ARIZONA PUBLIC SERVICE COMPANY

Four Corners Power Plant

ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT FOR 2023

COAL COMBUSTION RESIDUALS RULE GROUNDWATER MONITORING SYSTEM COMPLIANCE

JANUARY 31, 2024



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FOUR CORNERS POWER PLANT

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ARIZONA PUBLIC SERVICE COMPANY

FRUITLAND, NEW MEXICO

PROJECT NO.: 1420232011
DATE: JANUARY 31, 2024

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TABLE OF CONTENTS

GROUNDWATER MONITORING AND CORRECTIVE ACTION PROGRAM OVERVIEW 1

1 INTRODUCTION 2

1.1 Site Background 2

1.1.1 Facility and CCR Unit Description 2

1.1.2 Environmental Setting 3

1.2 CCR Groundwater Monitoring System 4

1.2.1 Monitoring System Description 5

1.2.1.1 Background Groundwater Monitoring Wells. 5

1.2.1.2 Downgradient CCR Monitoring Well Networks. 5

1.2.2 Implemented Changes to Monitoring System 6

2 SUMMARY OF KEY ACTIONS COMPLETED 8

3 GROUNDWATER MONITORING PROGRAM 10

3.1 Program Status 10

3.1.1 Problems Encountered and Resolutions to Problems 10

3.1.2 Groundwater Monitoring Program Transitions 11

3.1.3 Alternative Source Demonstrations 11

3.2 Monitoring Data Collected 12

3.2.1 Water Level Monitoring 12

3.2.2 Groundwater Flow Estimation 13

3.2.3 Sample Collection 14

3.2.4 Sample Analysis and Data Validation 14

3.2.5 Sample Results 15

3.3 Statistical Analysis of Monitoring Data 15

3.3.1 Evaluation of Appendix III Constituent Data 15

3.3.2 Evaluation of Appendix IV Constituent Data 15

4 CORRECTIVE ACTION PROGRAM 16

4.1 Program Status 16

4.2 Characterization of Potential Releases from CCR Units 16

4.3 Interim Response Measures 18

4.4 Progress on Remedy Selection for Multiunit 1 and the URS 19

4.4.1 Corrective Measures Pre-Design Studies 19

4.4.2 Remedy Selection Reports for Multiunit 1 and the URS 20

4.4.3 Semi-Annual Progress Report on Remedy Selection for Multiunit 1 and the URS 20

4.5 CCR Unit Closure Activities 20

4.5.1 URS Closure 20

4.5.2 CWTP Closure 21

4.5.3 Multiunit 1 Closure 21

5 KEY ACTIVITIES FOR THE UPCOMING YEAR 22

BIBLIOGRAPHY 24

TABLES

TABLE 1-1	DESCRIPTION OF COAL COMBUSTION RESIDUALS UNITS
TABLE 1-2	CCR GROUNDWATER MONITORING SYSTEM SUMMARY
TABLE 3-1	BTVS AND GWPS' FOR SITE CCR UNITS
TABLE 3-2	CCR GROUNDWATER MONITORING EVENT SUMMARY FOR 2023
TABLE 3-3	AQUIFER PROPERTIES AND GROUNDWATER FLOW CALCULATIONS
TABLE 4-1	TOTAL COC MASS REMOVED FROM INTERCEPT TRENCH OPERATION IN 2023
TABLE 4-2	INDIVIDUAL SITE CHEMISTRY AND FLOW VOLUMES
TABLE 4-3	TOTAL COC MASS REMOVED FROM THE URS EXTRACTION SYSTEM OPERATION IN 2023

FIGURES

FIGURE 1-1	SITE LOCATION MAP
FIGURE 1-2	CCR UNITS AND MONITORING SYSTEM SUMMARY
FIGURE 3-1	POTENTIOMETRIC SURFACE MAP MAY 2023
FIGURE 3-2	POTENTIOMETRIC SURFACE MAP NOVEMBER 2023
FIGURE 4-1	MOLYBDENUM ISO-CONCENTRATION MAP FOR MULTIUNIT 1 – MAY 2023
FIGURE 4-2	MOLYBDENUM ISO-CONCENTRATION MAP FOR MULTIUNIT 1 – NOVEMBER 2023
FIGURE 4-3	COBALT ISO-CONCENTRATION MAP FOR MULTIUNIT 1 – MAY 2023
FIGURE 4-4	COBALT ISO-CONCENTRATION MAP FOR MULTIUNIT 1 – NOVEMBER 2023

FIGURE 4-5 URS FLUORIDE ISO-CONCENTRATION MAP 2023

APPENDICES

A WELL CONSTRUCTION, REPAIR, AND MODIFICATION REPORT

B CCR GROUNDWATER DETECTION MONITORING STATISTICAL ANALYSIS AND RESULTS FOR THE CWTP APPENDIX III CONSTITUENT DATA COLLECTED THROUGH JANUARY 2023

C GROUNDWATER ELEVATION DATA AND HYDROGRAPHS THROUGH 2023

D 2023 ANALYTICAL LABORATORY REPORTS

E 2023 DATA VALIDATION REPORT

F GROUNDWATER QUALITY DATA TABLES THROUGH 2023

G CCR GROUNDWATER ASSESSMENT MONITORING STATISTICAL ANALYSIS AND RESULTS FOR THE CWTP APPENDIX IV CONSTITUENT DATA COLLECTED THROUGH JUNE 2023

H SIT PRESSURE TRANDUCER HYDROGRAPHS

I CALIBRATION AND UTILIZATION UPDATE ON THE GROUNDWATER MODEL SUPPORTING URS REMEDY SELECTION

J SEMI-ANNUAL REPORT DOCUMENTING PROGRESS ON REMEDY SELECTION MULTIUNIT 1 AND THE UPPER RETENTION SUMP

ACRONYMS AND ABBREVIATIONS

%	percent
ACM	Assessment of Corrective Measures
AECOM	AECOM Technical Services, Inc.
Annual Report	Annual Groundwater Monitoring and Corrective Action Report for 2022
amsl	above mean sea level
APS	Arizona Protection Agency
ASD	Alternative Source Demonstration
btoc	below the top of the casing
BTV(s)	background threshold value(s)
CCR	coal combustion residuals
CCR Units	CCR landfills and surface impoundments
CFR	Code of Federal Regulations
CSM	Conceptual Site Model
CWTP	Combined Waste Treatment Pond
DFADA	Dry Fly Ash Disposal Area
FCPP	Four Corners Power Plant
FGD	flue gas desulfurization
ft	foot, feet
gpd	gallons per day
GWPS(s)	groundwater protection standard(s)
LAI	Lined Ash Pond
Lbs	pounds
LDWP	Lined Decant Water Pond
memo(s)	memorandum
mg/L	milligrams per liter
Multiunit 1	CCR Multiunit comprised of LAI and LDWP
Navajo Mine	Navajo Transitional Energy Company, 2016
NIT	Northern Intercept Trench
NPDES	National Pollutant Discharge Elimination System
pCi/L	picocurries per liter

Radiation Safety	Radiation Safety Engineering, Inc.
RWP	Return Water Pond
SAP	Sampling and Analysis Plan
SDAWP	Statistical Data Analysis Work Plan
SIT	Southern Intercept Trench
Site	Four Corners Power Plant
SSI(s)	statistically significant increase(s)
SSL(s)	statistically significant level(s)
TDS	Total Dissolved Solids
Tech Memo	Technical Memorandum
TestAmerica	Eurofins TestAmerica Laboratories, Inc.
URS	Upper Retention Sump
URT	Upper Retention Tank
USEPA	United States Environmental Protection Agency
WSP	WSP USA Environment & Infrastructure, Inc.

GROUNDWATER MONITORING AND CORRECTIVE ACTION PROGRAM OVERVIEW

FACILITY NAME:	ARIZONA PUBLIC SERVICE COMPANY FOUR CORNERS POWER PLANT	ANNUAL REPORT DATE:		1/31/2024
Location:	Fruitland, New Mexico	Reporting Period:		1/1/2023 – 12/31/2023
Groundwater Monitoring Program Status				
CCR Unit	Status at Beginning of Reporting Period	Status at End of Reporting Period	Date(s) of Any Program Transitions	Comments
Combined Waste Treatment Pond (CWTP)	Detection Monitoring	Assessment Monitoring	4/10/2023	Initial Assessment Monitoring conducted in May 2023
Dry Fly Ash Disposal Area (DFADA)	Detection Monitoring	Detection Monitoring	NA	-
Return Water Pond (RWP)	Detection Monitoring	Detection Monitoring	NA	-
Multiunit 1	Assessment Monitoring	Assessment Monitoring	2/12/2018	Progressing Activities Supporting Remedy Selection
Upper Retention Sump (URS)	Assessment Monitoring	Assessment Monitoring	2/12/2018	Progressing Activities Supporting Remedy Selection
Groundwater Monitoring Statistical Analysis Summary				
CCR Unit	Appendix III Constituent(s) with SSIs over Background	Monitoring Wells where SSIs over Background have been Observed‡	Appendix IV Constituent(s) Present at SSL(s) above GWPSs	Monitoring Wells where SSLs above GWPSs have been Observed‡
Combined Waste Treatment Pond (CWTP)	B, Ca	MW-62	None	None
Dry Fly Ash Disposal Area (DFADA)	None	None	None	None
Return Water Pond (RWP)	None	None	None	None
Multiunit 1	B, Ca, Cl, F	MW-7, MW-8, MW-61, MW-75	Co, Mo	MW-61, MW-75
Upper Retention Sump (URS)	B, Ca, Cl, F, pH	MW-66, MW-67, MW-68, MW-69, MW-70	F	MW-66, MW-67, MW-68, MW-69
Corrective Action Summary				
CCR Unit	Dates when the ACM was Initiated and Completed	Date of Public Meeting Discussing the ACM	Date when Remedy was Selected	Dates when Remedy was Initiated and Completed
Multiunit 1	2/13/2019; 6/14/2019	8/15/2022 and 8/16/2022	N/A	N/A
Upper Retention Sump (URS)	2/13/2019; 6/14/2019	8/15/2022 and 8/16/2022	N/A	N/A

Abbreviations:
ACM – Assessment of Corrective Measures
CCR – Coal Combustion Residuals
GWPS – Groundwater Protection Standard
N/A – Not Applicable
SSI – statistically significant increase
SSL – statistically significant level

‡ Only includes wells where statistical analyses have been performed (i.e., Downgradient CCR Monitoring System Wells)

1 INTRODUCTION

This Annual Groundwater Monitoring and Corrective Action Report for 2023 (Annual Report) was prepared on behalf of Arizona Public Service Company (APS) by WSP USA Environment & Infrastructure Inc. (WSP) for the Four Corners Power Plant (FCPP or the Site) located in Fruitland, New Mexico. The Annual Report summarizes groundwater monitoring and corrective action activities conducted in 2023 to support compliance with coal combustion residuals (CCR) groundwater monitoring and corrective action requirements detailed in 40 Code of Federal Regulations (CFR) Part 257 (herein referred to as the CCR Rule) (Federal Register, 2020).

The CCR Rule became effective on October 19, 2015 and established standards for the disposal of CCR in landfills and surface impoundments (CCR units). In particular, the CCR Rule set forth groundwater monitoring and corrective action requirements for CCR units. The CCR Rule includes the requirement that an "annual groundwater monitoring and corrective action report" be prepared by January 31 for the preceding calendar year (the reporting period). This Annual Report prepared for the 2023 calendar year is intended to document the status of the groundwater monitoring and corrective action programs for each CCR unit, summarize key actions completed, and forecast key activities for 2024. APS additionally considers this report to meet the semi-annual reporting requirements of 40 CFR §257.97(a) for selecting and designing remedies pursuant to the CCR Rule during the last half of 2023.

The remainder of this section (Section 1) provides a summary description of the power generating facility, the CCR units present at the facility, the facility's environmental setting which forms the basis for assessment of underlying groundwater conditions, and an overview of the CCR groundwater monitoring system. Section 2 presents key groundwater monitoring and corrective action activities performed during the reporting period. Sections 3 and 4 summarize in further detail the activities performed for the groundwater monitoring and corrective action programs respectively during the reporting period. Key activities identified for the upcoming year are presented in Section 5.

1.1 SITE BACKGROUND

1.1.1 FACILITY AND CCR UNIT DESCRIPTION

Facility Description. FCPP is an operating power plant owned by APS and four other utilities. The plant burns low sulfur coal in two electrical generating units (Units 4 and 5) and has a net generating capacity of 1,540 megawatts. FCPP formerly had five generating units and a capacity of 2,040 megawatts; Units 1, 2, and 3 were retired in December 2013 and decommissioned between 2014 and 2016. Coal burned at the plant is generally sourced from the nearby Navajo Mine (Navajo Transitional Energy Company, 2016).

Facility Location. The plant and associated infrastructure are located approximately 20 miles southwest of the city of Farmington in the Colorado Plateau physiographic province of northwestern New Mexico (**Figure 1-1**). The land on which the plant resides is leased from the Navajo Nation and is primarily located in Section 36, Township 29 North, and Range 16 West of the northwest quadrant of the New Mexico Principal Meridian and Base Line.

CCR Unit Description. Plant infrastructure includes three single CCR units in the main plant area where the generating units are located (i.e., the Upper Retention Sump [URS], Combined Waste Treatment Pond [CWTP], and Return Water Pond [RWP]) and one single CCR unit (the Dry Fly Ash Disposal Area [DFADA]) and one CCR multiunit (referred to as Multiunit 1 comprised of the Lined Ash Impoundment [LAI] and Lined Decant Water Pond [LDWP]) to the west of the main plant area within the FCPP lease boundary (also known as the disposal area where CCR is currently and has historically been placed) (**Figure 1-2**). **Table 1-1** summarizes the location, function, operation, size/construction, and history of each regulated unit. The boundaries of CCR units depicted in **Figure 1-2** are based on available historical plans for the units.

1.1.2 ENVIRONMENTAL SETTING

Unless otherwise noted, the following information is abstracted from the *CCR Monitoring Well Network Report and Certification* by AECOM Technical Services, Inc. (AECOM, 2017).

Climate. The plant is located in a semi-arid climate on the western flank of the San Juan Basin. The area receives an average of 8.6 inches of precipitation and 12.6 inches of snow per year.

Topography. The main plant area of the FCPP is located at an elevation of approximately 5,340 to 5,360 feet (ft) above mean sea level (amsl). The topography of the FCPP area is characterized by rolling terrain, steep escarpments, and incised drainages/arroyos. In the vicinity of the plant, the ground surface is relatively flat, sloping to the west at approximately 20 ft per mile; however, surface drainage immediately near Morgan Lake flows towards the lake. About one mile west of the plant, the level ground surface drops rapidly to 5,200 ft amsl. Chaco Wash (also known as Chaco River) is located west of the abrupt change in elevation and ephemerally flows north to the San Juan River.

Surface Water Hydrology. FCPP is situated on the southern bank of Morgan Lake, an approximately 1,300-acre manufactured lake that has a maximum storage capacity of 39,000 acre-ft of water and supplies cooling water to the plant. Morgan Lake was formed by damming a westerly flowing stream (now known as 'No Name Wash') and is replenished by an underground pipeline (i.e., aqueduct) that routes flow from the San Juan River located approximately 3 miles north of the FCPP. The typical water surface elevation of the lake is approximately 5,330 ft amsl. Morgan Dam intermittently discharges in accordance with National Pollutant Discharge Elimination System (NPDES) Permit No. NN0000019 to 'No Name Wash' which flows west of the lake to Chaco Wash.

Site Geology. The San Juan Basin is a structural depression that lies at the eastern edge of the Colorado Plateau (Dames & Moore, 1988). The dominant geographic feature in the vicinity of FCPP is the Hogback Monocline located to the west of Chaco Wash; this monocline is a steep (38 degree) eastward-dipping flank composed of Cretaceous sedimentary rock (Dames & Moore, 1988).

There are two 'uppermost geologic units' that underlie the FCPP Site and immediate vicinity. These units are expected to influence groundwater flow and result in variations in naturally occurring constituent concentrations across the Site. The units are as follows:

- **Pictured Cliffs Sandstone:** The Pictured Cliffs Sandstone is the uppermost geologic unit beneath the plant and the CCR units located in this vicinity (i.e., the URS, the CWTP, and the RWP as depicted in **Figure 1-2**). This unit is a fine- to medium-grained marine sandstone. The lower portions of the Pictured Cliffs Sandstone represent a transitional sequence between this formation and the underlying Lewis Shale as indicated by alternating thin beds of very fine-grained sandstone and silty shale. The Pictured Cliffs Sandstone forms a capstone on an exposed cliff face located between the main plant site and the CCR units located to the west (i.e., LAI, LDWP and the DFADA).
- **Lewis Shale:** The Lewis Shale is a marine shale that contains evaporite deposits resulting in naturally occurring saline groundwater conditions. The Lewis Shale is the uppermost geologic unit that underlies the LAI, LDWP, and DFADA and spans west of the Pictured Cliffs Sandstone cliff face approximately 1.5 miles westward to the base of the Hogback Monocline. The regional thickness of the Lewis Shale is approximately 500 ft and is underlain by the Cliff House Sandstone. The Lewis Shale consists of a weathered shale subunit overlying a hard, unweathered shale subunit. The thickness of the weathered shale varies between 11 and 47 ft with an average thickness of 30 ft within the vicinity of the Site (Dames & Moore, 1988). The weathered shale is not as thick when overlain by the Pictured Cliffs Sandstone in the vicinity of the plant site. At the RWP, subsurface investigations identified no weathered Lewis Shale and a dip in the unweathered shale to the northeast, towards Morgan Lake (Wood, 2020a). The Lewis Shale subunit contains thin sandstone lenses that vary in thickness from 1 to 7 ft; the sandstone is fine to very fine-grained and cemented by calcium carbonate (Dames & Moore, 1988). The unweathered shale is significantly less permeable than the weathered shale. The unweathered shale is very fine-grained to silty and contains periodic siltstone and sandstone lenses (Dames & Moore, 1988). The surface of the unweathered shale slopes towards the Chaco Wash in the disposal area at approximately the same slope as land surface (Dames & Moore, 1988) but displays some irregularity resulting in varying levels of

saturated thickness in the weathered shale. The weathered Lewis Shale is variably saturated and hydraulically interconnected with alluvial deposits of Chaco Wash. The low-permeability unweathered shale underlying the Pictured Cliffs Sandstone results in a perched saturated zone in this region.

Applicable Hydrostratigraphy. Three general hydrostratigraphic units are conceptualized beneath the FCPP and associated CCR units. These units form the basis for the Conceptual Site Model (CSM) developed by AECOM (AECOM, 2017) for the purpose of designing the Site CCR groundwater monitoring system and establishing the working basis for statistically evaluating groundwater conditions underlying the Site.

The first hydrostratigraphic unit (Pictured Cliffs Sandstone) is dominant under the plant area, which is located in an elevated area south of Morgan Lake (**Figure 1-2**). Three CCR units (i.e., the URS, the CWTP, and the RWP) reside within this area. The Pictured Cliffs Sandstone is saturated below the URS and the CWTP and thus serves as the uppermost water bearing unit for these surface impoundments. While the Pictured Cliffs Sandstone is unsaturated beneath the RWP, this hydrostratigraphic unit is the uppermost water bearing unit should a leak from the RWP occur (the underlying Unweathered Lewis Shale prevents appreciable vertical migration of groundwater). The Pictured Cliffs Sandstone extends from ground surface (between approximately 5,340 to 5,360 ft amsl) to approximately 5,300 ft amsl in the plant area. Groundwater underlying the URS and CWTP is strongly influenced by Morgan Lake (at a surface elevation of approximately 5,330 ft amsl) and generally flows northward towards the lake. However, construction and operations of the plant have resulted in disturbed ground conditions and associated impacts are not well understood.

The second hydrostratigraphic unit (Weathered Lewis Shale/Alluvium) underlies the Pictured Cliffs Sandstone in the plant area and the Multiunit 1/DFADA CCR units in the disposal area, approximately 1 mile west of the plant (**Figure 1-2**). The Weathered Lewis Shale and the hydraulically connected alluvial deposits along Chaco Wash are designated as the uppermost water bearing unit in the disposal area. Although the Lewis Shale is geologically continuous in this area, it is unsaturated in the vicinity of the DFADA. The water table in the Weathered Lewis Shale can exhibit local seasonal fluctuations that are attributed to interactions between rates of groundwater recharge and discharge (Dames & Moore, 1988) from/to Morgan Lake (based on proximity), historical unlined ponds, and Chaco Wash. Groundwater flow underlying the disposal area CCR units generally follows the surface topography and descends to the west-southwest in the disposal area, mainly in the weathered shale and in local alluvial channels that drain toward the Chaco Wash (APS, 2013).

The third hydrostratigraphic unit (Unweathered Lewis Shale) consists of the unweathered Lewis Shale geologic unit and is a regionally extensive confining unit that forms the base of the uppermost aquifers in the plant and disposal areas. The Unweathered Lewis Shale is not capable of yielding usable quantities of water and thus is not an aquifer.

1.2 CCR GROUNDWATER MONITORING SYSTEM

Multiple monitoring wells are in place at FCPP to monitor groundwater conditions beneath the five Site CCR units and support ongoing assessment of impacts from potential leakage. **Table 1-2** identifies each well with associated CCR unit information, the date of well installation, and summary well construction details. **Figure 1-2** presents a map of the well locations.

Installation of the FCPP CCR groundwater monitoring system is summarized in the *CCR Monitoring Well Network Report and Certification* (AECOM, 2017) and the *Groundwater Monitoring Network Certification Report for the Return Water Pond* (Wood, 2020a). These reports certify the CCR groundwater monitoring system as compliant with 40 CFR §257.91(a) through I. Per the CCR Rule, Site monitoring systems are required to evaluate groundwater quality that is representative of background (i.e. groundwater that has not been affected by leakage from a CCR unit) and groundwater passing the downgradient boundary of each CCR unit, in the uppermost water bearing hydrostratigraphic unit underlying the CCR unit.

In addition to the CCR groundwater monitoring system wells, there are many non-CCR supplementary monitoring wells and extraction wells at the Site that are not part of the CCR groundwater monitoring systems but may provide useful information to the program. Groundwater extraction at the Site predates implementation of the CCR Rule. Although some extraction wells have been installed as part of interim response measures (see Section

4.3), many older extraction wells are inactive in terms of extraction operations, but the well can be monitored to assess groundwater conditions. **Table 1-2** and **Figure 1-2** identify the supplemental and extraction wells.

1.2.1 MONITORING SYSTEM DESCRIPTION

1.2.1.1 BACKGROUND GROUNDWATER MONITORING WELLS.

Background water quality at the Site can be established by a single monitoring well or a group of monitoring wells. If a group of monitoring wells is used, these wells should be screened within the same lithologic unit, exhibit similar groundwater chemistry, illustrate similar statistical merits, and be supported by the CSM. The grouping and adequacy of background wells identified for FCPP to assess background water is adequate based on the current understanding of the geological and hydrostratigraphic conditions.

The processes used to evaluate and select the CCR unit background monitoring wells are documented in the *CCR Monitoring Well Network Report and Certification* (AECOM, 2017) and the *Groundwater Monitoring Network Certification Report for the Return Water Pond* (Wood, 2020a). The selected background monitoring wells and the rationales in selecting them are summarized below by hydrostratigraphic unit.

Background Wells for the Pictured Cliffs Sandstone. Three wells (MW-71, MW-72, and MW-73) are used to determine background groundwater quality for the URS, the CWTP, and the RWP in the Pictured Cliffs Sandstone (**Table 1-2** and **Figure 1-2**). Although these wells are not upgradient of the RWP, the water quality indicated by MW-71, MW-72, and MW-73 is considered representative of unimpacted groundwater in the Pictured Cliffs Sandstone. Exploratory borings advanced during the design of the RWP CCR Monitoring System indicated that the Pictured Cliffs Sandstone upgradient of the RWP is unsaturated.

Background Wells for the Weathered Lewis Shale/Alluvium. Water in the Weathered Lewis Shale/Alluvium is perched and sourced by localized surface water infiltration. The hydrogeological regime as well as the fractured nature of weathered shale contributes to difficulties in reliably locating saturated sediments in the subsurface. On that basis, seven wells upgradient of Multiunit 1 and the DFADA, including MW-12R1, MW-43, MW-49A, MW-51, MW-50A, MW-55R, and MW-74, are designated to assess background groundwater quality for the Weathered Lewis Shale/Alluvium (**Table 1-2** and **Figure 1-2**). Many of these wells are routinely either dry or have a limited saturated thickness that precludes sampling; the wells are included in the program should conditions change in the future.

Due to the natural heterogeneity of the geologic and hydrostratigraphic conditions underlying the FCPP, background constituent concentrations are expected to be spatially heterogeneous across the Site. The Site is also expected to exhibit temporal heterogeneity due to local climatic regimes, potential leakage from Morgan Lake, and potential operational activity at the Site. The adequacy of designated background monitoring wells is assessed on an ongoing basis using groundwater elevation data, boron data, a working understanding of the spatial heterogeneity of geochemistry underlying the FCPP, and the statistical merits of the constituents of concern. Historical groundwater chemistry data may be consulted during the evaluation, but data preceding December 2011 will not be considered due to noted "matrix interference issues associated with saline waters" in samples analyzed prior to that date (APS, 2013).

1.2.1.2 DOWNGRADIENT CCR MONITORING WELL NETWORKS.

A total of 27 CCR compliance wells are used to monitor groundwater conditions downgradient of each CCR unit (**Table 1-2** and **Figure 1-2**). Downgradient waste boundary wells assess for leakage from each CCR unit, and the remaining downgradient wells evaluate the nature and extent of groundwater conditions associated with identified releases from CCR units. Of the 27 downgradient or downgradient boundary wells, 16 are installed in the Pictured Cliffs Sandstone. The remaining 11 downgradient or downgradient boundary wells are completed in the Weathered Lewis Shale/Alluvium. The grouping of monitoring wells, spatial density, and coverage of the monitoring well network is adequate based on the current understanding of the geological and hydrostratigraphic conditions. These wells are identified by respective CCR unit, as described below:

URS Downgradient Wells (Pictured Cliffs Sandstone). Before the URS was demolished and replaced with the Upper Retention Tank (URT), the groundwater flow direction underlying the URS was radially outward from the

CCR unit. On that basis, five downgradient boundary wells, MW-66, MW-67, MW-68, MW-69, MW-70 and four downgradient wells, MW-83, MW-84, MW-85, and MW-86 were installed around the perimeter and downgradient of the URS to evaluate leakage and the extent of groundwater impacts, respectively. The URS downgradient wells are screened within the Pictured Cliffs Sandstone hydrostratigraphic unit.

CWTP Downgradient Wells (Pictured Cliffs Sandstone). Similar to the URS, the groundwater flow direction underlying the CWTP was inferred to be radially outward from the CCR unit at the time the monitoring system was designed. Four downgradient boundary wells, MW-62, MW-63, MW-64, and MW-65 were installed around the perimeter of the CWTP. The *CCR Monitoring Well Network Report and Certification* (AECOM, 2017) identifies these wells as screened within the Pictured Cliffs Sandstone hydrostratigraphic unit. However, additional review of boring logs conducted as part of an Alternative Source Demonstration (ASD) in 2019 for the CWTP (Wood, 2020b) indicates that MW-62 and MW-63 are screened in non-native embankment fill materials including Weathered Lewis Shale and bottom ash that appear to influence the water quality of samples collected from these wells.

RWP Downgradient Wells (Pictured Cliffs Sandstone). Three downgradient boundary monitoring wells are installed within the Pictured Cliffs Sandstone hydrostratigraphic unit on the northeastern edge of the RWP – MW-88, MW-89, and MW-90. The Pictured Cliffs Sandstone is unsaturated beneath the RWP, and the wells are installed directly above the aquitard created by the underlying Unweathered Lewis Shale, which dips towards the northeast beneath the RWP. The groundwater monitoring system is designed to detect releases from the RWP, as a release would likely migrate vertically downward through the relatively permeable Pictured Cliffs Sandstone to the underlying Unweathered Lewis Shale, then migrate laterally along the surface of the aquitard. The next underlying aquifer (in the Cliff House Sandstone) is separated from the CCR unit by several hundred feet of the Unweathered Lewis Shale.

Multiunit 1 Downgradient Wells (Weathered Lewis Shale/Alluvium). Six downgradient boundary monitoring wells are in place along the toe of the western to southwestern edge of Multiunit–1 – MW-07, MW-08, MW-40R, MW-61, MW-75, and MW-76. In 2018, to characterize the nature and extent of impacts from the unit, downgradient monitoring well MW-87 was installed at the western lease boundary near the Chaco Wash. Monitoring data collected during both events are discussed further in Section 3.2. The screened interval for each Multiunit 1 downgradient well resides within the Weathered Lewis Shale/Alluvium hydrostratigraphic unit.

DFADA Downgradient Wells (Weathered Lewis Shale/Alluvium). Four downgradient boundary monitoring wells are identified downgradient of the DFADA: MW-10, MW-13, MW-44, and MW-48. Each well, except MW-48, is screened within the Weathered Lewis Shale/Alluvium hydrostratigraphic unit. The screened interval for MW-48 resides within the Unweathered Lewis Shale hydrostratigraphic unit. The groundwater monitoring system was designed to detect releases since the next underlying aquifer (in the Cliff House Sandstone) is separated from the CCR unit by several hundred ft of Lewis Shale. The downgradient DFADA wells are generally dry; however, insignificant amounts of condensate are known to sometimes accumulate in the wells. Excluding condensate, the wells were dry in 2023. Monitoring data collected during both events are discussed further in Section 3.2.

1.2.2 IMPLEMENTED CHANGES TO MONITORING SYSTEM

There were no changes to the Site CCR groundwater monitoring systems during the 2023 reporting period.

However, there were several new and replacement wells that supplement the monitoring system installed in 2023:

- At the URS, two new extraction wells (URS-06 and URS-07) and two new monitoring wells (URS-05 and URS-08) were installed in the haul road located north of the URT in December 2023. The extraction wells were installed to expand the URS seepage intercept system (an interim response measure) and the monitoring wells were installed to monitor groundwater extraction operations. The approximate location of these wells is included on **Figure 1-2**. A well completion report documenting the installation of these wells is currently in progress and will be completed during the 2024 reporting period (Section 5).
- At Multiunit 1, the utility of supplementary extraction and monitoring wells EW-11, EW-12, MW-06, DMX-05, EW-14, EW-15, and MW-34 were evaluated as part of a routine well maintenance program. The approximate locations of these wells are included on **Figure 1-2**. Activities conducted to address

identified concerns were completed in June 2023 and presented in the *Well Construction, Repair, and Modification Report* included in **Appendix A**:

- Extraction wells EW-11 and EW-12 were replaced with extraction wells EW-11R and EW-12R, respectively, due to deteriorated well screen conditions including roots in the well screen and the proximity to overhead utilities for the existing wells.
- Monitoring well MW-06 was replaced with monitoring well MW-06R due to deteriorated conditions in the existing well, including roots in the well screen.
- Monitoring well DMX-05 was replaced with extraction well DMX-05R because assessment of the original well indicated that groundwater extraction may be viable at this location.
- Dedicated pump equipment and attached discharge piping was removed from EW-14, EW-15, and MW-34 (also referred to as EW-34) and the intended use of these wells was converted from the extraction of seepage to the monitoring of groundwater conditions downgradient of the Multiunit 1.

2 SUMMARY OF KEY ACTIONS COMPLETED

A summary of key actions conducted at the Site during 2023 to address CCR Rule requirements is as follows:

- *Documentation of Groundwater Monitoring Activities Conducted in 2022* – 40 CFR §257.90(e) requires that an Annual Groundwater Monitoring and Corrective Action Report for applicable sites be prepared for existing CCR units annually on January 31 of the following year. During the reporting period the *Annual Groundwater Monitoring and Corrective Action Report for 2022* (WSP, 2023a) was prepared, placed in the facility's operating record, and posted to the APS CCR information webpage in accordance with 40 CFR §257.105(h)(1) and 40 CFR §257.106(h)(1).
- *Continuation of the Detection Monitoring Program at the CWTP, DFADA, and RWP* – 40 CFR §257.94(b) requires the continuation of detection monitoring at a semi-annual frequency for Appendix III constituents at CCR units where statistical analysis of Appendix III constituent data do not indicate a statistically significant increase (SSI) over background. Section 3.2 presents the results of detection monitoring data collected on a semi-annual basis from the CWTP, DFADA and RWP in 2023.
- *Start of the Assessment Monitoring Program at the CWTP* – 40 CFR §257.95 requires conducting assessment monitoring for Appendix IV constituents within 90 days of declaring an SSI over background and annually thereafter. Semi-annual monitoring of Appendix III and detected Appendix IV constituents is also required. Section 3.1.2 summarizes the activities performed for the transition from detection monitoring to assessment monitoring. Section 3.3 presents the results of assessment monitoring data collected on a semi-annual basis from the CWTP in 2023.
- *Completion of Statistical Analyses for Collected Appendix III and IV Constituents at the CWTP – 40 CFR §257.93(h)* requires routine statistical analysis of Appendix III constituent data from CCR units in the detection monitoring program and of Appendix IV constituent data from the CCR units in the assessment monitoring program. During the reporting period, one statistical analysis was performed using updated Appendix III constituent data and one statistical analysis was performed using updated Appendix IV constituent data collected from CWTP monitoring wells. The statistical analyses are summarized in Section 3.3.
- *Preparation of a Semi-annual Progress Report on Remedy Selection for Multiunit 1 and the URS* – 40 CFR §257.97(a) requires the preparation of semi-annual reports which document the progress of remedy selection for CCR units that have impacted groundwater. The ninth semi-annual report was prepared to fulfill that requirement in July 2023 of the reporting period (Section 4.5). Activities supporting remedy selection conducted during the second semi-annual reporting period of 2023 are summarized in Section 4.4.
- *Interim Response Measures at the URS* – Startup of groundwater extraction from CM-01 and CM-02 began in February 2022 and APS continued to operate the seepage extraction system throughout the reporting period. The extracted groundwater is discharged into a plant sump for reuse in plant operations. Additionally, the groundwater model previously completed for the URS (Wood, 2019a) was reviewed, and an update of the model conditions completed to reflect current interim response measures at the URS. The results of the groundwater model update and evaluation are summarized in Section 4.4.1.
- *Interim Response Measures at the Multiunit 1* – APS operated the Northern and Southern Intercept Trench throughout the reporting period to intercept and collect seepage from Multiunit 1 and closed surface impoundments. The extracted groundwater is reused in plant operations. The 2023 Northern and Southern Intercept Trench operations are summarized in Section 4.3.
- *Continuation of the CWTP Dredging Program* – APS continued removing CCR from the CWTP through mechanical excavation and hydraulic dredging. CWTP dredging activities are anticipated to continue into Q2 2024.
- *Well Construction, Repair, and Modification*. APS contracted Montgomery & Associates to provide direction and oversight for various modifications to non-CCR monitoring system wells. All work for that effort was

completed in June 2023. A technical report documenting that work, dated September 26, 2023, is included as noted in Section 1.2.2

3 GROUNDWATER MONITORING PROGRAM

The groundwater monitoring and corrective action process defined in the CCR Rule includes a phased approach to groundwater monitoring, leading (if applicable) to the establishment of groundwater protection standards (GWPSs) for each CCR unit. Exceedances of the GWPSs that are determined to be statistically significant can trigger requirements for additional groundwater characterization and corrective measures assessment followed by implementation of a corrective action program.

The first phase of groundwater monitoring is the detection monitoring phase. Detection monitoring focuses on a set of CCR constituents (listed in Appendix III of the CCR Rule) that are more mobile and generally present at higher concentrations. These attributes can contribute to making constituents readily quantified and early indicators of a potential release from a CCR unit to groundwater. If SSIs are detected for Appendix III constituent over established background levels, otherwise known as background threshold values (BTVs), in downgradient waste boundary wells and cannot be demonstrated to be associated with a source other than the CCR unit, the groundwater monitoring moves into the second phase, assessment monitoring. **Table 3-1** summarizes the BTVs for Site CCR units.

The second phase of groundwater monitoring focuses on the constituents listed in Appendix IV of the CCR Rule. The Appendix IV constituents are generally less mobile and typically occur at lower concentrations in groundwater than the Appendix III constituents. Concentrations of Appendix IV constituents in downgradient wells are compared to established GWPSs. The GWPSs, established for Appendix IV constituents only, are the higher of either the federal Safe Drinking Water Act Maximum Contaminant Level, alternative human health risk-based GWPSs established in the CCR Rule, or the background concentration for each constituent. **Table 3-1** summarizes the GWPSs for Site CCR units.

If exceedances of the GWPSs are determined to be occurring in the downgradient boundary wells at statistically significant levels (SSLs) and no alternative sources for the exceedances can be demonstrated, then both additional groundwater characterization and assessment of corrective measures are initiated. Following an assessment of corrective measures, a remedy (or set of remedial activities) is selected and implemented as the groundwater corrective action program for the CCR unit. According to the CCR Rule, groundwater corrective action will continue until compliance with the GWPSs has been attained in all impacted wells and sustained for a period of three consecutive years.

3.1 PROGRAM STATUS

Based on available Appendix III and Appendix IV concentrations and statistical analyses completed as of the end of the 2023 reporting period, the DFADA and RWP are currently in detection groundwater monitoring and the CWTP is currently in assessment groundwater monitoring. During the 2023 reporting period all DFADA and RWP downgradient compliance wells continued to be dry and therefore precluded groundwater sampling and groundwater quality evaluation. The URS and Multiunit 1 (the LAI/LDWP) are in corrective action and continue to be monitored as part of the assessment groundwater monitoring program.

Summaries of groundwater monitoring program activities performed during the reporting period are presented in the following sections.

3.1.1 PROBLEMS ENCOUNTERED AND RESOLUTIONS TO PROBLEMS

The following problems and associated resolutions were encountered during the reporting period:

- During the May 2023 monitoring event, Eurofins TestAmerica Laboratories, Inc. (Eurofins) was unable to meet the required reporting limit (RL) of less than (<) 1 mg/L for many of the fluoride analysis performed using United States Environmental Protection Agency (USEPA) drinking water Method 300.0. Although the laboratory had achieved the acceptable RLs in the past during the analysis of samples collected from wells in the Four Corners CCR monitoring program, the laboratory refused to analyze the samples collected during the May 2023 event without performing multiple dilutions due to elevated total dissolved solids and sulfate concentrations in these samples which can adversely affect laboratory equipment. APS and WSP were notified that the fluoride RLs would be elevated, and it was requested that Eurofins report fluoride to the method detection limit (MDL) to achieve the lowest level of detection. The MDLs ranged from less than 2 to less than 80 mg/L and Eurofins was unable to re-analyze the samples without the dilutions. After the May 2023 monitoring event, project requirements were discussed with Eurofins and they agreed to target RLs based upon the previous level of dilutions achieved on a sample by sample basis. Additionally, Eurofins proposed USEPA solid waste Method 9056A as an alternative ion chromatography method to USEPA drinking water Method 300.0, that would allow for less sample dilution and lower reporting limits, more like those achieved in the past. In response, a small subset of samples was submitted to be analyzed for fluoride by Method 9056A during the November 2023 monitoring event to compare the methods. A split sampling analysis presenting the sampling methods, analytical results, and overall findings will be presented in a technical memorandum to be completed in 2024.
- Access to the well vault for MW-67, a URS downgradient boundary well, presented a challenge for samplers during the May and November 2023 sampling events. An assessment of the well vault, and potentially necessary repairs, are planned to be performed in 2024.
- A groundwater sample was unable to be collected from downgradient well MW-87 during the November 2023 sampling event due to an obstruction in the well that was measured at approximately 32.68 ft below the top of the casing (btoc). Roots and plant matter were identified during the May 2023 sampling event and is likely associated with roots or plant matter that have migrated through the well screen into the interior of the well casing. Efforts to clear the obstruction are planned to take place in 2024 and the well will be monitored for further obstructions during future semi-annual monitoring events.

3.1.2 GROUNDWATER MONITORING PROGRAM TRANSITIONS

The CWTP transitioned from detection monitoring to assessment monitoring during the 2023 reporting period (**Appendix B**). The statistical analysis of Appendix III constituent data collected through January 2023, inclusive of the November 2022 semi-annual detection monitoring results and a January 2023 resampling event results, indicated an SSI over background. A declaration of SSIs over background concentrations was made on April 10, 2023 for CWTP monitoring well MW-62 for two detection monitoring constituents, boron, and calcium. Pursuant to the CCR Rule, the owner or operator must, within 90 days of declaring an SSI for an Appendix III constituent, either establish an assessment monitoring program for the CWTP or demonstrate that a source other than the CWTP is the cause of the SSI declaration(s) (Federal Register, 2020). Given that the CWTP has had ongoing low-level SSIs attributable to surface/groundwater interactions, natural spatial variability, and the presence of potentially-impacted-fill materials in the vicinity of downgradient system wells (Wood, 2019; Wood, 2020; Wood, 2022) which could not be addressed with an alternative analysis approach, the CWTP was transitioned to assessment monitoring during the 2023 reporting period out of an abundance of caution. In accordance with the CCR Rule, assessment monitoring of the CWTP wells was initiated in May 2023, within 90 days of declaring an SSI for an Appendix III constituent.

3.1.3 ALTERNATIVE SOURCE DEMONSTRATIONS

No Alternative Source Demonstrations (ASDs) were conducted during the 2023 reporting period.

3.2 MONITORING DATA COLLECTED

CCR groundwater monitoring was conducted at FCPP during the 2023 reporting period in accordance with the updated *Site Sampling and Analysis Plan* (SAP) (Wood, 2022a). The SAP documents the methods and procedures used to conduct groundwater sampling, analyze collected samples for CCR constituents, and assess associated analytical data for quality assurance purposes.

The following sections summarize groundwater monitoring activities conducted in 2023. **Table 3-2** identifies when monitoring occurred, and which units were monitored. Unless otherwise noted, detection monitoring included evaluation of samples for Appendix III constituents on a semi-annual basis (40 CFR §257.94[b]) and at a minimum, assessment monitoring included evaluation of samples for all Appendix IV constituents on an annual basis (40 CFR §257.95[b]) and detected Appendix IV constituents as well as all Appendix III constituents on a semi-annual basis (40 CFR §257.95[d][1]). To simplify groundwater monitoring logistics, CCR compliance wells in assessment monitoring were evaluated for all Appendix IV constituents on a semi-annual basis in 2023.

The DFADA wells are completed in either the Weathered Lewis Shale/Alluvium or Unweathered Lewis Shale while the RWP wells are completed in the Pictured Cliffs Sandstone. These hydrostratigraphic units are known to be dry downgradient of the DFADA and the RWP. Thus, the DFADA and RWP groundwater monitoring systems are designed to detect releases by the presence of water (although insignificant amounts of condensate can accumulate in wells). During the May and November monitoring events, these wells were found to be dry, which is consistent with previous readings and indicates that releases from the DFADA and RWP did not occur in 2023.

Supplementary and extraction well water samples were also collected as part of characterization, pre-design and corrective measures evaluations conducted during the reporting period which include:

- Seepage intercept system (i.e., interim response measures) samples collected from sumps.
- Groundwater samples collected downgradient of seepage intercept systems.
- Surface water samples from the CWTP, Morgan Lake, and the cooling water canal adjacent to the CWTP.

As with the CCR groundwater samples, the supplementary samples were collected and analyzed using industry-standard procedures and in accordance with the SAP.

3.2.1 WATER LEVEL MONITORING

Appendix C presents hydrographs depicting groundwater elevations measured at downgradient CCR monitoring system wells over time. Groundwater elevations in the Pictured Cliffs Sandstone (i.e., plant area) and the Weathered Lewis Shale/Alluvium (i.e., disposal area) are graphed independently based on assessment of the data during initial CSM development; review of the data suggests that the two groundwater systems are likely not in direct communication. Unless otherwise noted below or within the hydrographs of **Appendix C**, hydrographs are based on water level measurements collected semi-annually during the groundwater monitoring events; therefore, the significant trends discussed below may be somewhat limited.

Downgradient and downgradient boundary wells for Multiunit 1 (MW-07, MW-08, MW-40R, MW-61, MW-75, MW-76 and MW-87): Groundwater elevations slowly declined at all Multiunit 1 downgradient and downgradient boundary wells in 2023 with the exception of minor trend fluctuations observed at MW-07, MW-08, and MW-87. The minor trend fluctuations observed at MW-08 and MW-87 are likely attributable to seasonal fluctuations in the groundwater table and interactions with stream flow within the Chaco Was (at MW-87). The increasing trend observed at MW-07 during the 2023 monitoring events is the first rise in groundwater elevations measured at this location since November 2019, however the groundwater elevations are still within the range of historical values.

MW-40R and MW-76 did not contain enough groundwater within the well casing to support the collection of groundwater samples during both the May and November 2023 semi-annual sampling events. Due to minimal groundwater and/or poor recovery rates, groundwater samples have not been collected from these wells since April 2021 per the SAP (Wood, 2022a).

Background wells for Multiunit 1 (MW-43, MW-49A, MW-50A, MW-51, MW-74): Water levels in background wells; MW-43, MW-49A, MW-50A, MW-51 remained stable in 2023 with a minor increase in groundwater levels at MW-49A from November 2022 to 2023 with an increase of 0.91 ft. Seasonal variations in groundwater elevations continue to be apparent at MW-74 (background well for Multiunit 1 and the DFADA and located downstream of Morgan Lake Dam), with the highest elevations occurring in early spring at approximately 5,202.40 ft amsl and lowest elevations occurring in late summer to late fall at approximately 5,198.70 ft amsl. Water level fluctuations at MW-74 (just south of 'No Name Wash') may be influenced by plant operations since the water level in the lake fluctuates based on plant requirements and discharges from Morgan Lake to 'No Name Wash'. Typical seasonal patterns appear to have continued during the 2023 reporting period.

MW-43, MW-50A, MW-51, and MW-74 all contained insufficient amounts of groundwater within their respective well casing during the May and November 2023 semi-annual sampling events and groundwater samples were not collected from these locations in 2023 per the SAP (Wood, 2022a). Due to minimal groundwater and/or poor recovery rates, groundwater samples have not been collected from these wells since April 2021.

Downgradient and downgradient boundary wells for URS (MW-66, MW-67, MW-68, MW-69, MW-70, MW-83, MW-84, MW-85, and MW-86): In contrast to the steadily declining trend observed since July 2016, groundwater elevations downgradient of the URS increased between November 2022 and November 2023 by up to 1.4 ft at MW-68; this well is located in the haul road west of the new URT. Although increases in water levels have occurred in URS wells before, the increases measured in the 2023 reporting period are notable because of the repeated occurrence (from November 2022 to May 2023 and then again in November 2023). The overall decline in water levels since 2016 is attributed to the decommissioning of the URS between June and December 2018 and pumping at interim response measure extraction wells CM-01 and CM-02 beginning in February 2022.

Downgradient boundary wells for the CWTP (MW-62, MW-63, MW-64, and MW-65): Between the November 2022 and May 2023 sampling events, groundwater elevations declined in all downgradient CWTP monitoring wells. Discharges to the unit ceased in November 2020 and water levels in the surface impoundment have been maintained at lower elevations since that time to prevent discharges from the unit to the adjacent canal during dredging (Section 4.5.2). Groundwater elevations continued to decline at MW-64 and MW-65 between May and November 2023; however, groundwater elevations increased slightly at MW-62 and MW-63 during the same time interval.

Background wells for URS and CWTP (MW-71, MW-72, and MW-73): Groundwater elevations at MW-71, MW-72, and MW-73 generally continued to decrease during 2023, with minor trend fluctuations attributed to seasonal variations.

Figures 3-1 and **3-2** present potentiometric surface maps that are representative of groundwater elevations prior to groundwater sampling in May and November 2023, respectively. Water levels measured at wells EW-14, EW-15, and MW-34, were collected approximately ten days later than water levels collected at all other wells located at the Site which were used to create the November 2023 potentiometric surface map. However, the delay in water level collection at these wells is not considered to be long enough to alter static water conditions due to temporal trends and the data collected at these wells is considered usable. The estimated direction and gradient of groundwater flow derived from collected groundwater elevation data are noted in the figures. Notably, the decline in groundwater elevations at the URS and CWTP wells appears to have significantly influenced groundwater flow directions in the vicinity of these units. At wells located in the vicinity of Morgan Lake, groundwater elevations appear to have been impacted by low lake levels associated with multiple river station outages from late 2022 through most of 2023 (the river station pumps water from the San Juan to Morgan Lake). Localized impacts from operation of the CM-01 and CM-02 extraction wells downgradient of the URS may also be contributing to lower water levels around the former URS.

3.2.2 GROUNDWATER FLOW ESTIMATION

The CCR Rule requires that groundwater flow rates beneath CCR units be estimated during each monitoring event. To meet the requirement, water levels measured at the time of sampling events were used to calculate the direction and magnitude of the hydraulic gradient in the vicinity of each unit using a spreadsheet tool available on the United States Environmental Protection Agency (USEPA) website (USEPA, 2014). Darcy's Equation for flow through porous media was then used with Site data (where available) and/or literature-based hydraulic

conductivity and effective porosity values for hydrogeologic units to estimate groundwater flow rates. Groundwater flow rates and gradient magnitudes were calculated separately for the Pictured Cliffs Sandstone underlying the URS and CWTP, respectively, in 2023, to evaluate the influence pumping at the URS extraction well system had at the units. **Table 3-3** summarizes the results of these calculations.

The hydraulic gradients and flow directions in the Lewis Shale underlying Multiunit 1 at the disposal area were relatively stable. The magnitude of the hydraulic gradient was 0.03 feet per foot (ft/ft) during each monitoring round and the direction of groundwater flow was southwest towards Chaco Wash (259.4 and 258.1 degrees from north for May and November 2023 measurements, respectively), which is comparable to historical gradient and direction values. The corresponding groundwater flow rate for May and November 2023 was 0.0002 feet per day (ft/d), which is also comparable to historical flow rates.

The data collected during the reporting period suggest that the water table in the plant area is relatively flat (as compared to other areas) and in hydraulic communication with Morgan Lake. The Hydraulic gradients and groundwater flows observed in the Pictured Cliffs Sandstone at the former URS and CWTP during the 2023 reporting period are discussed below:

- **For the Pictured Cliffs Sandstone underlying the former URS**, the magnitude of the hydraulic gradient was 0.001 ft/ft, for measurements taken in both May and November 2023. The direction of groundwater flow (collectively for all wells) was north-northwest towards Morgan Lake for both sampling events. The directions calculated were 334 and 331 degrees from north for measurements collected in May and November, respectively. Corresponding groundwater flow rates were 0.02 ft/d for measurements collected during both events in 2023. The URS extraction well pump operation appears to still have an impact on the groundwater flow direction in the area of the URS, which remains directed in a more northerly direction than past evaluations with some localized flow towards the extraction well system.
- **For the Pictured Cliffs Sandstone underlying the CWTP**, the magnitude of the hydraulic gradient was 0.0005 and 0.0004 ft/ft for measurements taken in May and November 2023, respectively. The direction of groundwater flow at the CWTP was significantly changed between November 2022 and May 2023, from the southwest (254 degrees) to the northeast (13 degrees), towards Morgan Lake. The flow direction again switched between May and November 2023 from the northeast (13 degrees) back toward the southwest (220 degrees). Corresponding groundwater flow rates were 0.01 ft/d for both measurements collected in 2023. Since the CWTP is being dredged, the water level in this unit is maintained by pumping water from the cooling water canal into the unit. The changes in groundwater flow directions observed in downgradient CWTP wells may be impacted by lower Morgan Lake levels and the dredging activity conducted in the CWTP during the reporting period.

3.2.3 SAMPLE COLLECTION

Groundwater samples were collected, labeled, preserved, and shipped in accordance with the SAP (Wood, 2022a). In some instances, the wells were observed to be dry upon monitoring or did not have enough water and could not be sampled (**Table 3-2**). In accordance with 40 CFR §257.93(i), which requires the measurement of total recoverable metals, collected groundwater samples were not field filtered prior to analysis. Pursuant to the SAP, quality control samples (i.e., field duplicates, field blanks and extra sample volume for matrix spike samples) were collected during each groundwater monitoring event. These samples are noted on associated chain-of-custody documentation.

3.2.4 SAMPLE ANALYSIS AND DATA VALIDATION

Groundwater samples were submitted to Eurofins and Radiation Safety Engineering, Inc. (Radiation Safety) located in Phoenix, Arizona for analysis. Eurofins evaluated samples for all constituents excluding radium. Radiation Safety performed the radium analyses. Both Eurofins and Radiation Safety are Arizona Department of Health Services-licensed laboratories (AZ0728 and AZ0462, respectively). **Appendix D** presents the associated Laboratory Reports of Analysis organized by CCR unit.

Table 3-2 identifies the analytes evaluated during each monitoring event. Analytes varied based on the monitoring program (i.e., detection vs. assessment monitoring) and the need for supplementary information useful in evaluating groundwater quality across the Site. The SAP identifies Appendix III and Appendix IV constituents with associated analytical methods. As disused in Section 3.1.1, a subset of samples was submitted for fluoride analysis by USEPA Method 9056A during the November 2023 monitoring event.

Following receipt of final laboratory reports of analysis, the reports and associated sample data collected during detection and assessment monitoring were evaluated for quality assurance purposes. The scope of the review was an USEPA Stage 2A validation (USEPA, 2009). **Appendix E** presents the *2023 Data Validation Report* which documents these reviews. No data was deemed unusable in 2023. All data qualifiers and reason codes are included in the *2023 Data Validation Report* (**Appendix E**).

3.2.5 SAMPLE RESULTS

Appendix F presents the groundwater sampling results for 2023 along with historical groundwater quality data for the Site. The groundwater quality data are discussed further in Section 4.2.

3.3 STATISTICAL ANALYSIS OF MONITORING DATA

Statistical analysis of Appendix III and Appendix IV constituent data was conducted during the reporting period to evaluate whether collected monitoring data indicate Site CCR units have adversely impacted underlying groundwater. These analyses were conducted pursuant to the Statistical Data Analysis Work Plan (SDAWP) developed for the Site (WSP, 2023b).

3.3.1 EVALUATION OF APPENDIX III CONSTITUENT DATA

Two CCR units remained in detection monitoring as of the end of 2023 which included: the DFADA and the RWP. There were no groundwater samples collected from the DFADA or the RWP CCR compliance wells during the reporting period due to insufficient groundwater availability in the respective monitoring wells, and thus no statistical analyses were performed using data collected from these units.

A statistical analysis of detection monitoring data collected at the CWTP through January 2023 was completed in April 2023 and is presented in **Appendix B**. The statistical analysis showed an initial exceedance for boron and calcium at MW-62 in November 2022. The exceedances of boron and calcium at MW-62 triggered a 1 of 2 resampling strategy and a resampling event was implemented in January 2023. The resampling detection results confirmed boron to exceed the associated BTV, and therefore the initial exceedance was statistically significant. The resampling detection results confirmed calcium to exceed the associated BTV, and therefore the initial exceedance was statistically significant. Based on the statistical evaluation and pursuant to the CCR Rule, the CWTP was transitioned to assessment monitoring.

3.3.2 EVALUATION OF APPENDIX IV CONSTITUENT DATA

Statistical analysis of assessment monitoring data occurred for one CCR unit, the CWTP, during 2023; both the URS and Multiunit are in Corrective Action. Initial assessment monitoring rounds were conducted in May 2023 (per 40 CFR §257.95[b]) and June 2023 (per 40 CFR §257.95[d][1]) at the CWTP following its transition from detection monitoring. Derivation of GWPSs and a statistical analysis of assessment monitoring data collected at the CWTP through June 2023 was completed in October 2023 and is presented in **Appendix G**. The statistical analysis indicated no Appendix IV constituents were detected at concentrations exceeding their respective GWPSs during the June 2023 groundwater sampling event. The statistical evaluation declared that there are no SSLs of Appendix IV constituents above their respective GWPSs at the CWTP.

4 CORRECTIVE ACTION PROGRAM

4.1 PROGRAM STATUS

Based on the declaration that one or more Appendix IV constituents are present at SSLs above GWPSs downgradient of Multiunit 1 and the URS, these units are currently in the corrective action program. Notification of the exceedances occurred on November 14, 2018, and were documented in the 2018 Annual Report (Wood, 2019b).

A summary of corrective action program activities conducted during the reporting period is presented in the following sections.

4.2 CHARACTERIZATION OF POTENTIAL RELEASES FROM CCR UNITS

To characterize releases from CCR units, 40 CFR §257.95(g)(1) requires: (i) the installation of wells to define the extent of contaminant plumes, (ii) collection of data on the nature and estimated quantity of material released, (iii) installation of at least one well at the facility boundary in the direction of contaminant migration, and (iv) sampling of these wells to characterize the nature and extent of the release.

Initial efforts to address the requirements of 40 CFR §257.95(g)(1) were documented in the *Hydrogeologic Investigation of Multiunit 1 and the Upper Retention Sump* (Wood, 2020c). However, due to the duration required to adequately characterize complex groundwater impacts, work supporting characterization of potential releases from CCR units is ongoing.

During the reporting period, activities conducted to address CCR Rule release characterization requirements downgradient of Multiunit 1 and the URS included:

- The collection of groundwater quality data from an expanded network of existing groundwater wells (Section 3.2);
- Delineation of the nature and extent of the release from Multiunit 1 and the URS in the form of plume maps (**Figures 4-1** through **4-5**).

Findings from these characterization activities are summarized as follows and further discussed in Section 4.4.

Multiunit 1: Molybdenum and cobalt are present at concentrations above their respective GWPSs in groundwater downgradient of Multiunit 1, including a region upgradient of MW-60 which is a past CCR conveyance corridor to former ash ponds. The use of this region for CCR management prior to the construction of Multiunit 1 makes it difficult to distinguish whether impacts are associated with the LAI or previous Site activities.

Assuming the LAI contributed to impacts upgradient of MW-60, the extent of molybdenum impacts associated with Multiunit 1 appear to be limited generally to the area directly downgradient of the LDWP and downgradient of the LAI along the northern edge of the LDWP (**Figures 4-1** and **4-2**).

The extent of cobalt concentrations that exceed the GWPS generally extend up to the SIT (**Figures 4-3** and **4-4**). During the reporting period, cobalt exceeded the GWPS (0.01 mg/L) at the following wells located upgradient of the SIT: MW-17R, MW-36R, MW-38R, MW-52, MW-60, MW-61, and MW-75. The maximum cobalt concentration observed during the reporting period was 0.22 mg/L at MW-36R.

Cobalt exceeded the GWPS at one well located downgradient of the SIT in 2023. MW-57, a supplementary well not part of the certified CCR monitoring system that is located approximately 180 feet downgradient of SIT, had a detection of cobalt at a concentration of 0.019 mg/L in November 2023. In addition to the elevated level of cobalt observed at MW-57, boron, chloride, and sulfate concentrations also increased which could be indicative of a

transient loss of containment in SIT operations. MW-57 is located partially downgradient of Sump 14 which was out of service from September to December 2022 due to a maintenance issue. MW-57 and Sump 14 are both located in the high flow zone downgradient of Multiunit 1 where increased groundwater flow rates at a magnitude of 10 times other portions of the trench were identified prior to the construction of the SIT (URS, 2013).

Four CCR constituents were present at concentrations exceeding Multiunit GWPSs downgradient of the SIT:

- Cobalt exceeded the GWPS (0.01 mg/L) at one well located downgradient of the SIT in 2023: MW-57, a supplementary well not part of the certified CCR monitoring system. The concentration of cobalt at MW-57 was 0.019 mg/L in November 2023. In addition to the elevated level of cobalt observed at MW-57, boron, chloride, and sulfate concentrations also increased in November 2023 which could be indicative of a transient loss of containment in SIT operations. MW-57 is located approximately 250 ft downgradient of SIT Sump 14 which experienced a maintenance issue from September to December 2022 that placed it out of service. MW-57 and Sump 14 are both located in the high flow zone downgradient of the Multiunit 1 where increased groundwater flow rates were identified prior to the construction of the SIT (URS, 2013).
- Lithium was measured at concentrations exceeding the established GWPS (1.8 mg/L) in samples collected from MW-05, MW-18, and MW-56 throughout 2023, and at MW-57 and MW-87 in May and November 2023, respectively. The lithium concentrations in these samples ranged from 2.0 to 2.8 mg/L. Lithium has not been measured at SSLs at the downgradient boundary wells for the Multiunit 1, so lithium is not an established COC for Multiunit 1.
- Radium was detected above the GWPS (5 picocurries per liter [pCi/L]) in samples collected from MW-56 and DMX-05R in November 2023 at concentrations of 6.4 and 5.4 pCI/L, respectively. DMX-05R, installed downgradient of the SIT in June 2023, was sampled for the first time in November 2023 with radium exceeding the GWPS at a detected concentration of 5.4 pCi/L. In contrast to the November 2023 results for DMX-05R, historical sampling results from other wells in its vicinity (DMX-06, MW-06, MW-87) have not detected radium at concentrations exceeding the GWPS. Radium concentrations at DMX-05R will be evaluated in future sampling events. Radium has not been measured at SSLs at the downgradient boundary wells for the Multiunit 1, so radium is not an established COC for Multiunit 1.
- Selenium, an Appendix IV constituent, was measured at concentrations exceeding the GWPS (0.092 mg/L) in samples collected in May and November 2023 from MW-56 at concentrations of 0.22 and 0.24 mg/L, respectively. Selenium has not been measured at SSLs at the downgradient boundary wells for Multiunit 1 and is therefore not an established COC for Multiunit 1.

URS: Fluoride is present at concentrations above the GWPS (4 mg/L) in groundwater in the vicinity of the URS. During the reporting period, the maximum concentration of fluoride observed was 19 mg/L at MW-66, located north of the former footprint of the URS. Fluoride also exceeded the GWPS at downgradient boundary wells MW-67 (13 mg/L), MW-68 (13 mg/L), and MW-69 (4.7 mg/L). Concentrations have declined in these wells since initial characterization of impacts and the demolition of the URS (the highest fluoride concentration observed downgradient of the URS was 32 mg/L); however, the extent of fluoride concentrations that exceed the GWPS has not changed.

The furthest location from the URS where measured concentrations of fluoride exceeded the GWPS (4 mg/L) in 2023 occurred at CM-02, which is an extraction well and not part of the certified CCR monitoring system. CM-02 is located approximately 115 feet downgradient of the northwest corner of the former URS footprint and the concentrations of fluoride during the May and November in 2023 were 4.1 and 4.2 mg/L, respectively (**Figure 4-5**).

DFADA: Although there was not enough water present in downgradient boundary DFADA wells to sample (Section 3.2), groundwater samples were collected during the reporting period from MW-11 and MW-16, which are both supplementary wells located more than 2,000 ft downgradient of the DFADA near surface drainage channels and upgradient of the SIT. As supplementary wells, MW-11 and MW-16 are not part of the certified CCR monitoring system for either the DFADA or Multiunit 1. Since MW-11 and MW-16 are completed in the Weathered Lewis Shale, the BTVs and GWPSs identified for Multiunit 1 (which are based on data collected from MW-49A and MW-74) in **Table 3-1** are the most applicable.

Cobalt concentrations at MW-11 in May and November 2023 were 0.022 and 0.025 mg/L, respectively, which exceed the Multiunit 1 GWPS of 0.01 mg/L. Cobalt concentrations at MW-11 have exceeded the Multiunit 1 GWPS since November 2021 when monitoring of the well for CCR constituents began. MW-11 is located approximately 650 feet upgradient of MW-16, which measured cobalt at a concentration of 0.010 in November 2023 (all previous cobalt data collected from MW-16 have been less than the GWPS). Molybdenum concentrations in samples collected from MW-11 and MW-16 during the 2023 sampling events were less than reporting levels.

The cobalt exceedances observed at MW-11 are difficult to explain. Detected boron concentrations, which are typically elevated in samples collected from CCR-impacted groundwater have remained relatively stable since CCR constituent monitoring began at this well, ranging from 0.50 to 0.52 mg/L (**Appendix F**). There has been more variability in sulfate concentrations at MW-11 which could be associated with surface water interactions with the weathered Lewis Shale. Sulfate concentrations at MW-11 in May and November 2023 were 60,000 and 7,900 mg/L, respectively, but the maximum sulfate concentration observed at the well was 140,000 mg/L in November 2021 (**Appendix F**).

At this time, elevated cobalt concentrations at MW-11 and MW-16 do not appear to be associated with a release from the DFADA but continued monitoring and additional investigation is warranted to ensure the CCR monitoring system at the DFADA is operating as designed.

4.3 INTERIM RESPONSE MEASURES

While remedy selection progressed during the reporting period (Section 4.4), APS implemented several interim response measures at Multiunit 1 and the URS to limit impacts to groundwater. The interim response measures will also help to evaluate the effectiveness of potential remedial technologies. The interim response measures implemented during the reporting period and planned for continued implementation in 2024 are summarized below.

Operation of the Northern Intercept Trench and Southern Intercept Trench. APS currently operates a 7,600-ft long seepage intercept trench system that was installed in two interconnected sections (the Northern Intercept Trench [NIT] and the SIT) along the western boundary of the Site lease boundary. The purpose of the intercept trench system is to intercept and collect seepage from the closed and existing CCR units as it flows westward towards Chaco Wash, thus preventing any potential groundwater contamination from impacting the wash (Wood, 2019b). The NIT was constructed and placed into service in 2011 and the SIT was constructed and placed into service in 2013. The trench system replaced an extraction well system that was assessed as ineffective. The extraction well system has not been fully decommissioned but does not contribute appreciable amounts of extracted groundwater to seepage collected system operations. In 2021, two new extraction wells were added to seepage collection system operations upgradient of the NIT (MW-82S and EW-17); only EW-17 remained operable in 2023.

In 2023, 2.3 million gallons were pumped from the NIT with a daily average of 6,332 gallons per day (gpd) and 11.4 million gallons were pumped from the SIT for a daily average of 31,272 gpd.

The estimated COC mass removed from the groundwater by these systems in 2023 is based on the totalized annual flow extracted in intercept trench operations and average constituent concentrations measured at each associated sump. There is currently flow metering equipment available to estimate flow rates at the NIT Seepage collection systems (i.e., Sump-7, Sump-8, and EW-17) and at the SIT seepage collection systems (i.e., Sump-9, Sump-10, Sump-11, Sump-12, Sump-13, Sump-14-1, Sump-15-1, Sump-16-1, Sump-17, and Sump-18). **Tables 4-1** and **4-2** display the results of the calculation. The total estimated mass removed at the NIT was 0.89 pounds (lbs) and at the SIT was 6.91 lbs for a total removal of 7.80 lbs of cobalt and molybdenum in 2023.

Operation of Extraction Wells at the URS. The URS extraction well system became operational in February 2022, following the installation of pumps, piping, and an electrical control system at URS extraction wells CM-01 and CM-02.

Approximately 736,000 gallons were pumped from the URS extraction wells in 2023 for a daily average of 2,026 gpd. The estimated COC mass removed from the groundwater by these systems is based on the totalized annual extracted flow and the constituent concentration measured at each extraction well during the November 2023 sampling event. The May 2023 fluoride concentrations measured at the URS were not used in performing the fluoride mass calculation due to laboratory issues that resulted in elevated laboratory detection limits greater than the GWPS (see Section 3.1.1). The results of the mass removed calculation are included in **Table 4-3**. The total estimated mass of fluoride removed from wells in the vicinity of the former URS was 25 lbs in 2023. The total mass of fluoride removed during 2023 is approximately 69 lbs less than what was calculated for the 2022 calendar year (94 lbs). The reduction is likely due to the fact that the 2022 calculation was performed using an average of concentrations corresponding to wells surrounding the URS extraction wells (i.e., MW-66, MW-67, MW-68, and MW-69) because samples were not collected from extraction wells CM-01 and CM-02 for fluoride analysis. Detected fluoride concentrations at wells MW-66, MW-67, MW-68, and MW-69 ranged from 3.9 to 16 mg/L in 2022. Observed fluoride concentrations at CM-01 and CM-02 were 3.3 and 4.2 mg/L in 2023. The lower fluoride concentrations observed at CM-01 and CM-02 in 2023 and the higher fluoride concentrations at the surrounding wells (MW-66, MW-67, MW-68, and MW-69) suggest that the calculated 2022 mass overestimated the actual fluoride mass removed in 2022.

4.4 PROGRESS ON REMEDY SELECTION FOR MULTIUNIT 1 AND THE URS

In response to GWPS exceedances at Multiunit 1 and the URS and pursuant to 40 CFR §257.96(a), an Assessment of Corrective Measures (ACM) was prepared in 2019 (Wood, 2019c) to evaluate the performance of several combined corrective measures to address groundwater impacts resulting from Multiunit 1 and the URS. Since completing the ACM, various evaluations and pre-design studies necessary to support the selection and design of remedies for Multiunit 1 and the URS have been conducted (Wood, 2020b; Wood, 2021).

4.4.1 CORRECTIVE MEASURES PRE-DESIGN STUDIES

Evaluations and pre-design studies completed during the 2023 reporting period are described below.

Continued Additional Monitoring at Multiunit 1. An expanded list of supplementary wells and constituents across the Site were monitored during the reporting period. The water quality data from these wells helps to refine the delineation of elevated concentrations of cobalt and molybdenum in groundwater downgradient of Multiunit 1 and the SIT. Spatially and temporally heterogeneous concentrations of cobalt and molybdenum around the Multiunit 1 are discussed in Section 4.2 and supported with updated plume maps (**Figures 4-1** through **4-4**).

Transducers were installed in wells upgradient and downgradient of SIT to record water level changes in the area at a greater frequency than twice a year. Water level data collected from wells located downgradient of the SIT are compared to the water level data collected from wells located upgradient of the SIT to evaluate the performance of the SIT in collecting seepage migrating downgradient from the Multiunit 1. Wells equipped with transducers to monitor water levels are identified in **Table 1-2** and hydrographs of the groundwater elevations recorded at these locations is included in **Appendix H**. Water levels in wells upgradient of the SIT are 10 to 30 ft higher than water levels at wells downgradient of the SIT, which suggests the SIT is performing as designed and preventing contaminated groundwater from migrating toward downgradient receptors such as the Chaco Wash.

Data collected from the flow monitoring station installed within Chaco Wash is compared to water levels downgradient of the SIT to evaluate the relationship between water in the Chaco Wash and groundwater located downgradient of the SIT. Water levels in Chaco Wash measured in 2023 were higher than water levels in several adjacent wells. The water levels support the CSM and indicate that Chaco Wash is a losing reach along the Site boundary during select periods of the year and that surface water infiltration could influence groundwater quality in these wells.

Groundwater Model Update at the URS. The groundwater model previously completed for the URS (Wood, 2019a) was reviewed and an update of the model conditions was completed to reflect current interim response measures at the URS (**Appendix I**). The updated groundwater model was calibrated with data collected through November 2022 and a second transient predictive flow and transport run was conducted to forecast the fate and migration of the fluoride plume based on operation of the current extraction system. The additional extraction wells drilled in December 2023 (Section 1.2.2) were included in the predictive forecast at a pumping rate of 1 gpm and 2 gpm each. The model predicts that operating these additional extraction wells will lead to an expanded capture zone and could potentially dry up portions of the near surface groundwater system under the URS in an expedited timeframe when compared to the current extraction system.

Exposure Assessment and Risk Evaluation at Multiunit 1 and the URS. During the 2023 reporting period, APS initiated an evaluation of human health and environmental risk associated with URS and Multiunit 1 COCs at levels above the GWPS to support an assessment of remedy protectiveness. A site-specific conceptual exposure model and step wise risk screening analysis will be developed and recommendations will be presented in a technical memorandum in 2024.

4.4.2 REMEDY SELECTION REPORTS FOR MULTIUNIT 1 AND THE URS

During the reporting period, APS further progressed selection of remedies for Multiunit 1 and the URS that meet the requirements of 40 CFR §257.97(b) while considering the evaluation factors of 40 CFR § 257.97(c). Preparation of a remedy selection report began in 2023 and is planned to be completed in 2024.

4.4.3 SEMI-ANNUAL PROGRESS REPORT ON REMEDY SELECTION FOR MULTIUNIT 1 AND THE URS

40 CFR §257.97(a) requires the preparation of semi-annual reports which document the progress of remedy selection for CCR units that have potentially impacted groundwater until the remedy is selected. Accordingly, a semi-annual report was prepared during the reporting period on July 15, 2023 which describes the progress of remedy selection for Multiunit 1 and the URS. This semi-annual report is included as **Appendix J**.

This Annual Report for 2023 fulfills the requirements of 40 CFR §257.97(a) for a subsequent semi-annual progress report corresponding to the second half of 2023 by providing updates on remedy selection for Multiunit 1 and the URS (Section 4). Future planned activities related to remedy selection for Multiunit 1 and the URS are documented in Section 5.

4.5 CCR UNIT CLOSURE ACTIVITIES

During the reporting period APS progressed CCR unit closure activities as outlined in the following sections.

4.5.1 URS CLOSURE

As documented in previous annual reports, APS provided notice of its intent to close the URS on December 10, 2018, pursuant to 40 CFR §257.101(a)(1) and §257.101(b)(1). The unit is currently in the closure process per the unit's closure plan (AECOM, 2016) which states the URS will be closed by removal. The URS has been demolished and both CCR and visually impacted soil underlying the unit were removed as of December 14, 2018. A new concrete tank (referred to as the URT) was constructed to serve the function of the URS and was placed in service on December 10, 2018. In accordance with 40 CFR §257.102(c), closure of the URS will not be complete until concentrations of fluoride in groundwater downgradient of the unit decline to less than the GWPS for the constituent. Interim response measures (Section 4.3) have been implemented to address elevated concentrations of fluoride in the vicinity of the former URS while a formal remedy selection process progresses. The SDAWP

update prepared during the 2022 reporting period specifically addresses unit closure statistical evaluation procedure to be used once concentrations decline to a level supporting analysis.

4.5.2 CWTP CLOSURE

APS provided notice of its intent to close the CWTP on November 23, 2020, pursuant to 40 CFR §257.101(a)(1) and §257.101(b)(1). The unit had not triggered corrective action and was in detection monitoring at the time discharges to the unit ceased; however, the unit transitioned into assessment monitoring in April 2023. Upon suspension of discharges to the CWTP, flows were directed to a new sedimentation tank system constructed to serve the function of the CWTP (i.e., treatment of ash-impacted wastewater).

The CWTP is being closed in accordance with its closure plan (AECOM, 2016) which includes closure by removal of CCR solids through mechanical excavation and hydraulic dredging. APS issued a contract to the dredging contractor in January 2022. After mobilizing to the Site in August 2022, the contractor performed detailed surveys of the unit and conducted a drilling program to verify the extent of material to be dredged. After incorporation of the information into a detailed computer model that interfaces with Site equipment, dredging began in early December 2022 and continued throughout most of the reporting period. It is anticipated that closure activities will continue into Q1 of 2024.

4.5.3 MULTIUNIT 1 CLOSURE

APS provided notice of its intent to close the LAI/LDWP (Multiunit 1) on April 10, 2021, pursuant to 40 CFR §257.101(a)(1). Discharges to the LAI (principally flue gas desulfurization (FGD) waste) were suspended at that time and have since been blended with ash and placed in the DFADA.

The closure plans for the LAI (AECOM, 2016) and LDWP (AECOM, 2016) state that CCR in these units will be closed in place and capped with an evapotranspiration cover. Dewatering of the units must occur prior to capping to safely construct the final cover system. During the reporting period, geotechnical assessment of the deposits in the LAI continued to support cover system design with placement of lightweight aggregate material in multiple test roads. The test roads have been constructed on the LAI surface to provide access for the installation of new dewatering and observation wells into the CCR above the liner. A pilot dewatering well study was completed in July 2023. Declining surface water levels in the LDWP indicate that flows into the LDWP from the LAI have significantly decreased; ponded water occurred in less than a quarter of the LDWP footprint as of the end of 2023.

Planned activities for 2024 include continuing to construct access roads onto the LAI and install more extraction wells, completion of cover system design, rerouting of LAI discharges (i.e., decant tower and toe drain seepage) from the LDWP to the RWP, and initiation of stormwater improvements supporting unit closure.

5 KEY ACTIVITIES FOR THE UPCOMING YEAR

During 2024, the following key activities will likely be conducted to support CCR groundwater monitoring and corrective action compliance at the Site:

- *Preparation of an Annual Groundwater Monitoring and Corrective Action Report for 2024* – Per 40 CFR §257.90€, an annual report must be prepared no later than January 31 of the year following the calendar year documented in the report.
- *Continued Detection Monitoring at the DFADA and RWP with Evaluation for SSIs Over Background* – Per 40 CFR §257.94(b), detection monitoring (including analysis of collected samples for Appendix III constituents) must continue on a semi-annual basis. On an ongoing basis, it will be determined whether there has been an SSI over background at the CCR units undergoing detection monitoring within 90 days of sampling and analysis (40 CFR §257.93[h][2]).
- *Initiation of Assessment Monitoring for CCR Units with an SSI over Background (as applicable)* – Per 40 CFR §257.94(e)(1), within 90 days of detecting an SSI over background levels for any Appendix III constituent, an assessment monitoring program must be established.
- *Continued Assessment Monitoring at CWTP, Multiunit 1, and the URS* – While corrective action evaluation progresses, assessment monitoring (including analysis of collected samples for Appendix III and Appendix IV constituents) must be conducted on a semi-annual basis at the Multiunit 1 and the URS per 40 CFR §257.95(b) and (d)(1). At the CWTP, assessment monitoring must be conducted for as long as concentrations of Appendix III constituents exceed background values per 40 CFR §257.95(f) and remain in assessment monitoring until criteria under §257.95(e) of the CCR Rule are met (Federal Register, 2020) or closure of the unit occurs.
- *Preparation of a Well Completion Report for the new URS wells installed in December 2023* – The report will document field activities, borehole advancement, and the well installation of two extraction wells and two monitoring wells at the URS.
- *Method 9056A Sample Analysis Technical Memorandum* – A technical memorandum will be prepared in 2024 that compares the results of the analysis of select groundwater samples for fluoride by both USEPA Method 9056A and EPA Method 300.0 during the November 2023 sampling event.
- *Evaluate Obstruction at MW-87 and Regaining Access* - Roots and plant matter have been identified at MW-87 and are likely associated with roots or plant matter that have migrated through the well screen into the interior of the well casing causing an obstruction. Efforts to clear the obstruction are planned to take place in 2024.
- *Continued Dredging of the CWTP* –Hydraulic dredging began in December 2022 as part of closure activities and is planned to continue into 2024. Groundwater monitoring will continue through the closure process.
- *LAI and LDWP Closure Activities* – Closure activities for 2024 include continuing construction of access roads onto the LAI, the installation of more extraction wells, completion of cover system design, rerouting of LAI discharges (i.e., decant tower and toe drain seepage) from the LDWP to the RWP, and initiation of stormwater improvements supporting unit closure.
- *Preparation of Remedy Selection Report* – APS will select remedies for Multiunit 1 and the URS that meet the requirements of 40 CFR §257.97(b) and document the selection process in a remedy selection report prepared for each unit per 40 CFR §257.97(a).
- *Initiation of Remedial Activities* – Per 40 CFR §257.91(f), remedial activities at Multiunit 1 and the URS will begin within 90 days of selecting a remedy for each unit.

Since the CCR Rule is implemented in phases based on analysis of data collected during the groundwater monitoring program, the foregoing list is subject to change and only includes reasonably probable activities that will occur in 2024; the list is not comprehensive.

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TABLES

Table 1-1

Description of Coal Combustion Residuals Units

CCR Unit	Location	Function	Operation	Size/Construction	History
Upper Retention Sump (URS) *Closure Initiated*	*Plant Area* NW 1/4 of Section 36, T29N, R16W	*Single CCR unit* . Impoundment. Surge pond for FGD system.	FGD system discharge was discharged into the sump via 10 plus controlled/monitored lines. Pond contents were recirculated back into the FGD process via a pump chamber located on the south end of the pond. Solids were periodically removed from the sump.	- 1.07 acres in areal extent - Soil-cement liner on bottom and inside slopes	Placed in service around 1983. Discharges to the unit ceased as of December 10, 2018 and were thereafter directed to a new concrete tank (i.e., the Upper Retention Tank) that is located within the former footprint of the URS and serves the function of the former unit. Closure activities conducted in 2018 included removal of CCR and associated impacted materials from the URS with placement in the DFADA prior to backfilling the area with clean fill.
Combined Waste Treatment Pond (CWTP) *Closure Initiated*	*East of Plant, Adjacent to Morgan Lake* SE 1/4 of Section 25, T29N, R16W	*Single CCR Unit* . Impoundment. Detention pond used for NPDES treatment; settling and stabilization basin for ash-impacted and other Plant wastewater flows prior to discharge to Morgan Lake in accordance with an NPDES permit.	The primary source of water to the CWTP was from hydrobins which separated transport water from bottom ash generated in plant Units 4 and 5. Seven earthen basins in the western edge of the CWTP promoted sediment settling prior to the water decanting into the main portion of the CWTP and then overflowing into the cooling water discharge canal at the northeast corner of the pond.	- 13.4 acres in areal extent	Constructed in 1978. Discharges to the unit ceased as of November 23, 2020 and were thereafter directed to a new concrete tank (i.e., the Bottom Ash Sluice Water Recycle Tank) that is located northeast of the coal storage area. CCR removal from the unit was initiated in 2022.
Lined Ash Impoundment (LAI) *Closure Initiated*	*Disposal Area* E 1/2 of Section 34, T29N, R16W	*Part of a CCR multiunit with the LDWP* that received fly ash, flue gas desulfurization (FGD) waste and associated residuals as a slurry from the plant.	Waste was discharged into the pond in the northeast portion of the pond. Decanted flow discharged via a vertical drop inlet structure and through a toe drain into the LDWP.	- 126.8 acres in areal extent (high water line) - 60 mil HDPE liner - 5,364 acre-ft design capacity - 5,275.2 ft AMSL maximum working level	Constructed on top of closed Ash Ponds 4 and 5 and placed in service in 2004. Discharges to the unit ceased as of April 10, 2021 and were thereafter blended with dry fly ash and placed in the DFADA.
Lined Decant Water Pond (LDWP) *Closure Initiated*	*Disposal Area* E 1/2 of Section 34, T29N, R16W	*Part of a CCR multiunit with the LAI* that received decanted water from the LAI. Impoundment.	Decanted water was discharged into the pond from the LAI via gravity; the water was pumped from the LDWP back to the plant for reuse in operations.	- 45 acres in areal extent - Two 60 mil HDPE liners separated by a leak detection layer - 435 acre-ft design capacity - 5,213.2 ft AMSL maximum working level	Constructed on top of closed Ash Pond 3 and placed in service in 2004. Notice of intent to close provided on April 10, 2021.
Dry Fly Ash Disposal Area (DFADA) *Receiving CCR*	*Disposal Area* SE 1/4 of Section 34, T29N, R16W	*Single CCR unit* . Landfill. Disposal of dry fly ash, bottom ash, FGD (blended with CCR solids), and construction debris.	The DFADA is filled in general accordance with a stacking plan. Leachate generated from the DFADA cells is pumped into trucks and used for dust control.	- 4 conjoined cells (DFADA 1, 2, 3 and 4) with an areal extent of 137.7 acres total - 8,028 acre-ft design capacity - DFADA 1: compacted clay overlain by 60 mil HDPE liner and drainage layer - DFADA 2, 3 and 4: geosynthetic clay liner overlain by 60 mil HDPE liner and drainage layer - Leachate collection system drains each DFADA cell	Constructed in 2007 (DFADA 1), 2012 (DFADA 2), 2014 (DFADA 3) and 2021 (DFADA 4).

Table 1-1

Description of Coal Combustion Residuals Units

CCR Unit	Location	Function	Operation	Size/Construction	History
Return Water Pond (RWP) *Receiving CCR*	*Plant Area* NW 1/4 of Section 36, T29N, R16W	*Single CCR unit.* Lined impoundment for the temporary storage of FGD system waste, drain down from the LAI, treated sewage wastewater flow, and water pumped from the site seepage collection system.	The RWP consists of two cells; FGD system waste generated at the plant can be discharged into an FGD cell while all other liquids are discharged into a liquid cell. A spillway between the two cells allows liquid in the FGD system waste to decant into the liquid cell. Liquids from the liquid cell are pumped back to the plant for reuse in plant operations.	- 5.1 acres in areal extent - Composite liner system and associated LCRS comprised of a primary 60 mil HDPE liner, a geosynthetic drainage layer, a secondary 60 mil HDPE liner, and an underlying geosynthetic clay liner - 38.6 acre-ft design capacity - 5379 ft AMSL maximum working level	Constructed in 2019 and placed into service November 2020.

Abbreviations:

AMSL - above mean sea level
CCR - Coal combustion residuals
CWTP - Combined Waste Treatment Pond
DFADA - Dry Fly Ash Disposal Area
FGD - flue gas desulfurization
ft - feet
HDPE - high density polyethylene
LAI - Lined Ash Impoundment
LCRS - leak collection and removal system
LDWP - Lined Decant Water Pond
NPDES - National Pollutant Discharge Elimination System
RWP - Return Water Pond
URS - Upper Retention Sump

Table 1-2

CCR Groundwater Monitoring Network Summary

Well	CCR Compliance Well	CCR Unit	Well Designation	Hydrogeologic Unit	Date Installed	Borehole Depth [ft bgs]	Top of Casing Elevation [ft AMSL]	Ground Surface Elevation [ft AMSL]	Top of Screen [ft bgs]	Bottom of Screen [ft bgs]	Screen Length [ft]	Top Screen Elevation [ft AMSL]	Bottom Screen Elevation [ft AMSL]	Bottom Borehole Elevation [ft AMSL]
MW-12R[1]	Yes	DFADA	Background	Weathered Lewis Shale	4/10/2018	40	5,270.12	5,268.23	22	32	10	5,246.20	5,236.20	5,228.23
MW-55R	Yes	DFADA	Background	Unweathered Lewis Shale	9/13/2015	95	5,243.96	5,241.36	73	93	20	5,168.46	5,148.46	5,146.36
MW-10	Yes	DFADA	Downgradient Boundary	Weathered Lewis Shale	3/12/1987	35	5,150.71	5,149.65	13	33	20	5,136.65	5,116.65	5,114.65
MW-13	Yes	DFADA	Downgradient Boundary	Weathered Lewis Shale	8/31/1987	60	5,150.75	5,149.52	35	55	20	5,114.62	5,094.62	5,089.52
MW-44	Yes	DFADA	Downgradient Boundary	Weathered Lewis Shale	3/28/2012	40	5,146.89	5,145.15	14	24	10	5,131.65	5,121.65	5,105.15
MW-48	Yes	DFADA	Downgradient Boundary	Unweathered Lewis Shale	5/14/2013	60	5,165.96	5,163.43	35	60	25	5,128.43	5,103.43	5,103.43
MW-11	No	DFADA	Supplementary	Weathered Lewis Shale	3/13/1987	50	5,111.96	5,110.48	30	50	20	5,080.58	5,060.58	5,060.58
MW-16	No	Multiunit 1	Supplementary	Weathered Lewis Shale	9/2/1987	55	5,101.32	5,100.42	36	55	19	5,064.92	5,045.62	5,045.62
MW-43	Yes	Multiunit 1	Background	Weathered Lewis Shale	3/24/2012	60	5,271.58	5,269.42	16	26	10	5,253.42	5,243.42	5,209.42
MW-49A	Yes	Multiunit 1	Background	Weathered Lewis Shale	5/18/2013	68	5,288.62	5,285.3	50	65	15	5,231.38	5,216.38	5,213.38
MW-50A	Yes	Multiunit 1	Background	Weathered Lewis Shale	5/7/2013	63	5,335.67	5,333.20	28	43	15	5,305.20	5,290.20	5,270.20
MW-51	Yes	Multiunit 1	Background	Weathered Lewis Shale	4/28/2013	80	5,288.14	5,285.14	20	30	10	5,265.14	5,255.14	5,205.14
MW-74	Yes	Multiunit 1	Background	Weathered Lewis Shale	1/18/2017	40	5,219.09	5,216.70	8	18	10	5,208.60	5,198.60	5,176.70
MW-07	Yes	Multiunit 1	Downgradient Boundary	Weathered Lewis Shale	3/11/1987[2]	60	5,149.32	5,148.29	15	35	20	5,133.59	5,113.59	5,088.29
MW-08	Yes	Multiunit 1	Downgradient Boundary	Weathered Lewis Shale	3/11/1987[2]	74	5,122.56	5,120.85	28	48	20	5,093.15	5,073.15	5,046.85
MW-40R	Yes	Multiunit 1	Downgradient Boundary	Weathered Lewis Shale	9/17/2015	25	5,137.43	5,134.83	14	24	10	5,120.53	5,110.53	5,109.83
MW-61	Yes	Multiunit 1	Downgradient Boundary	Weathered Lewis Shale	9/16/2015	35	5,129.19	5,126.59	24	34	10	5,102.39	5,092.39	5,091.59
MW-75	Yes	Multiunit 1	Downgradient Boundary	Weathered Lewis Shale	3/15/2017	41	5,126.80	5,124.80	29	39	10	5,095.80	5,085.80	5,083.80
MW-76	Yes	Multiunit 1	Downgradient Boundary	Weathered Lewis Shale	3/16/2017	33	5,116.23	5,114.30	12	27	15	5,102.50	5,087.50	5,081.30
MW-87[1]	Yes	Multiunit 1	Downgradient	Weathered Lewis Shale	11/28/2018	50	5,076.53	5,074.29	15	45	30	5,059.29	5,029.29	5,024.29
DMX-03	No	Multiunit 1	Supplementary	Weathered Lewis Shale	4/14/1992	38	5,085.50	5,084.85	18	38	20	5,066.85	5,046.85	5,046.85
DMX-04[1]	No	Multiunit 1	Supplementary	Weathered Lewis Shale	4/15/1992	51	5,073.00	5,072.11	31	51	20	5,041.11	5,021.11	5,021.11
DMX-05	No	Multiunit 1	Extraction (Inactive)	Weathered Lewis Shale	4/15/1992	42	5,083.23	5,081.42	22	42	20	5,059.42	5,039.42	5,039.42
DMX-05R	No	Multiunit 1	Extraction (Inactive)	Weathered Lewis Shale	6/25/2023	55	NM[4]	NM[4]	20	50	30	NM[4]	NM[4]	NM[4]
DMX-06	No	Multiunit 1	Supplementary	Weathered Lewis Shale	4/16/1992	35	5,077.40	5,076.42	15	35	20	5,061.42	5,041.42	5,041.42
MW-05[1]	No	Multiunit 1	Supplementary	Weathered Lewis Shale	3/12/1987	49	5,088.50	5,087.31	29	49	20	5,058.21	5,038.21	5,038.21
MW-06	No	Multiunit 1	Supplementary	Weathered Lewis Shale	3/12/1987	49	5082.71	5,080.19	29	49	20	5,051.39	5,031.39	5,031.39
MW-06R[1]	No	Multiunit 1	Supplementary	Weathered Lewis Shale	6/26/2023	45	NM[4]	NM[4]	25	40	15	NM[4]	NM[4]	NM[4]
MW-15	No	Multiunit 1	Supplementary	Weathered Lewis Shale	9/1/1987	53	5,093.93	5,092.28	22	52	30	5,070.08	5,040.08	5,039.58
MW-17R[1]	No	Multiunit 1	Supplementary	Weathered Lewis Shale	12/12/2013	32	5,093.09	5,090.43	17	32	15	5,073.93	5,058.93	5,058.43
MW-18[1]	No	Multiunit 1	Supplementary	Weathered Lewis Shale	9/3/1987	55	5,089.10	5,088.06	26	55	30	5,062.56	5,033.06	5,033.06
MW-23R	No	Multiunit 1	Supplementary	Weathered Lewis Shale	12/6/2013	42	5,101.53	5,099.08	21	41	20	5,078.08	5,058.08	5,057.58
MW-24	No	Multiunit 1	Supplementary	Weathered Lewis Shale	9/05/1987	70	5,081.65	5,080.41	60	70	10	5,020.71	5,010.71	5,010.71
MW-36R[1]	No	Multiunit 1	Supplementary	Weathered Lewis Shale	12/12/2013	34	5,093.33	5,090.76	14	34	20	5,077.26	5,057.26	5,056.76
MW-38R[1]	No	Multiunit 1	Supplementary	Weathered Lewis Shale	12/13/2013	39	5,094.12	5,091.41	14	39	25	5,077.91	5,052.91	5,052.41
MW-45	No	Multiunit 1	Supplementary	Weathered Lewis Shale	5/19/2013	39	5,089.56	5,087.13	24	39	15	5,063.13	5,048.13	5,048.13
MW-46[1]	No	Multiunit 1	Supplementary	Weathered Lewis Shale	4/26/2013	26	5,064.30	5,061.91	16	26	10	5,045.91	5,035.91	5,035.91
MW-52	No	Multiunit 1	Supplementary	Weathered Lewis Shale	5/10/2013	82	5,210.41	5,208.06	67	82	15	5,141.06	5,126.06	5,126.06
MW-54	No	Multiunit 1	Supplementary	Weathered Lewis Shale	5/20/2013	91	5,217.82	5,218.38	76	91	15	5,142.38	5,127.38	5,127.38
MW-56[1]	No	Multiunit 1	Supplementary	Weathered Lewis Shale	12/4/2013	37	5,091.49	5,089.14	26	36	10	5,063.14	5,053.14	5,052.64

Table 1-2

CCR Groundwater Monitoring Network Summary

Well	CCR Compliance Well	CCR Unit	Well Designation	Hydrogeologic Unit	Date Installed	Borehole Depth [ft bgs]	Top of Casing Elevation [ft AMSL]	Ground Surface Elevation [ft AMSL]	Top of Screen [ft bgs]	Bottom of Screen [ft bgs]	Screen Length [ft]	Top Screen Elevation [ft AMSL]	Bottom Screen Elevation [ft AMSL]	Bottom Borehole Elevation [ft AMSL]
MW-57[1]	No	Multiunit 1	Supplementary	Weathered Lewis Shale	12/8/2013	43	5,088.30	5,085.70	22	42	20	5,063.70	5,043.70	5,043.20
MW-60	No	Multiunit 1	Supplementary	Weathered Lewis Shale	9/16/2015	25	5144.10	5141.50	14	24	10	5,127.16	5,117.16	5,116.50
EW-14[1]	No	Multiunit 1	Supplementary	Weathered Lewis Shale	10/26/2010	48	5079.65	5,078.85	18	48	30	5,060.85	5,030.85	5,030.65
EW-15	No	Multiunit 1	Supplementary	Weathered Lewis Shale	10/26/2010	50	5077.73	5,076.82	19	49	30	5,057.82	5,027.82	5,027.20
EW-17	No	Multiunit 1	Extraction	Weathered Lewis Shale	10/08/2020	50	5097.55	5,095.73	20	40	20	5,075.73	5,055.73	5,045.73
MW-34[5]	No	Multiunit 1	Supplementary	Weathered Lewis Shale	6/9/2010	49	5078.33	5,077.34	24	49	25	5,053.34	5,028.34	5,028.34
IP-02	No	Multiunit 1	Supplementary	Weathered Lewis Shale	December 2013	28	5,090.79	5,088.27	17	27	10	5,071.27	5,061.27	5,060.77
IP-03	No	Multiunit 1	Supplementary	Weathered Lewis Shale	December 2013	35	5,091.08	5,088.68	24	34	10	5,064.68	5,054.68	5,054.18
IP-04	No	Multiunit 1	Supplementary	Weathered Lewis Shale	December 2013	33	5,095.92	5,093.46	22	32	10	5,071.46	5,061.46	5,060.96
IP-05	No	Multiunit 1	Supplementary	Weathered Lewis Shale	December 2013	41	5,094.43	5,091.88	21	41	20	5,071.38	5,051.38	5,050.88
MW-62	Yes	CWTP	Downgradient Boundary	Pictured Cliffs Sandstone	9/28/2015	20	5,341.87	5,339.37	10	20	10	5,329.37	5,319.37	5,319.37
MW-63	Yes	CWTP	Downgradient Boundary	Pictured Cliffs Sandstone	9/25/2015	20	5,337.02	5,337.02	9	19	10	5,328.02	5,318.02	5,317.02
MW-64	Yes	CWTP	Downgradient Boundary	Pictured Cliffs Sandstone	9/26/2015	25	5,337.66	5,337.66	10	20	10	5,327.66	5,317.66	5,312.66
MW-65	Yes	CWTP	Downgradient Boundary	Pictured Cliffs Sandstone	9/27/2015	20	5,339.74	5,337.24	8	18	10	5,329.24	5,319.24	5,317.24
MW-66[1]	Yes	URS	Downgradient Boundary	Pictured Cliffs Sandstone	9/27/2015	33	5,344.69	5,344.70	15	25	10	5,329.70	5,319.70	5,311.70
MW-67[1]	Yes	URS	Downgradient Boundary	Pictured Cliffs Sandstone	9/11/2015	31	5352.76[3]	5,353.80[3]	20	30	10	5,334.42	5,324.42	5,323.02
MW-68[1]	Yes	URS	Downgradient Boundary	Pictured Cliffs Sandstone	9/10/2015	30	5,353.58	5,353.95	19	29	10	5,334.95	5,324.95	5,323.95
MW-69	Yes	URS	Downgradient Boundary	Pictured Cliffs Sandstone	9/9/2015	35	5,357.66	5,355.26	24	34	10	5,330.96	5,320.96	5,320.26
MW-70	Yes	URS	Downgradient Boundary	Pictured Cliffs Sandstone	9/30/2015	53	5,371.12	5,368.62	40	50	10	5,328.62	5,318.62	5,315.62
MW-83	Yes	URS	Downgradient	Pictured Cliffs Sandstone	11/29/2018	35	5,343.15	5,341.51	14	29	15	5,327.51	5,312.51	5,306.51
MW-84[1]	Yes	URS	Downgradient	Pictured Cliffs Sandstone	11/18/2018	35	5,338.23	5,339.34	10	30	20	5,329.34	5,309.34	5,304.34
MW-85[1]	Yes	URS	Downgradient	Pictured Cliffs Sandstone	11/18/2018	35	5,352.78	5,353.69	15	30	15	5,338.69	5,323.69	5,318.69
MW-86	Yes	URS	Downgradient	Pictured Cliffs Sandstone	11/17/2018	35	5,338.76	5,338.74	10	30	20	5,328.74	5,308.74	5,303.74
CM-01[1]	No	URS	Extraction	Pictured Cliffs Sandstone	12/13/2019	37	5,353.42	5,351.19	20	30	10	5,331.19	5,321.19	5,314.19
CM-02[1]	No	URS	Extraction	Pictured Cliffs Sandstone	12/13/2019	37	5,348.50	5,346.54	20	30	10	5,326.54	5,316.54	5,309.54
CM-03[1]	No	URS	Supplementary	Pictured Cliffs Sandstone	12/12/2019	37	5,354.85	5,352.32	20	30	10	5,332.32	5,322.32	5,315.32
CM-04[1]	No	URS	Supplementary	Pictured Cliffs Sandstone	12/12/2019	36	5,353.94	5,351.81	20	30	10	5,331.81	5,321.81	5,315.81
URS-05	No	URS	Supplementary	Pictured Cliffs Sandstone	12/13/2023	50	NM[4]	NM[4]	30	40	10	NM[4]	NM[4]	NM[4]
URS-06	No	URS	Extraction (Inactive)	Pictured Cliffs Sandstone	12/15/2023	50	NM[4]	NM[4]	20	40	20	NM[4]	NM[4]	NM[4]
URS-07	No	URS	Extraction (Inactive)	Pictured Cliffs Sandstone	12/12/2023	50	NM[4]	NM[4]	25	45	20	NM[4]	NM[4]	NM[4]
URS-08	No	URS	Supplementary	Pictured Cliffs Sandstone	12/19/2023	50	NM[4]	NM[4]	30	40	10	NM[4]	NM[4]	NM[4]
MW-71	Yes	URS/CWTP/RWP	Background	Pictured Cliffs Sandstone	3/1/2016	50	5,362.91	5,363.62	23	43	20	5,341.12	5,321.12	5,313.62
MW-72	Yes	URS/CWTP/RWP	Background	Pictured Cliffs Sandstone	3/2/2016	61	5,381.62	5,379.09	51	61	10	5,328.39	5,318.39	5,318.09
MW-73	Yes	URS/CWTP/RWP	Background	Pictured Cliffs Sandstone	1/18/2017	45	5,353.95	5,351.90	29	44	15	5,323.00	5,308.00	5,306.90
MW-88	Yes	RWP	Downgradient Boundary	Pictured Cliffs Sandstone	12/6/2019	31	5365.25	5362.71	20	30	10	5,342.71	5,332.71	5,331.71
MW-89	Yes	RWP	Downgradient Boundary	Pictured Cliffs Sandstone	12/6/2019	35	5370.21	5367.51	24	34	10	5,343.51	5,333.51	5,332.51
MW-90	Yes	RWP	Downgradient Boundary	Pictured Cliffs Sandstone	12/7/2019	40	5374.08	5372.93	29	39	10	5,343.93	5,333.93	5,332.93
DMX-01	No	---	Supplementary	Weathered Lewis Shale	4/15/1992	39	5,098.02	5,097.49	19	39	20	5,078.49	5,058.49	5,058.49
IP-01	No	---	Supplementary	Weathered Lewis Shale	12/3/2013	39	5,101.81	5,099.39	14	39	20	5,085.89	5,060.89	5,060.89
MW-01	No	---	Supplementary	Weathered Lewis Shale	9/06/1987	22	5,140.43	5,138.48	12	22	10	5,126.88	5,116.88	5,116.88

Table 1-2

CCR Groundwater Monitoring Network Summary

Well	CCR Compliance Well	CCR Unit	Well Designation	Hydrogeologic Unit	Date Installed	Borehole Depth [ft bgs]	Top of Casing Elevation [ft AMSL]	Ground Surface Elevation [ft AMSL]	Top of Screen [ft bgs]	Bottom of Screen [ft bgs]	Screen Length [ft]	Top Screen Elevation [ft AMSL]	Bottom Screen Elevation [ft AMSL]	Bottom Borehole Elevation [ft AMSL]
MW-03	No	---	Supplementary	Weathered Lewis Shale	3/13/1987	44	5,126.73	5,125.52	14	44	30	5,111.27	5,081.27	5,081.27
MW-19	No	---	Supplementary	Weathered Lewis Shale	9/3/1987	50	5,127.40	5,126.34	29	50	21	5,097.14	5,076.64	5,076.64
MW-21	No	---	Supplementary	Weathered Lewis Shale	9/4/1987	30	5,155.04	5,154.47	11	30	19	5,143.87	5,124.47	5,124.47
MW-22	No	---	Supplementary	Weathered Lewis Shale	9/4/1987	30	5,156.51	5,156.30	10	30	20	5,145.90	5,125.90	5,125.90
MW-26	No	---	Supplementary	Weathered Lewis Shale	9/06/1987	51	5,139.26	5,138.36	41	51	10	5,097.86	5,087.86	5,087.86
MW-30	No	---	Supplementary	Weathered Lewis Shale	6/7/2010	23	5,091.67	5,092.06	13	23	10	5,079.06	5,069.06	5,069.06
MW-31	No	---	Supplementary	Weathered Lewis Shale	6/7/2010	24	5,092.59	5,089.96	14	24	10	5,075.96	5,065.96	5,065.96
MW-32	No	---	Supplementary	Weathered Lewis Shale	6/7/2010	20	5,087.65	5,084.94	10	20	10	5,074.94	5,064.94	5,064.94
MW-77S	No	---	Supplementary	Weathered Lewis Shale	11/8/2018	80	5094.94	5092.35	24	44	20	5,068.35	5,048.35	5,012.35
MW-78S	No	---	Supplementary	Weathered Lewis Shale	11/13/2018	80	5,088.79	5,086.51	24	44	20	5,062.51	5,042.51	5,006.51
MW-79S	No	---	Supplementary	Weathered Lewis Shale	11/20/2018	58	5,086.90	5,084.35	16	36	20	5,068.35	5,048.35	5,026.35
MW-80S	No	---	Supplementary	Weathered Lewis Shale	11/16/2018	81	5,086.80	5,084.29	35	55	20	5,049.29	5,029.29	5,003.29
MW-81	No	---	Supplementary	Weathered Lewis Shale	11/26/2018	36	5,086.41	5,084.07	13	33	20	5,071.07	5,051.07	5,048.07
MW-82S	No	---	Supplementary	Weathered Lewis Shale	11/27/2018	65	5,093.37	5,091.02	17	37	20	5,074.02	5,054.02	5,026.02
EW-11	No	---	Extraction (Inactive)	Weathered Lewis Shale	NA	50	5,043.60	5,043.85	12	50	38	5,031.90	4,993.80	4,993.75
EW-11R	No	---	Extraction (Inactive)	Weathered Lewis Shale	6/23/2023	43	NM[4]	NM[4]	12	42	30	NM[4]	NM[4]	NM[4]
EW-12	No	---	Extraction (Inactive)	Weathered Lewis Shale	NA	51	5038.1	5039.05	NA	NA	NA	NA	NA	4988.05
EW-12R	No	---	Extraction (Inactive)	Weathered Lewis Shale	6/24/2023	38	NM[4]	NM[4]	12.5	37.5	25	NM[4]	NM[4]	NM[4]

Notes and Abbreviations:

Source of presented information is AECOM, 2017 and Sakura Engineering & Surveying, 2017, 2019, and 2020.

Vertical datum is NAVD 88

[1] - Water level monitored via transdcuer

[2] - Estimated

[3] - New surveyed elevation after wellhead modifications

[4] - Well has not been surveyed as of January 31, 2024

[5] - MW-34 is also designated EW-34 on previous reports

Wells highlighted gray were abandoned

AMSL - Above mean sea level

bgs - below ground surface

CCR - coal combustion residual(s)

CWTP - Combined Waste Treatment Pond

DFADA - Dry Fly Ash Disposal Area

ft - feet

NA - Data Not Available

NM - Not Measured as of January 31, 2024

RWP - Return Water Pond

URS - Upper Retention Sump

Well Designation Descriptions:

Background - Monitoring location used to determine background groundwater quality that has not been affected by the CCR unit under investigation (40 CFR §257.91)

Downgradient - Monitoring location used to evaluate the nature and extent of groundwater conditions associated with each CCR unit

Downgradient Boundary - Monitoring location used to assess the groundwater conditions at the boundary of each CCR unit

Extraction - Well location that currently supports the hydraulic containment system with the extraction of groundwater located downgradient of a CCR unit

Extraction (Inactive) - Well location installed to assist with the extraction of groundwater that does not actively support the current hydraulic containment system

Supplementary - Monitoring location intended to further support interpretations of both immediate CCR Unit-area conditions and Site-wide conditions

Table 3-1

BTVs and GWPSs for Site CCR Units

		CWTP				URS				Multiunit 1				DFADA[3]	
	Constituent	BTV [mg/L]	Reference	GWPS [mg/L]	Reference	BTV [mg/L]	Reference	GWPS [mg/L]	Reference	BTV [mg/L]	Reference	GWPS [mg/L]	Reference	BTV [mg/L]	Reference
Appendix III Constituents	Boron	2.0 (MW-62, MW-63) 0.73 (MW-64, MW-65)	*4* *4*	N/A		1.9	*1*	N/A		1.3	*1*	N/A		1.3	*1*
	Calcium	536 (MW-62, MW-63) 486 (MW-64, MW-65)	*4* *4*			540	*1*			740	*1*			740	*1*
	Chloride	631	*4*			710	*1*			5,700	*1*			5,700	*1*
	Fluoride	1.8 (MW-62) 2.3 (MW-63) 1.6 (MW-64) 2.1 (MW-65)	*4*			>RL	*1*			0.8	*1*			0.8	*1*
	pH[1]	6.50 - 6.90 (MW-62, MW-63) 7.23 - 7.66 (MW-64) 7.00 - 7.44 (MW-65)	*4* *4* *4*			<LPL or >UPL	*1*			7.4	*1*			7.4	*1*
	Sulfate	13,000	*1*			13,000	*1*			5,100	*1*			5,100	*1*
	TDS	20,000	*1*			20,000	*1*			15,000	*1*			15,000	*1*
Appendix IV Constituents	Antimony	0.00027	4	0.006	4	0.01	*3*	0.01	*3*	0.01	*2*	0.01	*2*	N/A	
	Arsenic	0.013	4	0.013	4	0.013	*3*	0.013	*3*	0.0086	*2*	0.01	*2*		
	Barium	0.51	4	2	4	0.05	*3*	2	*3*	0.04	*2*	2	*2*		
	Beryllium	0.0022	4	0.004	4	0.001	*3*	0.004	*3*	0.001	*2*	0.004	*2*		
	Cadmium	0.00021	4	0.005	4	0.001	*3*	0.005	*3*	0.002	*2*	0.005	*2*		
	Chromium	0.0014	4	0.1	4	0.01	*3*	0.1	*3*	0.02	*2*	0.1	*2*		
	Cobalt	0.014	4	0.014	4	0.016	*3*	0.016	*3*	0.01	*2*	0.01	*2*		
	Fluoride	4.2	4	4.2	4	4	*3*	4	*3*	5	*2*	5	*2*		
	Lead	0.0011	4	0.015	4	0.005	*3*	0.015	*3*	0.01	*2*	0.015	*2*		
	Lithium	0.89	4	0.89	4	0.8	*3*	0.8	*3*	1.8	*2*	1.8	*2*		
	Mercury	0.0002	4	0.002	4	0.0002	*3*	0.002	*3*	0.0002	*2*	0.002	*2*		
	Molybdenum	0.011	4	0.1	4	0.011	*3*	0.1	*3*	0.12	*2*	0.1	*2*		
	Selenium	0.47	4	0.47	4	0.45	*3*	0.45	*3*	0.092	*2*	0.092	*2*		
	Thallium	0.0012	4	0.002	4	0.0014	*3*	0.002	*3*	0.017	*2*	0.017	*2*		
	Combined Radium[2]	4.16	4	5	4	5.4	*3*	5.4	*3*	4.4	*2*	5	*2*		

Notes:

[1] Units are standard units

[2] Units are picocuries per liter

[3] BTVs identified for the DFADA used background wells, MW-49A and MW-74, as presented in the CCR Monitoring Well Network Report and Certification (AECOM, 2017)

Abbreviations:

BTV - Background Threshold Value

CWTP - Combined Waste Treatment Pond

GWPS - Groundwater Protection Standard

LPL - lower prediction limit

mg/L - milligrams per liter

N/A - not applicable RL - reporting limit

UPL - upper prediction limit URS - Upper Retention Sump

References:

1 - *Statistical Analysis of Initial Detection Monitoring Appendix III Constituent Data* . Arizona Public Service Four Corners Power Plant - Fruitland, New Mexico. Wood Technical Memorandum dated January 12, 2018 and revised August 20, 2018.

2 - CCR Groundwater Assessment Monitoring Statistical Analysis and Results for Multiunit 1. Arizona Public Service Four Corners Power Plant - Fruitland, New Mexico. Wood Technical Memorandum dated October 15, 2018.

3 - CCR Groundwater Assessment Monitoring Statistical Analysis and Results for the Upper Retention Sump. Arizona Public Service Four Corners Power Plant - Fruitland, New Mexico. Wood Technical Memorandum dated October 15, 2018.

4 - CCR Groundwater Detection Monitoring Statistical Analysis and Results for the CWTP Appendix IV Constituent Data Collected Through June 2023. Arizona Public Service Four Corners Power Plant - Fruitland, New Mexico. WSP Technical Memorandum dated October 09, 2023.

Table 3-2

CCR Groundwater Monitoring Event Summary for 2023

CCR UNIT	Monitoring Location	CCR Compliance Well	Monitoring Point Designation	January 27, 2023 (Detection Resampling)	May 02-09, 2023 (Detection and Supplemental Sampling)	May 02-09, 2023 (Assessment Sampling)	June 27-28, 2023 (Assessment Sampling)	November 06-16, 2023 (Detection and Supplemental Sampling)	November 06-16, 2023 (Assessment Sampling)	Number of Field Original Samples Collected in 2023[(b)]
CWTP	MW-62	Yes	Downgradient Boundary	X	---	X	X	---	X	4
	MW-63	Yes	Downgradient Boundary	---	---	X	X	---	X	3
	MW-64	Yes	Downgradient Boundary	---	---	X	X	---	X	3
	MW-65	Yes	Downgradient Boundary	---	---	X	X	---	X	3
	Morgan Lake	No	Surface Water	X	---	X	X	---	X	3
	CWTP	No	Surface Water	X	---	X	X	---	X	3
	Cooling Canal	No	Surface Water	X	---	X	X	---	X	3
DFADA	MW-10	Yes	Downgradient Boundary	---	NS[1]	---	---	NS[1]	---	0
	MW-11	No	Supplementary	---	X	---	---	X	---	2
	MW-12R1	Yes	Background	---	NS[1]	---	---	NS[1]	---	0
	MW-13	Yes	Downgradient Boundary	---	NS[1]	---	---	NS[1]	---	0
	MW-16	No	Supplementary	---	---	X	---	---	X	2
	MW-44	Yes	Downgradient Boundary	---	NS[1]	---	---	NS[1]	---	0
	MW-48	Yes	Downgradient Boundary	---	NS[1]	---	---	NS[1]	---	0
	MW-55R	Yes	Background	---	NS[1]	---	---	NS[1]	---	0
Multiunit 1	MW-01	No	Supplementary	---	---	X	---	---	X	2
	MW-03	No	Supplementary	---	---	X	---	---	X	2
	MW-05	No	Supplementary	---	---	X	---	---	X	2
	MW-06	No	Supplementary	---	---	X	---	---	NS[2]	1
	MW-06R	No	Supplementary	---	---	NS[3]	---	---	X	1
	MW-07	Yes	Downgradient Boundary	---	---	X	---	---	X	2
	MW-08	Yes	Downgradient Boundary	---	---	X	---	---	X	2
	MW-15	No	Supplementary	---	---	X	---	---	X	2
	MW-17R	No	Supplementary	---	---	X	---	---	X	2
	MW-18	No	Supplementary	---	---	X	---	---	X	2
	MW-19	No	Supplementary	---	---	X	---	---	X	2
	MW-21	No	Supplementary	---	---	X	---	---	X	2
	MW-23R	No	Supplementary	---	---	X	---	---	X	2
	MW-24	No	Supplementary	---	---	X	---	---	X	2
	MW-30	No	Supplementary	---	---	X	---	---	X	2
	MW-32	No	Supplementary	---	---	---	---	---	--	0
	MW-34	No	Supplementary	---	---	NS[4]	---	---	X	1
	MW-36R	No	Supplementary	---	---	X	---	---	X	2
	MW-38R	No	Supplementary	---	---	X	---	---	X	2
	MW-40R	Yes	Downgradient Boundary	---	---	NS[5]	---	---	NS[5]	0
	MW-43	Yes	Background	---	---	NS[5]	---	---	NS[5]	0
	MW-49A	Yes	Background	---	---	X	---	---	X	2
	MW-50A	Yes	Background	---	---	NS[5]	---	---	NS[5]	0
	MW-51	Yes	Background	---	---	NS[5]	---	---	NS[5]	0
	MW-52	No	Supplementary	---	---	X	---	---	X	2
	MW-56	No	Supplementary	---	---	X	---	---	X	2
	MW-57	No	Supplementary	---	---	X	---	---	X	2
	MW-60	No	Supplementary	---	---	X	---	---	X	2
	MW-61	Yes	Downgradient Boundary	---	---	X	---	---	X	2
	MW-74	Yes	Background	---	---	NS[5]	---	---	NS[5]	0
	MW-75	Yes	Downgradient Boundary	---	---	X	---	---	X	2
	MW-76	Yes	Downgradient Boundary	---	---	NS[5]	---	---	NS[5]	0
	MW-77S	No	Supplementary	---	---	X	---	---	X	2
	MW-78S	No	Supplementary	---	---	X	---	---	X	2
	MW-79S	No	Supplementary	---	---	X	---	---	X	2
	MW-80S	No	Supplementary	---	---	NS[1]	---	---	NS[1]	0
	MW-81	No	Supplementary	---	---	X	---	---	X	2
	MW-82S	No	Supplementary	---	---	X	---	---	X	2
	MW-87	Yes	Downgradient	---	---	X	---	---	NS[6]	1
	EW-11R	No	Extraction (Inactive)	---	---	NS[3]	---	---	X	1
	EW-12R	No	Extraction (Inactive)	---	---	NS[3]	---	---	X	1
	EW-14	No	Supplementary	---	---	NS[4]	---	---	X	1
	EW-15	No	Supplementary	---	---	NS[4]	---	---	X	1
	EW-17	No	Extraction	---	---	X	---	---	X	2
	DMX-01	No	Supplementary	---	---	X	---	---	X	2
	DMX-03	No	Supplementary	---	---	X	---	---	X	2
	DMX-04	No	Supplementary	---	---	X	---	---	X	2
	DMX-05R	No	Extraction (Inactive)	---	---	NS[3]	---	---	X	1
	DMX-06	No	Supplementary	---	---	X	---	---	X	2
	SUMP-1	No	Extraction	---	---	X	---	---	X	2

Table 3-2

CCR Groundwater Monitoring Event Summary for 2023

CCR UNIT	Monitoring Location	CCR Compliance Well	Monitoring Point Designation	January 27, 2023 (Detection Resampling)	May 02-09, 2023 (Detection and Supplemental Sampling)	May 02-09, 2023 (Assessment Sampling)	June 27-28, 2023 (Assessment Sampling)	November 06-16, 2023 (Detection and Supplemental Sampling)	November 06-16, 2023 (Assessment Sampling)	Number of Field Original Samples Collected in 2023[(b)]
Multiunit 1	SUMP-2	No	Extraction	---	---	X	---	---	X	2
	SUMP-3	No	Extraction	---	---	X	---	---	X	2
	SUMP-7	No	Extraction	---	---	X	---	---	X	2
	SUMP-8	No	Extraction	---	---	X	---	---	X	2
	SUMP-9	No	Extraction	---	---	X	---	---	X	2
	SUMP-10	No	Extraction	---	---	X	---	---	X	2
	SUMP-11	No	Extraction	---	---	X	---	---	X	2
	SUMP-12	No	Extraction	---	---	X	---	---	X	2
	SUMP-13	No	Extraction	---	---	X	---	---	X	2
	SUMP-14	No	Extraction	---	---	X	---	---	X	2
	SUMP-15	No	Extraction	---	---	X	---	---	X	2
	SUMP-16	No	Extraction	---	---	X	---	---	X	2
	SUMP-17	No	Extraction	---	---	X	---	---	X	2
	SUMP-18	No	Extraction	---	---	X	---	---	X	2
	Ash Pond Vault 6	No	Extraction	---	---	X	---	---	X	2
RWP	MW-88	Yes	Downgradient Boundary	---	NS[3]	---	---	NS[3]	---	0
	MW-89	Yes	Downgradient Boundary	---	NS[3]	---	---	NS[3]	---	0
	MW-90	Yes	Downgradient Boundary	---	NS[3]	---	---	NS[3]	---	0
URS	MW-66	Yes	Downgradient Boundary	---	---	X	---	---	X	2
	MW-67	Yes	Downgradient Boundary	---	---	X	---	---	X	2
	MW-68	Yes	Downgradient Boundary	---	---	X	---	---	X	2
	MW-69	Yes	Downgradient Boundary	---	---	X	---	---	X	2
	MW-70	Yes	Downgradient Boundary	---	---	X	---	---	X	2
	MW-71[(a)]	Yes	Background	X	---	X	X	---	X	4
	MW-72[(a)]	Yes	Background	X	---	X	X	---	X	4
	MW-73[(a)]	Yes	Background	X	---	X	X	---	X	4
	MW-83	Yes	Downgradient	---	---	X	---	---	X	2
	MW-84	Yes	Downgradient	---	---	X	---	---	X	2
	MW-85	Yes	Downgradient	---	---	X	---	---	X	2
	MW-86	Yes	Downgradient	---	---	X	---	---	X	2
	CM-01	No	Extraction	---	---	X	---	---	X	2
	CM-02	No	Extraction	---	---	X	---	---	X	2
Analyzed Constituents				*App III and IV Constituents*	*App III, Select App IV, and Additional Constituents*	*App III, App IV, and Additional Constituents*	*App III, App IV, and Additional Constituents*	*App III, Select App IV, and Additional Constituents*	*App III, App IV, and Additional Constituents*	165

Notes:

[(a)] Background wells for the CWTP, RWP, and URS.

[(b)] Totals exclude field duplicate samples.

X - Well Monitored

--- - Well Not Monitored

[1]Well contained no groundwater and was measured dry during the sampling event

[2]Well was abandoned in June 2023

[3]Well installed in June 2023

[4]Well was not configured for sampling

[5]Well contained an insufficient amount of groundwater to support sample collection

[6]Obstruction present in the well prevented sample collection

Abbreviations:

App - Appendix

CCR - coal combustion residuals

CWTP - Combined Waste Treatment Pond

DFADA - Dry Fly Ash Disposal Area

RWP - Return Water Pond

URS - Upper Retention Sump

Monitoring Point Type Descriptions:

Background - Monitoring location used to determine background groundwater quality that has not been affected by the CCR unit under investigation (40 CFR §257.91)

Downgradient - Monitoring location used to evaluate the nature and extent of groundwater conditions associated with each CCR unit

Downgradient Boundary - Monitoring location used to assess the groundwater conditions at the boundary of each CCR unit

Extraction - Well location that currently supports the hydraulic containment system with the extraction of groundwater located downgradient of a CCR unit

Extraction (Inactive) - Well location installed to assist with the extraction of groundwater that does not actively support the current hydraulic containment system

Supplementary - Monitoring location intended to further support interpretations of both immediate CCR Unit-area conditions and Site-wide conditions

Surface Water - Sample collected from a surface water body that is monitored to provide information for overall Site conditions

Table 3-3

Aquifer Properties and Groundwater Flow Calculations

Hydrogeologic Unit (CCR Unit)	Estimated Hydraulic Conductivity [ft/d]	Estimated Effective Porosity [Vol/Vol]	Sampling Event	Calculated Hydraulic Gradient [ft/ft]	Calculated Groundwater Flow Direction [degrees from North]	Estimated Groundwater Flow Rate [ft/d]
Pictured Cliffs Sandstone (URS)	6.0[(a)]	0.25[(b)]	May 2023	0.001	334	0.02
			November 2023	0.001	331	0.02
Pictured Cliffs Sandstone (CWTP)			May 2023	0.0005	13	0.01
			November 2023	0.0004	220	0.01
Lewis Shale (Multiunit 1)	0.00028[(b)]	0.05[(b)]	May 2023	0.03	259	0.0002
			November 2023	0.03	258	0.0002

Notes:

Wells used in Pictured Cliffs Sandstone URS calculations: MW-66, MW-67, MW-68, MW-69, MW-70, MW-71, MW-72, MW-73, MW-83, MW-84, MW-85, MW-86

Wells used in Pictured Cliffs Sandstone CWTP calculations: MW-62, MW-63, MW-64, MW-65

Wells used in Lewis Shale calculations: MW-07, MW-08, MW-17R, MW-38R, MW-40R, MW-49A, MW-61, MW-75, MW-76, MW-60, MW-16, MW-15, MW-87, MW-44, MW-56, MW-06, MW-57, DMX-04, DMX-06

CCR - Coal Combustion Residuals

CWTP - Combined Waste Treatment Pond

d - day

ft - feet

URS - Upper Retention Sump

Vol/Vol - volume per volume

References:

[(a)] AECOM, 2017

[(b)] Freeze, R.A. and Cherry, J.A., 1979.

Table 4-1

Total COC Mass Removed from Intercept Trench Operation in 2023

Total Mass Removed (lbs)			**7.80**
Average Volume Pumped per Day (gpd)			**37,605**
Total Volume Pumped (gal)			**13,650,635**
Year	**2023**		
Constituent	**NIT (lbs/yr)**	**SIT (lbs/yr)**	**Total (lbs/yr)**
Cobalt	0.83	6.45	7.28
Molybdenum	0.06	0.46	0.52
Total (lb/yr)	**0.89**	**6.91**	**7.80**

Abbreviations:

gal - gallons

gpd - gallons per day

lbs - pounds

yr - year

NIT - Northern Intercept Trench

SIT - Southern Intercept Trench

Table 4-2

Individual Site Chemistry and Flow Volumes

Source Area		NIT									SIT					
Well/Seep		S7			S8			EW-17			S-9			S-10		
Daily Average Flow (gpd)		2,689			3,600			44			2,684			4,223		
Total Annual Flow (gal)[3]		976,083			1,306,720			15,809			974,463			1,533,125		
Analyte		mg/L	lb/day	lb/yr	mg/L	lb/day	lb/yr	mg/L	lb/day	lb/yr	mg/L	lb/day	lb/yr	mg/L	lb/day	lb/yr
Appendix IV	Antimony	NM	--	--	NM	--	--	NM	--	--	NM	--	--	NM	--	--
	Arsenic	NM	--	--	NM	--	--	NM	--	--	NM	--	--	NM	--	--
	Barium	NM	--	--	NM	--	--	NM	--	--	NM	--	--	NM	--	--
	Beryllium	NM	--	--	NM	--	--	NM	--	--	NM	--	--	NM	--	--
	Cadmium	NM	--	--	NM	--	--	NM	--	--	NM	--	--	NM	--	--
	Chromium	NM	--	--	NM	--	--	NM	--	--	NM	--	--	NM	--	--
	Cobalt	0.0655	0.0015	0.54	0.0270	0.0008	0.30	0.0110	0.0000	0.00	0.0225	0.0005	0.18	0.1500	0.0053	1.93
	Fluoride[1]	NM	--	--	NM	--	--	NM	--	--	NM	--	--	NM	--	--
	Lead	NM	--	--	NM	--	--	NM	--	--	NM	--	--	NM	--	--
	Lithium	NM	--	--	NM	--	--	NM	--	--	NM	--	--	NM	--	--
	Mercury	NM	--	--	NM	--	--	0.0002	0.0000	0.00	NM	--	--	NM	--	--
	Molybdenum	0.0034	0.0001	0.03	0.0028	0.0001	0.03	0.0050	0.0000	0.00	0.0184	0.0004	0.15	0.0009	0.00003	0.01
	Selenium	NM	--	--	NM	--	--	NM	--	--	NM	--	--	NM	--	--
	Thallium	NM	--	--	NM	--	--	NM	--	--	NM	--	--	NM	--	--
	Total (lbs)			*0.6*			*0.3*			*0.0*			*0.3*			*1.9*

Notes:

[1] Only fluoride concentrations from Semiannual Event 2 were used due to high method detection limits reported for the Semiannual Event 1 analytical data

[2] Water chemistry averaged from MW-66, MW-67, MW-68, and MW-69 2022 sampling results

[3] December 31, 2022-December 29, 2023

Abbreviations:

gal - gallons

gpd - gallons per day

lbs - pound

mg/L - milligrams per liter

yr - year

Table 4-2

Individual Site Chemistry and Flow Volumes

Source Area		SIT													
Well/Seep		S-11			S-12			S-13			S-14-1			S-15-1		
Daily Average Flow (gpd)		2,421			1,409			2,699			10,498			4,167		
Total Annual Flow (gal)[3]		878,870			511,603			979,820			3,810,786			1,512,693		
Analyte		mg/L	lb/day	lb/yr	mg/L	lb/day	lb/yr	mg/L	lb/day	lb/yr	mg/L	lb/day	lb/yr	mg/L	lb/day	lb/yr
Appendix IV	Antimony	NM	--	--	NM	--	--	NM	--	--	NM	--	--	NM	--	--
	Arsenic	NM	--	--	NM	--	--	NM	--	--	NM	--	--	NM	--	--
	Barium	NM	--	--	NM	--	--	NM	--	--	NM	--	--	NM	--	--
	Beryllium	NM	--	--	NM	--	--	NM	--	--	NM	--	--	NM	--	--
	Cadmium	NM	--	--	NM	--	--	NM	--	--	NM	--	--	NM	--	--
	Chromium	NM	--	--	NM	--	--	NM	--	--	NM	--	--	NM	--	--
	Cobalt	0.0805	0.0016	0.59	0.0555	0.0007	0.24	0.0970	0.0022	0.80	0.0815	0.0071	2.61	0.0045	0.0002	0.06
	Fluoride[1]	NM	--	--	NM	--	--	NM	--	--	NM	--	--	NM	--	--
	Lead	NM	--	--	NM	--	--	NM	--	--	NM	--	--	NM	--	--
	Lithium	NM	--	--	NM	--	--	NM	--	--	NM	--	--	NM	--	--
	Mercury	NM	--	--	NM	--	--	NM	--	--	NM	--	--	NM	--	--
	Molybdenum	0.0008	0.00002	0.01	0.0006	0.00001	0.00	0.0016	0.0000	0.01	0.0060	0.0005	0.19	0.0032	0.0001	0.04
	Selenium	NM	--	--	NM	--	--	NM	--	--	NM	--	--	NM	--	--
	Thallium	NM	--	--	NM	--	--	NM	--	--	NM	--	--	NM	--	--
	Total (lbs)			*0.6*			*0.2*			*0.8*			*2.8*			*0.1*

Notes:

[1] Only fluoride concentrations from Semiannual Event 2 were used due to high method detection limits reported for the Semiannual Event 1 analytical data

[2] Water chemistry averaged from MW-66, MW-67, MW-68, and MW-69 2022 sampling results

[3] December 31, 2022-December 29, 2023

Abbreviations:

gal - gallons

gpd - gallons per day

lbs - pound

mg/L - milligrams per liter

yr - year

Table 4-2

Individual Site Chemistry and Flow Volumes

Source Area		SIT									URS					
Well/Seep		S-16-1			S-17			S-18			CM-01/URS-01 (gpd)			CM-02/URS-02 (gpd)		
Daily Average Flow (gpd)		236			343			2,393			422			1,604		
Total Annual Flow (gal)[3]		157,509			124,376			868,778			153,339			582,276		
Analyte		mg/L	lb/day	lb/yr	mg/L	lb/day	lb/yr	mg/L	lb/day	lb/yr	mg/L	lb/day	lb/yr	mg/L	lb/day	lb/yr
Appendix IV	Antimony	NM	--	--	NM	--	--	NM	--	--	0.006	0.00	0.01	0.006	0.00	0.03
	Arsenic	NM	--	--	NM	--	--	NM	--	--	0.007	0.00	0.01	0.007	0.00	0.03
	Barium	NM	--	--	NM	--	--	NM	--	--	0.031	0.00	0.04	0.015	0.00	0.07
	Beryllium	NM	--	--	NM	--	--	NM	--	--	0.005	0.00	0.01	0.005	0.00	0.02
	Cadmium	NM	--	--	NM	--	--	NM	--	--	0.001	0.00	0.00	0.001	0.00	0.00
	Chromium	NM	--	--	NM	--	--	NM	--	--	0.007	0.00	0.01	0.007	0.00	0.03
	Cobalt	0.0325	0.0001	0.02	0.0009	0.0000	0.00	0.0015	0.0000	0.01	0.009	0.00	0.01	0.008	0.00	0.04
	Fluoride[1]	NM	--	--	NM	--	--	NM	--	--	3.30	0.01	4.25	4.20	0.06	20.54
	Lead	NM	--	--	NM	--	--	NM	--	--	0.003	0.00	0.00	0.003	0.00	0.01
	Lithium	NM	--	--	NM	--	--	NM	--	--	0.590	0.00	0.76	0.495	0.01	2.42
	Mercury	NM	--	--	NM	--	--	NM	--	--	0.000	0.00	0.00	0.000	0.00	0.00
	Molybdenum	0.0014	0.0000	0.00	0.0010	0.0000	0.00	0.0031	0.0001	0.02	0.006	0.00	0.01	0.004	0.00	0.02
	Selenium	NM	--	--	NM	--	--	NM	--	--	0.053	0.00	0.07	0.014	0.00	0.07
	Thallium	NM	--	--	NM	--	--	NM	--	--	0.001	0.00	0.00	0.001	0.00	0.01
	Total (lbs)			*0.0*			*0.0*			*0.0*			*5.2*			*23.3*

Notes:

[1] Only fluoride concentrations from Semiannual Event 2 were used due to high method detection limits reported for the Semiannual Event 1 analytical data

[2] Water chemistry averaged from MW-66, MW-67, MW-68, and MW-69 2022 sampling results

[3] December 31, 2022-December 29, 2023

Abbreviations:

gal - gallons

gpd - gallons per day

lbs - pound

mg/L - milligrams per liter

yr - year

Table 4-3

Total COC Mass Removed from the URS Extraction System Operation in 2023

Total Mass Removed (lbs)		**25**
Average Volume Pumped per Day (gpd)		**2,026**
Total Volume Pumped (gal)		**735,615**
Year	**2023**	
Constituent	**URS (lbs/yr)**	**Total (lbs/yr)**
Fluoride	25	25
Total (lb/yr)	**25**	**25**

Abbreviations:

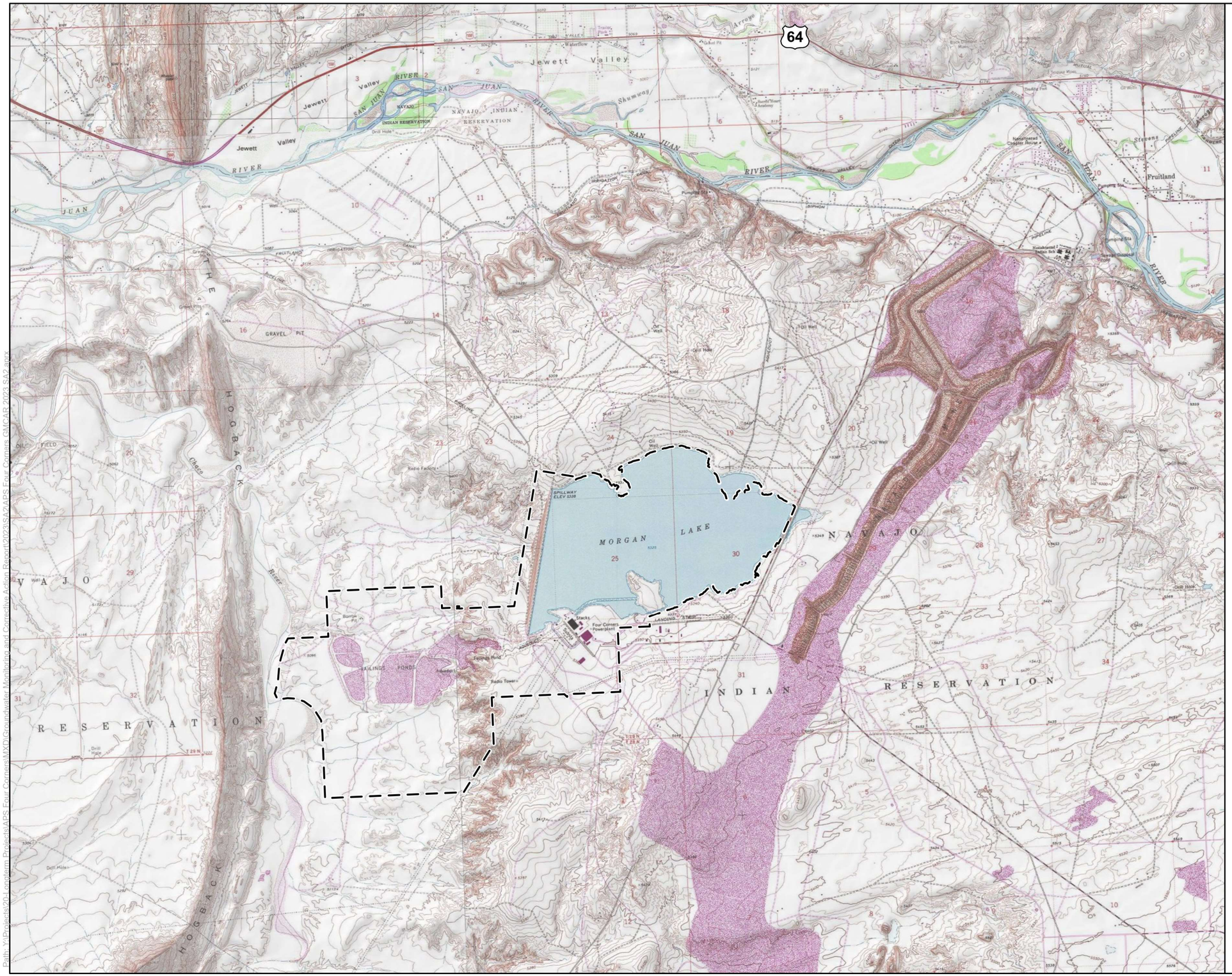
gal - gallons

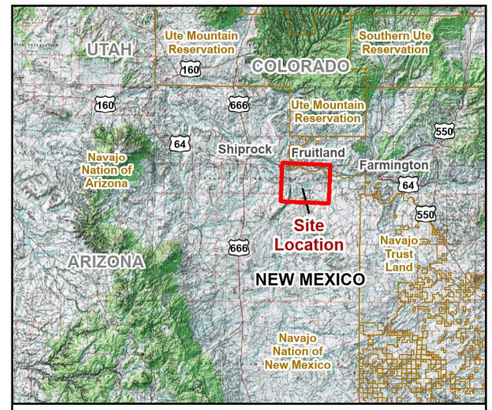
gpd - gallons per day

lbs - pounds

yr - year

FIGURES





Area of Detail

Legend

Four Corners Power Plant Lease Boundary

0 0.4 0.8 Miles

N

Arizona Public Service
Four Corners Power Plant
Fruitland, New Mexico

FIGURE **1-1**

Site Location Map

Job No.	14-2023-2011
PM:	MBH
Date:	1/24/2024
Scale:	1"= 0.8 miles

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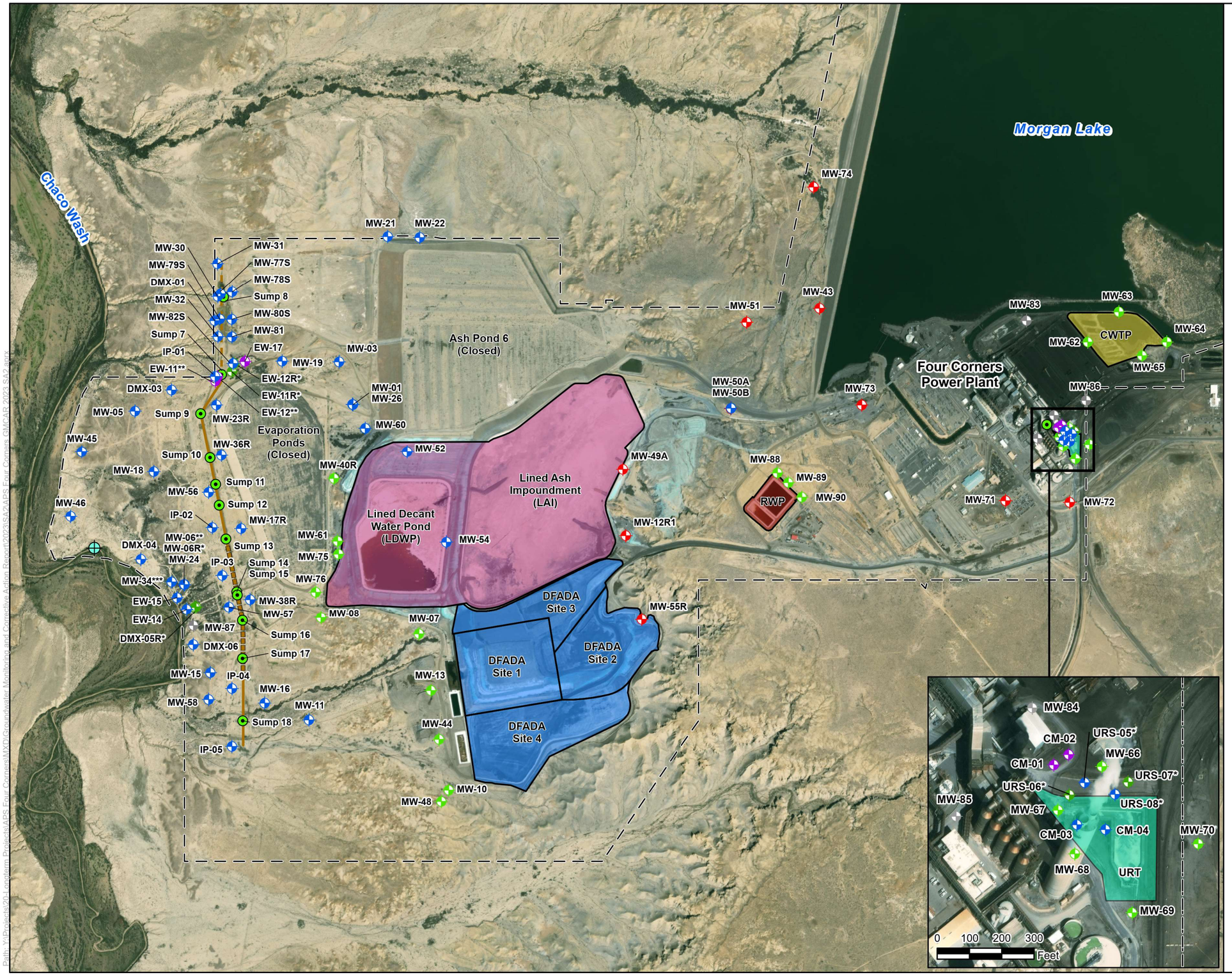

Legend

- CCR Compliance - Background Well Location
- CCR Compliance - Downgradient Well Location
- CCR Compliance - Downgradient Boundary Well Location
- Supplementary Site Monitoring Well Location
- Extraction Well Location
- Extraction (Inactive) Well Location
- Sump Locations
- Chaco Wash Stream Monitoring Station (Approximate Location)
- North Intercept Trench
- South Intercept Trench
- Approximate Extent of High Flow Zone
- Four Corners Power Plant Lease Boundary

CCR Units

- Multiunit 1(LAI and LDWP)
- Dry Fly Ash Disposal Area (DFADA)
- Combined Waste Treatment Pond (CWTP)
- Upper Retention Sump (URS)
- Return Water Pond (RWP)

Notes and Abbreviations:

MW-83	Well Identification
*	Approximate Well Location
**	Well abandoned in June 2023
***	In previous reports MW-34 is also referred to as EW-34.
CCR	Coal Combustion Residuals
URT	Upper Retention Tank

0 700 1,400 Feet

N

Arizona Public Service
Four Corners Power Plant
Fruitland, New Mexico

FIGURE **1-2**

CCR Units and Monitoring System Summary

Job No.	14-2023-2011
PM:	MBH
Date:	1/30/2024
Scale:	1" = 1,400 feet

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Morgan Lake
Water Surface Elevation
approximately 5,325.68 ft. amsl

Chaco Wash

MW-74 5202.36
MW-21 5134.72
MW-22 5145.84
MW-31 Dry
MW-77S 5062.23
MW-30 5063.07
MW-78S 5048.49*
MW-79S 5063.90
MW-80S Dry
MW-81 5069.42
DMX-01 5064.87
MW-32 5065.86
EW-17 NM*
MW-82S 5074.13
MW-19 5084.89
MW-03 5113.03
IP-01 5062.48
MW-05 5049.32
DMX-03 5051.18
MW-26 Dry*
MW-01 5123.25
MW-23R 5063.20
MW-60 5128.02
MW-45 Dry
MW-18 5048.56
MW-52 5156.21
MW-36R 5067.15
MW-40R 5112.61
MW-46 5042.95
MW-56 5055.30
IP-02 5061.06
MW-17R 5072.46
DMX-04 5046.28
MW-61 5099.94
MW-54 5144.57
MW-75 5098.88
IP-03 5054.30
MW-34** 5046.32
MW-38R 5060.59
MW-06 5042.35
MW-76 5087.41
MW-24 5040.83
MW-57 5049.08
MW-07 5127.14
MW-08 5084.82
EW-15 5047.35
MW-87 5045.94
EW-14 5047.25
IP-04 5061.16
DMX-06 5047.15
MW-15 5055.12
MW-11 5080.15
MW-16 5067.44
IP-05 Dry
MW-13 Dry
MW-44 Dry
MW-10 Dry
MW-48 Dry
MW-49A 5237.22
MW-88 Dry
MW-89 Dry
MW-90 Dry
MW-12R1 Dry
MW-55R Dry
MW-50A 5291.74
MW-73 5327.86
MW-43 5244.15
MW-51 5255.28
MW-83 5327.87
MW-62 5328.75
MW-63 5328.57
MW-64 5328.61
MW-65 5328.85
MW-86 5328.30
MW-71 5329.27
MW-72 5330.78
MW-84 5328.19
CM-02 5325.24
CM-01 NM
MW-66 5328.30
MW-85 5328.52
MW-67 NM
CM-04 5328.46
CM-03 5328.45
MW-70 5329.77
MW-68 5329.87
MW-69 5330.27

0.03 ft/ft
0.0005 ft/ft
0.001 ft/ft

5328
5329
5330
5331
5290
5280
5270
5260
5250
5240
5230
5220
5210
5200
5190
5180
5170
5160
5150
5140
5130
5120
5110
5100
5090
5080
5070
5060
5050

MULTIUNIT 1
DFADA 1
DFADA 2
DFADA 3
DFADA 4
RWP
CWTP
URT

See URS Detail

URS Detail

0 100 200 300 Feet

Legend

- CCR Compliance - Background Well Location
- CCR Compliance - Downgradient Well Location
- CCR Compliance - Downgradient Boundary Well Location
- Supplementary Site Monitoring Well Location
- Extraction Well Location
- Extraction (Inactive) Well Location
- Groundwater Elevation Contour (ft amsl) 10-Foot Contour Interval (Dashed Where Inferred)
- Groundwater Elevation Contour (ft amsl) 1-Foot Contour Interval (Dashed Where Inferred)
- Groundwater Flow Direction with Gradient (ft/ft)
- CCR Unit Boundary
- Four Corners Power Plant Lease Boundary
- North Intercept Trench
- South Intercept Trench
- Approximate Extent of High Flow Zone
- Ephemeral Surface Water Feature

Notes and Abbreviations:

MW-83	Well Identification
5328.06	Groundwater Elevation (ft amsl)
NM	Not measured because pump and piping are present in well which prevent the collection of manual groundwater measurements.
*	Well not used in potentiometric surface mapping
**	In previous reports MW-34 is also referred to as EW-34.
ft amsl	Feet above mean sea level
CCR	Coal Combustion Residuals

0 700 1,400 2,800 Feet

N

Arizona Public Service
Four Corners Power Plant
Fruitland, New Mexico

FIGURE 3-1

Potentiometric Surface Map May 2023

Job No.	14-2023-2011
PM:	MBH
Date:	1/30/2024
Scale:	1" = 1,400 feet

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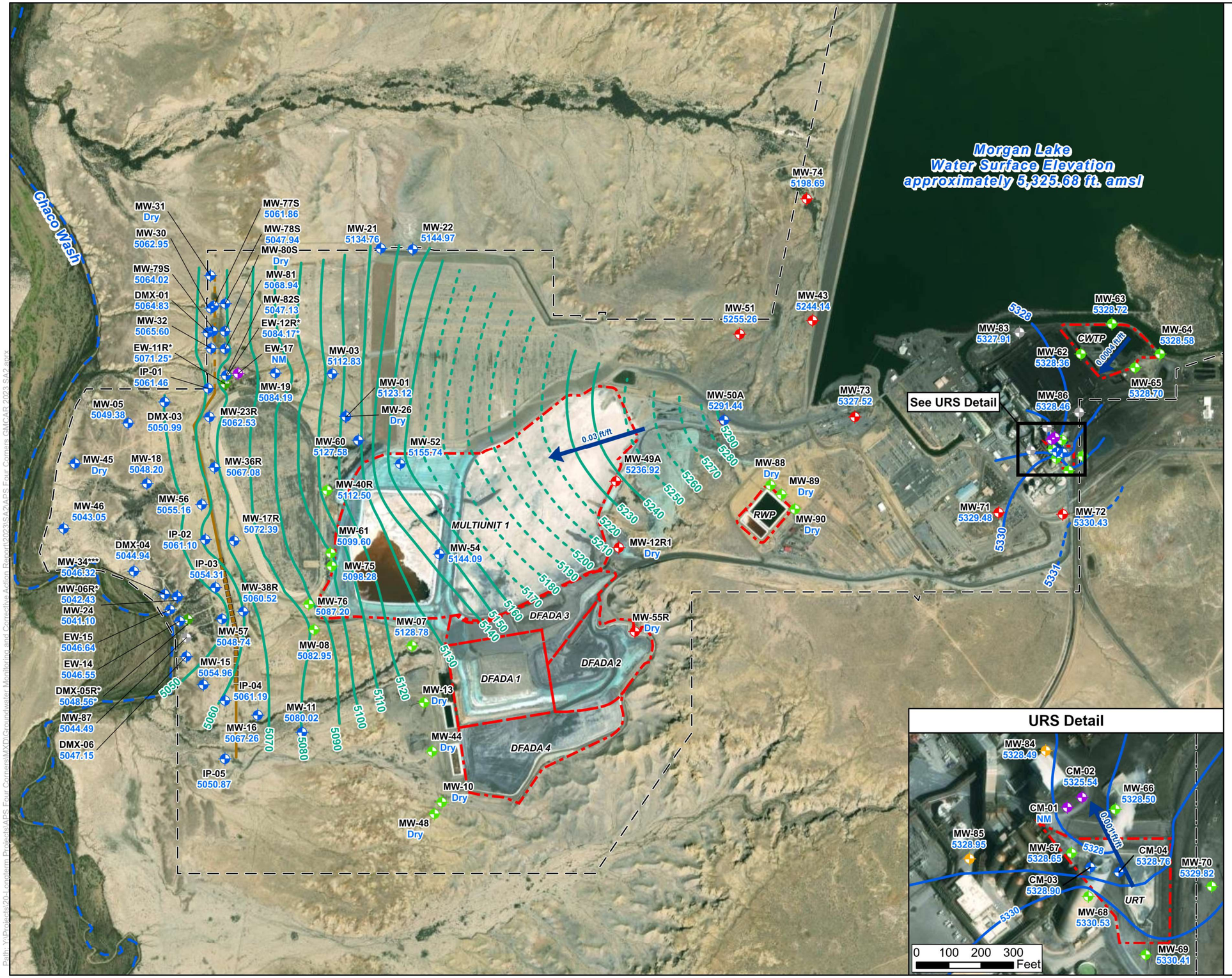

Legend

- CCR Compliance - Background Well Location
- CCR Compliance - Downgradient Well Location
- CCR Compliance - Downgradient Boundary Well Location
- Extraction Well Location
- Supplementary Site Monitoring Well Location
- Extraction (Inactive) Well Location
- Groundwater Elevation Contour (ft amsl) 10-Foot Contour Interval (Dashed Where Inferred)
- Groundwater Elevation Contour (ft amsl) 1-Foot Contour Interval (Dashed Where Inferred)
- Groundwater Flow Direction with Gradient (ft/ft)
- CCR Unit Boundary
- Four Corners Power Plant Lease Boundary
- North Intercept Trench
- South Intercept Trench
- Approximate Extent of High Flow Zone
- Ephemeral Surface Water Feature

Notes and Abbreviations:

MW-83	Well Identification
5327.91	Groundwater Elevation (ft amsl)
NM	Not measured because pump and piping are present in well which prevent the collection of manual groundwater measurements
*	Groundwater elevation is approximated based on ground surface elevation measured in Google Earth
*	Approximate Well Location
**	Well abandoned in June 2023
***	In previous reports MW-34 is also referred to as EW-34.
ft amsl	Feet above mean sea level
CCR	Coal Combustion Residuals

0 700 1,400 2,800 Feet

N

URS Detail

Arizona Public Service
Four Corners Power Plant
Fruitland, New Mexico

FIGURE 3-2

Potentiometric Surface Map November 2023

Job No.	14-2023-2011
PM:	MBH
Date:	1/30/2024
Scale:	1" = 1,400 feet

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MW-21
5134.72
0.0022

MW-77S
5062.23
0.021

MW-78S
5048.49
0.017

MW-30
5063.07
0.0048

MW-79S
5063.90
0.0044

DMX-01
5064.87
0.011

MW-81
5069.42
0.0021

MW-19
5084.89
0.0033

MW-82S
5074.13
0.0065

MW-03
5113.03
< 0.002

DMX-03
5051.18
< 0.002

MW-01
5123.25
0.023

MW-23R
5063.20
0.0035

MW-05
5049.32
< 0.002

MW-50A
5291.74
NS²

MW-60
5128.02
0.15

MW-52
5156.21
0.0021

0.03 ft/ft

MW-36R
5067.15
< 0.002

MW-49A
5237.22
0.029

MW-18
5048.56
0.0023

MW-40R
5112.61
NS²

MW-56
5055.30
0.0048

RWP

MW-17R
5072.46
< 0.002

MW-61
5099.94
0.11

MULTIUNIT 1

DMX-04
5046.28
0.009

MW-75
5098.88
0.17

MW-12R1
Dry
NS¹

MW-06
5042.35
0.0046

MW-24
5040.83
0.030

Chaco Wash

MW-38R
5060.59
0.0037

MW-76
5087.41
NS²

MW-55R
Dry
NS¹

MW-87
5045.94
0.036

MW-08
5084.82
0.013

MW-07
5127.14
0.0024

DFADA 3

MW-57
5049.08
< 0.002

DMX-06
5047.15
0.0038

DFADA 2

MW-15
5055.12
< 0.002

DFADA 1

MW-13
Dry
NS¹

MW-16
5067.44
< 0.002

MW-11
5080.15
< 0.002

MW-44
Dry
NS¹

DFADA 4

MW-10
Dry
NS¹

MW-48
Dry
NS¹

5280
5270
5260
5250
5240
5230
5220
5210
5200
5190
5180
5170
5160
5150
5140
5130
5120
5110
5100
5090
5080
5070
5060
5050

Legend

- CCR Compliance - Background Well Location
- CCR Compliance - Downgradient Well Location
- CCR Compliance - Downgradient Boundary Well Location
- Supplementary Site Monitoring Well Location
- CCR Unit Boundary
- Four Corners Power Plant Lease Boundary
- North Intercept Trench
- South Intercept Trench
- Approximate Extent of High Flow Zone
- Groundwater Elevation Contour (ft amsl) 10-Foot Contour Interval (Dashed Where Inferred)
- Flow Direction

Molybdenum Concentration in Groundwater (May 2023)

- 0.1 mg/L
- GWPS (0.1 mg/L; Dashed Where Inferred)

Notes and Abbreviations:

MW-52	Well Identification
5155.74	Groundwater Elevation (ft amsl)
0.0022	Molybdenum concentration (mg/L)
NS¹	Not Sampled[1]: Well contained no groundwater
NS²	Not Sampled[2]: Insufficient groundwater in well casing to support sampling
ft amsl	Feet above mean sea level
mg/L	Milligrams per Liter
CCR	Coal Combustion Residuals
GWPS	Groundwater Protection Standard

0 400 800 1,600 Feet

N

Arizona Public Service
Four Corners Power Plant
Fruitland, New Mexico

FIGURE 4-1

Molybdenum Iso-Concentration Map for MultiUnit 1 - May 2023

Job No.	14-2023-2011
PM:	MBH
Date:	1/30/2024
Scale:	1" = 800'

wsp

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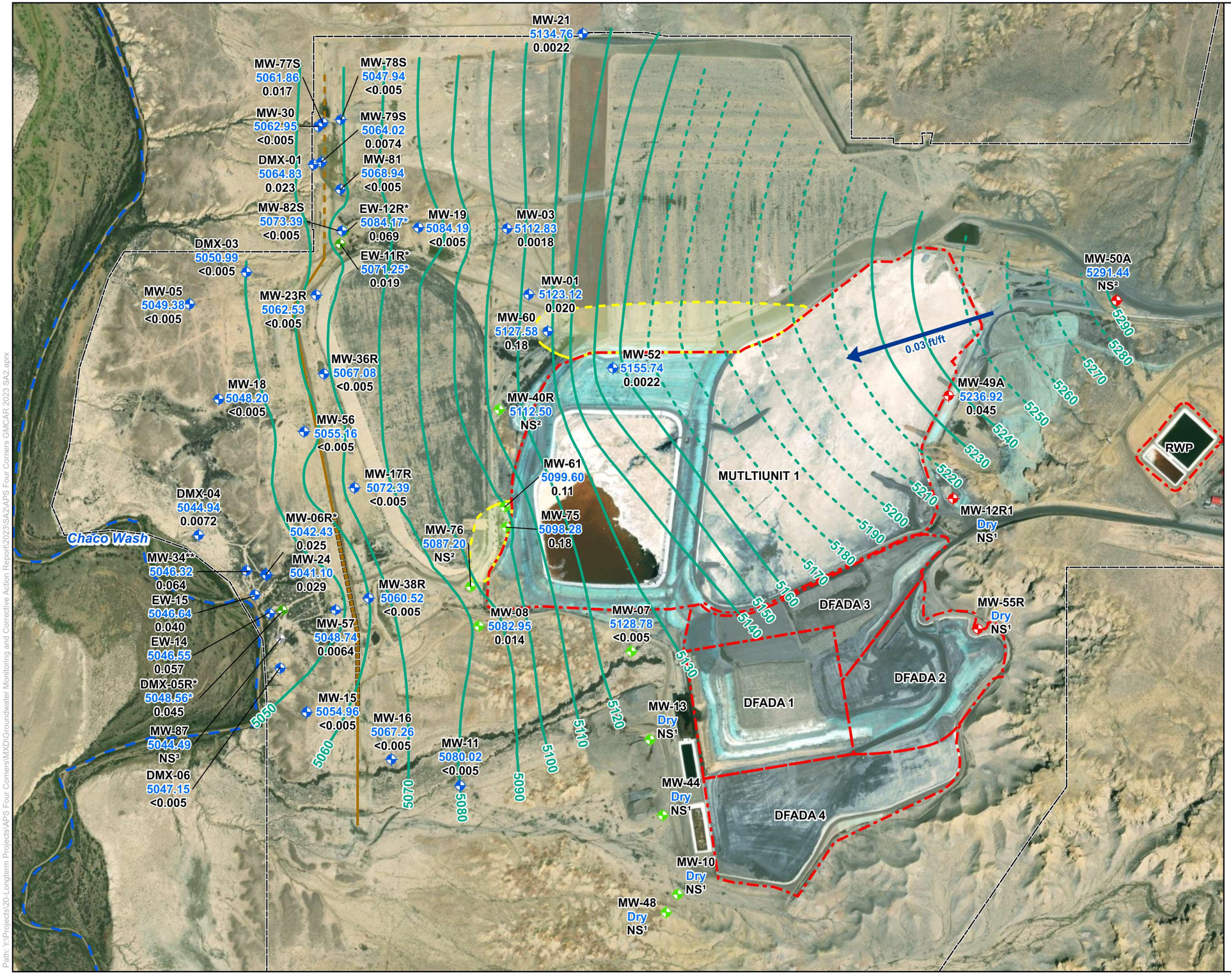

Legend

- CCR Compliance - Background Well Location
- CCR Compliance - Downgradient Well Location
- CCR Compliance - Downgradient Boundary Well Location
- Supplementary Site Monitoring Well Location
- Extraction (Inactive) Well Location
- CCR Unit Boundary
- Four Corners Power Plant Lease Boundary
- North Intercept Trench
- South Intercept Trench
- Approximate Extent of High Flow Zone
- Groundwater Elevation Contour (ft amsl) 10-Foot Contour Interval (Dashed Where Inferred)
- Flow Direction

Molybdenum Concentration in Groundwater (November 2023)

- 0.1 mg/L
- GWPS (0.1 mg/L; Dashed Where Inferred)

Notes and Abbreviations:

MW-52	Well Identification
5155.74	Groundwater Elevation (ft amsl)
0.10	Molybdenum concentration (mg/L)
NM	Not Measured
*	Approximate Well Location
**	In previous reports MW-34 is also referred to as EW-34
*	Groundwater elevation is approximated based on ground surface elevation measured in Google Earth
NS¹	Not Sampled[1]: Well contained no groundwater
NS²	Not Sampled[2]: Insufficient groundwater in well casing to support sampling
NS³	Not Sampled [3]: Unable to sample due to obstruction in well
ft amsl	Feet above mean sea level
mg/L	Milligrams per Liter
CCR	Coal Combustion Residuals
GWPS	Groundwater Protection Standard

0 400 800 1,600 Feet

N

Arizona Public Service
Four Corners Power Plant
Fruitland, New Mexico

FIGURE 4-2

Molybdenum Iso-Concentration Map for MultiUnit 1-November 2023

Job No.	14-2023-2011
PM:	MBH
Date:	1/30/2024
Scale:	1" = 800'

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MW-21
5134.72
0.0045

MW-77S
5062.23
0.0073

MW-78S
5048.49
0.0066

MW-30
5063.07
0.0013

MW-79S
5063.90
0.0035 J

DMX-01
5064.87
0.002 J

MW-81
5069.42
0.019

MW-19
5084.89
0.0014

MW-03
5113.03
< 0.001

MW-82S
5074.13
0.096

DMX-03
5051.18
0.0013

MW-05
5049.32
0.0035

MW-23R
5063.20
< 0.001

MW-01
5123.25
0.047

MW-50A
5291.74
NS²

MW-60
5128.02
0.18

MW-52
5156.21
0.11

MW-36R
5067.15
0.21

MW-49A
5237.22
0.002

MW-18
5048.56
0.0094

MW-40R
5112.61
NS²

MW-56
5055.30
< 0.001

MW-61
5099.94
0.03

MW-17R
5072.46
0.059

MULTIUNIT 1

MW-12R1
Dry
NS¹

DMX-04
5046.28
0.0023

MW-06
5042.35
0.0036

MW-75
5098.88
0.056

MW-24
5040.83
0.0027

MW-38R
5060.59
0.17

MW-76
5087.41
NS²

MW-87
5045.94
0.0030

MW-57
5049.08
0.0015

MW-08
5084.82
< 0.001

MW-07
5127.14
< 0.001

MW-55R
Dry
NS¹

DMX-06
5047.15
< 0.001

MW-15
5055.12
0.0021

DFADA 3

DFADA 2

DFADA 1

MW-13
Dry
NS¹

MW-16
5067.44
0.0075

MW-11
5080.15
0.022

MW-44
Dry
NS¹

DFADA 4

MW-10
Dry
NS¹

MW-48
Dry
NS¹

RWP

Chaco Wash

0.03 ft/ft

5290
5280
5270
5260
5250
5240
5230
5220
5210
5200
5190
5180
5170
5160
5150
5140
5130
5120
5110
5100
5090
5080
5070
5060
5050

Legend

- CCR Compliance - Downgradient Boundary Well Location
- CCR Compliance - Background Well Location
- CCR Compliance - Downgradient Well Location
- Supplementary Site Monitoring Well Location
- CCR Unit Boundary
- Four Corners Power Plant Lease Boundary
- North Intercept Trench
- South Intercept Trench
- Approximate Extent of High Flow Zone
- Groundwater Elevation Contour (ft amsl) 10-Foot Contour Interval (Dashed Where Inferred)
- Flow Direction

Cobalt Concentration in Groundwater (May 2023)

- 0.01 mg/L
- GWPS (0.01 mg/L; Dashed Where Inferred)

Notes and Abbreviations:

MW-52	Well Identification
5156.21	Groundwater Elevation (ft amsl)
0.11	Cobalt concentration (mg/L)
NS¹	Not Sampled[1]: Well contained no groundwater
NS²	Not Sampled[2]: Insufficient groundwater in well casing to support sampling
ft amsl	Feet above mean sea level
mg/L	Milligrams per Liter
CCR	Coal Combustion Residuals
GWPS	Groundwater Protection Standard

0 400 800 1,600 Feet

N

Arizona Public Service
Four Corners Power Plant
Fruitland, New Mexico

FIGURE 4-3

Cobalt Iso-Concentration Map for MultiUnit 1 - May 2023

Job No.	14-2023-2011
PM:	MBH
Date:	1/30/2024
Scale:	1" = 800'

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MW-21
5134.76
0.0045

MW-77S
5061.87
0.0069

MW-78S
5047.94
<0.005

MW-30
5062.95
<0.005

MW-79S
5064.02
<0.005

DMX-01
5064.83
<0.005

MW-81
5068.94
0.022

MW-82S
5073.39
0.10

EW-12R*
5084.17*
<0.005

MW-19
5084.19
<0.005

MW-03
5112.83
0.0015

DMX-03
5050.99
<0.005

EW-11R*
5071.25*
0.0061

MW-05
5049.38
<0.005

MW-23R
5062.53
<0.005

MW-01
5123.12
0.040

MW-50A
5291.44
NS²

MW-60
5127.58
0.19

MW-52
5155.74
0.10

MW-36R
5067.08
0.22

MW-18
5048.20
0.0098

MW-40R
5112.50
NS²

MW-49A
5236.92
<0.005

MW-56
5055.16
<0.005

MW-61
5099.60
0.027

MW-17R
5072.39
0.068

MULTIUNIT 1

MW-75
5098.28
0.058

MW-12R1
Dry
NS¹

DMX-04
5044.94
<0.005

MW-06R*
5042.43
<0.005

MW-76
5087.20
NS²

Chaco Wash

MW-34**
5046.32
<0.005

MW-24
5041.10
<0.005

MW-38R
5060.52
0.062

EW-15
5046.64
<0.005

MW-08
5082.95
<0.005

MW-07
5128.78
<0.005

MW-55R
Dry
NS¹

DFADA 3

EW-14
5046.55
0.007

MW-57
5048.74
0.019

DFADA 2

DMX-05R*
5048.56*
<0.005

MW-15
5054.96
<0.005

DFADA 1

MW-13
Dry
NS¹

MW-16
5067.26
0.01

MW-11
5080.02
0.025

MW-87
5044.49
NS³

MW-44
Dry
NS¹

DFADA 4

DMX-06
5047.15
<0.005

MW-10
Dry
NS¹

MW-48
Dry
NS¹

0.03 ft/ft

RWP

5290 5280 5270 5260 5250 5240 5230 5220 5210 5200 5190 5180 5170 5160 5150 5140 5130 5120 5110 5100 5090 5080 5070 5060 5050

Legend

- CCR Compliance - Background Well Location
- CCR Compliance - Downgradient Well Location
- CCR Compliance - Downgradient Boundary Well Location
- Supplementary Site Monitoring Well Location
- Extraction (Inactive) Well Location
- CCR Unit Boundary
- Four Corners Power Plant Lease Boundary
- North Intercept Trench
- South Intercept Trench
- Approximate Extent of High Flow Zone
- Groundwater Elevation Contour (ft amsl) 10-Foot Contour Interval (Dashed Where Inferred)
- Flow Direction

Cobalt Concentration in Groundwater (November 2023)

- 0.01 mg/L
- GWPS (0.01 mg/L; Dashed Where Inferred)

Notes and Abbreviations:

MW-52	Well Identification
5155.74	Groundwater Elevation (ft amsl)
0.01	Cobalt concentration (mg/L)
NM	Not measured because pump and piping are present in well which prevent the collection of manual groundwater measurements
*	Approximate Well Location
**	In previous reports MW-34 is also referred to as EW-34
*	Groundwater elevation is approximated based on ground surface elevation measured in Google Earth
NS¹	Not Sampled[1]: Well contained no groundwater
NS²	Not Sampled[2]: Insufficient groundwater in well casing to support sampling
NS³	Not Sampled[3]: Unable to sample due to obstruction in well
ft amsl	Feet above mean sea level
mg/L	Milligrams per Liter
CCR	Coal Combustion Residuals
GWPS	Groundwater Protection Standard

0 400 800 1,600 Feet

N

Arizona Public Service
Four Corners Power Plant
Fruitland, New Mexico

FIGURE 4-4

Cobalt Iso-Concentration Map for MultiUnit 1 - November 2023

Job No.	14-2023-2011
PM:	MBH
Date:	1/30/2024
Scale:	1" = 800'

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MW-83	
5327.91	
Date	Conc
May 2023	< 8.0 *
November 2023	2.1

MW-62	
5328.36	
Date	Conc
May 2023	< 80 *
November 2023	1.6

MW-63	
5328.72	
Date	Conc
May 2023	< 8.0 *
November 2023	2.2

MW-64	
5328.58	
Date	Conc
May 2023	1.4
November 2023	1.5

MW-84	
5328.49	
Date	Conc
May 2023	< 2.0*
November 2023	< 0.8

MW-86	
5328.46	
Date	Conc
May 2023	< 80*
November 2023	0.95

MW-65	
5328.70	
Date	Conc
May 2023	< 2.0*
November 2023	1.5

MW-73	
5327.52	
Date	Conc
May 2023	< 80 *
November 2023	< 0.8

CM-02	
5325.54	
Date	Conc
May 2023	4.1
November 2023	4.2

CM-01	
NM	
Date	Conc
May 2023	< 20 *
November 2023	3.3

MW-66	
5328.50	
Date	Conc
May 2023	< 80*
November 2023	19

MW-85	
5328.95	
Date	Conc
May 2023	< 2.0*
November 2023	1.9

MW-70	
5329.82	
Date	Conc
May 2023	< 80*
November 2023	1.5

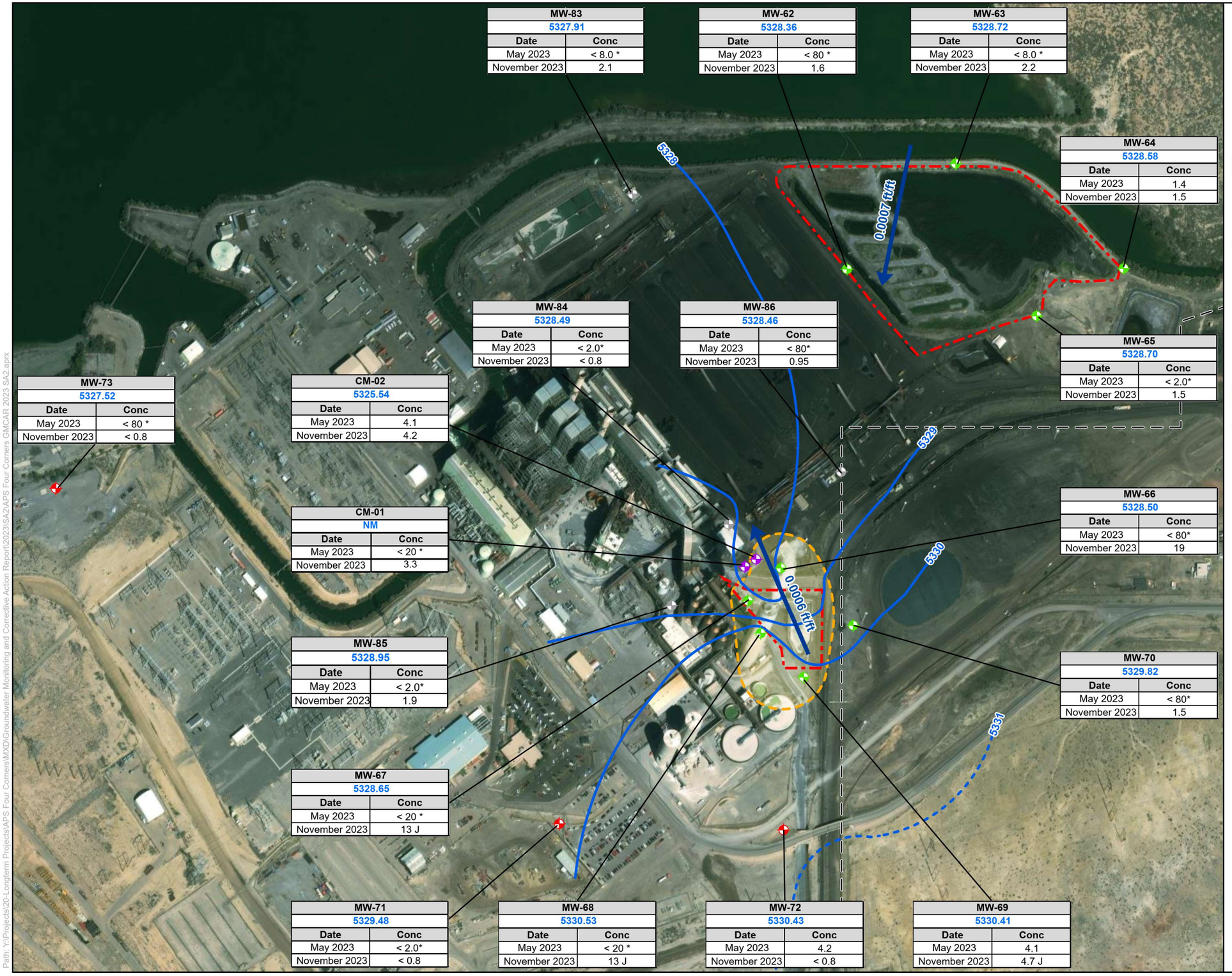
MW-67	
5328.65	
Date	Conc
May 2023	< 20 *
November 2023	13 J

MW-71	
5329.48	
Date	Conc
May 2023	< 2.0*
November 2023	< 0.8

MW-68	
5330.53	
Date	Conc
May 2023	< 20 *
November 2023	13 J

MW-72	
5330.43	
Date	Conc
May 2023	4.2
November 2023	< 0.8

MW-69	
5330.41	
Date	Conc
May 2023	4.1
November 2023	4.7 J



Legend

- CCR Compliance - Background Well Location
- CCR Compliance - Downgradient Well Location
- CCR Compliance - Downgradient Boundary Well Location
- Extraction Well Location
- CCR Unit Boundary
- Four Corners Power Plant Lease Boundary
- North Intercept Trench
- South Intercept Trench
- Approximate Extent of High Flow Zone
- Groundwater Elevation Contour (ft amsl) 1-Foot Contour Interval (Dashed Where Inferred)
- Flow Direction

Fluoride Concentration in Groundwater (November 2023)

- 4.0 mg/L
- GWPS (4 mg/L; Dashed Where Inferred)

Notes and Abbreviations:

MW-64	Well Identification
5328.58	Groundwater Elevation (ft amsl) November 2023
NM	Not Measured
1.4	Fluoride concentration (mg/L)
J	Result is estimated quantity
*	Elevated Laboratory Reporting Limit
ft amsl	Feet above mean sea level
mg/L	Milligrams per Liter
CCR	Coal Combustion Residuals
GWPS	Groundwater Protection Standard

0 200 400 800 Feet

N

Arizona Public Service
Four Corners Power Plant
Fruitland, New Mexico

FIGURE **4-5**

URS Fluoride Iso-Concentration Map 2023

Job No.	14-2023-2011
PM:	MBH
Date:	1/30/2024
Scale:	1" = 400'

The map shown here has been created with all due and reasonable care and is strictly for use with WSP USA Project Number 14-2023-2011. This map has not been certified by a licensed land surveyor, and any third party use of this map comes without warranties of any kind. WSP USA assumes no liability, direct or indirect, whatsoever for any such third party or unintended use.

Path: Y:\Projects\20-Longterm Projects\APS Four Corners\MXD\Groundwater Monitoring and Corrective Action Report\2023\SA2\APS Four Corners GMCAR 2023 SA2.aprx

APPENDIX

A

WELL CONSTRUCTION, REPAIR, AND MODIFICATION REPORT

MONTGOMERY
& ASSOCIATES
Water Resource Consultants

FINAL REPORT

September 26, 2023

Four Corners Generating Station
Well Construction, Repair, and Modification

Prepared for:

aps

Arizona Public Service

4222 E. Thomas Road, Suite 320, Phoenix, AZ 85018
elmontgomery.com

MONTGOMERY & ASSOCIATES
Water Resource Consultants

September 26, 2022

Four Corners Generating Station
Well Construction, Repair, and Modification Report

Prepared for:

Arizona Public Service

Prepared by:

Montgomery & Associates
4222 E. Thomas Road, Suite 320
Phoenix, Arizona 85018

MONTGOMERY & ASSOCIATES

Contents

1 INTRODUCTION 1
2 WELL CONSTRUCTION ACTIVITIES 3
2.1 Extraction Well Drilling and Construction 3
2.1.1 EW-11R 4
2.1.2 EW-12R 5
2.1.3 DMX-5R 7
2.2 Monitor Well Drilling and Construction 9
2.2.1 MW-6R 9
2.2.2 MW-21R 10
3 WELL REPAIR AND MODIFICATION ACTIVITIES 12
3.1 Wellhead Repair at Existing Monitor Wells 12
3.2 Modification of Existing Extraction Wells to Monitor Wells 13
4 REFERENCES 15

Tables

Table 1. Construction Details for Replacement Extraction Wells 3
Table 2. Summary of EW-12R Step Test Results 7
Table 3. Construction Details for Replacement Monitor Wells 9

Figures

Figure 1. Site Map 2
Figure 2. EW-11R Surface Completion 4
Figure 3. EW-12R Surface Completion 6
Figure 4. DMX-5R Surface Completion 8
Figure 5. MW-6R Surface Completion 10
Figure 6. MW-21R Borehole Abandonment Completion 11
Figure 7. MW-21 Surface Completion Repair 12
Figure 8. MW-22 Surface Completion Repair 12
Figure 9. EW-14 Wellhead 14
Figure 10. EW-15 Wellhead 14
Figure 11. EW-34 Wellhead 14

MONTGOMERY & ASSOCIATES

Appendices

Appendix A. Lithologic Logs and Well Schematics

Appendix B. Well Development and Testing Hydrographs

1 INTRODUCTION

Montgomery & Associates (M&A) has prepared this report to summarize well construction, repair, and modification activities conducted from June 20 to June 27, 2023, at the Arizona Public Service (APS) Four Corners Generating Station (FCGS) in Fruitland, New Mexico.

In 2022, Daniel B. Stevens, a Geo-logic Company, evaluated 31 extraction and monitor wells at the FCGS site to determine their efficacy based on available hydrogeologic and well data. WSP USA Environment & Infrastructure, Inc. (WSP) reviewed their findings and recommended that wells either be replaced, abandoned, modified, or repaired. WSP provided recommendations to address each well in a technical memorandum dated January 27, 2023 (WSP, 2023).

Based on the recommendations provided by WSP, APS contracted M&A to provide direction and oversight for drilling and construction of 3 new extraction wells and 1 new monitor well to replace existing wells, for repair of 2 existing monitor wells, and for modification of 3 existing extraction wells for use as monitor wells. APS contracted directly with Cascade Drilling for the well construction, repair, and modification work. The well locations are shown on Figure 1.



Figure 1. Site Map

2 WELL CONSTRUCTION ACTIVITIES

Three new extraction wells and 1 new monitor well were drilled and constructed at the FCGS from June 20 to 27, 2023. The boreholes for the new wells were advanced using sonic drilling methods by Cascade Drilling. Sonic drilling enabled retrieval of a relatively intact core of drill cuttings, which facilitated detailed visual inspection of the lithology.

All drilling and well construction activities were directed in the field by a qualified M&A hydrogeologist. During drilling operations, the on-site M&A hydrogeologist maintained lithologic logs of the subsurface materials encountered and notes regarding drilling characteristics.

2.1 Extraction Well Drilling and Construction

Extraction wells EW-11R, EW-12R, and DMX-5R were installed to replace abandoned wells EW-11, EW-12, and DMX-5, respectively. New well locations are shown on Figure 1. Prior to drilling, hydrovac excavation was conducted at the 3 locations from land surface to approximately 5 feet below land surface (bls) to confirm no subsurface utilities were present. At each location, a nominal 10-inch diameter borehole was advanced into competent Lewis Shale formation to accommodate construction of a 6-inch diameter well screened above unweathered shale.

Construction details for extraction wells EW-11R, EW-12R, and DMX-5R are summarized in Table 1. Borehole lithologic logs and well schematics for new extraction wells are provided in Appendix A. Hydrographs showing water level data and pumping rates recorded during well development and testing activities are provided in Appendix B. Drilling, construction, and testing activities completed at each location are summarized in the following sections.

Table 1. Construction Details for Replacement Extraction Wells

Well ID	Borehole Depth (ft bls)	Borehole Diameter (inches)	Well Casing Diameter (inches)	Well Casing Material	Screened Interval (ft bls)	Static Water Level (ft bls)	Approximate Sustainable Pumping Rate (gpm)
EW-11R	43	10	6	Sch 80 PVC	11.5 – 41.5	29.48	<1
EW-12R	37.5	10	6	Sch 80 PVC	12.5 – 37.5	17.48	1
DMX-5R	55	10	6	Sch 80 PVC	20 - 55	35.51	<1

ft bls – feet below land surface
gpm – gallons per minute

2.1.1 EW-11R

The EW-11R borehole was advanced to a total depth of 43 feet bls. Light brown to brownish gray sandy silty clay with moderate to high plasticity was encountered from land surface to 15 feet bls. Light brown to brown silty clay with trace sand and gravel was encountered from 15 to 29 feet bgs, underlain by highly weathered, poorly to moderately lithified, grayish brown shale from 29 to 35 feet bgs. Unweathered, moderately to highly lithified gray shale was encountered at 35 feet bls. The borehole was advanced approximately 8 feet into the competent shale to confirm the contact. Evidence of groundwater was not observed during drilling. The lithologic log and well construction schematic for EW-11R are provided on Figure A-1 (Appendix A).

EW-11R was constructed of 6-inch diameter, schedule 80, flush-threaded PVC blank casing, machine-slotted well screen with 0.020 inch slots, and a threaded end cap. EW-11R was screened from 11.5 to 41.5 feet bls. From bottom to top, the EW-11R annular space was filled with No. 12-20 mesh silica sand filter pack from total depth to 1.5 feet above the screened interval, a 2-foot layer of No. 20-40 mesh transition sand, a 2-foot layer of hydrated bentonite chips, and a cement-bentonite grout seal to land surface. The well was completed with a 10-inch diameter steel lockable security monument anchored in concrete (Figure 2). The monument extends from 2 feet bls to 3 feet above land surface. On June 26, 2023 (3 days after construction), the water level stabilized at 29.48 feet bls.



Figure 2. EW-11R Surface Completion

Following construction, EW-11R was developed by swabbing, bailing, and pumping methods. The screened interval was swabbed with a single-flanged swab tool for approximately 20 minutes and settled solids were removed by bailing. After bailing, a submersible pump was installed and the well was pumped at rates from 1 to 2 gpm. EW-11R was equipped with a data logging pressure transducer to monitor water level drawdown and recovery during pumping cycles. Water level data and pumping rates recorded during development are presented on Figure B-1 (Appendix B).

During the first development pumping cycle, EW-11R drew down completely after 12 minutes at a rate of 1.5 gpm. After 22 hours, the well recovered to approximately 70% of the original static water level. During subsequent pumping cycles, the well continued to draw down completely at a pumping rate of 1 gpm. Development activities were limited by the sustainable pumping rate (less than 1 gpm) and slow recovery rate. Additional well testing was not feasible.

During development activities, the well produced little to no sand. The lowest turbidity was recorded at 64 nephelometric turbidity units (NTUs); however, turbidity generally increased as the well drew down. During the final pumping cycles, conductivity and pH generally stabilized at approximately 8,300 µS/cm and 7.3, respectively. Water generated during development was disposed at the Ash Pond 3 Pump House.

2.1.2 EW-12R

The EW-12R borehole was advanced to a total depth of 37.5 feet bls. Light brown to brown sandy silty clay with moderate plasticity and sparse gypsum was encountered from land surface to 8 feet bls. Yellowish brown clayey sandy silt with moderate plasticity and some yellow staining was encountered from 8 to 25 feet bls. From 25 to 30 feet bls, moderately weathered, moderately lithified, dark grayish brown shale with red staining was encountered. Unweathered, moderately to highly lithified gray shale was encountered at 30 feet bls. The borehole was advanced approximately 7.5 feet into the competent shale to confirm the contact. During drilling, water was encountered at approximately 18 feet bls. The lithologic log and well construction schematic for EW-12R are provided on Figure A-2 (Appendix A).

EW-12R was constructed of 6-inch diameter, schedule 80, flush-threaded PVC blank casing, machine-slotted well screen with 0.020 inch slots, and a threaded end cap. EW-12R was screened from 12.5 to 37.5 feet bls. From bottom to top, the EW-12R annular space was filled with No. 12-20 mesh silica sand filter pack from total depth to 2.5 feet above the screened interval, a 2-foot layer of No. 20-40 mesh transition sand, a 2-foot layer of hydrated bentonite chips, and a cement-bentonite grout seal to land surface. The well was completed with a 10-inch diameter steel lockable security monument anchored in concrete (Figure 3). The monument

extends from 2 feet bls to 3 feet above land surface. On June 26, 2023 (2 days after construction), the water level stabilized at 17.48 feet bls.



Figure 3. EW-12R Surface Completion

Following construction, EW-12R was developed by swabbing, bailing, and pumping methods. The screened interval was swabbed with a single-flanged swab tool for approximately 25 minutes and settled solids were removed by bailing. After bailing, a submersible pump was installed and the well was pumped at rates from 2 to 3 gpm. EW-12R was equipped with a data logging pressure transducer to monitor water level drawdown and recovery during development pumping cycles. Water level data and pumping rates recorded during development are presented on Figure B-2 (Appendix B).

During development activities, the well produced little to no sand. The lowest turbidity was recorded at 44 NTUs; however, turbidity generally increased as the well drew down. Conductivity generally stabilized at approximately 9,300 µS/c; pH stabilized at 7.3. Water generated during development was transported to the Ash Pond 3 Pump House.

During development, EW-12R drew down completely within 1 hour at a pumping rate of 3 gpm. The well recovered to 95% of the original static water level within 15 minutes. Based on water level data, a step-rate pumping test was conducted on June 28 at pumping rates of 0.4, 1, and 2 gpm. Water level data and pumping rates recorded during step testing are presented on Figure B-3 (Appendix B). Step test results are summarized in Table 2.

Table 2. Summary of EW-12R Step Test Results

Step	Step Length (minutes)	Pumping Rate (gpm)	Drawdown (feet)	Specific Capacity (gpm/ft)
1	60	0.4	0.53	0.75
2	60	1	1.68	0.60
3	105	2	>7	<0.29

gpm/ft – Gallons per minute per foot

At pumping rates of 0.4 gpm (Step 1) and 1 gpm (Step 2), the water level in the well stabilized within 5 and 15 minutes, respectively. At a pumping rate of 2 gpm (Step 3), the water level did not stabilize after 105 minutes of pumping, and the rate of drawdown appeared to increase slightly near the end of the pumping period (Figure B-3). During step testing, conductivity and pH levels were consistent with those observed during development. Turbidity was measured at 1.82 NTUs during the first step but increased significantly when the pumping rate and drawdown increased.

2.1.3 DMX-5R

The DMX-5R borehole was advanced to a total depth of 55 feet bls. Light brown to brown sandy clay with moderate to high plasticity was encountered from land surface to 14 feet bls. Light brown silty sand was encountered from 14 to 35 feet bls, underlain by brown sandy clay from 35 to 37 feet bls. Moderately weathered, moderately lithified, yellowish brown to grayish brown shale was encountered from 37 to 50 feet bls. Unweathered, moderately lithified gray shale was encountered at 50 feet. The borehole was advanced approximately 5 feet into the competent shale to confirm the contact. During drilling, evidence of groundwater was observed in drilling cuttings at approximately 34 feet bls. The lithologic log and well construction schematic for DMX-5R are provided on Figure A-3 (Appendix A).

DMX-5R was constructed of 6-inch diameter, schedule 80, flush-threaded PVC blank casing, machine-slotted well screen with 0.020 inch slots, and a threaded end cap. DMX-5R was screened from 20 to 55 feet bls. From bottom to top, the DMX-5R annular space was filled with No. 12-20 mesh silica sand filter pack from total depth to 2 feet above the screened interval, a 2-foot layer of No. 20-40 mesh transition sand, a 2.5-foot layer of hydrated bentonite chips, and a cement-bentonite grout seal to land surface. The well was completed with a 10-inch diameter steel lockable security monument anchored in concrete (Figure 4). The monument extends from 2 feet bls to 3 feet above land surface. On June 27, 2023 (2 days after construction), the water level stabilized at 35.51 feet bls.



Figure 4. DMX-5R Surface Completion

Following construction, DMX-5R was developed by swabbing, bailing, and pumping methods. The screened interval was swabbed with a single-flanged swab tool for approximately 20 minutes and settled solids were removed by bailing. After bailing, a submersible pump was installed and the well was pumped at rates from 0.5 to 3 gpm. DMX-5R was equipped with a data logging pressure transducer to monitor water level drawdown and recovery during pumping cycles. Water level data and pumping rates recorded during development are presented on Figure B-4 (Appendix B).

During the first development pumping cycle, DMX-5R drew down completely within 15 minutes at a rate of 3 gpm and recovered to approximately 95% of the original static water level within 9 hours. During subsequent pumping cycles, the well drew down completely at a pumping rate of 1 gpm. Development activities were limited by the sustainable pumping rate (less than 1 gpm) and slow recovery rate. Additional well testing was not feasible.

During development activities, the well produced little to no sand. The lowest turbidity was recorded at 32 NTUs; however, turbidity generally increased as the well drew down. During the

final pumping cycles, conductivity and pH generally stabilized at approximately 7,800 µS/cm and 7.0, respectively. Water generated during development was disposed at the Ash Pond 3 Pump House.

2.2 Monitor Well Drilling and Construction

Monitor well MW-6R was installed to replace abandoned well MW-6. Borehole MW-21R was drilled for potential replacement of MW-21. However, the MW-21R borehole was not completed as a well and was abandoned. Drilling locations are shown on Figure 1. Prior to drilling, hydrovac excavation was conducted at the 2 locations to approximately 5 feet bls to confirm no subsurface utilities were present. At each location, a nominal 8-inch diameter borehole was advanced into competent Lewis Shale formation to accommodate potential construction of a 4-inch diameter well screened above unweathered shale.

Borehole and construction details for monitor well MW-6R and borehole MW-21R are summarized in Table 3. Borehole lithologic logs for the 2 drilling locations and the well schematic for MW-6R are provided in Appendix A. Drilling and construction activities completed at each location are summarized in the following sections.

Table 3. Construction Details for Replacement Monitor Wells

Well ID	Borehole Depth (ft bls)	Borehole Diameter (inches)	Well Casing Diameter (inches)	Well Casing Material	Screened Interval (ft bls)	Static Water Level (ft bls)
MW-6R	46	8	4	Sch 80 PVC	25-40	39.17
MW-21R	35	8	---	---	---	---

ft bgs – feet below ground surface

2.2.1 MW-6R

The MW-6R borehole was advanced to a total depth of 46 feet bls. Brown sandy silty clay was encountered from land surface to about 4 feet bls. Weathered shale was encountered from 4 to 34 feet bls; the degree of weathering decreased and the color transitioned from brown to gray with depth. Unweathered, moderately to highly lithified gray shale was encountered at 34 feet bls. The borehole was advanced approximately 12 feet into the competent shale to confirm the contact. Evidence of groundwater was not observed during drilling. The lithologic log and well construction schematic for MW-6R are provided on Figure A-4 (Appendix A).

MW-6R was constructed of 4-inch diameter, schedule 80, flush-threaded PVC blank casing, machine-slotted well screen with 0.020 inch slots, and a threaded end cap. MW6-R was screened

from 25 to 40 feet bls. Prior to setting the screen, the lower portion of the borehole was backfilled with bentonite chips from 41 to 46 feet bls. From bottom to top, the MW-6R annular space was filled with No. 12-20 mesh silica sand filter pack from 41 feet bls to 2 feet above the screened interval, a 2-foot layer of No. 20-40 mesh transition sand, a 2-foot layer of hydrated bentonite chips, and a cement-bentonite grout seal to land surface. The well was completed with an 8-inch diameter steel lockable security monument anchored in concrete (Figure 5). The monument extends from 2 feet bls to 3 feet above land surface.



Figure 5. MW-6R Surface Completion

Approximately 24 hours after construction, the water level in MW-6R was measured at 33.39 feet bls. The well was bailed dry and monitored for recovery. After 24 hours, the water level in the well stabilized at 39.17 feet bls. MW-6R development was not feasible due to the minimal saturated thickness in the well. After bailing activities, the pressure transducer and bladder pump formerly located in abandoned well MW-6 were placed in MW-6R.

2.2.2 MW-21R

The MW-21R borehole was advanced to a total depth of 35 feet bls. Brown sandy silty clay was encountered from land surface to about 4 feet bls. Weathered shale was encountered from 4 to

25 feet bls; the degree of weathering decreased, and the color transitioned from brown to gray with depth. Unweathered, moderately to highly lithified gray shale was encountered at 25 feet bls. The borehole was advanced approximately 10 feet into the competent shale to confirm the contact. Evidence of groundwater was not observed during drilling.

Construction of a monitor well within the MW-21R borehole was contingent upon the occurrence of groundwater. Once total depth was reached, the borehole was allowed to remain open overnight. After 12 hours, no water had accumulated in the borehole. Based on the dry conditions, the borehole was abandoned. Cement-bentonite grout was placed from total depth to land surface, and the abandoned borehole location was marked with a brass survey marker (Figure 6). The lithologic log and borehole abandonment schematic for MW-21R are provided on Figure A-5 (Appendix A).



Figure 6. MW-21R Borehole Abandonment Completion

3 WELL REPAIR AND MODIFICATION ACTIVITIES

The field program included repair of 2 existing monitor well monuments and modification of 3 existing extraction wells for use as monitor wells.

3.1 Wellhead Repair at Existing Monitor Wells

Based on dry conditions within the MW-21R borehole, APS elected to preserve existing monitor wells MW-21 and MW-22, originally scheduled for abandonment. Monitor wells MW-21 and MW-22 are located approximately 6 and 475 feet east of the MW-21R borehole, respectively (Figure 1). During field activities, depth-to-water in MW-21 was measured at 18.70 feet bls. Depth-to-water in MW-22 was measured at 10.20 feet bls.

At both locations, the deteriorated 6-inch diameter, steel outer protective casing was cut at land surface and the area around the buried portion of the steel casing was excavated to approximately 2 feet bls. The height of the PVC well casings were not altered during repair activities. A new 8-inch diameter steel security monument with locking cap was installed over the existing steel and PVC casing and anchored in concrete. The new security monuments extend from 2 feet bls to 3 feet above land surface (Figure 7 and Figure 8).



Figure 7. MW-21 Surface Completion Repair



Figure 8. MW-22 Surface Completion Repair

3.2 Modification of Existing Extraction Wells to Monitor Wells

Existing extraction wells EW-14, EW-15, and EW-34 (Figure 1) were converted for use as monitor wells. The 3 wells are constructed with 5-diameter PVC casing and screen. At each location, 8-inch diameter steel surface casing extends approximately 1 foot above land surface and terminates with a flanged wellhead connection. At the time of field activities, each well was equipped with a 0.5-horsepower submersible pump, 1 ¼-inch stainless steel column pipe, active electrical control boxes, and a functional pump control box. The wells were equipped with functional wellheads connected to the wellfield pipeline. Before any abandonment work began, APS shut down the power supply to each well site and isolated equipment per APS lockout tagout (LOTO) protocols.

On June 21, 2023, Cascade Drilling removed the submersible pumps and column pipe at each location. The wellheads were dismantled, and pump electrical cables were disconnected at the control boxes. The wellfield pipeline connections were sealed with blind flanges. APS requested that the control boxes remain in place for potential future use. Following pump removal, the wells were secured with a lockable blind flange (Figure 9, Figure 10, and Figure 11).



Figure 9. EW-14 Wellhead



Figure 10. EW-15 Wellhead



Figure 11. EW-34 Wellhead

4 REFERENCE

WSP, 2023. *Four Corners File Review and Evaluation for Extraction/Groundwater Monitoring Wells, Four Corners Generating Station, San Juan County, New Mexico*: prepared for APS, January 27, 2023.

MONTGOMERY & ASSOCIATES

Appendix A

Lithologic Logs and Well Schematics

Figure A-1: EW-11R Lithologic and Construction Log

MONTGOMERY & ASSOCIATES
Water Resource Consultants

Location: Fruitland, NM
Client: APS
Project Name: Four Corners

Date Started: 6/22/2023
Date Finished: 6/23/2023
Borehole Dia.:10"

Geologists: A. Platt
Driller: Cascade Drilling
Method: Sonic

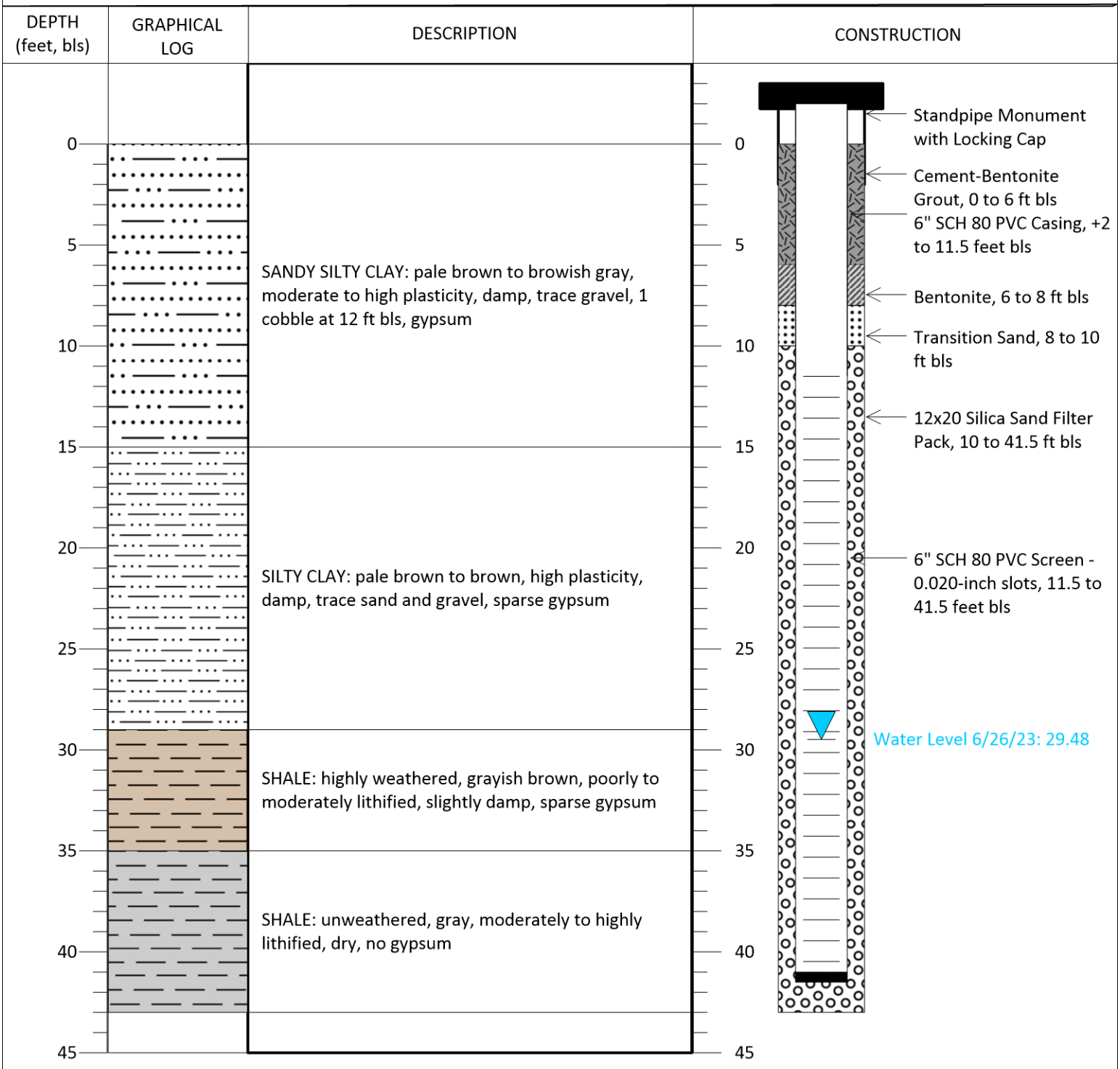


Figure A-2: EW-12R Lithologic and Construction Log

MONTGOMERY & ASSOCIATES
Water Resource Consultants

Location: Fruitland, NM
Client: APS
Project Name: Four Corners

Date Started: 6/23/2023
Date Finished: 6/24/2023
Borehole Dia.:10"

Geologists: A. Platt
Driller: Cascade Drilling
Method: Sonic

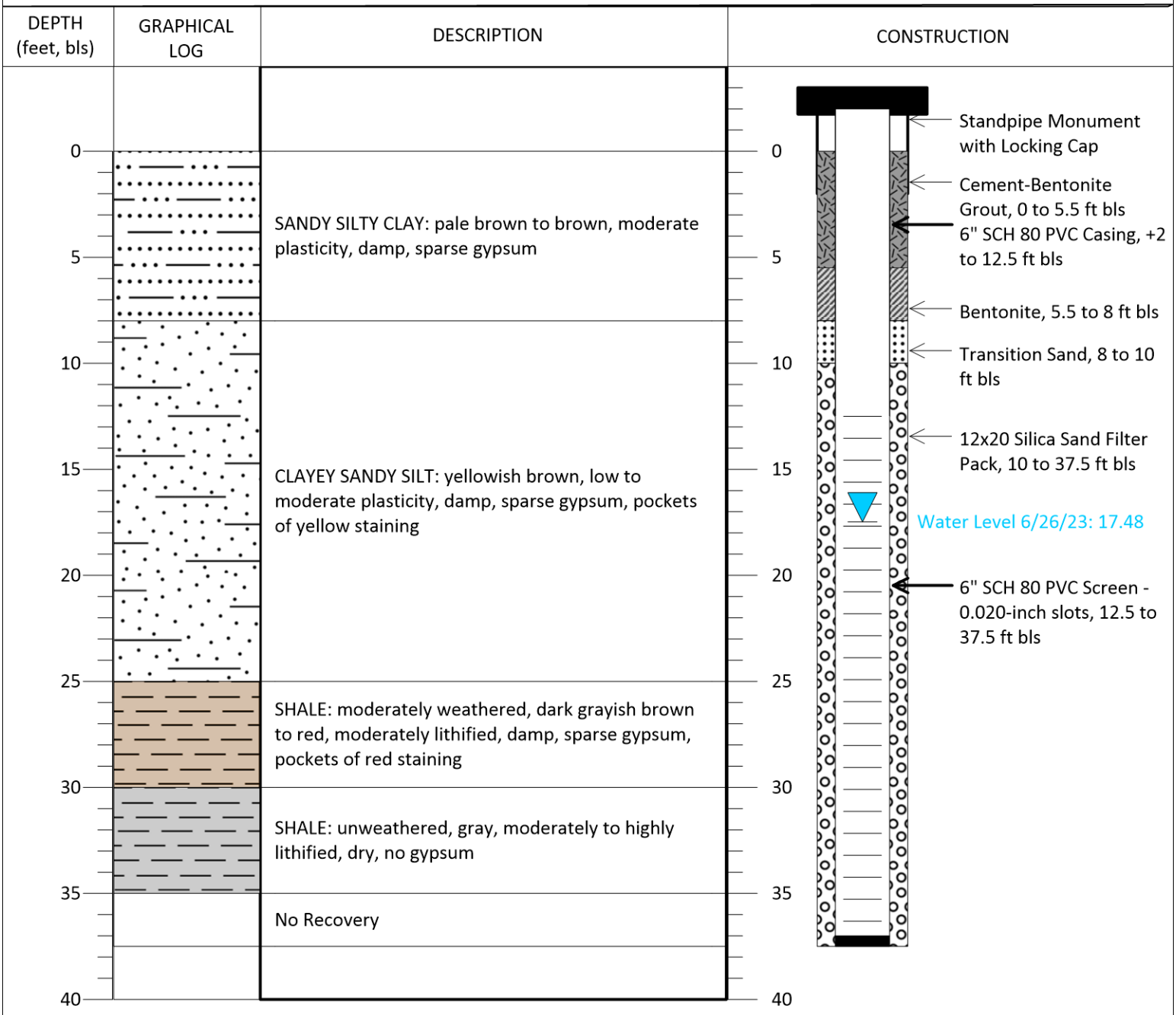


Figure A-3: DMX-5R Lithologic and Construction Log

MONTGOMERY & ASSOCIATES
Water Resource Consultants

Location: Fruitland, NM
Client: APS
Project Name: Four Corners

Date Started: 6/24/2023
Date Finished: 6/25/2023
Borehole Dia.:10"

Geologists: A. Platt
Driller: Cascade Drilling
Method: Sonic

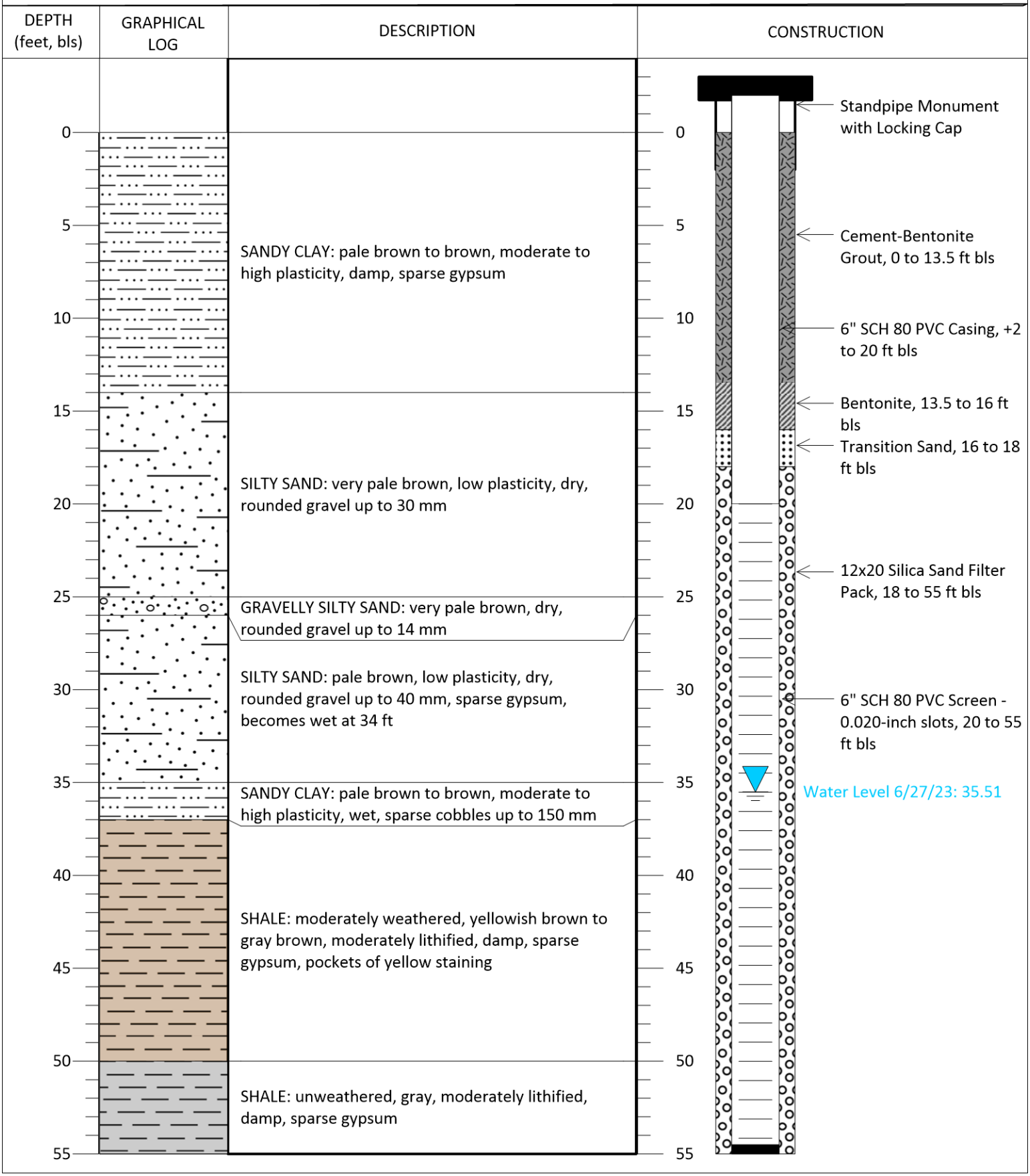


Figure A-4: MW-6R Lithologic and Construction Log

MONTGOMERY & ASSOCIATES
Water Resource Consultants

Location: Fruitland, NM
Client: APS
Project Name: Four Corners

Date Started: 6/26/2023
Date Finished: 6/26/2023
Borehole Dia.:8"

Geologists: A. Platt
Driller: Cascade Drilling
Method: Sonic

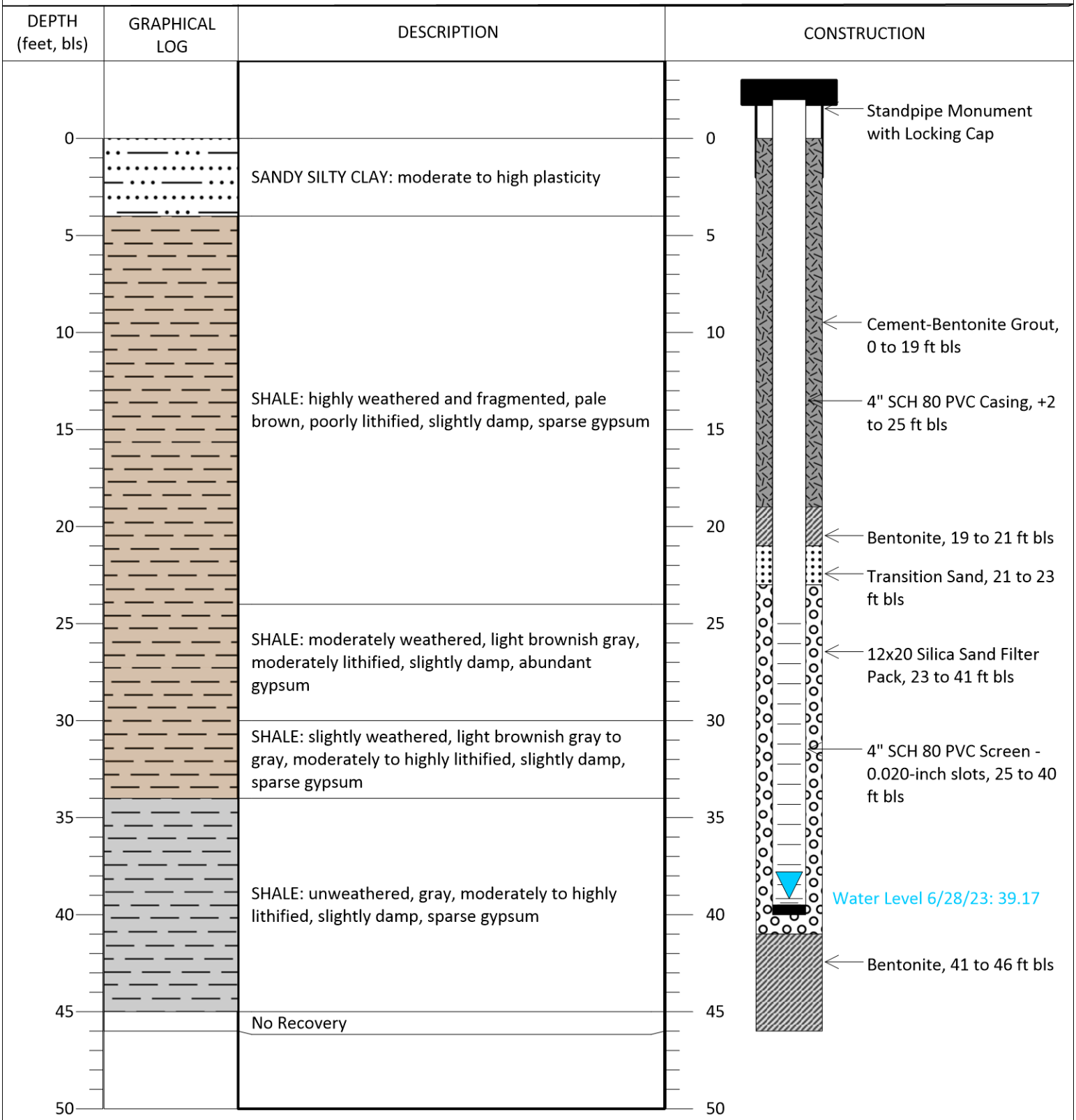


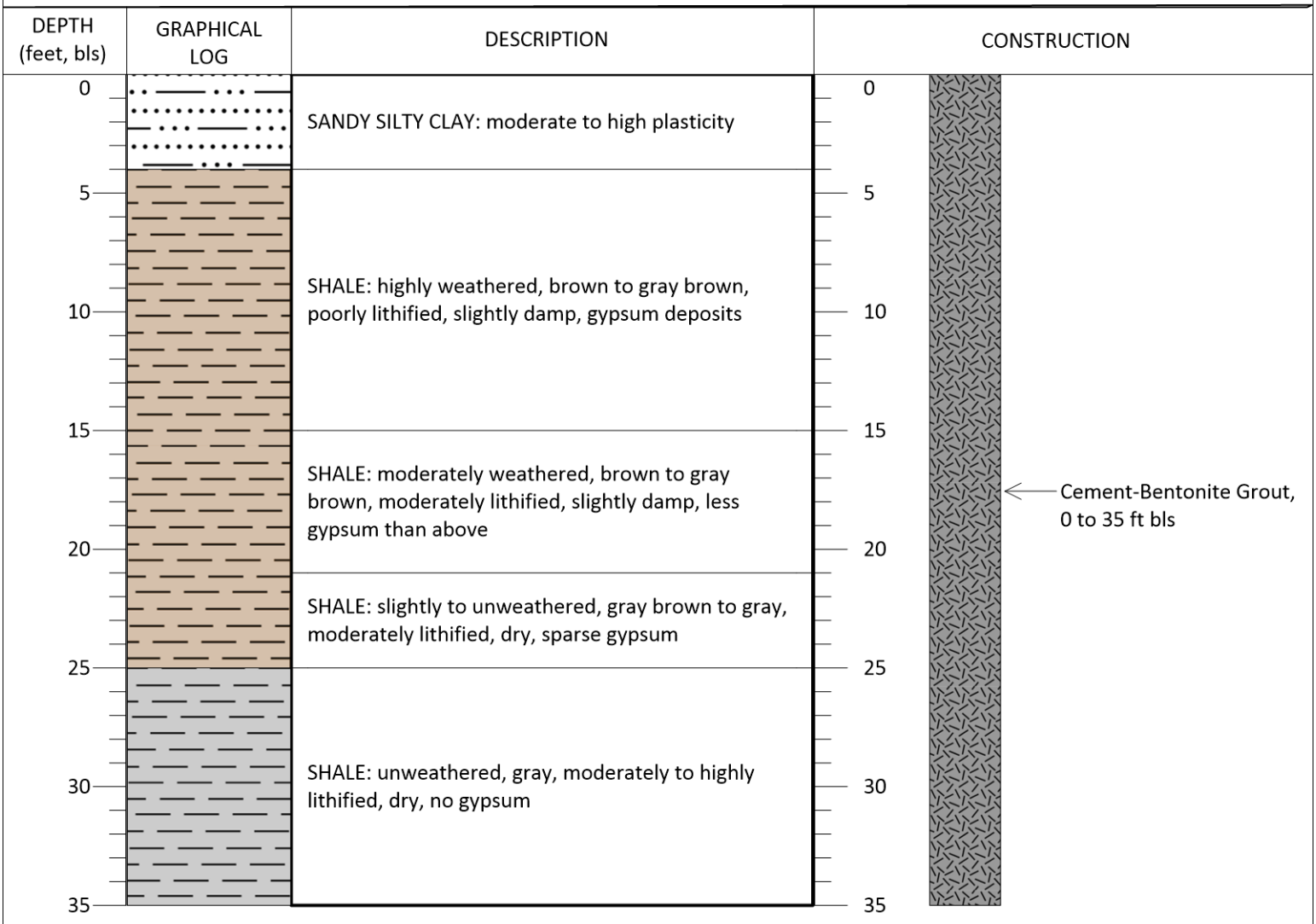
Figure A-5: MW-21R Lithologic and Abandonment Log

MONTGOMERY & ASSOCIATES
Water Resource Consultants

Location: Fruitland, NM
Client: APS
Project Name: Four Corners

Date Started: 6/20/2023
Date Finished: 6/21/2023
Borehole Dia.:8"

Geologists: A. Platt
Driller: Cascade Drilling
Method: Sonic



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Appendix B

Well Development and Testing Hydrographs

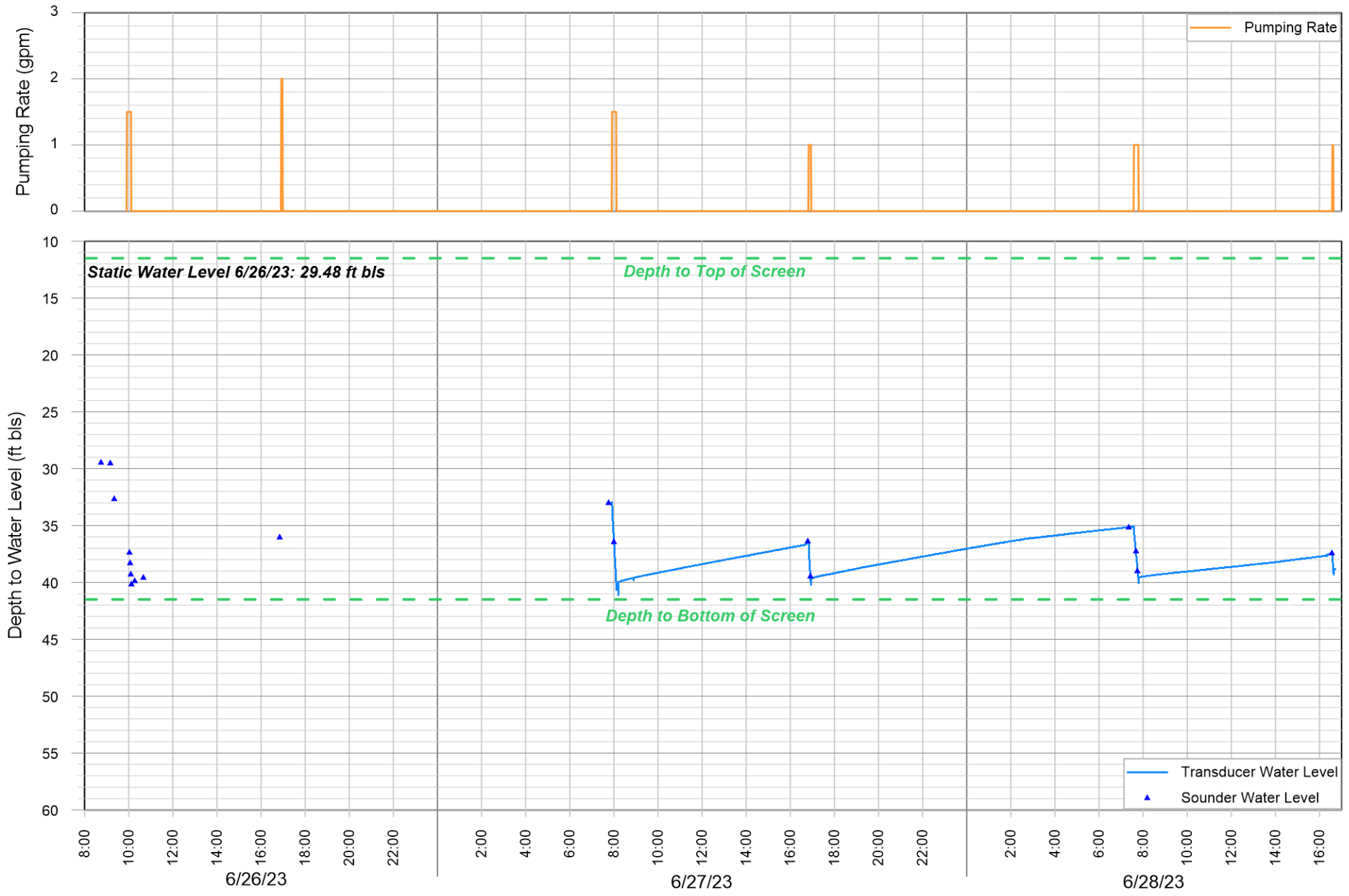

Figure B-1. Pumping Rate and Depth to Water during Development at EW-11R

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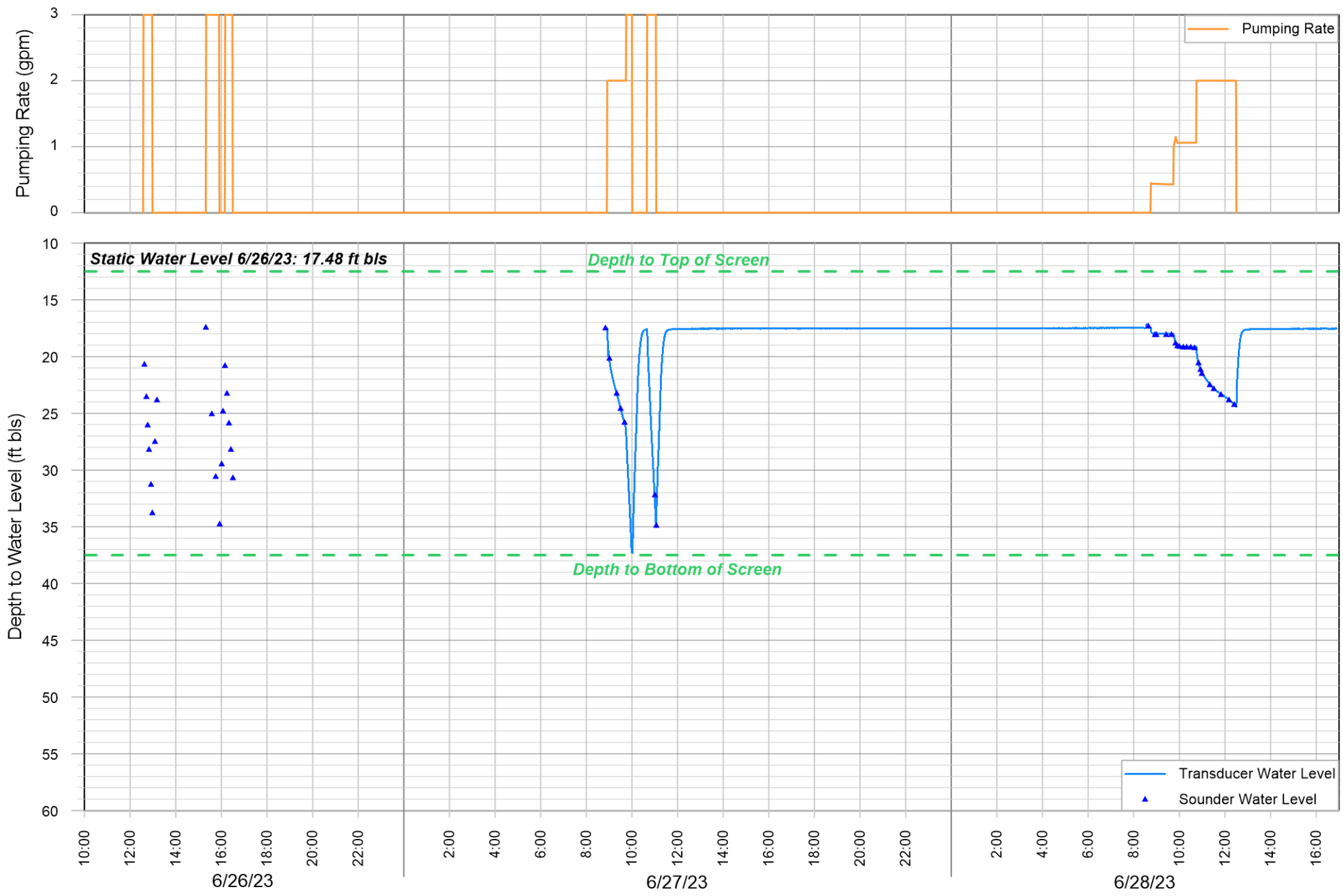

Figure B-2. Pumping Rate and Depth to Water during Development at EW-12R

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Water Resource Consultants

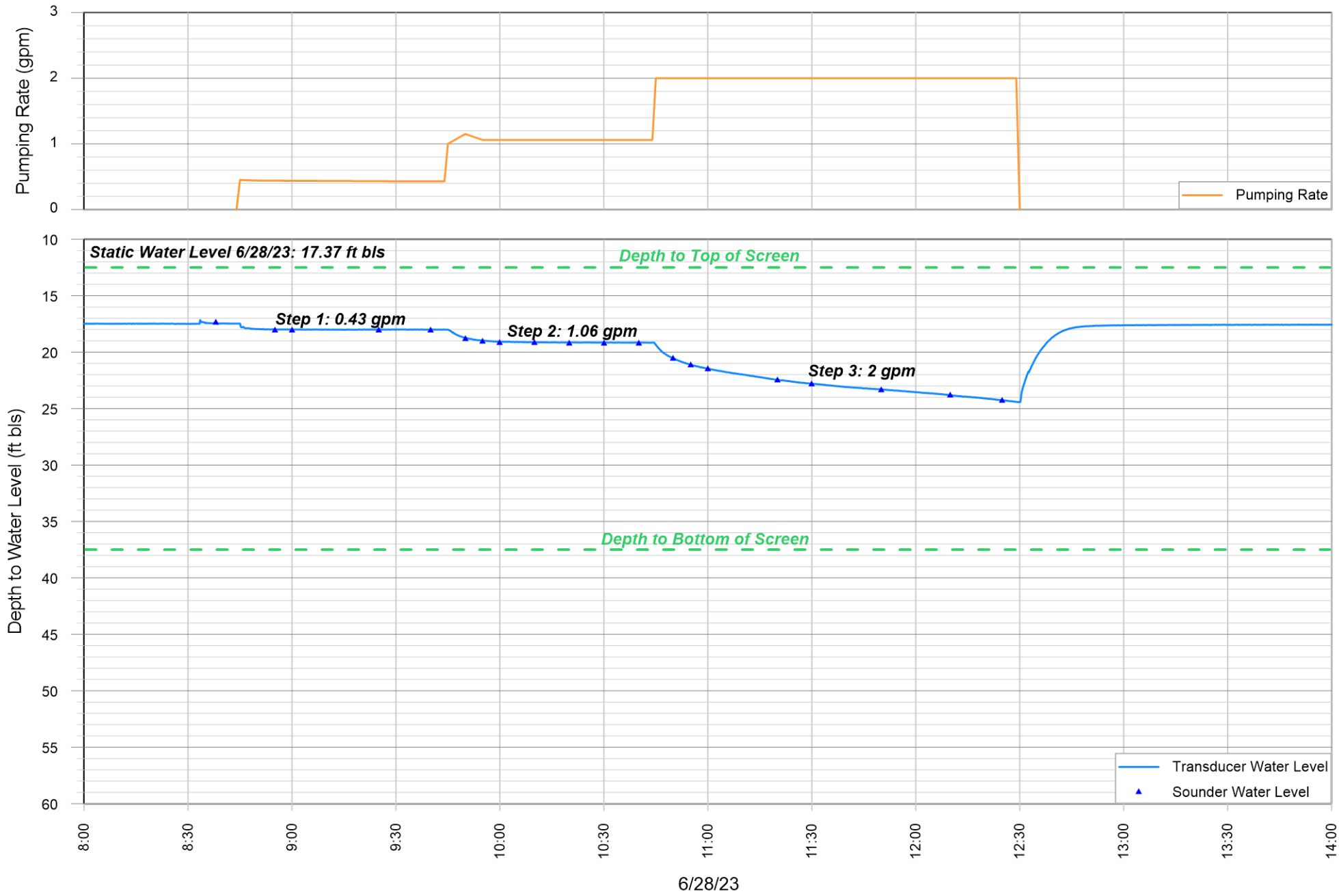

Figure B-3. Pumping Rate and Depth to Water during Step Test at EW-12R

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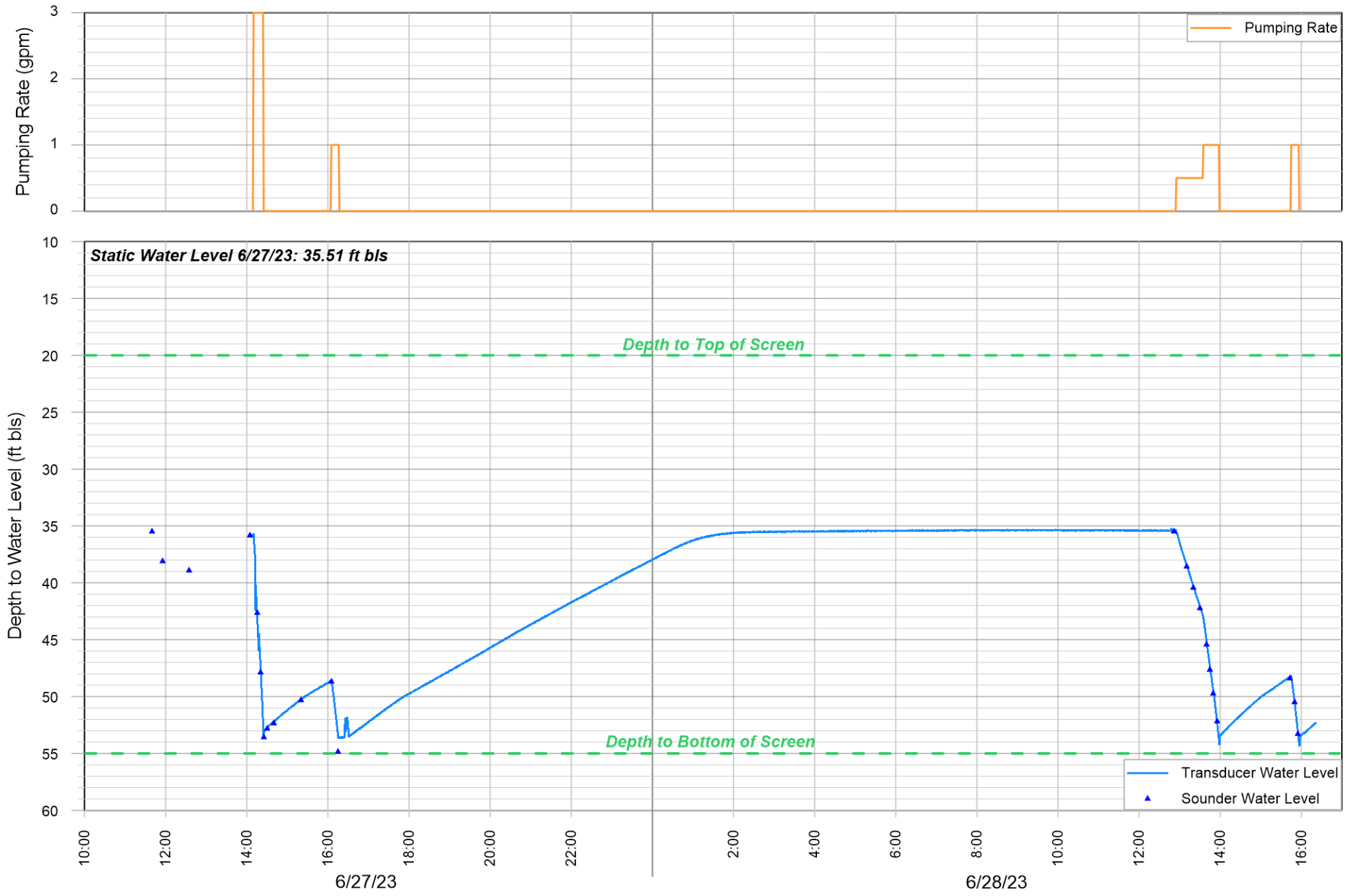

Figure B-4. Pumping Rate and Depth to Water during Development at DMX-5R

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APPENDIX

B

CCR GROUNDWATER DETECTION MONITORING STATISTICAL ANALYSIS AND RESULTS FOR THE CWTP APPENDIX III CONSTITUENT DATA COLLECTED THROUGH JANUARY 2023

TECHNICAL MEMORANDUM

To:	Arizona Public Service Company	**Project No.**	14-2023-2011
By:	Samantha O'Shea	**Reviewed by:**	Maren Henley, PE
Tel:	602-733-6000	**CC:**	File
Date:	April 10, 2023		

Re: CCR GROUNDWATER DETECTION MONITORING
STATISTICAL ANALYSIS AND RESULTS FOR THE CWTP
APPENDIX III CONSTITUENT DATA COLLECTED THROUGH JANUARY 2023
Arizona Public Service Company Four Corners Power Plant – Fruitland, New Mexico

Please be advised that, effective September 21, 2022, Wood Environment & Infrastructure Solutions, Inc. was acquired by WSP. due to the acquisition, we have changed our name to WSP USA Environment & Infrastructure Inc. no other aspects of our legal entity or capabilities have changed for this report, including our Federal Tax ID which remains 91-1641772. Correspondence for this technical memorandum should continue to be addressed to the individuals listed above.

1.0 INTRODUCTION

This Technical Memorandum presents the results of a statistical evaluation of groundwater monitoring data collected from monitoring wells downgradient of the Combined Waste Treatment Pond (CWTP) located at the Arizona Public Service Company (APS) Four Corners Power Plant (Site) in Fruitland, New Mexico. The statistical evaluation was performed by Geosciences Consulting Strategies, LLC (Geosciences Consulting), a subcontractor to WSP USA Environment and Infrastructure, Inc. (WSP) pursuant to Coal Combustion Residuals (CCR) Rule requirements for groundwater monitoring and corrective action detailed in 40 Code of Federal Regulations Sections 257.90 through 257.98 (CCR Rule) (Federal Register, 2020).

The CWTP is a Site CCR unit that is currently in the detection monitoring program. The CCR Rule requires evaluation on an ongoing semi-annual basis of Appendix III constituent data collected from CWTP downgradient wells to determine if a statistically significant increase (SSI) over background threshold values (BTVs) has occurred. The statistical evaluation documented herein incorporates Appendix III constituent data collected from CWTP downgradient compliance wells MW-62, MW-63, MW-64, and MW-65 and CWTP background wells MW-71, MW-72, and MW-73 during the November 2022 semi-annual sampling event and a January 2023 resampling event.

To address an initial exceedance of the boron and calcium BTV at MW-62 in November 2022, resampling was performed in January 2023. In accordance with the Statistical Data Analysis Workplan (SDAWP) developed for the Site and the US EPA's Unified Guidance (WSP, 2023; USEPA, 2009), resampling of the well was implemented in January 2023. The January 2023 resampling event provided additional evidence that the initial November 2022 exceedances for boron and calcium were statistically significant. Further details of the initial November 2022 exceedances, and statistical findings are presented in Section 2.0 below.

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2.0 STATISTICAL EVALUATION RESULTS

Attachment A presents the statistical evaluation performed by Geosciences Consulting. The results of the evaluation are summarized as follows:

- Table 1 of **Attachment A** presents interwell BTVs for the CWTP which were updated in April 2022 pursuant to recommendations in the January 2022 Alternative Source Demonstration (WSP, 2023). Table 2 of Attachment A presents the downgradient sample data summary.
- In November 2022, an initial boron detection of 2.1 milligrams per liter (mg/L) exceeded the boron BTV of 2.0 mg/L at MW-62; this exceedance triggered a 1 of 2 resampling strategy for this constituent and monitoring location. The January 2023 resample resulted in a detection of 2.1 mg/L which exceeded the boron BTV, therefore the initial exceedance is found to be statistically significant and consistent with previous detections at this location.
- In November 2022, an initial calcium detection of 610 mg/L exceeded the boron BTV of 536 mg/L at MW-62; this exceedance triggered a 1 of 2 resampling strategy for this constituent and monitoring location. The January 2023 resample resulted in a detection of 550 mg/L which exceeded the calcium BTV, therefore the initial exceedance is found to be statistically significant and consistent with previous detections at this location.
- The January resampling event at MW-62 indicated an exceedance for pH at a concentration of 7.00 standard units (SU) and did not require resampling based on the November 2022 sample result of 6.75 SU.
- In November 2022, an initial pH concentration of 7.00 standard units (SU) exceeded the pH BTV range of 6.5 to 6.9 mg/L at MW-63. This exceedance triggered a 1 of 2 resampling strategy for this constituent at this monitoring location. The January 2023 resample was not completed but an April resampling confirmed the initial pH concentration of 7.00 SU exceeding the pH BTV range of 6.5 to 6.9 mg/L. Exceedances of pH were comparable to background concentrations at the CWTP and require further statistical review to assure BTVs are representative of groundwater conditions.
- A statistically significant decreasing temporal trend is evident for chloride and TDS at MW-63, boron, calcium, and TDS at MW-64, and boron and TDS at MW-65.
- A statistically significant decreasing temporal trend is becoming apparent for concentrations of boron and sulfate at MW-63
- There is sufficient evidence to declare statistically significant increases (SSI) in concentrations of boron and calcium over their respective BTVs at MW-62 using the 1 of 2 resampling strategy (**Attachment A**).

3.0 RECOMMENDATIONS

Based on the statistical evaluation presented in **Attachment A** and pursuant to the CCR Rule, the Owner or Operator must, within 90 days of declaring an SSI for an Appendix III constituent, either establish an assessment monitoring program for the CWTP or demonstrate that a source other than the CWTP is the cause of the SSI declaration(s) (Federal Register, 2020).

WSP recommends transitioning to assessment monitoring for the CWTP and performing continued trend testing after each monitoring event and updates to the BTVs after 1-2 years of future sampling events. Exceedances of pH were comparable to background concentrations at the CWTP but warrant further statistical review to assure BTVs in Table 1 of **Attachment A** are current and representative of groundwater conditions.

4.0 REFERENCES

- Federal Register, 2020. 40 Code of Federal Regulations Part 257 – Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals From Electric Utilities; Final Rule promulgated at 80 FR 21468 on April 17, 2015 with amendments issued through November 12, 2020 at 85 FR 72539 (A Holistic Approach to Closure Part B: Alternate Demonstration for Unlined Surface Impoundments).
- United States Environmental Protection Agency (USEPA), 2009. *Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities Unified Guidance. EPA 530/R-09-007*. Environmental Protection Agency Office of Resource Conservation and Recovery.
- WSP USA Environment & Infrastructure, Inc. (WSP), 2023. *Statistical Data Analysis Work Plan*. Coal Combustion Residual Rule Groundwater Monitoring System Compliance, Four Corners Power Plan, Fruitland, New Mexico. Prepared for Arizona Public Service. January 10, 2023.

ATTACHMENT A

DETECTION MONITORING STATISTICAL EVALUATION OF CWTP –

GEOSCIENCE CONSULTING STRATERGIES LLC

Technical Memorandum

To: Maren Henley, PE
WSP USA Environment & Infrastructure Inc.

From: Carla Landrum, PhD
Geoscience Consulting Strategies LLC

Date: April 3, 2023

Subject: **CCR Groundwater Semiannual Detection Monitoring**
Statistical Evaluation of CWTP Data through November 2022
Arizona Public Service Company Four Corners Power Plant – Fruitland, New Mexico

1.0 INTRODUCTION

This Technical Memorandum (Tech Memo) documents the statistical evaluation of detection monitoring (i.e., Appendix III constituents) groundwater data associated with the Combined Waste Treatment Pond (CWTP) unit located at the Arizona Public Service Company (APS) Four Corners Power Plant (FCPP) in Fruitland, New Mexico. This routine statistical evaluation is completed by Geoscience Consulting Strategies LLC in accordance with the Statistical Data Analysis Work Plan (SDAWP) for the FCPP and the Coal Combustion Residuals (CCR) Rule (Federal Register, 2020; WSP USA Environment & Infrastructure Inc. (WSP), 2023).

This statistical evaluation incorporates the CWTP November 2022 semiannual detection monitoring results and any corresponding resample events, as necessary. Following is a summary of the statistical evaluation of the November 2022 CWTP detection monitoring groundwater data. The following sections present data inputs, statistical methods, results, and conclusions.

2.0 DATA INPUTS

The CWTP groundwater monitoring well network consists of three background monitoring wells (MW-71, MW-72, and MW-73) and four compliance (i.e., downgradient) monitoring wells (MW-62, MW-63, MW-64 and MW-65).

The CWTP detection monitoring program performs statistical evaluations semiannually. The period of evaluation for this subject analysis ranges from November 2015 through November 2022 and includes:

1) the minimum of eight initial, or baseline, sampling rounds required by the CCR Rule and eleven subsequent sampling rounds of detection monitoring that occur on a semi-annual frequency; and

2) a January 2023 resampling event to confirm initial exceedance declarations in November 2022 for boron and calcium at MW-62 (see Table 2).

Due principally to the CCR Rule requirement that a minimum of eight initial rounds of data be collected from the site prior to October 17, 2017, the frequency of sample collection prior to this date is short and variable (e.g., biweekly to quarterly sampling).

This statistical data evaluation includes 25 to 30 sample results each for boron, calcium, chloride, fluoride, sulfate, total dissolved solids (TDS), and field pH at each compliance monitoring well. The CWTP detection monitoring program consists of eleven sampling rounds occurring between November 2017 and November 2022:

CWTP Sampling Round	Date
1st	November 2017
2nd	June 2018
3rd	November 2018
4th	May 2019
5th	December 2019
6th	June 2020
7th	November 2020
8th	April 2021
9th	November 2021
10th	May 2022
11th	November 2022

All Appendix III constituents were evaluated during these monitoring events except for chloride and sulfate in May 2019 due to the inadvertent exclusion of these analytes on the Chain of Custody in the field.

Appendix A contains the contents of the ProUCL data upload tables for the subject analysis. Data inputs for this statistical analysis were prepared, and provided by, WSP. The Appendix III analytes are listed by name or chemical symbol as column headers in the ProUCL data upload table. By ProUCL convention, each analyte has a corresponding data column (indicated with a "D_" prefix) that indicates if the analyte was detected or not at a concentration that exceeds the analytical reporting limit, where detectable concentrations are symbolized by a "1" and non-detectable concentrations are symbolized by a "0." The detection frequency is 100% for all compliance well sample data listed in Appendix A.

3.0 METHODS

This statistical analysis follows the statistical methods and approaches put forth in the FCPP SDAWP (WSP, 2023) and the United States Environmental Protection Agency (US EPA) Unified Guidance (2009). The subject statistical analysis consists of: 1) exploratory data analysis (EDA), including outlier analysis, calculating summary statistics, temporal trend analysis and fitting a statistical distribution model (i.e., Goodness-of-Fit Test Statistics) to sample populations and 2) comparing the November 2022 sample concentrations to corresponding not-to-exceed BTVs in Table 1. If an exceedance exists, the statistical significance of this exceedance is assessed through the prescribed resampling strategy. For this statistical analysis, the January 2023 resampling event fulfills the 1 of 2 resampling strategy for boron and calcium at MW-62.

4.0 RESULTS

Table 2 summarizes: 1) Appendix III constituent concentrations relative to their respective BTV for each compliance well and 2) which constituents exhibit statistically significant ($p<0.05$) temporal trends.

Appendix B includes the EDA results.

This statistical analysis results in the following:

Monitoring Well MW-62. The November 2022 sampling event shows an initial exceedance for boron and calcium at this monitoring location (Table 2). The resampling event in January 2023 confirms the initial exceedances for boron and calcium are statistically significant ($p<0.05$). The January 2023 resampling event also indicates an exceedance for pH albeit this constituent did not require resampling based on the November 2022 sample results. The remaining Appendix III sample concentrations at this monitoring location fall below their respective BTVs for the November 2022 sampling event.

There is an absence of statistically significant ($p<0.05$) temporal trends at this monitoring location for this reporting period.

Monitoring Well MW-63. As shown in Table 2, the November 2022 sampling event shows an initial exceedance for field pH at this monitoring location. There is no resampling event recorded for this monitoring location. The remaining Appendix III sample concentrations at this monitoring location fall below their respective BTVs for the November 2022 sampling event.

The statistically significant ($p<0.05$) decreasing trends for chloride and TDS remain persistent at this monitoring location during the November 2022 sampling event. Statistically significantly ($p<0.05$) decreasing trends for boron and sulfate become apparent in MW-63 during the November 2022 sampling event.

Monitoring Well MW-64. The Appendix III sample concentrations for boron, calcium, chloride, fluoride, sulfate, field pH and TDS fall below or within their respective BTVs for the November 2022 sampling event.

The statistically significant ($p<0.05$) decreasing trends for boron, calcium and TDS remain persistent at this monitoring location during the November 2022 sampling event.

Monitoring Well MW-65. The Appendix III sample concentrations for boron, calcium, chloride, fluoride, sulfate, field pH and TDS fall below or within their respective BTVs for the November 2022 sampling event.

There are persistent and statistically significant ($p<0.05$) decreasing trends for TDS and boron at this sampling location.

5.0 RECOMMENDATIONS

There is sufficient evidence to declare statistically significant increases (SSI) in boron and calcium concentrations over their respective BTVs at MW-62 using the 1 of 2 resampling strategy (Table 1). Per 40 Code of Federal Regulations (CFR) Sections (§) 257.90 through 257.98, the Owner or Operator must, within 90 days of declaring an SSI for an Appendix III constituent, either establish an assessment monitoring

program for the CWTP or demonstrate that a source other than the CWTP is the cause of the SSI declaration(s) (Federal Register, 2020).

There is no resample on record to determine the statistical significance of the initial exceedance for pH at MW-63 during this reporting period. Furthermore, the January 2023 resampling event did demonstrate an exceedance for pH at MW-62, albeit this constituent did not require resampling in January 2023. The sample exceedances for pH at MW-62 and MW-63 are comparable to sample concentrations observed in background wells for this sampling period. With this said, background concentrations at the CWTP warrant further statistical review to assure BTVs in Table 1 are current and representative of groundwater conditions.

6.0 REFERENCES

Federal Register, 2020. 40 Code of Federal Regulations Part 257 – Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals from Electric Utilities; Final Rule promulgated at 80 FR 21468 on April 17, 2015 with amendments issued through November 12, 2020 at 85 FR 72539 (A Holistic Approach to Closure Part B: Alternate Demonstration for Unlined Surface Impoundments).

WSP USA Environment & Infrastructure Inc (WSP), 2023. *Statistical Data Analysis Work Plan*. Coal Combustion Residual Rule Groundwater Monitoring System Compliance, Four Corners Power Plan, Fruitland, New Mexico. Prepared for Arizona Public Service. January 10, 2023.

United States Environmental Protection Agency (US EPA), 2009. Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities Unified Guidance. EPA 530/R-09-007. Environmental Protection Agency Office of Resource Conservation and Recovery.

ATTACHMENTS

Table 1 – Interwell and Intrawell BTVs for the Four Corners CWTP
Table 2 – CWTP Downgradient Sample Data Summary

Appendix A – ProUCL Data Upload Table
Appendix B – ProUCL EDA Output Files

TABLES

Table 1
Interwell and Intrawell BTVs for the Four Corners CWTP
Appendix III Statistical Analysis

Interwell	Dates Corresponding to Data Used to Derive UPL	Constituent	Interwell UPL (BTV Calculation Method)	Units	Resampling Strategy[1]
MW-71 and MW-72	3/5/2016-11/12/2021	Boron	0.73 (NP-UPL)[2]	mg/L	1 of 2
MW-73	2/2/2017-11/13/2021	Boron	2.0 (NP-UPL)[3]	mg/L	1 of 2
MW-71 and MW-72	3/5/2016-11/12/2021	Calcium	486 (P-UPL)[2]	mg/L	1 of 2
MW-73	2/2/2017-11/13/2021	Calcium	536 (P-UPL)[3]	mg/L	1 of 2
MW-71, MW-72, and MW-73	3/5/2016-11/13/2021	Chloride	631 (P-UPL)	mg/L	1 of 2
MW-71, MW-72, and MW-73	3/5/2016-11/13/2021	pH (upper limit)	6.90 (P-UPL)[3]	SU	1 of 2
MW-71, MW-72, and MW-73	3/5/2016-11/13/2021	pH (lower limit)	6.5 (P-LPL)[3]	SU	1 of 2
MW-71, MW-72, and MW-73	3/5/2016-11/13/2021	Sulfate	13,000 (NP-UPL)	mg/L	1 of 3
MW-71, MW-72, and MW-73	3/5/2016-11/13/2021	TDS	20,000 (NP-UPL)	mg/L	1 of 3

Intrawell	Dates Corresponding to Data Used to Derive UPL	Constituent	Intrawell UPL (BTV Calculation Method[1])	Units	Resampling Strategy[1]
MW-62	11/9/2015-11/15/2021	Fluoride	1.8 (NP-UPL)	mg/L	1 of 3
MW-63	11/4/2015-11/15/2021	Fluoride	2.3 (P-UPL)	mg/L	1 of 2
MW-64	11/5/2015-11/15/2021	Fluoride	1.6 (NP-UPL)	mg/L	1 of 3
MW-64	11/5/2015-11/15/2021	pH	7.66 (P-UPL)	SU	1 of 2
MW-64	11/5/2015-11/15/2021	pH	7.23 (P-LPL)	SU	1 of 2
MW-65	11/5/2015-11/15/2021	Fluoride	2.1 (NP-UPL)	mg/L	1 of 3
MW-65	11/5/2015-11/15/2021	pH	7.45 (P-UPL)	SU	1 of 2
MW-65	11/5/2015-11/15/2021	pH	6.98 (P-LPL)	SU	1 of 2

Notes:

BTV = background threshold value
CWTP = Combined Waste Treatment Pond
LPL = Lower Prediction Limit
mg/L = milligrams per liter
NP = Non Parametric
P = Parametric
SU = standard units
UPL = Upper Prediction Limit

[1] Resampling strategies are chosen based on acceptance of the sitewide false positive error rate and the effective power of the test.

[2] Only applicable to MW-64 and MW-65

[3] Only applicable to MW-62 and MW-63

Table 2
Four Corners CWTP Downgradient Sample Data Summary
Appendix III Statistical Analysis

Well	Sample_ID	SampleDate	Constituent Concentration						
			Boron	Calcium	Chloride	Fluoride	pH	Sulfate	TDS
MW-62	FC-CCR-MW62-110915	11/9/2015	*2.1*	*520*	*150*	*1.6*	*6.63*	*3600*	*6700*
MW-62	FC-CCR-MW-62-042716	4/27/2016	*2.0*	*530*	*150*	*1.6*	*6.77*	*3200*	*6100*
MW-62	FC-CCR-MW62-616	6/5/2016	*2.0*	*510*	*140*	*1.5*	*6.50*	*3300*	*5900*
MW-62	FC-CCR-MW62-816	8/20/2016	*2.3*	*530*	*120*	*1.5*	*7.40*	*3300*	*5800*
MW-62	FC-CCR-MW62-916	9/12/2016	*2.5*	*570*	*130*	*1.5*	*6.73*	*3300*	*2400*
MW-62	FC-CCR-MW62-1016	10/19/2016	*2.2*	*480*	*120*	*1.2*	*6.57*	*3300*	*6000*
MW-62	FC-CCR-MW62-117	2/1/2017	*2.1*	*510*	*110*		*6.68*	*3400*	*5600*
MW-62	FC-CCR-MW62-41617	4/16/2017	*1.9*	*500*	*120*	*1.2*	*6.64*	*3300*	*5900*
MW-62	FC-CCR-MW62-5117	5/1/2017	*1.9*	*520*	*110*	*3.3*	*6.64*	*3800*	*5800*
MW-62	FC-CCR-MW62-52917	5/29/2017	*1.9*	*570*	*120*	*1.2*	*6.50*	*3500*	*5500*
MW-62	FC-CCR-MW62-62117	6/21/2017	*1.9*	*520*	*120*	*1.4*	*6.54*	*3600*	*5700*
MW-62	FC-CCR-MW62-72117	07/21/2017	*2.1*	*540*	*99*	*1.5*	*6.69*	*3300*	*5400*
MW-62	FC-CCR-MW62-8917	08/09/2017	*2.2*	*540*	*110*	*1.4*	*6.41*	*3400*	*5400*
MW-62	FC-CCR-MW62-81617	08/16/2017	*2.1*	*590*	*110*	*1.6*	*6.36*	*3200*	*5400*
MW-62	FC-CCR-MW62-9917	09/09/2017	*2.3*	*570*	*120*	*1.5*	*6.41*	*3300*	*5500*
MW-62	FC-CCR-MW62-101317	10/13/2017	*2.2*	*520*	*130*	*1.5*	*6.46*	*3300*	*5600*
MW-62	FC-CCR-MW62-113017	11/30/2017	2.3	570	130	1.4	6.43	3400	5900
MW-62	FC-CCR-MW62-4618	04/06/2018	2.1	520	--	--	6.70	--	--
MW-62	FC-CCR-MW-62-6318	06/03/2018	1.8	490	120	1.6	6.59	3500	5900
MW-62	FC-CCR-MW62-11218	11/02/2018	2.4	550	110	1.5	6.46	3300	5600
MW-62	FC-CCR-MW62-5719-01	05/07/2019	1.8	540	--	1.4	6.65	--	5800
MW-62	FC-CCR-MW62-120319	12/03/2019	2.1	530	--	1.5	6.37	--	5000
MW-62	FC-CCR-MW62-0620	06/19/2020	1.9	490	82	1.8	7	2800	4700
MW-62	FC-CCR-MW62-011421	11/05/2020	2.1	510	130	1.8	6.57	3500	5300
MW-62	FC-CCR-MW62-011421	01/14/2021	--	--	--	1.2	--	--	--
MW-62	FC-CCR-MW62-0421	04/22/2021	1.9	530	130	1.5	6.91	3400	5700
MW-62	FC-CCR-MW62-1121	11/15/2021	2.3	530	180	1.4	6.51	4000	6700
MW-62	FC-CCR-MW62-0222	02/09/2022	1.9	--	--	--	6.71	--	--
MW-62	FC-CCR-MW62-0522	5/20/2022	1.8	500	180	1.4	6.89	3400	6000
MW-62	FC-CCR-MW62-1122	11/13/2022	**2.1**	**610**	200	1.6	6.75	4000	7100
MW-62	FC-CCR-MW62-0123	01/27/2023	**2.1**	**550**	--	--	**6.99**	--	--
		Units:	*mg/L*	*mg/L*	*mg/L*	*mg/L*	*SU*	*mg/L*	*mg/L*
		Updated BTV or Intrawell UPL [1,2]:	***2.0***	***536***	***631***	***1.8***	***6.90/6.50***	***13,000***	***20,000***
		Temporal Trend [3]:	*None*	*None*	*None*	*None*	*None*	*None*	*None*

Table 2
Four Corners CWTP Downgradient Sample Data Summary
Appendix III Statistical Analysis

Well	Sample_ID	SampleDate	Constituent Concentration						
			Boron	Calcium	Chloride	Fluoride	pH	Sulfate	TDS
MW-63	FC-CCR-MW63-110415	11/4/2015	*1.6*	*420*	*77*	*2.4*	*6.86*	*2800*	*4100*
MW-63	FC-CCR-MW-63-042716	4/27/2016	*1.3*	*500*	*100*	*2.0*	*6.88*	*2300*	*4300*
MW-63	FC-CCR-MW63-616	6/5/2016	*1.4*	*500*	*110*	*1.9*	*6.70*	*2500*	*4400*
MW-63	FC-CCR-MW63-816	8/20/2016	*1.9*	*530*	*98*	*1.9*	*6.92*	*2800*	*4700*
MW-63	FC-CCR-MW63-916	9/12/2016	*2.0*	*550*	*110*	*2.1*	*7.03*	*2800*	*4700*
MW-63	FC-CCR-MW63-1016	10/19/2016	*1.7*	*470*	*100*	*1.8*	*6.82*	*2700*	*4500*
MW-63	FC-CCR-MW63-117	1/31/2017	*1.4*	*510*	*95*	*2.0*	*6.67*	*2600*	*4200*
MW-63	FC-CCR-MW63-41717	4/17/2017	*1.4*	*520*	*98*	*1.6*	*6.78*	*2600*	*4400*
MW-63	FC-CCR-MW63-5217	5/2/2017	*1.4*	*510*	*92*	*2.5*	*6.79*	*4300*	*4300*
MW-63	FC-CCR-MW63-52817	5/28/2017	*1.5*	*550*	*98*	*1.6*	*6.80*	*2700*	*4300*
MW-63	FC-CCR-MW63-62117	6/21/2017	*1.6*	*520*	*100*	*1.9*	*6.78*	*2900*	*4400*
MW-63	FC-CCR-MW63-72117	7/21/2017	*1.8*	*530*	*98*	*2.0*	*6.87*	*2900*	*4600*
MW-63	FC-CCR-MW63-8917	8/9/2017	*1.9*	*530*	*97*	*1.9*	*6.56*	*2900*	*4500*
MW-63	FC-CCR-MW63-81617	8/16/2017	*1.8*	*580*	*100*	*2.1*	*6.53*	*2700*	*4500*
MW-63	FC-CCR-MW63-9917	9/9/2017	*2.0*	*540*	*97*	*2.0*	*6.83*	*2700*	*4300*
MW-63	FC-CCR-MW63-101317	10/13/2017	*1.8*	*500*	*90*	*2.0*	*6.69*	*2700*	*4300*
MW-63	FC-CCR-MW63-113017	11/30/2017	1.7	560	91	1.8	6.72	2700	4500
MW-63	FC-CCR-MW63-4618	4/6/2018	1.3	530	--	--	6.75	--	--
MW-63	FC-CCR-MW-63-6318	6/3/2018	1.4	510	90	1.7	6.76	2600	4500
MW-63	FC-CCR-MW63-112818	11/2/2018	1.9	550	88	1.9	6.66	2800	4300
MW-63	FC-CCR-MW63-5719-02	5/7/2019	1.3	540	--	1.6	6.63	--	4400
MW-63	FC-CCR-MW63-120319	12/3/2019	1.6	550	--	1.8	6.58	--	4300
MW-63	FC-CCR-MW63-0620	06/19/2020	1.5	540	77	2.1	6.53	2400	4200
MW-63	FC-CCR-MW63-1120	11/05/2020	1.7	550	85	2.2	6.72	2800	4200
MW-63	FC-CCR-MW63-0421	04/22/2021	0.93	400	88	2	7.07	1900	3200
MW-63	FC-CCR-MW63-0721	07/08/2021	--	--	--	--	7.21	--	--
MW-63	FC-CCR-MW63-1121	11/15/2021	1.3	440	81	0.28	6.89	2100	3600
MW-63	FC-CCR-MW63-0522	5/20/2022	0.83	310	93	2.1	**7.09**	1500	2500
MW-63	FC-CCR-MW63-0822	8/14/2022	--	--	--	--	6.88	--	--
MW-63	FC-CCR-MW63-1122	11/13/2022	1.1	420	80	2.1	**7**	1700	3000
	Units:		*mg/L*	*mg/L*	*mg/L*	*mg/L*	*SU*	*mg/L*	*mg/L*
	Updated BTV or Intrawell UPL [1,2]:		***2.0***	***536***	***631***	***2.3***	***6.90/6.50***	***13,000***	***20,000***
	Temporal Trend [3]:		*Decreasing*	*None*	*Decreasing*	*None*	*None*	*Decreasing*	*Decreasing*

Table 2
Four Corners CWTP Downgradient Sample Data Summary
Appendix III Statistical Analysis

Well	Sample_ID	SampleDate	Constituent Concentration						
			Boron	Calcium	Chloride	Fluoride	pH	Sulfate	TDS
MW-64	FC-CCR-MW64-110515	11/5/2015	*0.6*	*87*	*49*	*1.5*	*7.64*	*320*	*780*
MW-64	FC-CCR-MW-64-042716	4/27/2016	*0.62*	*90*	*53*	*1.4*	*7.50*	*340*	*810*
MW-64	FC-CCR-MW64-616	6/5/2016	*0.58*	*86*	*52*	*1.4*	*7.29*	*350*	*800*
MW-64	FC-CCR-MW64-816	8/20/2016	*0.65*	*89*	*46*	*1.3*	*7.68*	*330*	*790*
MW-64	FC-CCR-MW64-916	9/12/2016	*0.67*	*90*	*52*	*1.5*	*7.54*	*320*	*790*
MW-64	FC-CCR-MW64-1016	10/19/2016	*0.64*	*83*	*53*	*1.5*	*7.52*	*330*	*790*
MW-64	FC-CCR-MW64-117	1/31/2017	*0.61*	*85*	*48*	*1.4*	*7.38*	*340*	*800*
MW-64	FC-CCR-MW64-41717	4/17/2017	*0.58*	*85*	*51*	*1.4*	*7.53*	*870*	*800*
MW-64	FC-CCR-MW64-5217	5/2/2017	*0.55*	*86*	*44*	*1.3*	*7.47*	*340*	*780*
MW-64	FC-CCR-MW64-52817	5/28/2017	*0.55*	*93*	*51*	*1.5*	*7.45*	*380*	*780*
MW-64	FC-CCR-MW64-62117	6/21/2017	*0.55*	*86*	*51*	*1.4*	*7.50*	*390*	*770*
MW-64	FC-CCR-MW64-72117	7/21/2017	*0.59*	*88*	*52*	*1.5*	*7.61*	*370*	*790*
MW-64	FC-CCR-MW64-8917	8/9/2017	*0.61*	*89*	*52*	*1.5*	*7.31*	*380*	*890*
MW-64	FC-CCR-MW64-81617	8/16/2017	*0.58*	*89*	*53*	*1.5*	*7.29*	*360*	*790*
MW-64	FC-CCR-MW64-9917	9/9/2017	*0.67*	*90*	*53*	*1.5*	*7.36*	*350*	*810*
MW-64	FC-CCR-MW64-101317	10/13/2017	*0.62*	*82*	*52*	*1.4*	*7.42*	*360*	*790*
MW-64	FC-CCR-MW64-113017	11/30/2017	0.64	90	52	1.4	7.37	350	780
MW-64	FC-CCR-MW-64-6318	6/3/2018	0.48	85	50	1.4	7.54	390	800
MW-64	FC-CCR-MW64-11218	11/2/2018	0.64	88	50	1.4	7.43	350	760
MW-64	FC-CCR-MW64-5719-03	5/7/2019	0.49	89	--	1.4	7.41	--	790
MW-64	FC-CCR-MW64-120319	12/3/2019	0.56	82	--	1.5	7.29	--	720
MW-64	FC-CCR-MW64-0620	06/19/2020	0.47	77	49	1.3	7.22	300	790
MW-64	FC-CCR-MW64-1120	11/05/2020	0.51	73	53	1.6	7.49	270	720
MW-64	FC-CCR-MW64-0421	04/22/2021	0.5	89	52	1.4	7.60	300	660
MW-64	FC-CCR-MW64-1121	11/15/2021	0.58	72	51	1.4	7.29	270	680
MW-64	FC-CCR-MW64-0522	5/20/2022	0.53	77	52	1.4	7.61	290	850
MW-64	FC-CCR-MW64-1122	11/13/2022	0.52	70	51	1.6	7.56	230	610
		Units:	*mg/L*	*mg/L*	*mg/L*	*mg/L*	*SU*	*mg/L*	*mg/L*
		BTV or Intrawell UPL [1,2]:	***0.73***	***486***	***631***	***1.6***	***7.66/7.23***	***13,000***	***20,000***
		Temporal Trend [3]:	*Decreasing*	*Decreasing*	*None*	*None*	*None*	*None*	*Decreasing*

Table 2
Four Corners CWTP Downgradient Sample Data Summary
Appendix III Statistical Analysis

Well	Sample_ID	SampleDate	Constituent Concentration						
			Boron	Calcium	Chloride	Fluoride	pH	Sulfate	TDS
MW-65	FC-CCR-MW65-110515	11/5/2015	*0.86*	*100*	*52*	*2.0*	*7.50*	*440*	*1000*
MW-65	FC-CCR-MW-65-042716	4/27/2016	*0.76*	*110*	*55*	*1.8*	*7.29*	*460*	*1100*
MW-65	FC-CCR-MW65-616	6/5/2016	*0.75*	*100*	*54*	*2.0*	*7.08*	*460*	*1100*
MW-65	FC-CCR-MW65-816	8/20/2016	*0.79*	*100*	*52*	*1.7*	*8.27*	*450*	*1000*
MW-65	FC-CCR-MW65-916	9/12/2016	*0.83*	*110*	*54*	*2.0*	*7.52*	*480*	*1100*
MW-65	FC-CCR-MW65-1016	10/19/2016	*0.77*	*95*	*54*	*2.0*	*7.36*	*450*	*1000*
MW-65	FC-CCR-MW65-117	2/1/2017	*0.76*	*96*	*51*	*1.8*	*7.35*	*410*	*970*
MW-65	FC-CCR-MW65-41617	4/16/2017	*0.83*	*120*	*60*	*1.8*	*7.21*	*490*	*1300*
MW-65	FC-CCR-MW65-5117	5/1/2017	*0.79*	*110*	*58*	*1.6*	*7.24*	*500*	*1100*
MW-65	FC-CCR-MW65-52917	5/29/2017	*0.98*	*160*	*77*	*1.8*	*7.10*	*790*	*1500*
MW-65	FC-CCR-MW65-62117	6/21/2017	*0.92*	*140*	*68*	*1.9*	*7.06*	*710*	*1400*
MW-65	FC-CCR-MW65-72117	7/21/2017	*0.76*	*110*	*53*	*2.0*	*7.31*	*470*	*1000*
MW-65	FC-CCR-MW65-8917	8/9/2017	*0.76*	*110*	*53*	*2.0*	*7.15*	*500*	*1000*
MW-65	FC-CCR-MW65-81617	8/16/2017	*0.75*	*110*	*53*	*2.0*	*6.96*	*500*	*1000*
MW-65	FC-CCR-MW65-9917	9/9/2017	*0.80*	*110*	*53*	*2.0*	*7.04*	*450*	*1000*
MW-65	FC-CCR-MW65-101317	10/13/2017	*0.75*	*92*	*52*	*1.9*	*7.13*	*400*	*960*
MW-65	FC-CCR-MW65-113017	11/30/2017	0.79	100	53	2.0	7.21	410	990
MW-65	FC-CCR-MW-65-6318	6/3/2018	0.62	98	52	1.9	7.22	480	1000
MW-65	FC-CCR-MW65-11218	11/2/2018	0.77	100	51	1.9	7.18	420	940
MW-65	FC-CCR-MW65-5719-05	5/7/2019	0.60	100	--	1.7	7.13	--	970
MW-65	FC-CCR-MW65-120319	12/3/2019	0.65	89	--	1.9	7.10	--	850
MW-65	FC-CCR-MW65-0620	06/19/2020	0.57	88	48	1.7	7.18	380	940
MW-65	FC-CCR-MW65-1120	11/05/2020	0.61	82	52	2.1	7.36	350	780
MW-65	FC-CCR-MW65-0421	04/22/2021	0.78	170	71	1.5	7.19	740	540
MW-65	FC-CCR-MW65-0721	07/08/2021	0.87	--	--	--	7.40	--	--
MW-65	FC-CCR-MW65-1121	11/15/2021	0.73	92	55	1.7	7.14	390	910
MW-65	FC-CCR-MW65-0222	02/09/2022	0.71	--	--	--	7.17	--	--
MW-65	FC-CCR-MW65-0522	05/20/2022	**0.85**	200	140	1.5	7.27	980	1900
MW-65	FC-CCR-MW65-0822	08/14/2022	0.61	--	--	--	7.29	--	--
MW-65	FC-CCR-MW65-1122	11/13/2022	0.64	93	59	1.8	7.35	300	840
	Units:		*mg/L*	*mg/L*	*mg/L*	*mg/L*	*SU*	*mg/L*	*mg/L*
	BTV or Intrawell UPL [1,2]:		***0.73***	***486***	***631***	***2.1***	***7.44/7.00***	***13,000***	***20,000***
	Temporal Trend [3]:		*Decreasing*	*None*	*None*	*None*	*None*	*None*	*Decreasing*

Table 2
Four Corners CWTP Downgradient Sample Data Summary
Appendix III Statistical Analysis

Well	Sample_ID	SampleDate	Constituent Concentration						
			Boron	Calcium	Chloride	Fluoride	pH	Sulfate	TDS

Notes:

BTV = background threshold value

mg/L = milligrams per liter

TDS = total dissolved solids

UPL = upper prediction limit

SU = standard units

0.75	Value from baseline monitoring period (November 2015 thru October 2017)
	Reported value in current sampling round exceeds the BTV or UPL
	Statistically significant increasing trend present
	Statistically significant decreasing trend present
None	Insufficient evidence to identify a trend
	Updated BTV (See Table 1)

[1] See Table 1 for relevant BTV and Intrawell UPL information

[2] For pH, values presented refer to the Upper Prediction Limit/Lower Prediction Limit, respectively

[3] Temporal trends evaluated with Mann-Kendall trend tests ($p<0.05$); tied values (sequential sample concentrations

APPENDIX A

PROUCL DATA UPLOAD TABLE

Appendix A - PROUCL DATA UPLOAD TABLE

StationName	QC_SampleID	NumDate	Boron	D_Boron	Calcium	D_Calcium	Chloride	D_Chloride	Fluoride	D_Fluoride	Sulfate	D_Sulfate	DissolvedSolids	D_DissolvedSolids	Field_pH	D_Field_pH
MW-62	FC-CCR-MW62-110915	11/9/2015	2.1	1	520	1	150	1	1.6	1	3600	1	6700	1	6.63	1
MW-62	FC-CCR-MW-62-042716	4/27/2016	2	1	530	1	150	1	1.6	1	3200	1	6100	1	6.77	1
MW-62	FC-CCR-MW62-616	6/5/2016	2	1	510	1	140	1	1.5	1	3300	1	5900	1	6.50	1
MW-62	FC-CCR-MW62-816	8/20/2016	2.3	1	530	1	120	1	1.5	1	3300	1	5800	1	7.40	1
MW-62	FC-CCR-MW62-916	9/12/2016	2.5	1	570	1	130	1	1.5	1	3300	1	2400	1	6.73	1
MW-62	FC-CCR-MW62-1016	10/19/2016	2.2	1	480	1	120	1	1.2	1	3300	1	6000	1	6.57	1
MW-62	FC-CCR-MW62-117	2/1/2017	2.1	1	510	1	110	1	1.4	1	3400	1	5600	1	6.68	1
MW-62	FC-CCR-MW62-41617	4/16/2017	1.9	1	500	1	120	1	1.2	1	3300	1	5900	1	6.64	1
MW-62	FC-CCR-MW62-5117	5/1/2017	1.9	1	520	1	110	1	3.3	1	3800	1	5800	1	6.64	1
MW-62	FC-CCR-MW62-52917	5/29/2017	1.9	1	570	1	120	1	1.2	1	3500	1	5500	1	6.50	1
MW-62	FC-CCR-MW62-62117	6/21/2017	1.9	1	520	1	120	1	1.4	1	3600	1	5700	1	6.54	1
MW-62	FC-CCR-MW62-72117	7/21/2017	2.1	1	540	1	99	1	1.5	1	3300	1	5400	1	6.69	1
MW-62	FC-CCR-MW62-8917	8/9/2017	2.2	1	540	1	110	1	1.4	1	3400	1	5400	1	6.41	1
MW-62	FC-CCR-MW62-81617	8/16/2017	2.1	1	590	1	110	1	1.6	1	3200	1	5400	1	6.36	1
MW-62	FC-CCR-MW62-9917	9/9/2017	2.3	1	570	1	120	1	1.5	1	3300	1	5500	1	6.41	1
MW-62	FC-CCR-MW62-101317	10/13/2017	2.2	1	520	1	130	1	1.5	1	3300	1	5600	1	6.46	1
MW-62	FC-CCR-MW62-113017	11/30/2017	2.3	1	570	1	130	1	1.4	1	3400	1	5900	1	6.43	1
MW-62	FC-CCR-MW62-4618	4/6/2018	2.1	1	520	1	--	--	--	--	--	--	--	--	6.70	1
MW-62	FC-CCR-MW-62-6318	6/3/2018	1.8	1	490	1	120	1	1.6	1	3500	1	5900	1	6.59	1
MW-62	FC-CCR-MW62-11218	11/2/2018	2.4	1	550	1	110	1	1.5	1	3300	1	5600	1	6.46	1
MW-62	FC-CCR-MW62-5719-01	5/7/2019	1.8	1	540	1	--	--	1.4	1	--	--	5800	1	6.65	1
MW-62	FC-CCR-MW62-120319	12/3/2019	2.1	1	530	1	NA	0	1.5	1	NA	0	5000	1	6.37	1
MW-62	FC-CCR-MW62-0620	6/19/2020	1.9	1	490	1	82	1	1.8	1	2800	1	4700	1	6.90	1
MW-62	FC-CCR-MW62-1120	11/5/2020	2.1	1	510	1	130	1	1.8	1	3500	1	5300	1	6.57	1
MW-62	FC-CCR-MW62-011421	1/14/2021	--	--	--	--	--	--	1.2	1	--	--	--	--	--	--
MW-62	FC-CCR-MW62-0421	4/22/2021	1.9	1	530	1	130	1	1.5	1	3400	1	5700	1	6.91	1
MW-62	FC-CCR-MW62-1121	11/15/2021	2.3	1	530	1	180	1	1.4	1	4000	1	6700	1	6.51	1
MW-62	FC-CCR-MW62-0222	2/9/2022	1.9	1	--	--	--	--	--	--	--	--	--	--	6.71	1
MW-62	FC-CCR-MW62-0522	5/20/2022	1.8	1	500	1	180	1	1.4	1	3400	1	6000	1	6.89	1
MW-62	FC-CCR-MW62-1122	11/13/2022	2.1	1	610	1	200	1	1.6	1	4000	1	7100	1	6.75	1
MW-62	FC-CCR-MW62-0123	01/27/2023	2.1	1	550	1	--	--	--	--	--	--	--	--	6.99	1
MW-63	FC-CCR-MW63-110415	11/4/2015	1.6	1	420	1	77	1	2.4	1	2800	1	4100	1	6.86	1
MW-63	FC-CCR-MW-63-042716	4/27/2016	1.3	1	500	1	100	1	2	1	2300	1	4300	1	6.88	1
MW-63	FC-CCR-MW63-616	6/5/2016	1.4	1	500	1	110	1	1.9	1	2500	1	4400	1	6.70	1
MW-63	FC-CCR-MW63-816	8/20/2016	1.9	1	530	1	98	1	1.9	1	2800	1	4700	1	6.92	1
MW-63	FC-CCR-MW63-916	9/12/2016	2	1	550	1	110	1	2.1	1	2800	1	4700	1	7.03	1
MW-63	FC-CCR-MW63-1016	10/19/2016	1.7	1	470	1	100	1	1.8	1	2700	1	4500	1	6.82	1
MW-63	FC-CCR-MW63-117	1/31/2017	1.4	1	510	1	95	1	2	1	2600	1	4200	1	6.67	1
MW-63	FC-CCR-MW63-41717	4/17/2017	1.4	1	520	1	98	1	1.6	1	2600	1	4400	1	6.78	1
MW-63	FC-CCR-MW63-5217	5/2/2017	1.4	1	510	1	92	1	2.5	1	4300	1	4300	1	6.79	1
MW-63	FC-CCR-MW63-52817	5/28/2017	1.5	1	550	1	98	1	1.6	1	2700	1	4300	1	6.80	1
MW-63	FC-CCR-MW63-62117	6/21/2017	1.6	1	520	1	100	1	1.9	1	2900	1	4400	1	6.78	1
MW-63	FC-CCR-MW63-72117	7/21/2017	1.8	1	530	1	98	1	2	1	2900	1	4600	1	6.87	1

Appendix A - PROUCL DATA UPLOAD TABLE

StationName	QC_SampleID	NumDate	Boron	D_Boron	Calcium	D_Calcium	Chloride	D_Chloride	Fluoride	D_Fluoride	Sulfate	D_Sulfate	DissolvedSolids	D_DissolvedSolids	Field_pH	D_Field_pH
MW-63	FC-CCR-MW63-8917	8/9/2017	1.9	1	530	1	97	1	1.9	1	2900	1	4500	1	6.56	1
MW-63	FC-CCR-MW63-81617	8/16/2017	1.8	1	580	1	100	1	2.1	1	2700	1	4500	1	6.53	1
MW-63	FC-CCR-MW63-9917	9/9/2017	2	1	540	1	97	1	2	1	2700	1	4300	1	6.83	1
MW-63	FC-CCR-MW63-101317	10/13/2017	1.8	1	500	1	90	1	2	1	2700	1	4300	1	6.69	1
MW-63	FC-CCR-MW63-113017	11/30/2017	1.7	1	560	1	91	1	1.8	1	2700	1	4500	1	6.72	1
MW-63	FC-CCR-MW63-4618	4/6/2018	1.3	1	530	1	--	--	--	--	--	--	--	--	6.75	1
MW-63	FC-CCR-MW-63-6318	6/3/2018	1.4	1	510	1	90	1	1.7	1	2600	1	4500	1	6.76	1
MW-63	FC-CCR-MW63-112818	11/2/2018	1.9	1	550	1	88	1	1.9	1	2800	1	4300	1	6.66	1
MW-63	FC-CCR-MW63-5719-02	5/7/2019	1.3	1	540	1	--	--	1.6	1	--	--	4400	1	6.63	1
MW-63	FC-CCR-MW63-120319	12/3/2019	1.5	1	550	1	NA	0	1.8	1	NA	0	4300	1	6.58	1
MW-63	FC-CCR-MW63-0620	6/19/2020	1.5	1	540	1	77	1	2.1	1	2400	1	4200	1	6.53	1
MW-63	FC-CCR-MW63-1120	11/5/2020	1.7	1	550	1	85	1	2.2	1	2800	1	4200	1	6.72	1
MW-63	FC-CCR-MW63-0421	4/22/2021	0.93	1	400	1	88	1	2	1	1900	1	3200	1	7.07	1
MW-63	FC-CCR-MW63-0721	7/8/2021	--	--	--	--	--	--	--	--	--	--	--	--	7.21	1
MW-63	FC-CCR-MW63-1121	11/15/2021	1.3	1	440	1	81	1	0.28	1	2100	1	3600	1	6.89	1
MW-63	FC-CCR-MW63-0522	5/20/2022	0.83	1	310	1	93	1	2.1	1	1500	1	2500	1	7.09	1
MW-63	FC-CCR-MW63-0822	8/14/2022	--	--	--	--	--	--	--	--	--	--	--	--	6.88	1
MW-63	FC-CCR-MW63-1122	11/13/2022	1.1	1	420	1	80	1	2.1	1	1700	1	3000	1	7	1
MW-64	FC-CCR-MW64-110515	11/5/2015	0.64	1	87	1	49	1	1.5	1	320	1	780	1	7.64	1
MW-64	FC-CCR-MW-64-042716	4/27/2016	0.62	1	90	1	53	1	1.4	1	340	1	810	1	7.50	1
MW-64	FC-CCR-MW64-616	6/5/2016	0.58	1	86	1	52	1	1.4	1	350	1	800	1	7.29	1
MW-64	FC-CCR-MW64-816	8/20/2016	0.65	1	89	1	46	1	1.3	1	330	1	790	1	7.68	1
MW-64	FC-CCR-MW64-916	9/12/2016	0.67	1	90	1	52	1	1.5	1	320	1	790	1	7.54	1
MW-64	FC-CCR-MW64-1016	10/19/2016	0.64	1	83	1	53	1	1.5	1	330	1	790	1	7.52	1
MW-64	FC-CCR-MW64-117	1/31/2017	0.61	1	85	1	48	1	1.4	1	340	1	800	1	7.38	1
MW-64	FC-CCR-MW64-41717	4/17/2017	0.58	1	85	1	51	1	1.4	1	870	1	800	1	7.53	1
MW-64	FC-CCR-MW64-5217	5/2/2017	0.55	1	86	1	44	1	1.3	1	340	1	780	1	7.47	1
MW-64	FC-CCR-MW64-52817	5/28/2017	0.55	1	93	1	51	1	1.5	1	380	1	780	1	7.45	1
MW-64	FC-CCR-MW64-62117	6/21/2017	0.55	1	86	1	51	1	1.4	1	390	1	770	1	7.50	1
MW-64	FC-CCR-MW64-72117	7/21/2017	0.59	1	88	1	52	1	1.5	1	370	1	790	1	7.61	1
MW-64	FC-CCR-MW64-8917	8/9/2017	0.61	1	89	1	52	1	1.5	1	380	1	890	1	7.31	1
MW-64	FC-CCR-MW64-81617	8/16/2017	0.58	1	89	1	53	1	1.5	1	360	1	790	1	7.29	1
MW-64	FC-CCR-MW64-9917	9/9/2017	0.67	1	90	1	53	1	1.5	1	350	1	810	1	7.36	1
MW-64	FC-CCR-MW64-101317	10/13/2017	0.62	1	82	1	52	1	1.4	1	360	1	790	1	7.42	1
MW-64	FC-CCR-MW64-113017	11/30/2017	0.64	1	90	1	52	1	1.4	1	350	1	780	1	7.37	1
MW-64	FC-CCR-MW-64-6318	6/3/2018	0.48	1	85	1	50	1	1.4	1	390	1	800	1	7.54	1
MW-64	FC-CCR-MW64-11218	11/2/2018	0.64	1	88	1	50	1	1.4	1	350	1	760	1	7.43	1
MW-64	FC-CCR-MW64-5719-03	5/7/2019	0.49	1	89	1	--	--	1.4	1	--	--	790	1	7.41	1
MW-64	FC-CCR-MW64-120319	12/3/2019	0.56	1	82	1	NA	0	1.5	1	NA	0	720	1	7.29	1
MW-64	FC-CCR-MW64-0620	6/19/2020	0.47	1	77	1	49	1	1.3	1	300	1	790	1	7.22	1
MW-64	FC-CCR-MW64-1120	11/5/2020	0.51	1	73	1	53	1	1.6	1	270	1	720	1	7.49	1
MW-64	FC-CCR-MW64-0421	4/22/2021	0.5	1	89	1	52	1	1.4	1	300	1	660	1	7.60	1
MW-64	FC-CCR-MW64-1121	11/15/2021	0.58	1	72	1	51	1	1.4	1	270	1	680	1	7.29	1

Appendix A - PROUCL DATA UPLOAD TABLE

StationName	QC_SampleID	NumDate	Boron	D_Boron	Calcium	D_Calcium	Chloride	D_Chloride	Fluoride	D_Fluoride	Sulfate	D_Sulfate	DissolvedSolids	D_DissolvedSolids	Field_pH	D_Field_pH
MW-64	FC-CCR-MW64-0522	5/20/2022	0.53	1	77	1	52	1	1.4	1	290	1	850	1	7.61	1
MW-64	FC-CCR-MW64-1122	11/13/2022	0.52	1	70	1	51	1	1.6	1	230	1	610	1	7.56	1
MW-65	FC-CCR-MW65-110515	11/5/2015	0.86	1	100	1	52	1	2	1	440	1	1000	1	7.50	1
MW-65	FC-CCR-MW-65-042716	4/27/2016	0.76	1	110	1	55	1	1.8	1	460	1	1100	1	7.29	1
MW-65	FC-CCR-MW65-616	6/5/2016	0.75	1	100	1	54	1	2	1	460	1	1100	1	7.08	1
MW-65	FC-CCR-MW65-816	8/20/2016	0.79	1	100	1	52	1	1.7	1	450	1	1000	1	8.27	1
MW-65	FC-CCR-MW65-916	9/12/2016	0.83	1	110	1	54	1	2	1	480	1	1100	1	7.52	1
MW-65	FC-CCR-MW65-1016	10/19/2016	0.77	1	95	1	54	1	2	1	450	1	1000	1	7.36	1
MW-65	FC-CCR-MW65-117	2/1/2017	0.76	1	96	1	51	1	1.8	1	410	1	970	1	7.35	1
MW-65	FC-CCR-MW65-41617	4/16/2017	0.83	1	120	1	60	1	1.8	1	490	1	1300	1	7.21	1
MW-65	FC-CCR-MW65-5117	5/1/2017	0.79	1	110	1	58	1	1.6	1	500	1	1100	1	7.24	1
MW-65	FC-CCR-MW65-52917	5/29/2017	0.98	1	160	1	77	1	1.8	1	790	1	1500	1	7.10	1
MW-65	FC-CCR-MW65-62117	6/21/2017	0.92	1	140	1	68	1	1.9	1	710	1	1400	1	7.06	1
MW-65	FC-CCR-MW65-72117	7/21/2017	0.76	1	110	1	53	1	2	1	470	1	1000	1	7.31	1
MW-65	FC-CCR-MW65-8917	8/9/2017	0.76	1	110	1	53	1	2	1	500	1	1000	1	7.15	1
MW-65	FC-CCR-MW65-81617	8/16/2017	0.75	1	110	1	53	1	2	1	500	1	1000	1	6.96	1
MW-65	FC-CCR-MW65-9917	9/9/2017	0.8	1	110	1	53	1	2	1	450	1	1000	1	7.04	1
MW-65	FC-CCR-MW65-101317	10/13/2017	0.75	1	92	1	52	1	1.9	1	400	1	960	1	7.13	1
MW-65	FC-CCR-MW65-113017	11/30/2017	0.79	1	100	1	53	1	2	1	410	1	990	1	7.21	1
MW-65	FC-CCR-MW-65-6318	6/3/2018	0.62	1	98	1	52	1	1.9	1	480	1	1000	1	7.22	1
MW-65	FC-CCR-MW65-11218	11/2/2018	0.77	1	100	1	51	1	1.9	1	420	1	940	1	7.18	1
MW-65	FC-CCR-MW65-5719-05	5/7/2019	0.6	1	100	1	--	--	1.7	1	--	--	970	1	7.13	1
MW-65	FC-CCR-MW65-120319	12/3/2019	0.65	1	89	1	NA	0	1.9	1	NA	0	850	1	7.10	1
MW-65	FC-CCR-MW65-0620	6/19/2020	0.57	1	88	1	48	1	1.7	1	380	1	940	1	7.18	1
MW-65	FC-CCR-MW65-1120	11/5/2020	0.61	1	82	1	52	1	2.1	1	350	1	780	1	7.36	1
MW-65	FC-CCR-MW65-0421	4/22/2021	0.78	1	170	1	71	1	1.5	1	740	1	540	1	7.19	1
MW-65	FC-CCR-MW65-0721	7/8/2021	0.87	1	--	--	--	--	--	--	--	--	--	--	7.40	1
MW-65	FC-CCR-MW65-1121	11/15/2021	0.73	1	92	1	55	1	1.7	1	390	1	910	1	7.14	1
MW-65	FC-CCR-MW65-0222	2/9/2022	0.71	1	--	--	--	--	--	--	--	--	--	--	7.17	1
MW-65	FC-CCR-MW65-0522	5/20/2022	0.85	1	200	1	140	1	1.5	1	980	1	1900	1	7.27	1
MW-65	FC-CCR-MW65-0822	8/14/2022	0.61	1	--	--	--	--	--	--	--	--	--	--	7.29	1
MW-65	FC-CCR-MW65-1122	11/13/2022	0.64	1	93	1	59	1	1.8	1	300	1	840	1	7.35	1
MW-71	FC-CCR-MW-71-030516	3/5/2016	0.44	1	450	1	660	1	0.05	0	8500	1	13000	1	7.73	1
MW-71	FC-CCR-MW-71-042616	4/26/2016	0.69	1	470	1	670	1	2	0	13000	1	21000	1	6.58	1
MW-71	FC-CCR-MW71-616	6/6/2016	0.7	1	460	1	750	1	0.4	0	13000	1	20000	1	6.47	1
MW-71	FC-CCR-MW71-816	8/21/2016	0.56	1	450	1	590	1	0.8	0	8400	1	14000	1	7.04	1
MW-71	FC-CCR-MW71-916	9/12/2016	0.58	1	460	1	570	1	0.4	0	9300	1	16000	1	6.86	1
MW-71	FC-CCR-MW71-1016	10/20/2016	0.55	1	410	1	580	1	0.4	0	9100	1	15000	1	6.90	1
MW-71	FC-CCR-MW71-117	2/2/2017	0.62	1	440	1	610	1	0.4	0	14000	1	17000	1	6.64	1
MW-71	FC-CCR-MW71-41717	4/17/2017	0.52	1	400	1	550	1	2	0	9400	1	15000	1	6.81	1
MW-71	FC-CCR-MW71-5217	5/2/2017	0.58	1	450	1	560	1	2	0	11000	1	15000	1	6.86	1
MW-71	FC-CCR-MW71-52917	5/29/2017	0.58	1	460	1	580	1	2	0	9900	1	14000	1	6.76	1
MW-71	FC-CCR-MW71-62217	6/22/2017	0.6	1	460	1	620	1	2	0	4600	1	17000	1	6.79	1

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StationName	QC_SampleID	NumDate	Boron	D_Boron	Calcium	D_Calcium	Chloride	D_Chloride	Fluoride	D_Fluoride	Sulfate	D_Sulfate	DissolvedSolids	D_DissolvedSolids	Field_pH	D_Field_pH
MW-71	FC-CCR-MW71-72117	7/21/2017	0.55	1	450	1	590	1	2	0	10000	1	15000	1	7.00	1
MW-71	FC-CCR-MW71-81017	8/10/2017	0.55	1	450	1	560	1	2	0	10000	1	15000	1	6.59	1
MW-71	FC-CCR-MW71-81717	8/17/2017	0.56	1	480	1	570	1	2	0	9500	1	15000	1	6.62	1
MW-71	FC-CCR-MW71-91117	9/11/2017	0.55	1	470	1	570	1	2	0	9900	1	15000	1	6.56	1
MW-71	FC-CCR-MW71-101317	10/13/2017	0.54	1	420	1	570	1	2	0	10000	1	15000	1	6.79	1
MW-71	FC-CCR-MW71-113017	11/30/2017	0.56	1	490	1	540	1	2	0	10000	1	15000	1	6.71	1
MW-71	FC-CCR-MW-71-6218	6/2/2018	0.55	1	420	1	520	1	0.8	0	10000	1	15000	1	6.85	1
MW-71	FC-CCR-MW71-11318	11/3/2018	0.56	1	470	1	520	1	0.8	0	11000	1	16000	1	6.81	1
MW-71	FC-CCR-MW71-031819	3/18/2019	--	--	--	--	--	--	0.8	0	--	--	--	--	6.68	1
MW-71	FC-CCR-MW71-5719	5/6/2019	0.5	1	400	1	--	--	0.8	0	--	--	16000	1	6.66	1
MW-71	FC-CCR-MW71-120219	12/2/2019	0.50	1	440	1	500	1	0.8	0	10000	1	16000	1	6.66	1
MW-71	FC-CCR-MW71-0620	6/20/2020	0.59	1	450	1	480	1	0.8	0	9900	1	15000	1	6.71	1
MW-71	FC-CCR-MW71-1120	11/5/2020	0.59	1	460	1	490	1	0.4	0	10000	1	16000	1	6.78	1
MW-71	FC-CCR-MW71-0421	4/22/2021	0.73	1	510	1	560	1	3.8	1	14000	1	19000	1	6.83	1
MW-71	FC-CCR-MW71-1121	11/12/2021	0.54	1	440	1	560	1	0.14	1	12000	1	8000	1	6.74	1
MW-71	FC-CCR-MW71-0522	5/21/2022	0.56	1	450	1	560	1	0.8	0	9900	1	16000	1	6.74	1
MW-71	FC-CCR-MW71-0822	8/14/2022	0.44	1	--	--	--	--	--	--	--	--	--	--	6.80	1
MW-71	FC-CCR-MW71-1122	11/13/2022	0.52	1	490	1	530	1	0.8	0	12000	1	19000	1	6.79	1
MW-71	FC-CCR-MW71-0123	01/27/2023	0.47	1	460	1	--	--	--	--	--	--	--	--	6.97	1
MW-72	FC-CCR-MW72-030716	3/7/2016	0.16	1	480	1	490	1	0.05	0	12000	1	17000	1	7.71	1
MW-72	FC-CCR-MW-72-042616	4/26/2016	0.22	1	470	1	430	1	2	0	11000	1	19000	1	6.87	1
MW-72	FC-CCR-MW72-616	6/6/2016	0.25	1	570	1	530	1	0.4	0	4500	1	9500	1	6.56	1
MW-72	FC-CCR-MW72-816	8/21/2016	0.23	1	450	1	440	1	0.4	0	10000	1	17000	1	6.72	1
MW-72	FC-CCR-MW72-916	9/13/2016	0.24	1	470	1	450	1	0.4	0	10000	1	17000	1	6.17	1
MW-72	FC-CCR-MW72-1016	10/20/2016	0.23	1	400	1	480	1	0.4	0	11000	1	17000	1	6.84	1
MW-72	FC-CCR-MW72-117	2/2/2017	0.23	1	420	1	430	1	0.4	0	11000	1	16000	1	6.63	1
MW-72	FC-CCR-MW72-41717	4/17/2017	0.2	1	440	1	450	1	2	0	610	1	17000	1	6.73	1
MW-72	FC-CCR-MW72-5217	5/2/2017	0.25	1	430	1	450	1	2	0	11000	1	16000	1	6.83	1
MW-72	FC-CCR-MW72-52917	5/29/2017	0.25	1	470	1	460	1	2	0	11000	1	15000	1	6.68	1
MW-72	FC-CCR-MW72-62217	6/22/2017	0.23	1	450	1	450	1	2	0	11000	1	17000	1	6.65	1
MW-72	FC-CCR-MW72-72117	7/21/2017	0.23	1	450	1	460	1	2	0	11000	1	17000	1	6.93	1
MW-72	FC-CCR-MW72-81017	8/10/2017	0.21	1	450	1	460	1	2	0	11000	1	17000	1	6.47	1
MW-72	FC-CCR-MW72-81717	8/17/2017	0.26	1	490	1	450	1	2	0	11000	1	17000	1	6.18	1
MW-72	FC-CCR-MW72-91017	9/10/2017	0.21	1	470	1	460	1	2	0	11000	1	17000	1	6.61	1
MW-72	FC-CCR-MW72-101317	10/13/2017	0.22	1	430	1	450	1	2	0	11000	1	16000	1	6.65	1
MW-72	FC-CCR-MW72-113017	11/30/2017	0.22	1	500	1	450	1	2	0	10000	1	16000	1	6.63	1
MW-72	FC-CCR-MW-72-6218	6/2/2018	0.21	1	410	1	450	1	0.8	0	11000	1	16000	1	6.75	1
MW-72	FC-CCR-MW72-11318	11/3/2018	0.22	1	470	1	450	1	0.8	0	11000	1	16000	1	6.75	1
MW-72	FC-CCR-MW72-031719	3/17/2019	--	--	--	--	--	--	0.8	0	--	--	--	--	6.68	1
MW-72	FC-CCR-MW72-5719	5/6/2019	0.22	1	400	1	--	--	0.8	0	--	--	16000	1	6.85	1
MW-72	FC-CCR-MW72-120219	12/2/2019	0.19	1	430	1	430	1	0.8	0	11000	1	16000	1	6.62	1
MW-72	FC-CCR-MW72-0620	6/19/2020	0.23	1	440	1	400	1	0.8	0	11000	1	16000	1	6.65	1
MW-72	FC-CCR-MW72-1120	11/5/2020	0.24	1	470	1	430	1	0.4	0	10000	1	16000	1	6.70	1

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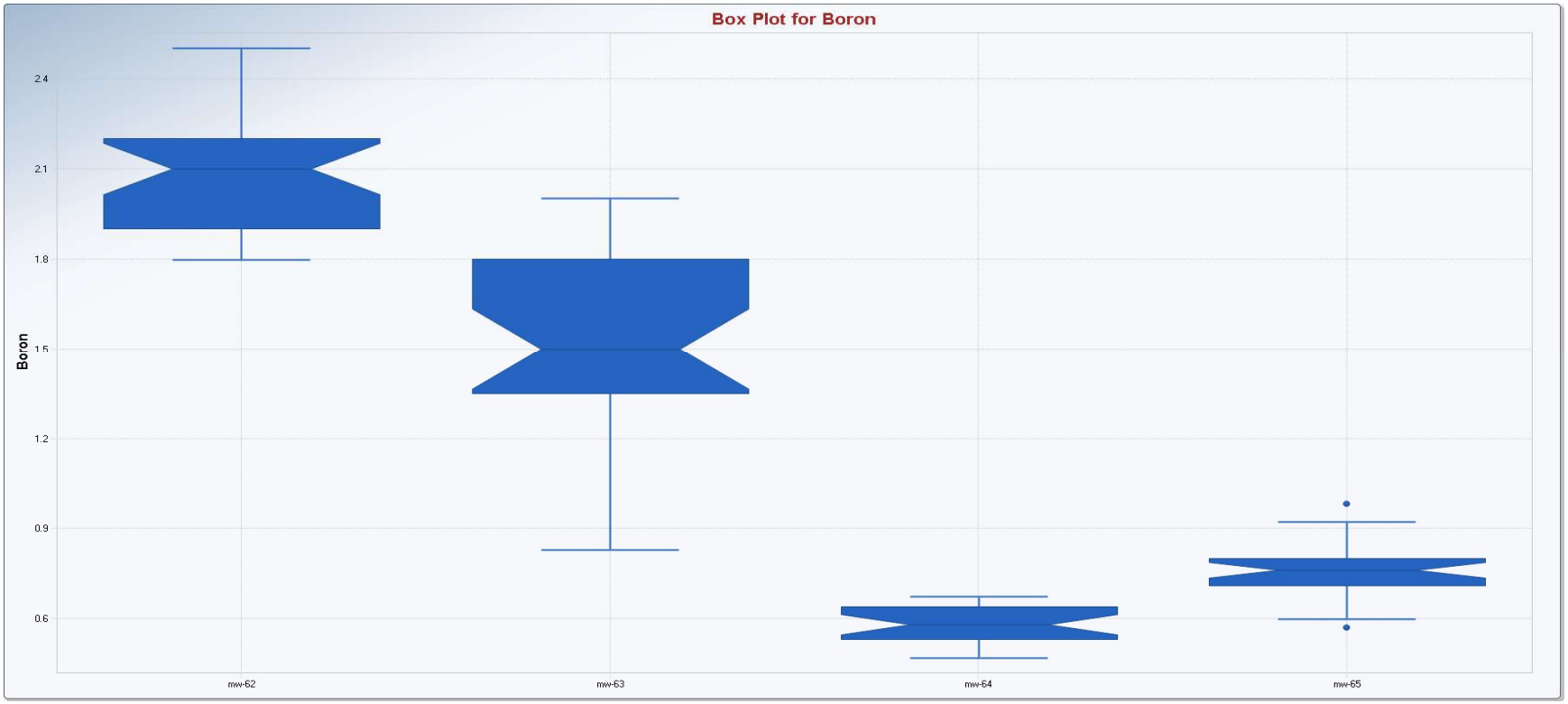
StationName	QC_SampleID	NumDate	Boron	D_Boron	Calcium	D_Calcium	Chloride	D_Chloride	Fluoride	D_Fluoride	Sulfate	D_Sulfate	DissolvedSolids	D_DissolvedSolids	Field_pH	D_Field_pH
MW-72	FC-CCR-MW72-0421	4/22/2021	0.25	1	480	1	400	1	0.8	0	10000	1	16000	1	6.89	1
MW-72	FC-CCR-MW72-1121	11/12/2021	0.22	1	440	1	450	1	0.8	0	11000	1	14000	1	6.64	1
MW-72	FC-CCR-MW72-0522	5/22/2022	0.22	1	440	1	410	1	0.8	0	9600	1	13000	1	6.63	1
MW-72	FC-CCR-MW72-0822	8/13/2022	0.14	1	--	--	--	--	--	--	--	--	--	--	6.81	1
MW-72	FC-CCR-MW72-1122	11/13/2022	0.15	1	470	1	400	1	0.8	0	10000	1	15000	1	6.81	1
MW-72	FC-CCR-MW72-0123	01/27/2023	0.16	1	470	1	--	--	--	--	--	--	--	--	6.77	1
MW-73	FC-CCR-MW73-117	2/2/2017	1.6	1	480	1	380	1	0.4	0	5400	1	8800	1	6.65	1
MW-73	FC-CCR-MW73-41817	4/18/2017	1.6	1	450	1	340	1	0.8	0	5700	1	9200	1	6.70	1
MW-73	FC-CCR-MW73-5217	5/2/2017	1.6	1	470	1	570	1	0.8	0	6900	1	11000	1	6.70	1
MW-73	FC-CCR-MW73-52917	5/29/2017	1.8	1	510	1	290	1	0.8	0	4300	1	6100	1	6.70	1
MW-73	FC-CCR-MW73-62217	6/22/2017	1.6	1	490	1	450	1	0.8	0	6700	1	11000	1	6.74	1
MW-73	FC-CCR-MW73-72217	7/22/2017	1.6	1	490	1	520	1	0.8	0	8000	1	12000	1	6.83	1
MW-73	FC-CCR-MW73-81017	8/10/2017	1.7	1	500	1	540	1	0.8	0	7700	1	12000	1	6.45	1
MW-73	FC-CCR-MW73-81717	8/17/2017	1.7	1	540	1	550	1	0.8	0	7600	1	11000	1	6.50	1
MW-73	FC-CCR-MW73-91017	9/10/2017	1.9	1	520	1	470	1	0.8	0	6000	1	9900	1	6.62	1
MW-73	FC-CCR-MW73-101217	10/12/2017	2	1	510	1	310	1	0.8	0	3900	1	6600	1	6.64	1
MW-73	FC-CCR-MW73-113017	11/30/2017	1.8	1	550	1	420	1	0.8	0	5600	1	8900	1	6.61	1
MW-73	FC-CCR-MW-73-6218	6/2/2018	1.6	1	460	1	550	1	0.8	0	7100	1	12000	1	6.67	1
MW-73	FC-CCR-MW73-11318	11/3/2018	1.7	1	480	1	660	1	0.8	0	7500	1	12000	1	6.64	1
MW-73	FC-CCR-MW73-031819	3/18/2019	--	--	--	--	--	--	0.8	0	--	--	--	--	6.95	1
MW-73	FC-CCR-MW73-5619	5/6/2019	1.6	1	420	1	--	--	0.8	0	--	--	13000	1	6.51	1
MW-73	FC-CCR-MW73-120219	12/2/2019	1.6	1	460	1	520	1	0.8	0	7100	1	11000	1	6.49	1
MW-73	FC-CCR-MW73-0620	6/20/2020	1.7	1	450	1	520	1	0.8	0	7200	1	12000	1	6.53	1
MW-73	FC-CCR-MW73-1120	11/5/2020	1.6	1	480	1	530	1	0.063	1	7100	1	12000	1	6.65	1
MW-73	FC-CCR-MW73-0421	4/22/2021	1.6	1	530	1	380	1	0.4	0	5700	1	9700	1	6.76	1
MW-73	FC-CCR-MW73-1121	11/13/2021	1.6	1	460	1	560	1	0.12	1	7400	1	9600	1	6.48	1
MW-73	FC-CCR-MW73-0522	5/22/2022	1.6	1	470	1	570	1	0.8	0	7100	1	11000	1	6.55	1
MW-73	FC-CCR-MW73-0822	8/13/2022	1.6	1	--	--	--	--	--	--	--	--	--	--	6.66	1
MW-73	FC-CCR-MW73-1122	11/14/2022	1.6	1	490	1	610	1	0.8	0	6800	1	12000	1	6.73	1
MW-73	FC-CCR-MW73-0123	01/27/2023	1.6	1	480	1	--	--	--	--	--	--	--	--	7	1

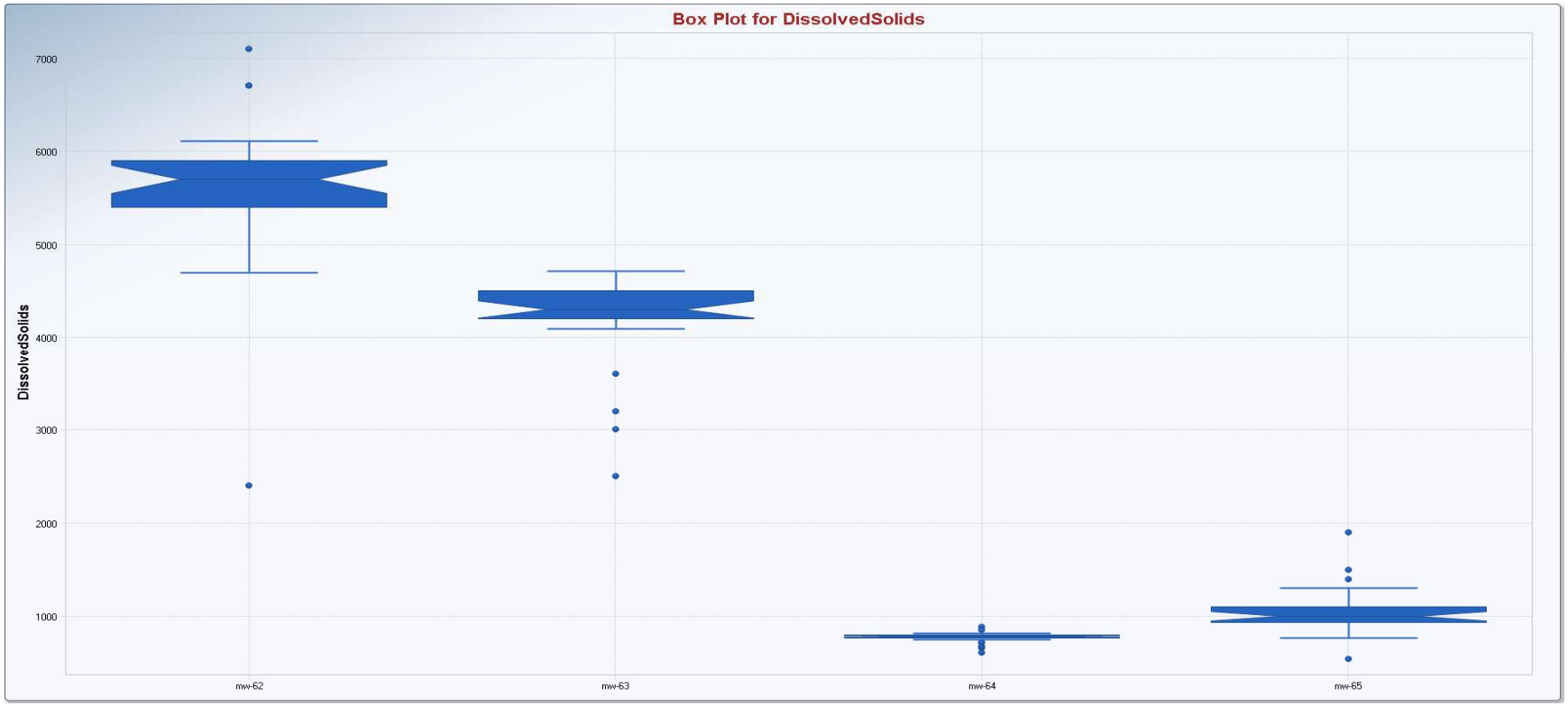
APPENDIX B

PROUCL EDA OUTPUT FILES

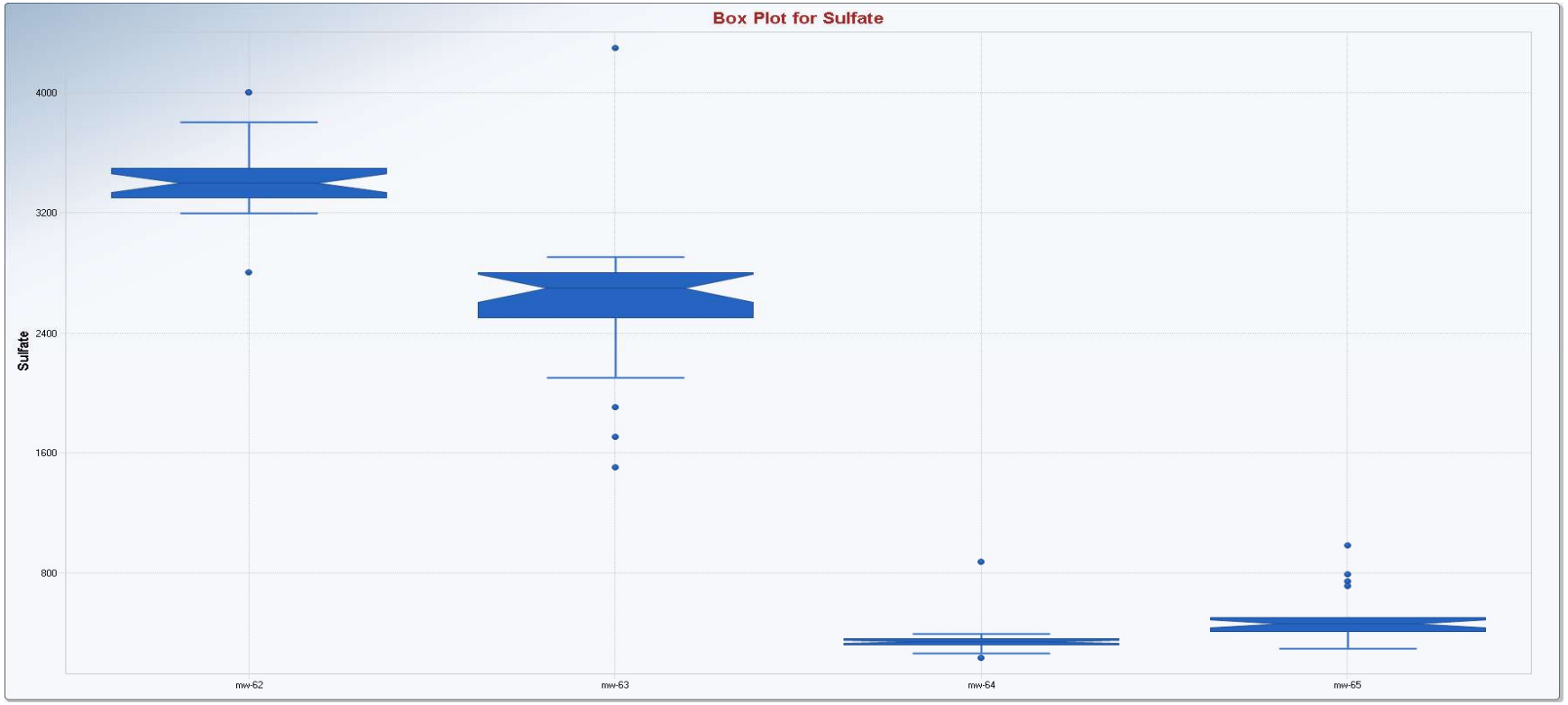
Appendix B
Box and Whisker Plots



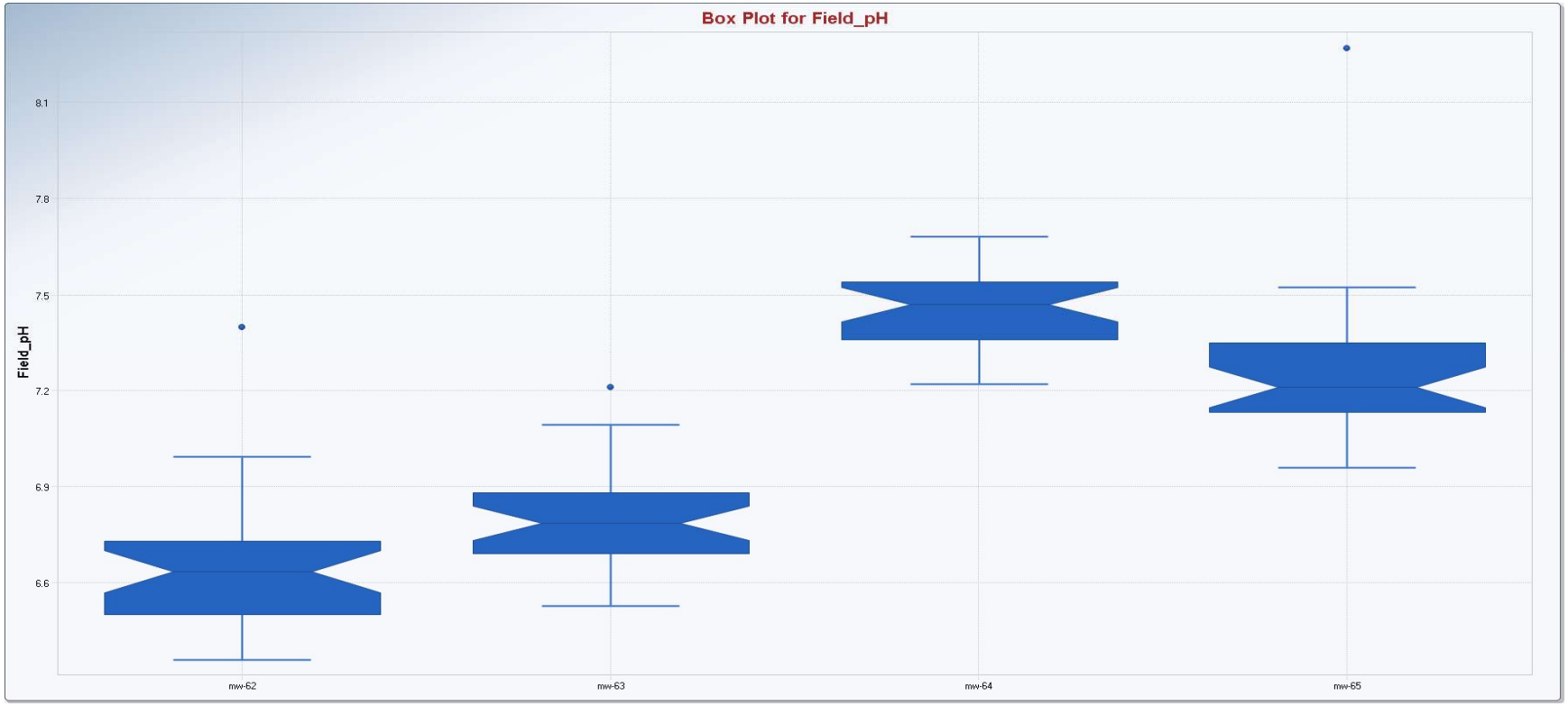
Appendix B
Box and Whisker Plots



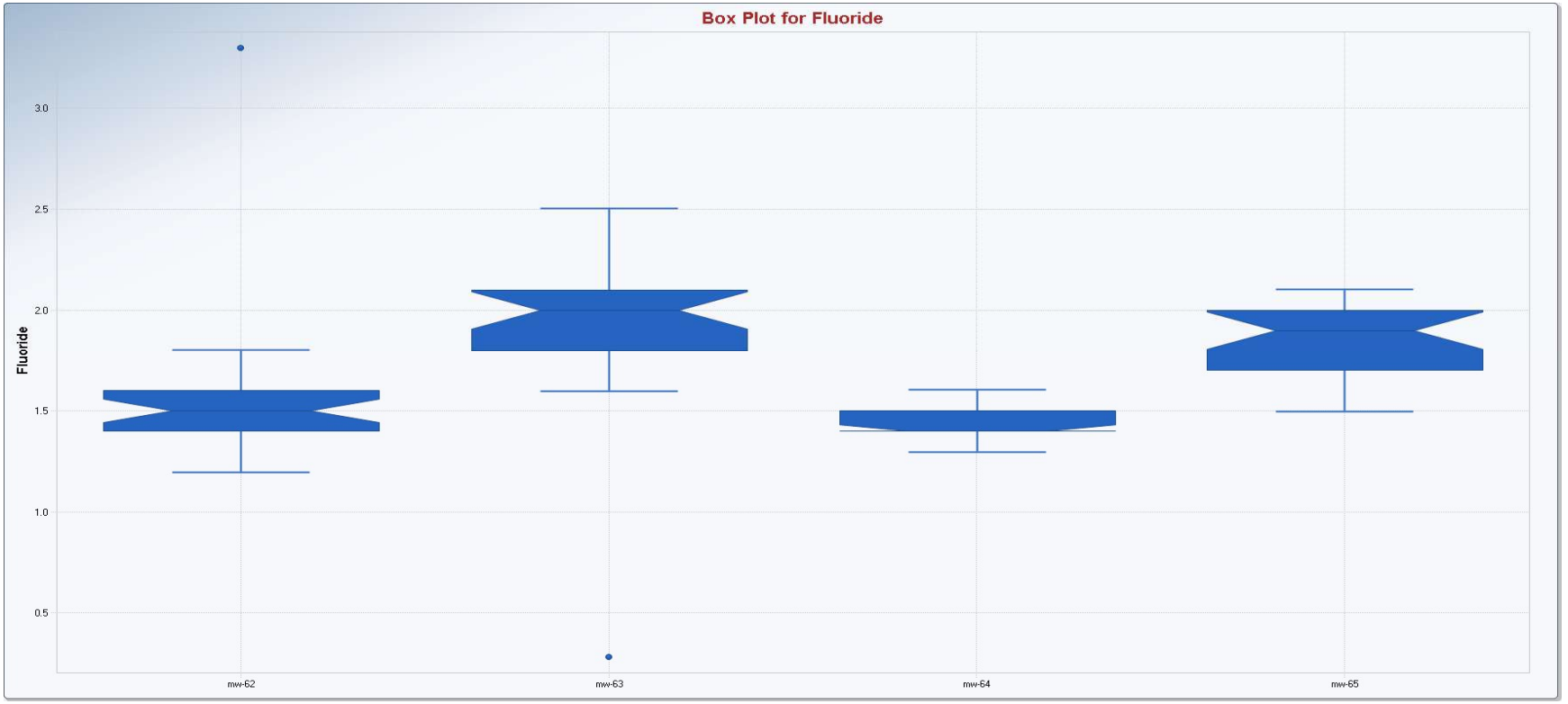
Appendix B
Box and Whisker Plots



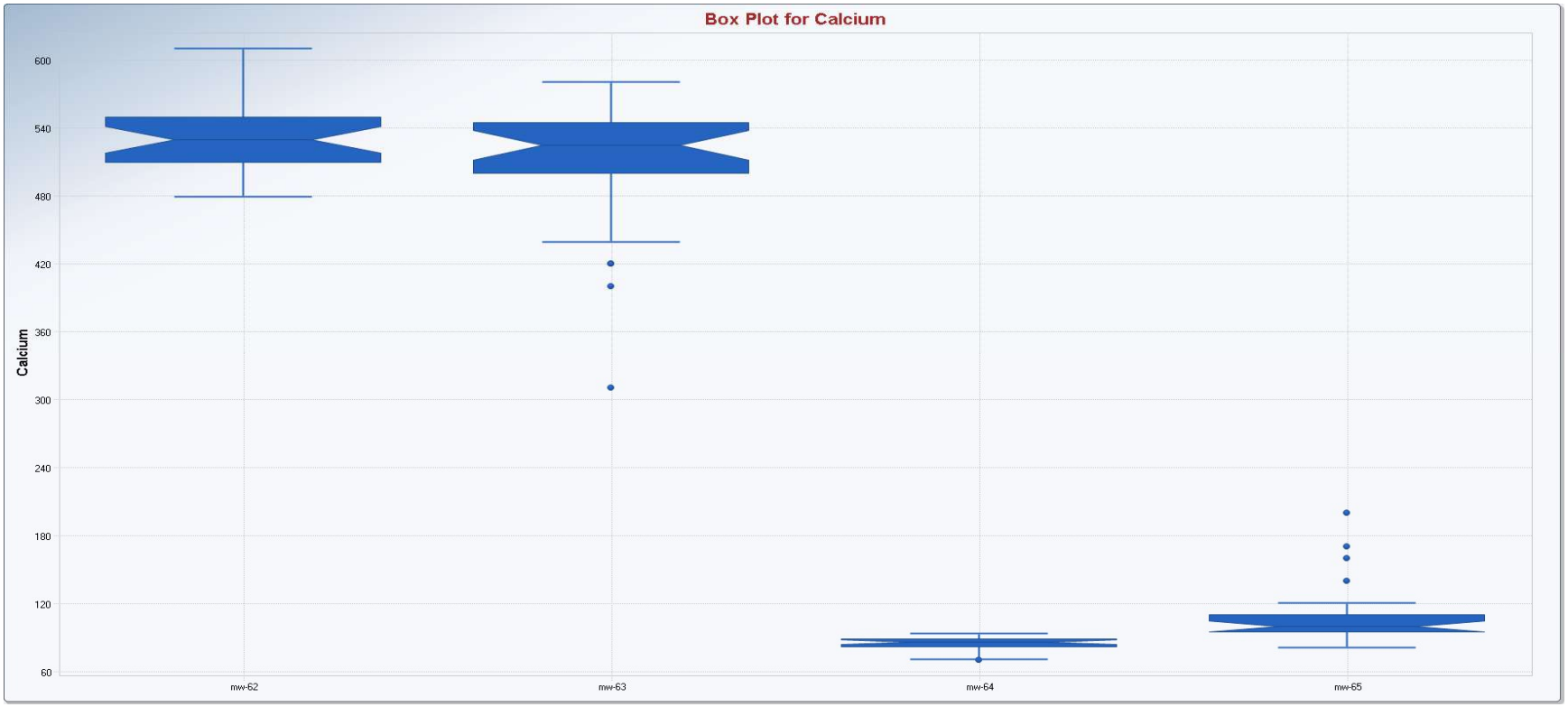
Appendix B
Box and Whisker Plots



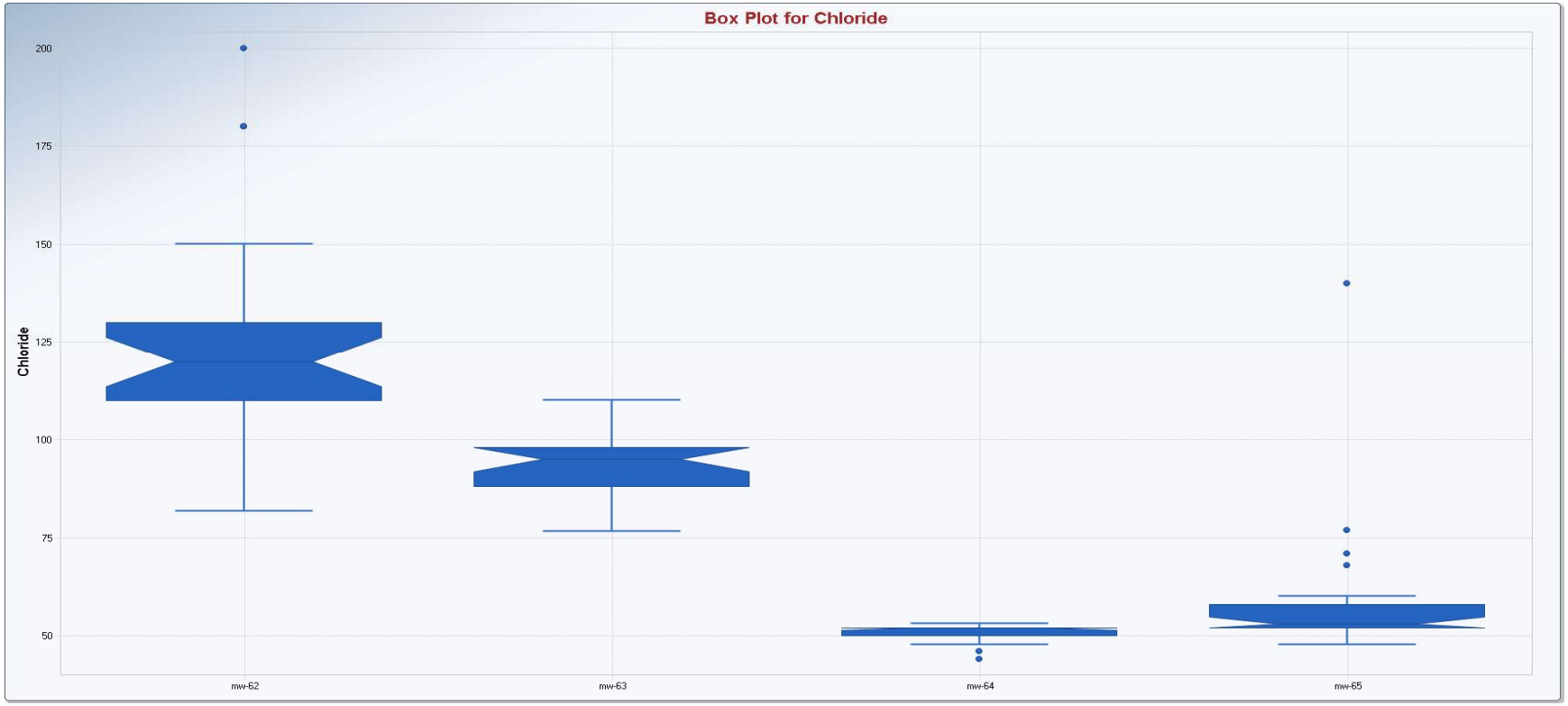
Appendix B
Box and Whisker Plots



Appendix B
Box and Whisker Plots



Appendix B
Box and Whisker Plots



Appendix B
Goodness of Fit Statistics

	Goodness-of-Fit Test Statistics for Uncensored Full Data Sets without Non-Detects
User Selected Options	
Date/Time of Computation	ProUCL 5.13/26/2023 4:32:49 PM
From File	CWTP_ProUCLUpload_200230323_a.xls
Full Precision	OFF
Confidence Coefficient	0.95

Boron (mw-62)

Raw Statistics	
Number of Valid Observations	30
Number of Missing Observations	1
Number of Distinct Observations	8
Minimum	1.8
Maximum	2.5
Mean of Raw Data	2.077
Standard Deviation of Raw Data	0.185
Khat	131.6
Theta hat	0.0158
Kstar	118.5
Theta star	0.0175
Mean of Log Transformed Data	0.727
Standard Deviation of Log Transformed Data	0.0885

Normal GOF Test Results	
Correlation Coefficient R	0.972
Shapiro Wilk Test Statistic	0.936
Shapiro Wilk Critical (0.05) Value	0.927
Approximate Shapiro Wilk P Value	0.0832
Lilliefors Test Statistic	0.163
Lilliefors Critical (0.05) Value	0.159

Data appear Approximate Normal at (0.05) Significance Level

Gamma GOF Test Results	
Correlation Coefficient R	0.975
A-D Test Statistic	0.77
A-D Critical (0.05) Value	0.745

Appendix B
Goodness of Fit Statistics

K-S Test Statistic	0.169
K-S Critical(0.05) Value	0.16
Data not Gamma Distributed at (0.05) Significance Level	
Lognormal GOF Test Results	
Correlation Coefficient R	0.974
Shapiro Wilk Test Statistic	0.938
Shapiro Wilk Critical (0.05) Value	0.927
Approximate Shapiro Wilk P Value	0.096
Lilliefors Test Statistic	0.167
Lilliefors Critical (0.05) Value	0.159
Data appear Approximate_Lognormal at (0.05) Significance Level	
Boron (mw-63)	
Raw Statistics	
Number of Valid Observations	28
Number of Missing Observations	2
Number of Distinct Observations	11
Minimum	0.83
Maximum	2
Mean of Raw Data	1.534
Standard Deviation of Raw Data	0.304
Khat	23.73
Theta hat	0.0647
Kstar	21.21
Theta star	0.0723
Mean of Log Transformed Data	0.407
Standard Deviation of Log Transformed Data	0.217
Normal GOF Test Results	
Correlation Coefficient R	0.98
Shapiro Wilk Test Statistic	0.953
Shapiro Wilk Critical (0.05) Value	0.924
Approximate Shapiro Wilk P Value	0.268
Lilliefors Test Statistic	0.114
Lilliefors Critical (0.05) Value	0.164

Appendix B
Goodness of Fit Statistics

Data appear Normal at (0.05) Significance Level	
Gamma GOF Test Results	
Correlation Coefficient R	0.966
A-D Test Statistic	0.542
A-D Critical (0.05) Value	0.744
K-S Test Statistic	0.13
K-S Critical(0.05) Value	0.165
Data appear Gamma Distributed at (0.05) Significance Level	
Lognormal GOF Test Results	
Correlation Coefficient R	0.958
Shapiro Wilk Test Statistic	0.915
Shapiro Wilk Critical (0.05) Value	0.924
Approximate Shapiro Wilk P Value	0.0289
Lilliefors Test Statistic	0.145
Lilliefors Critical (0.05) Value	0.164
Data appear Approximate_Lognormal at (0.05) Significance Level	
Boron (mw-64)	
Raw Statistics	
Number of Valid Observations	27
Number of Distinct Observations	16
Minimum	0.47
Maximum	0.67
Mean of Raw Data	0.579
Standard Deviation of Raw Data	0.0592
Khat	96.84
Theta hat	0.00598
Kstar	86.1
Theta star	0.00672
Mean of Log Transformed Data	-0.552
Standard Deviation of Log Transformed Data	0.104
Normal GOF Test Results	

Appendix B
Goodness of Fit Statistics

Correlation Coefficient R	0.984
Shapiro Wilk Test Statistic	0.952
Shapiro Wilk Critical (0.05) Value	0.923
Approximate Shapiro Wilk P Value	0.26
Lilliefors Test Statistic	0.108
Lilliefors Critical (0.05) Value	0.167
Data appear Normal at (0.05) Significance Level	
Gamma GOF Test Results	
Correlation Coefficient R	0.978
A-D Test Statistic	0.436
A-D Critical (0.05) Value	0.744
K-S Test Statistic	0.117
K-S Critical(0.05) Value	0.168
Data appear Gamma Distributed at (0.05) Significance Level	
Lognormal GOF Test Results	
Correlation Coefficient R	0.98
Shapiro Wilk Test Statistic	0.946
Shapiro Wilk Critical (0.05) Value	0.923
Approximate Shapiro Wilk P Value	0.185
Lilliefors Test Statistic	0.12
Lilliefors Critical (0.05) Value	0.167
Data appear Lognormal at (0.05) Significance Level	
Boron (mw-65)	
Raw Statistics	
Number of Valid Observations	30
Number of Distinct Observations	20
Minimum	0.57
Maximum	0.98
Mean of Raw Data	0.755
Standard Deviation of Raw Data	0.0973
Khat	60.87
Theta hat	0.0124
Kstar	54.8

Appendix B
Goodness of Fit Statistics

Theta star	0.0138
Mean of Log Transformed Data	-0.289
Standard Deviation of Log Transformed Data	0.132
Normal GOF Test Results	
Correlation Coefficient R	0.978
Shapiro Wilk Test Statistic	0.954
Shapiro Wilk Critical (0.05) Value	0.927
Approximate Shapiro Wilk P Value	0.256
Lilliefors Test Statistic	0.178
Lilliefors Critical (0.05) Value	0.159
Data appear Approximate Normal at (0.05) Significance Level	
Gamma GOF Test Results	
Correlation Coefficient R	0.977
A-D Test Statistic	0.789
A-D Critical (0.05) Value	0.744
K-S Test Statistic	0.195
K-S Critical(0.05) Value	0.16
Data not Gamma Distributed at (0.05) Significance Level	
Lognormal GOF Test Results	
Correlation Coefficient R	0.973
Shapiro Wilk Test Statistic	0.943
Shapiro Wilk Critical (0.05) Value	0.927
Approximate Shapiro Wilk P Value	0.128
Lilliefors Test Statistic	0.203
Lilliefors Critical (0.05) Value	0.159
Data appear Approximate_Lognormal at (0.05) Significance Level	
Calcium (mw-62)	
Raw Statistics	
Number of Valid Observations	29
Number of Missing Observations	2
Number of Distinct Observations	11

Appendix B
Goodness of Fit Statistics

Minimum	480
Maximum	610
Mean of Raw Data	532.4
Standard Deviation of Raw Data	30.78
Khat	315.6
Theta hat	1.687
Kstar	283
Theta star	1.881
Mean of Log Transformed Data	6.276
Standard Deviation of Log Transformed Data	0.0571
Normal GOF Test Results	
Correlation Coefficient R	0.979
Shapiro Wilk Test Statistic	0.957
Shapiro Wilk Critical (0.05) Value	0.926
Approximate Shapiro Wilk P Value	0.31
Lilliefors Test Statistic	0.152
Lilliefors Critical (0.05) Value	0.161
Data appear Normal at (0.05) Significance Level	
Gamma GOF Test Results	
Correlation Coefficient R	0.982
A-D Test Statistic	0.447
A-D Critical (0.05) Value	0.742
K-S Test Statistic	0.145
K-S Critical(0.05) Value	0.162
Data appear Gamma Distributed at (0.05) Significance Level	
Lognormal GOF Test Results	
Correlation Coefficient R	0.984
Shapiro Wilk Test Statistic	0.966
Shapiro Wilk Critical (0.05) Value	0.926
Approximate Shapiro Wilk P Value	0.491
Lilliefors Test Statistic	0.141
Lilliefors Critical (0.05) Value	0.161
Data appear Lognormal at (0.05) Significance Level	

Appendix B
Goodness of Fit Statistics

Calcium (mw-63)

Raw Statistics	
Number of Valid Observations	28
Number of Missing Observations	2
Number of Distinct Observations	13
Minimum	310
Maximum	580
Mean of Raw Data	505.7
Standard Deviation of Raw Data	59.16
Khat	64.48
Theta hat	7.843
Kstar	57.6
Theta star	8.78
Mean of Log Transformed Data	6.218
Standard Deviation of Log Transformed Data	0.133

Normal GOF Test Results	
Correlation Coefficient R	0.9
Shapiro Wilk Test Statistic	0.822
Shapiro Wilk Critical (0.05) Value	0.924
Approximate Shapiro Wilk P Value	1.6331E-4
Lilliefors Test Statistic	0.247
Lilliefors Critical (0.05) Value	0.164

Data not Normal at (0.05) Significance Level

Gamma GOF Test Results	
Correlation Coefficient R	0.879
A-D Test Statistic	2.108
A-D Critical (0.05) Value	0.743
K-S Test Statistic	0.266
K-S Critical(0.05) Value	0.165

Data not Gamma Distributed at (0.05) Significance Level

Lognormal GOF Test Results

Appendix B
Goodness of Fit Statistics

Correlation Coefficient R	0.865
Shapiro Wilk Test Statistic	0.765
Shapiro Wilk Critical (0.05) Value	0.924
Approximate Shapiro Wilk P Value	1.0491E-5
Lilliefors Test Statistic	0.275
Lilliefors Critical (0.05) Value	0.164
Data not Lognormal at (0.05) Significance Level	
Non-parametric GOF Test Results	
Data do not follow a discernible distribution at (0.05) Level of Significance	
Calcium (mw-64)	
Raw Statistics	
Number of Valid Observations	27
Number of Distinct Observations	13
Minimum	70
Maximum	93
Mean of Raw Data	84.81
Standard Deviation of Raw Data	6.064
Khat	191.4
Theta hat	0.443
Kstar	170.2
Theta star	0.498
Mean of Log Transformed Data	4.438
Standard Deviation of Log Transformed Data	0.0748
Normal GOF Test Results	
Correlation Coefficient R	0.927
Shapiro Wilk Test Statistic	0.856
Shapiro Wilk Critical (0.05) Value	0.923
Approximate Shapiro Wilk P Value	0.00119
Lilliefors Test Statistic	0.216
Lilliefors Critical (0.05) Value	0.167
Data not Normal at (0.05) Significance Level	
Gamma GOF Test Results	

Appendix B
Goodness of Fit Statistics

Correlation Coefficient R	0.916
A-D Test Statistic	1.681
A-D Critical (0.05) Value	0.744
K-S Test Statistic	0.225
K-S Critical(0.05) Value	0.168

Data not Gamma Distributed at (0.05) Significance Level

Lognormal GOF Test Results

Correlation Coefficient R	0.916
Shapiro Wilk Test Statistic	0.836
Shapiro Wilk Critical (0.05) Value	0.923
Approximate Shapiro Wilk P Value	4.4301E-4
Lilliefors Test Statistic	0.229
Lilliefors Critical (0.05) Value	0.167

Data not Lognormal at (0.05) Significance Level

Non-parametric GOF Test Results

Data do not follow a discernible distribution at (0.05) Level of Significance

Calcium (mw-65)

Raw Statistics

Number of Valid Observations	27
Number of Missing Observations	3
Number of Distinct Observations	15
Minimum	82
Maximum	200
Mean of Raw Data	110.6
Standard Deviation of Raw Data	27.03
Khat	21.8
Theta hat	5.072
Kstar	19.4
Theta star	5.699
Mean of Log Transformed Data	4.682
Standard Deviation of Log Transformed Data	0.208

Appendix B
Goodness of Fit Statistics

Normal GOF Test Results	
Correlation Coefficient R	0.854
Shapiro Wilk Test Statistic	0.741
Shapiro Wilk Critical (0.05) Value	0.923
Approximate Shapiro Wilk P Value	5.3168E-6
Lilliefors Test Statistic	0.323
Lilliefors Critical (0.05) Value	0.167
Data not Normal at (0.05) Significance Level	
Gamma GOF Test Results	
Correlation Coefficient R	0.894
A-D Test Statistic	2.114
A-D Critical (0.05) Value	0.744
K-S Test Statistic	0.296
K-S Critical(0.05) Value	0.168
Data not Gamma Distributed at (0.05) Significance Level	
Lognormal GOF Test Results	
Correlation Coefficient R	0.904
Shapiro Wilk Test Statistic	0.825
Shapiro Wilk Critical (0.05) Value	0.923
Approximate Shapiro Wilk P Value	2.4367E-4
Lilliefors Test Statistic	0.28
Lilliefors Critical (0.05) Value	0.167
Data not Lognormal at (0.05) Significance Level	
Non-parametric GOF Test Results	
Data do not follow a discernible distribution at (0.05) Level of Significance	
Chloride (mw-62)	
Raw Statistics	
Number of Valid Observations	25
Number of Missing Observations	6
Number of Distinct Observations	9

Appendix B
Goodness of Fit Statistics

Minimum	82
Maximum	200
Mean of Raw Data	128.8
Standard Deviation of Raw Data	26.4
Khat	27.18
Theta hat	4.741
Kstar	23.94
Theta star	5.381
Mean of Log Transformed Data	4.84
Standard Deviation of Log Transformed Data	0.193
Normal GOF Test Results	
Correlation Coefficient R	0.931
Shapiro Wilk Test Statistic	0.877
Shapiro Wilk Critical (0.05) Value	0.918
Approximate Shapiro Wilk P Value	0.0053
Lilliefors Test Statistic	0.242
Lilliefors Critical (0.05) Value	0.173
Data not Normal at (0.05) Significance Level	
Gamma GOF Test Results	
Correlation Coefficient R	0.951
A-D Test Statistic	1.05
A-D Critical (0.05) Value	0.743
K-S Test Statistic	0.216
K-S Critical(0.05) Value	0.174
Data not Gamma Distributed at (0.05) Significance Level	
Lognormal GOF Test Results	
Correlation Coefficient R	0.956
Shapiro Wilk Test Statistic	0.925
Shapiro Wilk Critical (0.05) Value	0.918
Approximate Shapiro Wilk P Value	0.0691
Lilliefors Test Statistic	0.203
Lilliefors Critical (0.05) Value	0.173
Data appear Approximate_Lognormal at (0.05) Significance Level	

Appendix B
Goodness of Fit Statistics

Chloride (mw-63)

Raw Statistics	
Number of Valid Observations	25
Number of Missing Observations	5
Number of Distinct Observations	14
Minimum	77
Maximum	110
Mean of Raw Data	93.32
Standard Deviation of Raw Data	8.826
Khat	114
Theta hat	0.818
Kstar	100.4
Theta star	0.93
Mean of Log Transformed Data	4.532
Standard Deviation of Log Transformed Data	0.0963

Normal GOF Test Results	
Correlation Coefficient R	0.976
Shapiro Wilk Test Statistic	0.946
Shapiro Wilk Critical (0.05) Value	0.918
Approximate Shapiro Wilk P Value	0.213
Lilliefors Test Statistic	0.145
Lilliefors Critical (0.05) Value	0.173

Data appear Normal at (0.05) Significance Level

Gamma GOF Test Results	
Correlation Coefficient R	0.973
A-D Test Statistic	0.575
A-D Critical (0.05) Value	0.742
K-S Test Statistic	0.152
K-S Critical(0.05) Value	0.174

Data appear Gamma Distributed at (0.05) Significance Level

Lognormal GOF Test Results

Appendix B
Goodness of Fit Statistics

Correlation Coefficient R	0.972
Shapiro Wilk Test Statistic	0.938
Shapiro Wilk Critical (0.05) Value	0.918
Approximate Shapiro Wilk P Value	0.142
Lilliefors Test Statistic	0.153
Lilliefors Critical (0.05) Value	0.173
Data appear Lognormal at (0.05) Significance Level	
Chloride (mw-64)	
Raw Statistics	
Number of Valid Observations	25
Number of Missing Observations	2
Number of Distinct Observations	8
Minimum	44
Maximum	53
Mean of Raw Data	50.88
Standard Deviation of Raw Data	2.242
Khat	510.5
Theta hat	0.0997
Kstar	449.3
Theta star	0.113
Mean of Log Transformed Data	3.928
Standard Deviation of Log Transformed Data	0.0458
Normal GOF Test Results	
Correlation Coefficient R	0.898
Shapiro Wilk Test Statistic	0.81
Shapiro Wilk Critical (0.05) Value	0.918
Approximate Shapiro Wilk P Value	2.0751E-4
Lilliefors Test Statistic	0.241
Lilliefors Critical (0.05) Value	0.173
Data not Normal at (0.05) Significance Level	
Gamma GOF Test Results	
Correlation Coefficient R	0.891
A-D Test Statistic	1.695

Appendix B
Goodness of Fit Statistics

A-D Critical (0.05) Value	0.742
K-S Test Statistic	0.247
K-S Critical(0.05) Value	0.174
Data not Gamma Distributed at (0.05) Significance Level	
Lognormal GOF Test Results	
Correlation Coefficient R	0.888
Shapiro Wilk Test Statistic	0.794
Shapiro Wilk Critical (0.05) Value	0.918
Approximate Shapiro Wilk P Value	9.9547E-5
Lilliefors Test Statistic	0.249
Lilliefors Critical (0.05) Value	0.173
Data not Lognormal at (0.05) Significance Level	
Non-parametric GOF Test Results	
Data do not follow a discernible distribution at (0.05) Level of Significance	
Chloride (mw-65)	
Raw Statistics	
Number of Valid Observations	25
Number of Missing Observations	5
Number of Distinct Observations	13
Minimum	48
Maximum	140
Mean of Raw Data	59.2
Standard Deviation of Raw Data	18.13
Khat	18.05
Theta hat	3.28
Kstar	15.91
Theta star	3.721
Mean of Log Transformed Data	4.053
Standard Deviation of Log Transformed Data	0.215
Normal GOF Test Results	
Correlation Coefficient R	0.668

Appendix B
Goodness of Fit Statistics

Shapiro Wilk Test Statistic	0.477
Shapiro Wilk Critical (0.05) Value	0.918
Approximate Shapiro Wilk P Value	1.2744E-9
Lilliefors Test Statistic	0.322
Lilliefors Critical (0.05) Value	0.173
Data not Normal at (0.05) Significance Level	
Gamma GOF Test Results	
Correlation Coefficient R	0.73
A-D Test Statistic	3.859
A-D Critical (0.05) Value	0.743
K-S Test Statistic	0.311
K-S Critical(0.05) Value	0.174
Data not Gamma Distributed at (0.05) Significance Level	
Lognormal GOF Test Results	
Correlation Coefficient R	0.755
Shapiro Wilk Test Statistic	0.597
Shapiro Wilk Critical (0.05) Value	0.918
Approximate Shapiro Wilk P Value	5.3894E-8
Lilliefors Test Statistic	0.304
Lilliefors Critical (0.05) Value	0.173
Data not Lognormal at (0.05) Significance Level	
Non-parametric GOF Test Results	
Data do not follow a discernible distribution at (0.05) Level of Significance	
Fluoride (mw-62)	
Raw Statistics	
Number of Valid Observations	28
Number of Missing Observations	3
Number of Distinct Observations	6
Minimum	1.2
Maximum	3.3
Mean of Raw Data	1.536

Appendix B
Goodness of Fit Statistics

Standard Deviation of Raw Data	0.378
Khat	25.23
Theta hat	0.0609
Kstar	22.55
Theta star	0.0681
Mean of Log Transformed Data	0.409
Standard Deviation of Log Transformed Data	0.187
Normal GOF Test Results	
Correlation Coefficient R	0.723
Shapiro Wilk Test Statistic	0.558
Shapiro Wilk Critical (0.05) Value	0.924
Approximate Shapiro Wilk P Value	2.9627E-9
Lilliefors Test Statistic	0.325
Lilliefors Critical (0.05) Value	0.164
Data not Normal at (0.05) Significance Level	
Gamma GOF Test Results	
Correlation Coefficient R	0.763
A-D Test Statistic	2.651
A-D Critical (0.05) Value	0.744
K-S Test Statistic	0.285
K-S Critical(0.05) Value	0.165
Data not Gamma Distributed at (0.05) Significance Level	
Lognormal GOF Test Results	
Correlation Coefficient R	0.826
Shapiro Wilk Test Statistic	0.713
Shapiro Wilk Critical (0.05) Value	0.924
Approximate Shapiro Wilk P Value	1.0663E-6
Lilliefors Test Statistic	0.265
Lilliefors Critical (0.05) Value	0.164
Data not Lognormal at (0.05) Significance Level	
Non-parametric GOF Test Results	

Appendix B
Goodness of Fit Statistics

Data do not follow a discernible distribution at (0.05) Level of Significance	
Fluoride (mw-63)	
Raw Statistics	
Number of Valid Observations	27
Number of Missing Observations	3
Number of Distinct Observations	10
Minimum	0.28
Maximum	2.5
Mean of Raw Data	1.899
Standard Deviation of Raw Data	0.389
Khat	11.14
Theta hat	0.171
Kstar	9.923
Theta star	0.191
Mean of Log Transformed Data	0.596
Standard Deviation of Log Transformed Data	0.389
Normal GOF Test Results	
Correlation Coefficient R	0.833
Shapiro Wilk Test Statistic	0.73
Shapiro Wilk Critical (0.05) Value	0.923
Approximate Shapiro Wilk P Value	3.2877E-6
Lilliefors Test Statistic	0.214
Lilliefors Critical (0.05) Value	0.167
Data not Normal at (0.05) Significance Level	
Gamma GOF Test Results	
Correlation Coefficient R	0.793
A-D Test Statistic	3.877
A-D Critical (0.05) Value	0.744
K-S Test Statistic	0.288
K-S Critical(0.05) Value	0.168
Data not Gamma Distributed at (0.05) Significance Level	
Lognormal GOF Test Results	

Appendix B
Goodness of Fit Statistics

Correlation Coefficient R	0.643
Shapiro Wilk Test Statistic	0.451
Shapiro Wilk Critical (0.05) Value	0.923
Approximate Shapiro Wilk P Value	1.775E-10
Lilliefors Test Statistic	0.336
Lilliefors Critical (0.05) Value	0.167

Data not Lognormal at (0.05) Significance Level

Non-parametric GOF Test Results

Data do not follow a discernible distribution at (0.05) Level of Significance

Fluoride (mw-64)

Raw Statistics

Number of Valid Observations	27
Number of Distinct Observations	4
Minimum	1.3
Maximum	1.6
Mean of Raw Data	1.437
Standard Deviation of Raw Data	0.0792
Khat	343.4
Theta hat	0.00418
Kstar	305.3
Theta star	0.00471
Mean of Log Transformed Data	0.361
Standard Deviation of Log Transformed Data	0.055

Normal GOF Test Results

Correlation Coefficient R	0.929
Shapiro Wilk Test Statistic	0.86
Shapiro Wilk Critical (0.05) Value	0.923
Approximate Shapiro Wilk P Value	0.00152
Lilliefors Test Statistic	0.273
Lilliefors Critical (0.05) Value	0.167

Data not Normal at (0.05) Significance Level

Appendix B
Goodness of Fit Statistics

Gamma GOF Test Results	
Correlation Coefficient R	0.931
A-D Test Statistic	1.888
A-D Critical (0.05) Value	0.744
K-S Test Statistic	0.271
K-S Critical(0.05) Value	0.168
Data not Gamma Distributed at (0.05) Significance Level	
Lognormal GOF Test Results	
Correlation Coefficient R	0.93
Shapiro Wilk Test Statistic	0.861
Shapiro Wilk Critical (0.05) Value	0.923
Approximate Shapiro Wilk P Value	0.00159
Lilliefors Test Statistic	0.266
Lilliefors Critical (0.05) Value	0.167
Data not Lognormal at (0.05) Significance Level	
Non-parametric GOF Test Results	
Data do not follow a discernible distribution at (0.05) Level of Significance	
Fluoride (mw-65)	
Raw Statistics	
Number of Valid Observations	27
Number of Missing Observations	3
Number of Distinct Observations	7
Minimum	1.5
Maximum	2.1
Mean of Raw Data	1.852
Standard Deviation of Raw Data	0.163
Khat	128.6
Theta hat	0.0144
Kstar	114.3
Theta star	0.0162
Mean of Log Transformed Data	0.612
Standard Deviation of Log Transformed Data	0.091

Appendix B
Goodness of Fit Statistics

Normal GOF Test Results	
Correlation Coefficient R	0.952
Shapiro Wilk Test Statistic	0.899
Shapiro Wilk Critical (0.05) Value	0.923
Approximate Shapiro Wilk P Value	0.0129
Lilliefors Test Statistic	0.189
Lilliefors Critical (0.05) Value	0.167
Data not Normal at (0.05) Significance Level	
Gamma GOF Test Results	
Correlation Coefficient R	0.943
A-D Test Statistic	1.13
A-D Critical (0.05) Value	0.744
K-S Test Statistic	0.19
K-S Critical(0.05) Value	0.168
Data not Gamma Distributed at (0.05) Significance Level	
Lognormal GOF Test Results	
Correlation Coefficient R	0.944
Shapiro Wilk Test Statistic	0.885
Shapiro Wilk Critical (0.05) Value	0.923
Approximate Shapiro Wilk P Value	0.00588
Lilliefors Test Statistic	0.183
Lilliefors Critical (0.05) Value	0.167
Data not Lognormal at (0.05) Significance Level	
Non-parametric GOF Test Results	
Data do not follow a discernible distribution at (0.05) Level of Significance	
Sulfate (mw-62)	
Raw Statistics	
Number of Valid Observations	25
Number of Missing Observations	6

Appendix B
Goodness of Fit Statistics

Number of Distinct Observations	8
Minimum	2800
Maximum	4000
Mean of Raw Data	3416
Standard Deviation of Raw Data	251.1
Khat	195.8
Theta hat	17.45
Kstar	172.3
Theta star	19.83
Mean of Log Transformed Data	8.134
Standard Deviation of Log Transformed Data	0.0728
Normal GOF Test Results	
Correlation Coefficient R	0.925
Shapiro Wilk Test Statistic	0.872
Shapiro Wilk Critical (0.05) Value	0.918
Approximate Shapiro Wilk P Value	0.00417
Lilliefors Test Statistic	0.205
Lilliefors Critical (0.05) Value	0.173
Data not Normal at (0.05) Significance Level	
Gamma GOF Test Results	
Correlation Coefficient R	0.932
A-D Test Statistic	1.358
A-D Critical (0.05) Value	0.742
K-S Test Statistic	0.204
K-S Critical(0.05) Value	0.174
Data not Gamma Distributed at (0.05) Significance Level	
Lognormal GOF Test Results	
Correlation Coefficient R	0.928
Shapiro Wilk Test Statistic	0.878
Shapiro Wilk Critical (0.05) Value	0.918
Approximate Shapiro Wilk P Value	0.0058
Lilliefors Test Statistic	0.21
Lilliefors Critical (0.05) Value	0.173

Appendix B
Goodness of Fit Statistics

Data not Lognormal at (0.05) Significance Level	
Non-parametric GOF Test Results	
Data do not follow a discernible distribution at (0.05) Level of Significance	
Sulfate (mw-63)	
Raw Statistics	
Number of Valid Observations	25
Number of Missing Observations	5
Number of Distinct Observations	12
Minimum	1500
Maximum	4300
Mean of Raw Data	2616
Standard Deviation of Raw Data	512.9
Khat	26.78
Theta hat	97.69
Kstar	23.59
Theta star	110.9
Mean of Log Transformed Data	7.851
Standard Deviation of Log Transformed Data	0.201
Normal GOF Test Results	
Correlation Coefficient R	0.889
Shapiro Wilk Test Statistic	0.82
Shapiro Wilk Critical (0.05) Value	0.918
Approximate Shapiro Wilk P Value	3.2413E-4
Lilliefors Test Statistic	0.25
Lilliefors Critical (0.05) Value	0.173
Data not Normal at (0.05) Significance Level	
Gamma GOF Test Results	
Correlation Coefficient R	0.89
A-D Test Statistic	1.865
A-D Critical (0.05) Value	0.743
K-S Test Statistic	0.233

Appendix B
Goodness of Fit Statistics

K-S Critical(0.05) Value	0.174
Data not Gamma Distributed at (0.05) Significance Level	
Lognormal GOF Test Results	
Correlation Coefficient R	0.899
Shapiro Wilk Test Statistic	0.834
Shapiro Wilk Critical (0.05) Value	0.918
Approximate Shapiro Wilk P Value	6.2231E-4
Lilliefors Test Statistic	0.245
Lilliefors Critical (0.05) Value	0.173
Data not Lognormal at (0.05) Significance Level	
Non-parametric GOF Test Results	
Data do not follow a discernible distribution at (0.05) Level of Significance	
Sulfate (mw-64)	
Raw Statistics	
Number of Valid Observations	25
Number of Missing Observations	2
Number of Distinct Observations	13
Minimum	230
Maximum	870
Mean of Raw Data	355.2
Standard Deviation of Raw Data	114.4
Khat	16.1
Theta hat	22.06
Kstar	14.19
Theta star	25.02
Mean of Log Transformed Data	5.841
Standard Deviation of Log Transformed Data	0.231
Normal GOF Test Results	
Correlation Coefficient R	0.705
Shapiro Wilk Test Statistic	0.534
Shapiro Wilk Critical (0.05) Value	0.918

Appendix B
Goodness of Fit Statistics

Approximate Shapiro Wilk P Value	7.1827E-9
Lilliefors Test Statistic	0.34
Lilliefors Critical (0.05) Value	0.173
Data not Normal at (0.05) Significance Level	
Gamma GOF Test Results	
Correlation Coefficient R	0.751
A-D Test Statistic	2.391
A-D Critical (0.05) Value	0.744
K-S Test Statistic	0.282
K-S Critical(0.05) Value	0.174
Data not Gamma Distributed at (0.05) Significance Level	
Lognormal GOF Test Results	
Correlation Coefficient R	0.834
Shapiro Wilk Test Statistic	0.732
Shapiro Wilk Critical (0.05) Value	0.918
Approximate Shapiro Wilk P Value	7.4789E-6
Lilliefors Test Statistic	0.255
Lilliefors Critical (0.05) Value	0.173
Data not Lognormal at (0.05) Significance Level	
Non-parametric GOF Test Results	
Data do not follow a discernible distribution at (0.05) Level of Significance	
Sulfate (mw-65)	
Raw Statistics	
Number of Valid Observations	25
Number of Missing Observations	5
Number of Distinct Observations	18
Minimum	300
Maximum	980
Mean of Raw Data	496.4
Standard Deviation of Raw Data	151.9
Khat	13.97

Appendix B
Goodness of Fit Statistics

Theta hat	35.53
Kstar	12.32
Theta star	40.29
Mean of Log Transformed Data	6.171
Standard Deviation of Log Transformed Data	0.262
Normal GOF Test Results	
Correlation Coefficient R	0.872
Shapiro Wilk Test Statistic	0.775
Shapiro Wilk Critical (0.05) Value	0.918
Approximate Shapiro Wilk P Value	4.3698E-5
Lilliefors Test Statistic	0.331
Lilliefors Critical (0.05) Value	0.173
Data not Normal at (0.05) Significance Level	
Gamma GOF Test Results	
Correlation Coefficient R	0.914
A-D Test Statistic	1.708
A-D Critical (0.05) Value	0.744
K-S Test Statistic	0.294
K-S Critical(0.05) Value	0.174
Data not Gamma Distributed at (0.05) Significance Level	
Lognormal GOF Test Results	
Correlation Coefficient R	0.93
Shapiro Wilk Test Statistic	0.876
Shapiro Wilk Critical (0.05) Value	0.918
Approximate Shapiro Wilk P Value	0.00501
Lilliefors Test Statistic	0.274
Lilliefors Critical (0.05) Value	0.173
Data not Lognormal at (0.05) Significance Level	
Non-parametric GOF Test Results	
Data do not follow a discernible distribution at (0.05) Level of Significance	

Appendix B
Goodness of Fit Statistics

DissolvedSolids (mw-62)	
Raw Statistics	
Number of Valid Observations	27
Number of Missing Observations	4
Number of Distinct Observations	14
Minimum	2400
Maximum	7100
Mean of Raw Data	5644
Standard Deviation of Raw Data	816.3
Khat	35.64
Theta hat	158.4
Kstar	31.71
Theta star	178
Mean of Log Transformed Data	8.624
Standard Deviation of Log Transformed Data	0.188
Normal GOF Test Results	
Correlation Coefficient R	0.857
Shapiro Wilk Test Statistic	0.77
Shapiro Wilk Critical (0.05) Value	0.923
Approximate Shapiro Wilk P Value	1.8931E-5
Lilliefors Test Statistic	0.234
Lilliefors Critical (0.05) Value	0.167
Data not Normal at (0.05) Significance Level	
Gamma GOF Test Results	
Correlation Coefficient R	0.843
A-D Test Statistic	2.633
A-D Critical (0.05) Value	0.744
K-S Test Statistic	0.27
K-S Critical(0.05) Value	0.168
Data not Gamma Distributed at (0.05) Significance Level	
Lognormal GOF Test Results	
Correlation Coefficient R	0.761

Appendix B
Goodness of Fit Statistics

Shapiro Wilk Test Statistic	0.618
Shapiro Wilk Critical (0.05) Value	0.923
Approximate Shapiro Wilk P Value	4.2332E-8
Lilliefors Test Statistic	0.288
Lilliefors Critical (0.05) Value	0.167
Data not Lognormal at (0.05) Significance Level	
Non-parametric GOF Test Results	
Data do not follow a discernible distribution at (0.05) Level of Significance	
DissolvedSolids (mw-63)	
Raw Statistics	
Number of Valid Observations	27
Number of Missing Observations	3
Number of Distinct Observations	11
Minimum	2500
Maximum	4700
Mean of Raw Data	4193
Standard Deviation of Raw Data	520.3
Khat	55.02
Theta hat	76.2
Kstar	48.93
Theta star	85.68
Mean of Log Transformed Data	8.332
Standard Deviation of Log Transformed Data	0.145
Normal GOF Test Results	
Correlation Coefficient R	0.838
Shapiro Wilk Test Statistic	0.714
Shapiro Wilk Critical (0.05) Value	0.923
Approximate Shapiro Wilk P Value	1.6642E-6
Lilliefors Test Statistic	0.32
Lilliefors Critical (0.05) Value	0.167
Data not Normal at (0.05) Significance Level	
Gamma GOF Test Results	

Appendix B
Goodness of Fit Statistics

Correlation Coefficient R	0.813
A-D Test Statistic	3.495
A-D Critical (0.05) Value	0.743
K-S Test Statistic	0.338
K-S Critical(0.05) Value	0.168
Data not Gamma Distributed at (0.05) Significance Level	
Lognormal GOF Test Results	
Correlation Coefficient R	0.804
Shapiro Wilk Test Statistic	0.661
Shapiro Wilk Critical (0.05) Value	0.923
Approximate Shapiro Wilk P Value	2.1007E-7
Lilliefors Test Statistic	0.345
Lilliefors Critical (0.05) Value	0.167
Data not Lognormal at (0.05) Significance Level	
Non-parametric GOF Test Results	
Data do not follow a discernible distribution at (0.05) Level of Significance	
DissolvedSolids (mw-64)	
Raw Statistics	
Number of Valid Observations	27
Number of Distinct Observations	12
Minimum	610
Maximum	890
Mean of Raw Data	774.8
Standard Deviation of Raw Data	55.98
Khat	186.5
Theta hat	4.154
Kstar	165.8
Theta star	4.672
Mean of Log Transformed Data	6.65
Standard Deviation of Log Transformed Data	0.0759
Normal GOF Test Results	

Appendix B
Goodness of Fit Statistics

Correlation Coefficient R	0.904
Shapiro Wilk Test Statistic	0.838
Shapiro Wilk Critical (0.05) Value	0.923
Approximate Shapiro Wilk P Value	4.8345E-4
Lilliefors Test Statistic	0.278
Lilliefors Critical (0.05) Value	0.167

Data not Normal at (0.05) Significance Level

Gamma GOF Test Results

Correlation Coefficient R	0.9
A-D Test Statistic	2.301
A-D Critical (0.05) Value	0.744
K-S Test Statistic	0.287
K-S Critical(0.05) Value	0.168

Data not Gamma Distributed at (0.05) Significance Level

Lognormal GOF Test Results

Correlation Coefficient R	0.89
Shapiro Wilk Test Statistic	0.813
Shapiro Wilk Critical (0.05) Value	0.923
Approximate Shapiro Wilk P Value	1.3674E-4
Lilliefors Test Statistic	0.29
Lilliefors Critical (0.05) Value	0.167

Data not Lognormal at (0.05) Significance Level

Non-parametric GOF Test Results

Data do not follow a discernible distribution at (0.05) Level of Significance

DissolvedSolids (mw-65)

Raw Statistics

Number of Valid Observations	27
Number of Missing Observations	3
Number of Distinct Observations	15
Minimum	540

Appendix B
Goodness of Fit Statistics

Maximum	1900
Mean of Raw Data	1044
Standard Deviation of Raw Data	250
Khat	20.36
Theta hat	51.28
Kstar	18.12
Theta star	57.61
Mean of Log Transformed Data	6.926
Standard Deviation of Log Transformed Data	0.224
Normal GOF Test Results	
Correlation Coefficient R	0.888
Shapiro Wilk Test Statistic	0.818
Shapiro Wilk Critical (0.05) Value	0.923
Approximate Shapiro Wilk P Value	1.7224E-4
Lilliefors Test Statistic	0.274
Lilliefors Critical (0.05) Value	0.167
Data not Normal at (0.05) Significance Level	
Gamma GOF Test Results	
Correlation Coefficient R	0.915
A-D Test Statistic	1.712
A-D Critical (0.05) Value	0.744
K-S Test Statistic	0.251
K-S Critical(0.05) Value	0.168
Data not Gamma Distributed at (0.05) Significance Level	
Lognormal GOF Test Results	
Correlation Coefficient R	0.919
Shapiro Wilk Test Statistic	0.876
Shapiro Wilk Critical (0.05) Value	0.923
Approximate Shapiro Wilk P Value	0.00355
Lilliefors Test Statistic	0.236
Lilliefors Critical (0.05) Value	0.167
Data not Lognormal at (0.05) Significance Level	

Appendix B
Goodness of Fit Statistics

Non-parametric GOF Test Results	
Data do not follow a discernible distribution at (0.05) Level of Significance	
Field_pH (mw-62)	
Raw Statistics	
Number of Valid Observations	30
Number of Missing Observations	1
Number of Distinct Observations	25
Minimum	6.36
Maximum	7.4
Mean of Raw Data	6.645
Standard Deviation of Raw Data	0.219
Khat	975.5
Theta hat	0.00681
Kstar	878
Theta star	0.00757
Mean of Log Transformed Data	1.893
Standard Deviation of Log Transformed Data	0.0323
Normal GOF Test Results	
Correlation Coefficient R	0.941
Shapiro Wilk Test Statistic	0.896
Shapiro Wilk Critical (0.05) Value	0.927
Approximate Shapiro Wilk P Value	0.007
Lilliefors Test Statistic	0.118
Lilliefors Critical (0.05) Value	0.159
Data appear Approximate Normal at (0.05) Significance Level	
Gamma GOF Test Results	
Correlation Coefficient R	0.946
A-D Test Statistic	0.605
A-D Critical (0.05) Value	0.745
K-S Test Statistic	0.11
K-S Critical(0.05) Value	0.16
Data appear Gamma Distributed at (0.05) Significance Level	

Appendix B
Goodness of Fit Statistics

Lognormal GOF Test Results	
Correlation Coefficient R	0.949
Shapiro Wilk Test Statistic	0.91
Shapiro Wilk Critical (0.05) Value	0.927
Approximate Shapiro Wilk P Value	0.0163
Lilliefors Test Statistic	0.111
Lilliefors Critical (0.05) Value	0.159
Data appear Approximate_Lognormal at (0.05) Significance Level	
Field_pH (mw-63)	
Raw Statistics	
Number of Valid Observations	30
Number of Distinct Observations	26
Minimum	6.53
Maximum	7.21
Mean of Raw Data	6.8
Standard Deviation of Raw Data	0.168
Khat	1702
Theta hat	0.00399
Kstar	1532
Theta star	0.00444
Mean of Log Transformed Data	1.917
Standard Deviation of Log Transformed Data	0.0246
Normal GOF Test Results	
Correlation Coefficient R	0.988
Shapiro Wilk Test Statistic	0.97
Shapiro Wilk Critical (0.05) Value	0.927
Approximate Shapiro Wilk P Value	0.582
Lilliefors Test Statistic	0.0963
Lilliefors Critical (0.05) Value	0.159
Data appear Normal at (0.05) Significance Level	
Gamma GOF Test Results	

Appendix B
Goodness of Fit Statistics

Correlation Coefficient R	0.989
A-D Test Statistic	0.236
A-D Critical (0.05) Value	0.745
K-S Test Statistic	0.0906
K-S Critical(0.05) Value	0.16
Data appear Gamma Distributed at (0.05) Significance Level	
Lognormal GOF Test Results	
Correlation Coefficient R	0.989
Shapiro Wilk Test Statistic	0.973
Shapiro Wilk Critical (0.05) Value	0.927
Approximate Shapiro Wilk P Value	0.654
Lilliefors Test Statistic	0.0925
Lilliefors Critical (0.05) Value	0.159
Data appear Lognormal at (0.05) Significance Level	
Field_pH (mw-64)	
Raw Statistics	
Number of Valid Observations	27
Number of Distinct Observations	21
Minimum	7.22
Maximum	7.68
Mean of Raw Data	7.456
Standard Deviation of Raw Data	0.125
Khat	3695
Theta hat	0.00202
Kstar	3284
Theta star	0.00227
Mean of Log Transformed Data	2.009
Standard Deviation of Log Transformed Data	0.0168
Normal GOF Test Results	
Correlation Coefficient R	0.988
Shapiro Wilk Test Statistic	0.965
Shapiro Wilk Critical (0.05) Value	0.923
Approximate Shapiro Wilk P Value	0.505

Appendix B
Goodness of Fit Statistics

Lilliefors Test Statistic	0.1
Lilliefors Critical (0.05) Value	0.167
Data appear Normal at (0.05) Significance Level	
Gamma GOF Test Results	
Correlation Coefficient R	0.986
A-D Test Statistic	0.371
A-D Critical (0.05) Value	0.744
K-S Test Statistic	0.107
K-S Critical(0.05) Value	0.168
Data appear Gamma Distributed at (0.05) Significance Level	
Lognormal GOF Test Results	
Correlation Coefficient R	0.987
Shapiro Wilk Test Statistic	0.964
Shapiro Wilk Critical (0.05) Value	0.923
Approximate Shapiro Wilk P Value	0.489
Lilliefors Test Statistic	0.101
Lilliefors Critical (0.05) Value	0.167
Data appear Lognormal at (0.05) Significance Level	
Field_pH (mw-65)	
Raw Statistics	
Number of Valid Observations	30
Number of Distinct Observations	23
Minimum	6.96
Maximum	8.27
Mean of Raw Data	7.259
Standard Deviation of Raw Data	0.232
Khat	1070
Theta hat	0.00678
Kstar	963
Theta star	0.00754
Mean of Log Transformed Data	1.982
Standard Deviation of Log Transformed Data	0.0307

Appendix B
Goodness of Fit Statistics

Normal GOF Test Results	
Correlation Coefficient R	0.839
Shapiro Wilk Test Statistic	0.736
Shapiro Wilk Critical (0.05) Value	0.927
Approximate Shapiro Wilk P Value	1.3014E-6
Lilliefors Test Statistic	0.198
Lilliefors Critical (0.05) Value	0.159
Data not Normal at (0.05) Significance Level	
Gamma GOF Test Results	
Correlation Coefficient R	0.848
A-D Test Statistic	1.679
A-D Critical (0.05) Value	0.745
K-S Test Statistic	0.188
K-S Critical(0.05) Value	0.16
Data not Gamma Distributed at (0.05) Significance Level	
Lognormal GOF Test Results	
Correlation Coefficient R	0.855
Shapiro Wilk Test Statistic	0.762
Shapiro Wilk Critical (0.05) Value	0.927
Approximate Shapiro Wilk P Value	4.5573E-6
Lilliefors Test Statistic	0.187
Lilliefors Critical (0.05) Value	0.159
Data not Lognormal at (0.05) Significance Level	
Non-parametric GOF Test Results	
Data do not follow a discernible distribution at (0.05) Level of Significance	

Appendix B
Outlier Statistics

Outlier Tests for Selected Uncensored Variables

User Selected Options

Date/Time of Computation	ProUCL 5.13/26/2023 4:18:03 PM
From File	CWTP_ProUCLUpload_200230323_a.xls
Full Precision	OFF

Rosner's Outlier Test for Boron (mw-62)

Mean	**2.077**
Standard Deviation	**0.185**
Number of data	**30**
Number of suspected outliers	**5**

#	Mean	sd	Potential outlier	Obs. Number	Test value	Critical value (5%)	Critical value (1%)
1	2.077	0.182	2.5	5	2.326	2.91	3.24
2	2.062	0.17	2.4	20	1.989	2.89	3.22
3	2.05	0.16	2.3	4	1.564	2.88	3.2
4	2.041	0.155	2.3	15	1.672	2.86	3.18
5	2.031	0.149	2.3	17	1.806	2.84	3.16

For 5% Significance Level, there is no Potential Outlier

For 1% Significance Level, there is no Potential Outlier

Rosner's Outlier Test for Boron (mw-63)

Mean	**1.534**
Standard Deviation	**0.304**
Number of data	**28**
Number of suspected outliers	**5**

#	Mean	sd	Potential outlier	Obs. Number	Test value	Critical value (5%)	Critical value (1%)
1	1.534	0.299	0.83	27	2.357	2.88	3.2
2	1.56	0.276	0.93	25	2.281	2.86	3.18

Appendix B
Outlier Statistics

3	1.585	0.251	1.1	28	1.931	2.84	3.16				
4	1.604	0.235	2	5	1.682	2.82	3.14				
5	1.588	0.225	2	15	1.832	2.8	3.11				
For 5% Significance Level, there is no Potential Outlier											
For 1% Significance Level, there is no Potential Outlier											
Rosner's Outlier Test for Boron (mw-64)											
Mean	**0.579**										
Standard Deviation	**0.0592**										
Number of data	**27**										
Number of suspected outliers	**5**										
			Potential	Obs.	Test	Critical	Critical				
#	Mean	sd	outlier	Number	value	value (5%)	value (1%)				
1	0.579	0.0581	0.47	22	1.873	2.86	3.18				
2	0.583	0.0562	0.48	18	1.834	2.84	3.16				
3	0.587	0.0532	0.49	20	1.827	2.82	3.14				
4	0.591	0.0502	0.5	24	1.816	2.8	3.11				
5	0.595	0.0474	0.51	23	1.799	2.78	3.09				
For 5% Significance Level, there is no Potential Outlier											
For 1% Significance Level, there is no Potential Outlier											
Rosner's Outlier Test for Boron (mw-65)											
Mean	**0.755**										
Standard Deviation	**0.0973**										
Number of data	**30**										
Number of suspected outliers	**5**										
			Potential	Obs.	Test	Critical	Critical				

Appendix B
Outlier Statistics

#	Mean	sd	outlier	Number	value	value (5%)	value (1%)
1	0.755	0.0957	0.98	10	2.348	2.91	3.24
2	0.748	0.0891	0.57	22	1.992	2.89	3.22
3	0.754	0.0839	0.92	11	1.98	2.88	3.2
4	0.748	0.0788	0.6	20	1.876	2.86	3.18
5	0.753	0.0745	0.61	23	1.927	2.84	3.16

For 5% Significance Level, there is no Potential Outlier

For 1% Significance Level, there is no Potential Outlier

Rosner's Outlier Test for Calcium (mw-62)

Mean	**532.4**
Standard Deviation	**30.78**
Number of data	**29**
Number of suspected outliers	**5**

#	Mean	sd	Potential outlier	Obs. Number	Test value	Critical value (5%)	Critical value (1%)
1	532.4	30.25	610	28	2.565	2.89	3.22
2	529.6	27.42	590	14	2.201	2.88	3.2
3	527.4	25.21	480	6	1.881	2.86	3.18
4	529.2	23.82	570	5	1.712	2.84	3.16
5	527.6	22.78	570	10	1.861	2.82	3.14

For 5% Significance Level, there is no Potential Outlier

For 1% Significance Level, there is no Potential Outlier

Rosner's Outlier Test for Calcium (mw-63)

Mean	**505.7**
Standard Deviation	**59.16**
Number of data	**28**

Appendix B
Outlier Statistics

Number of suspected outliers	**5**						
#	Mean	sd	Potential outlier	Obs. Number	Test value	Critical value (5%)	Critical value (1%)
1	505.7	58.09	310	27	3.369	2.88	3.2
2	513	45.89	400	25	2.461	2.86	3.18
3	517.3	40.75	420	1	2.388	2.84	3.16
4	521.2	36.32	420	28	2.786	2.82	3.14
5	525.4	30.21	440	26	2.827	2.8	3.11
For 5% significance level, there are 5 Potential Outliers							
Potential outliers are:							
310, 400, 420, 420, 440							
For 1% Significance Level, there is 1 Potential Outlier							
Potential outliers is: 310							
Rosner's Outlier Test for Calcium (mw-64)							
Mean	**84.81**						
Standard Deviation	**6.064**						
Number of data	**27**						
Number of suspected outliers	**5**						
#	Mean	sd	Potential outlier	Obs. Number	Test value	Critical value (5%)	Critical value (1%)
1	84.81	5.951	70	27	2.49	2.86	3.18
2	85.38	5.397	72	25	2.48	2.84	3.16
3	85.92	4.751	73	23	2.719	2.82	3.14
4	86.46	4	77	22	2.365	2.8	3.11
5	86.87	3.533	77	26	2.794	2.78	3.09
For 5% significance level, there are 5 Potential Outliers							
Potential outliers are:							
70, 72, 73, 77, 77							
For 1% Significance Level, there is no Potential Outlier							

Appendix B
Outlier Statistics

Rosner's Outlier Test for Calcium (mw-65)

Mean	**110.6**
Standard Deviation	**27.03**
Number of data	**27**
Number of suspected outliers	**5**

#	Mean	sd	Potential outlier	Obs. Number	Test value	Critical value (5%)	Critical value (1%)
1	110.6	26.53	200	26	3.372	2.86	3.18
2	107.1	20.68	170	24	3.04	2.84	3.16
3	104.6	16.56	160	10	3.345	2.82	3.14
4	102.3	12.13	140	11	3.108	2.8	3.11
5	100.7	9.296	120	8	2.081	2.78	3.09

For 5% significance level, there are 4 Potential Outliers

Potential outliers are:

200, 170, 160, 140

For 1% Significance Level, there are 3 Potential Outliers

Potential outliers are:

200, 170, 160

Rosner's Outlier Test for Chloride (mw-62)

Mean	**128.8**
Standard Deviation	**26.4**
Number of data	**25**
Number of suspected outliers	**5**

#	Mean	sd	Potential outlier	Obs. Number	Test value	Critical value (5%)	Critical value (1%)
1	128.8	25.87	200	25	2.751	2.82	3.14
2	125.9	22.32	180	23	2.425	2.8	3.11

Appendix B
Outlier Statistics

3	123.5	19.54	180	24	2.89	2.78	3.09				
4	121	15.53	82	20	2.508	2.76	3.06				
5	122.8	13.18	150	1	2.063	2.73	3.03				
For 5% significance level, there are 3 Potential Outliers											
Potential outliers are:											
200, 180, 180											
For 1% Significance Level, there is no Potential Outlier											
Rosner's Outlier Test for Chloride (mw-63)											
Mean	**93.32**										
Standard Deviation	**8.826**										
Number of data	**25**										
Number of suspected outliers	**5**										
			Potential	Obs.	Test	Critical	Critical				
#	Mean	sd	outlier	Number	value	value (5%)	value (1%)				
1	93.32	8.647	110	3	1.929	2.82	3.14				
2	92.63	8.287	110	5	2.097	2.8	3.11				
3	91.87	7.582	77	1	1.961	2.78	3.09				
4	92.55	7.015	77	20	2.216	2.76	3.06				
5	93.29	6.246	80	25	2.127	2.73	3.03				
For 5% Significance Level, there is no Potential Outlier											
For 1% Significance Level, there is no Potential Outlier											
Rosner's Outlier Test for Chloride (mw-64)											
Mean	**50.88**										
Standard Deviation	**2.242**										
Number of data	**25**										
Number of suspected outliers	**5**										

Appendix B
Outlier Statistics

#	Mean	sd	Potential outlier	Obs. Number	Test value	Critical value (5%)	Critical value (1%)
1	50.88	2.197	44	9	3.132	2.82	3.14
2	51.17	1.761	46	4	2.934	2.8	3.11
3	51.39	1.406	48	7	2.412	2.78	3.09
4	51.55	1.224	49	1	2.08	2.76	3.06
5	51.67	1.111	49	20	2.401	2.73	3.03

For 5% significance level, there are 2 Potential Outliers

Potential outliers are:

44, 46

For 1% Significance Level, there is no Potential Outlier

Rosner's Outlier Test for Chloride (mw-65)

Mean	**59.2**
Standard Deviation	**18.13**
Number of data	**25**
Number of suspected outliers	**5**

#	Mean	sd	Potential outlier	Obs. Number	Test value	Critical value (5%)	Critical value (1%)
1	59.2	17.77	140	24	4.548	2.82	3.14
2	55.83	6.888	77	10	3.073	2.8	3.11
3	54.91	5.325	71	22	3.021	2.78	3.09
4	54.18	4.102	68	11	3.369	2.76	3.06
5	53.52	2.768	60	8	2.34	2.73	3.03

For 5% significance level, there are 4 Potential Outliers

Potential outliers are:

140, 77, 71, 68

For 1% Significance Level, there are 4 Potential Outliers

Potential outliers are:

140, 77, 71, 68

Appendix B
Outlier Statistics

Rosner's Outlier Test for Fluoride (mw-62)

Mean	**1.536**
Standard Deviation	**0.378**
Number of data	**28**
Number of suspected outliers	**5**

#	Mean	sd	Potential outlier	Obs. Number	Test value	Critical value (5%)	Critical value (1%)
1	1.536	0.371	3.3	9	4.749	2.88	3.2
2	1.47	0.156	1.8	22	2.107	2.86	3.18
3	1.458	0.145	1.8	23	2.366	2.84	3.16
4	1.444	0.129	1.2	6	1.886	2.82	3.14
5	1.454	0.122	1.2	8	2.092	2.8	3.11

For 5% Significance Level, there is 1 Potential Outlier

Potential outliers is: 3.3

For 1% Significance Level, there is 1 Potential Outlier

Potential outliers is: 3.3

Rosner's Outlier Test for Fluoride (mw-63)

Mean	**1.899**
Standard Deviation	**0.389**
Number of data	**27**
Number of suspected outliers	**5**

#	Mean	sd	Potential outlier	Obs. Number	Test value	Critical value (5%)	Critical value (1%)
1	1.899	0.381	0.28	25	4.247	2.86	3.18
2	1.962	0.219	2.5	9	2.456	2.84	3.16
3	1.94	0.194	2.4	1	2.375	2.82	3.14
4	1.921	0.172	1.6	8	1.866	2.8	3.11

Appendix B
Outlier Statistics

5	1.935	0.161	1.6	10	2.076	2.78	3.09				
For 5% Significance Level, there is 1 Potential Outlier											
Potential outliers is: 0.28											
For 1% Significance Level, there is 1 Potential Outlier											
Potential outliers is: 0.28											

Rosner's Outlier Test for Fluoride (mw-64)

Mean	**1.437**
Standard Deviation	**0.0792**
Number of data	**27**
Number of suspected outliers	**5**

#	Mean	sd	Potential outlier	Obs. Number	Test value	Critical value (5%)	Critical value (1%)
1	1.437	0.0777	1.6	23	2.098	2.86	3.18
2	1.431	0.0736	1.6	27	2.3	2.84	3.16
3	1.424	0.0663	1.3	4	1.869	2.82	3.14
4	1.429	0.0624	1.3	9	2.07	2.8	3.11
5	1.435	0.0573	1.3	22	2.353	2.78	3.09

For 5% Significance Level, there is no Potential Outlier

For 1% Significance Level, there is no Potential Outlier

Rosner's Outlier Test for Fluoride (mw-65)

Mean	**1.852**
Standard Deviation	**0.163**
Number of data	**27**
Number of suspected outliers	**5**

			Potential	Obs.	Test	Critical	Critical

Appendix B
Outlier Statistics

#	Mean	sd	outlier	Number	value	value (5%)	value (1%)
1	1.852	0.16	1.5	24	2.205	2.86	3.18
2	1.865	0.15	1.5	26	2.444	2.84	3.16
3	1.88	0.132	1.6	9	2.117	2.82	3.14
4	1.892	0.121	2.1	23	1.718	2.8	3.11
5	1.883	0.115	1.7	4	1.582	2.78	3.09

For 5% Significance Level, there is no Potential Outlier

For 1% Significance Level, there is no Potential Outlier

Rosner's Outlier Test for Sulfate (mw-62)

Mean	**3416**
Standard Deviation	**251.1**
Number of data	**25**

Appendix B
Summary Statistics

General Statistics on Uncensored Data

Date/Time of Computation ProUCL 5.13/23/2023 6:56:25 PM

User Selected Options

From File CWTP_ProUCLUpload_200230323_a.xls

Full Precision OFF

From File: CWTP_ProUCLUpload_200230323_a.xls

General Statistics for Censored Data Set (with NDs) using Kaplan Meier Method

Variable	NumObs	# Missing	Num Ds	NumNDs	% NDs	Min ND	Max ND	KM Mean	KM Var	KM SD	KM CV
Boron (mw-62)	30	1	30	0	0.00%	N/A	N/A	2.077	0.0343	0.185	0.0891
Boron (mw-63)	28	2	28	0	0.00%	N/A	N/A	1.534	0.0926	0.304	0.198
Boron (mw-64)	27	0	27	0	0.00%	N/A	N/A	0.579	0.00351	0.0592	0.102
Boron (mw-65)	30	0	30	0	0.00%	N/A	N/A	0.755	0.00947	0.0973	0.129
Calcium (mw-62)	29	2	29	0	0.00%	N/A	N/A	532.4	947.5	30.78	0.0578
Calcium (mw-63)	28	2	28	0	0.00%	N/A	N/A	505.7	3499	59.16	0.117
Calcium (mw-64)	27	0	27	0	0.00%	N/A	N/A	84.81	36.77	6.064	0.0715
Calcium (mw-65)	27	3	27	0	0.00%	N/A	N/A	110.6	730.9	27.03	0.245
Chloride (mw-62)	25	6	25	0	0.00%	N/A	N/A	128.8	697.1	26.4	0.205
Chloride (mw-63)	25	5	25	0	0.00%	N/A	N/A	93.32	77.89	8.826	0.0946
Chloride (mw-64)	25	2	25	0	0.00%	N/A	N/A	50.88	5.027	2.242	0.0441
Chloride (mw-65)	25	5	25	0	0.00%	N/A	N/A	59.2	328.8	18.13	0.306
Fluoride (mw-62)	28	3	28	0	0.00%	N/A	N/A	1.536	0.143	0.378	0.246
Fluoride (mw-63)	27	3	27	0	0.00%	N/A	N/A	1.899	0.151	0.389	0.205
Fluoride (mw-64)	27	0	27	0	0.00%	N/A	N/A	1.437	0.00627	0.0792	0.0551
Fluoride (mw-65)	27	3	27	0	0.00%	N/A	N/A	1.852	0.0264	0.163	0.0878
Sulfate (mw-62)	25	6	25	0	0.00%	N/A	N/A	3416	63067	251.1	0.0735
Sulfate (mw-63)	25	5	25	0	0.00%	N/A	N/A	2616	263067	512.9	0.196
Sulfate (mw-64)	25	2	25	0	0.00%	N/A	N/A	355.2	13084	114.4	0.322
Sulfate (mw-65)	25	5	25	0	0.00%	N/A	N/A	496.4	23066	151.9	0.306
DissolvedSolids (mw-62)	27	4	27	0	0.00%	N/A	N/A	5644	666410	816.3	0.145
DissolvedSolids (mw-63)	27	3	27	0	0.00%	N/A	N/A	4193	270712	520.3	0.124
DissolvedSolids (mw-64)	27	0	27	0	0.00%	N/A	N/A	774.8	3134	55.98	0.0722
DissolvedSolids (mw-65)	27	3	27	0	0.00%	N/A	N/A	1044	62479	250	0.239
Field_pH (mw-62)	30	1	30	0	0.00%	N/A	N/A	6.645	0.0482	0.219	0.033

Appendix B
Summary Statistics

User Selected Options

Field_pH (mw-63)	30	0	30	0	0.00%	N/A	N/A	6.8	0.0283	0.168	0.0247
Field_pH (mw-64)	27	0	27	0	0.00%	N/A	N/A	7.456	0.0156	0.125	0.0168
Field_pH (mw-65)	30	0	30	0	0.00%	N/A	N/A	7.259	0.0538	0.232	0.032

General Statistics for Raw Data Sets using Detected Data Only

Variable	NumObs	# Missing	Minimum	Maximum	Mean	Median	Var	SD	MAD/0.675	Skewness	CV
Boron (mw-62)	30	1	1.8	2.5	2.077	2.1	0.0343	0.185	0.297	0.332	0.0891
Boron (mw-63)	28	2	0.83	2	1.534	1.5	0.0926	0.304	0.297	-0.419	0.198
Boron (mw-64)	27	0	0.47	0.67	0.579	0.58	0.00351	0.0592	0.0741	-0.238	0.102
Boron (mw-65)	30	0	0.57	0.98	0.755	0.76	0.00947	0.0973	0.0667	-0.0468	0.129
Calcium (mw-62)	29	2	480	610	532.4	530	947.5	30.78	29.65	0.624	0.0578
Calcium (mw-63)	28	2	310	580	505.7	525	3499	59.16	37.06	-1.749	0.117
Calcium (mw-64)	27	0	70	93	84.81	86	36.77	6.064	4.448	-1.203	0.0715
Calcium (mw-65)	27	3	82	200	110.6	100	730.9	27.03	14.83	2.09	0.245
Chloride (mw-62)	25	6	82	200	128.8	120	697.1	26.4	14.83	1.183	0.205
Chloride (mw-63)	25	5	77	110	93.32	95	77.89	8.826	7.413	-0.191	0.0946
Chloride (mw-64)	25	2	44	53	50.88	52	5.027	2.242	1.483	-1.694	0.0441
Chloride (mw-65)	25	5	48	140	59.2	53	328.8	18.13	1.483	4.02	0.306
Fluoride (mw-62)	28	3	1.2	3.3	1.536	1.5	0.143	0.378	0.148	3.949	0.246
Fluoride (mw-63)	27	3	0.28	2.5	1.899	2	0.151	0.389	0.148	-2.777	0.205
Fluoride (mw-64)	27	0	1.3	1.6	1.437	1.4	0.00627	0.0792	0.148	0.211	0.0551
Fluoride (mw-65)	27	3	1.5	2.1	1.852	1.9	0.0264	0.163	0.148	-0.702	0.0878
Sulfate (mw-62)	25	6	2800	4000	3416	3400	63067	251.1	148.3	0.575	0.0735
Sulfate (mw-63)	25	5	1500	4300	2616	2700	263067	512.9	148.3	0.729	0.196
Sulfate (mw-64)	25	2	230	870	355.2	340	13084	114.4	29.65	4.013	0.322
Sulfate (mw-65)	25	5	300	980	496.4	460	23066	151.9	59.3	1.886	0.306
DissolvedSolids (mw-62)	27	4	2400	7100	5644	5700	666410	816.3	296.5	-2.264	0.145
DissolvedSolids (mw-63)	27	3	2500	4700	4193	4300	270712	520.3	148.3	-2.127	0.124
DissolvedSolids (mw-64)	27	0	610	890	774.8	790	3134	55.98	14.83	-1.194	0.0722
DissolvedSolids (mw-65)	27	3	540	1900	1044	1000	62479	250	88.95	1.636	0.239
Field_pH (mw-62)	30	1	6.36	7.4	6.645	6.635	0.0482	0.219	0.193	1.472	0.033
Field_pH (mw-63)	30	0	6.53	7.21	6.8	6.785	0.0283	0.168	0.141	0.466	0.0247
Field_pH (mw-64)	27	0	7.22	7.68	7.456	7.47	0.0156	0.125	0.133	-0.111	0.0168
Field_pH (mw-65)	30	0	6.96	8.27	7.259	7.21	0.0538	0.232	0.133	2.974	0.032

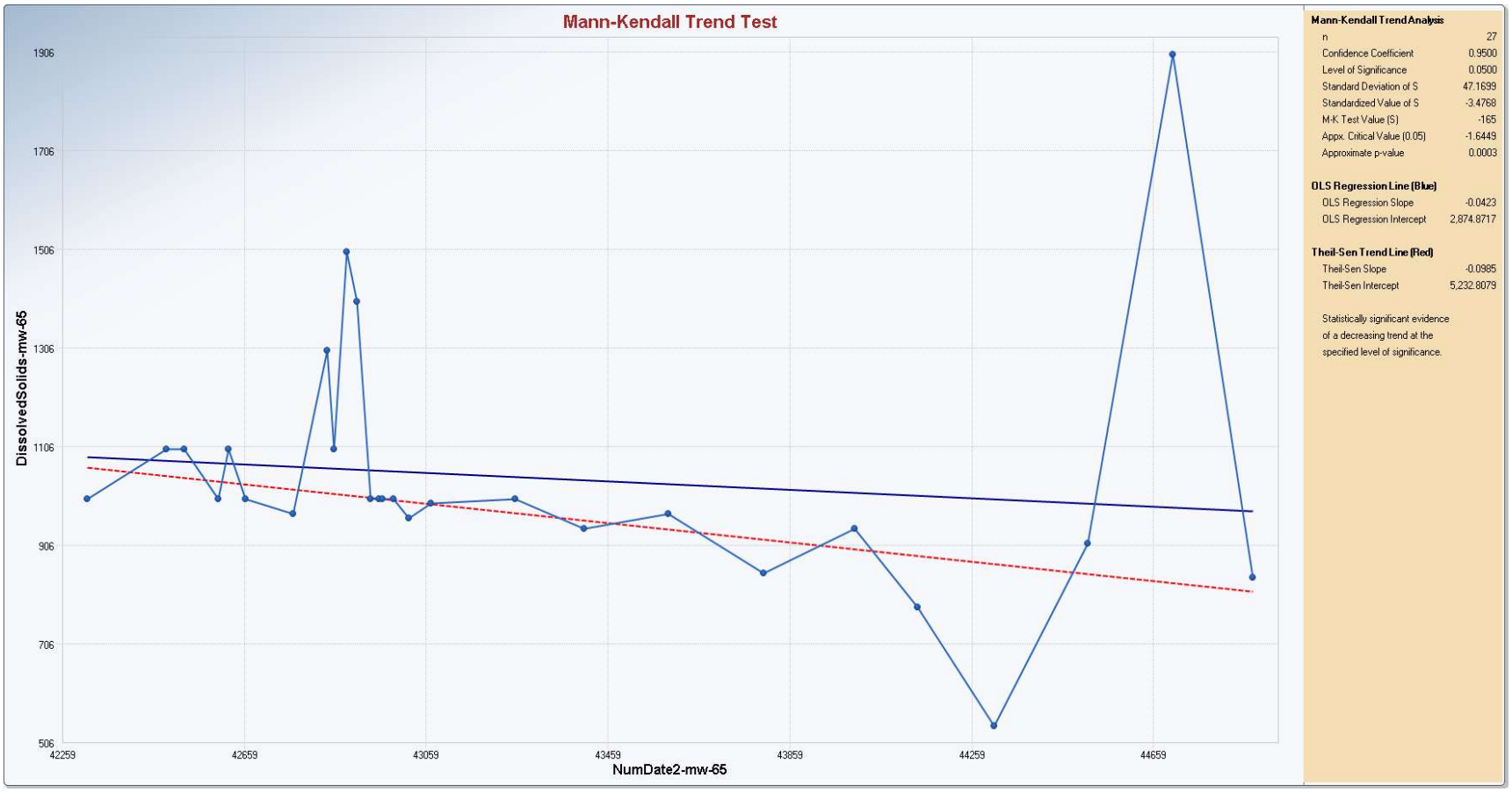
Appendix B
Summary Statistics

User Selected Options

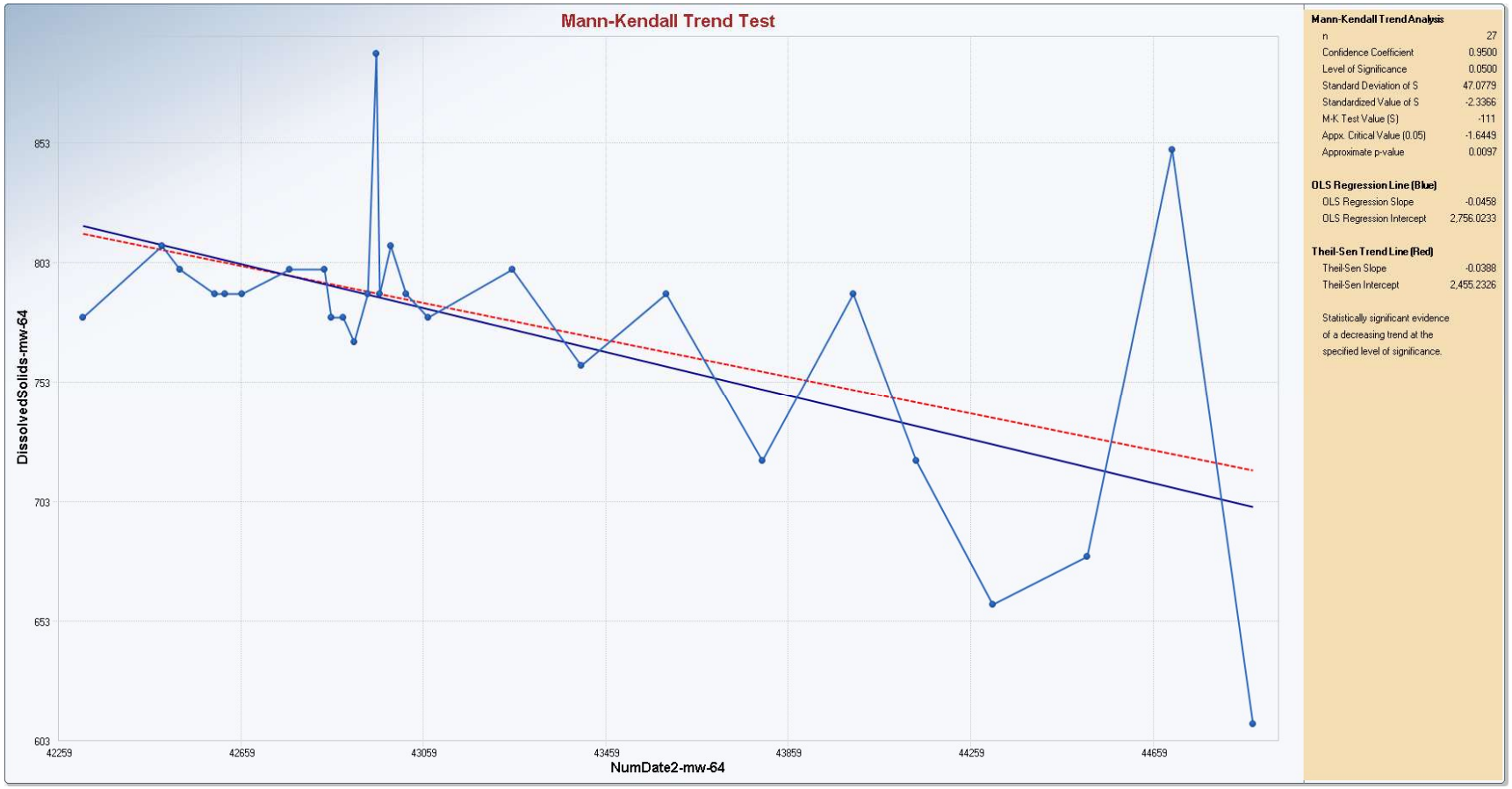
Percentiles using all Detects (Ds) and Non-Detects (NDs)

Variable	NumObs	# Missing	10%ile	20%ile	25%ile(Q1)	50%ile(Q2)	75%ile(Q3)	80%ile	90%ile	95%ile	99%ile
Boron (mw-62)	30	1	1.89	1.9	1.9	2.1	2.2	2.22	2.3	2.355	2.471
Boron (mw-63)	28	2	1.24	1.3	1.375	1.5	1.8	1.8	1.9	1.965	2
Boron (mw-64)	27	0	0.496	0.522	0.54	0.58	0.63	0.64	0.644	0.664	0.67
Boron (mw-65)	30	0	0.61	0.648	0.715	0.76	0.798	0.83	0.861	0.898	0.963
Calcium (mw-62)	29	2	498	510	510	530	550	558	570	582	604.4
Calcium (mw-63)	28	2	420	482	500	525	542.5	550	550	556.5	574.6
Calcium (mw-64)	27	0	75.4	82	82.5	86	89	89	90	90	92.22
Calcium (mw-65)	27	3	90.8	93.4	95.5	100	110	110	148	167	192.2
Chloride (mw-62)	25	6	110	110	110	120	130	142	168	180	195.2
Chloride (mw-63)	25	5	80.4	87.4	88	95	98	100	100	108	110
Chloride (mw-64)	25	2	48.4	49.8	50	52	52	52.2	53	53	53
Chloride (mw-65)	25	5	51.4	52	52	53	58	59.2	69.8	75.8	124.9
Fluoride (mw-62)	28	3	1.2	1.4	1.4	1.5	1.6	1.6	1.66	1.8	2.895
Fluoride (mw-63)	27	3	1.6	1.8	1.8	2	2.1	2.1	2.14	2.34	2.474
Fluoride (mw-64)	27	0	1.36	1.4	1.4	1.4	1.5	1.5	1.5	1.57	1.6
Fluoride (mw-65)	27	3	1.66	1.7	1.75	1.9	2	2	2	2	2.074
Sulfate (mw-62)	25	6	3240	3300	3300	3400	3500	3520	3720	3960	4000
Sulfate (mw-63)	25	5	1980	2380	2500	2700	2800	2800	2900	2900	3964
Sulfate (mw-64)	25	2	278	300	320	340	360	372	386	390	754.8
Sulfate (mw-65)	25	5	384	408	410	460	500	500	728	780	934.4
DissolvedSolids (mw-62)	27	4	5180	5400	5450	5700	5900	5980	6340	6700	6996
DissolvedSolids (mw-63)	27	3	3440	4200	4200	4300	4500	4500	4540	4670	4700
DissolvedSolids (mw-64)	27	0	704	762	775	790	800	800	810	838	879.6
DissolvedSolids (mw-65)	27	3	846	940	950	1000	1100	1100	1340	1470	1796
Field_pH (mw-62)	30	1	6.41	6.46	6.5	6.635	6.725	6.754	6.901	6.954	7.281
Field_pH (mw-63)	30	0	6.578	6.668	6.693	6.785	6.88	6.896	7.034	7.081	7.175
Field_pH (mw-64)	27	0	7.29	7.32	7.365	7.47	7.54	7.556	7.61	7.631	7.67
Field_pH (mw-65)	30	0	7.078	7.124	7.133	7.21	7.34	7.352	7.41	7.511	8.053

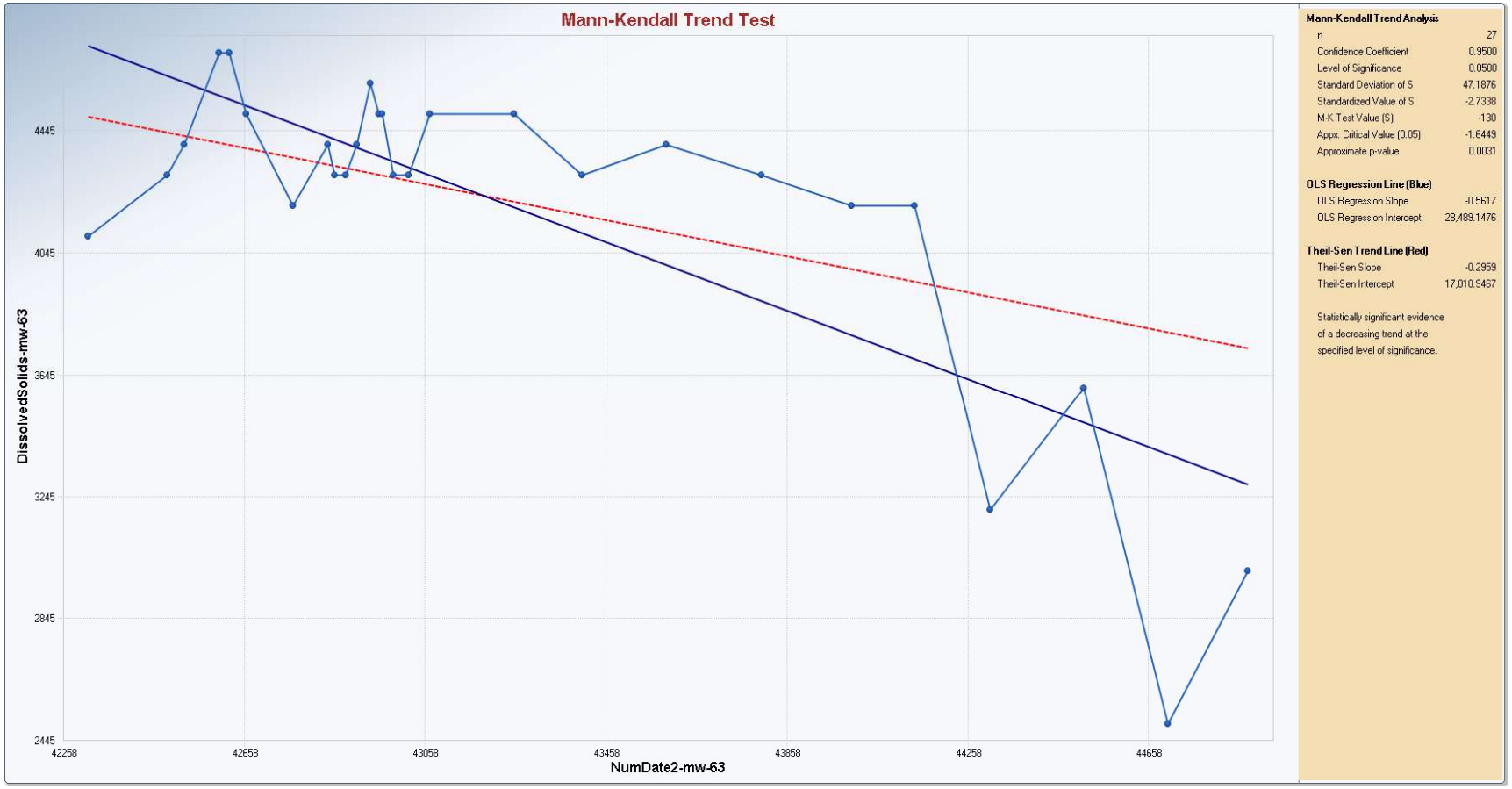
Appendix B
Mann-Kendall Trend Test



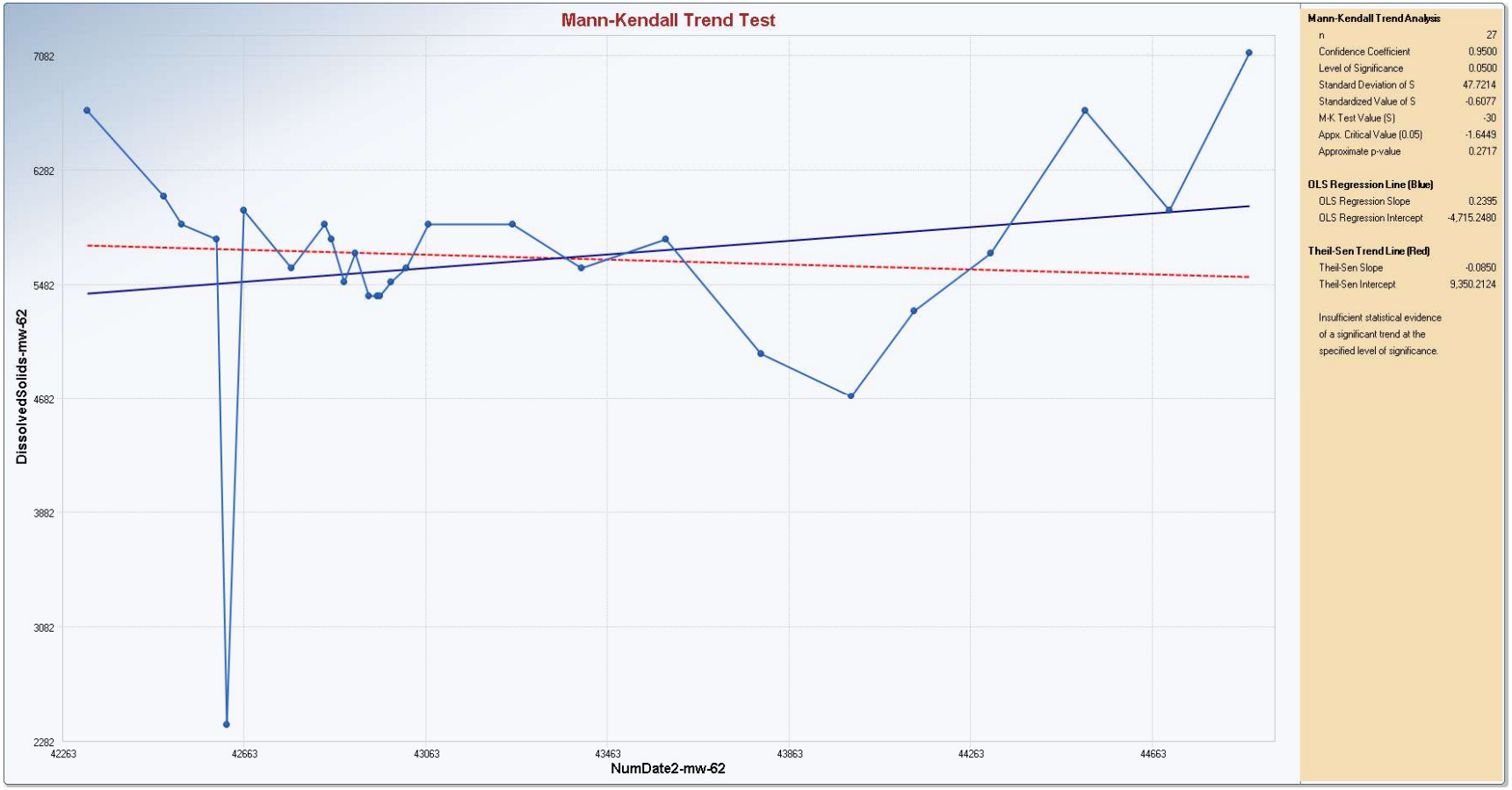
Appendix B
Mann-Kendall Trend Test



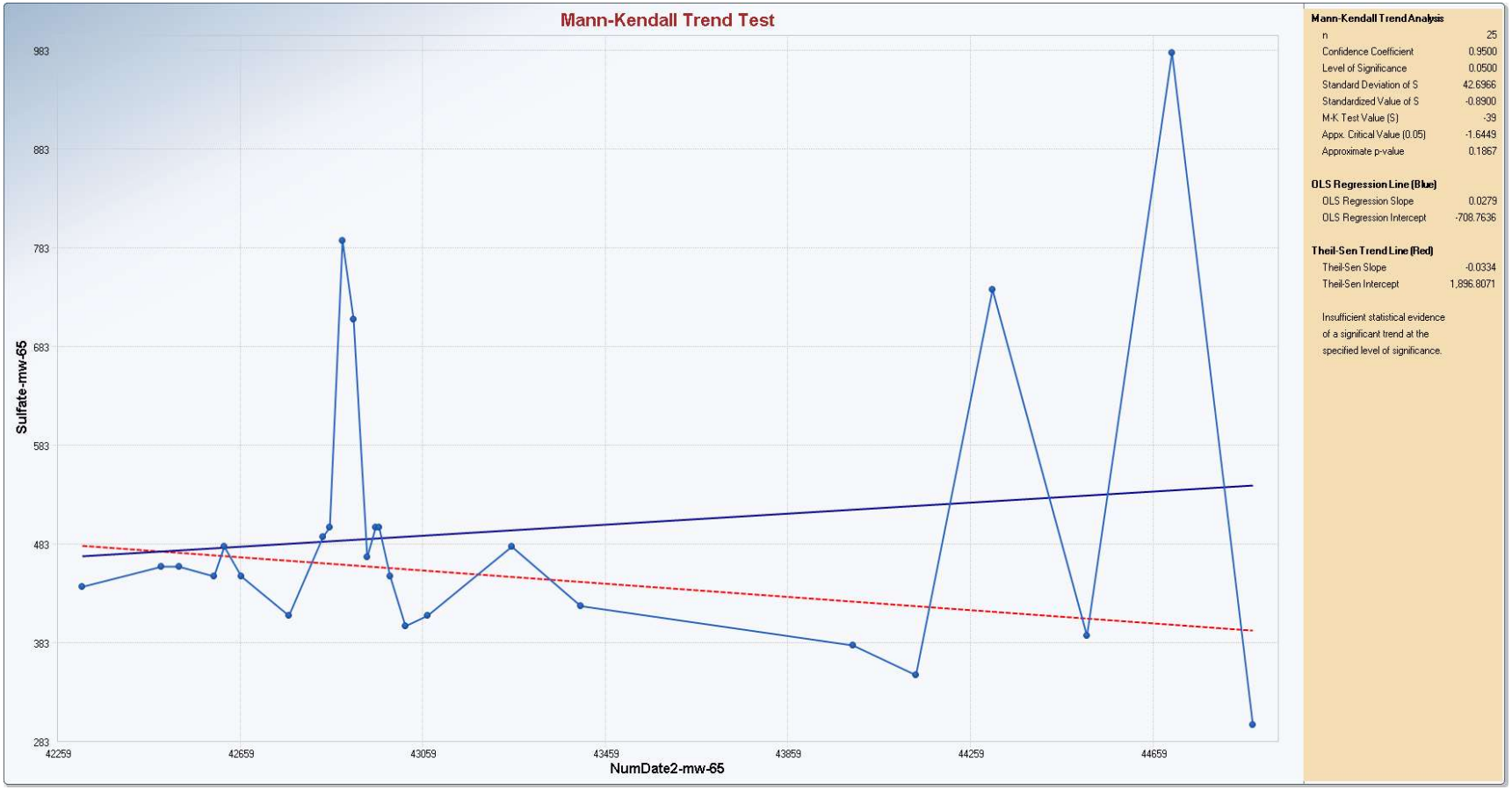
Appendix B
Mann-Kendall Trend Test



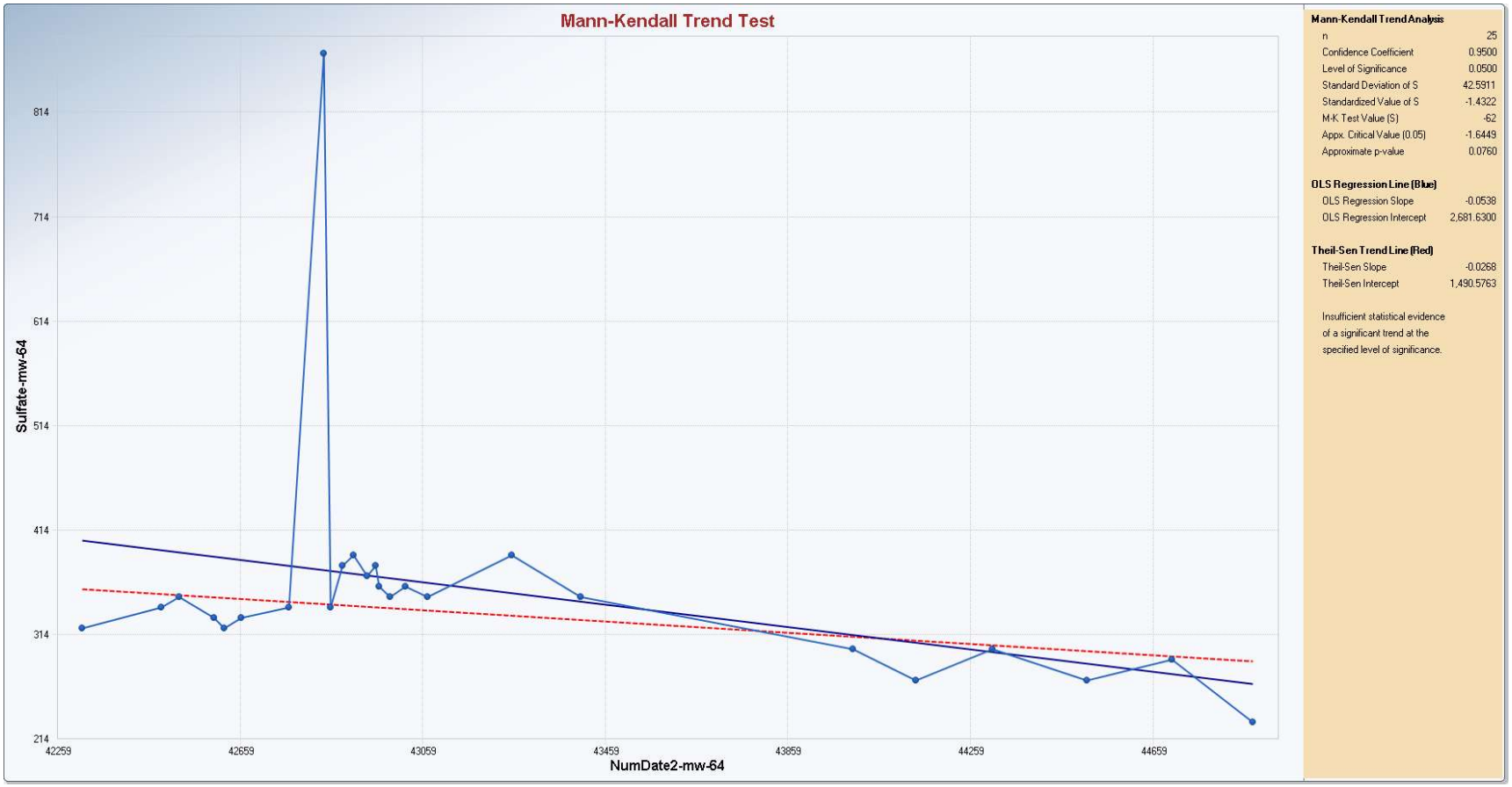
Appendix B
Mann-Kendall Trend Test



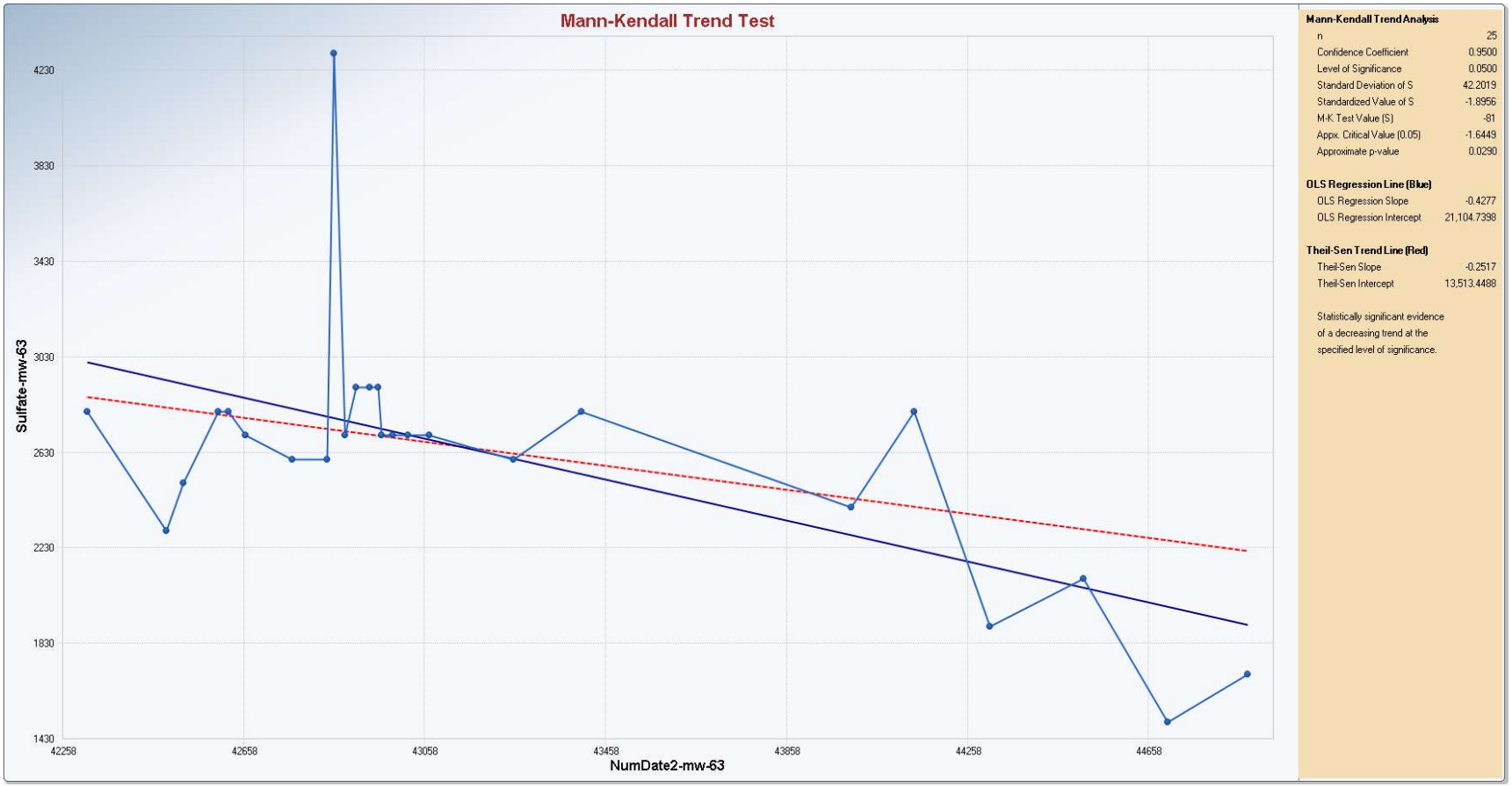
Appendix B
Mann-Kendall Trend Test



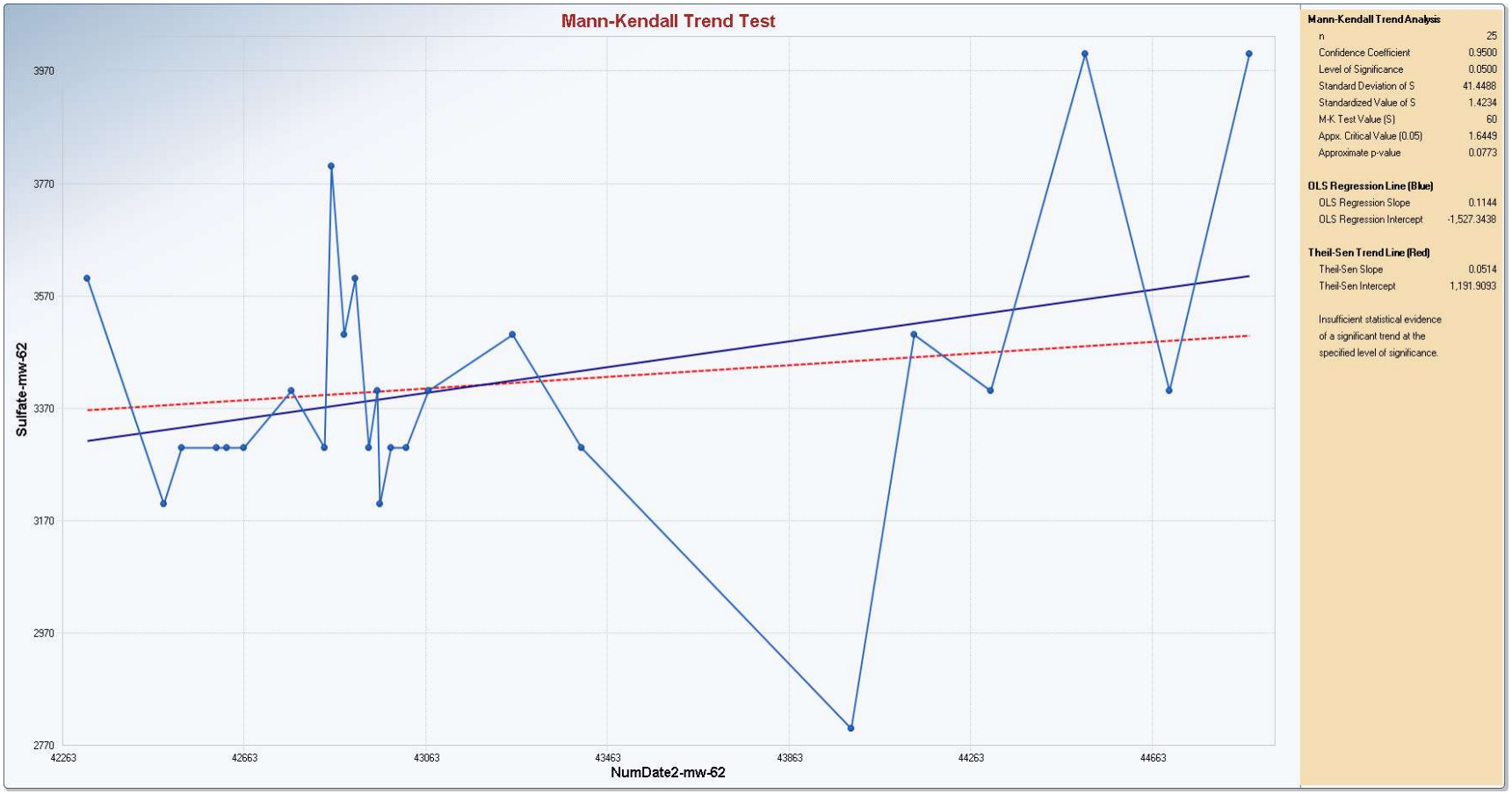
Appendix B
Mann-Kendall Trend Test



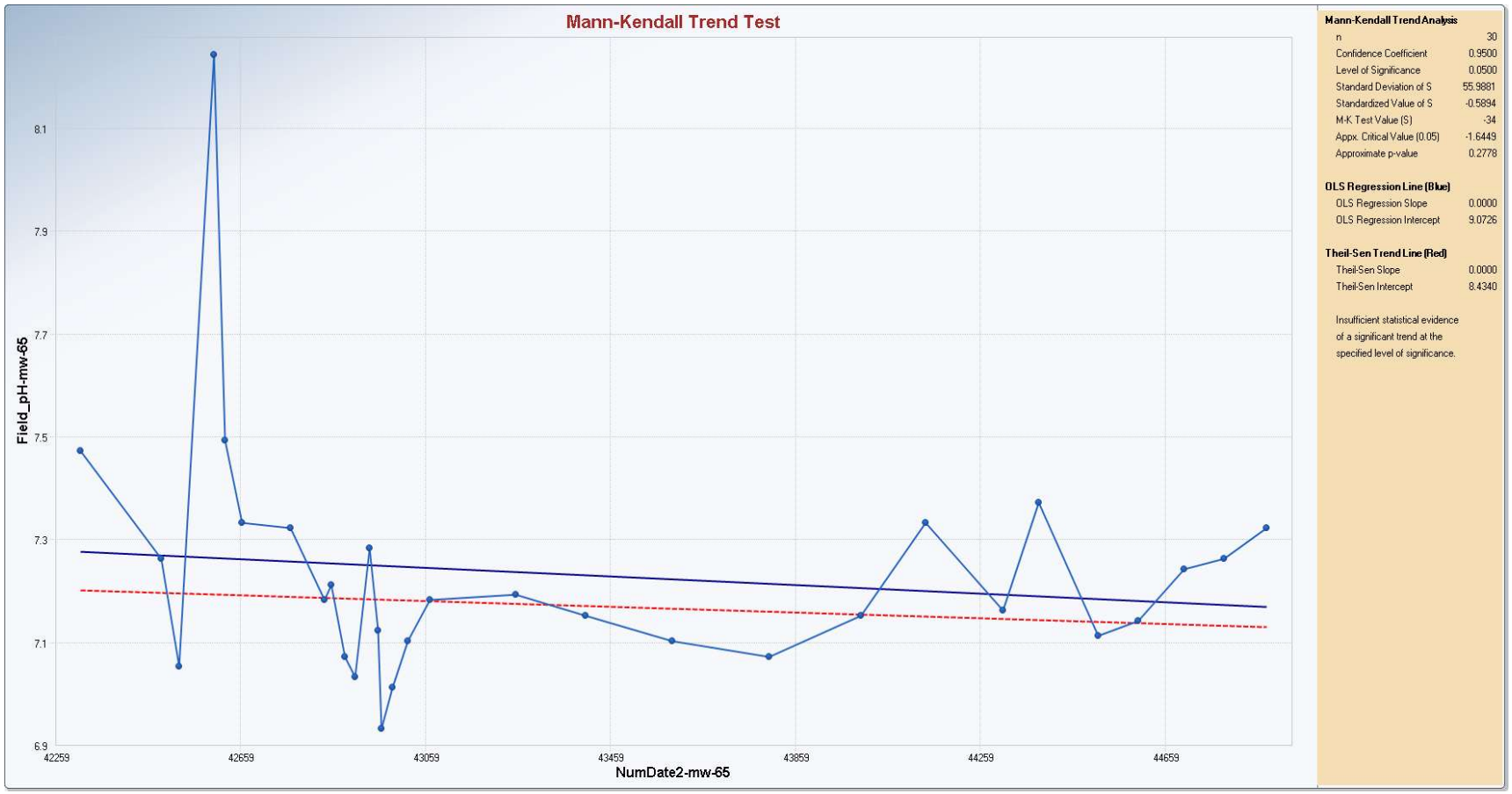
Appendix B
Mann-Kendall Trend Test



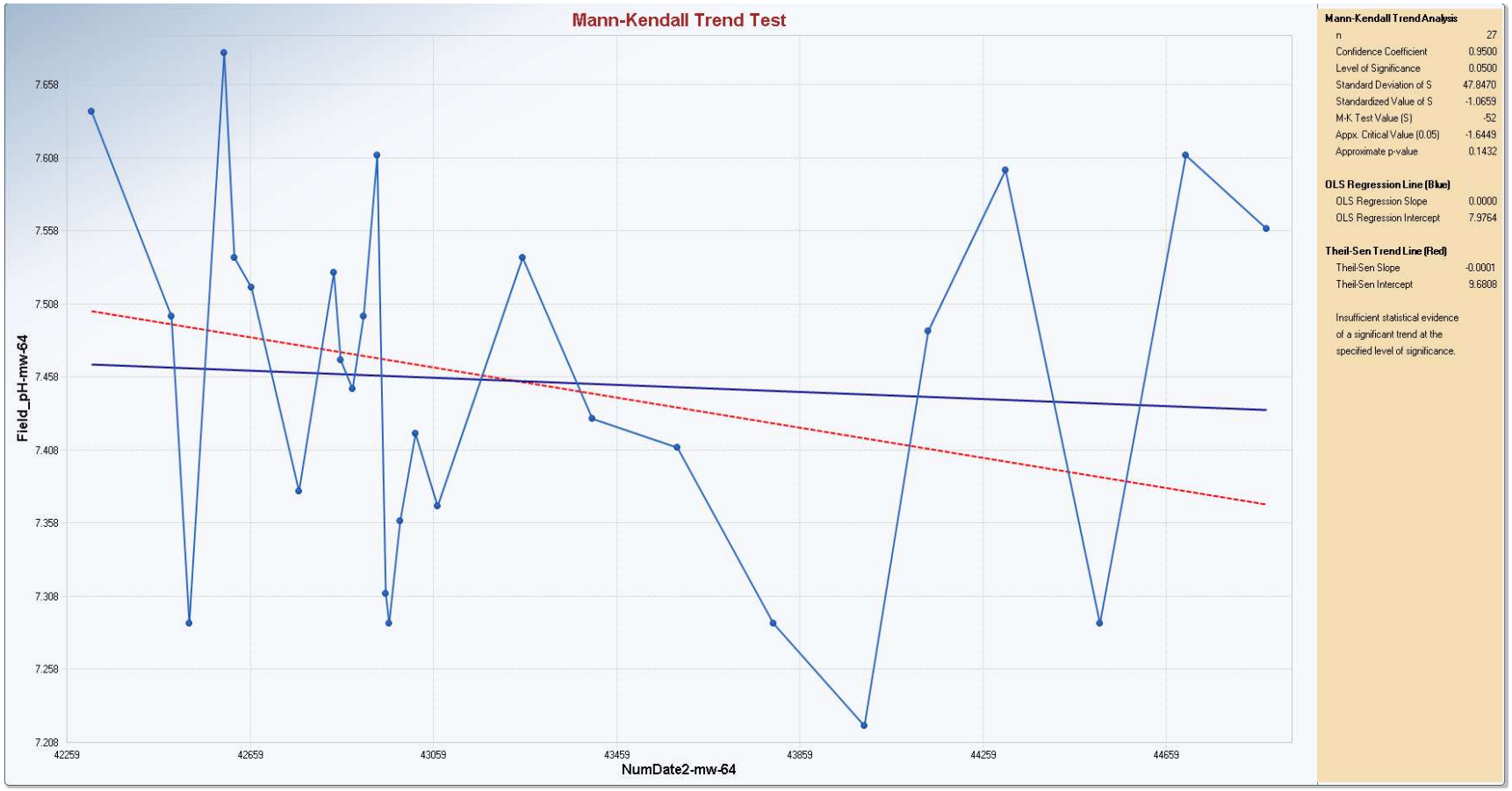
Appendix B
Mann-Kendall Trend Test



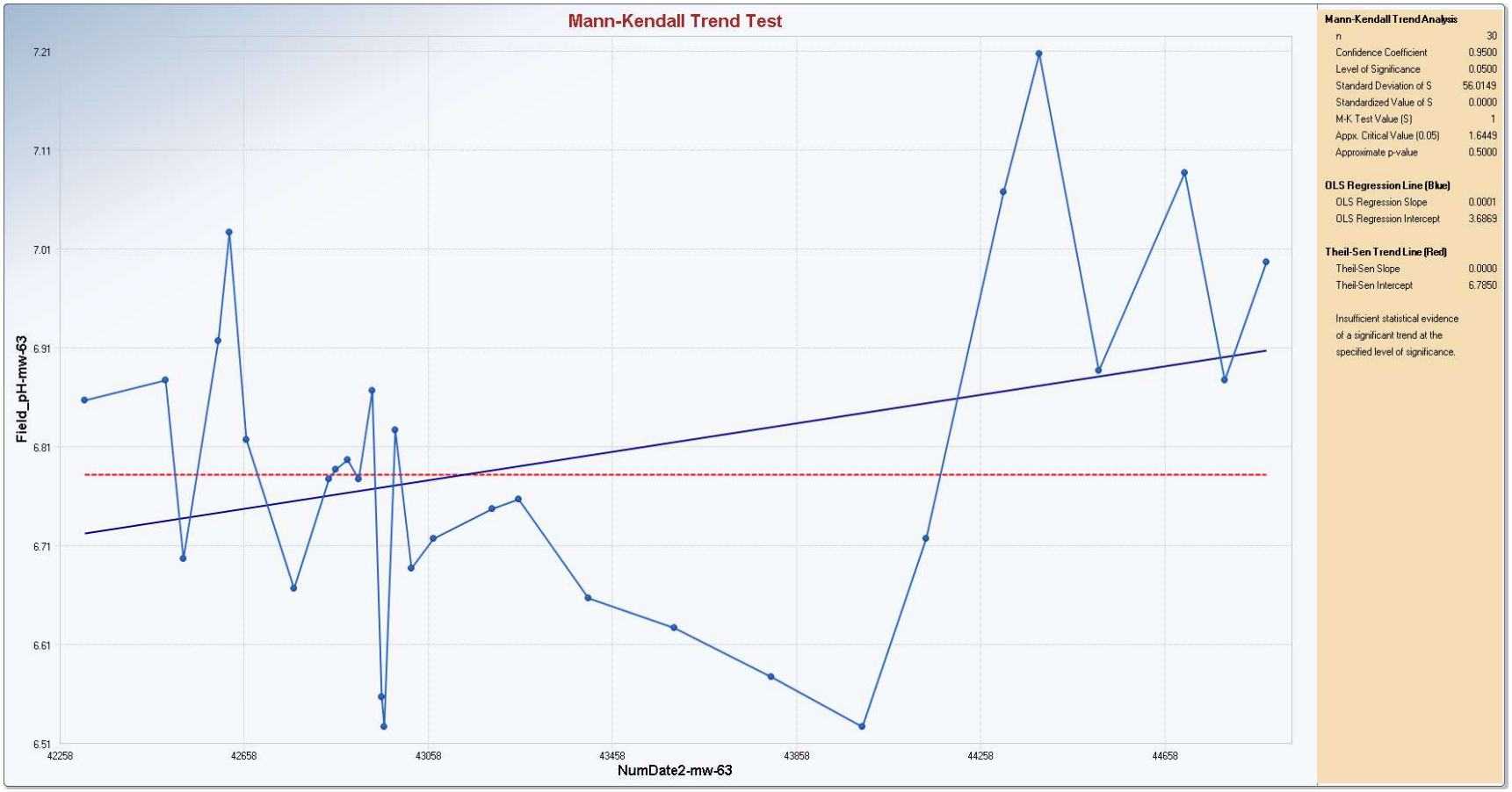
Appendix B
Mann-Kendall Trend Test



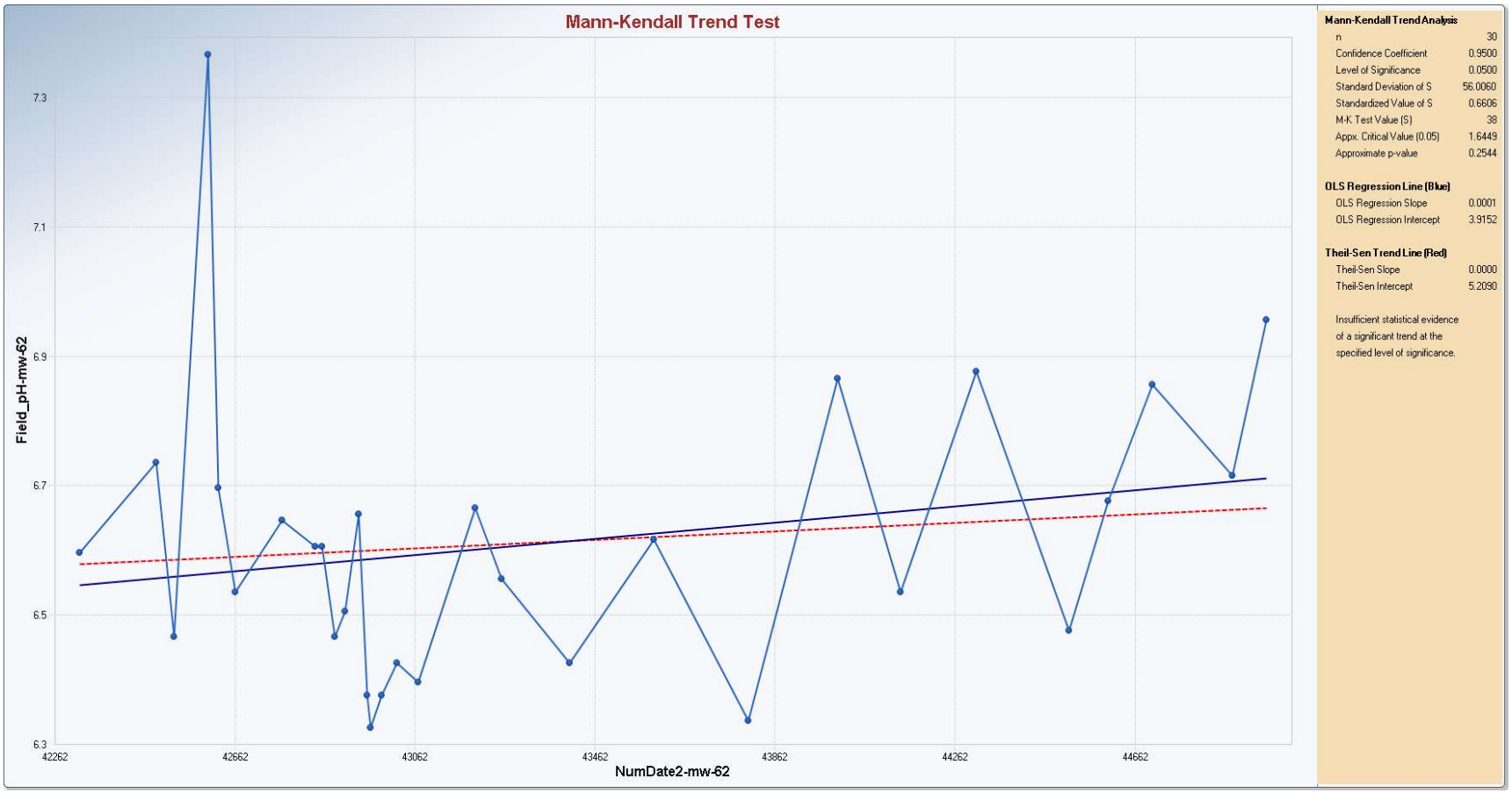
Appendix B
Mann-Kendall Trend Test



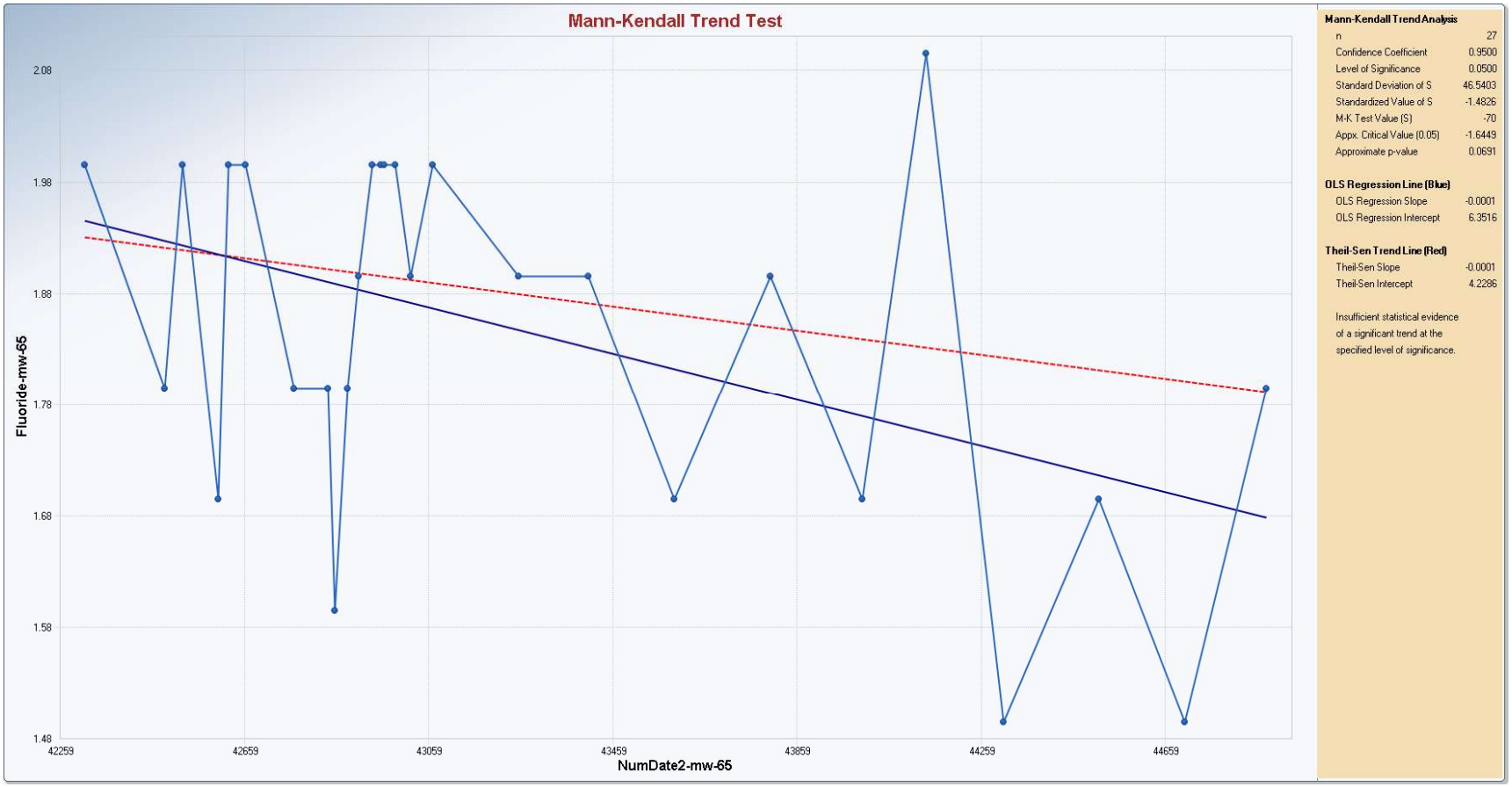
Appendix B
Mann-Kendall Trend Test



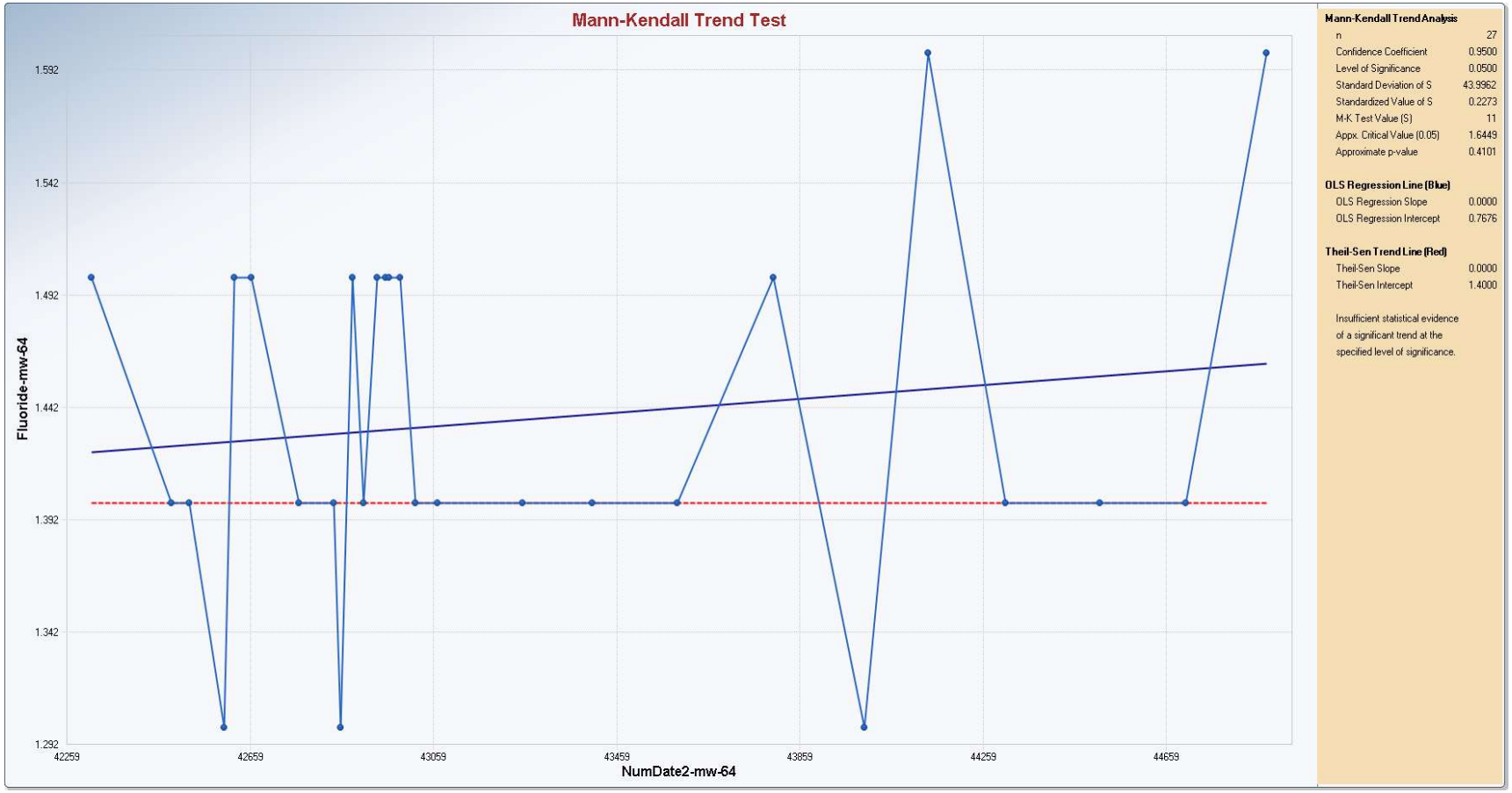
Appendix B
Mann-Kendall Trend Test



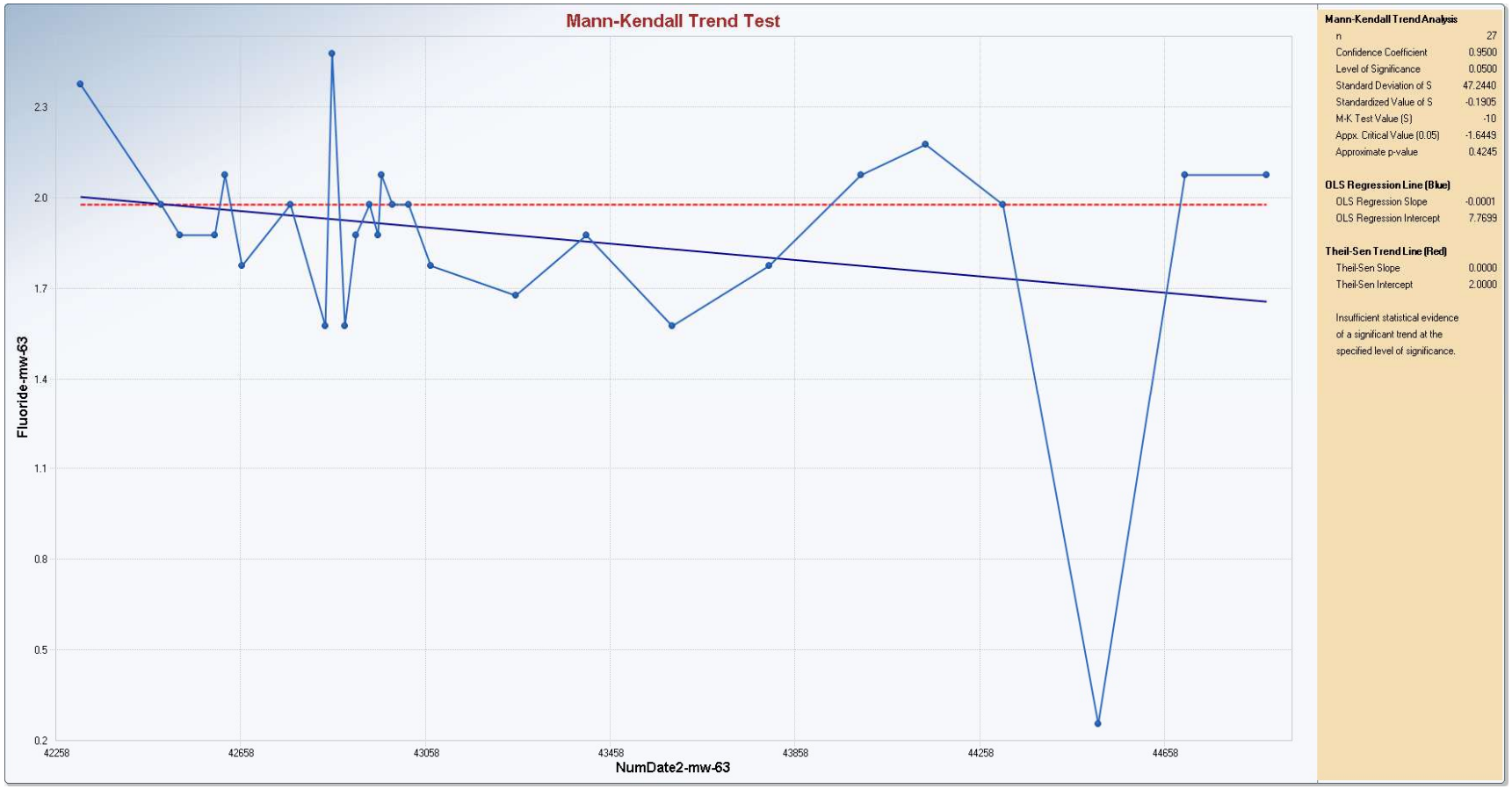
Appendix B
Mann-Kendall Trend Test



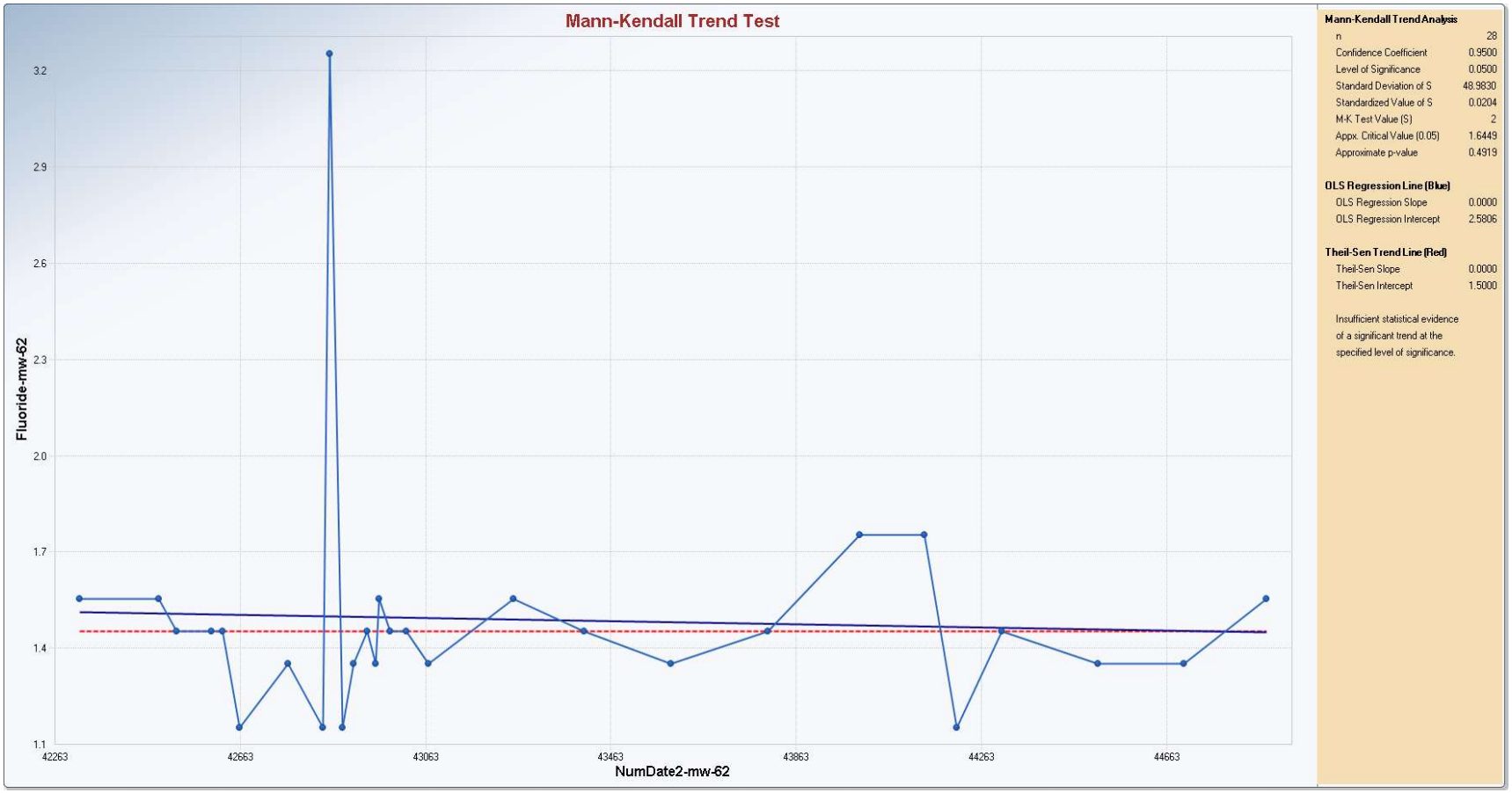
Appendix B
Mann-Kendall Trend Test



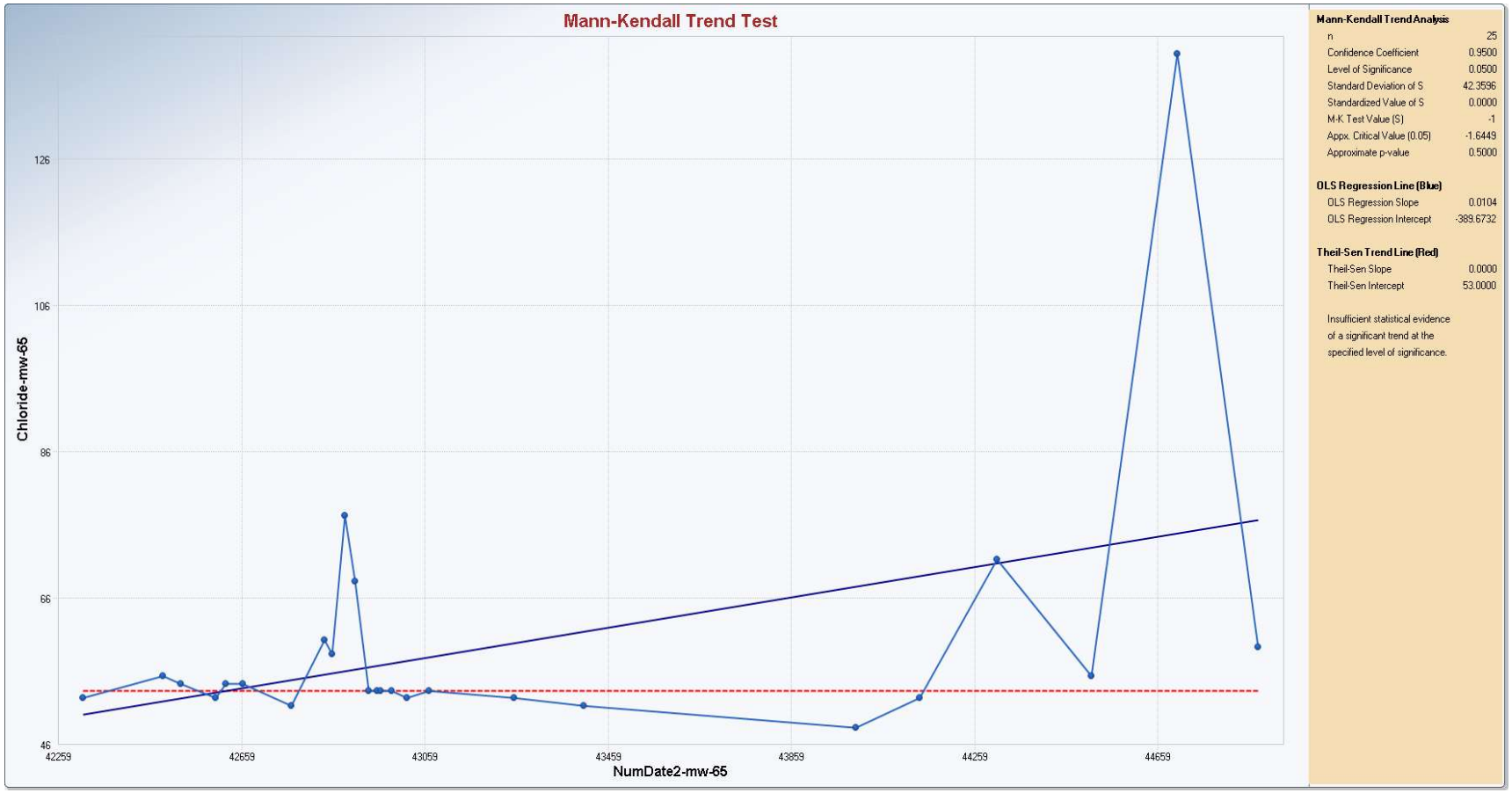
Appendix B
Mann-Kendall Trend Test



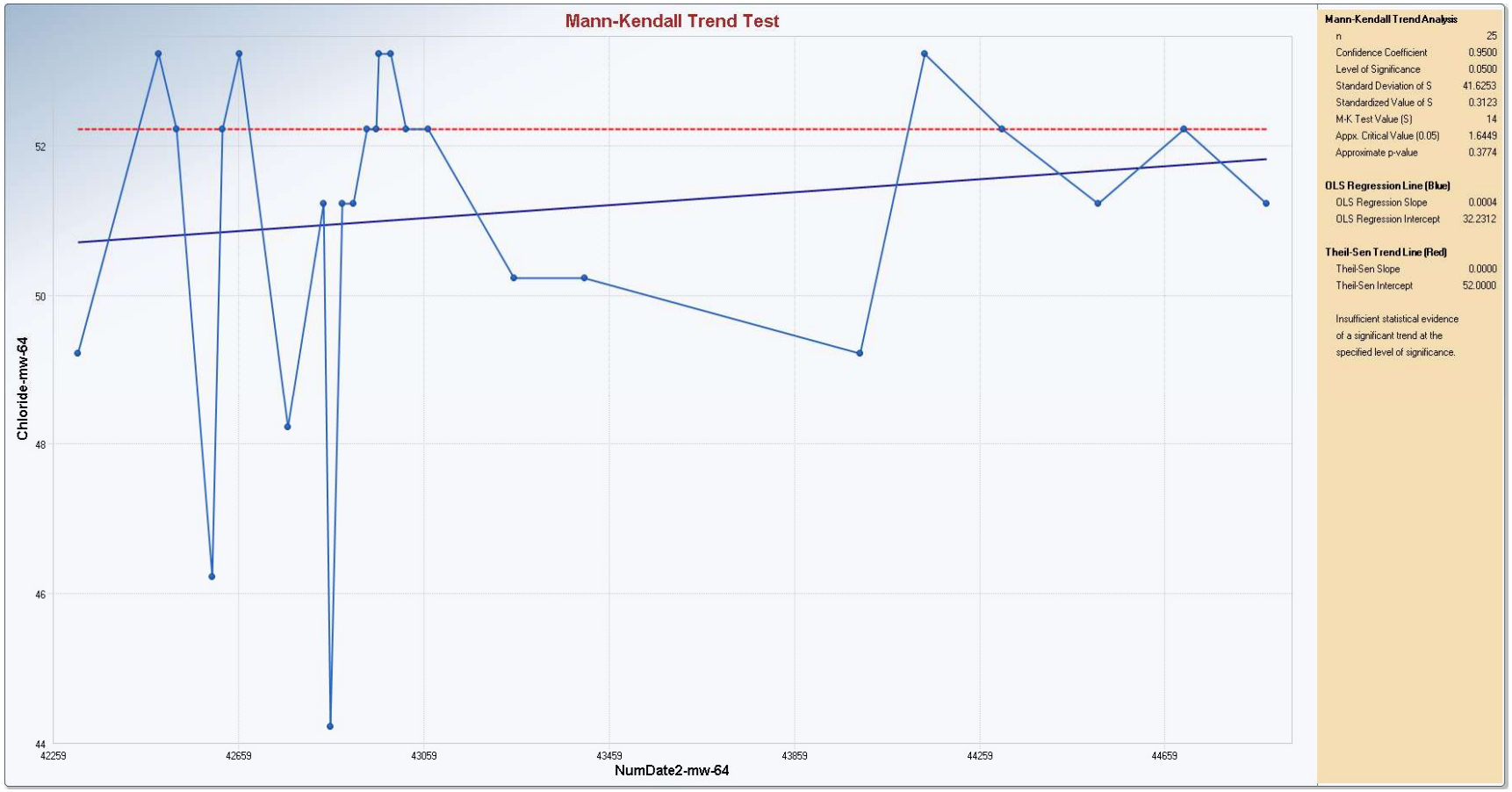
Appendix B
Mann-Kendall Trend Test



Appendix B
Mann-Kendall Trend Test



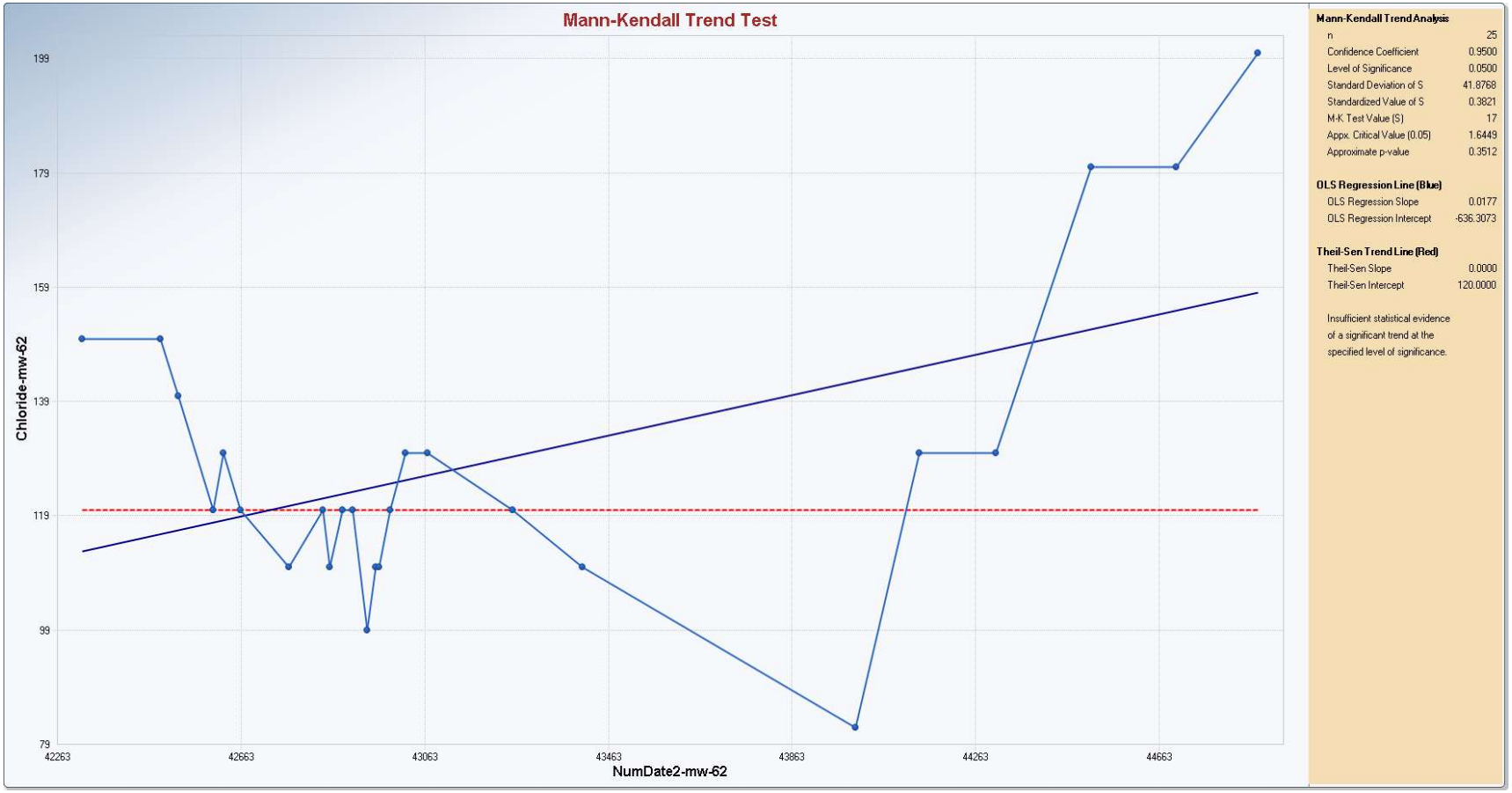
Appendix B
Mann-Kendall Trend Test



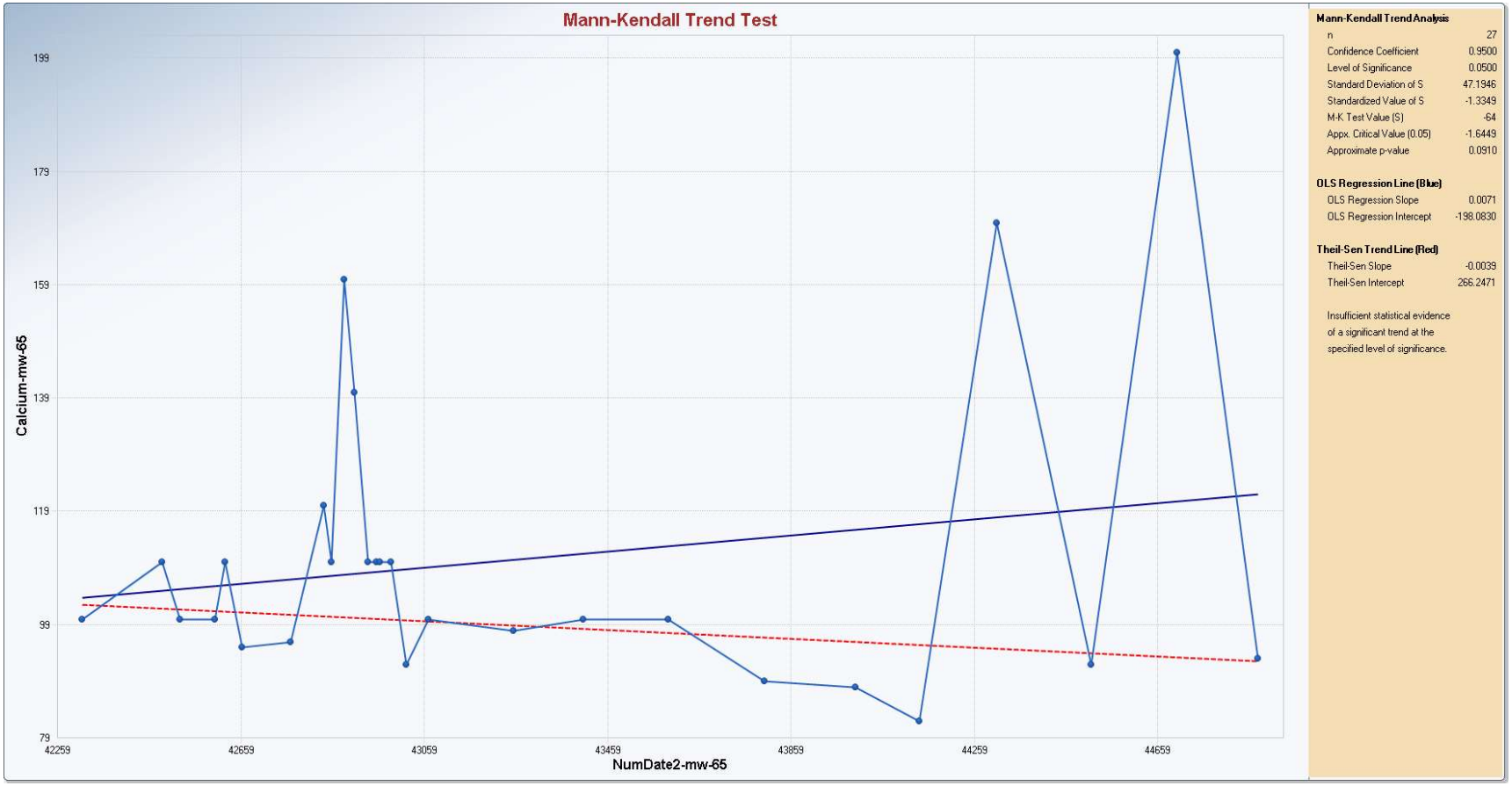
Appendix B
Mann-Kendall Trend Test



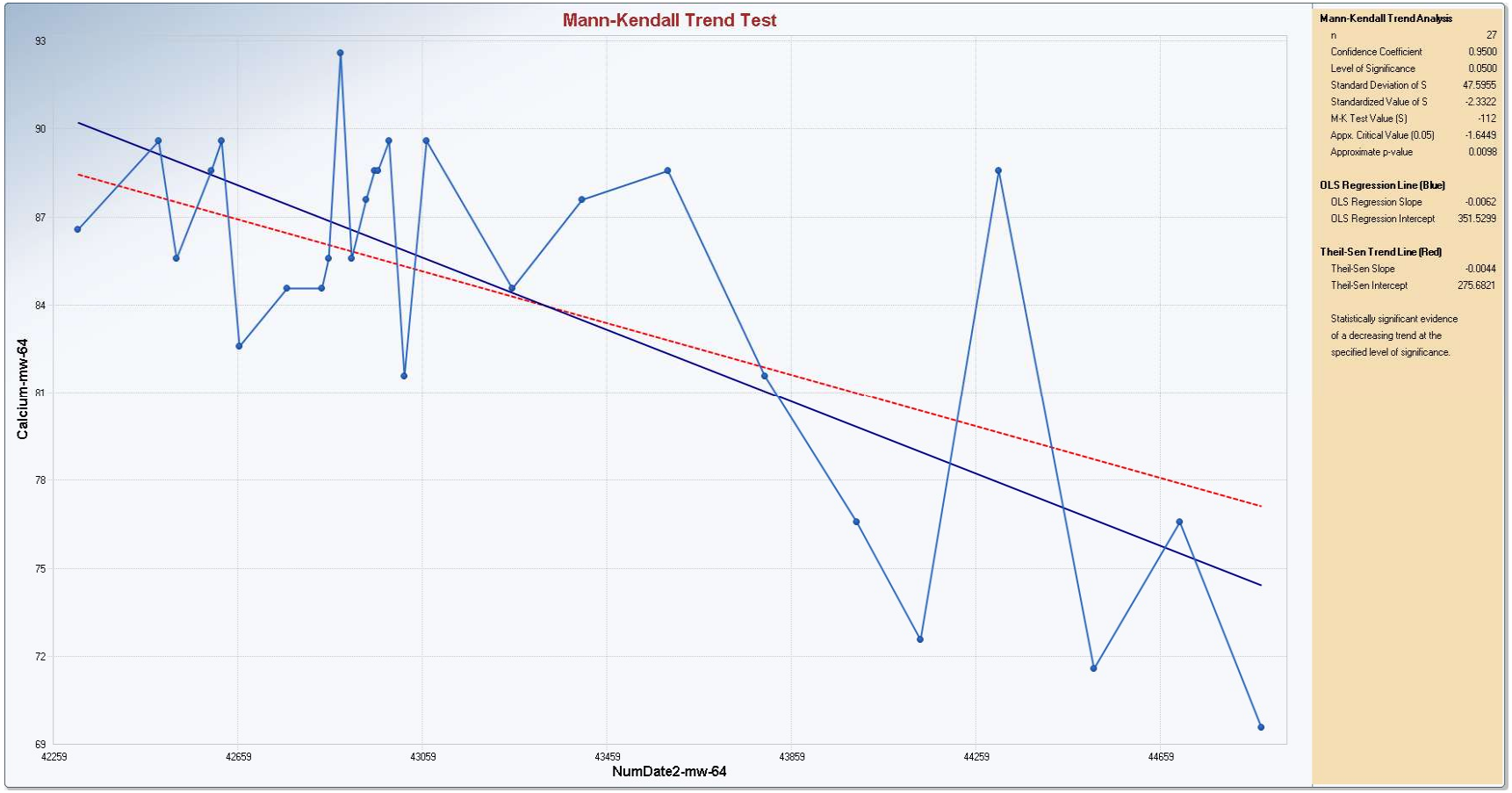
Appendix B
Mann-Kendall Trend Test



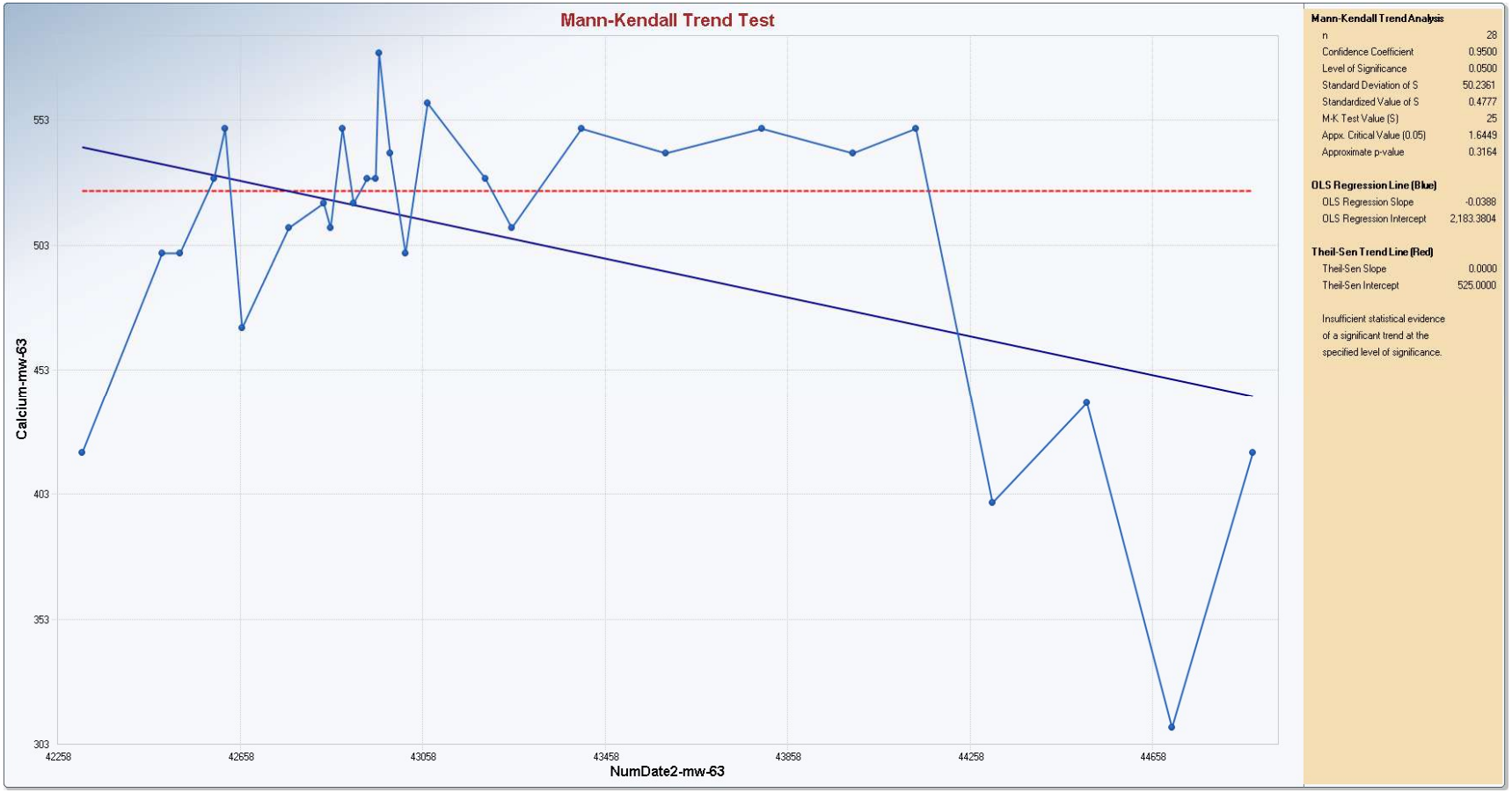
Appendix B
Mann-Kendall Trend Test



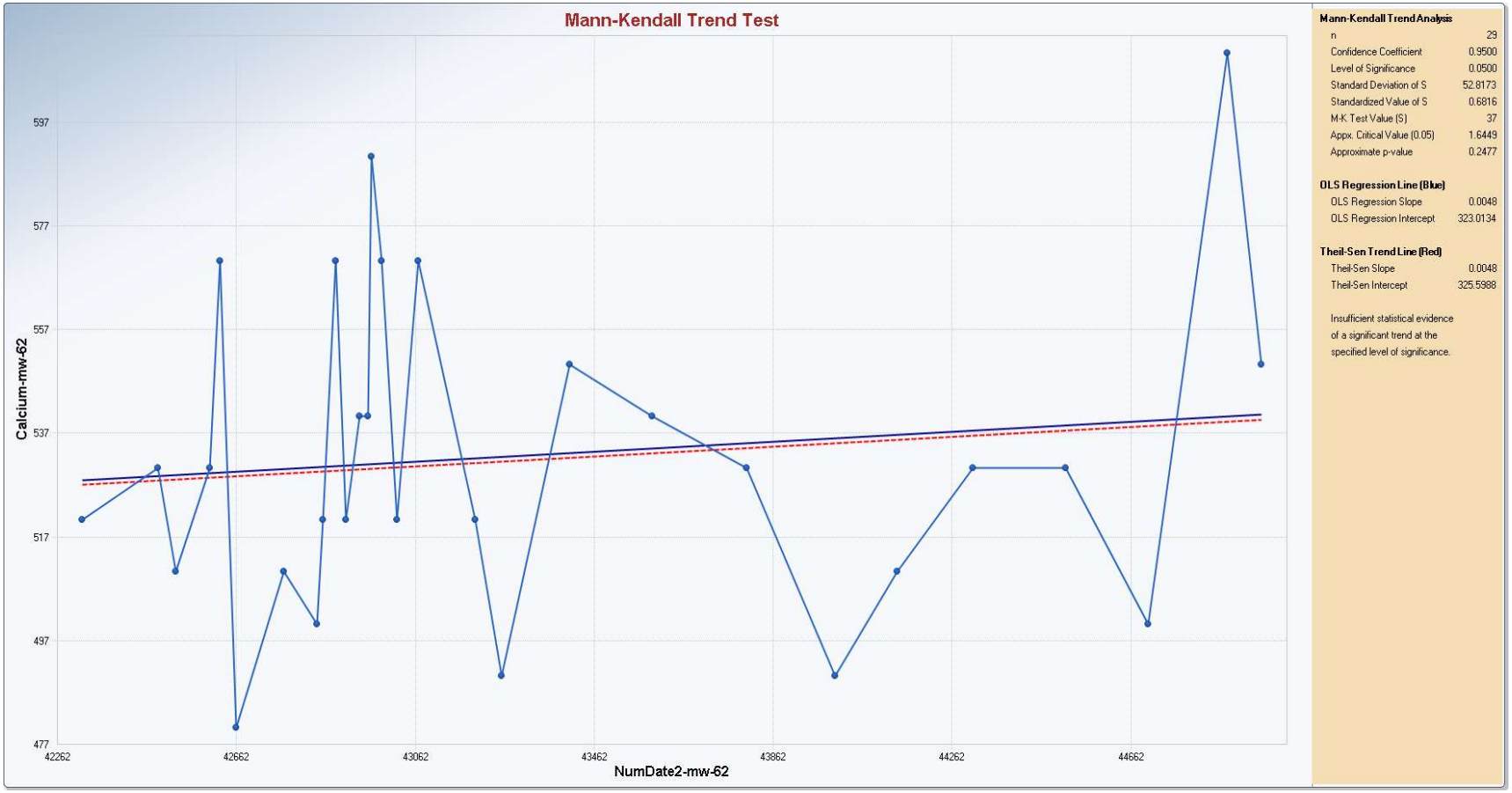
Appendix B
Mann-Kendall Trend Test



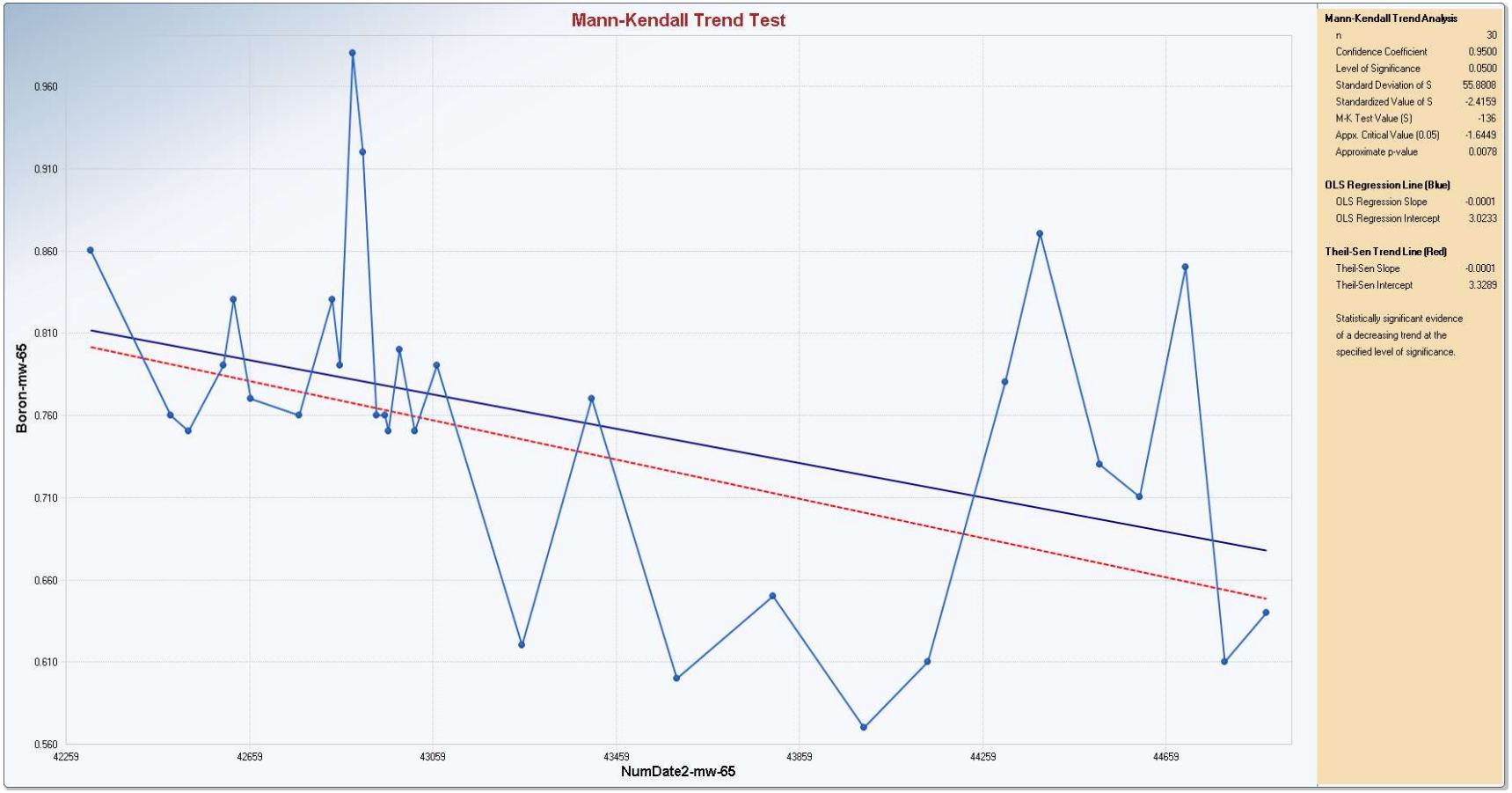
Appendix B
Mann-Kendall Trend Test



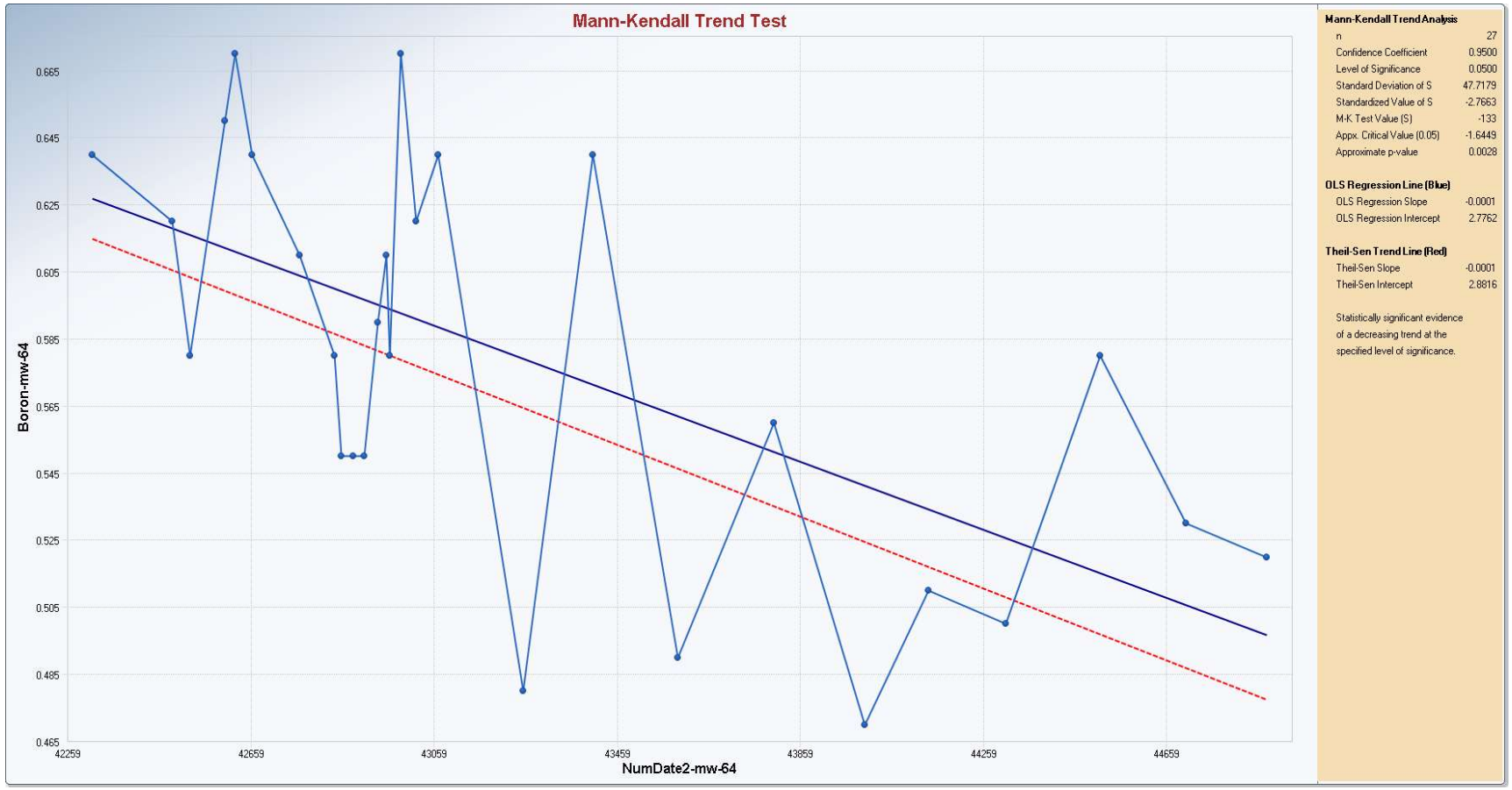
Appendix B
Mann-Kendall Trend Test



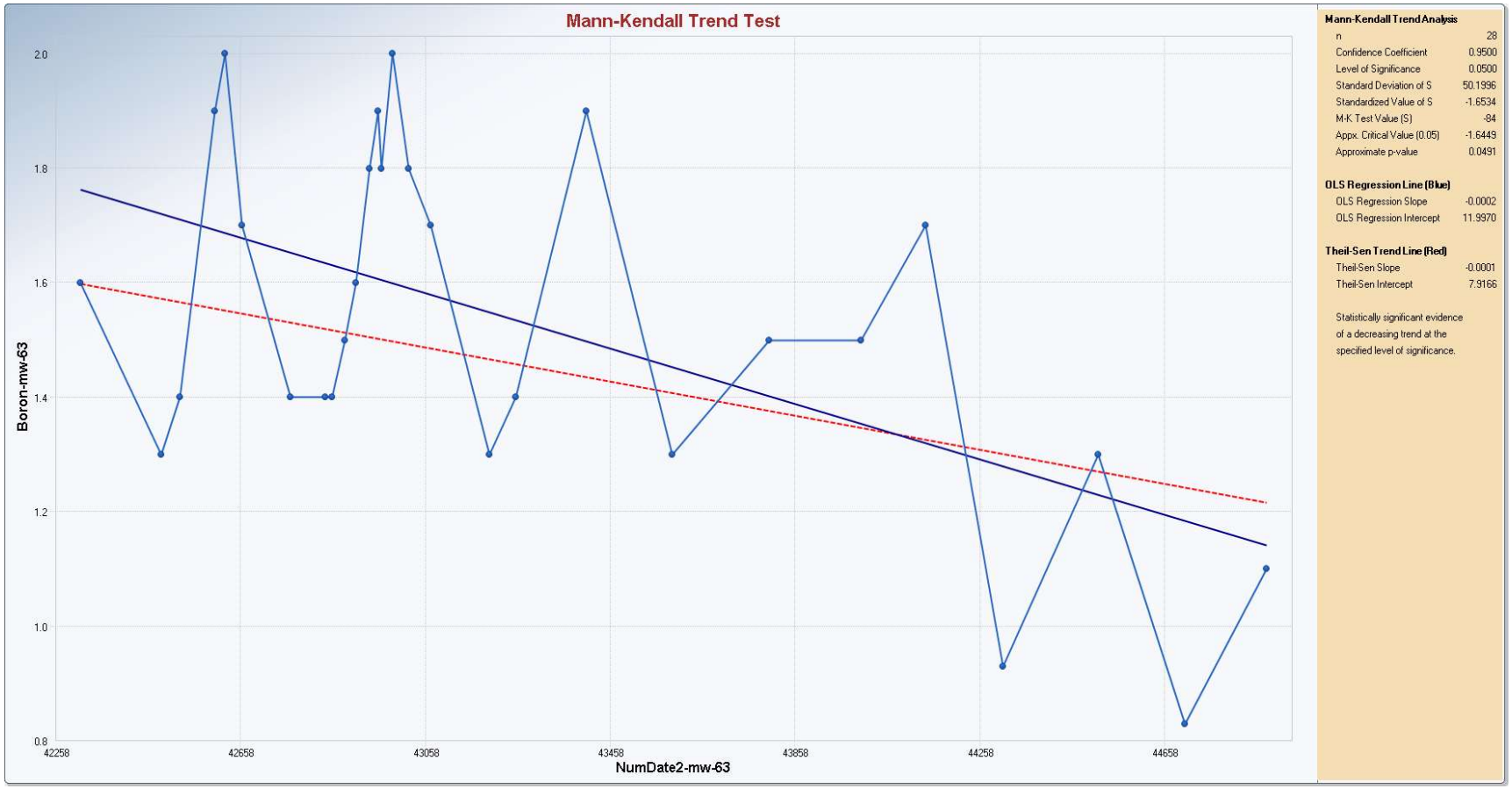
Appendix B
Mann-Kendall Trend Test



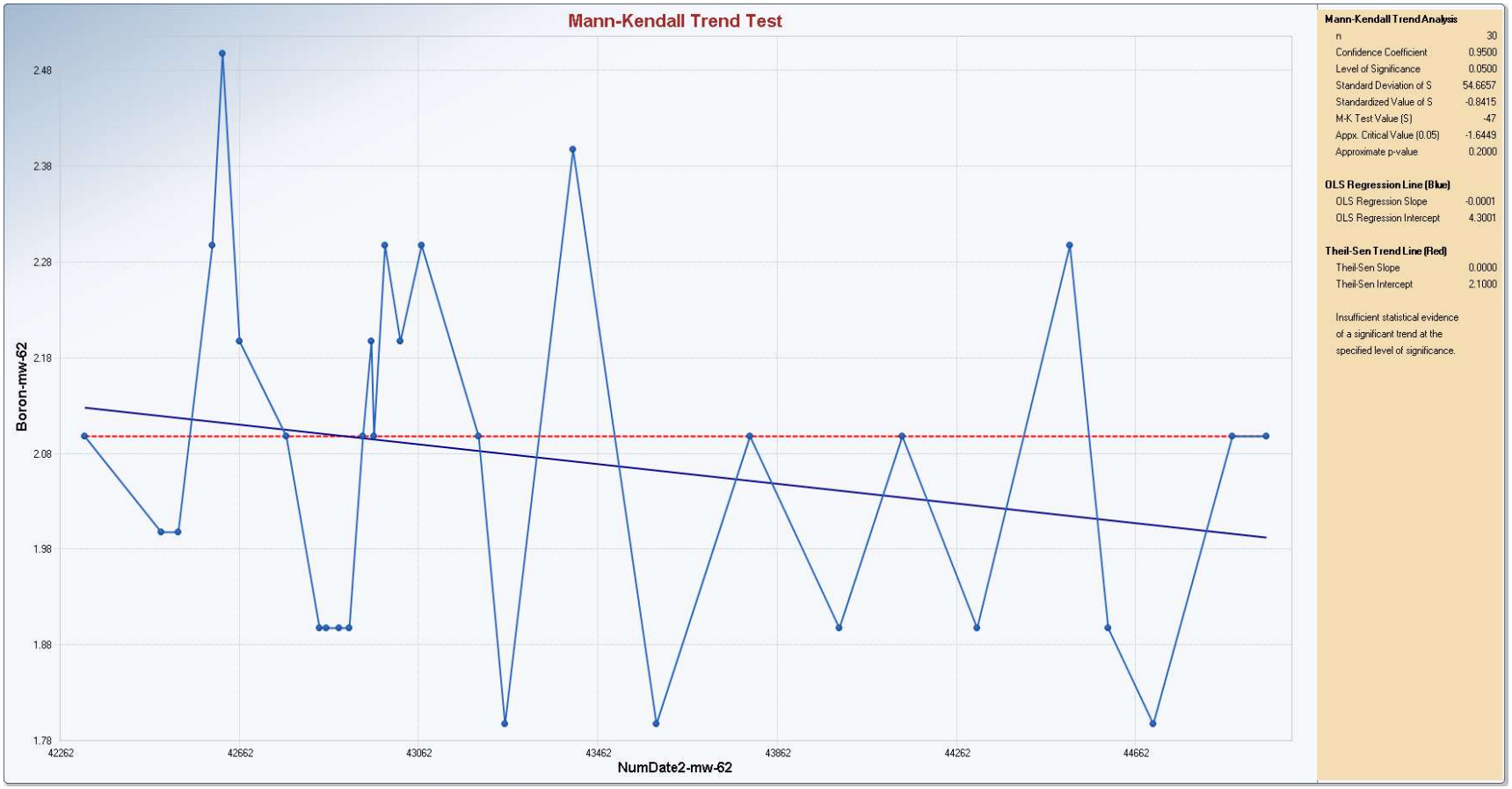
Appendix B
Mann-Kendall Trend Test



Appendix B
Mann-Kendall Trend Test



Appendix B
Mann-Kendall Trend Test



Appendix B
Time Series Statistics

	Mann-Kendall Trend Test Analysis
User Selected Options	
Date/Time of Computation	ProUCL 5.13/23/2023 7:14:58 PM
From File	CWTP_ProUCLUpload_200230323_a.xls
Full Precision	OFF
Confidence Coefficient	0.95
Level of Significance	0.05

Boron-mw-62

General Statistics	
Number of Events Reported (m)	31
Number of Missing Events	1
Number or Reported Events Used	30
Number Values Reported (n)	31
Number Values Missing	1
Number Values Used	30
Minimum	1.8
Maximum	2.5
Mean	2.077
Geometric Mean	2.069
Median	2.1
Standard Deviation	0.185
Coefficient of Variation	0.0891

Mann-Kendall Test	
M-K Test Value (S)	-47
Critical Value (0.05)	-1.645
Standard Deviation of S	54.67
Standardized Value of S	-0.841
Approximate p-value	0.2

Insufficient evidence to identify a significant trend at the specified level of significance.

Boron-mw-63

General Statistics	
Number of Events Reported (m)	30
Number of Missing Events	2
Number or Reported Events Used	28

Appendix B
Time Series Statistics

Number Values Reported (n)	30
Number Values Missing	2
Number Values Used	28
Minimum	0.83
Maximum	2
Mean	1.534
Geometric Mean	1.502
Median	1.5
Standard Deviation	0.304
Coefficient of Variation	0.198
Mann-Kendall Test	
M-K Test Value (S)	-84
Critical Value (0.05)	-1.645
Standard Deviation of S	50.2
Standardized Value of S	-1.653
Approximate p-value	0.0491
Statistically significant evidence of a decreasing trend at the specified level of significance.	
Boron-mw-64	
General Statistics	
Number of Events Reported (m)	27
Number of Missing Events	0
Number or Reported Events Used	27
Number Values Reported (n)	27
Minimum	0.47
Maximum	0.67
Mean	0.579
Geometric Mean	0.576
Median	0.58
Standard Deviation	0.0592
Coefficient of Variation	0.102
Mann-Kendall Test	
M-K Test Value (S)	-133
Critical Value (0.05)	-1.645
Standard Deviation of S	47.72

Appendix B
Time Series Statistics

Standardized Value of S	-2.766
Approximate p-value	0.00284
Statistically significant evidence of a decreasing trend at the specified level of significance.	
Boron-mw-65	
General Statistics	
Number of Events Reported (m)	30
Number of Missing Events	0
Number or Reported Events Used	30
Number Values Reported (n)	30
Minimum	0.57
Maximum	0.98
Mean	0.755
Geometric Mean	0.749
Median	0.76
Standard Deviation	0.0973
Coefficient of Variation	0.129
Mann-Kendall Test	
M-K Test Value (S)	-136
Critical Value (0.05)	-1.645
Standard Deviation of S	55.88
Standardized Value of S	-2.416
Approximate p-value	0.00785
Statistically significant evidence of a decreasing trend at the specified level of significance.	

	Mann-Kendall Trend Test Analysis
User Selected Options	
Date/Time of Computation	ProUCL 5.13/23/2023 7:18:17 PM
From File	CWTP_ProUCLUpload_200230323_a.xls
Full Precision	OFF
Confidence Coefficient	0.95
Level of Significance	0.05
Calcium-mw-62	

Appendix B
Time Series Statistics

General Statistics	
Number of Events Reported (m)	31
Number of Missing Events	2
Number or Reported Events Used	29
Number Values Reported (n)	31
Number Values Missing	2
Number Values Used	29
Minimum	480
Maximum	610
Mean	532.4
Geometric Mean	531.6
Median	530
Standard Deviation	30.78
Coefficient of Variation	0.0578
Mann-Kendall Test	
M-K Test Value (S)	37
Critical Value (0.05)	1.645
Standard Deviation of S	52.82
Standardized Value of S	0.682
Approximate p-value	0.248
Insufficient evidence to identify a significant	
trend at the specified level of significance.	
Calcium-mw-63	
General Statistics	
Number of Events Reported (m)	30
Number of Missing Events	2
Number or Reported Events Used	28
Number Values Reported (n)	30
Number Values Missing	2
Number Values Used	28
Minimum	310
Maximum	580
Mean	505.7
Geometric Mean	501.8
Median	525

Appendix B
Time Series Statistics

Standard Deviation	59.16
Coefficient of Variation	0.117
Mann-Kendall Test	
M-K Test Value (S)	25
Critical Value (0.05)	1.645
Standard Deviation of S	50.24
Standardized Value of S	0.478
Approximate p-value	0.316
Insufficient evidence to identify a significant	
trend at the specified level of significance.	
Calcium-mw-64	
General Statistics	
Number of Events Reported (m)	27
Number of Missing Events	0
Number or Reported Events Used	27
Number Values Reported (n)	27
Minimum	70
Maximum	93
Mean	84.81
Geometric Mean	84.59
Median	86
Standard Deviation	6.064
Coefficient of Variation	0.0715
Mann-Kendall Test	
M-K Test Value (S)	-112
Critical Value (0.05)	-1.645
Standard Deviation of S	47.6
Standardized Value of S	-2.332
Approximate p-value	0.00985
Statistically significant evidence of a decreasing	
trend at the specified level of significance.	
Calcium-mw-65	
General Statistics	

Appendix B
Time Series Statistics

Number of Events Reported (m)	30
Number of Missing Events	3
Number or Reported Events Used	27
Number Values Reported (n)	30
Number Values Missing	3
Number Values Used	27
Minimum	82
Maximum	200
Mean	110.6
Geometric Mean	108
Median	100
Standard Deviation	27.03
Coefficient of Variation	0.245
Mann-Kendall Test	
M-K Test Value (S)	-64
Critical Value (0.05)	-1.645
Standard Deviation of S	47.19
Standardized Value of S	-1.335
Approximate p-value	0.091

Insufficient evidence to identify a significant trend at the specified level of significance.

	Mann-Kendall Trend Test Analysis
User Selected Options	
Date/Time of Computation	ProUCL 5.13/23/2023 7:23:25 PM
From File	CWTP_ProUCLUpload_200230323_a.xls
Full Precision	OFF
Confidence Coefficient	0.95
Level of Significance	0.05

Chloride-mw-62	
General Statistics	
Number of Events Reported (m)	31
Number of Missing Events	6
Number or Reported Events Used	25
Number Values Reported (n)	31

Appendix B
Time Series Statistics

Number Values Missing	6
Number Values Used	25
Minimum	82
Maximum	200
Mean	128.8
Geometric Mean	126.5
Median	120
Standard Deviation	26.4
Coefficient of Variation	0.205
Mann-Kendall Test	
M-K Test Value (S)	17
Critical Value (0.05)	1.645
Standard Deviation of S	41.88
Standardized Value of S	0.382
Approximate p-value	0.351
Insufficient evidence to identify a significant	
trend at the specified level of significance.	
Chloride-mw-63	
General Statistics	
Number of Events Reported (m)	30
Number of Missing Events	5
Number or Reported Events Used	25
Number Values Reported (n)	30
Number Values Missing	5
Number Values Used	25
Minimum	77
Maximum	110
Mean	93.32
Geometric Mean	92.91
Median	95
Standard Deviation	8.826
Coefficient of Variation	0.0946
Mann-Kendall Test	
M-K Test Value (S)	-157
Critical Value (0.05)	-1.645

Appendix B
Time Series Statistics

Standard Deviation of S	42.56
Standardized Value of S	-3.666
Approximate p-value	1.2330E-4
Statistically significant evidence of a decreasing trend at the specified level of significance.	
Chloride-mw-64	
General Statistics	
Number of Events Reported (m)	27
Number of Missing Events	2
Number or Reported Events Used	25
Number Values Reported (n)	27
Number Values Missing	2
Number Values Used	25
Minimum	44
Maximum	53
Mean	50.88
Geometric Mean	50.83
Median	52
Standard Deviation	2.242
Coefficient of Variation	0.0441
Mann-Kendall Test	
M-K Test Value (S)	14
Critical Value (0.05)	1.645
Standard Deviation of S	41.63
Standardized Value of S	0.312
Approximate p-value	0.377
Insufficient evidence to identify a significant trend at the specified level of significance.	
Chloride-mw-65	
General Statistics	
Number of Events Reported (m)	30
Number of Missing Events	5
Number or Reported Events Used	25
Number Values Reported (n)	30

Appendix B
Time Series Statistics

Number Values Missing	5
Number Values Used	25
Minimum	48
Maximum	140
Mean	59.2
Geometric Mean	57.57
Median	53
Standard Deviation	18.13
Coefficient of Variation	0.306
Mann-Kendall Test	
M-K Test Value (S)	-1
Critical Value (0.05)	-1.645
Standard Deviation of S	42.36
Standardized Value of S	0
Approximate p-value	0.5
Insufficient evidence to identify a significant trend at the specified level of significance.	

	Mann-Kendall Trend Test Analysis
User Selected Options	
Date/Time of Computation	ProUCL 5.13/23/2023 7:26:18 PM
From File	CWTP_ProUCLUpload_200230323_a.xls
Full Precision	OFF
Confidence Coefficient	0.95
Level of Significance	0.05

Fluoride-mw-62	
General Statistics	
Number of Events Reported (m)	31
Number of Missing Events	3
Number or Reported Events Used	28
Number Values Reported (n)	31
Number Values Missing	3
Number Values Used	28
Minimum	1.2
Maximum	3.3

Appendix B
Time Series Statistics

Mean	1.536
Geometric Mean	1.505
Median	1.5
Standard Deviation	0.378
Coefficient of Variation	0.246
Mann-Kendall Test	
M-K Test Value (S)	2
Critical Value (0.05)	1.645
Standard Deviation of S	48.98
Standardized Value of S	0.0204
Approximate p-value	0.492
Insufficient evidence to identify a significant	
trend at the specified level of significance.	
Fluoride-mw-63	
General Statistics	
Number of Events Reported (m)	30
Number of Missing Events	3
Number or Reported Events Used	27
Number Values Reported (n)	30
Number Values Missing	3
Number Values Used	27
Minimum	0.28
Maximum	2.5
Mean	1.899
Geometric Mean	1.815
Median	2
Standard Deviation	0.389
Coefficient of Variation	0.205
Mann-Kendall Test	
M-K Test Value (S)	-10
Critical Value (0.05)	-1.645
Standard Deviation of S	47.24
Standardized Value of S	-0.191
Approximate p-value	0.424

Appendix B
Time Series Statistics

Insufficient evidence to identify a significant	
trend at the specified level of significance.	
Fluoride-mw-64	
General Statistics	
Number of Events Reported (m)	27
Number of Missing Events	0
Number or Reported Events Used	27
Number Values Reported (n)	27
Minimum	1.3
Maximum	1.6
Mean	1.437
Geometric Mean	1.435
Median	1.4
Standard Deviation	0.0792
Coefficient of Variation	0.0551
Mann-Kendall Test	
M-K Test Value (S)	11
Critical Value (0.05)	1.645
Standard Deviation of S	44
Standardized Value of S	0.227
Approximate p-value	0.41
Insufficient evidence to identify a significant	
trend at the specified level of significance.	
Fluoride-mw-65	
General Statistics	
Number of Events Reported (m)	30
Number of Missing Events	3
Number or Reported Events Used	27
Number Values Reported (n)	30
Number Values Missing	3
Number Values Used	27
Minimum	1.5
Maximum	2.1
Mean	1.852
Geometric Mean	1.845

Appendix B
Time Series Statistics

Median	1.9
Standard Deviation	0.163
Coefficient of Variation	0.0878
Mann-Kendall Test	
M-K Test Value (S)	-70
Critical Value (0.05)	-1.645
Standard Deviation of S	46.54
Standardized Value of S	-1.483
Approximate p-value	0.0691
Insufficient evidence to identify a significant trend at the specified level of significance.	

	Mann-Kendall Trend Test Analysis
User Selected Options	
Date/Time of Computation	ProUCL 5.13/23/2023 7:34:25 PM
From File	CWTP_ProUCLUpload_200230323_a.xls
Full Precision	OFF
Confidence Coefficient	0.95
Level of Significance	0.05

Field_pH-mw-62

General Statistics	
Number of Events Reported (m)	31
Number of Missing Events	1
Number or Reported Events Used	30
Number Values Reported (n)	31
Number Values Missing	1
Number Values Used	30
Minimum	6.36
Maximum	7.4
Mean	6.645
Geometric Mean	6.642
Median	6.635
Standard Deviation	0.219
Coefficient of Variation	0.033

Appendix B
Time Series Statistics

Mann-Kendall Test	
M-K Test Value (S)	38
Critical Value (0.05)	1.645
Standard Deviation of S	56.01
Standardized Value of S	0.661
Approximate p-value	0.254
Insufficient evidence to identify a significant	
trend at the specified level of significance.	
Field_pH-mw-63	
General Statistics	
Number of Events Reported (m)	30
Number of Missing Events	0
Number or Reported Events Used	30
Number Values Reported (n)	30
Minimum	6.53
Maximum	7.21
Mean	6.8
Geometric Mean	6.798
Median	6.785
Standard Deviation	0.168
Coefficient of Variation	0.0247
Mann-Kendall Test	
M-K Test Value (S)	1
Critical Value (0.05)	1.645
Standard Deviation of S	56.01
Standardized Value of S	0
Approximate p-value	0.5
Insufficient evidence to identify a significant	
trend at the specified level of significance.	
Field_pH-mw-64	
General Statistics	
Number of Events Reported (m)	27
Number of Missing Events	0
Number or Reported Events Used	27

Appendix B
Time Series Statistics

Number Values Reported (n)	27
Minimum	7.22
Maximum	7.68
Mean	7.456
Geometric Mean	7.455
Median	7.47
Standard Deviation	0.125
Coefficient of Variation	0.0168
Mann-Kendall Test	
M-K Test Value (S)	-52
Critical Value (0.05)	-1.645
Standard Deviation of S	47.85
Standardized Value of S	-1.066
Approximate p-value	0.143
Insufficient evidence to identify a significant	
trend at the specified level of significance.	
Field_pH-mw-65	
General Statistics	
Number of Events Reported (m)	30
Number of Missing Events	0
Number or Reported Events Used	30
Number Values Reported (n)	30
Minimum	6.96
Maximum	8.27
Mean	7.259
Geometric Mean	7.255
Median	7.21
Standard Deviation	0.232
Coefficient of Variation	0.032
Mann-Kendall Test	
M-K Test Value (S)	-34
Critical Value (0.05)	-1.645
Standard Deviation of S	55.99
Standardized Value of S	-0.589
Approximate p-value	0.278

Appendix B
Time Series Statistics

Insufficient evidence to identify a significant trend at the specified level of significance.	
	Mann-Kendall Trend Test Analysis
User Selected Options	
Date/Time of Computation	ProUCL 5.13/23/2023 7:37:57 PM
From File	CWTP_ProUCLUpload_200230323_a.xls
Full Precision	OFF
Confidence Coefficient	0.95
Level of Significance	0.05
Sulfate-mw-62	
General Statistics	
Number of Events Reported (m)	31
Number of Missing Events	6
Number or Reported Events Used	25
Number Values Reported (n)	31
Number Values Missing	6
Number Values Used	25
Minimum	2800
Maximum	4000
Mean	3416
Geometric Mean	3407
Median	3400
Standard Deviation	251.1
Coefficient of Variation	0.0735
Mann-Kendall Test	
M-K Test Value (S)	60
Critical Value (0.05)	1.645
Standard Deviation of S	41.45
Standardized Value of S	1.423
Approximate p-value	0.0773
Insufficient evidence to identify a significant trend at the specified level of significance.	
Sulfate-mw-63	

Appendix B
Time Series Statistics

General Statistics	
Number of Events Reported (m)	30
Number of Missing Events	5
Number or Reported Events Used	25
Number Values Reported (n)	30
Number Values Missing	5
Number Values Used	25
Minimum	1500
Maximum	4300
Mean	2616
Geometric Mean	2567
Median	2700
Standard Deviation	512.9
Coefficient of Variation	0.196
Mann-Kendall Test	
M-K Test Value (S)	-81
Critical Value (0.05)	-1.645
Standard Deviation of S	42.2
Standardized Value of S	-1.896
Approximate p-value	0.029
Statistically significant evidence of a decreasing trend at the specified level of significance.	
Sulfate-mw-64	
General Statistics	
Number of Events Reported (m)	27
Number of Missing Events	2
Number or Reported Events Used	25
Number Values Reported (n)	27
Number Values Missing	2
Number Values Used	25
Minimum	230
Maximum	870
Mean	355.2
Geometric Mean	344.2
Median	340

Appendix B
Time Series Statistics

Standard Deviation	114.4
Coefficient of Variation	0.322
Mann-Kendall Test	
M-K Test Value (S)	-62
Critical Value (0.05)	-1.645
Standard Deviation of S	42.59
Standardized Value of S	-1.432
Approximate p-value	0.076
Insufficient evidence to identify a significant	
trend at the specified level of significance.	
Sulfate-mw-65	
General Statistics	
Number of Events Reported (m)	30
Number of Missing Events	5
Number or Reported Events Used	25
Number Values Reported (n)	30
Number Values Missing	5
Number Values Used	25
Minimum	300
Maximum	980
Mean	496.4
Geometric Mean	478.7
Median	460
Standard Deviation	151.9
Coefficient of Variation	0.306
Mann-Kendall Test	
M-K Test Value (S)	-39
Critical Value (0.05)	-1.645
Standard Deviation of S	42.7
Standardized Value of S	-0.89
Approximate p-value	0.187
Insufficient evidence to identify a significant	
trend at the specified level of significance.	

Appendix B
Time Series Statistics

	Mann-Kendall Trend Test Analysis
User Selected Options	
Date/Time of Computation	ProUCL 5.13/23/2023 7:41:30 PM
From File	CWTP_ProUCLUpload_200230323_a.xls
Full Precision	OFF
Confidence Coefficient	0.95
Level of Significance	0.05

DissolvedSolids-mw-62

General Statistics	
Number of Events Reported (m)	31
Number of Missing Events	4
Number or Reported Events Used	27
Number Values Reported (n)	31
Number Values Missing	4
Number Values Used	27
Minimum	2400
Maximum	7100
Mean	5644
Geometric Mean	5565
Median	5700
Standard Deviation	816.3
Coefficient of Variation	0.145

Mann-Kendall Test	
M-K Test Value (S)	-30
Critical Value (0.05)	-1.645
Standard Deviation of S	47.72
Standardized Value of S	-0.608
Approximate p-value	0.272

Insufficient evidence to identify a significant trend at the specified level of significance.

DissolvedSolids-mw-63

General Statistics	
Number of Events Reported (m)	30
Number of Missing Events	3

Appendix B
Time Series Statistics

Number or Reported Events Used	27
Number Values Reported (n)	30
Number Values Missing	3
Number Values Used	27
Minimum	2500
Maximum	4700
Mean	4193
Geometric Mean	4155
Median	4300
Standard Deviation	520.3
Coefficient of Variation	0.124
Mann-Kendall Test	
M-K Test Value (S)	-130
Critical Value (0.05)	-1.645
Standard Deviation of S	47.19
Standardized Value of S	-2.734
Approximate p-value	0.00313
Statistically significant evidence of a decreasing trend at the specified level of significance.	
DissolvedSolids-mw-64	
General Statistics	
Number of Events Reported (m)	27
Number of Missing Events	0
Number or Reported Events Used	27
Number Values Reported (n)	27
Minimum	610
Maximum	890
Mean	774.8
Geometric Mean	772.7
Median	790
Standard Deviation	55.98
Coefficient of Variation	0.0722
Mann-Kendall Test	
M-K Test Value (S)	-111
Critical Value (0.05)	-1.645

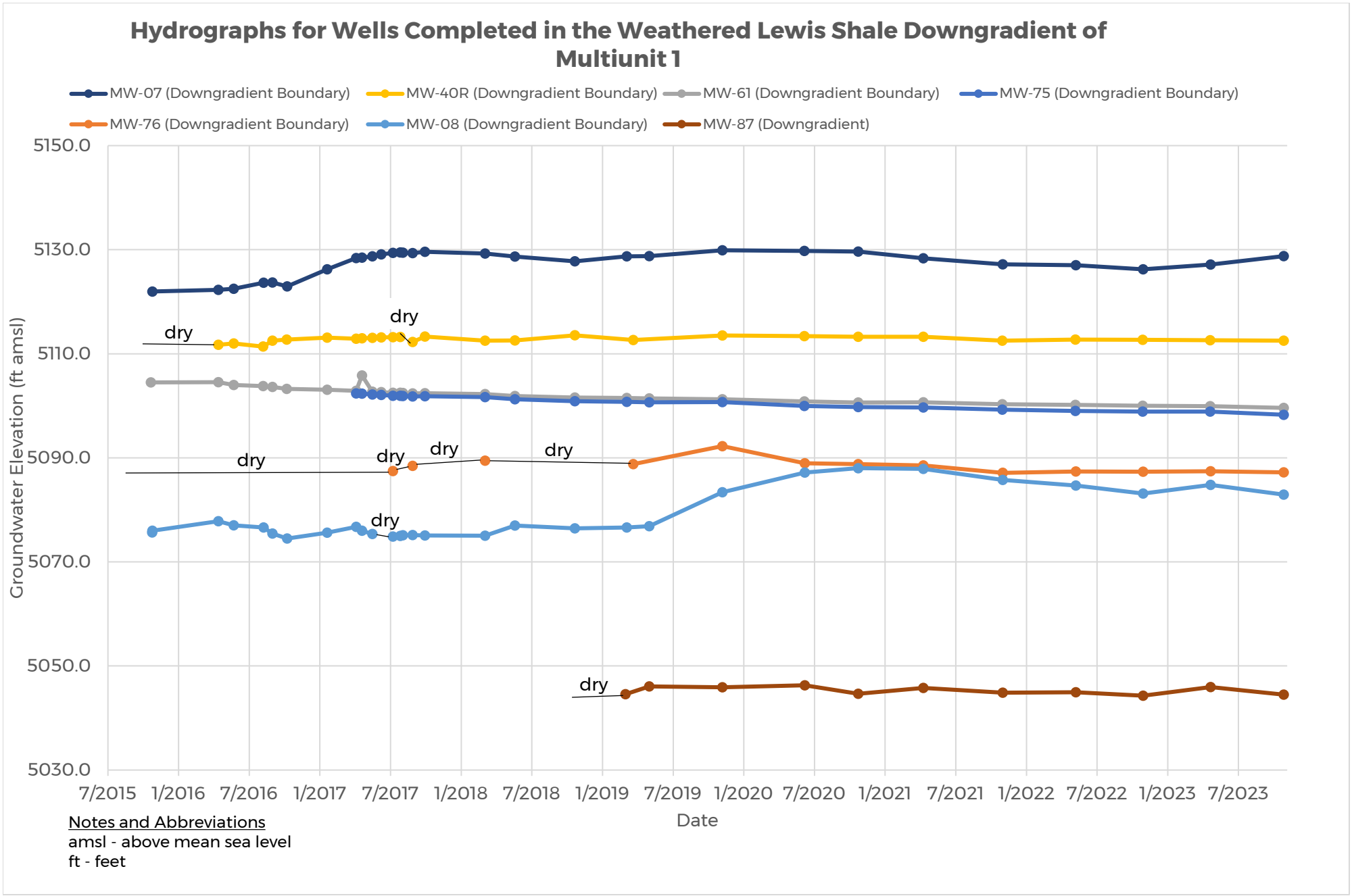
Appendix B
Time Series Statistics

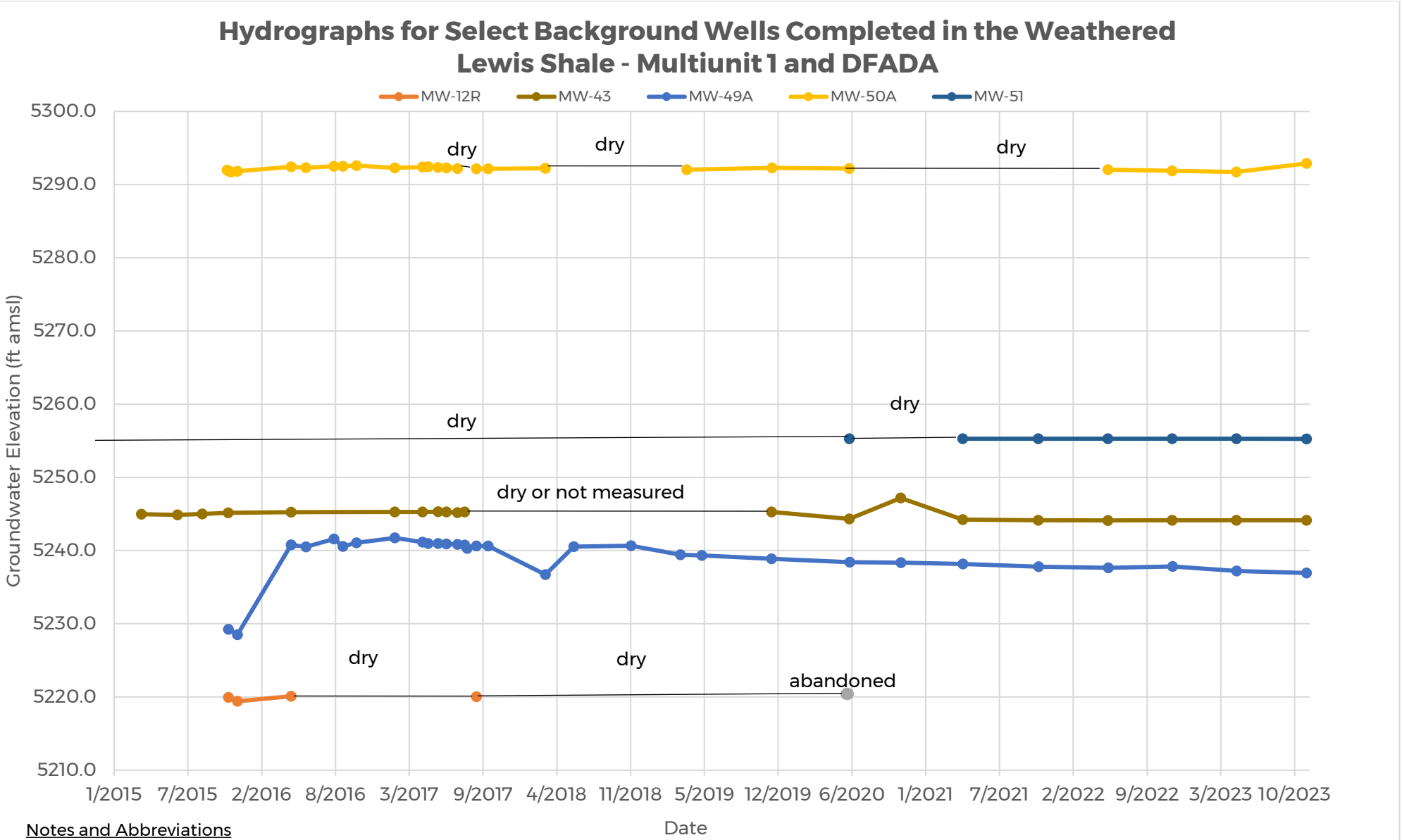
Standard Deviation of S	47.08
Standardized Value of S	-2.337
Approximate p-value	0.00973
Statistically significant evidence of a decreasing trend at the specified level of significance.	
DissolvedSolids-mw-65	
General Statistics	
Number of Events Reported (m)	30
Number of Missing Events	3
Number or Reported Events Used	27
Number Values Reported (n)	30
Number Values Missing	3
Number Values Used	27
Minimum	540
Maximum	1900
Mean	1044
Geometric Mean	1019
Median	1000
Standard Deviation	250
Coefficient of Variation	0.239
Mann-Kendall Test	
M-K Test Value (S)	-165
Critical Value (0.05)	-1.645
Standard Deviation of S	47.17
Standardized Value of S	-3.477
Approximate p-value	2.5372E-4
Statistically significant evidence of a decreasing trend at the specified level of significance.	

APPENDIX

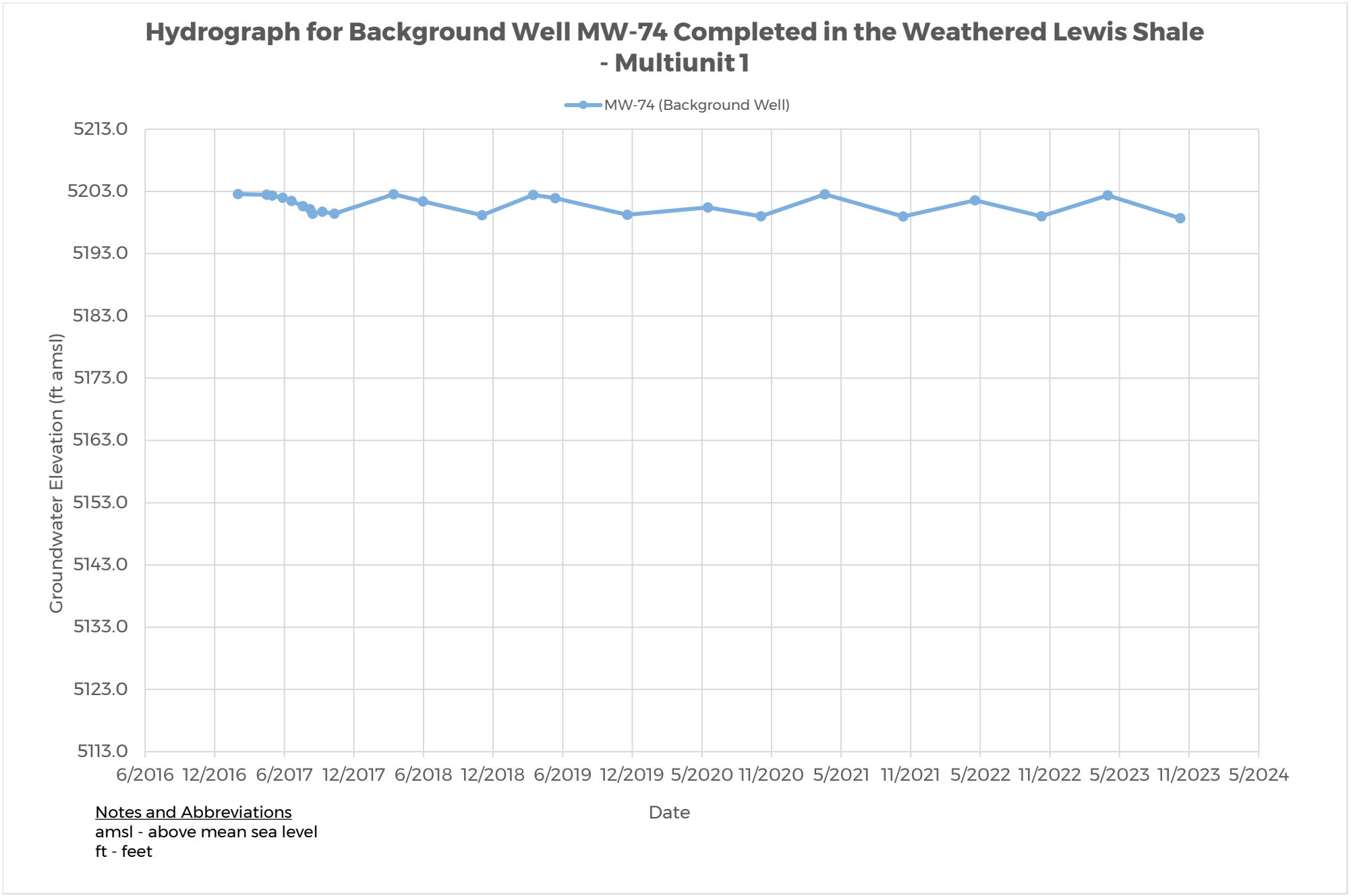
C

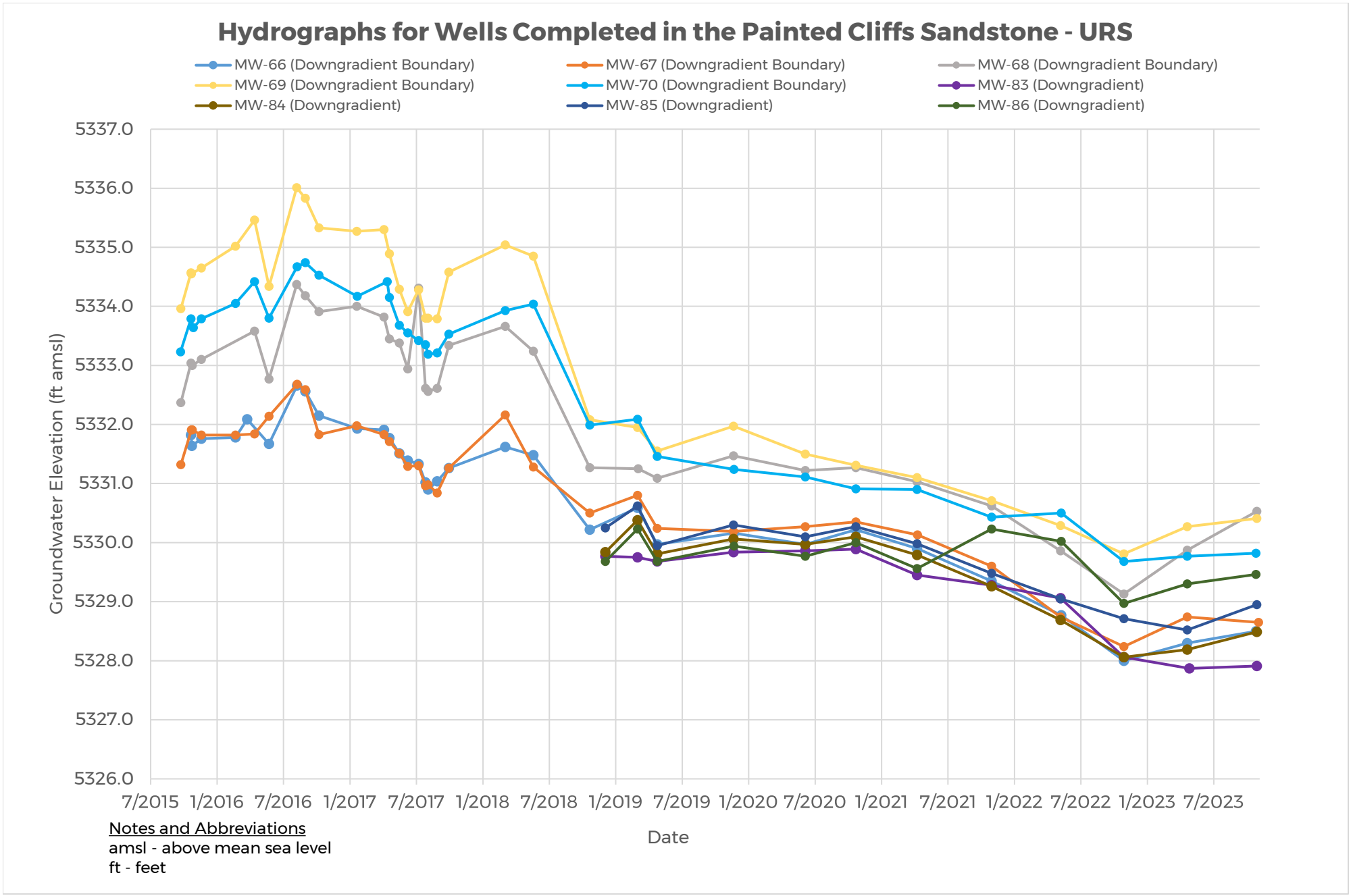
GROUNDWATER ELEVATION DATA AND HYDROGRAPHS THROUGH 2023

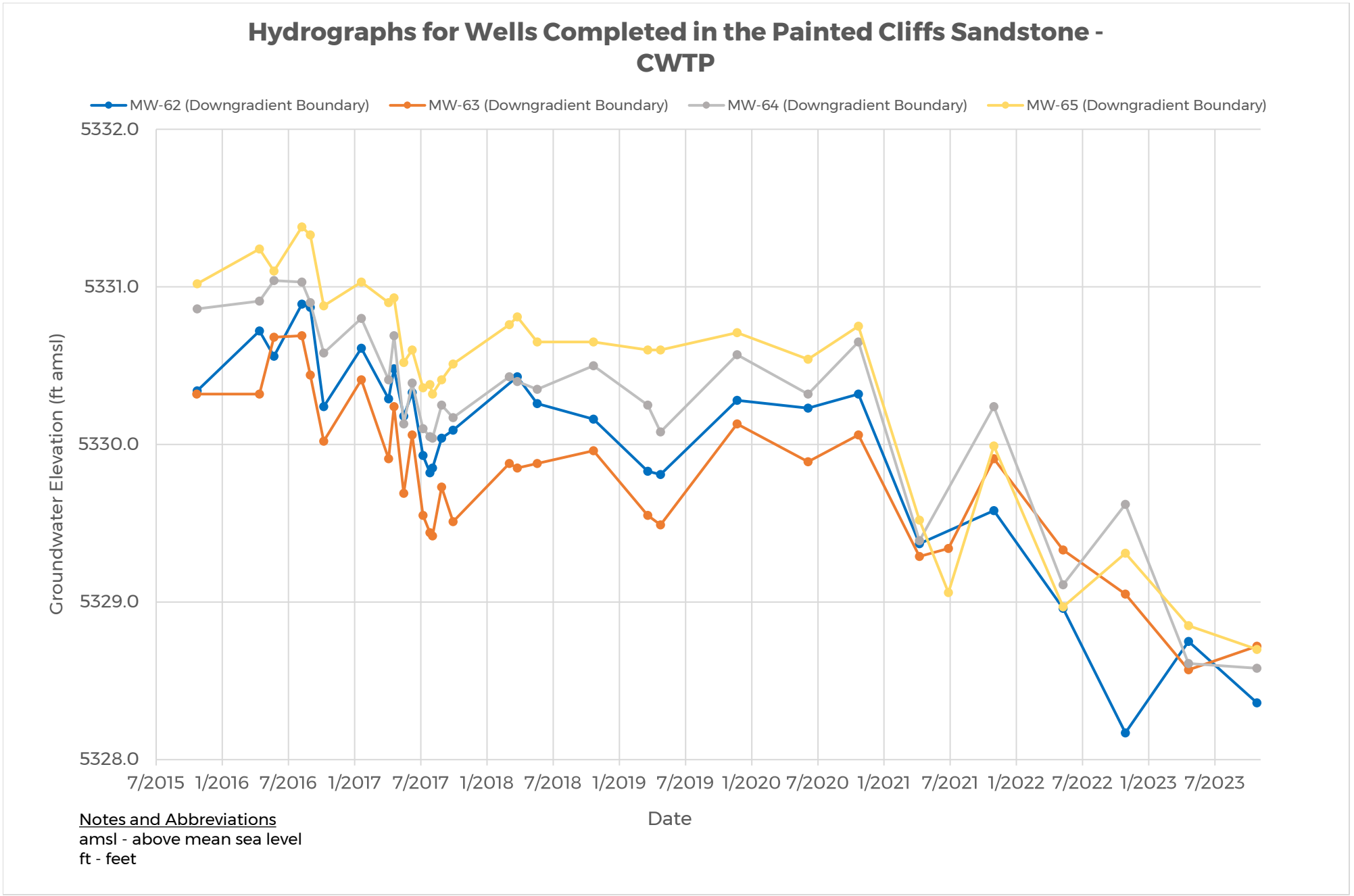

Hydrographs for Wells Completed in the Weathered Lewis Shale Downgradient of Multiunit 1
MW-07 (Downgradient Boundary)
MW-40R (Downgradient Boundary)
MW-61 (Downgradient Boundary)
MW-75 (Downgradient Boundary)
MW-76 (Downgradient Boundary)
MW-08 (Downgradient Boundary)
MW-87 (Downgradient)
Groundwater Elevation (ft amsl)
5150.0
5130.0
5110.0
5090.0
5070.0
5050.0
5030.0
dry
7/2015
1/2016
7/2016
1/2017
7/2017
1/2018
7/2018
1/2019
7/2019
1/2020
7/2020
1/2021
7/2021
1/2022
7/2022
1/2023
7/2023
Date
Notes and Abbreviations
amsl - above mean sea level
ft - feet

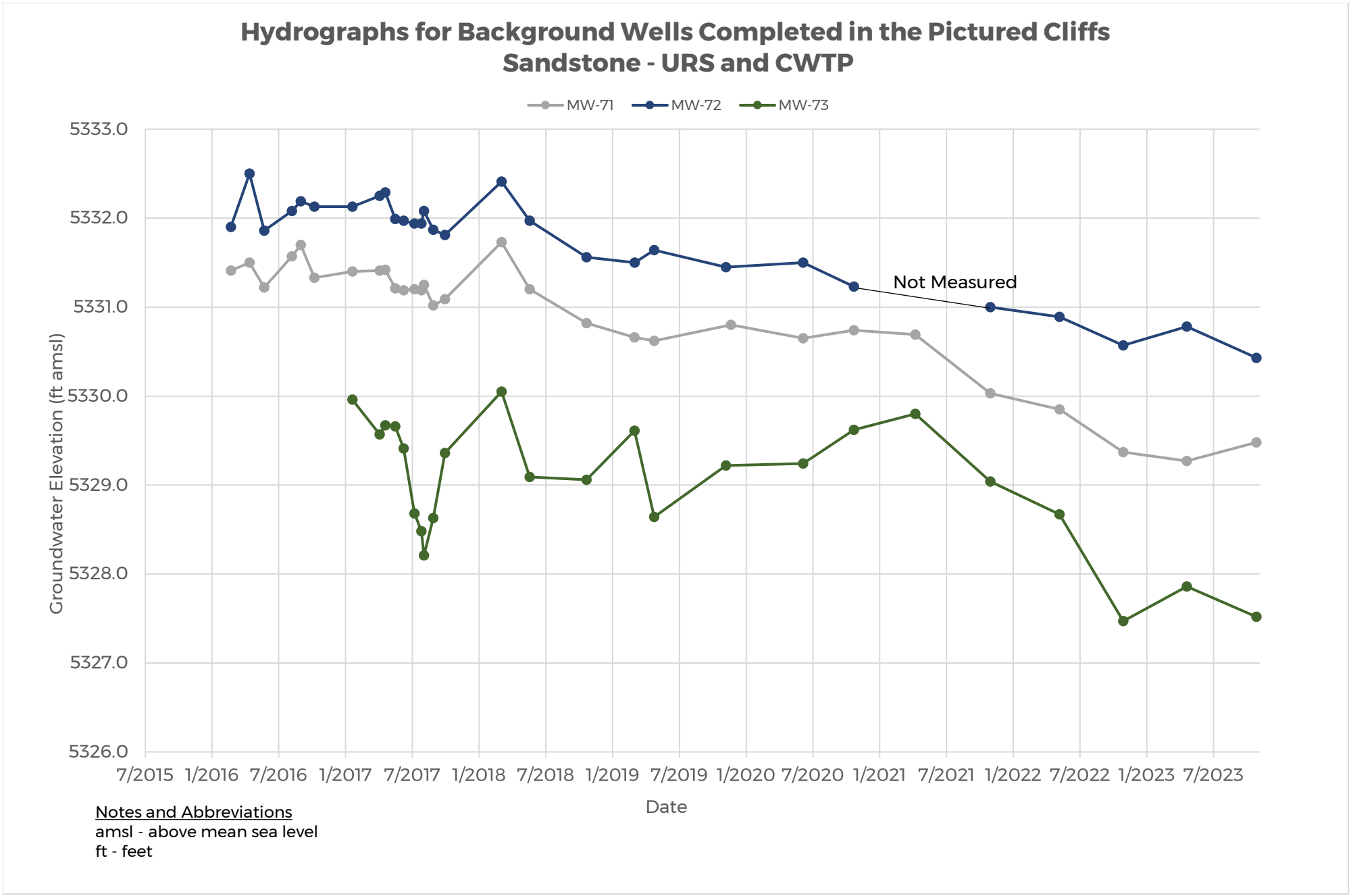


Notes and Abbreviations
amsl - above mean sea level
ft - feet
Replacement well MW-12R1 has remained dry since installation

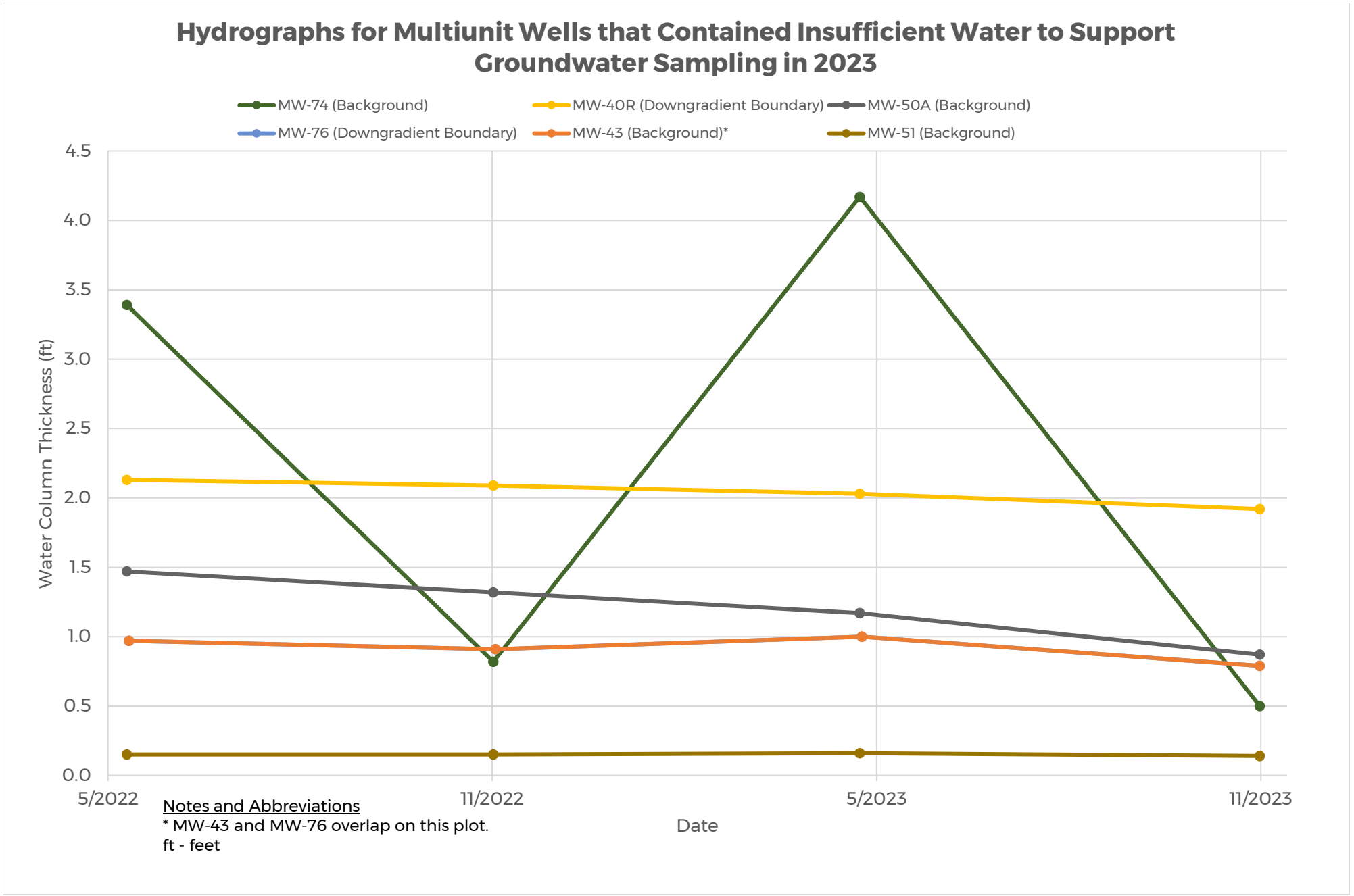

Hydrograph for Background Well MW-74 Completed in the Weathered Lewis Shale - Multiunit 1
MW-74 (Background Well)
Groundwater Elevation (ft amsl)
5213.0
5203.0
5193.0
5183.0
5173.0
5163.0
5153.0
5143.0
5133.0
5123.0
5113.0
6/2016 12/2016 6/2017 12/2017 6/2018 12/2018 6/2019 12/2019 5/2020 11/2020 5/2021 11/2021 5/2022 11/2022 5/2023 11/2023 5/2024
Date
Notes and Abbreviations
amsl - above mean sea level
ft - feet

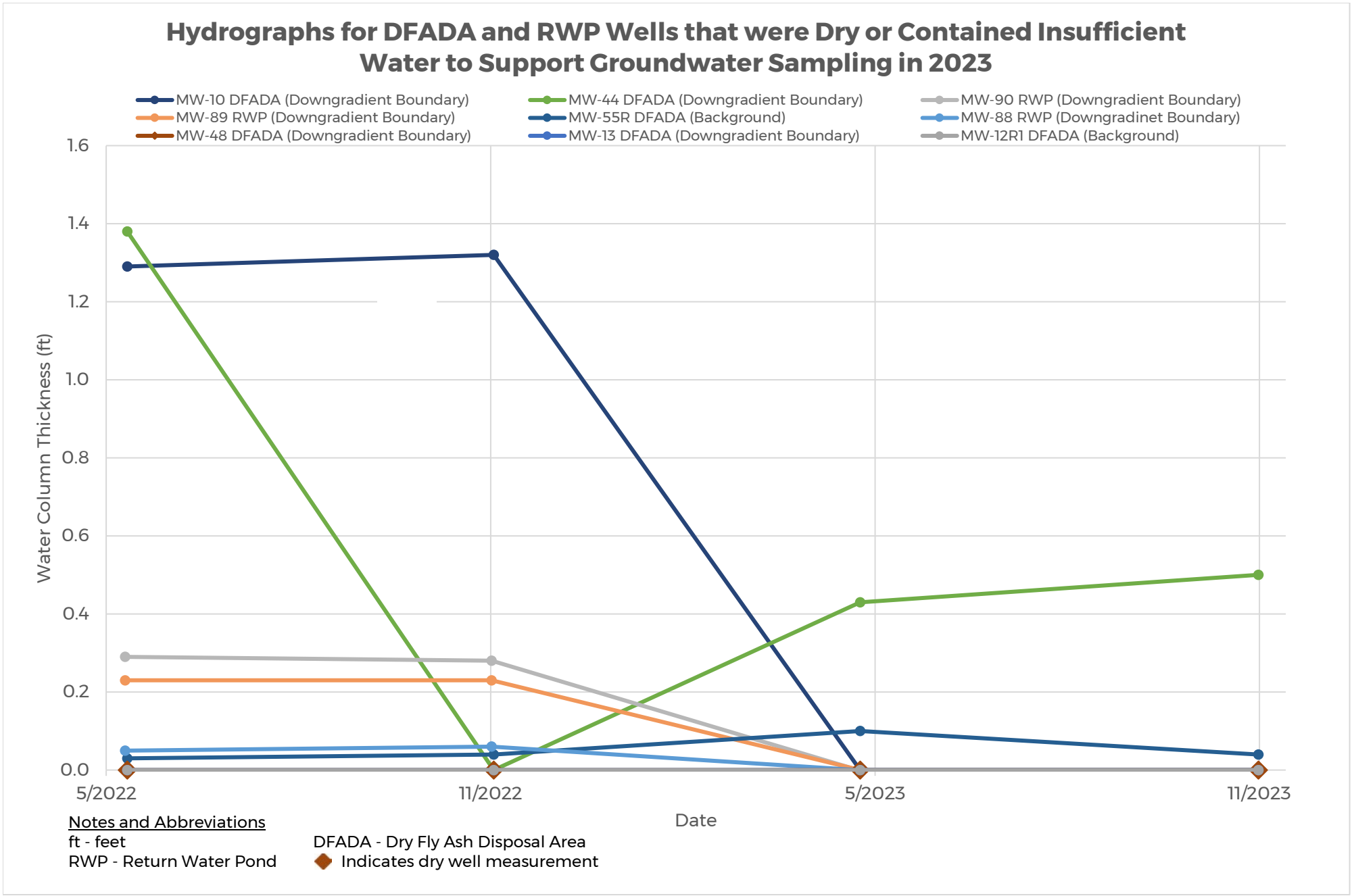

Hydrographs for Wells Completed in the Painted Cliffs Sandstone - URS
MW-66 (Downgradient Boundary)
MW-67 (Downgradient Boundary)
MW-68 (Downgradient Boundary)
MW-69 (Downgradient Boundary)
MW-70 (Downgradient Boundary)
MW-83 (Downgradient)
MW-84 (Downgradient)
MW-85 (Downgradient)
MW-86 (Downgradient)
Groundwater Elevation (ft amsl)
5337.0
5336.0
5335.0
5334.0
5333.0
5332.0
5331.0
5330.0
5329.0
5328.0
5327.0
5326.0
7/2015
1/2016
7/2016
1/2017
7/2017
1/2018
7/2018
1/2019
7/2019
1/2020
7/2020
1/2021
7/2021
1/2022
7/2022
1/2023
7/2023
Date
Notes and Abbreviations
amsl - above mean sea level
ft - feet


Hydrographs for Wells Completed in the Painted Cliffs Sandstone - CWTP
MW-62 (Downgradient Boundary)
MW-63 (Downgradient Boundary)
MW-64 (Downgradient Boundary)
MW-65 (Downgradient Boundary)
5332.0
5331.0
5330.0
5329.0
5328.0
Groundwater Elevation (ft amsl)
7/2015
1/2016
7/2016
1/2017
7/2017
1/2018
7/2018
1/2019
7/2019
1/2020
7/2020
1/2021
7/2021
1/2022
7/2022
1/2023
7/2023
Date
Notes and Abbreviations
amsl - above mean sea level
ft - feet



Notes and Abbreviations
amsl - above mean sea level
ft - feet


Hydrographs for Multiunit Wells that Contained Insufficient Water to Support Groundwater Sampling in 2023
MW-74 (Background)
MW-40R (Downgradient Boundary)
MW-50A (Background)
MW-76 (Downgradient Boundary)
MW-43 (Background)*
MW-51 (Background)
Water Column Thickness (ft)
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
5/2022
11/2022
5/2023
11/2023
Date
Notes and Abbreviations
* MW-43 and MW-76 overlap on this plot.
ft - feet


Hydrographs for DFADA and RWP Wells that were Dry or Contained Insufficient Water to Support Groundwater Sampling in 2023
MW-10 DFADA (Downgradient Boundary)
MW-44 DFADA (Downgradient Boundary)
MW-90 RWP (Downgradient Boundary)
MW-89 RWP (Downgradient Boundary)
MW-55R DFADA (Background)
MW-88 RWP (Downgradinet Boundary)
MW-48 DFADA (Downgradient Boundary)
MW-13 DFADA (Downgradient Boundary)
MW-12R1 DFADA (Background)
Water Column Thickness (ft)
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
5/2022
11/2022
5/2023
11/2023
Date
Notes and Abbreviations
ft - feet
RWP - Return Water Pond
DFADA - Dry Fly Ash Disposal Area
Indicates dry well measurement

MW-07			
Date of Measurement	**Measuring Pt Elevation (ft AMSL]**	**Water Level (ft bmp]**	**GW Elevation (ft AMSL]**
11/7/2015	5149.32	27.35	5121.97
4/25/2016	5149.32	27.04	5122.28
6/4/2016	5149.32	26.85	5122.47
8/20/2016	5149.32	25.68	5123.64
9/12/2016	5149.32	25.61	5123.71
10/20/2016	5149.32	26.36	5122.96
1/31/2017	5149.32	23.08	5126.24
4/16/2017	5149.32	20.95	5128.37
5/1/2017	5149.32	20.83	5128.49
5/28/2017	5149.32	20.59	5128.73
6/20/2017	5149.32	20.21	5129.11
7/20/2017	5149.32	19.93	5129.39
8/8/2017	5149.32	19.83	5129.49
8/15/2017	5149.32	19.91	5129.41
9/9/2017	5149.32	19.97	5129.35
10/11/2017	5149.32	19.72	5129.6
3/15/2018	5149.32	20.07	5129.25
5/31/2018	5149.32	20.62	5128.7
11/2/2018	5149.32	21.55	5127.77
3/16/2019	5149.32	20.59	5128.73
5/13/2019	5149.32	20.54	5128.78
11/18/2019	5149.32	19.43	5129.89
6/17/2020	5149.32	19.54	5129.78
11/3/2020	5149.32	19.68	5129.64
4/20/2021	5149.32	20.97	5128.35
11/11/2021	5149.32	22.14	5127.18
5/19/2022	5149.32	22.3	5127.02
11/9/2022	5149.32	23.09	5126.23
5/2/2023	5149.32	22.18	5127.14
11/7/2023	5149.32	20.54	5128.78
	Maximum Observed:	*5129.89*	*ft AMSL*
	Minimum Observed:	*5121.97*	*ft AMSL*
	Range:	*7.92*	*ft*

MW-08			
Date of Measurement	**Measuring Pt Elevation (ft AMSL]**	**Water Level (ft bmp]**	**GW Elevation (ft AMSL]**
11/6/2015	5122.56	46.9	5075.66
11/7/2015	5122.56	46.56	5076.00
4/25/2016	5122.56	44.76	5077.80
6/4/2016	5122.56	45.52	5077.04
8/20/2016	5122.56	45.95	5076.61
9/12/2016	5122.56	47.11	5075.45
10/20/2016	5122.56	48.07	5074.49
1/31/2017	5122.56	46.94	5075.62
4/16/2017	5122.56	45.82	5076.74
5/1/2017	5122.56	46.59	5075.97
5/28/2017	5122.56	47.19	5075.37
6/20/2017	5122.56	Dry	
7/20/2017	5122.56	47.68	5074.88
8/8/2017	5122.56	47.57	5074.99
8/15/2017	5122.56	47.44	5075.12
9/9/2017	5122.56	47.39	5075.17
10/11/2017	5122.56	47.49	5075.07
3/15/2018	5122.56	47.51	5075.05
5/31/2018	5122.56	45.56	5077.00
11/2/2018	5122.56	46.12	5076.44
3/16/2019	5122.56	45.96	5076.60
5/13/2019	5122.56	45.68	5076.88
11/18/2019	5122.56	39.18	5083.38
6/18/2020	5122.56	35.38	5087.18
11/3/2020	5122.56	34.54	5088.02
4/20/2021	5122.56	34.7	5087.86
11/11/2021	5122.56	36.8	5085.76
5/19/2022	5122.56	37.9	5084.66
11/9/2022	5122.56	39.43	5083.13
5/2/2023	5122.56	37.74	5084.82
11/7/2023	5122.56	39.61	5082.95
	Maximum Observed:	*5088.02*	*ft AMSL*
	Minimum Observed:	*5074.49*	*ft AMSL*
	Range:	*13.53*	*ft*

MW-10			
Date of Measurement	**Measuring Pt Elevation (ft AMSL]**	**Water Level (ft bmp]**	**GW Elevation (ft AMSL]**
11/29/2017	5150.71	Dry	Dry
3/15/2018	5150.71	Dry	Dry
5/31/2018	5151.71	Dry	Dry
11/21/2018	5151.71	Dry	Dry
11/18/2019	5151.71	Dry	Dry
6/17/2020	5150.71	Dry	Dry
11/3/2020	5150.71	Dry	Dry
4/20/2021	5150.71	Dry	Dry
11/11/2021	5150.71	33.70	5117.01
5/19/2022	5150.71	33.71	5117.00
11/9/2022	5150.71	33.68	5117.03
5/2/2023	5150.71	Dry	Dry
11/7/2023	5150.71	Dry	Dry
	Maximum Observed:	*5117.01*	*ft AMSL*
	Minimum Observed:	*5117.01*	*ft AMSL*
	Range:	*0.00*	*ft*

MW-11			
Date of Measurement	**Measuring Pt Elevation (ft AMSL]**	**Water Level (ft bmp]**	**GW Elevation (ft AMSL]**
06/17/2020	5111.96	31.99	5079.97
11/3/2020	5111.96	31.85	5080.11
4/20/2021	5111.96	31.86	5080.1
11/11/2021	5111.96	31.85	5080.11
5/19/2022	5111.96	31.88	5080.08
11/9/2022	5111.96	31.89	5080.07
5/2/2023	5111.96	31.81	5080.15
11/7/2023	5111.96	31.94	5080.02
	Maximum Observed:	*5080.15*	*ft AMSL*
	Minimum Observed:	*5079.97*	*ft AMSL*
	Range:	*0.18*	*ft*

MW-12R			
Date of Measurement	**Measuring Pt Elevation (ft AMSL]**	**Water Level (ft bmp]**	**GW Elevation (ft AMSL]**
11/7/2015	5264.70	44.75	5219.95
12/1/2015	5264.70	45.29	5219.41
4/25/2016	5264.70	44.6	5220.10
6/4/2016	5264.70	Dry	
8/20/2016	5264.70	Dry	
9/12/2016	5264.70	Dry	
10/19/2016	5264.70	Dry	
1/31/2017	5264.70	Dry	
4/16/2017	5264.70	Dry	
5/1/2017	5264.70	Dry	
5/28/2017	5264.70	Dry	
6/20/2017	5264.70	Dry	
7/20/2017	5264.70	Dry	
8/8/2017	5264.70	Dry	
8/15/2017	5264.70	Dry	
9/9/2017	5264.70	44.68	5220.02
10/11/2017	5264.70	Dry	
3/15/2018	5264.70	Dry	
ABANDONED ON 4/9/2018			
	Maximum Observed:	*5220.10*	*ft AMSL*
	Minimum Observed:	*5219.41*	*ft AMSL*
	Range:	*0.69*	*ft*

MW-12R1			
Date of Measurement	**Measuring Pt Elevation (ft AMSL]**	**Water Level (ft bmp]**	**GW Elevation (ft AMSL]**
06/17/2020	5264.44	Dry	Dry
11/3/2020	5264.44	Dry	Dry
4/20/2021	5264.44	Dry	Dry
11/11/2021	5264.44	Dry	Dry
5/19/2022	5264.44	Dry	Dry
11/9/2022	5264.44	Dry	Dry
5/2/2023	5264.44	Dry	Dry
11/7/2023	5264.44	Dry	Dry
	Maximum Observed:	--	*ft AMSL*
	Minimum Observed:	--	*ft AMSL*
	Range:	--	*ft*

MW-13			
Date of Measurement	**Measuring Pt Elevation (ft AMSL]**	**Water Level (ft bmp]**	**GW Elevation (ft AMSL]**
11/29/2017	5150.75	Dry	Dry
3/15/2018	5150.75	Dry	Dry
5/31/2018	5150.75	Dry	Dry
11/21/2018	5150.75	Dry	Dry
11/18/2019	5150.75	Dry	Dry
6/17/2020	5155.75	Dry	Dry
11/3/2020	5155.75	Dry	Dry
4/20/2021	5155.75	Dry	Dry
11/11/2021	5155.75	Dry	Dry
5/19/2022	5155.75	Dry	Dry
11/9/2022	5155.75	Dry	Dry
5/2/2023	5155.75	Dry	Dry
11/7/2023	5155.75	Dry	Dry
	Maximum Observed:	--	*ft AMSL*
	Minimum Observed:	--	*ft AMSL*
	Range:	--	*ft*

MW-40R			
Date of Measurement	**Measuring Pt Elevation (ft AMSL]**	**Water Level (ft bmp]**	**GW Elevation (ft AMSL]**
11/7/2015	5137.43	Dry	
4/25/2016	5137.43	25.70	5111.73
6/4/2016	5137.43	25.46	5111.97
8/19/2016	5137.43	26.05	5111.38
9/12/2016	5137.43	24.90	5112.53
10/19/2016	5137.43	24.72	5112.71
1/31/2017	5137.43	24.34	5113.09
4/16/2017	5137.43	24.56	5112.87
5/1/2017	5137.43	24.47	5112.96
5/28/2017	5137.43	24.38	5113.05
6/20/2017	5137.43	24.29	5113.14
7/20/2017	5137.43	24.26	5113.17
8/8/2017	5137.43	24.19	5113.24
8/15/2017	5137.43	Dry	
9/9/2017	5137.43	25.18	5112.25
10/11/2017	5137.43	24.14	5113.29
3/15/2018	5137.43	24.92	5112.51
5/31/2018	5137.43	24.86	5112.57
11/2/2018	5137.43	23.89	5113.54
4/2/2019	5137.43	24.78	5112.65
11/18/2019	5137.43	23.91	5113.52
6/17/2020	5137.43	24.06	5113.37
11/3/2020	5137.43	24.15	5113.28
4/20/2021	5137.43	24.18	5113.25
11/10/2021	5137.43	24.91	5112.52
5/18/2022	5137.43	24.72	5112.71
11/8/2022	5137.43	24.76	5112.67
5/1/2023	5137.43	24.82	5112.61
11/7/2023	5137.43	24.93	5112.5
	Maximum Observed:	*5113.54*	*ft AMSL*
	Minimum Observed:	*5111.38*	*ft AMSL*
	Range:	*2.16*	*ft*

MW-43			
Date of Measurement	**Measuring Pt Elevation (ft AMSL]**	**Water Level (ft bmp]**	**GW Elevation (ft AMSL]**
3/16/2015	5272.46	27.50	5244.96
6/22/2015	5272.46	27.59	5244.87
8/28/2015	5272.46	27.46	5245
11/6/2015	5272.46	27.32	5245.14
4/25/2016	5272.46	27.20	5245.26
1/31/2017	5272.46	27.19	5245.27
4/16/2017	5272.46	27.18	5245.28
5/28/2017	5272.46	27.15	5245.31
6/20/2017	5272.46	27.18	5245.28
7/20/2017	5272.46	27.29	5245.17
8/8/2017	5272.46	27.18	5245.28
8/15/2017	5272.46	Dry	
11/18/2019	5272.46	27.18	5245.28
6/16/2020	5271.58	27.25	5244.33
11/2/2020	5271.58	24.4	5247.18
4/19/2021	5271.58	27.36	5244.22
11/10/2021	5271.58	27.43	5244.15
5/18/2022	5271.58	27.46	5244.12
11/8/2022	5271.58	27.45	5244.13
5/1/2023	5271.58	27.43	5244.15
11/7/2023	5271.58	27.44	5244.14
	Maximum Observed:	*5247.18*	*ft AMSL*
	Minimum Observed:	*5244.12*	*ft AMSL*
	Range:	*3.06*	*ft*

Note: Probable error in 11/2/2020 water level measurement.

MW-44			
Date of Measurement	**Measuring Pt Elevation (ft AMSL]**	**Water Level (ft bmp]**	**GW Elevation (ft AMSL]**
11/29/2017	5146.89	Dry	Dry
3/15/2018	5146.89	Dry	Dry
5/31/2018	5146.89	Dry	Dry
11/21/2018	5146.89	Dry	Dry
11/18/2019	5146.89	25.5	5121.39
6/17/2020	5146.89	Dry	Dry
11/3/2020	5146.89	Dry	Dry
4/20/2021	5146.89	Dry	Dry
11/11/2021	5146.89	Dry	Dry
5/19/2022	5146.89	24.42	5122.47
11/9/2022	5146.89	Dry	Dry
5/2/2023	5146.89	25.37	5121.52
11/7/2023	5146.89	25.30	Dry
	Maximum Observed:	*5122.47*	*ft AMSL*
	Minimum Observed:	*5121.39*	*ft AMSL*
	Range:	*1.08*	*ft*

Note: Water levels are field-noted to be measurements of saturated sediment or likely condensate accumulation in well.

MW-48			
Date of Measurement	**Measuring Pt Elevation (ft AMSL]**	**Water Level (ft bmp]**	**GW Elevation (ft AMSL]**
11/29/2017	5165.96	Dry	Dry
3/15/2018	5165.96	Dry	Dry
5/31/2018	5165.96	Dry	Dry
11/21/2018	5165.96	Dry	Dry
11/18/2019	5165.96	Dry	Dry
6/17/2020	5165.96	Dry	Dry
11/3/2020	5165.96	Dry	Dry
4/20/2021	5165.96	Dry	Dry
11/11/2021	5165.96	Dry	Dry
5/19/2022	5165.96	Dry	Dry
11/9/2022	5165.96	Dry	Dry
5/2/2023	5165.96	Dry	Dry
11/7/2023	5165.96	Dry	Dry
	Maximum Observed:	*0.00*	*ft AMSL*
	Minimum Observed:	*0.00*	*ft AMSL*
	Range:	*0.00*	*ft*

MW-49A			
Date of Measurement	**Measuring Pt Elevation (ft AMSL]**	**Water Level (ft bmp]**	**GW Elevation (ft AMSL]**
11/7/2015	5285.96	56.71	5229.25
12/1/2015	5285.96	57.45	5228.51
4/25/2016	5285.96	45.17	5240.79
6/4/2016	5285.96	45.44	5240.52
8/19/2016	5285.96	44.38	5241.58
9/12/2016	5285.96	45.40	5240.56
10/19/2016	5285.96	44.90	5241.06
1/31/2017	5285.96	44.23	5241.73
4/16/2017	5285.96	44.82	5241.14
5/1/2017	5285.96	44.98	5240.98
5/28/2017	5285.96	44.98	5240.98
6/20/2017	5285.96	45.06	5240.90
7/20/2017	5285.96	45.13	5240.83
8/8/2017	5285.96	45.22	5240.74
8/15/2017	5285.96	45.68	5240.28
9/9/2017	5285.96	45.32	5240.64
10/11/2017	5285.96	45.34	5240.62
3/15/2018	5285.96	49.23	5236.73
5/31/2018	5285.96	45.42	5240.54
11/2/2018	5285.96	45.29	5240.67
3/16/2019	5288.62	49.20	5239.42
5/13/2019	5288.62	49.28	5239.34
11/18/2019	5288.62	49.74	5238.88
6/17/2020	5288.62	50.21	5238.41
11/3/2020	5288.62	50.28	5238.34
4/20/2021	5288.62	50.46	5238.16
11/11/2021	5288.62	50.82	5237.80
5/19/2022	5288.62	50.99	5237.63
11/9/2022	5288.62	50.79	5237.83
5/2/2023	5288.62	51.4	5237.22
11/7/2023	5288.62	51.7	5236.92
	Maximum Observed:	*5241.73*	*ft AMSL*
	Minimum Observed:	*5228.51*	*ft AMSL*
	Range:	*13.22*	*ft*

MW-50A			
Date of Measurement	**Measuring Pt Elevation (ft AMSL]**	**Water Level (ft bmp]**	**GW Elevation (ft AMSL]**
11/3/2015	5335.67	43.69	5291.98
11/8/2015	5335.67	43.84	5291.83
11/14/2015	5335.67	43.95	5291.72
12/1/2015	5335.67	43.85	5291.82
4/25/2016	5335.67	43.23	5292.44
6/4/2016	5335.67	43.36	5292.31
8/19/2016	5335.67	43.16	5292.51
9/12/2016	5335.67	43.18	5292.49
10/19/2016	5335.67	43.07	5292.6
1/31/2017	5335.67	43.38	5292.29
4/16/2017	5335.67	43.25	5292.42
5/1/2017	5335.67	43.24	5292.43
5/28/2017	5335.67	43.33	5292.34
6/20/2017	5335.67	43.39	5292.28
7/20/2017	5335.67	43.49	5292.18
8/8/2017	5335.67	Dry	
8/15/2017	5335.67	Dry	
9/9/2017	5335.67	43.51	5292.16
10/11/2017	5335.67	43.52	5292.15
3/15/2018	5335.67	43.46	5292.21
5/31/2018	5335.67	Dry	
11/2/2018	5335.67	Dry	
4/2/2019	5335.67	43.62	5292.05
11/19/2019	5335.67	43.39	5292.28
6/16/2020	5335.67	43.47	5292.2
11/3/2020	5335.67	Dry	
4/19/2021	5335.67	Dry	
11/11/2021	5335.67	Dry	
5/18/2022	5335.67	43.63	5292.04
11/8/2022	5335.67	43.78	5291.89
5/1/2023	5335.67	43.93	5291.74
11/7/2023	5335.67	44.23	5292.89
	Maximum Observed:	*5292.89*	*ft AMSL*
	Minimum Observed:	*5291.72*	*ft AMSL*
	Range:	*1.17*	*ft*

MW-51			
Date of Measurement	**Measuring Pt Elevation (ft AMSL]**	**Water Level (ft bmp]**	**GW Elevation (ft AMSL]**
11/3/2015	5287.515	Dry	
12/1/2015	5287.515	Dry	
4/25/2016	5287.515	Dry	
6/4/2016	5287.515	Dry	
8/20/2016	5287.515	Dry	
9/12/2016	5287.515	Dry	
1/31/2017	5287.515	Dry	
4/16/2017	5287.515	Dry	
5/28/2017	5287.515	Dry	
6/20/2017	5287.515	Dry	
7/20/2017	5287.515	Dry	
8/8/2017	5287.515	Dry	
8/15/2017	5287.515	Dry	
12/2/2019	5287.515	Dry	
6/16/2020	5287.52	32.23	5255.29
11/2/2020	5287.52	Dry	
4/19/2021	5287.52	32.24	5255.28
11/10/2021	5287.52	32.25	5255.27
5/18/2022	5287.52	32.25	5255.27
11/8/2022	5287.52	32.25	5255.27
5/1/2023	5287.52	Dry	5255.28
11/7/2023	5287.52	Dry	5255.26
	Maximum Observed:	*5255.29*	*ft AMSL*
	Minimum Observed:	*5255.26*	*ft AMSL*
	Range:	*0.03*	*ft*

MW-55R			
Date of Measurement	**Measuring Pt Elevation (ft AMSL]**	**Water Level (ft AMSL]**	**GW Elevation (ft AMSL]**
6/17/2020	5243.96	Dry	
11/3/2020	5243.96	Dry	
4/20/2021	5243.96	95.92	5148.04
11/11/2021	5243.96	95.94	5148.02
5/19/2022	5243.96	95.95	Dry
11/9/2022	5243.96	95.94	Dry
5/2/2023	5234.96	95.88	Dry
11/7/2023	5234.96	95.94	Dry
	Maximum Observed:	*5148.04*	*ft AMSL*
	Minimum Observed:	*5148.02*	*ft AMSL*
	Range:	*0.02*	*ft*

Note: Water levels are field-noted to be measurements of saturated sediment or likely condensate accumulation in well.

MW-60 (Supplementary)			
Date of Measurement	**Measuring Pt Elevation (ft AMSL]**	**Water Level (ft bmp]**	**GW Elevation (ft AMSL]**
11/7/2015	5144.10	14.41	5129.69
4/25/2016	5144.10	15.45	5128.65
6/4/2016	5144.10	13.66	5130.44
8/19/2016	5144.10	13.66	5130.44
9/12/2016	5144.10	14.02	5130.08
10/19/2016	5144.10	14.28	5129.82
1/31/2017	5144.10	14.03	5130.07
4/16/2017	5144.10	13.96	5130.14
5/1/2017	5144.10	14.43	5129.67
5/28/2017	5144.10	14.30	5129.80
6/20/2017	5144.10	14.45	5129.65
7/20/2017	5144.10	14.47	5129.63
8/8/2017	5144.10	14.69	5129.41
8/15/2017	5144.10	15.33	5128.77
9/9/2017	5144.10	14.76	5129.34
10/11/2017	5144.10	14.47	5129.63
3/15/2018	5144.10	13.98	5130.12
5/31/2018	5144.10	14.08	5130.02
11/2/2018	5144.10	14.26	5129.84
12/4/2019	5144.10	14.35	5129.75
6/17/2020	5144.10	14.41	5129.69
11/3/2020	5144.10	14.68	5129.42
4/20/2021	5144.10	14.57	5129.53
11/10/2021	5144.10	15.26	5128.84
5/18/2022	5144.10	15.81	5128.29
11/8/2022	5144.10	15.94	5128.16
5/1/2023	5144.10	16.08	5128.02
11/7/2023	5144.10	16.52	5127.58
	Maximum Observed:	*5130.44*	*ft AMSL*
	Minimum Observed:	*5127.58*	*ft AMSL*
	Range:	*2.86*	*ft*

MW-61			
Date of Measurement	**Measuring Pt Elevation (ft AMSL]**	**Water Level (ft bmp]**	**GW Elevation (ft AMSL]**
11/3/2015	5129.19	24.70	5104.49
4/25/2016	5129.19	24.64	5104.55
6/4/2016	5129.19	25.18	5104.01
8/19/2016	5129.19	25.38	5103.81
9/12/2016	5129.19	25.55	5103.64
10/19/2016	5129.19	25.94	5103.25
1/31/2017	5129.19	26.10	5103.09
4/16/2017	5129.19	26.32	5102.87
5/1/2017	5129.19	23.36	5105.83
5/28/2017	5129.19	26.48	5102.71
6/20/2017	5129.19	26.56	5102.63
7/20/2017	5129.19	26.67	5102.52
8/8/2017	5129.19	26.69	5102.50
8/15/2017	5129.19	26.75	5102.44
9/9/2017	5129.19	26.81	5102.38
10/11/2017	5129.19	26.79	5102.40
3/15/2018	5129.19	26.93	5102.26
5/31/2018	5129.19	27.31	5101.88
11/2/2018	5129.19	27.61	5101.58
3/16/2019	5129.19	27.70	5101.49
5/13/2019	5129.19	27.78	5101.41
11/18/2019	5129.19	27.92	5101.27
6/17/2020	5129.19	28.35	5100.84
11/3/2020	5129.19	28.56	5100.63
4/20/2021	5129.19	28.51	5100.68
11/10/2021	5129.19	28.87	5100.32
5/18/2022	5129.19	29.01	5100.18
11/8/2022	5129.19	29.18	5100.01
5/1/2023	5129.19	29.25	5099.94
11/7/2023	5129.19	29.59	5099.60
	Maximum Observed:	*5105.83*	*ft AMSL*
	Minimum Observed:	*5099.60*	*ft AMSL*
	Range:	*6.23*	*ft*

MW-62			
Date of Measurement	**Measuring Pt Elevation (ft AMSL]**	**Water Level (ft bmp]**	**GW Elevation (ft AMSL]**
11/5/2015	5341.87	11.53	5330.34
4/25/2016	5341.87	11.15	5330.72
6/4/2016	5341.87	11.31	5330.56
8/20/2016	5341.87	10.98	5330.89
9/12/2016	5341.87	11.00	5330.87
10/19/2016	5341.87	11.63	5330.24
1/31/2017	5341.87	11.26	5330.61
4/16/2017	5341.87	11.58	5330.29
5/1/2017	5341.87	11.39	5330.48
5/28/2017	5341.87	11.69	5330.18
6/20/2017	5341.87	11.54	5330.33
7/20/2017	5341.87	11.94	5329.93
8/8/2017	5341.87	12.05	5329.82
8/15/2017	5341.87	12.02	5329.85
9/9/2017	5341.87	11.83	5330.04
10/11/2017	5341.87	11.78	5330.09
4/6/2018	5341.87	11.44	5330.43
5/31/2018	5341.87	11.61	5330.26
11/2/2018	5341.87	11.71	5330.16
4/1/2019	5341.87	12.04	5329.83
5/6/2019	5341.87	12.06	5329.81
12/3/2019	5341.87	11.59	5330.28
6/16/2020	5341.87	11.64	5330.23
11/2/2020	5341.87	11.55	5330.32
4/19/2021	5341.87	12.50	5329.37
11/10/2021	5341.87	12.29	5329.58
5/20/2022	5341.87	12.91	5328.96
11/8/2022	5341.87	13.7	5328.17
5/1/2023	5341.87	13.12	5328.75
11/6/2023	5341.87	13.51	5328.36
	Maximum Observed:	*5330.89*	*ft AMSL*
	Minimum Observed:	*5328.17*	*ft AMSL*
	Range:	*2.72*	*ft*

MW-63			
Date of Measurement	**Measuring Pt Elevation (ft ASML]**	**Water Level (ft bmp]**	**GW Elevation (ft AMSL]**
11/4/2015	5337.02	6.70	5330.32
4/25/2016	5337.02	6.70	5330.32
6/4/2016	5337.02	6.34	5330.68
8/20/2016	5337.02	6.33	5330.69
9/12/2016	5337.02	6.58	5330.44
10/19/2016	5337.02	7.00	5330.02
1/31/2017	5337.02	6.61	5330.41
4/16/2017	5337.02	7.11	5329.91
5/1/2017	5337.02	6.78	5330.24
5/28/2017	5337.02	7.33	5329.69
6/20/2017	5337.02	6.96	5330.06
7/20/2017	5337.02	7.47	5329.55
8/8/2017	5337.02	7.58	5329.44
8/15/2017	5337.02	7.60	5329.42
9/9/2017	5337.02	7.29	5329.73
10/11/2017	5337.02	7.51	5329.51
3/15/2018	5337.02	7.14	5329.88
4/6/2018	5337.02	7.17	5329.85
5/31/2018	5337.02	7.14	5329.88
11/2/2018	5337.02	7.06	5329.96
4/1/2019	5337.02	7.47	5329.55
5/6/2019	5337.02	7.53	5329.49
12/3/2019	5337.02	6.89	5330.13
6/16/2020	5337.02	7.13	5329.89
11/2/2020	5337.02	6.96	5330.06
4/19/2021	5337.02	7.73	5329.29
7/8/2021	5337.02	7.68	5329.34
11/10/2021	5337.02	7.11	5329.91
5/20/2022	5337.02	7.69	5329.33
11/8/2022	5337.02	7.97	5329.05
5/1/2023	5337.02	8.45	5328.57
11/6/2023	5337.02	8.3	5328.72
	Maximum Observed:	*5330.69*	*ft AMSL*
	Minimum Observed:	*5328.57*	*ft AMSL*
	Range:	*2.12*	*ft*

MW-64			
Date of Measurement	**Measuring Pt Elevation [ft AMSL]**	**Water Level [ft bmp]**	**GW Elevation [ft AMSL]**
11/5/2015	5337.66	6.80	5330.86
4/25/2016	5337.66	6.75	5330.91
6/4/2016	5337.66	6.62	5331.04
8/20/2016	5337.66	6.63	5331.03
9/12/2016	5337.66	6.76	5330.90
10/19/2016	5337.66	7.08	5330.58
1/31/2017	5337.66	6.86	5330.80
4/16/2017	5337.66	7.25	5330.41
5/1/2017	5337.66	6.97	5330.69
5/28/2017	5337.66	7.53	5330.13
6/20/2017	5337.66	7.27	5330.39
7/20/2017	5337.66	7.56	5330.10
8/8/2017	5337.66	7.61	5330.05
8/15/2017	5337.66	7.62	5330.04
9/9/2017	5337.66	7.41	5330.25
10/11/2017	5337.66	7.49	5330.17
3/15/2018	5337.66	7.23	5330.43
4/6/2018	5337.66	7.26	5330.40
5/31/2018	5337.66	7.31	5330.35
11/2/2018	5337.66	7.16	5330.50
4/1/2019	5337.66	7.41	5330.25
5/6/2019	5337.66	7.58	5330.08
12/3/2019	5337.66	7.09	5330.57
6/16/2020	5337.66	7.34	5330.32
11/2/2020	5337.66	7.01	5330.65
4/19/2021	5337.66	8.27	5329.39
11/10/2021	5337.66	7.42	5330.24
5/20/2022	5337.66	8.55	5329.11
11/8/2022	5337.66	8.04	5329.62
5/1/2023	5337.66	9.05	5328.61
11/6/2023	5337.66	9.08	5328.58
	Maximum Observed:	*5331.04*	*ft AMSL*
	Minimum Observed:	*5328.58*	*ft AMSL*
	Range:	*2.46*	*ft*

MW-65			
Date of Measurement	**Measuring Pt Elevation [ft AMSL]**	**Water Level [ft bmp]**	**GW Elevation [ft AMSL]**
11/5/2015	5339.74	8.72	5331.02
4/25/2016	5339.74	8.5	5331.24
6/4/2016	5339.74	8.64	5331.10
8/20/2016	5339.74	8.36	5331.38
9/12/2016	5339.74	8.41	5331.33
10/19/2016	5339.74	8.86	5330.88
1/31/2017	5339.74	8.71	5331.03
4/16/2017	5339.74	8.84	5330.90
5/1/2017	5339.74	8.81	5330.93
5/28/2017	5339.74	9.22	5330.52
6/20/2017	5339.74	9.14	5330.60
7/20/2017	5339.74	9.38	5330.36
8/8/2017	5339.74	9.36	5330.38
8/15/2017	5339.74	9.42	5330.32
9/9/2017	5339.74	9.33	5330.41
10/11/2017	5339.74	9.23	5330.51
3/15/2018	5339.74	8.98	5330.76
4/6/2018	5339.74	8.93	5330.81
5/31/2018	5339.74	9.09	5330.65
11/2/2018	5339.74	9.09	5330.65
4/1/2019	5339.74	9.14	5330.60
5/6/2019	5339.74	9.14	5330.60
12/3/2019	5339.74	9.03	5330.71
6/16/2020	5339.74	9.2	5330.54
11/2/2020	5339.74	8.99	5330.75
4/19/2021	5339.74	10.22	5329.52
7/8/2021	5339.74	10.68	5329.06
11/10/2021	5339.74	9.75	5329.99
5/20/2022	5339.74	10.77	5328.97
11/8/2022	5339.74	10.43	5329.31
5/1/2023	5339.74	10.89	5328.85
11/6/2023	5339.74	11.04	5328.70
	Maximum Observed:	*5331.38*	*ft AMSL*
	Minimum Observed:	*5328.70*	*ft AMSL*
	Range:	*2.68*	*ft*

MW-66			
Date of Measurement	**Measuring Pt Elevation (ft AMSL]**	**Water Level (ft bmp]**	**GW Elevation (ft AMSL]**
11/3/2015	5344.69	12.87	5331.82
11/5/2015	5344.69	13.05	5331.64
12/1/2015	5344.69	12.93	5331.76
3/4/2016	5344.69	12.91	5331.78
4/5/2016	5344.69	12.6	5332.09
6/4/2016	5344.69	13.02	5331.67
8/20/2016	5344.69	12.03	5332.66
9/12/2016	5344.69	12.13	5332.56
10/19/2016	5344.69	12.54	5332.15
2/1/2017	5344.69	12.76	5331.93
4/16/2017	5344.69	12.78	5331.91
5/1/2017	5344.69	12.92	5331.77
5/28/2017	5344.69	13.18	5331.51
6/20/2017	5344.69	13.3	5331.39
7/20/2017	5344.69	13.36	5331.33
8/8/2017	5344.69	13.67	5331.02
8/15/2017	5344.69	13.79	5330.90
9/9/2017	5344.69	13.65	5331.04
10/11/2017	5344.69	13.43	5331.26
3/15/2018	5344.69	13.07	5331.62
5/31/2018	5344.69	13.21	5331.48
11/2/2018	5344.69	14.47	5330.22
3/13/2019	5344.69	14.1	5330.59
5/6/2019	5344.69	14.72	5329.97
12/3/2019	5344.69	14.53	5330.16
6/16/2020	5344.69	14.72	5329.97
11/2/2020	5344.69	14.47	5330.22
4/19/2021	5344.69	14.79	5329.90
11/10/2021	5344.69	15.34	5329.35
5/20/2022	5344.69	15.92	5328.77
11/8/2022	5344.69	16.69	5328
5/1/2023	5344.69	16.39	5328.3
11/6/2023	5344.69	16.19	5328.5
	Maximum Observed:	*5332.66*	*ft AMSL*
	Minimum Observed:	*5328.00*	*ft AMSL*
	Range:	*4.66*	*ft*

MW-67			
Date of Measurement	**Measuring Pt Elevation (ft AMSL]**	**Water Level (ft bmp]**	**GW Elevation (ft AMSL]**
10/6/2015	5356.42	25.10	5331.32
11/4/2015	5356.42	24.51	5331.91
11/6/2015	5356.42	24.51	5331.91
12/1/2015	5356.42	24.60	5331.82
3/4/2016	5356.42	24.60	5331.82
4/25/2016	5356.42	24.58	5331.84
6/4/2016	5356.42	24.28	5332.14
8/20/2016	5356.42	23.74	5332.68
9/12/2016	5356.42	23.83	5332.59
10/19/2016	5356.42	24.59	5331.83
1/31/2017	5356.42	24.44	5331.98
4/16/2017	5356.42	24.59	5331.83
5/1/2017	5356.42	24.71	5331.71
5/28/2017	5356.42	24.91	5331.51
6/20/2017	5356.42	25.13	5331.29
7/20/2017	5356.42	25.12	5331.30
8/8/2017	5356.42	25.46	5330.96
8/15/2017	5356.42	25.44	5330.98
9/9/2017	5356.42	25.58	5330.84
10/11/2017	5356.42	25.16	5331.26
3/15/2018	5356.42	24.26	5332.16
5/31/2018	5356.42	25.14	5331.28
11/2/2018	5352.76	22.26	5330.50
3/13/2019	5352.76	21.96	5330.80
5/6/2019	5352.76	22.52	5330.24
12/2/2019	5352.76	22.57	5330.19
6/16/2020	5352.76	22.49	5330.27
11/2/2020	5352.76	22.41	5330.35
4/20/2021	5352.76	22.63	5330.13
11/10/2021	5352.76	23.16	5329.60
5/18/2022	5352.76	24.02	5328.74
11/8/2022	5352.76	24.52	5328.24
5/1/2023	5352.76	24.02	5328.74
11/13/2023	5352.76	24.11	5328.65
	Maximum Observed:	*5332.68*	*ft AMSL*
	Minimum Observed:	*5328.24*	*ft AMSL*
	Range:	*4.44*	*ft*

MW-68			
Date of Measurement	**Measuring Pt Elevation (ft AMSL]**	**Water Level (ft bmp]**	**GW Elevation (ft AMSL]**
10/6/2015	5353.58	21.21	5332.37
11/3/2015	5353.58	20.54	5333.04
11/6/2015	5353.58	20.58	5333.00
12/1/2015	5353.58	20.48	5333.10
4/25/2016	5353.58	20.00	5333.58
6/4/2016	5353.58	20.81	5332.77
8/19/2016	5353.58	19.21	5334.37
9/12/2016	5353.58	19.40	5334.18
10/19/2016	5353.58	19.67	5333.91
1/31/2017	5353.58	19.58	5334.00
4/16/2017	5353.58	19.76	5333.82
5/1/2017	5353.58	20.13	5333.45
5/28/2017	5353.58	20.20	5333.38
6/20/2017	5353.58	20.64	5332.94
7/20/2017	5353.58	19.27	5334.31
8/8/2017	5353.58	20.97	5332.61
8/15/2017	5353.58	21.02	5332.56
9/9/2017	5353.58	20.97	5332.61
10/11/2017	5353.58	20.24	5333.34
3/15/2018	5353.58	19.92	5333.66
5/31/2018	5353.58	20.34	5333.24
11/2/2018	5353.58	22.31	5331.27
3/15/2019	5353.58	22.33	5331.25
5/6/2019	5353.58	22.49	5331.09
12/2/2019	5353.58	22.11	5331.47
6/16/2020	5353.58	22.36	5331.22
11/2/2020	5353.58	22.31	5331.27
4/19/2021	5353.58	22.55	5331.03
11/10/2021	5353.58	22.96	5330.62
5/18/2022	5353.58	23.72	5329.86
11/8/2022	5353.58	24.45	5329.13
5/1/2023	5353.58	23.71	5329.87
11/8/2023	5353.58	23.05	5330.53
	Maximum Observed:	*5334.37*	*ft AMSL*
	Minimum Observed:	*5329.13*	*ft AMSL*
	Range:	*5.24*	*ft*

MW-69			
Date of Measurement	**Measuring Pt Elevation (ft AMSL]**	**Water Level (ft bmp]**	**GW Elevation (ft AMSL]**
10/6/2015	5357.66	23.70	5333.96
11/3/2015	5357.66	23.09	5334.57
11/4/2015	5357.66	23.11	5334.55
12/1/2015	5357.66	23.01	5334.65
3/4/2016	5357.66	22.64	5335.02
4/25/2016	5357.66	22.20	5335.46
6/4/2016	5357.66	23.32	5334.34
8/19/2016	5357.66	21.65	5336.01
9/12/2016	5357.66	21.83	5335.83
10/19/2016	5357.66	22.33	5335.33
1/31/2017	5357.66	22.39	5335.27
4/16/2017	5357.66	22.36	5335.30
5/1/2017	5357.66	22.77	5334.89
5/28/2017	5357.66	23.37	5334.29
6/20/2017	5357.66	23.75	5333.91
7/20/2017	5357.66	23.38	5334.28
8/8/2017	5357.66	23.86	5333.80
8/15/2017	5357.66	23.86	5333.80
9/9/2017	5357.66	23.87	5333.79
10/11/2017	5357.66	23.08	5334.58
3/15/2018	5357.66	22.62	5335.04
5/31/2018	5357.66	22.81	5334.85
11/2/2018	5357.66	25.58	5332.08
3/13/2019	5357.66	25.71	5331.95
5/6/2019	5357.66	26.11	5331.55
12/2/2019	5357.66	25.69	5331.97
6/16/2020	5357.66	26.16	5331.50
11/2/2020	5357.66	26.35	5331.31
4/19/2021	5357.66	26.56	5331.10
11/10/2021	5357.66	26.95	5330.71
5/18/2022	5357.66	27.37	5330.29
11/8/2022	5357.66	27.85	5329.81
5/1/2023	5357.66	27.39	5330.27
11/8/2023	5357.66	27.25	5330.41
	Maximum Observed:	*5336.01*	*ft AMSL*
	Minimum Observed:	*5329.81*	*ft AMSL*
	Range:	*6.20*	*ft*

MW-70			
Date of Measurement	**Measuring Pt Elevation (ft AMSL]**	**Water Level (ft bmp]**	**GW Elevation (ft AMSL]**
10/5/2015	5371.12	37.89	5333.23
11/3/2015	5371.12	37.33	5333.79
11/9/2015	5371.12	37.48	5333.64
12/1/2015	5371.12	37.33	5333.79
3/4/2016	5371.12	37.07	5334.05
4/25/2016	5371.12	36.70	5334.42
6/4/2016	5371.12	37.32	5333.80
8/20/2016	5371.12	36.45	5334.67
9/12/2016	5371.12	36.38	5334.74
10/19/2016	5371.12	36.59	5334.53
2/1/2017	5371.12	36.95	5334.17
4/25/2017	5371.12	36.70	5334.42
5/1/2017	5371.12	36.97	5334.15
5/28/2017	5371.12	37.44	5333.68
6/20/2017	5371.12	37.57	5333.55
7/20/2017	5371.12	37.70	5333.42
8/8/2017	5371.12	37.77	5333.35
8/15/2017	5371.12	37.93	5333.19
9/9/2017	5371.12	37.91	5333.21
10/11/2017	5371.12	37.59	5333.53
3/15/2018	5371.12	37.19	5333.93
5/31/2018	5371.12	37.08	5334.04
11/2/2018	5371.12	39.13	5331.99
3/13/2019	5371.12	39.03	5332.09
5/6/2019	5371.12	39.66	5331.46
12/3/2019	5371.12	39.88	5331.24
6/16/2020	5371.12	40.01	5331.11
11/2/2020	5371.12	40.21	5330.91
4/19/2021	5371.12	40.22	5330.90
11/10/2021	5371.12	40.69	5330.43
5/20/2022	5371.12	40.62	5330.50
11/8/2022	5371.12	41.44	5329.68
5/1/2023	5371.12	41.35	5329.77
11/6/2023	5371.12	41.3	5329.82
	Maximum Observed:	*5334.74*	*ft AMSL*
	Minimum Observed:	*5329.68*	*ft AMSL*
	Range:	*5.06*	*ft*

MW-71			
Date of Measurement	**Measuring Pt Elevation (ft AMSL]**	**Water Level (ft bmp]**	**GW Elevation (ft AMSL]**
3/5/2016	5362.91	31.50	5331.41
4/25/2016	5362.91	31.41	5331.50
6/4/2016	5362.91	31.69	5331.22
8/19/2016	5362.91	31.34	5331.57
9/12/2016	5362.91	31.21	5331.70
10/19/2016	5362.91	31.58	5331.33
1/31/2017	5362.91	31.51	5331.40
4/16/2017	5362.91	31.50	5331.41
5/1/2017	5362.91	31.49	5331.42
5/28/2017	5362.91	31.70	5331.21
6/20/2017	5362.91	31.72	5331.19
7/20/2017	5362.91	31.71	5331.20
8/8/2017	5362.91	31.72	5331.19
8/15/2017	5362.91	31.66	5331.25
9/9/2017	5362.91	31.89	5331.02
10/11/2017	5362.91	31.82	5331.09
3/15/2018	5362.91	31.18	5331.73
5/31/2018	5362.91	31.71	5331.20
11/2/2018	5362.91	32.09	5330.82
3/13/2019	5362.91	32.25	5330.66
5/6/2019	5362.91	32.29	5330.62
12/2/2019	5362.91	32.11	5330.80
6/16/2020	5362.91	32.26	5330.65
11/2/2020	5362.91	32.17	5330.74
4/19/2021	5362.91	32.22	5330.69
11/10/2021	5362.91	32.88	5330.03
5/18/2022	5362.91	33.06	5329.85
11/8/2022	5362.91	33.54	5329.37
5/1/2023	5362.91	33.64	5329.27
11/7/2023	5362.91	33.43	5329.48
	Maximum Observed:	*5331.73*	*ft AMSL*
	Minimum Observed:	*5329.27*	*ft AMSL*
	Range:	*2.46*	*ft*

MW-72			
Date of Measurement	**Measuring Pt Elevation (ft AMSL]**	**Water Level (ft bmp]**	**GW Elevation (ft AMSL]**
3/5/2016	5381.62	49.72	5331.90
4/25/2016	5381.62	49.12	5332.50
6/4/2016	5381.62	49.76	5331.86
8/19/2016	5381.62	49.54	5332.08
9/12/2016	5381.62	49.43	5332.19
10/19/2016	5381.62	49.49	5332.13
1/31/2017	5381.62	49.49	5332.13
4/16/2017	5381.62	49.37	5332.25
5/1/2017	5381.62	49.33	5332.29
5/28/2017	5381.62	49.63	5331.99
6/20/2017	5381.62	49.65	5331.97
7/20/2017	5381.62	49.68	5331.94
8/8/2017	5381.62	49.68	5331.94
8/15/2017	5381.62	49.54	5332.08
9/9/2017	5381.62	49.75	5331.87
10/11/2017	5381.62	49.81	5331.81
3/15/2018	5381.62	49.21	5332.41
5/31/2018	5381.62	49.65	5331.97
11/2/2018	5381.62	50.06	5331.56
3/14/2019	5381.62	50.12	5331.50
5/6/2019	5381.62	49.98	5331.64
11/18/2019	5381.62	50.17	5331.45
6/16/2020	5381.62	50.12	5331.50
11/2/2020	5381.62	50.39	5331.23
4/22/2021	5381.62	NM	
11/10/2021	5381.62	50.62	5331.00
5/18/2022	5381.62	50.73	5330.89
11/8/2022	5381.62	51.05	5330.57
5/1/2023	5381.62	50.84	5330.78
11/7/2023	5381.62	51.19	5330.43
	Maximum Observed:	*5332.50*	*ft AMSL*
	Minimum Observed:	*5330.43*	*ft AMSL*
	Range:	*2.07*	*ft*

MW-73			
Date of Measurement	**Measuring Pt Elevation (ft AMSL]**	**Water Level (ft bmp]**	**GW Elevation (ft AMSL]**
1/31/2017	5353.95	23.99	5329.96
4/16/2017	5353.95	24.38	5329.57
5/1/2017	5353.95	24.28	5329.67
5/28/2017	5353.95	24.29	5329.66
6/20/2017	5353.95	24.54	5329.41
7/20/2017	5353.95	25.27	5328.68
8/8/2017	5353.95	25.47	5328.48
8/15/2017	5353.95	25.74	5328.21
9/9/2017	5353.95	25.32	5328.63
10/11/2017	5353.95	24.59	5329.36
3/15/2018	5353.95	23.90	5330.05
5/31/2018	5353.95	24.86	5329.09
11/2/2018	5353.95	24.89	5329.06
3/13/2019	5353.95	24.34	5329.61
5/6/2019	5353.95	25.31	5328.64
11/18/2019	5353.95	24.73	5329.22
6/16/2020	5353.95	24.71	5329.24
11/2/2020	5353.95	24.33	5329.62
4/19/2021	5353.95	24.15	5329.80
11/10/2021	5353.95	24.91	5329.04
5/18/2022	5353.95	25.28	5328.67
11/8/2022	5353.95	26.48	5327.47
5/1/2023	5353.95	26.09	5327.86
11/7/2023	5353.95	26.43	5327.52
	Maximum Observed:	*5330.05*	*ft AMSL*
	Minimum Observed:	*5327.47*	*ft AMSL*
	Range:	*2.58*	*ft*

MW-74			
Date of Measurement	**Measuring Pt Elevation (ft AMSL]**	**Water Level (ft bmp]**	**GW Elevation (ft AMSL]**
1/31/2017	5219.09	16.53	5202.56
4/16/2017	5219.09	16.61	5202.48
5/1/2017	5219.09	16.76	5202.33
5/28/2017	5219.09	17.12	5201.97
6/20/2017	5219.09	17.61	5201.48
7/20/2017	5219.09	18.46	5200.63
8/8/2017	5219.09	18.94	5200.15
8/15/2017	5219.09	19.67	5199.42
9/9/2017	5219.09	19.36	5199.73
10/11/2017	5219.09	19.67	5199.42
3/15/2018	5219.09	16.54	5202.55
5/31/2018	5219.09	17.69	5201.40
11/2/2018	5219.09	19.92	5199.17
3/16/2019	5219.09	16.65	5202.44
5/13/2019	5219.09	17.19	5201.90
11/18/2019	5219.09	19.84	5199.25
6/16/2020	5219.09	18.68	5200.41
11/2/2020	5219.09	20.08	5199.01
4/19/2021	5219.09	16.55	5202.54
11/10/2021	5219.09	20.11	5198.98
5/18/2022	5219.09	17.51	5201.58
11/8/2022	5219.09	20.08	5199.01
5/1/2023	5219.09	16.73	5202.36
11/7/2023	5219.09	20.4	5198.69
	Maximum Observed:	*5202.56*	*ft AMSL*
	Minimum Observed:	*5198.69*	*ft AMSL*
	Range:	*3.87*	*ft*

MW-75			
Date of Measurement	**Measuring Pt Elevation (ft AMSL]**	**Water Level (ft bmp]**	**GW Elevation (ft AMSL]**
4/16/2017	5126.80	24.42	5102.38
5/1/2017	5126.80	24.48	5102.32
5/28/2017	5126.80	24.64	5102.16
6/20/2017	5126.80	24.71	5102.09
7/20/2017	5126.80	24.88	5101.92
8/8/2017	5126.80	24.89	5101.91
8/15/2017	5126.80	24.93	5101.87
9/9/2017	5126.80	25.02	5101.78
10/11/2017	5126.80	24.95	5101.85
3/15/2018	5126.80	25.13	5101.67
5/31/2018	5126.80	25.54	5101.26
11/2/2018	5126.80	25.92	5100.88
3/16/2019	5126.80	26.04	5100.76
5/13/2019	5126.80	26.11	5100.69
11/18/2019	5126.80	26.08	5100.72
6/17/2020	5126.80	26.85	5099.95
11/3/2020	5126.80	27.03	5099.77
4/20/2021	5126.80	27.11	5099.69
11/10/2021	5126.80	27.54	5099.26
5/18/2022	5126.80	27.79	5099.01
11/8/2022	5126.80	27.93	5098.87
5/1/2023	5126.80	27.92	5098.88
11/7/2023	5126.80	28.52	5098.28
	Maximum Observed:	*5102.38*	*ft AMSL*
	Minimum Observed:	*5098.28*	*ft AMSL*
	Range:	*4.10*	*ft*

MW-76			
Date of Measurement	**Measuring Pt Elevation (ft AMSL]**	**Water Level (ft bmp]**	**GW Elevation (ft AMSL]**
4/16/2017	5116.23	Dry	
5/1/2017	5116.23	Dry	
5/28/2017	5116.23	Dry	
6/20/2017	5116.23	Dry	
7/20/2017	5116.23	28.78	5087.45
8/8/2017	5116.23	Dry	
8/15/2017	5116.23	Dry	
9/9/2017	5116.23	27.76	5088.47
10/11/2017	5116.23	Dry	
3/15/2018	5116.23	26.79	5089.44
5/31/2018	5116.23	Dry	
11/2/2018	5116.23	Dry	
4/2/2019	5116.23	27.44	5088.79
11/18/2019	5116.23	23.98	5092.25
6/18/2020	5116.23	27.26	5088.97
11/3/2020	5116.23	27.42	5088.81
4/20/2021	5116.23	27.71	5088.52
11/11/2021	5116.23	29.12	5087.11
5/19/2022	5116.23	28.85	5087.38
11/9/2022	5116.23	28.91	5087.32
5/2/2023	5116.23	28.82	5087.41
11/7/2023	5116.23	29.03	5087.2
	Maximum Observed:	*5092.25*	*ft AMSL*
	Minimum Observed:	*5087.11*	*ft AMSL*
	Range:	*5.14*	*ft*

MW-83			
Date of Measurement	**Measuring Pt Elevation (ft AMSL]**	**Water Level (ft bmp]**	**GW Elevation (ft AMSL]**
12/15/2018	5343.15	13.38	5329.77
3/13/2019	5343.15	13.40	5329.75
5/6/2019	5343.15	13.47	5329.68
12/2/2019	5343.15	13.31	5329.84
6/16/2020	5343.15	13.29	5329.86
11/2/2020	5343.15	13.26	5329.89
4/19/2021	5343.15	13.7	5329.45
11/10/2021	5343.15	13.87	5329.28
5/18/2022	5343.15	14.09	5329.06
11/8/2022	5343.15	15.09	5328.06
5/7/2023	5343.15	15.28	5327.87
11/8/2023	5343.15	15.24	5327.91
	Maximum Observed:	*5329.89*	*ft AMSL*
	Minimum Observed:	*5327.87*	*ft AMSL*
	Range:	*2.02*	*ft*

MW-84			
Date of Measurement	**Measuring Pt Elevation (ft AMSL]**	**Water Level (ft bmp]**	**GW Elevation (ft AMSL]**
12/15/2018	5338.23	8.39	5329.84
3/13/2019	5338.23	7.85	5330.38
5/6/2019	5338.23	8.42	5329.81
12/2/2019	5338.23	8.17	5330.06
6/16/2020	5338.23	8.26	5329.97
11/2/2020	5338.23	8.13	5330.1
4/19/2021	5338.23	8.44	5329.79
11/10/2021	5338.23	8.97	5329.26
5/18/2022	5338.23	9.54	5328.69
11/8/2022	5338.23	10.17	5328.06
5/1/2023	5338.23	10.04	5328.19
11/8/2023	5338.23	9.74	5328.49
	Maximum Observed:	*5330.38*	*ft AMSL*
	Minimum Observed:	*5328.06*	*ft AMSL*
	Range:	*2.32*	*ft*

MW-85			
Date of Measurement	**Measuring Pt Elevation (ft AMSL]**	**Water Level (ft bmp]**	**GW Elevation (ft AMSL]**
12/15/2018	5352.78	22.53	5330.25
3/13/2019	5352.78	22.16	5330.62
5/6/2019	5352.78	22.83	5329.95
12/2/2019	5352.78	22.48	5330.30
6/16/2020	5352.78	22.68	5330.1
11/2/2020	5352.78	22.51	5330.27
4/19/2021	5352.78	22.8	5329.98
11/10/2021	5352.78	23.3	5329.48
5/18/2022	5352.78	23.73	5329.05
11/8/2022	5352.78	24.07	5328.71
5/1/2023	5352.78	24.26	5328.52
11/8/2023	5352.78	23.83	5328.95
	Maximum Observed:	*5330.62*	*ft AMSL*
	Minimum Observed:	*5328.52*	*ft AMSL*
	Range:	*2.10*	*ft*

MW-86			
Date of Measurement	**Measuring Pt Elevation (ft AMSL]**	**Water Level (ft bmp]**	**GW Elevation (ft AMSL]**
12/15/2018	5338.76	9.08	5329.68
3/13/2019	5338.76	8.53	5330.23
5/6/2019	5338.76	9.08	5329.68
12/3/2019	5338.76	8.82	5329.94
6/16/2020	5338.76	8.99	5329.77
11/2/2020	5338.76	8.76	5330
4/19/2021	5338.76	9.2	5329.56
11/10/2021	5339.76	9.53	5330.23
5/20/2022	5339.76	9.74	5330.02
11/8/2022	5339.76	10.79	5328.97
5/1/2023	5339.76	10.46	5329.3
11/6/2023	5339.76	10.3	5329.46
	Maximum Observed:	*5330.23*	*ft AMSL*
	Minimum Observed:	*5328.97*	*ft AMSL*
	Range:	*1.26*	*ft*

MW-87			
Date of Measurement	**Measuring Pt Elevation (ft AMSL]**	**Water Level (ft bmp]**	**GW Elevation (ft AMSL]**
12/15/2018	5076.53	Dry	
3/13/2019	5076.53	31.95	5044.58
5/13/2019	5076.53	30.46	5046.07
11/18/2019	5076.53	30.62	5045.91
6/18/2020	5076.53	30.24	5046.29
11/3/2020	5076.53	31.86	5044.67
4/20/2021	5076.53	30.75	5045.78
11/11/2021	5076.53	31.67	5044.86
5/19/2022	5076.53	31.6	5044.93
11/9/2022	5076.53	32.24	5044.29
5/2/2023	5076.53	30.59	5045.94
11/7/2023	5076.53	32.04	5044.49
	Maximum Observed:	*5046.29*	*ft AMSL*
	Minimum Observed:	*5044.29*	*ft AMSL*
	Range:	*2.00*	*ft*

MW-88			
Date of Measurement	**Measuring Pt Elevation (ft AMSL]**	**Water Level (ft bmp]**	**GW Elevation (ft AMSL]**
6/17/2020	5365.249	Dry	
11/2/2020	5365.249	Dry	
4/19/2021	5365.249	Dry	
11/10/2021	5365.249	Dry	
5/18/2022	5365.249	32	5333.249
11/8/2022	5365.249	31.99	5333.259
5/1/2023	5365.249	Dry	
11/7/2023	5365.249	Dry	
	Maximum Observed:	*5333.26*	*ft AMSL*
	Minimum Observed:	*5333.25*	*ft AMSL*
	Range:	*0.01*	*ft*

MW-89			
Date of Measurement	**Measuring Pt Elevation (ft AMSL]**	**Water Level (ft bmp]**	**GW Elevation (ft AMSL]**
6/17/2020	5370.208	35.21	5334.998
11/2/2020	5370.208	35.21	5334.998
4/19/2021	5370.208	35.19	5335.018
11/10/2021	5370.208	35.22	5334.988
5/18/2022	5370.208	35.21	5334.998
11/8/2022	5370.208	35.21	5334.998
5/2/2023	5370.208	Dry	
11/7/2023	5370.208	Dry	
	Maximum Observed:	*5335.02*	*ft AMSL*
	Minimum Observed:	*5334.99*	*ft AMSL*
	Range:	*0.03*	*ft*

Note: Water levels are field-noted to be measurements of saturated sediment or likely condensate accumulation in well.

MW-90			
Date of Measurement	**Measuring Pt Elevation (ft AMSL]**	**Water Level (ft bmp]**	**GW Elevation (ft AMSL]**
6/17/2020	5374.082	40.32	5333.762
11/2/2020	5374.082	40.31	5333.772
4/19/2021	5374.082	40.16	5333.922
11/10/2021	5374.082	40.19	5333.892
5/18/2022	5374.082	40.13	5333.952
11/8/2022	5374.082	40.14	5333.942
5/1/2023	5374.082	Dry	
11/7/2023	5374.082	Dry	
	Maximum Observed:	*5333.95*	*ft AMSL*
	Minimum Observed:	*5333.76*	*ft AMSL*
	Range:	*0.19*	*ft*

Note: Water levels are field-noted to be measurements of saturated sediment or likely condensate accumulation in well.

APPENDIX

D

2023 ANALYTICAL LABORATORY REPORTS

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ANALYTICAL REPORT

PREPARED FOR

Attn: Natalie Chrisman
Arizona Public Service Company
PO BOX 188, Ste. 4458
Joseph City, Arizona 86032

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JOB DESCRIPTION

CCR Groundwater Monitoring
SDG NUMBER APS Four Corners Power Plant (CWTP)

JOB NUMBER

550-196988-1

Eurofins Phoenix
4625 East Cotton Center Boulevard
Suite #189
Phoenix AZ 85040

See page two for job notes and contact information.

Job Notes

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The data in the report relate to the field sample(s) as received by the laboratory and associated QC. All results have been reviewed and have been found to be compliant with laboratory and accreditation requirements, with the exception of the noted deviation(s). For questions, please contact the Project Manager.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Southwest, LLC Project Manager.

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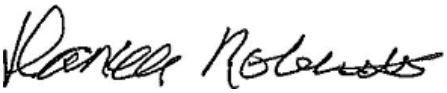

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Table of Contents

Cover Page 1
Table of Contents 3
Definitions/Glossary 4
Case Narrative 5
Sample Summary 6
Detection Summary 7
Client Sample Results 8
QC Sample Results 10
QC Association Summary 11
Lab Chronicle 12
Certification Summary 14
Method Summary 15
Chain of Custody 16
Receipt Checklists 17

Definitions/Glossary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-196988-1
SDG: APS Four Corners Power Plant (CWTP)

Qualifiers

Metals

Qualifier	Qualifier Description
M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The associated blank spike was acceptable.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 550-196988-1

Laboratory: Eurofins Phoenix

Narrative

Job Narrative
550-196988-1

Comments
The report being provided is a revision of the original report sent on 2/06/2023. The report (revision 1) is being revised due to: Calcium added.

No additional comments.

Receipt
The samples were received on 1/30/2023 10:39 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 1.8º C.

Metals
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Sample Summary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-196988-1
SDG: APS Four Corners Power Plant (CWTP)

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
550-196988-1	FC-CCR-MW62-0123	Water	01/27/23 12:24	01/30/23 10:39
550-196988-2	FC-CCR-MW71-0123	Water	01/27/23 16:00	01/30/23 10:39
550-196988-3	FC-CCR-MW72-0123	Water	01/27/23 15:17	01/30/23 10:39
550-196988-4	FC-CCR-MW73-0123	Water	01/27/23 14:05	01/30/23 10:39
550-196988-5	FC-CCR-SW1-0123	Water	01/27/23 13:24	01/30/23 10:39
550-196988-6	FC-CCR-SW2-0123	Water	01/27/23 12:50	01/30/23 10:39
550-196988-7	FC-CCR-SW3-0123	Water	01/27/23 12:45	01/30/23 10:39
550-196988-8	FC-CCR-FD01-0123	Water	01/27/23 14:40	01/30/23 10:39
550-196988-9	FC-CCR-EB01-0123	Water	01/28/23 14:18	01/30/23 10:39

Detection Summary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-196988-1
SDG: APS Four Corners Power Plant (CWTP)

Client Sample ID: FC-CCR-MW62-0123 — Lab Sample ID: 550-196988-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	2.1		0.050		mg/L	1		200.7 Rev 4.4	Total/NA
Calcium	550		2.0		mg/L	1		200.7 Rev 4.4	Total/NA

Client Sample ID: FC-CCR-MW71-0123 — Lab Sample ID: 550-196988-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	0.47		0.050		mg/L	1		200.7 Rev 4.4	Total/NA
Calcium	460		2.0		mg/L	1		200.7 Rev 4.4	Total/NA

Client Sample ID: FC-CCR-MW72-0123 — Lab Sample ID: 550-196988-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	0.16		0.050		mg/L	1		200.7 Rev 4.4	Total/NA
Calcium	470		2.0		mg/L	1		200.7 Rev 4.4	Total/NA

Client Sample ID: FC-CCR-MW73-0123 — Lab Sample ID: 550-196988-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	1.6		0.050		mg/L	1		200.7 Rev 4.4	Total/NA
Calcium	480	M3	2.0		mg/L	1		200.7 Rev 4.4	Total/NA

Client Sample ID: FC-CCR-SW1-0123 — Lab Sample ID: 550-196988-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	0.31		0.050		mg/L	1		200.7 Rev 4.4	Total/NA
Calcium	90		2.0		mg/L	1		200.7 Rev 4.4	Total/NA

Client Sample ID: FC-CCR-SW2-0123 — Lab Sample ID: 550-196988-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	0.45		0.050		mg/L	1		200.7 Rev 4.4	Total/NA
Calcium	110		2.0		mg/L	1		200.7 Rev 4.4	Total/NA

Client Sample ID: FC-CCR-SW3-0123 — Lab Sample ID: 550-196988-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	0.31		0.050		mg/L	1		200.7 Rev 4.4	Total/NA
Calcium	88		2.0		mg/L	1		200.7 Rev 4.4	Total/NA

Client Sample ID: FC-CCR-FD01-0123 — Lab Sample ID: 550-196988-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	0.31		0.050		mg/L	1		200.7 Rev 4.4	Total/NA
Calcium	89		2.0		mg/L	1		200.7 Rev 4.4	Total/NA

Client Sample ID: FC-CCR-EB01-0123 — Lab Sample ID: 550-196988-9

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Phoenix

Client Sample ID: FC-CCR-MW62-0123
Lab Sample ID: 550-196988-1
Date Collected: 01/27/23 12:24
Matrix: Water
Date Received: 01/30/23 10:39

Method: 40CFR136A 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	2.1		0.050		mg/L		01/31/23 09:56	02/02/23 21:33	1
Calcium	550		2.0		mg/L		01/31/23 09:56	02/02/23 21:33	1

Client Sample ID: FC-CCR-MW71-0123
Lab Sample ID: 550-196988-2
Date Collected: 01/27/23 16:00
Matrix: Water
Date Received: 01/30/23 10:39

Method: 40CFR136A 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.47		0.050		mg/L		01/31/23 09:56	02/02/23 21:35	1
Calcium	460		2.0		mg/L		01/31/23 09:56	02/02/23 21:35	1

Client Sample ID: FC-CCR-MW72-0123
Lab Sample ID: 550-196988-3
Date Collected: 01/27/23 15:17
Matrix: Water
Date Received: 01/30/23 10:39

Method: 40CFR136A 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.16		0.050		mg/L		01/31/23 09:56	02/02/23 21:38	1
Calcium	470		2.0		mg/L		01/31/23 09:56	02/02/23 21:38	1

Client Sample ID: FC-CCR-MW73-0123
Lab Sample ID: 550-196988-4
Date Collected: 01/27/23 14:05
Matrix: Water
Date Received: 01/30/23 10:39

Method: 40CFR136A 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1.6		0.050		mg/L		01/31/23 09:56	02/02/23 21:30	1
Calcium	480	M3	2.0		mg/L		01/31/23 09:56	02/02/23 21:30	1

Client Sample ID: FC-CCR-SW1-0123
Lab Sample ID: 550-196988-5
Date Collected: 01/27/23 13:24
Matrix: Water
Date Received: 01/30/23 10:39

Method: 40CFR136A 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.31		0.050		mg/L		01/31/23 09:56	02/02/23 21:41	1
Calcium	90		2.0		mg/L		01/31/23 09:56	02/02/23 21:41	1

Client Sample ID: FC-CCR-SW2-0123
Lab Sample ID: 550-196988-6
Date Collected: 01/27/23 12:50
Matrix: Water
Date Received: 01/30/23 10:39

Method: 40CFR136A 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.45		0.050		mg/L		01/31/23 09:56	02/02/23 21:44	1
Calcium	110		2.0		mg/L		01/31/23 09:56	02/02/23 21:44	1

Client Sample Results

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-196988-1
SDG: APS Four Corners Power Plant (CWTP)

Client Sample ID: FC-CCR-SW3-0123

Lab Sample ID: 550-196988-7
Date Collected: 01/27/23 12:45
Matrix: Water
Date Received: 01/30/23 10:39

Method: 40CFR136A 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.31		0.050		mg/L		01/31/23 09:56	02/02/23 21:52	1
Calcium	88		2.0		mg/L		01/31/23 09:56	02/02/23 21:52	1

Client Sample ID: FC-CCR-FD01-0123

Lab Sample ID: 550-196988-8
Date Collected: 01/27/23 14:40
Matrix: Water
Date Received: 01/30/23 10:39

Method: 40CFR136A 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.31		0.050		mg/L		01/31/23 09:56	02/02/23 21:55	1
Calcium	89		2.0		mg/L		01/31/23 09:56	02/02/23 21:55	1

Client Sample ID: FC-CCR-EB01-0123

Lab Sample ID: 550-196988-9
Date Collected: 01/28/23 14:18
Matrix: Water
Date Received: 01/30/23 10:39

Method: 40CFR136A 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.050		mg/L		01/31/23 09:56	02/02/23 21:58	1
Calcium	ND		2.0		mg/L		01/31/23 09:56	02/02/23 21:58	1

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 550-293515/1-A
Matrix: Water
Analysis Batch: 293821

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 293515

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.050		mg/L		01/31/23 09:56	02/02/23 21:16	1
Calcium	ND		2.0		mg/L		01/31/23 09:56	02/02/23 21:16	1

Lab Sample ID: LCS 550-293515/2-A
Matrix: Water
Analysis Batch: 293821

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 293515

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Boron			1.00	1.03		mg/L		103	85 - 115		
Calcium			20.0	19.6		mg/L		98	85 - 115		

Lab Sample ID: LCSD 550-293515/3-A
Matrix: Water
Analysis Batch: 293821

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 293515

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron			1.00	1.02		mg/L		102	85 - 115	1	20
Calcium			20.0	19.8		mg/L		99	85 - 115	1	20

Lab Sample ID: 550-196988-4 MS
Matrix: Water
Analysis Batch: 293821

Client Sample ID: FC-CCR-MW73-0123
Prep Type: Total/NA
Prep Batch: 293515

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Boron	1.6		1.00	2.59		mg/L		99	70 - 130		
Calcium	480	M3	20.0	471	M3	mg/L		-42	70 - 130		

Lab Sample ID: 550-196988-4 MSD
Matrix: Water
Analysis Batch: 293821

Client Sample ID: FC-CCR-MW73-0123
Prep Type: Total/NA
Prep Batch: 293515

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron	1.6		1.00	2.59		mg/L		100	70 - 130	0	20
Calcium	480	M3	20.0	472	M3	mg/L		-36	70 - 130	0	20

QC Association Summary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-196988-1
SDG: APS Four Corners Power Plant (CWTP)

Metals

Prep Batch: 293515

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-196988-1	FC-CCR-MW62-0123	Total/NA	Water	200.7	
550-196988-2	FC-CCR-MW71-0123	Total/NA	Water	200.7	
550-196988-3	FC-CCR-MW72-0123	Total/NA	Water	200.7	
550-196988-4	FC-CCR-MW73-0123	Total/NA	Water	200.7	
550-196988-5	FC-CCR-SW1-0123	Total/NA	Water	200.7	
550-196988-6	FC-CCR-SW2-0123	Total/NA	Water	200.7	
550-196988-7	FC-CCR-SW3-0123	Total/NA	Water	200.7	
550-196988-8	FC-CCR-FD01-0123	Total/NA	Water	200.7	
550-196988-9	FC-CCR-EB01-0123	Total/NA	Water	200.7	
MB 550-293515/1-A	Method Blank	Total/NA	Water	200.7	
LCS 550-293515/2-A	Lab Control Sample	Total/NA	Water	200.7	
LCSD 550-293515/3-A	Lab Control Sample Dup	Total/NA	Water	200.7	
550-196988-4 MS	FC-CCR-MW73-0123	Total/NA	Water	200.7	
550-196988-4 MSD	FC-CCR-MW73-0123	Total/NA	Water	200.7	

Analysis Batch: 293821

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-196988-1	FC-CCR-MW62-0123	Total/NA	Water	200.7 Rev 4.4	293515
550-196988-2	FC-CCR-MW71-0123	Total/NA	Water	200.7 Rev 4.4	293515
550-196988-3	FC-CCR-MW72-0123	Total/NA	Water	200.7 Rev 4.4	293515
550-196988-4	FC-CCR-MW73-0123	Total/NA	Water	200.7 Rev 4.4	293515
550-196988-5	FC-CCR-SW1-0123	Total/NA	Water	200.7 Rev 4.4	293515
550-196988-6	FC-CCR-SW2-0123	Total/NA	Water	200.7 Rev 4.4	293515
550-196988-7	FC-CCR-SW3-0123	Total/NA	Water	200.7 Rev 4.4	293515
550-196988-8	FC-CCR-FD01-0123	Total/NA	Water	200.7 Rev 4.4	293515
550-196988-9	FC-CCR-EB01-0123	Total/NA	Water	200.7 Rev 4.4	293515
MB 550-293515/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	293515
LCS 550-293515/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	293515
LCSD 550-293515/3-A	Lab Control Sample Dup	Total/NA	Water	200.7 Rev 4.4	293515
550-196988-4 MS	FC-CCR-MW73-0123	Total/NA	Water	200.7 Rev 4.4	293515
550-196988-4 MSD	FC-CCR-MW73-0123	Total/NA	Water	200.7 Rev 4.4	293515

Lab Chronicle

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-196988-1
SDG: APS Four Corners Power Plant (CWTP)

Client Sample ID: FC-CCR-MW62-0123
Lab Sample ID: 550-196988-1
Date Collected: 01/27/23 12:24
Matrix: Water
Date Received: 01/30/23 10:39

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	200.7			293515	SGO	EET PHX	01/31/23 09:56
Total/NA	Analysis	200.7 Rev 4.4		1	293821	GLW	EET PHX	02/02/23 21:33

Client Sample ID: FC-CCR-MW71-0123
Lab Sample ID: 550-196988-2
Date Collected: 01/27/23 16:00
Matrix: Water
Date Received: 01/30/23 10:39

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	200.7			293515	SGO	EET PHX	01/31/23 09:56
Total/NA	Analysis	200.7 Rev 4.4		1	293821	GLW	EET PHX	02/02/23 21:35

Client Sample ID: FC-CCR-MW72-0123
Lab Sample ID: 550-196988-3
Date Collected: 01/27/23 15:17
Matrix: Water
Date Received: 01/30/23 10:39

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	200.7			293515	SGO	EET PHX	01/31/23 09:56
Total/NA	Analysis	200.7 Rev 4.4		1	293821	GLW	EET PHX	02/02/23 21:38

Client Sample ID: FC-CCR-MW73-0123
Lab Sample ID: 550-196988-4
Date Collected: 01/27/23 14:05
Matrix: Water
Date Received: 01/30/23 10:39

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	200.7			293515	SGO	EET PHX	01/31/23 09:56
Total/NA	Analysis	200.7 Rev 4.4		1	293821	GLW	EET PHX	02/02/23 21:30

Client Sample ID: FC-CCR-SW1-0123
Lab Sample ID: 550-196988-5
Date Collected: 01/27/23 13:24
Matrix: Water
Date Received: 01/30/23 10:39

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	200.7			293515	SGO	EET PHX	01/31/23 09:56
Total/NA	Analysis	200.7 Rev 4.4		1	293821	GLW	EET PHX	02/02/23 21:41

Client Sample ID: FC-CCR-SW2-0123
Lab Sample ID: 550-196988-6
Date Collected: 01/27/23 12:50
Matrix: Water
Date Received: 01/30/23 10:39

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	200.7			293515	SGO	EET PHX	01/31/23 09:56
Total/NA	Analysis	200.7 Rev 4.4		1	293821	GLW	EET PHX	02/02/23 21:44

Lab Chronicle

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-196988-1
SDG: APS Four Corners Power Plant (CWTP)

Client Sample ID: FC-CCR-SW3-0123
Date Collected: 01/27/23 12:45
Date Received: 01/30/23 10:39

Lab Sample ID: 550-196988-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	200.7			293515	SGO	EET PHX	01/31/23 09:56
Total/NA	Analysis	200.7 Rev 4.4		1	293821	GLW	EET PHX	02/02/23 21:52

Client Sample ID: FC-CCR-FD01-0123
Date Collected: 01/27/23 14:40
Date Received: 01/30/23 10:39

Lab Sample ID: 550-196988-8
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	200.7			293515	SGO	EET PHX	01/31/23 09:56
Total/NA	Analysis	200.7 Rev 4.4		1	293821	GLW	EET PHX	02/02/23 21:55

Client Sample ID: FC-CCR-EB01-0123
Date Collected: 01/28/23 14:18
Date Received: 01/30/23 10:39

Lab Sample ID: 550-196988-9
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	200.7			293515	SGO	EET PHX	01/31/23 09:56
Total/NA	Analysis	200.7 Rev 4.4		1	293821	GLW	EET PHX	02/02/23 21:58

Laboratory References:

EET PHX = Eurofins Phoenix, 4625 East Cotton Center Boulevard, Suite #189, Phoenix, AZ 85040, TEL (602)437-3340

Accreditation/Certification Summary

Client: Arizona Public Service Company
Job ID: 550-196988-1
Project/Site: CCR Groundwater Monitoring
SDG: APS Four Corners Power Plant (CWTP)

Laboratory: Eurofins Phoenix

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arizona	State	AZ0728	06-10-23

Method Summary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-196988-1
SDG: APS Four Corners Power Plant (CWTP)

Method	Method Description	Protocol	Laboratory
200.7 Rev 4.4	Metals (ICP)	40CFR136A	EET PHX
200.7	Preparation, Total Metals	EPA	EET PHX

Protocol References:

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.
EPA = US Environmental Protection Agency

Laboratory References:

EET PHX = Eurofins Phoenix, 4625 East Cotton Center Boulevard, Suite #189, Phoenix, AZ 85040, TEL (602)437-3340

TestAmerica Phoenix
4625 E Cotton Center Blvd
Suite 189
Phoenix, AZ 85040
phone 602.437.3340 fax 602.454.9303

Chain of Custody Record

196988

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☑ Other: CCR

TestAmerica Laboratories, Inc.

Client Contact	Natalie Chrisman	Cameron Corley (505-860-3619)	Date:	COC No:
Arizona Public Service	602-250-3608	Lab Contact: Rachel Sester	Carrier:	1 of 1 COCs
PO Box 355, MS 4915	Analysis Turnaround Time			Sampler:
Fruitland, NM 87416	☐ CALENDAR DAYS ☑ WORKING DAYS			For Lab Use Only:
Phone	TAT if different from Below _____			Walk-in Client:
FAX	☑ 2 weeks			Lab Sampling:
Project Name: CCR Groundwater Monitoring	☐ 1 week			
Site: APS Four Corners Power Plant (CWTP)	☐ 2 days			Job / SDG No.:
PO #: 100617121	☐ 1 day			

550-196988 Chain of Custody

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	EPA 200.7 - Totals (B)		Sample Specific Notes:
FC-CCR-MW62-0123	1-27-23	1224	G	W	1	N	N	X	-01	Low Flow
FC-CCR-MW71-0123	1-27-23	1600	G	W	1	N	N	X	-02	"
FC-CCR-MW72-0123	1-27-23	1517	G	W	1	N	N	X	-03	"
FC-CCR-MW73-0123	1-27-23	1405	G	W	3	N	Y	X	-04	Low Flow, MS/MSD
FC-CCR-SW1-0123	1-27-23	1324	G	W	1	N	N	X	-05	Morgan Lake surface grab sample
FC-CCR-SW2-0123	1-27-23	1250	G	W	1	N	N	X	-06	CWTP surface grab sample
FC-CCR-SW3-0123	1-27-23	1245	G	W	1	N	N	X	-07	Cooling Canal surface grab sample
FC-CCR-FD01-0123	1-27-23	1440	G	W	1	N	N	X	-08	Dupe
FC-CCR-EB01-0123	1-28-23	1418	G	W	1	N	N	X	-09	
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____								4		

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☑ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

Method 200.8 with collision cell

1.8°C

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:				
Relinquished by: BSLC	Company: WSP	Date/Time: 1-30-23 1039	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company: EETA PHX	Date/Time: 1/30/23 10:39

CPO

Login Sample Receipt Checklist

Client: Arizona Public Service Company

Job Number: 550-196988-1
SDG Number: APS Four Corners Power Plant (CWTP)

Login Number: 196988
List Number: 1
Creator: Gravlin, Andrea

List Source: Eurofins Phoenix

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Radiation Safety Engineering, Inc.

3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121 (480) 897-9459
Website: www.radsafe.com FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Arizona Public Service
400 N. 5th Street
Phoenix, AZ 85004

Sampling Date: May 04, 2023
Sample Received: May 08, 2023
Analysis Completed: May 22, 2023

Sample ID	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
FC-CCR-MW61-0523	0.6 ± 0.3	2.2 ± 0.4	2.8 ± 0.5

Date of Analysis	5/12/2023	5/12/2023	5/12/2023

Alex Myers, Ph.D. 5/22/2023
Date

Laboratory License Number AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

May 4, 2023 (Sample Date) 9:54 (Sample Time) (24 hour clock) _____ Owner/Contact Person

_____ Owner/Contact Fax Number _____ Owner/Contact Phone Number

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring Date Q1 collected: _____

☐ Quarterly Date Q2 collected: _____

☐ Composite of four quarterly samples Date Q3 collected: _____

Date Q4 collected: _____

RADIOCHEMICAL ANALYSIS

>>>To be filled out by laboratory personnel<<<

*****Combined Uranium must be reported in micrograms per liter*****

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result		Exceed MCL
	15 pCi/L		Adjusted Gross Alpha	4000				
600/00-02		3 pCi/L	Gross Alpha	4002				
7500 - Rn			Radon	4004				
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L	
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	5/12/2023	2.8 ± 0.5		
GammaRay HPGE		1 pCi/L	Radium 226	4020	5/12/2023	0.6 ± 0.3		
		1 pCi/L	Radium 228	4030	5/12/2023	2.2 ± 0.4		

LABORATORY INFORMATION

>>>To be filled out by laboratory personnel<<<

Specimen Number: RSE71784

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: FC-CCR-MW61-0523

Authorized Signature: _____

Date Public Water System Notified: _____

DWAR 6: 11/2007

Radiation Safety Engineering, Inc.
3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121 (480) 897-9459
Website: www.radsafe.com FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Arizona Public Service
400 N. 5th Street
Phoenix, AZ 85004

Sampling Date: May 04, 2023
Sample Received: May 08, 2023
Analysis Completed: May 22, 2023

Sample ID	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
FC-CCR-MW75-0523	0.7 ± 0.2	< 0.6	0.7 ± 0.2
Date of Analysis	5/12/2023	5/12/2023	5/12/2023

Alex Myers, Ph.D. 5/22/2023
Date

Laboratory License Number AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

May 4, 2023 (Sample Date) 10:42 (Sample Time) (24 hour clock) _____ Owner/Contact Person

_____ Owner/Contact Fax Number _____ Owner/Contact Phone Number

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring Date Q1 collected: _____

☐ Quarterly Date Q2 collected: _____

☐ Composite of four quarterly samples Date Q3 collected: _____

Date Q4 collected: _____

RADIOCHEMICAL ANALYSIS

>>>To be filled out by laboratory personnel<<<

*****Combined Uranium must be reported in micrograms per liter*****

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result		Exceed MCL
	15 pCi/L		Adjusted Gross Alpha	4000				
600/00-02		3 pCi/L	Gross Alpha	4002				
7500 - Rn			Radon	4004				
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L	
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	5/12/2023	0.7 ± 0.2		
GammaRay HPGE		1 pCi/L	Radium 226	4020	5/12/2023	0.7 ± 0.2		
		1 pCi/L	Radium 228	4030	5/12/2023	< 0.6		

LABORATORY INFORMATION

>>>To be filled out by laboratory personnel<<<

Specimen Number: RSE71785

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: FC-CCR-MW75-0523

Authorized Signature: Alex Mun

Date Public Water System Notified: _____

DWAR 6: 11/2007

Radiation Safety Engineering, Inc.

3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121
Website: www.radsafe.com

(480) 897-9459
FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Arizona Public Service
400 N. 5th Street
Phoenix, AZ 85004

Sampling Date: May 05, 2023
Sample Received: May 08, 2023
Analysis Completed: May 22, 2023

Sample ID	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
FC-CCR-MW87-0523	< 0.5	2.3 ± 0.3	2.3 ± 0.3
Date of Analysis	5/12/2023	5/12/2023	5/12/2023

Alex Myers, Ph.D. 5/22/2023
Date

Laboratory License Number AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

May 5, 2023 (Sample Date) 18:06 (Sample Time) (24 hour clock)

_____ Owner/Contact Person

_____ Owner/Contact Fax Number

_____ Owner/Contact Phone Number

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring — Date Q1 collected: _____

☐ Quarterly — Date Q2 collected: _____

☐ Composite of four quarterly samples — Date Q3 collected: _____

Date Q4 collected: _____

RADIOCHEMICAL ANALYSIS

>>>To be filled out by laboratory personnel<<<

*****Combined Uranium must be reported in micrograms per liter*****

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result		Exceed MCL
	15 pCi/L		Adjusted Gross Alpha	4000				
600/00-02		3 pCi/L	Gross Alpha	4002				
7500 - Rn			Radon	4004				
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L	
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	5/12/2023	2.3 ± 0.3		
GammaRay HPGE		1 pCi/L	Radium 226	4020	5/12/2023	< 0.5		
		1 pCi/L	Radium 228	4030	5/12/2023	2.3 ± 0.3		

LABORATORY INFORMATION

>>>To be filled out by laboratory personnel<<<

Specimen Number: RSE71786

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: FC-CCR-MW87-0523

Authorized Signature: _____

Date Public Water System Notified: _____

DWAR 6: 11/2007

Client Information	
Name:	Natalie Chrisman/602-250-3608 Pam Norris/505-598-8781
Company	Arizona Public Service
Address	PO Box 355, MS 4915 Fruitland, NM 87416
Phone	
Site	APS Four Corners Power Plant (Multiunit)

Radiation Safety Engineering, Inc.
3245 North Washington Street, Chandler, Arizona 85225
Analysis Request

Sample ID & Location (DWR#)	Collection Date	Collection Time	Media (DW* WW* Other)	Drinking Water Compliance	Gross Alpha	Gross Beta	Total Uranium	Isotopic Uranium	Ra-226	Ra-228	Ra-226 + Ra-228, Combined	H-3	Gamma Spectroscopy	Sr-89/Sr-90	Radon in Water	Radon in Air
FC-CCR-MW61-0523	5/4/2023	954	GW						X	X	X				71784	
FC-CCR-MW75-0523	5/4/2023	1042	GW						X	X	X				71785	
FC-CCR-MW87-0523	5/5/2023	1806	GW						X	X	X				71786	

Sample Receipt	
Total No. of Containers	
Chain of Custody Seals	
Container Condition	
Lab No.	

Invoice to:
PO#: 300592346

Instructions/Comments
Method HPGe

Relinquished By: [illegible]	Company: WSP	Date/time: 8 May 23	Received By: [signature]		Company:	Date/time: 5/8/23	1445
Relinquished By: American Matrix	Company: AMS	Date/time: 0854	Received By:		Company:	Date/time:	
Relinquished By:	Company:	Date/time:	Received By: [signature]		Company:	Date/time:	

* DW = Drinking Water, WW = Waste Water, GW = Groundwater.

Radiation Safety Engineering, Inc.

3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121 (480) 897-9459
Website: www.radsafe.com FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Arizona Public Service
400 N. 5th Street
Phoenix, AZ 85004

Sampling Date: May 08, 2023
Sample Received: May 11, 2023
Analysis Completed: May 30, 2023

Sample ID	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
FC-CCR-MW07-0523	< 0.4	0.7 ± 0.3	0.7 ± 0.3

Date of Analysis	5/12/2023	5/12/2023	5/12/2023

Alex Myers, Ph.D. 5/30/2023
Date

Laboratory License Number AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

May 8, 2023 (Sample Date) 15:18 (Sample Time) (24 hour clock) _____ (Owner/Contact Person)

_____ (Owner/Contact Fax Number) _____ (Owner/Contact Phone Number)

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring — Date Q1 collected: _____

☐ Quarterly — Date Q2 collected: _____

☐ Composite of four quarterly samples — Date Q3 collected: _____

Date Q4 collected: _____

*****RADIOCHEMICAL ANALYSIS*****

>>>To be filled out by laboratory personnel<<<

*****Combined Uranium must be reported in micrograms per liter*****

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result		Exceed MCL
	15 pCi/L		Adjusted Gross Alpha	4000				
600/00-02		3 pCi/L	Gross Alpha	4002				
7500 - Rn			Radon	4004				
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L	
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	5/12/2023	0.7 ± 0.3		
GammaRay HPGE		1 pCi/L	Radium 226	4020	5/12/2023	< 0.4		
		1 pCi/L	Radium 228	4030	5/12/2023	0.7 ± 0.3		

*****LABORATORY INFORMATION*****

>>>To be filled out by laboratory personnel<<<

Specimen Number: RSE71822

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: FC-CCR-MW07-0523

Authorized Signature: _____

Date Public Water System Notified: _____

DWAR 6: 11/2007

Radiation Safety Engineering, Inc.

3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121 (480) 897-9459
Website: www.radsafe.com FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Arizona Public Service
400 N. 5th Street
Phoenix, AZ 85004

Sampling Date: May 08, 2023
Sample Received: May 11, 2023
Analysis Completed: May 30, 2023

Sample ID	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
FC-CCR-MW08-0523	< 0.4	1.0 ± 0.3	1.0 ± 0.3
Date of Analysis	5/12/2023	5/12/2023	5/12/2023

Alex Myers, Ph.D. 5/30/2023
Date

Laboratory License Number AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

May 8, 2023 (Sample Date) 14:07 (Sample Time) (24 hour clock) _____ (Owner/Contact Person)

_____ (Owner/Contact Fax Number) _____ (Owner/Contact Phone Number)

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring — Date Q1 collected: _____

☐ Quarterly — Date Q2 collected: _____

☐ Composite of four quarterly samples — Date Q3 collected: _____

Date Q4 collected: _____

RADIOCHEMICAL ANALYSIS

>>>To be filled out by laboratory personnel<<<

*****Combined Uranium must be reported in micrograms per liter*****

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result		Exceed MCL
	15 pCi/L		Adjusted Gross Alpha	4000				
600/00-02		3 pCi/L	Gross Alpha	4002				
7500 - Rn			Radon	4004				
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L	
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	5/12/2023	1.0 ± 0.3		
GammaRay HPGE		1 pCi/L	Radium 226	4020	5/12/2023	< 0.4		
		1 pCi/L	Radium 228	4030	5/12/2023	1.0 ± 0.3		

LABORATORY INFORMATION

>>>To be filled out by laboratory personnel<<<

Specimen Number: RSE71823

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: FC-CCR-MW08-0523

Authorized Signature: _____

Date Public Water System Notified: _____

DWAR 6: 11/2007

Radiation Safety Engineering, Inc.

3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121
Website: www.radsafe.com

(480) 897-9459
FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Arizona Public Service
400 N. 5th Street
Phoenix, AZ 85004

Sampling Date: May 08, 2023
Sample Received: May 11, 2023
Analysis Completed: May 30, 2023

Sample ID	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
FC-CCR-MW49A-0523	< 0.4	0.9 ± 0.3	0.9 ± 0.3

Date of Analysis	5/12/2023	5/12/2023	5/12/2023

Alex Myers, Ph.D. 5/30/2023
Date

Laboratory License Number AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

May 8, 2023 (Sample Date) 16:34 (Sample Time) (24 hour clock) _____ Owner/Contact Person

_____ Owner/Contact Fax Number _____ Owner/Contact Phone Number

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring Date Q1 collected: _____

☐ Quarterly Date Q2 collected: _____

☐ Composite of four quarterly samples Date Q3 collected: _____

Date Q4 collected: _____

RADIOCHEMICAL ANALYSIS

>>>To be filled out by laboratory personnel<<<

*****Combined Uranium must be reported in micrograms per liter*****

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result		Exceed MCL
	15 pCi/L		Adjusted Gross Alpha	4000				
600/00-02		3 pCi/L	Gross Alpha	4002				
7500 - Rn			Radon	4004				
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L	
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	5/12/2023	0.9 ± 0.3		
GammaRay HPGE		1 pCi/L	Radium 226	4020	5/12/2023	< 0.4		
		1 pCi/L	Radium 228	4030	5/12/2023	0.9 ± 0.3		

LABORATORY INFORMATION

>>>To be filled out by laboratory personnel<<<

Specimen Number: RSE71824

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: FC-CCR-MW49A-0523

Authorized Signature: _____

Date Public Water System Notified: _____

DWAR 6: 11/2007

Client Information

Name:	**Natalie Chrisman/602-250-3608** **Pam Norris/505-598-8781**
Company	**Arizona Public Service**
Address	**PO Box 355, MS 4915** **Fruitland, NM 87416**
Phone	
Site	**APS Four Corners Power Plant (Multiunit)**

Radiation Safety Engineering, Inc.
3245 North Washington Street, Chandler, Arizona 85225
Analysis Request

Sample ID & Location (DWR#)	Collection Date	Collection Time	Media (DW* WW* Other)	Drinking Water Compliance	Gross Alpha	Gross Beta	Total Uranium	Isotopic Uranium	Ra-226	Ra-228	Ra-226 + Ra-228, Combined	H-3	Gamma Spectroscopy	Sr-89/Sr-90	Radon in Water	Radon in Air	
FC-CCR-MW07-0523	5/8/2023	1518	**GW**						X	X	X						71822
FC-CCR-MW08-0523	5/8/2023	1407	**GW**						X	X	X						71823
FC-CCR-MW49A-0523	5/8/2023	1634	**GW**						X	X	X						71824

Sample Receipt

Total No. of Containers	
Chain of Custody Seals	
Container Condition	
Lab No.	

Invoice to:
PO#: 300592346

Instructions/Comments
Method HPGe

Relinguished By: Hunter	Company: WSP	Date/time: 5/11/23 09:56	Received By: Pat Flannery		Company:	Date/time: 5/11/23 9:56
Relinguished By:	Company:	Date/time:	Received By:		Company:	Date/time:
Relinguished By:	Company:	Date/time:	Received By:		Company:	Date/time:

* DW = Drinking Water, WW = Waste Water, GW = Groundwater.

u/client/forms/cofc.frm

Radiation Safety Engineering, Inc.

3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121
Website: www.radsafe.com

(480) 897-9459
FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Arizona Public Service
400 N. 5th Street
Phoenix, AZ 85004

Sampling Date: May 08, 2023
Sample Received: May 11, 2023
Analysis Completed: May 30, 2023

Sample ID	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
FC-CCR-DMX06-0523	< 0.4	< 0.6	< 0.6
Date of Analysis	5/12/2023	5/12/2023	5/12/2023

Alex Myers, Ph.D. 5/30/2023
Date

Laboratory License Number AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

May 8, 2023 (Sample Date) 10:28 (Sample Time) (24 hour clock) _____ (Owner/Contact Person)

_____ (Owner/Contact Fax Number) _____ (Owner/Contact Phone Number)

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring — Date Q1 collected: _____

☐ Quarterly — Date Q2 collected: _____

☐ Composite of four quarterly samples — Date Q3 collected: _____

Date Q4 collected: _____

*****RADIOCHEMICAL ANALYSIS*****

>>>To be filled out by laboratory personnel<<<

*****Combined Uranium must be reported in micrograms per liter*****

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result		Exceed MCL
	15 pCi/L		Adjusted Gross Alpha	4000				
600/00-02		3 pCi/L	Gross Alpha	4002				
7500 - Rn			Radon	4004				
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L	
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	5/12/2023	< 0.6		
GammaRay HPGE		1 pCi/L	Radium 226	4020	5/12/2023	< 0.4		
		1 pCi/L	Radium 228	4030	5/12/2023	< 0.6		

*****LABORATORY INFORMATION*****

>>>To be filled out by laboratory personnel<<<

Specimen Number: RSE71817

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: FC-CCR-DMX06-0523

Authorized Signature: _____

Date Public Water System Notified: _____

DWAR 6: 11/2007

Radiation Safety Engineering, Inc.
3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121 (480) 897-9459
Website: www.radsafe.com FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Arizona Public Service
400 N. 5th Street
Phoenix, AZ 85004

Sampling Date: May 08, 2023
Sample Received: May 11, 2023
Analysis Completed: May 30, 2023

Sample ID	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
FC-CCR-MW15-0523	0.6 ± 0.2	0.9 ± 0.3	1.5 ± 0.4
Date of Analysis	5/12/2023	5/12/2023	5/12/2023

Alex Myers, Ph.D. 5/30/2023
Date

Laboratory License Number AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

May 8, 2023 (Sample Date) 11:18 (Sample Time) (24 hour clock) _____ Owner/Contact Person

_____ Owner/Contact Fax Number _____ Owner/Contact Phone Number

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring Date Q1 collected: _____

☐ Quarterly Date Q2 collected: _____

☐ Composite of four quarterly samples Date Q3 collected: _____

Date Q4 collected: _____

*****RADIOCHEMICAL ANALYSIS*****

>>>To be filled out by laboratory personnel<<<

*****Combined Uranium must be reported in micrograms per liter*****

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result		Exceed MCL
	15 pCi/L		Adjusted Gross Alpha	4000				
600/00-02		3 pCi/L	Gross Alpha	4002				
7500 - Rn			Radon	4004				
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L	
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	5/12/2023	1.5 ± 0.4		
GammaRay HPGE		1 pCi/L	Radium 226	4020	5/12/2023	0.6 ± 0.2		
		1 pCi/L	Radium 228	4030	5/12/2023	0.9 ± 0.3		

*****LABORATORY INFORMATION*****

>>>To be filled out by laboratory personnel<<<

Specimen Number: RSE71818

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: FC-CCR-MW15-0523

Authorized Signature: _____

Date Public Water System Notified: _____

DWAR 6: 11/2007

Radiation Safety Engineering, Inc.

3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121
Website: www.radsafe.com

(480) 897-9459
FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Arizona Public Service
400 N. 5th Street
Phoenix, AZ 85004

Sampling Date: May 08, 2023
Sample Received: May 11, 2023
Analysis Completed: May 30, 2023

Sample ID	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
FC-CCR-MW16-0523	1.3 ± 0.2	3.0 ± 0.4	4.3 ± 0.4
Date of Analysis	5/12/2023	5/12/2023	5/12/2023

Alex Myers, Ph.D. 5/30/2023
Date

Laboratory License Number AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

May 8, 2023 (Sample Date) 12:38 (Sample Time) (24 hour clock) _____ Owner/Contact Person

_____ Owner/Contact Fax Number _____ Owner/Contact Phone Number

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring Date Q1 collected: _____

☐ Quarterly Date Q2 collected: _____

☐ Composite of four quarterly samples Date Q3 collected: _____

Date Q4 collected: _____

RADIOCHEMICAL ANALYSIS

>>>To be filled out by laboratory personnel<<<

*****Combined Uranium must be reported in micrograms per liter*****

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result		Exceed MCL
	15 pCi/L		Adjusted Gross Alpha	4000				
600/00-02		3 pCi/L	Gross Alpha	4002				
7500 - Rn			Radon	4004				
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L	
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	5/12/2023	4.3 ± 0.4		
GammaRay HPGE		1 pCi/L	Radium 226	4020	5/12/2023	1.3 ± 0.2		
		1 pCi/L	Radium 228	4030	5/12/2023	3.0 ± 0.4		

LABORATORY INFORMATION

>>>To be filled out by laboratory personnel<<<

Specimen Number: RSE71819

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: FC-CCR-MW16-0523

Authorized Signature: _____

Date Public Water System Notified: _____

DWAR 6: 11/2007

Radiation Safety Engineering, Inc.

3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121 (480) 897-9459
Website: www.radsafe.com FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Arizona Public Service
400 N. 5th Street
Phoenix, AZ 85004

Sampling Date: May 10, 2023
Sample Received: May 11, 2023
Analysis Completed: May 30, 2023

Sample ID	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
FC-CCR-EB01-0523	< 0.4	0.9 ± 0.5	0.9 ± 0.5

Date of Analysis	5/12/2023	5/12/2023	5/12/2023

Alex Myers, Ph.D. 5/30/2023
Date

Laboratory License Number AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

May 10, 2023 (Sample Date) 9:25 (Sample Time) (24 hour clock) _____ (Owner/Contact Person)

_____ (Owner/Contact Fax Number) _____ (Owner/Contact Phone Number)

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring — Date Q1 collected: _____

☐ Quarterly — Date Q2 collected: _____

☐ Composite of four quarterly samples — Date Q3 collected: _____

Date Q4 collected: _____

*****RADIOCHEMICAL ANALYSIS*****

>>>To be filled out by laboratory personnel<<<

*****Combined Uranium must be reported in micrograms per liter*****

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result		Exceed MCL
	15 pCi/L		Adjusted Gross Alpha	4000				
600/00-02		3 pCi/L	Gross Alpha	4002				
7500 - Rn			Radon	4004				
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L	
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	5/12/2023	0.9 ± 0.5		
GammaRay HPGE		1 pCi/L	Radium 226	4020	5/12/2023	< 0.4		
		1 pCi/L	Radium 228	4030	5/12/2023	0.9 ± 0.5		

*****LABORATORY INFORMATION*****

>>>To be filled out by laboratory personnel<<<

Specimen Number: RSE71820

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: FC-CCR-EB01-0523

Authorized Signature: _____

Date Public Water System Notified: _____

DWAR 6: 11/2007

Radiation Safety Engineering, Inc.

3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121 (480) 897-9459
Website: www.radsafe.com FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Arizona Public Service
400 N. 5th Street
Phoenix, AZ 85004

Sampling Date: May 09, 2023
Sample Received: May 11, 2023
Analysis Completed: May 30, 2023

Sample ID	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
FC-CCR-APV6-0523	< 0.4	1.8 ± 0.3	1.8 ± 0.3

Date of Analysis	5/12/2023	5/12/2023	5/12/2023

Alex Myers, Ph.D. 5/30/2023
Date

Laboratory License Number AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

May 9, 2023 (Sample Date) 9:04 (Sample Time) (24 hour clock) _____ Owner/Contact Person

_____ Owner/Contact Fax Number _____ Owner/Contact Phone Number

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring — Date Q1 collected: _____

☐ Quarterly — Date Q2 collected: _____

☐ Composite of four quarterly samples — Date Q3 collected: _____

Date Q4 collected: _____

*****RADIOCHEMICAL ANALYSIS*****

>>>To be filled out by laboratory personnel<<<

*****Combined Uranium must be reported in micrograms per liter*****

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result		Exceed MCL
	15 pCi/L		Adjusted Gross Alpha	4000				
600/00-02		3 pCi/L	Gross Alpha	4002				
7500 - Rn			Radon	4004				
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L	
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	5/12/2023	1.8 ± 0.3		
GammaRay HPGE		1 pCi/L	Radium 226	4020	5/12/2023	< 0.4		
		1 pCi/L	Radium 228	4030	5/12/2023	1.8 ± 0.3		

*****LABORATORY INFORMATION*****

>>>To be filled out by laboratory personnel<<<

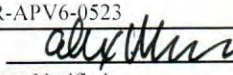
Specimen Number: RSE71821

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: FC-CCR-APV6-0523

Authorized Signature: 

Date Public Water System Notified: _____

DWAR 6: 11/2007

Client Information

Name:	**Natalie Chrisman/602-250-3608** **Pam Norris/505-598-8781**
Company	**Arizona Public Service**
Address	**PO Box 355, MS 4915** **Fruitland, NM 87416**
Phone	
Site	**APS Four Corners Power Plant (Other)**

Radiation Safety Engineering, Inc.
3245 North Washington Street, Chandler, Arizona 85225
Analysis Request

Sample ID & Location (DWR#)	Collection Date	Collection Time	Media (DW* WW* Other)	Drinking Water Compliance	Gross Alpha	Gross Beta	Total Uranium	Isotopic Uranium	Ra-226	Ra-228	Ra-226 + Ra-228, Combined	H-3	Gamma Spectroscopy	Sr-89/Sr-90	Radon in Water	Radon in Air	
FC-CCR-DMX06-0523	5/8/2023	1028	**GW**						X	X	X						71817
FC-CCR-MW15-0523	5/8/2023	1118	**GW**						X	X	X						71818
FC-CCR-MW16-0523	5/8/2023	1238	**GW**						X	X	X						71819
FC-CCR-EB01-0523	5/10/2023	925	**GW**						X	X	X						71820
FC-CCR-APV6-0523	5/9/2023	904	**GW**						X	X	X						71821

Total No. of Containers	
Chain of Custody Seals	
Container Condition	
Lab No.	

PO#: 300592346

Method HPGe

Relinguished By:	Company: WJP	Date/time: 5/11/23 09:50	Received By:		Company:	Date/time: 5/11/23 9:56
Relinguished By:	Company:	Date/time:	Received By:		Company:	Date/time:
Relinguished By:	Company:	Date/time:	Received By:		Company:	Date/time:

* DW = Drinking Water, WW = Waste Water, GW = Groundwater.

u/client/forms/cofc.frm

Radiation Safety Engineering, Inc.

3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121 (480) 897-9459
Website: www.radsafe.com FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Arizona Public Service
400 N. 5th Street
Phoenix, AZ 85004

Sampling Date: May 07, 2023
Sample Received: May 08, 2023
Analysis Completed: May 30, 2023

Sample ID	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
FC-CCR-MW66-0523	0.4 ± 0.2	2.1 ± 0.3	2.5 ± 0.4

Date of Analysis	5/12/2023	5/12/2023	5/12/2023

Alex Myers, Ph.D. 5/30/2023
Date

Laboratory License Number AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

May 7, 2023 (Sample Date) 12:45 (Sample Time) (24 hour clock) _____ Owner/Contact Person

_____ Owner/Contact Fax Number _____ Owner/Contact Phone Number

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring Date Q1 collected: _____

☐ Quarterly Date Q2 collected: _____

☐ Composite of four quarterly samples Date Q3 collected: _____

Date Q4 collected: _____

*****RADIOCHEMICAL ANALYSIS*****

>>>To be filled out by laboratory personnel<<<

*****Combined Uranium must be reported in micrograms per liter*****

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result	Exceed MCL
	15 pCi/L		Adjusted Gross Alpha	4000			
600/00-02		3 pCi/L	Gross Alpha	4002			
7500 - Rn			Radon	4004			
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006		µg/L	
			Uranium 234	4007			
			Uranium 235	4008			
			Uranium 238	4009			
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	5/12/2023	2.5 ± 0.4	
GammaRay HPGE		1 pCi/L	Radium 226	4020	5/12/2023	0.4 ± 0.2	
		1 pCi/L	Radium 228	4030	5/12/2023	2.1 ± 0.3	

*****LABORATORY INFORMATION*****

>>>To be filled out by laboratory personnel<<<

Specimen Number: RSE71778

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: FC-CCR-MW66-0523

Authorized Signature: _____

Date Public Water System Notified: _____

DWAR 6: 11/2007

Radiation Safety Engineering, Inc.

3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121
Website: www.radsafe.com

(480) 897-9459
FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Arizona Public Service
400 N. 5th Street
Phoenix, AZ 85004

Sampling Date: May 07, 2023
Sample Received: May 08, 2023
Analysis Completed: May 30, 2023

Sample ID	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
FC-CCR-MW70-0523	0.5 ± 0.2	1.6 ± 0.3	2.1 ± 0.4
Date of Analysis	5/12/2023	5/12/2023	5/12/2023

Alex Myers, Ph.D. — 5/30/2023 Date

Laboratory License Number AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

May 7, 2023 (Sample Date) 10:59 (Sample Time) (24 hour clock) _____ Owner/Contact Person

_____ Owner/Contact Fax Number _____ Owner/Contact Phone Number

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring Date Q1 collected: _____

☐ Quarterly Date Q2 collected: _____

☐ Composite of four quarterly samples Date Q3 collected: _____

Date Q4 collected: _____

*****RADIOCHEMICAL ANALYSIS*****

>>>To be filled out by laboratory personnel<<<

*****Combined Uranium must be reported in micrograms per liter*****

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result	Exceed MCL
	15 pCi/L		Adjusted Gross Alpha	4000			
600/00-02		3 pCi/L	Gross Alpha	4002			
7500 - Rn			Radon	4004			
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006		µg/L	
			Uranium 234	4007			
			Uranium 235	4008			
			Uranium 238	4009			
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	5/12/2023	2.1 ± 0.4	
GammaRay HPGE		1 pCi/L	Radium 226	4020	5/12/2023	0.5 ± 0.2	
		1 pCi/L	Radium 228	4030	5/12/2023	1.6 ± 0.3	

*****LABORATORY INFORMATION*****

>>>To be filled out by laboratory personnel<<<

Specimen Number: RSE71779

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: FC-CCR-MW70-0523

Authorized Signature: _____

Date Public Water System Notified: _____

DWAR 6: 11/2007

Radiation Safety Engineering, Inc.

3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121 (480) 897-9459
Website: www.radsafe.com FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Arizona Public Service
400 N. 5th Street
Phoenix, AZ 85004

Sampling Date: May 07, 2023
Sample Received: May 08, 2023
Analysis Completed: May 30, 2023

Sample ID	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
FC-CCR-MW73-0523	< 0.5	0.8 ± 0.3	0.8 ± 0.3

Date of Analysis	5/12/2023	5/12/2023	5/12/2023

Alex Myers, Ph.D. 5/30/2023
Date

Laboratory License Number AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

May 7, 2023 (Sample Date) 18:15 (Sample Time) (24 hour clock)

_____ Owner/Contact Person

_____ Owner/Contact Fax Number

_____ Owner/Contact Phone Number

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring — Date Q1 collected: _____

☐ Quarterly — Date Q2 collected: _____

☐ Composite of four quarterly samples — Date Q3 collected: _____

Date Q4 collected: _____

RADIOCHEMICAL ANALYSIS

>>>To be filled out by laboratory personnel<<<

*****Combined Uranium must be reported in micrograms per liter*****

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result		Exceed MCL
	15 pCi/L		Adjusted Gross Alpha	4000				
600/00-02		3 pCi/L	Gross Alpha	4002				
7500 - Rn			Radon	4004				
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L	
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	5/12/2023	0.8 ± 0.3		
GammaRay HPGE		1 pCi/L	Radium 226	4020	5/12/2023	< 0.5		
		1 pCi/L	Radium 228	4030	5/12/2023	0.8 ± 0.3		

LABORATORY INFORMATION

>>>To be filled out by laboratory personnel<<<

Specimen Number: RSE71780

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: FC-CCR-MW73-0523

Authorized Signature: _____

Date Public Water System Notified: _____

DWAR 6: 11/2007

Radiation Safety Engineering, Inc.

3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121
Website: www.radsafe.com

(480) 897-9459
FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Arizona Public Service
400 N. 5th Street
Phoenix, AZ 85004

Sampling Date: May 07, 2023
Sample Received: May 08, 2023
Analysis Completed: May 30, 2023

Sample ID	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
FC-CCR-MW83-0523	< 0.5	< 0.6	< 0.6
Date of Analysis	5/12/2023	5/12/2023	5/12/2023

alex Myers 5/30/2023

Alex Myers, Ph.D. Date

Laboratory License Number AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

May 7, 2023 (Sample Date) 17:21 (Sample Time) (24 hour clock)

_____ Owner/Contact Person

_____ Owner/Contact Fax Number

_____ Owner/Contact Phone Number

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring

☐ Quarterly

☐ Composite of four quarterly samples

Date Q1 collected: _____

Date Q2 collected: _____

Date Q3 collected: _____

Date Q4 collected: _____

RADIOCHEMICAL ANALYSIS

>>>To be filled out by laboratory personnel<<<

*****Combined Uranium must be reported in micrograms per liter*****

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result		Exceed MCL
	15 pCi/L		Adjusted Gross Alpha	4000				
600/00-02		3 pCi/L	Gross Alpha	4002				
7500 - Rn			Radon	4004				
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L	
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	5/12/2023	< 0.6		
GammaRay HPGE		1 pCi/L	Radium 226	4020	5/12/2023	< 0.5		
		1 pCi/L	Radium 228	4030	5/12/2023	< 0.6		

LABORATORY INFORMATION

>>>To be filled out by laboratory personnel<<<

Specimen Number: RSE71781

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: FC-CCR-MW83-0523

Authorized Signature: _____

Date Public Water System Notified: _____

DWAR 6: 11/2007

Radiation Safety Engineering, Inc.
3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121
Website: www.radsafe.com
(480) 897-9459
FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Arizona Public Service
400 N. 5th Street
Phoenix, AZ 85004

Sampling Date: May 07, 2023
Sample Received: May 08, 2023
Analysis Completed: May 30, 2023

Sample ID	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
FC-CCR-MW86-0523	< 0.5	< 0.6	< 0.6
Date of Analysis	5/12/2023	5/12/2023	5/12/2023

Alex Myers, Ph.D. 5/30/2023
Date

Laboratory License Number AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

May 7, 2023 (Sample Date) 13:25 (Sample Time) (24 hour clock)

_____ Owner/Contact Person

_____ Owner/Contact Fax Number

_____ Owner/Contact Phone Number

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring

☐ Quarterly

☐ Composite of four quarterly samples

Date Q1 collected: _____

Date Q2 collected: _____

Date Q3 collected: _____

Date Q4 collected: _____

RADIOCHEMICAL ANALYSIS

>>>To be filled out by laboratory personnel<<<

*****Combined Uranium must be reported in micrograms per liter*****

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result		Exceed MCL
	15 pCi/L		Adjusted Gross Alpha	4000				
600/00-02		3 pCi/L	Gross Alpha	4002				
7500 - Rn			Radon	4004				
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L	
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	5/12/2023	< 0.6		
GammaRay HPGE		1 pCi/L	Radium 226	4020	5/12/2023	< 0.5		
		1 pCi/L	Radium 228	4030	5/12/2023	< 0.6		

LABORATORY INFORMATION

>>>To be filled out by laboratory personnel<<<

Specimen Number: RSE71782

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: FC-CCR-MW86, 0523

Authorized Signature: _____

Date Public Water System Notified: _____

DWAR 6: 11/2007

Radiation Safety Engineering, Inc.

3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121
Website: www.radsafe.com

(480) 897-9459
FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Arizona Public Service
400 N. 5th Street
Phoenix, AZ 85004

Sampling Date: May 07, 2023
Sample Received: May 08, 2023
Analysis Completed: May 30, 2023

Sample ID	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
FC-CCR-FD02-0523	< 0.5	< 0.6	< 0.6
Date of Analysis	5/12/2023	5/12/2023	5/12/2023

Alex Myers, Ph.D. 5/30/2023
Date

Laboratory License Number AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

May 7, 2023 (Sample Date) 16:20 (Sample Time) (24 hour clock)

_____ Owner/Contact Person

_____ Owner/Contact Fax Number

_____ Owner/Contact Phone Number

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring — Date Q1 collected: _____

☐ Quarterly — Date Q2 collected: _____

☐ Composite of four quarterly samples — Date Q3 collected: _____

Date Q4 collected: _____

RADIOCHEMICAL ANALYSIS

>>>To be filled out by laboratory personnel<<<

*****Combined Uranium must be reported in micrograms per liter*****

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result		Exceed MCL
	15 pCi/L		Adjusted Gross Alpha	4000				
600/00-02		3 pCi/L	Gross Alpha	4002				
7500 - Rn			Radon	4004				
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L	
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	5/12/2023	< 0.6		
GammaRay HPGE		1 pCi/L	Radium 226	4020	5/12/2023	< 0.5		
		1 pCi/L	Radium 228	4030	5/12/2023	< 0.6		

LABORATORY INFORMATION

>>>To be filled out by laboratory personnel<<<

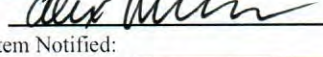
Specimen Number: RSE71783

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: FC-CCR-FD02-0523

Authorized Signature: 

Date Public Water System Notified: _____

DWAR 6: 11/2007

Client Information

Name:	**Natalie Chrisman/602-250-3608** **Pam Norris/505-598-8781**
Company	**Arizona Public Service**
Address	**PO Box 355, MS 4915** **Fruitland, NM 87416**
Phone	
Site	**APS Four Corners Power Plant (URS)**

Radiation Safety Engineering, Inc.
3245 North Washington Street, Chandler, Arizona 85225
Analysis Request

Sample ID & Location (DWR#)	Collection Date	Collection Time	Media (DW* WW* Other)	Drinking Water Compliance	Gross Alpha	Gross Beta	Total Uranium	Isotopic Uranium	Ra-226	Ra-228	Ra-226 + Ra-228, Combined	H-3	Gamma Spectroscopy	Sr-89/Sr-90	Radon in Water	Radon in Air
FC-CCR-MW66-0523	5/7/2023	1245	**GW**						X	X	X				71778	
FC-CCR-MW70-0523	5/7/2023	1059	**GW**						X	X	X				71779	
FC-CCR-MW73-0523	5/7/2023	1815	**GW**						X	X	X				71780	
FC-CCR-MW83-0523	5/7/2023	1721	**GW**						X	X	X				71781	
FC-CCR-MW86-0523	5/7/2023	1325	**GW**						X	X	X				71782	
FC-CCR-FD02-0523	5/7/2023	1620	**GW**						X	X	X				71783	

Sample Receipt

Total No. of Containers	
Chain of Custody Seals	
Container Condition	
Lab No.	

Invoice to:
PO#: 300592346

Instructions/Comments
Method HPGe

Relinquished By: BSL	Company: WSP	Date/time: 8 May 23	Received By:		Company:	Date/time: 5/8/23 1445
Relinquished By:	Company: AMHS	Date/time: 0854	Received By:		Company:	Date/time:
Relinquished By:	Company:	Date/time: 0852	Received By:		Company:	Date/time:

* DW = Drinking Water, WW = Waste Water, GW = Groundwater.

u/client/forms/cofc.frm

Radiation Safety Engineering, Inc.

3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121 (480) 897-9459
Website: www.radsafe.com FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Arizona Public Service
400 N. 5th Street
Phoenix, AZ 85004

Sampling Date: May 03, 2023
Sample Received: May 08, 2023
Analysis Completed: May 22, 2023

Sample ID	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
FC-CCR-DMX03-0523	< 0.5	1.6 ± 0.3	1.6 ± 0.3
Date of Analysis	5/12/2023	5/12/2023	5/12/2023

Alex Myers, Ph.D. 5/22/2023
Date

Laboratory License Number AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

May 3, 2023 (Sample Date) 16:47 (Sample Time) (24 hour clock) _____ (Owner/Contact Person)

_____ (Owner/Contact Fax Number) _____ (Owner/Contact Phone Number)

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring — Date Q1 collected: _____

☐ Quarterly — Date Q2 collected: _____

☐ Composite of four quarterly samples — Date Q3 collected: _____

Date Q4 collected: _____

*****RADIOCHEMICAL ANALYSIS*****

>>>To be filled out by laboratory personnel<<<

*****Combined Uranium must be reported in micrograms per liter*****

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result		Exceed MCL
	15 pCi/L		Adjusted Gross Alpha	4000				
600/00-02		3 pCi/L	Gross Alpha	4002				
7500 - Rn			Radon	4004				
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L	
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	5/12/2023	1.6 ± 0.3		
GammaRay HPGE		1 pCi/L	Radium 226	4020	5/12/2023	< 0.5		
		1 pCi/L	Radium 228	4030	5/12/2023	1.6 ± 0.3		

*****LABORATORY INFORMATION*****

>>>To be filled out by laboratory personnel<<<

Specimen Number: RSE71787

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: FC-CCR-DMX03-0523

Authorized Signature: _____

Date Public Water System Notified: _____

DWAR 6: 11/2007

Radiation Safety Engineering, Inc.

3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121 (480) 897-9459
Website: www.radsafe.com FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Arizona Public Service
400 N. 5th Street
Phoenix, AZ 85004

Sampling Date: May 04, 2023
Sample Received: May 08, 2023
Analysis Completed: May 22, 2023

Sample ID	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
FC-CCR-DMX04-0523	< 0.5	< 0.6	< 0.6

Date of Analysis	5/12/2023	5/12/2023	5/12/2023

Alex Myers, Ph.D. 5/22/2023
Date

Laboratory License Number AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

May 4, 2023 (Sample Date) 16:55 (Sample Time) (24 hour clock) _____ (Owner/Contact Person)

_____ (Owner/Contact Fax Number) _____ (Owner/Contact Phone Number)

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring — Date Q1 collected: _____

☐ Quarterly — Date Q2 collected: _____

☐ Composite of four quarterly samples — Date Q3 collected: _____

Date Q4 collected: _____

RADIOCHEMICAL ANALYSIS

>>>To be filled out by laboratory personnel<<<

Combined Uranium must be reported in micrograms per liter

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result		Exceed MCL
	15 pCi/L		Adjusted Gross Alpha	4000				
600/00-02		3 pCi/L	Gross Alpha	4002				
7500 - Rn			Radon	4004				
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L	
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	5/12/2023	< 0.6		
GammaRay HPGE		1 pCi/L	Radium 226	4020	5/12/2023	< 0.5		
		1 pCi/L	Radium 228	4030	5/12/2023	< 0.6		

LABORATORY INFORMATION

>>>To be filled out by laboratory personnel<<<

Specimen Number: RSE71788

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: FC-CCR-DMX04-0523

Authorized Signature: _____

Date Public Water System Notified: _____

DWAR 6: 11/2007

Radiation Safety Engineering, Inc.

3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121 (480) 897-9459
Website: www.radsafe.com FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Arizona Public Service
400 N. 5th Street
Phoenix, AZ 85004

Sampling Date: May 04, 2023
Sample Received: May 08, 2023
Analysis Completed: May 22, 2023

Sample ID	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
FC-CCR-MW06-0523	< 0.5	1.4 ± 0.3	1.4 ± 0.3

Date of Analysis	5/12/2023	5/12/2023	5/12/2023

Alex Myers, Ph.D. 5/22/2023
Date

Laboratory License Number AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

May 4, 2023 (Sample Date) 16:13 (Sample Time) (24 hour clock) _____ (Owner/Contact Person)

_____ (Owner/Contact Fax Number) _____ (Owner/Contact Phone Number)

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring — Date Q1 collected: _____

☐ Quarterly — Date Q2 collected: _____

☐ Composite of four quarterly samples — Date Q3 collected: _____

Date Q4 collected: _____

RADIOCHEMICAL ANALYSIS

>>>To be filled out by laboratory personnel<<<

*****Combined Uranium must be reported in micrograms per liter*****

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result		Exceed MCL
	15 pCi/L		Adjusted Gross Alpha	4000				
600/00-02		3 pCi/L	Gross Alpha	4002				
7500 - Rn			Radon	4004				
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L	
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	5/12/2023	1.4 ± 0.3		
GammaRay HPGE		1 pCi/L	Radium 226	4020	5/12/2023	< 0.5		
		1 pCi/L	Radium 228	4030	5/12/2023	1.4 ± 0.3		

LABORATORY INFORMATION

>>>To be filled out by laboratory personnel<<<

Specimen Number: RSE71789

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: FC-CCR-MW06-0523

Authorized Signature: _____

Date Public Water System Notified: _____

DWAR 6: 11/2007

Radiation Safety Engineering, Inc.

3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121 (480) 897-9459
Website: www.radsafe.com FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Arizona Public Service
400 N. 5th Street
Phoenix, AZ 85004

Sampling Date: May 04, 2023
Sample Received: May 08, 2023
Analysis Completed: May 22, 2023

Sample ID	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
FC-CCR-MW17R-0523	1.2 ± 0.2	0.8 ± 0.3	2.0 ± 0.4

Date of Analysis	5/12/2023	5/12/2023	5/12/2023

Alex Myers, Ph.D. 5/22/2023
Date

Laboratory License Number AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

May 4, 2023 (Sample Date) 14:34 (Sample Time) (24 hour clock) _____ Owner/Contact Person

_____ Owner/Contact Fax Number _____ Owner/Contact Phone Number

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring Date Q1 collected: _____

☐ Quarterly Date Q2 collected: _____

☐ Composite of four quarterly samples Date Q3 collected: _____

Date Q4 collected: _____

*****RADIOCHEMICAL ANALYSIS*****

>>>To be filled out by laboratory personnel<<<

*****Combined Uranium must be reported in micrograms per liter*****

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result		Exceed MCL
	15 pCi/L		Adjusted Gross Alpha	4000				
600/00-02		3 pCi/L	Gross Alpha	4002				
7500 - Rn			Radon	4004				
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L	
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	5/12/2023	2.0 ± 0.4		
GammaRay HPGE		1 pCi/L	Radium 226	4020	5/12/2023	1.2 ± 0.2		
		1 pCi/L	Radium 228	4030	5/12/2023	0.8 ± 0.3		

*****LABORATORY INFORMATION*****

>>>To be filled out by laboratory personnel<<<

Specimen Number: RSE71790

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: FC-CCR-MW17B-0523

Authorized Signature: _____

Date Public Water System Notified: _____

DWAR 6: 11/2007

Radiation Safety Engineering, Inc.
3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121 (480) 897-9459
Website: www.radsafe.com FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Arizona Public Service
400 N. 5th Street
Phoenix, AZ 85004

Sampling Date: May 05, 2023
Sample Received: May 08, 2023
Analysis Completed: May 22, 2023

Sample ID	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
FC-CCR-MW38R-0523	0.9 ± 0.2	1.0 ± 0.3	1.9 ± 0.4
Date of Analysis	5/12/2023	5/12/2023	5/12/2023

alex Myers 5/22/2023

Alex Myers, Ph.D. Date

Laboratory License Number AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

May 5, 2023 (Sample Date) 11:20 (Sample Time) (24 hour clock) _____ (Owner/Contact Person)

_____ (Owner/Contact Fax Number) _____ (Owner/Contact Phone Number)

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring — Date Q1 collected: _____

☐ Quarterly — Date Q2 collected: _____

☐ Composite of four quarterly samples — Date Q3 collected: _____

Date Q4 collected: _____

RADIOCHEMICAL ANALYSIS

>>>To be filled out by laboratory personnel<<<

*****Combined Uranium must be reported in micrograms per liter*****

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result		Exceed MCL
	15 pCi/L		Adjusted Gross Alpha	4000				
600/00-02		3 pCi/L	Gross Alpha	4002				
7500 - Rn			Radon	4004				
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L	
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	5/12/2023	1.9 ± 0.4		
GammaRay HPGE		1 pCi/L	Radium 226	4020	5/12/2023	0.9 ± 0.2		
		1 pCi/L	Radium 228	4030	5/12/2023	1.0 ± 0.3		

LABORATORY INFORMATION

>>>To be filled out by laboratory personnel<<<

Specimen Number: RSE71791

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: FC-CCR-MW38R-0523

Authorized Signature: _____

Date Public Water System Notified: _____

DWAR 6: 11/2007

Radiation Safety Engineering, Inc.

3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121 (480) 897-9459
Website: www.radsafe.com FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Arizona Public Service
400 N. 5th Street
Phoenix, AZ 85004

Sampling Date: May 04, 2023
Sample Received: May 08, 2023
Analysis Completed: May 22, 2023

Sample ID	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
FC-CCR-MW56-0523	1.1 ± 0.2	3.3 ± 0.4	4.4 ± 0.4

Date of Analysis	5/12/2023	5/12/2023	5/12/2023

Alex Myers, Ph.D. 5/22/2023
Date

Laboratory License Number AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

May 4, 2023 (Sample Date) 13:33 (Sample Time) (24 hour clock) _____ (Owner/Contact Person)

_____ (Owner/Contact Fax Number) _____ (Owner/Contact Phone Number)

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring — Date Q1 collected: _____

☐ Quarterly — Date Q2 collected: _____

☐ Composite of four quarterly samples — Date Q3 collected: _____

Date Q4 collected: _____

RADIOCHEMICAL ANALYSIS

>>>To be filled out by laboratory personnel<<<

Combined Uranium must be reported in micrograms per liter

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result		Exceed MCL
	15 pCi/L		Adjusted Gross Alpha	4000				
600/00-02		3 pCi/L	Gross Alpha	4002				
7500 - Rn			Radon	4004				
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L	
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	5/12/2023	4.4 ± 0.4		
GammaRay HPGE		1 pCi/L	Radium 226	4020	5/12/2023	1.1 ± 0.2		
		1 pCi/L	Radium 228	4030	5/12/2023	3.3 ± 0.4		

LABORATORY INFORMATION

>>>To be filled out by laboratory personnel<<<

Specimen Number: RSE71792

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: FC-CCR-MW56-0523

Authorized Signature: _____

Date Public Water System Notified: _____

DWAR 6: 11/2007

Radiation Safety Engineering, Inc.

3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121
Website: www.radsafe.com

(480) 897-9459
FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Arizona Public Service
400 N. 5th Street
Phoenix, AZ 85004

Sampling Date: May 05, 2023
Sample Received: May 08, 2023
Analysis Completed: May 22, 2023

Sample ID	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
FC-CCR-MW57-0523	1.0 ± 0.2	2.1 ± 0.3	3.1 ± 0.4
Date of Analysis	5/12/2023	5/12/2023	5/12/2023

Alex Myers, Ph.D. 5/22/2023
Date

Laboratory License Number AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

May 5, 2023 (Sample Date) 12:42 (Sample Time) (24 hour clock)

_____ Owner/Contact Person

_____ Owner/Contact Fax Number

_____ Owner/Contact Phone Number

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring

☐ Quarterly

☐ Composite of four quarterly samples

Date Q1 collected: _____

Date Q2 collected: _____

Date Q3 collected: _____

Date Q4 collected: _____

RADIOCHEMICAL ANALYSIS

>>>To be filled out by laboratory personnel<<<

*****Combined Uranium must be reported in micrograms per liter*****

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result		Exceed MCL
	15 pCi/L		Adjusted Gross Alpha	4000				
600/00-02		3 pCi/L	Gross Alpha	4002				
7500 - Rn			Radon	4004				
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L	
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	5/12/2023	3.1 ± 0.4		
GammaRay HPGE		1 pCi/L	Radium 226	4020	5/12/2023	1.0 ± 0.2		
		1 pCi/L	Radium 228	4030	5/12/2023	2.1 ± 0.3		

LABORATORY INFORMATION

>>>To be filled out by laboratory personnel<<<

Specimen Number: RSE71793

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: FC-CCR-MW5-0523

Authorized Signature: _____

Date Public Water System Notified: _____

DWAR 6: 11/2007

Client Information	
Name:	Natalie Chrisman/602-250-3608 Pam Norris/505-598-8781
Company	Arizona Public Service
Address	PO Box 355, MS 4915 Fruitland, NM 87416
Phone	
Site	APS Four Corners Power Plant (Other)

Radiation Safety Engineering, Inc.
3245 North Washington Street, Chandler, Arizona 85225
Analysis Request

Sample ID & Location (DWR#)	Collection Date	Collection Time	Media (DW* WW* Other)	Drinking Water Compliance	Gross Alpha	Gross Beta	Total Uranium	Isotopic Uranium	Ra-226	Ra-228	Ra-226 + Ra-228, Combined	H-3	Gamma Spectroscopy	Sr-89/Sr-90	Radon in Water	Radon in Air
FC-CCR-DMX03-0523	5/3/2023	1647	GW						X	X	X				71787	
FC-CCR-DMX04-0523	5/4/2023	1655	GW						X	X	X				71788	
FC-CCR-MW06-0523	5/4/2023	1613	GW						X	X	X				71789	
FC-CCR-MW17R-0523	5/4/2023	1434	GW						X	X	X				71790	
FC-CCR-MW38R-0523	5/5/2023	1120	GW						X	X	X				71791	
FC-CCR-MW56-0523	5/4/2023	1333	GW						X	X	X				71792	
FC-CCR-MW57-0523	5/5/2023	1242	GW						X	X	X				71793	

Sample Receipt	
Total No. of Containers	
Chain of Custody Seals	
Container Condition	
Lab No.	

Invoice to:
PO#: 300592346

Instructions/Comments
Method HPGe

Relinquished By: BSLC	Company: WSP	Date/time: 8 May 23 0855	Received By:		Company:	Date/time: 5/8/23	1445
Relinquished By:	Company: AHS	Date/time: 0855	Received By:		Company:	Date/time:	
Relinquished By:	Company:	Date/time:	Received By:		Company:	Date/time:	

* DW = Drinking Water, WW = Waste Water, GW = Groundwater.

u/client/forms/cofc.frm

Radiation Safety Engineering, Inc.

3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121 (480) 897-9459
Website: www.radsafe.com FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Arizona Public Service
400 N. 5th Street
Phoenix, AZ 85004

Sampling Date: May 07, 2023
Sample Received: May 08, 2023
Analysis Completed: May 30, 2023

Sample ID	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
FC-CCR-MW62-0523	< 0.4	0.9 ± 0.3	0.9 ± 0.3
Date of Analysis	5/12/2023	5/12/2023	5/12/2023

Alex Myers, Ph.D. 5/30/2023
Date

Laboratory License Number AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

May 7, 2023 (Sample Date) 14:12 (Sample Time) (24 hour clock) _____ Owner/Contact Person

_____ Owner/Contact Fax Number _____ Owner/Contact Phone Number

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring Date Q1 collected: _____

☐ Quarterly Date Q2 collected: _____

☐ Composite of four quarterly samples Date Q3 collected: _____

Date Q4 collected: _____

*****RADIOCHEMICAL ANALYSIS*****

>>>To be filled out by laboratory personnel<<<

*****Combined Uranium must be reported in micrograms per liter*****

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result		Exceed MCL
	15 pCi/L		Adjusted Gross Alpha	4000				
600/00-02		3 pCi/L	Gross Alpha	4002				
7500 - Rn			Radon	4004				
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L	
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	5/12/2023	0.9 ± 0.3		
GammaRay HPGE		1 pCi/L	Radium 226	4020	5/12/2023	< 0.4		
		1 pCi/L	Radium 228	4030	5/12/2023	0.9 ± 0.3		

*****LABORATORY INFORMATION*****

>>>To be filled out by laboratory personnel<<<

Specimen Number: RSE71770

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: FC-CCR-MW68-0523

Authorized Signature: _____

Date Public Water System Notified: _____

DWAR 6: 11/2007

Radiation Safety Engineering, Inc.

3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121 (480) 897-9459
Website: www.radsafe.com FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Arizona Public Service
400 N. 5th Street
Phoenix, AZ 85004

Sampling Date: May 07, 2023
Sample Received: May 08, 2023
Analysis Completed: May 30, 2023

Sample ID	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
FC-CCR-MW63-0523	< 0.4	0.8 ± 0.3	0.8 ± 0.3

Date of Analysis	5/12/2023	5/12/2023	5/12/2023

Alex Myers, Ph.D. 5/30/2023
Date

Laboratory License Number AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

May 7, 2023 (Sample Date) 15:41 (Sample Time) (24 hour clock)

_____ Owner/Contact Person

_____ Owner/Contact Fax Number

_____ Owner/Contact Phone Number

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring — Date Q1 collected: _____

☐ Quarterly — Date Q2 collected: _____

☐ Composite of four quarterly samples — Date Q3 collected: _____

Date Q4 collected: _____

RADIOCHEMICAL ANALYSIS

>>>To be filled out by laboratory personnel<<<

*****Combined Uranium must be reported in micrograms per liter*****

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result		Exceed MCL
	15 pCi/L		Adjusted Gross Alpha	4000				
600/00-02		3 pCi/L	Gross Alpha	4002				
7500 - Rn			Radon	4004				
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L	
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	5/12/2023	0.8 ± 0.3		
GammaRay HPGE		1 pCi/L	Radium 226	4020	5/12/2023	< 0.4		
		1 pCi/L	Radium 228	4030	5/12/2023	0.8 ± 0.3		

LABORATORY INFORMATION

>>>To be filled out by laboratory personnel<<<

Specimen Number: RSE71771

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: FC-CCR-MW63-0523

Authorized Signature: _____

Date Public Water System Notified: _____

DWAR 6: 11/2007

Radiation Safety Engineering, Inc.

3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121
Website: www.radsafe.com

(480) 897-9459
FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Arizona Public Service
400 N. 5th Street
Phoenix, AZ 85004

Sampling Date: May 07, 2023
Sample Received: May 08, 2023
Analysis Completed: May 30, 2023

Sample ID	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
FC-CCR-MW64-0523	< 0.4	< 0.6	< 0.6
Date of Analysis	5/12/2023	5/12/2023	5/12/2023

Alex Myers, Ph.D. — 5/30/2023 Date

Laboratory License Number AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

May 7, 2023 (Sample Date) 16:13 (Sample Time) (24 hour clock) _____ (Owner/Contact Person)

_____ (Owner/Contact Fax Number) _____ (Owner/Contact Phone Number)

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring — Date Q1 collected: _____

☐ Quarterly — Date Q2 collected: _____

☐ Composite of four quarterly samples — Date Q3 collected: _____

Date Q4 collected: _____

RADIOCHEMICAL ANALYSIS

>>>To be filled out by laboratory personnel<<<

*****Combined Uranium must be reported in micrograms per liter*****

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result		Exceed MCL
	15 pCi/L		Adjusted Gross Alpha	4000				
600/00-02		3 pCi/L	Gross Alpha	4002				
7500 - Rn			Radon	4004				
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L	
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	5/12/2023	< 0.6		
GammaRay HPGE		1 pCi/L	Radium 226	4020	5/12/2023	< 0.4		
		1 pCi/L	Radium 228	4030	5/12/2023	< 0.6		

LABORATORY INFORMATION

>>>To be filled out by laboratory personnel<<<

Specimen Number: RSE71772

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: FC-CCR-MW64-0523

Authorized Signature: _____

Date Public Water System Notified: _____

DWAR 6: 11/2007

Radiation Safety Engineering, Inc.

3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121 (480) 897-9459
Website: www.radsafe.com FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Arizona Public Service
400 N. 5th Street
Phoenix, AZ 85004

Sampling Date: May 07, 2023
Sample Received: May 08, 2023
Analysis Completed: May 30, 2023

Sample ID	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
FC-CCR-MW65-0523	< 0.4	< 0.6	< 0.6

Date of Analysis	5/12/2023	5/12/2023	5/12/2023

Alex Myers, Ph.D. 5/30/2023
Date

Laboratory License Number AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

May 7, 2023 (Sample Date) 11:53 (Sample Time) (24 hour clock)

_____ Owner/Contact Person

_____ Owner/Contact Fax Number

_____ Owner/Contact Phone Number

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring — Date Q1 collected: _____

☐ Quarterly — Date Q2 collected: _____

☐ Composite of four quarterly samples — Date Q3 collected: _____

Date Q4 collected: _____

*****RADIOCHEMICAL ANALYSIS*****

>>>To be filled out by laboratory personnel<<<

*****Combined Uranium must be reported in micrograms per liter*****

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result		Exceed MCL
	15 pCi/L		Adjusted Gross Alpha	4000				
600/00-02		3 pCi/L	Gross Alpha	4002				
7500 - Rn			Radon	4004				
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L	
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	5/12/2023	< 0.6		
GammaRay HPGE		1 pCi/L	Radium 226	4020	5/12/2023	< 0.4		
		1 pCi/L	Radium 228	4030	5/12/2023	< 0.6		

*****LABORATORY INFORMATION*****

>>>To be filled out by laboratory personnel<<<

Specimen Number: RSE71773

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: FC-CCR-MW65-0523

Authorized Signature: 

Date Public Water System Notified: _____

DWAR 6: 11/2007

Radiation Safety Engineering, Inc.

3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121
Website: www.radsafe.com

(480) 897-9459
FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Arizona Public Service
400 N. 5th Street
Phoenix, AZ 85004

Sampling Date: May 07, 2023
Sample Received: May 08, 2023
Analysis Completed: May 30, 2023

Sample ID	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
FC-CCR-SW1-0523	< 0.4	< 0.6	< 0.6

Date of Analysis	5/12/2023	5/12/2023	5/12/2023

Alex Myers, Ph.D. 5/30/2023
Date

Laboratory License Number AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

May 7, 2023 (Sample Date) 18:42 (Sample Time) (24 hour clock) _____ (Owner/Contact Person)

_____ (Owner/Contact Fax Number) _____ (Owner/Contact Phone Number)

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring — Date Q1 collected: _____

☐ Quarterly — Date Q2 collected: _____

☐ Composite of four quarterly samples — Date Q3 collected: _____

Date Q4 collected: _____

*****RADIOCHEMICAL ANALYSIS*****

>>>To be filled out by laboratory personnel<<<

*****Combined Uranium must be reported in micrograms per liter*****

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result		Exceed MCL
	15 pCi/L		Adjusted Gross Alpha	4000				
600/00-02		3 pCi/L	Gross Alpha	4002				
7500 - Rn			Radon	4004				
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L	
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	5/12/2023	< 0.6		
GammaRay HPGE		1 pCi/L	Radium 226	4020	5/12/2023	< 0.4		
		1 pCi/L	Radium 228	4030	5/12/2023	< 0.6		

*****LABORATORY INFORMATION*****

>>>To be filled out by laboratory personnel<<<

Specimen Number: RSE71774

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: FC-CCR-SW1-0623

Authorized Signature: _____

Date Public Water System Notified: _____

DWAR 6: 11/2007

Radiation Safety Engineering, Inc.

3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121
Website: www.radsafe.com

(480) 897-9459
FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Arizona Public Service
400 N. 5th Street
Phoenix, AZ 85004

Sampling Date: May 07, 2023
Sample Received: May 08, 2023
Analysis Completed: May 30, 2023

Sample ID	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
FC-CCR-SW2-0523	0.8 ± 0.3	0.9 ± 0.5	1.7 ± 0.6
Date of Analysis	5/12/2023	5/12/2023	5/12/2023

Alex Myers, Ph.D. 5/30/2023
Date

Laboratory License Number AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

May 7, 2023 (Sample Date) 15:06 (Sample Time) (24 hour clock)

_____ Owner/Contact Person

_____ Owner/Contact Fax Number

_____ Owner/Contact Phone Number

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring

☐ Quarterly

☐ Composite of four quarterly samples

Date Q1 collected: _____

Date Q2 collected: _____

Date Q3 collected: _____

Date Q4 collected: _____

RADIOCHEMICAL ANALYSIS

>>>To be filled out by laboratory personnel<<<

*****Combined Uranium must be reported in micrograms per liter*****

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result		Exceed MCL
	15 pCi/L		Adjusted Gross Alpha	4000				
600/00-02		3 pCi/L	Gross Alpha	4002				
7500 - Rn			Radon	4004				
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L	
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	5/12/2023	1.7 ± 0.6		
GammaRay HPGE		1 pCi/L	Radium 226	4020	5/12/2023	0.8 ± 0.3		
		1 pCi/L	Radium 228	4030	5/12/2023	0.9 ± 0.5		

LABORATORY INFORMATION

>>>To be filled out by laboratory personnel<<<

Specimen Number: RSE71775

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: FC-CCR-SW2-0523

Authorized Signature: Alex Mann

Date Public Water System Notified: _____

DWAR 6: 11/2007

Radiation Safety Engineering, Inc.
3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121
Website: www.radsafe.com
(480) 897-9459
FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Arizona Public Service
400 N. 5th Street
Phoenix, AZ 85004

Sampling Date: May 07, 2023
Sample Received: May 08, 2023
Analysis Completed: May 30, 2023

Sample ID	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
FC-CCR-SW3-0523	< 0.4	< 0.6	< 0.6

Date of Analysis	5/12/2023	5/12/2023	5/12/2023

Alex Myers, Ph.D. 5/30/2023
Date

Laboratory License Number AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

May 7, 2023 (Sample Date) 15:13 (Sample Time) (24 hour clock) _____ (Owner/Contact Person)

_____ (Owner/Contact Fax Number) _____ (Owner/Contact Phone Number)

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring — Date Q1 collected: _____

☐ Quarterly — Date Q2 collected: _____

☐ Composite of four quarterly samples — Date Q3 collected: _____

Date Q4 collected: _____

RADIOCHEMICAL ANALYSIS

>>>To be filled out by laboratory personnel<<<

Combined Uranium must be reported in micrograms per liter

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result		Exceed MCL
	15 pCi/L		Adjusted Gross Alpha	4000				
600/00-02		3 pCi/L	Gross Alpha	4002				
7500 - Rn			Radon	4004				
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L	
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	5/12/2023	< 0.6		
GammaRay HPGE		1 pCi/L	Radium 226	4020	5/12/2023	< 0.4		
		1 pCi/L	Radium 228	4030	5/12/2023	< 0.6		

LABORATORY INFORMATION

>>>To be filled out by laboratory personnel<<<

Specimen Number: RSE71776

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: FC-CCR-SW3-0523

Authorized Signature: _____

Date Public Water System Notified: _____

DWAR 6: 11/2007

Radiation Safety Engineering, Inc.

3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121
Website: www.radsafe.com

(480) 897-9459
FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Arizona Public Service
400 N. 5th Street
Phoenix, AZ 85004

Sampling Date: May 07, 2023
Sample Received: May 08, 2023
Analysis Completed: May 30, 2023

Sample ID	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
FC-CCR-SWFD08-0523	< 0.4	0.8 ± 0.3	0.8 ± 0.3
Date of Analysis	5/12/2023	5/12/2023	5/12/2023

alex Myers 5/30/2023

Alex Myers, Ph.D. Date

Laboratory License Number AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

May 7, 2023 (Sample Date) 12:34 (Sample Time) (24 hour clock)

_____ Owner/Contact Person

_____ Owner/Contact Fax Number

_____ Owner/Contact Phone Number

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring

☐ Quarterly

☐ Composite of four quarterly samples

Date Q1 collected: _____

Date Q2 collected: _____

Date Q3 collected: _____

Date Q4 collected: _____

RADIOCHEMICAL ANALYSIS

>>>To be filled out by laboratory personnel<<<

*****Combined Uranium must be reported in micrograms per liter*****

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result		Exceed MCL
	15 pCi/L		Adjusted Gross Alpha	4000				
600/00-02		3 pCi/L	Gross Alpha	4002				
7500 - Rn			Radon	4004				
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L	
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	5/12/2023	0.8 ± 0.3		
GammaRay HPGE		1 pCi/L	Radium 226	4020	5/12/2023	< 0.4		
		1 pCi/L	Radium 228	4030	5/12/2023	0.8 ± 0.3		

LABORATORY INFORMATION

>>>To be filled out by laboratory personnel<<<

Specimen Number: RSE71777

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: FC-CCR-SWFP08-0523

Authorized Signature: _____

Date Public Water System Notified: _____

DWAR 6: 11/2007

Client Information	
Name:	Natalie Chrisman/602-250-3608 Pam Norris/505-598-8781
Company	Arizona Public Service
Address	PO Box 355, MS 4915 Fruitland, NM 87416
Phone	
Site	APS Four Corners Power Plant (CWTP)

Radiation Safety Engineering, Inc.
3245 North Washington Street, Chandler, Arizona 85225
Analysis Request

Sample ID & Location (DWR#)	Collection Date	Collection Time	Media (DW* WW* Other)	Drinking Water Compliance	Gross Alpha	Gross Beta	Total Uranium	Isotopic Uranium	Ra-226	Ra-228	Ra-226 + Ra-228, Combined	H-3	Gamma Spectroscopy	Sr-89/Sr-90	Radon in Water	Radon in Air
FC-CCR-MW62-0523	5/7/2023	1412	GW						X	X	X				71770	
FC-CCR-MW63-0523	5/7/2023	1541	GW						X	X	X				71771	
FC-CCR-MW64-0523	5/7/2023	1613	GW						X	X	X				71772	
FC-CCR-MW65-0523	5/7/2023	1153	GW						X	X	X				71773	
FC-CCR-SW1-0523	5/7/2023	1842	GW						X	X	X				71774	
FC-CCR-SW2-0523	5/7/2023	1506	GW						X	X	X				71775	
FC-CCR-SW3-0523	5/7/2023	1513	GW						X	X	X				71776	
FC-CCR-FD08-0523	5/7/2023	1234	GW						X	X	X				71777	

Sample Receipt	
Total No. of Containers	
Chain of Custody Seals	
Container Condition	
Lab No.	

Invoice to:
PO#: 300592346

Instructions/Comments
Method HPGe

Relinquished By:	Company: USP	Date/time: 8May23	Received By:		Company:	Date/time: 5/8/23 1445
Relinquished By:	Company: AMHS.	Date/time: 0854	Received By:		Company:	Date/time:
Relinquished By:	Company:	Date/time: 0854	Received By:		Company:	Date/time:

* DW = Drinking Water, WW = Waste Water, GW = Groundwater.

u/client/forms/cofc.frm

Radiation Safety Engineering, Inc.

3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121 (480) 897-9459
Website: www.radsafe.com FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Arizona Public Service
400 N. 5th Street
Phoenix, AZ 85004

Sampling Date: May 09, 2023
Sample Received: May 11, 2023
Analysis Completed: June 08, 2023

Sample ID	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
FC-CCR-MW67-0523	0.5 ± 0.2	0.7 ± 0.3	1.2 ± 0.4

Date of Analysis	5/19/2023	5/19/2023	5/19/2023

Alex Myers, Ph.D. 6/8/2023
Date

Laboratory License Number AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

May 9, 2023 (Sample Date) 13:25 (Sample Time) (24 hour clock) _____ Owner/Contact Person

_____ Owner/Contact Fax Number _____ Owner/Contact Phone Number

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring Date Q1 collected: _____

☐ Quarterly Date Q2 collected: _____

☐ Composite of four quarterly samples Date Q3 collected: _____

Date Q4 collected: _____

*****RADIOCHEMICAL ANALYSIS*****

>>>To be filled out by laboratory personnel<<<

*****Combined Uranium must be reported in micrograms per liter*****

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result		Exceed MCL
	15 pCi/L		Adjusted Gross Alpha	4000				
600/00-02		3 pCi/L	Gross Alpha	4002				
7500 - Rn			Radon	4004				
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L	
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	5/19/2023	1.2 ± 0.4		
GammaRay HPGE		1 pCi/L	Radium 226	4020	5/19/2023	0.5 ± 0.2		
		1 pCi/L	Radium 228	4030	5/19/2023	0.7 ± 0.3		

*****LABORATORY INFORMATION*****

>>>To be filled out by laboratory personnel<<<

Specimen Number: RSE71807

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: FC-CCR-MW67-0523

Authorized Signature: _____

Date Public Water System Notified: _____

DWAR 6: 11/2007

Radiation Safety Engineering, Inc.

3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121
Website: www.radsafe.com

(480) 897-9459
FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Arizona Public Service
400 N. 5th Street
Phoenix, AZ 85004

Sampling Date: May 09, 2023
Sample Received: May 11, 2023
Analysis Completed: June 08, 2023

Sample ID	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
FC-CCR-MW68-0523	1.3 ± 0.2	< 0.6	1.3 ± 0.2
Date of Analysis	5/19/2023	5/19/2023	5/19/2023

alex Myers 6/8/2023

Alex Myers, Ph.D. Date

Laboratory License Number AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

May 9, 2023 (Sample Date) 10:49 (Sample Time) (24 hour clock) _____ Owner/Contact Person

_____ Owner/Contact Fax Number _____ Owner/Contact Phone Number

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring Date Q1 collected: _____

☐ Quarterly Date Q2 collected: _____

☐ Composite of four quarterly samples Date Q3 collected: _____

Date Q4 collected: _____

*****RADIOCHEMICAL ANALYSIS*****

>>>To be filled out by laboratory personnel<<<

*****Combined Uranium must be reported in micrograms per liter*****

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result		Exceed MCL
	15 pCi/L		Adjusted Gross Alpha	4000				
600/00-02		3 pCi/L	Gross Alpha	4002				
7500 - Rn			Radon	4004				
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L	
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	5/19/2023	1.3 ± 0.2		
GammaRay HPGE		1 pCi/L	Radium 226	4020	5/19/2023	1.3 ± 0.2		
		1 pCi/L	Radium 228	4030	5/19/2023	< 0.6		

*****LABORATORY INFORMATION*****

>>>To be filled out by laboratory personnel<<<

Specimen Number: RSE71808

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: FC-CCR-MW68-0523

Authorized Signature: _____

Date Public Water System Notified: _____

DWAR 6: 11/2007

Radiation Safety Engineering, Inc.

3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121
Website: www.radsafe.com

(480) 897-9459
FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Arizona Public Service
400 N. 5th Street
Phoenix, AZ 85004

Sampling Date: May 09, 2023
Sample Received: May 11, 2023
Analysis Completed: June 08, 2023

Sample ID	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
FC-CCR-MW69-0523	0.6 ± 0.2	0.8 ± 0.3	1.4 ± 0.4
Date of Analysis	5/12/2023	5/12/2023	5/12/2023

Alex Myers, Ph.D. 6/8/2023
Date

Laboratory License Number AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

May 9, 2023 Sample Date | 10:07 Sample Time (24 hour clock)

_____ Owner/Contact Person

_____ Owner/Contact Fax Number

_____ Owner/Contact Phone Number

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring — Date Q1 collected: _____

☐ Quarterly — Date Q2 collected: _____

☐ Composite of four quarterly samples — Date Q3 collected: _____

Date Q4 collected: _____

RADIOCHEMICAL ANALYSIS

>>>To be filled out by laboratory personnel<<<

*****Combined Uranium must be reported in micrograms per liter*****

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result		Exceed MCL
	15 pCi/L		Adjusted Gross Alpha	4000				
600/00-02		3 pCi/L	Gross Alpha	4002				
7500 - Rn			Radon	4004				
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L	
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	5/12/2023	1.4 ± 0.4		
GammaRay HPGE		1 pCi/L	Radium 226	4020	5/12/2023	0.6 ± 0.2		
		1 pCi/L	Radium 228	4030	5/12/2023	0.8 ± 0.3		

LABORATORY INFORMATION

>>>To be filled out by laboratory personnel<<<

Specimen Number: RSE71809

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: FC-CCR-MW69-0523

Authorized Signature: _____

Date Public Water System Notified: _____

DWAR 6: 11/2007

Radiation Safety Engineering, Inc.

3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121
Website: www.radsafe.com

(480) 897-9459
FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Arizona Public Service
400 N. 5th Street
Phoenix, AZ 85004

Sampling Date: May 08, 2023
Sample Received: May 11, 2023
Analysis Completed: June 08, 2023

Sample ID	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
FC-CCR-MW71-0523	< 0.4	1.7 ± 0.3	1.7 ± 0.3
Date of Analysis	5/12/2023	5/12/2023	5/12/2023

Alex Myers, Ph.D. 6/8/2023
Date

Laboratory License Number AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

May 8, 2023 (Sample Date) 19:13 (Sample Time) (24 hour clock)

_____ Owner/Contact Person

_____ Owner/Contact Fax Number

_____ Owner/Contact Phone Number

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring — Date Q1 collected: _____

☐ Quarterly — Date Q2 collected: _____

☐ Composite of four quarterly samples — Date Q3 collected: _____

Date Q4 collected: _____

RADIOCHEMICAL ANALYSIS

>>>To be filled out by laboratory personnel<<<

*****Combined Uranium must be reported in micrograms per liter*****

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result		Exceed MCL
	15 pCi/L		Adjusted Gross Alpha	4000				
600/00-02		3 pCi/L	Gross Alpha	4002				
7500 - Rn			Radon	4004				
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L	
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	5/12/2023	1.7 ± 0.3		
GammaRay HPGE		1 pCi/L	Radium 226	4020	5/12/2023	< 0.4		
		1 pCi/L	Radium 228	4030	5/12/2023	1.7 ± 0.3		

LABORATORY INFORMATION

>>>To be filled out by laboratory personnel<<<

Specimen Number: RSE71810

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: FC-CCR-MW71-0523

Authorized Signature: _____

Date Public Water System Notified: _____

DWAR 6: 11/2007

Radiation Safety Engineering, Inc.

3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121
Website: www.radsafe.com

(480) 897-9459
FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Arizona Public Service
400 N. 5th Street
Phoenix, AZ 85004

Sampling Date: May 08, 2023
Sample Received: May 11, 2023
Analysis Completed: June 08, 2023

Sample ID	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
FC-CCR-MW72-0523	< 0.4	4.0 ± 0.4	4.0 ± 0.4
Date of Analysis	5/12/2023	5/12/2023	5/12/2023

Alex Myers, Ph.D. 6/8/2023
Date

Laboratory License Number AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

May 8, 2023 (Sample Date) 18:14 (Sample Time) (24 hour clock) _____ Owner/Contact Person

_____ Owner/Contact Fax Number _____ Owner/Contact Phone Number

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring Date Q1 collected: _____

☐ Quarterly Date Q2 collected: _____

☐ Composite of four quarterly samples Date Q3 collected: _____

Date Q4 collected: _____

RADIOCHEMICAL ANALYSIS

>>>To be filled out by laboratory personnel<<<

*****Combined Uranium must be reported in micrograms per liter*****

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result		Exceed MCL
	15 pCi/L		Adjusted Gross Alpha	4000				
600/00-02		3 pCi/L	Gross Alpha	4002				
7500 - Rn			Radon	4004				
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L	
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	5/12/2023	4.0 ± 0.4		
GammaRay HPGE		1 pCi/L	Radium 226	4020	5/12/2023	< 0.4		
		1 pCi/L	Radium 228	4030	5/12/2023	4.0 ± 0.4		

LABORATORY INFORMATION

>>>To be filled out by laboratory personnel<<<

Specimen Number: RSE71811

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: FC-CCR-MW72-0523

Authorized Signature: _____

Date Public Water System Notified: _____

DWAR 6: 11/2007

Radiation Safety Engineering, Inc.

3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121
Website: www.radsafe.com

(480) 897-9459
FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Arizona Public Service
400 N. 5th Street
Phoenix, AZ 85004

Sampling Date: May 09, 2023
Sample Received: May 11, 2023
Analysis Completed: June 08, 2023

Sample ID	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
FC-CCR-MW84-0523	< 0.4	< 0.6	< 0.6

Date of Analysis	5/12/2023	5/12/2023	5/12/2023

Alex Myers, Ph.D. 6/8/2023
Date

Laboratory License Number AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

May 9, 2023 (Sample Date) 12:39 (Sample Time) (24 hour clock) _____ Owner/Contact Person

_____ Owner/Contact Fax Number _____ Owner/Contact Phone Number

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring Date Q1 collected: _____

☐ Quarterly Date Q2 collected: _____

☐ Composite of four quarterly samples Date Q3 collected: _____

Date Q4 collected: _____

*****RADIOCHEMICAL ANALYSIS*****

>>>To be filled out by laboratory personnel<<<

*****Combined Uranium must be reported in micrograms per liter*****

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result		Exceed MCL
	15 pCi/L		Adjusted Gross Alpha	4000				
600/00-02		3 pCi/L	Gross Alpha	4002				
7500 - Rn			Radon	4004				
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L	
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	5/12/2023	< 0.6		
GammaRay HPGE		1 pCi/L	Radium 226	4020	5/12/2023	< 0.4		
		1 pCi/L	Radium 228	4030	5/12/2023	< 0.6		

*****LABORATORY INFORMATION*****

>>>To be filled out by laboratory personnel<<<

Specimen Number: RSE71812

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: FC-CCR-MW84-0523

Authorized Signature: _____

Date Public Water System Notified: _____

DWAR 6: 11/2007

Radiation Safety Engineering, Inc.

3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121 (480) 897-9459
Website: www.radsafe.com FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Arizona Public Service
400 N. 5th Street
Phoenix, AZ 85004

Sampling Date: May 09, 2023
Sample Received: May 11, 2023
Analysis Completed: June 08, 2023

Sample ID	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
FC-CCR-MW85-0523	0.6 ± 0.2	1.0 ± 0.3	1.6 ± 0.4
Date of Analysis	5/12/2023	5/12/2023	5/12/2023

Alex Myers, Ph.D. 6/8/2023
Date

Laboratory License Number AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

May 9, 2023 (Sample Date) 14:13 (Sample Time) (24 hour clock)

_____ Owner/Contact Person

_____ Owner/Contact Fax Number

_____ Owner/Contact Phone Number

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring — Date Q1 collected: _____

☐ Quarterly — Date Q2 collected: _____

☐ Composite of four quarterly samples — Date Q3 collected: _____

Date Q4 collected: _____

RADIOCHEMICAL ANALYSIS

>>>To be filled out by laboratory personnel<<<

*****Combined Uranium must be reported in micrograms per liter*****

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result		Exceed MCL
	15 pCi/L		Adjusted Gross Alpha	4000				
600/00-02		3 pCi/L	Gross Alpha	4002				
7500 - Rn			Radon	4004				
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L	
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	5/12/2023	1.6 ± 0.4		
GammaRay HPGE		1 pCi/L	Radium 226	4020	5/12/2023	0.6 ± 0.2		
		1 pCi/L	Radium 228	4030	5/12/2023	1.0 ± 0.3		

LABORATORY INFORMATION

>>>To be filled out by laboratory personnel<<<

Specimen Number: RSE71813

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: FC-CCR-MW8500523

Authorized Signature: _____

Date Public Water System Notified: _____

DWAR 6: 11/2007

Radiation Safety Engineering, Inc.

3245 N. WASHINGTON ST.• CHANDLER, ARIZONA 85225-1121 (480) 897-9459
Website: www.radsafe.com FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Arizona Public Service
400 N. 5th Street
Phoenix, AZ 85004

Sampling Date: May 09, 2023
Sample Received: May 11, 2023
Analysis Completed: June 08, 2023

Sample ID	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
FC-CCR-CM01-0523	0.8 ± 0.2	< 0.6	0.8 ± 0.2
Date of Analysis	5/19/2023	5/19/2023	5/19/2023

Alex Myers, Ph.D. 6/8/2023
Date

Laboratory License Number AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

May 9, 2023 (Sample Date) 11:43 (Sample Time) (24 hour clock) _____ (Owner/Contact Person)

_____ (Owner/Contact Fax Number) _____ (Owner/Contact Phone Number)

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring — Date Q1 collected: _____

☐ Quarterly — Date Q2 collected: _____

☐ Composite of four quarterly samples — Date Q3 collected: _____

Date Q4 collected: _____

RADIOCHEMICAL ANALYSIS

>>>To be filled out by laboratory personnel<<<

Combined Uranium must be reported in micrograms per liter

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result		Exceed MCL
	15 pCi/L		Adjusted Gross Alpha	4000				
600/00-02		3 pCi/L	Gross Alpha	4002				
7500 - Rn			Radon	4004				
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L	
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	5/19/2023	0.8 ± 0.2		
GammaRay HPGE		1 pCi/L	Radium 226	4020	5/19/2023	0.8 ± 0.2		
		1 pCi/L	Radium 228	4030	5/19/2023	< 0.6		

LABORATORY INFORMATION

>>>To be filled out by laboratory personnel<<<

Specimen Number: RSE71814

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: FC-CCR-CM01-0523

Authorized Signature: _____

Date Public Water System Notified: _____

DWAR 6: 11/2007

Radiation Safety Engineering, Inc.

3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121 (480) 897-9459
Website: www.radsafe.com FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Arizona Public Service
400 N. 5th Street
Phoenix, AZ 85004

Sampling Date: May 09, 2023
Sample Received: May 11, 2023
Analysis Completed: June 08, 2023

Sample ID	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
FC-CCR-CM02-0523	0.9 ± 0.2	1.4 ± 0.3	2.3 ± 0.4
Date of Analysis	5/12/2023	5/12/2023	5/12/2023

Alex Myers, Ph.D. 6/8/2023
Date

Laboratory License Number AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

May 9, 2023 (Sample Date) 11:48 (Sample Time) (24 hour clock) _____ Owner/Contact Person

_____ Owner/Contact Fax Number _____ Owner/Contact Phone Number

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring — Date Q1 collected: _____

☐ Quarterly — Date Q2 collected: _____

☐ Composite of four quarterly samples — Date Q3 collected: _____

Date Q4 collected: _____

RADIOCHEMICAL ANALYSIS

>>>To be filled out by laboratory personnel<<<

Combined Uranium must be reported in micrograms per liter

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result		Exceed MCL
	15 pCi/L		Adjusted Gross Alpha	4000				
600/00-02		3 pCi/L	Gross Alpha	4002				
7500 - Rn			Radon	4004				
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L	
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	5/12/2023	2.3 ± 0.4		
GammaRay HPGE		1 pCi/L	Radium 226	4020	5/12/2023	0.9 ± 0.2		
		1 pCi/L	Radium 228	4030	5/12/2023	1.4 ± 0.3		

LABORATORY INFORMATION

>>>To be filled out by laboratory personnel<<<

Specimen Number: RSE71815

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: FC-CCR-CM02-0523

Authorized Signature: _____

Date Public Water System Notified: _____

DWAR 6: 11/2007

Radiation Safety Engineering, Inc.

3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121
Website: www.radsafe.com

(480) 897-9459
FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Arizona Public Service
400 N. 5th Street
Phoenix, AZ 85004

Sampling Date: May 09, 2023
Sample Received: May 11, 2023
Analysis Completed: June 08, 2023

Sample ID	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
FC-CCR-FD01-0523	< 0.4	1.0 ± 0.3	1.0 ± 0.3
Date of Analysis	5/12/2023	5/12/2023	5/12/2023

Alex Myers, Ph.D. 6/8/2023
Date

Laboratory License Number AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

May 9, 2023 (Sample Date) 16:20 (Sample Time) (24 hour clock)

_____ Owner/Contact Person

_____ Owner/Contact Fax Number

_____ Owner/Contact Phone Number

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring — Date Q1 collected: _____

☐ Quarterly — Date Q2 collected: _____

☐ Composite of four quarterly samples — Date Q3 collected: _____

Date Q4 collected: _____

RADIOCHEMICAL ANALYSIS

>>>To be filled out by laboratory personnel<<<

*****Combined Uranium must be reported in micrograms per liter*****

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result		Exceed MCL
	15 pCi/L		Adjusted Gross Alpha	4000				
600/00-02		3 pCi/L	Gross Alpha	4002				
7500 - Rn			Radon	4004				
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L	
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	5/12/2023	1.0 ± 0.3		
GammaRay HPGE		1 pCi/L	Radium 226	4020	5/12/2023	< 0.4		
		1 pCi/L	Radium 228	4030	5/12/2023	1.0 ± 0.3		

LABORATORY INFORMATION

>>>To be filled out by laboratory personnel<<<

Specimen Number: RSE71816

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: FC-CCR-FD01-0523

Authorized Signature: _____

Date Public Water System Notified: _____

DWAR 6: 11/2007

Client Information

Name:	Natalie Chrisman/602-250-3608 Pam Norris/505-598-8781
Company	Arizona Public Service
Address	PO Box 355, MS 4915 Fruitland, NM 87416
Phone	
Site	APS Four Corners Power Plant (URS)

Radiation Safety Engineering, Inc.
3245 North Washington Street, Chandler, Arizona 85225
Analysis Request

Sample ID & Location (DWR#)	Collection Date	Collection Time	Media (DW* WW* Other)	Drinking Water Compliance	Gross Alpha	Gross Beta	Total Uranium	Isotopic Uranium	Ra-226	Ra-228	Ra-226 + Ra-228, Combined	H-3	Gamma Spectroscopy	Sr-89/Sr-90	Radon in Water	Radon in Air	
FC-CCR-MW67-0523	5/9/2023	1325	GW						X	X	X						71807
FC-CCR-MW68-0523	5/9/2023	1049	GW						X	X	X						71808
FC-CCR-MW69-0523	5/9/2023	1007	GW						X	X	X						71809
FC-CCR-MW71-0523	5/8/2023	1913	GW						X	X	X						71810
FC-CCR-MW72-0523	5/8/2023	1814	GW						X	X	X						71811
FC-CCR-MW84-0523	5/9/2023	1239	GW						X	X	X						71812
FC-CCR-MW85-0523	5/9/2023	1413	GW						X	X	X						71813
FC-CCR-CM01-0523	5/9/2023	1143	GW						X	X	X						71814
FC-CCR-CM02-0523	5/9/2023	1148	GW						X	X	X						71815
FC-CCR-FD01-0523	5/9/2023	1620	GW						X	X	X						71816

Sample Receipt

Total No. of Containers	
Chain of Custody Seals	
Container Condition	
Lab No.	

Invoice to:
PO#: 300592346

Instructions/Comments
Method HPGe

Relinquished By:	Company: WSP	Date/time: 5/11/23 9:56	Received By:		Company:	Date/time: 5/11/23 9:56
Relinquished By:	Company:	Date/time:	Received By:		Company:	Date/time:
Relinquished By:	Company:	Date/time:	Received By:		Company:	Date/time:

* DW = Drinking Water, WW = Waste Water, GW = Groundwater.

u/client/forms/cofc.frm

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Natalie Chrisman
Arizona Public Service Company
PO BOX 188, Ste. 4458
Joseph City, Arizona 86032

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JOB DESCRIPTION

CCR Groundwater Monitoring
SDG NUMBER APS Four Corners Power Plant

JOB NUMBER

550-201909-1

Eurofins Phoenix
4625 East Cotton Center Boulevard
Suite #189
Phoenix AZ 85040

See page two for job notes and contact information.

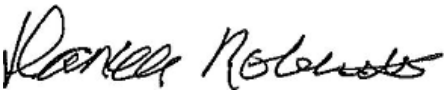
my EOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Southwest, LLC Project Manager.

Authorization



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Authorized for release by
Danielle Roberts, Senior Project Manager
Danielle.Roberts@et.eurofinsus.com
(657)210-6355

Table of Contents

Cover Page 1
Table of Contents 3
Definitions/Glossary 4
Case Narrative 6
Sample Summary 9
Detection Summary 11
Client Sample Results 33
QC Sample Results 72
QC Association Summary 96
Lab Chronicle 112
Certification Summary 133
Method Summary 134
Chain of Custody 135
Receipt Checklists 161

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
D1	Sample required dilution due to matrix.
D2	Sample required dilution due to high concentration of analyte.
D5	Minimum Reporting Limit (MRL) adjusted due to sample dilution; analyte was non-detect in the sample.
E2	Concentration estimated. Analyte exceeded calibration range. Reanalysis not performed due to sample matrix.
M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The associated blank spike was acceptable.

Metals

Qualifier	Qualifier Description
B1	Target analyte detected in method blank at or above the method reporting limit.
M2	Matrix spike recovery was low, the associated blank spike recovery was acceptable.
M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The associated blank spike was acceptable.
T5	Laboratory not licensed for this parameter

General Chemistry

Qualifier	Qualifier Description
B7	Target analyte detected in method blank at or above method reporting limit. Concentration found in the sample was 10 times above the concentration found in the blank.
E2	Concentration estimated. Analyte exceeded calibration range. Reanalysis not performed due to sample matrix.
H5	This test is specified to be performed in the field within 15 minutes of sampling; sample was received and analyzed past the regulatory holding time.
N1	See case narrative.
T5	Laboratory not licensed for this parameter

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 550-201909-1

Laboratory: Eurofins Phoenix

Narrative

Job Narrative
550-201909-1

Comments
No additional comments.

Receipt
The samples were received on 5/8/2023 4:00 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 7 coolers at receipt time were 1.8º C, 1.8º C, 2.0º C, 2.0º C, 2.0º C, 2.0º C and 2.4º C.

HPLC/IC
Method 300.0: The following samples were diluted due to matrix interferences as well as high amounts of metals constituents: FC-CCR-MW62-0523 (550-201909-1), FC-CCR-MW63-0523 (550-201909-2), FC-CCR-MW64-0523 (550-201909-3), FC-CCR-MW65-0523 (550-201909-4), FC-CCR-SW1-0523 (550-201909-5), FC-CCR-SW2-0523 (550-201909-6), FC-CCR-SW3-0523 (550-201909-7), FC-CCR-FD08-0523 (550-201909-8), FC-CCR-MW66-0523 (550-201909-9), FC-CCR-MW70-0523 (550-201909-10), FC-CCR-MW73-0523 (550-201909-11), FC-CCR-MW83-0523 (550-201909-12) and FC-CCR-MW86-0523 (550-201909-13). A metals test was performed on the undiluted samples which produced strong positive results. Therefore to reduce these interferences, dilutions were prepared prior to the instrument analysis. The samples were re-tested at increasing dilutions and run at the lowest dilutions which presented with minimized interference. This analyte was not detected in the diluted samples. As such, elevated reporting limits (RLs) have been provided and the results have been qualified with D flags.

Method 300.0: The following samples were diluted due to matrix interferences as well as high amounts of metals constituents: FC-CCR-FD02-0523 (550-201909-14) and FC-CCR-MW61-0523 (550-201909-16). A metals test was performed on the undiluted samples which produced strong positive results. Therefore to reduce these interferences, dilutions were prepared prior to the instrument analysis. The samples were re-tested at increasing dilutions and run at the lowest dilutions which presented with minimized interference. This analyte was not detected in the diluted samples. As such, elevated reporting limits (RLs) have been provided and the results have been qualified with D flags.

Method 300.0: The following samples were diluted due to matrix interferences as well as high amounts of metals constituents: FC-CCR-DMX03-0523 (550-201909-21), FC-CCR-DMX04-0523 (550-201909-22), FC-CCR-MW05-0523 (550-201909-25), FC-CCR-MW06-0523 (550-201909-26), FC-CCR-MW11-0523 (550-201909-27), FC-CCR-MW17R-0523 (550-201909-29), FC-CCR-MW18-0523 (550-201909-30) and FC-CCR-MW23R-0523 (550-201909-33). A metals test was performed on the undiluted samples which produced strong positive results. Therefore to reduce these interferences, dilutions were prepared prior to the instrument analysis. The samples were re-tested at increasing dilutions and run at the lowest dilutions which presented with minimized interference. This analyte was not detected in the diluted samples. As such, elevated reporting limits (RLs) have been provided and the results have been qualified with D flags.

Method 300.0: The following samples were diluted due to matrix interferences as well as high amounts of metals constituents: FC-CCR-MW75-0523 (550-201909-17) and FC-CCR-MW87-0523 (550-201909-18). A metals test was performed on the undiluted samples which produced strong positive results. Therefore to reduce these interferences, dilutions were prepared prior to the instrument analysis. The samples were re-tested at increasing dilutions and run at the lowest dilutions which presented with minimized interference. This analyte was not detected in the diluted samples. As such, elevated reporting limits (RLs) have been provided and the results have been qualified with D flags.

Method 300.0: The following samples were diluted due to matrix interferences as well as high amounts of metals constituents: FC-CCR-MW24-0523 (550-201909-34), FC-CCR-MW36R-0523 (550-201909-36) and FC-CCR-MW38R-0523 (550-201909-37). A metals test was performed on the undiluted samples which produced strong positive results. Therefore to reduce these interferences, dilutions were prepared prior to the instrument analysis. The samples were re-tested at increasing dilutions and run at the lowest dilutions which presented with minimized interference. This analyte was not detected in the diluted samples. As such, elevated reporting limits (RLs) have been provided and the results have been qualified with D flags.

Method 300.0: The following samples were diluted due to matrix interferences as well as high amounts of metals constituents: FC-CCR-MW56-0523 (550-201909-38), FC-CCR-MW57-0523 (550-201909-40) and FC-CCR-MW82S-0523 (550-201909-46). A metals test was performed on the undiluted samples which produced strong positive results. Therefore to reduce these interferences, dilutions

Job ID: 550-201909-1 (Continued)

Laboratory: Eurofins Phoenix (Continued)

were prepared prior to the instrument analysis. The samples were re-tested at increasing dilutions and run at the lowest dilutions which presented with minimized interference. This analyte was not detected in the diluted samples. As such, elevated reporting limits (RLs) have been provided and the results have been qualified with D flags.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

Method 200.7 Rev 4.4: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 280-612031 and analytical batch 280-613158 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 200.7 Rev 4.4: The method blank for preparation batch 280-612170 and analytical batch 280-613151 contained Ca above the reporting limit (RL). Associated sample(s) were not re-extracted and/or re-analyzed because results were greater than 10X the value found in the method blank.

Method 200.7 Rev 4.4: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 280-612170 and analytical batch 280-613779 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 200.8: The LCS was missed during scanning of batch sheets, therefore the raw data is off by one and corrected in TALS

FC-CCR-MW62-0523 (550-201909-1), FC-CCR-MW63-0523 (550-201909-2), FC-CCR-MW64-0523 (550-201909-3), FC-CCR-MW65-0523 (550-201909-4), FC-CCR-SW1-0523 (550-201909-5), FC-CCR-SW2-0523 (550-201909-6), FC-CCR-SW3-0523 (550-201909-7), FC-CCR-FD08-0523 (550-201909-8), FC-CCR-MW66-0523 (550-201909-9), FC-CCR-MW70-0523 (550-201909-10), FC-CCR-MW73-0523 (550-201909-11), FC-CCR-MW83-0523 (550-201909-12), FC-CCR-MW86-0523 (550-201909-13), FC-CCR-FD02-0523 (550-201909-14), FC-CCR-MW52-0523 (550-201909-15), FC-CCR-MW52-0523 (550-201909-15[MS]), FC-CCR-MW52-0523 (550-201909-15[MSD]), FC-CCR-MW61-0523 (550-201909-16), FC-CCR-MW75-0523 (550-201909-17), FC-CCR-MW87-0523 (550-201909-18), FC-CCR-FD03-0523 (550-201909-19), FC-CCR-DMX01-0523 (550-201909-20), FC-CCR-DMX01-0523 (550-201909-20[MS]), FC-CCR-DMX01-0523 (550-201909-20[MSD]), (LCS 280-612031/25-A), (LCS 280-612170/26-A), (MB 280-612170/1-A), (550-201909-B-15-D PDS) and (550-201909-B-15-D SD)

Method 200.8: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 280-612170 and analytical batch 280-613435 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 200.8: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 280-612031 and analytical batch 280-613435 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry

Method SM 2540C: The analysis volume selected for the following sample produced a base result greater than 200mg before calculation of the final result: FC-CCR-MW87-0523 (550-201909-18). Reanalysis could not be performed due to holding time exceedance. The reference method specifies that no more than 200mg of weight be recovered for a chosen sample analysis volume in order to produce the best data precision. As such, these data have been qualified.

Method SM 2540C: Constant weight was not achieved after 3 drying cycles for the following samples: FC-CCR-MW87-0523 (550-201909-18).

Method SM 2540C: Constant weight was not achieved after 3 drying cycles for the following samples: FC-CCR-SW3-0523 (550-201909-7) and FC-CCR-SUMP15-0523 (550-201909-60).

Method SM 2540C: The analysis volume selected for the following sample produced a base result greater than 200mg before calculation of the final result: FC-CCR-SUMP18-0523 (550-201909-63). Reanalysis could not be performed due to holding time exceedance. The

Job ID: 550-201909-1 (Continued)

Laboratory: Eurofins Phoenix (Continued)

reference method specifies that no more than 200mg of weight be recovered for a chosen sample analysis volume in order to produce the best data precision. As such, these data have been qualified.

Method SM 2540C: The method blank for analytical batch 550-300213 contained Total Dissolved Solids above the reporting limit (RL). Associated sample were not re-extracted and/or re-analyzed because results were greater than 10X the value found in the method blank.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Sample Summary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-201909-1
SDG: APS Four Corners Power Plant

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
550-201909-1	FC-CCR-MW62-0523	Water	05/07/23 14:12	05/08/23 16:00
550-201909-2	FC-CCR-MW63-0523	Water	05/07/23 15:41	05/08/23 16:00
550-201909-3	FC-CCR-MW64-0523	Water	05/07/23 16:13	05/08/23 16:00
550-201909-4	FC-CCR-MW65-0523	Water	05/07/23 11:53	05/08/23 16:00
550-201909-5	FC-CCR-SW1-0523	Water	05/07/23 18:42	05/08/23 16:00
550-201909-6	FC-CCR-SW2-0523	Water	05/07/23 15:06	05/08/23 16:00
550-201909-7	FC-CCR-SW3-0523	Water	05/07/23 15:13	05/08/23 16:00
550-201909-8	FC-CCR-FD08-0523	Water	05/07/23 12:34	05/08/23 16:00
550-201909-9	FC-CCR-MW66-0523	Water	05/07/23 12:45	05/08/23 16:00
550-201909-10	FC-CCR-MW70-0523	Water	05/07/23 10:59	05/08/23 16:00
550-201909-11	FC-CCR-MW73-0523	Water	05/07/23 18:15	05/08/23 16:00
550-201909-12	FC-CCR-MW83-0523	Water	05/07/23 17:21	05/08/23 16:00
550-201909-13	FC-CCR-MW86-0523	Water	05/07/23 13:25	05/08/23 16:00
550-201909-14	FC-CCR-FD02-0523	Water	05/07/23 16:20	05/08/23 16:00
550-201909-15	FC-CCR-MW52-0523	Water	05/02/23 14:10	05/08/23 16:00
550-201909-16	FC-CCR-MW61-0523	Water	05/04/23 09:54	05/08/23 16:00
550-201909-17	FC-CCR-MW75-0523	Water	05/04/23 10:42	05/08/23 16:00
550-201909-18	FC-CCR-MW87-0523	Water	05/05/23 18:06	05/08/23 16:00
550-201909-19	FC-CCR-FD03-0523	Water	05/02/23 16:20	05/08/23 16:00
550-201909-20	FC-CCR-DMX01-0523	Water	05/03/23 14:08	05/08/23 16:00
550-201909-21	FC-CCR-DMX03-0523	Water	05/03/23 16:47	05/08/23 16:00
550-201909-22	FC-CCR-DMX04-0523	Water	05/04/23 15:25	05/08/23 16:00
550-201909-23	FC-CCR-MW01-0523	Water	05/02/23 15:42	05/08/23 16:00
550-201909-24	FC-CCR-MW03-0523	Water	05/02/23 16:25	05/08/23 16:00
550-201909-25	FC-CCR-MW05-0523	Water	05/03/23 17:38	05/08/23 16:00
550-201909-26	FC-CCR-MW06-0523	Water	05/04/23 16:13	05/08/23 16:00
550-201909-27	FC-CCR-MW11-0523	Water	05/05/23 16:31	05/08/23 16:00
550-201909-28	FC-CCR-FD04-0523	Water	05/03/23 12:34	05/08/23 16:00
550-201909-29	FC-CCR-MW17R-0523	Water	05/04/23 14:34	05/08/23 16:00
550-201909-30	FC-CCR-MW18-0523	Water	05/04/23 11:50	05/08/23 16:00
550-201909-31	FC-CCR-MW19-0523	Water	05/03/23 15:07	05/08/23 16:00
550-201909-32	FC-CCR-MW21-0523	Water	05/02/23 17:06	05/08/23 16:00
550-201909-33	FC-CCR-MW23R-0523	Water	05/03/23 16:02	05/08/23 16:00
550-201909-34	FC-CCR-MW24-0523	Water	05/04/23 18:12	05/08/23 16:00
550-201909-35	FC-CCR-MW30-0523	Water	05/03/23 09:50	05/08/23 16:00
550-201909-36	FC-CCR-MW36R-0523	Water	05/04/23 12:44	05/08/23 16:00
550-201909-37	FC-CCR-MW38R-0523	Water	05/05/23 11:20	05/08/23 16:00
550-201909-38	FC-CCR-MW56-0523	Water	05/04/23 13:33	05/08/23 16:00
550-201909-39	FC-CCR-FD06-0523	Water	05/03/23 16:20	05/08/23 16:00
550-201909-40	FC-CCR-MW57-0523	Water	05/05/23 12:42	05/08/23 16:00
550-201909-41	FC-CCR-MW60-0523	Water	05/02/23 15:04	05/08/23 16:00
550-201909-42	FC-CCR-MW77S-0523	Water	05/03/23 10:48	05/08/23 16:00
550-201909-43	FC-CCR-MW78S-0523	Water	05/03/23 11:26	05/08/23 16:00
550-201909-44	FC-CCR-MW79S-0523	Water	05/03/23 12:54	05/08/23 16:00
550-201909-45	FC-CCR-MW81-0523	Water	05/03/23 12:07	05/08/23 16:00
550-201909-46	FC-CCR-MW82S-0523	Water	05/05/23 15:32	05/08/23 16:00
550-201909-47	FC-CCR-FD07-0523	Water	05/03/23 13:31	05/08/23 16:00
550-201909-48	FC-CCR-FD05-0523	Water	05/03/23 20:02	05/08/23 16:00
550-201909-49	FC-CCR-SUMP1-0523	Water	05/05/23 08:14	05/08/23 16:00
550-201909-50	FC-CCR-SUMP2-0523	Water	05/05/23 08:27	05/08/23 16:00
550-201909-51	FC-CCR-SUMP3-0523	Water	05/05/23 08:44	05/08/23 16:00
550-201909-52	FC-CCR-SUMP7-0523	Water	05/05/23 08:51	05/08/23 16:00
550-201909-53	FC-CCR-SUMP8-0523	Water	05/05/23 09:00	05/08/23 16:00
550-201909-54	FC-CCR-SUMP9-0523	Water	05/05/23 09:08	05/08/23 16:00

Sample Summary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-201909-1
SDG: APS Four Corners Power Plant

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
550-201909-55	FC-CCR-SUMP10-0523	Water	05/05/23 09:15	05/08/23 16:00
550-201909-56	FC-CCR-SUMP11-0523	Water	05/05/23 09:21	05/08/23 16:00
550-201909-57	FC-CCR-SUMP12-0523	Water	05/05/23 09:29	05/08/23 16:00
550-201909-58	FC-CCR-SUMP13-0523	Water	05/05/23 09:36	05/08/23 16:00
550-201909-59	FC-CCR-SUMP14-0523	Water	05/05/23 09:45	05/08/23 16:00
550-201909-60	FC-CCR-SUMP15-0523	Water	05/05/23 09:48	05/08/23 16:00
550-201909-61	FC-CCR-SUMP16-0523	Water	05/05/23 09:56	05/08/23 16:00
550-201909-62	FC-CCR-SUMP17-0523	Water	05/05/23 10:03	05/08/23 16:00
550-201909-63	FC-CCR-SUMP18-0523	Water	05/05/23 10:08	05/08/23 16:00

Detection Summary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-201909-1
SDG: APS Four Corners Power Plant

Client Sample ID: FC-CCR-MW62-0523 — Lab Sample ID: 550-201909-1

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Sulfate	3500	D2	400		mg/L	200		300.0	Total/NA
Lithium	0.14		0.020		mg/L	1		200.7 Rev 4.4	Total/NA
Boron	2200		100		ug/L	1		200.7 Rev 4.4	Total Recoverable
Calcium	550000		200		ug/L	1		200.7 Rev 4.4	Total Recoverable
Arsenic	11		5.0		ug/L	1		200.8	Total Recoverable
Barium	26		3.0		ug/L	1		200.8	Total Recoverable
Cobalt	3.3		1.0		ug/L	1		200.8	Total Recoverable
Nickel	4.5		3.0		ug/L	1		200.8	Total Recoverable
Mercury	0.00044		0.00020		mg/L	1		245.1	Total/NA
Total Dissolved Solids	6400		100		mg/L	1		SM 2540C	Total/NA
pH	7.0	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	10.1	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-MW63-0523 — Lab Sample ID: 550-201909-2

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	76	D1	40		mg/L	20		300.0	Total/NA
Sulfate	1900	D2	40		mg/L	20		300.0	Total/NA
Lithium	0.055		0.020		mg/L	1		200.7 Rev 4.4	Total/NA
Boron	900		100		ug/L	1		200.7 Rev 4.4	Total Recoverable
Calcium	470000		200		ug/L	1		200.7 Rev 4.4	Total Recoverable
Barium	16		3.0		ug/L	1		200.8	Total Recoverable
Molybdenum	2.2		2.0		ug/L	1		200.8	Total Recoverable
Total Dissolved Solids	3400		40		mg/L	1		SM 2540C	Total/NA
pH	7.4	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	8.4	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-MW64-0523 — Lab Sample ID: 550-201909-3

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	51	D1	4.0		mg/L	2		300.0	Total/NA
Fluoride	1.4	D1	0.80		mg/L	2		300.0	Total/NA
Sulfate	200	D2	4.0		mg/L	2		300.0	Total/NA
Lithium	0.023		0.020		mg/L	1		200.7 Rev 4.4	Total/NA
Beryllium	5.1		1.0		ug/L	1		200.7 Rev 4.4	Total Recoverable
Boron	530		100		ug/L	1		200.7 Rev 4.4	Total Recoverable
Calcium	81000		200		ug/L	1		200.7 Rev 4.4	Total Recoverable
Barium	22		3.0		ug/L	1		200.8	Total Recoverable
Cobalt	1.7		1.0		ug/L	1		200.8	Total Recoverable
Molybdenum	5.0		2.0		ug/L	1		200.8	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: FC-CCR-MW64-0523 (Continued) — Lab Sample ID: 550-201909-3

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Total Dissolved Solids	650		20		mg/L	1		SM 2540C	Total/NA
pH	7.8	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	7.7	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-MW65-0523 — Lab Sample ID: 550-201909-4

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	56	D1	10		mg/L	5		300.0	Total/NA
Sulfate	300	D2	10		mg/L	5		300.0	Total/NA
Lithium	0.045		0.020		mg/L	1		200.7 Rev 4.4	Total/NA
Boron	580		100		ug/L	1		200.7 Rev 4.4	Total Recoverable
Calcium	100000		200		ug/L	1		200.7 Rev 4.4	Total Recoverable
Barium	23		3.0		ug/L	1		200.8	Total Recoverable
Cobalt	1.8		1.0		ug/L	1		200.8	Total Recoverable
Molybdenum	7.0		2.0		ug/L	1		200.8	Total Recoverable
Nickel	3.1		3.0		ug/L	1		200.8	Total Recoverable
Total Dissolved Solids	900		20		mg/L	1		SM 2540C	Total/NA
pH	7.6	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	8.8	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-SW1-0523 — Lab Sample ID: 550-201909-5

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	52	D1	4.0		mg/L	2		300.0	Total/NA
Fluoride	0.91	D1	0.80		mg/L	2		300.0	Total/NA
Sulfate	450	D2	400		mg/L	200		300.0	Total/NA
Lithium	0.087		0.020		mg/L	1		200.7 Rev 4.4	Total/NA
Boron	340		100		ug/L	1		200.7 Rev 4.4	Total Recoverable
Calcium	100000		200		ug/L	1		200.7 Rev 4.4	Total Recoverable
Barium	200		3.0		ug/L	1		200.8	Total Recoverable
Molybdenum	6.1		2.0		ug/L	1		200.8	Total Recoverable
Total Dissolved Solids	910		20		mg/L	1		SM 2540C	Total/NA
pH	8.6	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	8.0	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-SW2-0523 — Lab Sample ID: 550-201909-6

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	55	D1	4.0		mg/L	2		300.0	Total/NA
Fluoride	0.98	D1	0.80		mg/L	2		300.0	Total/NA
Sulfate	490	D2	400		mg/L	200		300.0	Total/NA
Lithium	0.085		0.020		mg/L	1		200.7 Rev 4.4	Total/NA
Boron	410		100		ug/L	1		200.7 Rev 4.4	Total Recoverable

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-201909-1
SDG: APS Four Corners Power Plant

Client Sample ID: FC-CCR-SW2-0523 (Continued) — Lab Sample ID: 550-201909-6

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Calcium	110000		200		ug/L	1		200.7 Rev 4.4	Total Recoverable
Antimony	2.4		2.0		ug/L	1		200.8	Total Recoverable
Barium	150		3.0		ug/L	1		200.8	Total Recoverable
Molybdenum	20		2.0		ug/L	1		200.8	Total Recoverable
Total Dissolved Solids	940		20		mg/L	1		SM 2540C	Total/NA
pH	8.6	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	8.4	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-SW3-0523 — Lab Sample ID: 550-201909-7

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	51	D1	4.0		mg/L	2		300.0	Total/NA
Fluoride	0.83	D1	0.80		mg/L	2		300.0	Total/NA
Sulfate	440	D2	400		mg/L	200		300.0	Total/NA
Lithium	0.089		0.020		mg/L	1		200.7 Rev 4.4	Total/NA
Boron	350		100		ug/L	1		200.7 Rev 4.4	Total Recoverable
Calcium	100000		200		ug/L	1		200.7 Rev 4.4	Total Recoverable
Barium	190		3.0		ug/L	1		200.8	Total Recoverable
Molybdenum	6.5		2.0		ug/L	1		200.8	Total Recoverable
Total Dissolved Solids	850	N1	20		mg/L	1		SM 2540C	Total/NA
pH	8.7	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	9.6	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-FD08-0523 — Lab Sample ID: 550-201909-8

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	52	D1	4.0		mg/L	2		300.0	Total/NA
Fluoride	0.85	D1	0.80		mg/L	2		300.0	Total/NA
Sulfate	460	D2	400		mg/L	200		300.0	Total/NA
Lithium	0.092		0.020		mg/L	1		200.7 Rev 4.4	Total/NA
Boron	350		100		ug/L	1		200.7 Rev 4.4	Total Recoverable
Calcium	110000		200		ug/L	1		200.7 Rev 4.4	Total Recoverable
Barium	190		3.0		ug/L	1		200.8	Total Recoverable
Molybdenum	6.5		2.0		ug/L	1		200.8	Total Recoverable
Total Dissolved Solids	860		20		mg/L	1		SM 2540C	Total/NA
pH	8.7	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	10.0	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-MW66-0523 — Lab Sample ID: 550-201909-9

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	1600	D2	400		mg/L	200		300.0	Total/NA
Sulfate	11000	D2	400		mg/L	200		300.0	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: FC-CCR-MW66-0523 (Continued) — Lab Sample ID: 550-201909-9

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Lithium	0.33		0.020		mg/L	1		200.7 Rev 4.4	Total/NA
Boron	170000		1000		ug/L	10		200.7 Rev 4.4	Total Recoverable
Calcium	490000		200		ug/L	1		200.7 Rev 4.4	Total Recoverable
Barium	17		3.0		ug/L	1		200.8	Total Recoverable
Cobalt	7.9		1.0		ug/L	1		200.8	Total Recoverable
Molybdenum	17		2.0		ug/L	1		200.8	Total Recoverable
Nickel	20		3.0		ug/L	1		200.8	Total Recoverable
Total Dissolved Solids	18000		100		mg/L	1		SM 2540C	Total/NA
pH	7.4	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	10.2	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-MW70-0523 — Lab Sample ID: 550-201909-10

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	1200	D2	400		mg/L	200		300.0	Total/NA
Sulfate	5600	D2	400		mg/L	200		300.0	Total/NA
Lithium	0.36		0.020		mg/L	1		200.7 Rev 4.4	Total/NA
Boron	110000		1000		ug/L	10		200.7 Rev 4.4	Total Recoverable
Calcium	560000		200		ug/L	1		200.7 Rev 4.4	Total Recoverable
Barium	11		3.0		ug/L	1		200.8	Total Recoverable
Cobalt	1.7		1.0		ug/L	1		200.8	Total Recoverable
Molybdenum	4.4		2.0		ug/L	1		200.8	Total Recoverable
Nickel	11		3.0		ug/L	1		200.8	Total Recoverable
Selenium	140		5.0		ug/L	1		200.8	Total Recoverable
Total Dissolved Solids	11000		100		mg/L	1		SM 2540C	Total/NA
pH	7.1	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	9.8	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-MW73-0523 — Lab Sample ID: 550-201909-11

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	740	D2	400		mg/L	200		300.0	Total/NA
Sulfate	8200	D2	400		mg/L	200		300.0	Total/NA
Lithium	0.33		0.020		mg/L	1		200.7 Rev 4.4	Total/NA
Boron	1900		100		ug/L	1		200.7 Rev 4.4	Total Recoverable
Calcium	510000		200		ug/L	1		200.7 Rev 4.4	Total Recoverable
Barium	18		3.0		ug/L	1		200.8	Total Recoverable
Cobalt	4.5		1.0		ug/L	1		200.8	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: FC-CCR-MW73-0523 (Continued) — Lab Sample ID: 550-201909-11

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Nickel	13		3.0		ug/L	1		200.8	Total Recoverable
Total Dissolved Solids	12000		100		mg/L	1		SM 2540C	Total/NA
pH	7.0	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	8.9	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-MW83-0523 — Lab Sample ID: 550-201909-12

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	120	D2	40		mg/L	20		300.0	Total/NA
Sulfate	3400	D2	400		mg/L	200		300.0	Total/NA
Lithium	0.19		0.020		mg/L	1		200.7 Rev 4.4	Total/NA
Boron	2800		100		ug/L	1		200.7 Rev 4.4	Total Recoverable
Calcium	530000		200		ug/L	1		200.7 Rev 4.4	Total Recoverable
Barium	8.5		3.0		ug/L	1		200.8	Total Recoverable
Cobalt	1.6		1.0		ug/L	1		200.8	Total Recoverable
Molybdenum	6.8		2.0		ug/L	1		200.8	Total Recoverable
Nickel	7.7		3.0		ug/L	1		200.8	Total Recoverable
Total Dissolved Solids	5300	B7	100		mg/L	1		SM 2540C	Total/NA
pH	7.4	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	8.3	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-MW86-0523 — Lab Sample ID: 550-201909-13

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	720	D2	400		mg/L	200		300.0	Total/NA
Sulfate	5600	D2	400		mg/L	200		300.0	Total/NA
Lithium	0.25		0.020		mg/L	1		200.7 Rev 4.4	Total/NA
Boron	49000		100		ug/L	1		200.7 Rev 4.4	Total Recoverable
Calcium	470000		200		ug/L	1		200.7 Rev 4.4	Total Recoverable
Barium	10		3.0		ug/L	1		200.8	Total Recoverable
Cobalt	1.3		1.0		ug/L	1		200.8	Total Recoverable
Nickel	9.7		3.0		ug/L	1		200.8	Total Recoverable
Selenium	12		5.0		ug/L	1		200.8	Total Recoverable
Total Dissolved Solids	9300	B7	100		mg/L	1		SM 2540C	Total/NA
pH	7.3	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	8.8	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-FD02-0523 — Lab Sample ID: 550-201909-14

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	690	D2	400		mg/L	200		300.0	Total/NA
Sulfate	5400	D2	400		mg/L	200		300.0	Total/NA
Lithium	0.25		0.020		mg/L	1		200.7 Rev 4.4	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: FC-CCR-FD02-0523 (Continued) — Lab Sample ID: 550-201909-14

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Boron	49000		100		ug/L	1		200.7 Rev 4.4	Total Recoverable
Calcium	470000		200		ug/L	1		200.7 Rev 4.4	Total Recoverable
Barium	10		3.0		ug/L	1		200.8	Total Recoverable
Cobalt	1.2		1.0		ug/L	1		200.8	Total Recoverable
Nickel	10		3.0		ug/L	1		200.8	Total Recoverable
Selenium	12		5.0		ug/L	1		200.8	Total Recoverable
Total Dissolved Solids	9400	B7	100		mg/L	1		SM 2540C	Total/NA
pH	7.3	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	11.0	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-MW52-0523 — Lab Sample ID: 550-201909-15

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Boron	11000		100		ug/L	1		200.7 Rev 4.4	Total Recoverable
Cobalt	110		1.0		ug/L	1		200.8	Total Recoverable
Molybdenum	2.1		2.0		ug/L	1		200.8	Total Recoverable

Client Sample ID: FC-CCR-MW61-0523 — Lab Sample ID: 550-201909-16

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	380	D2	20		mg/L	10		300.0	Total/NA
Sulfate	3400	D2	400		mg/L	200		300.0	Total/NA
Lithium	0.48		0.020		mg/L	1		200.7 Rev 4.4	Total/NA
Boron	45000		100		ug/L	1		200.7 Rev 4.4	Total Recoverable
Calcium	560000		200		ug/L	1		200.7 Rev 4.4	Total Recoverable
Magnesium	160000		200		ug/L	1		200.7 Rev 4.4	Total Recoverable
Potassium	24000		3000		ug/L	1		200.7 Rev 4.4	Total Recoverable
Sodium	1100000		10000		ug/L	10		200.7 Rev 4.4	Total Recoverable
Barium	18		3.0		ug/L	1		200.8	Total Recoverable
Cadmium	1.1		1.0		ug/L	1		200.8	Total Recoverable
Cobalt	30		1.0		ug/L	1		200.8	Total Recoverable
Lead	1.2		1.0		ug/L	1		200.8	Total Recoverable
Molybdenum	110		2.0		ug/L	1		200.8	Total Recoverable
Nickel	460		3.0		ug/L	1		200.8	Total Recoverable
Alkalinity as CaCO3	97		6.0		mg/L	1		SM 2320B	Total/NA
Alkalinity, Phenolphthalein	12		6.0		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	74		6.0		mg/L	1		SM 2320B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: FC-CCR-MW61-0523 (Continued) — Lab Sample ID: 550-201909-16

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Carbonate Alkalinity as CaCO3	23		6.0		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	5800		100		mg/L	1		SM 2540C	Total/NA
pH	8.6	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	9.7	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-MW75-0523 — Lab Sample ID: 550-201909-17

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	330	D2	20		mg/L	10		300.0	Total/NA
Sulfate	4500	D2	400		mg/L	200		300.0	Total/NA
Lithium	0.47		0.020		mg/L	1		200.7 Rev 4.4	Total/NA
Boron	26000		100		ug/L	1		200.7 Rev 4.4	Total Recoverable
Calcium	490000		200		ug/L	1		200.7 Rev 4.4	Total Recoverable
Magnesium	250000		200		ug/L	1		200.7 Rev 4.4	Total Recoverable
Potassium	26000		3000		ug/L	1		200.7 Rev 4.4	Total Recoverable
Sodium	1400000		10000		ug/L	10		200.7 Rev 4.4	Total Recoverable
Barium	19		3.0		ug/L	1		200.8	Total Recoverable
Cadmium	1.7		1.0		ug/L	1		200.8	Total Recoverable
Cobalt	56		1.0		ug/L	1		200.8	Total Recoverable
Lead	3.4		1.0		ug/L	1		200.8	Total Recoverable
Molybdenum	170		2.0		ug/L	1		200.8	Total Recoverable
Nickel	310		3.0		ug/L	1		200.8	Total Recoverable
Alkalinity as CaCO3	100		6.0		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	100		6.0		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	6800		100		mg/L	1		SM 2540C	Total/NA
pH	8.4	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	9.0	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-MW87-0523 — Lab Sample ID: 550-201909-18

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	2800	D2	400		mg/L	200		300.0	Total/NA
Sulfate	33000	D2	400		mg/L	200		300.0	Total/NA
Lithium	2.6		0.020		mg/L	1		200.7 Rev 4.4	Total/NA
Boron	2100		100		ug/L	1		200.7 Rev 4.4	Total Recoverable
Calcium	400000		200		ug/L	1		200.7 Rev 4.4	Total Recoverable
Iron	330		100		ug/L	1		200.7 Rev 4.4	Total Recoverable
Magnesium	3900000		2000		ug/L	10		200.7 Rev 4.4	Total Recoverable
Manganese	350		10		ug/L	1		200.7 Rev 4.4	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: FC-CCR-MW87-0523 (Continued) — Lab Sample ID: 550-201909-18

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Potassium	110000		3000		ug/L	1		200.7 Rev 4.4	Total Recoverable
Sodium	9800000		10000		ug/L	10		200.7 Rev 4.4	Total Recoverable
Barium	7.6		3.0		ug/L	1		200.8	Total Recoverable
Cobalt	3.0		1.0		ug/L	1		200.8	Total Recoverable
Molybdenum	36		2.0		ug/L	1		200.8	Total Recoverable
Nickel	51		3.0		ug/L	1		200.8	Total Recoverable
Selenium	5.3		5.0		ug/L	1		200.8	Total Recoverable
Alkalinity as CaCO3	1200		6.0		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	1200		6.0		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	54000	E2 N1	40		mg/L	1		SM 2540C	Total/NA
pH	7.5	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	10.1	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-FD03-0523 — Lab Sample ID: 550-201909-19

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Boron	9300		100		ug/L	1		200.7 Rev 4.4	Total Recoverable
Cobalt	96		1.0		ug/L	1		200.8	Total Recoverable
Molybdenum	2.7		2.0		ug/L	1		200.8	Total Recoverable

Client Sample ID: FC-CCR-DMX01-0523 — Lab Sample ID: 550-201909-20

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Boron	77000		500		ug/L	5		200.7 Rev 4.4	Total Recoverable
Cobalt	2.0	M2	1.0		ug/L	1		200.8	Total Recoverable
Molybdenum	11		2.0		ug/L	1		200.8	Total Recoverable

Client Sample ID: FC-CCR-DMX03-0523 — Lab Sample ID: 550-201909-21

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	1200	D2	400		mg/L	200		300.0	Total/NA
Sulfate	13000	D2	400		mg/L	200		300.0	Total/NA
Lithium	1.3		0.020		mg/L	1		200.7 Rev 4.4	Total/NA
Boron	960		100		ug/L	1		200.7 Rev 4.4	Total Recoverable
Calcium	440000		200		ug/L	1		200.7 Rev 4.4	Total Recoverable
Iron	160		100		ug/L	1		200.7 Rev 4.4	Total Recoverable
Magnesium	2300000	M3	2000		ug/L	10		200.7 Rev 4.4	Total Recoverable
Manganese	440		10		ug/L	1		200.7 Rev 4.4	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: FC-CCR-DMX03-0523 (Continued) — Lab Sample ID: 550-201909-21

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Potassium	67000		3000		ug/L	1		200.7 Rev 4.4	Total Recoverable
Sodium	2900000	M3	10000		ug/L	10		200.7 Rev 4.4	Total Recoverable
Barium	16		3.0		ug/L	1		200.8	Total Recoverable
Cobalt	1.3		1.0		ug/L	1		200.8	Total Recoverable
Nickel	26		3.0		ug/L	1		200.8	Total Recoverable
Alkalinity as CaCO3	870		6.0		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	870		6.0		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	21000		200		mg/L	1		SM 2540C	Total/NA
pH	7.2	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	9.7	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-DMX04-0523 — Lab Sample ID: 550-201909-22

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	450	D2	100		mg/L	50		300.0	Total/NA
Sulfate	6800	D2	400		mg/L	200		300.0	Total/NA
Lithium	0.69		0.020		mg/L	1		200.7 Rev 4.4	Total/NA
Boron	1400		100		ug/L	1		200.7 Rev 4.4	Total Recoverable
Calcium	430000		200		ug/L	1		200.7 Rev 4.4	Total Recoverable
Magnesium	700000		200		ug/L	1		200.7 Rev 4.4	Total Recoverable
Manganese	970		10		ug/L	1		200.7 Rev 4.4	Total Recoverable
Potassium	39000		3000		ug/L	1		200.7 Rev 4.4	Total Recoverable
Sodium	1700000	B1	10000		ug/L	10		200.7 Rev 4.4	Total Recoverable
Barium	8.8		3.0		ug/L	1		200.8	Total Recoverable
Cobalt	2.3		1.0		ug/L	1		200.8	Total Recoverable
Molybdenum	9.0		2.0		ug/L	1		200.8	Total Recoverable
Nickel	28		3.0		ug/L	1		200.8	Total Recoverable
Alkalinity as CaCO3	370		6.0		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	370		6.0		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	11000		100		mg/L	1		SM 2540C	Total/NA
pH	7.6	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	8.5	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-MW01-0523 — Lab Sample ID: 550-201909-23

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Boron	60000		1000		ug/L	10		200.7 Rev 4.4	Total Recoverable
Cobalt	47		1.0		ug/L	1		200.8	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: FC-CCR-MW01-0523 (Continued) — Lab Sample ID: 550-201909-23

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Molybdenum	23		2.0		ug/L	1		200.8	Total Recoverable

Client Sample ID: FC-CCR-MW03-0523 — Lab Sample ID: 550-201909-24

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Boron	9900		100		ug/L	1		200.7 Rev 4.4	Total Recoverable

Client Sample ID: FC-CCR-MW05-0523 — Lab Sample ID: 550-201909-25

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	4200	D2	400		mg/L	200		300.0	Total/NA
Sulfate	14000	D2	400		mg/L	200		300.0	Total/NA
Lithium	2.3		0.020		mg/L	1		200.7 Rev 4.4	Total/NA
Boron	1300		100		ug/L	1		200.7 Rev 4.4	Total Recoverable
Calcium	460000		200		ug/L	1		200.7 Rev 4.4	Total Recoverable
Magnesium	1500000		2000		ug/L	10		200.7 Rev 4.4	Total Recoverable
Manganese	830		10		ug/L	1		200.7 Rev 4.4	Total Recoverable
Potassium	78000		3000		ug/L	1		200.7 Rev 4.4	Total Recoverable
Sodium	8000000		50000		ug/L	50		200.7 Rev 4.4	Total Recoverable
Cobalt	3.5		1.0		ug/L	1		200.8	Total Recoverable
Alkalinity as CaCO3	830		6.0		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	830		6.0		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	28000		200		mg/L	1		SM 2540C	Total/NA
pH	7.1	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	9.2	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-MW06-0523 — Lab Sample ID: 550-201909-26

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	2700	D2	400		mg/L	200		300.0	Total/NA
Sulfate	20000	D2	2000		mg/L	1000		300.0	Total/NA
Lithium	2.5		0.020		mg/L	1		200.7 Rev 4.4	Total/NA
Boron	6200		100		ug/L	1		200.7 Rev 4.4	Total Recoverable
Calcium	420000		2000		ug/L	10		200.7 Rev 4.4	Total Recoverable
Iron	2900		100		ug/L	1		200.7 Rev 4.4	Total Recoverable
Magnesium	1900000		2000		ug/L	10		200.7 Rev 4.4	Total Recoverable
Manganese	500		10		ug/L	1		200.7 Rev 4.4	Total Recoverable
Potassium	81000		3000		ug/L	1		200.7 Rev 4.4	Total Recoverable
Sodium	6800000		10000		ug/L	10		200.7 Rev 4.4	Total Recoverable
Barium	17		3.0		ug/L	1		200.8	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: FC-CCR-MW06-0523 (Continued) — Lab Sample ID: 550-201909-26

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Cobalt	3.6		1.0		ug/L	1		200.8	Total Recoverable
Molybdenum	4.6		2.0		ug/L	1		200.8	Total Recoverable
Nickel	45		3.0		ug/L	1		200.8	Total Recoverable
Alkalinity as CaCO3	610		6.0		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	610		6.0		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	31000		200		mg/L	1		SM 2540C	Total/NA
pH	7.3	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	10.2	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-MW11-0523 — Lab Sample ID: 550-201909-27

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	3000	D2	400		mg/L	200		300.0	Total/NA
Sulfate	60000	D2	2000		mg/L	1000		300.0	Total/NA
Calcium	400000		200		ug/L	1		200.7 Rev 4.4	Total Recoverable
Magnesium	11000000		5000		ug/L	25		200.7 Rev 4.4	Total Recoverable
Potassium	190000		3000		ug/L	1		200.7 Rev 4.4	Total Recoverable
Sodium	15000000		25000		ug/L	25		200.7 Rev 4.4	Total Recoverable
Cobalt	22		1.0		ug/L	1		200.8	Total Recoverable
Alkalinity as CaCO3	870		6.0		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	870		6.0		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	100000		1000		mg/L	1		SM 2540C	Total/NA
pH	6.8	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	10.1	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-FD04-0523 — Lab Sample ID: 550-201909-28

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Boron	87000		1000		ug/L	10		200.7 Rev 4.4	Total Recoverable
Cobalt	1.7		1.0		ug/L	1		200.8	Total Recoverable
Molybdenum	11		2.0		ug/L	1		200.8	Total Recoverable

Client Sample ID: FC-CCR-MW17R-0523 — Lab Sample ID: 550-201909-29

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	420	D2	40		mg/L	20		300.0	Total/NA
Sulfate	4000	D2	400		mg/L	200		300.0	Total/NA
Lithium	0.46		0.020		mg/L	1		200.7 Rev 4.4	Total/NA
Boron	38000		100		ug/L	1		200.7 Rev 4.4	Total Recoverable
Calcium	480000		200		ug/L	1		200.7 Rev 4.4	Total Recoverable
Magnesium	300000		200		ug/L	1		200.7 Rev 4.4	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: FC-CCR-MW17R-0523 (Continued) — Lab Sample ID: 550-201909-29

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Manganese	930		10		ug/L	1		200.7 Rev 4.4	Total Recoverable
Potassium	22000		3000		ug/L	1		200.7 Rev 4.4	Total Recoverable
Sodium	970000		10000		ug/L	10		200.7 Rev 4.4	Total Recoverable
Barium	17		3.0		ug/L	1		200.8	Total Recoverable
Cadmium	1.2		1.0		ug/L	1		200.8	Total Recoverable
Cobalt	59		1.0		ug/L	1		200.8	Total Recoverable
Lead	2.3		1.0		ug/L	1		200.8	Total Recoverable
Nickel	520		3.0		ug/L	1		200.8	Total Recoverable
Alkalinity as CaCO3	140		6.0		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	140		6.0		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	6200		100		mg/L	1		SM 2540C	Total/NA
pH	7.4	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	9.4	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-MW18-0523 — Lab Sample ID: 550-201909-30

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	5100	D2	400		mg/L	200		300.0	Total/NA
Sulfate	16000	D2	400		mg/L	200		300.0	Total/NA
Lithium	2.5		0.020		mg/L	1		200.7 Rev 4.4	Total/NA
Boron	1500		100		ug/L	1		200.7 Rev 4.4	Total Recoverable
Calcium	440000		200		ug/L	1		200.7 Rev 4.4	Total Recoverable
Iron	140		100		ug/L	1		200.7 Rev 4.4	Total Recoverable
Magnesium	890000		200		ug/L	1		200.7 Rev 4.4	Total Recoverable
Manganese	2500		10		ug/L	1		200.7 Rev 4.4	Total Recoverable
Potassium	81000		3000		ug/L	1		200.7 Rev 4.4	Total Recoverable
Sodium	6800000		10000		ug/L	10		200.7 Rev 4.4	Total Recoverable
Cobalt	9.4		1.0		ug/L	1		200.8	Total Recoverable
Molybdenum	2.3		2.0		ug/L	1		200.8	Total Recoverable
Alkalinity as CaCO3	950		6.0		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	950		6.0		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	29000		200		mg/L	1		SM 2540C	Total/NA
pH	7.1	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	9.3	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-201909-1
SDG: APS Four Corners Power Plant

Client Sample ID: FC-CCR-MW19-0523 — Lab Sample ID: 550-201909-31

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Boron	2300		100		ug/L	1		200.7 Rev 4.4	Total Recoverable
Cobalt	1.4		1.0		ug/L	1		200.8	Total Recoverable
Molybdenum	3.3		2.0		ug/L	1		200.8	Total Recoverable

Client Sample ID: FC-CCR-MW21-0523 — Lab Sample ID: 550-201909-32

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Boron	5200		1000		ug/L	10		200.7 Rev 4.4	Total Recoverable
Cobalt	4.5		1.0		ug/L	1		200.8	Total Recoverable
Molybdenum	2.2		2.0		ug/L	1		200.8	Total Recoverable

Client Sample ID: FC-CCR-MW23R-0523 — Lab Sample ID: 550-201909-33

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	750	D2	400		mg/L	200		300.0	Total/NA
Sulfate	8800	D2	400		mg/L	200		300.0	Total/NA
Lithium	1.2		0.020		mg/L	1		200.7 Rev 4.4	Total/NA
Boron	16000		100		ug/L	1		200.7 Rev 4.4	Total Recoverable
Calcium	520000		200		ug/L	1		200.7 Rev 4.4	Total Recoverable
Magnesium	1300000		2000		ug/L	10		200.7 Rev 4.4	Total Recoverable
Manganese	55		10		ug/L	1		200.7 Rev 4.4	Total Recoverable
Potassium	46000		3000		ug/L	1		200.7 Rev 4.4	Total Recoverable
Sodium	1900000		10000		ug/L	10		200.7 Rev 4.4	Total Recoverable
Molybdenum	3.5		2.0		ug/L	1		200.8	Total Recoverable
Alkalinity as CaCO3	470		6.0		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	470		6.0		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	14000		100		mg/L	1		SM 2540C	Total/NA
pH	7.2	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	9.7	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-MW24-0523 — Lab Sample ID: 550-201909-34

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	4800	D2	400		mg/L	200		300.0	Total/NA
Sulfate	11000	D2	400		mg/L	200		300.0	Total/NA
Lithium	1.5		0.020		mg/L	1		200.7 Rev 4.4	Total/NA
Boron	1100		100		ug/L	1		200.7 Rev 4.4	Total Recoverable
Calcium	460000		200		ug/L	1		200.7 Rev 4.4	Total Recoverable
Iron	570		100		ug/L	1		200.7 Rev 4.4	Total Recoverable
Magnesium	180000		200		ug/L	1		200.7 Rev 4.4	Total Recoverable

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-201909-1
SDG: APS Four Corners Power Plant

Client Sample ID: FC-CCR-MW24-0523 (Continued) — Lab Sample ID: 550-201909-34

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Manganese	1900		10		ug/L	1		200.7 Rev 4.4	Total Recoverable
Potassium	46000		3000		ug/L	1		200.7 Rev 4.4	Total Recoverable
Sodium	6600000		10000		ug/L	10		200.7 Rev 4.4	Total Recoverable
Cobalt	2.7		1.0		ug/L	1		200.8	Total Recoverable
Molybdenum	30		2.0		ug/L	1		200.8	Total Recoverable
Alkalinity as CaCO3	290		6.0		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	290		6.0		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	24000		200		mg/L	1		SM 2540C	Total/NA
pH	7.4	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	9.7	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-MW30-0523 — Lab Sample ID: 550-201909-35

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Boron	26000		100		ug/L	1		200.7 Rev 4.4	Total Recoverable
Cobalt	1.3		1.0		ug/L	1		200.8	Total Recoverable
Molybdenum	4.8		2.0		ug/L	1		200.8	Total Recoverable

Client Sample ID: FC-CCR-MW36R-0523 — Lab Sample ID: 550-201909-36

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	510	D2	40		mg/L	20		300.0	Total/NA
Sulfate	3900	D2	40		mg/L	20		300.0	Total/NA
Lithium	0.69		0.020		mg/L	1		200.7 Rev 4.4	Total/NA
Boron	58000		1000		ug/L	10		200.7 Rev 4.4	Total Recoverable
Calcium	530000		200		ug/L	1		200.7 Rev 4.4	Total Recoverable
Magnesium	440000		200		ug/L	1		200.7 Rev 4.4	Total Recoverable
Manganese	180		10		ug/L	1		200.7 Rev 4.4	Total Recoverable
Potassium	29000		3000		ug/L	1		200.7 Rev 4.4	Total Recoverable
Sodium	1100000		10000		ug/L	10		200.7 Rev 4.4	Total Recoverable
Cobalt	210		1.0		ug/L	1		200.8	Total Recoverable
Alkalinity as CaCO3	220		6.0		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	220		6.0		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	6800		100		mg/L	1		SM 2540C	Total/NA
pH	7.4	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	9.9	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-MW38R-0523 — Lab Sample ID: 550-201909-37

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	350	D2	40		mg/L	20		300.0	Total/NA

This Detection Summary does not include radiochemical test results.

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Client Sample ID: FC-CCR-MW38R-0523 (Continued) — Lab Sample ID: 550-201909-37

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Sulfate	5400	D2	400		mg/L	200		300.0	Total/NA
Lithium	0.60		0.020		mg/L	1		200.7 Rev 4.4	Total/NA
Boron	27000		100		ug/L	1		200.7 Rev 4.4	Total Recoverable
Calcium	480000		200		ug/L	1		200.7 Rev 4.4	Total Recoverable
Iron	260		100		ug/L	1		200.7 Rev 4.4	Total Recoverable
Magnesium	530000		200		ug/L	1		200.7 Rev 4.4	Total Recoverable
Potassium	28000		3000		ug/L	1		200.7 Rev 4.4	Total Recoverable
Sodium	1500000		10000		ug/L	10		200.7 Rev 4.4	Total Recoverable
Barium	14		3.0		ug/L	1		200.8	Total Recoverable
Cobalt	170		1.0		ug/L	1		200.8	Total Recoverable
Molybdenum	3.7		2.0		ug/L	1		200.8	Total Recoverable
Nickel	320		3.0		ug/L	1		200.8	Total Recoverable
Selenium	9.6		5.0		ug/L	1		200.8	Total Recoverable
Alkalinity as CaCO3	180		6.0		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	180		6.0		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	8900		100		mg/L	1		SM 2540C	Total/NA
pH	7.4	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	10.8	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-MW56-0523 — Lab Sample ID: 550-201909-38

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	2300	D2	400		mg/L	200		300.0	Total/NA
Sulfate	19000	D2	400		mg/L	200		300.0	Total/NA
Lithium	2.0		0.020		mg/L	1		200.7 Rev 4.4	Total/NA
Boron	1700		100		ug/L	1		200.7 Rev 4.4	Total Recoverable
Calcium	440000		200		ug/L	1		200.7 Rev 4.4	Total Recoverable
Magnesium	3200000		2000		ug/L	10		200.7 Rev 4.4	Total Recoverable
Potassium	87000		3000		ug/L	1		200.7 Rev 4.4	Total Recoverable
Sodium	4900000		10000		ug/L	10		200.7 Rev 4.4	Total Recoverable
Barium	16		3.0		ug/L	1		200.8	Total Recoverable
Molybdenum	4.8		2.0		ug/L	1		200.8	Total Recoverable
Nickel	36		3.0		ug/L	1		200.8	Total Recoverable
Selenium	220		5.0		ug/L	1		200.8	Total Recoverable
Thallium	1.1		1.0		ug/L	1		200.8	Total Recoverable
Alkalinity as CaCO3	880		6.0		mg/L	1		SM 2320B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: FC-CCR-MW56-0523 (Continued) — Lab Sample ID: 550-201909-38

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Bicarbonate Alkalinity as CaCO3	880		6.0		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	30000		200		mg/L	1		SM 2540C	Total/NA
pH	7.3	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	11.0	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-FD06-0523 — Lab Sample ID: 550-201909-39

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Boron	24000		100		ug/L	1		200.7 Rev 4.4	Total Recoverable
Cobalt	1.2		1.0		ug/L	1		200.8	Total Recoverable
Molybdenum	4.8		2.0		ug/L	1		200.8	Total Recoverable

Client Sample ID: FC-CCR-MW57-0523 — Lab Sample ID: 550-201909-40

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	590	D2	200		mg/L	100		300.0	Total/NA
Sulfate	9100	D2	200		mg/L	100		300.0	Total/NA
Lithium	1.1		0.020		mg/L	1		200.7 Rev 4.4	Total/NA
Boron	1500		100		ug/L	1		200.7 Rev 4.4	Total Recoverable
Calcium	480000		200		ug/L	1		200.7 Rev 4.4	Total Recoverable
Iron	180		100		ug/L	1		200.7 Rev 4.4	Total Recoverable
Magnesium	940000		200		ug/L	1		200.7 Rev 4.4	Total Recoverable
Manganese	170		10		ug/L	1		200.7 Rev 4.4	Total Recoverable
Potassium	54000		3000		ug/L	1		200.7 Rev 4.4	Total Recoverable
Sodium	2300000		10000		ug/L	10		200.7 Rev 4.4	Total Recoverable
Barium	16		3.0		ug/L	1		200.8	Total Recoverable
Cobalt	1.5		1.0		ug/L	1		200.8	Total Recoverable
Nickel	34		3.0		ug/L	1		200.8	Total Recoverable
Alkalinity as CaCO3	470		6.0		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	470		6.0		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	14000		100		mg/L	1		SM 2540C	Total/NA
pH	7.4	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	10.2	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-MW60-0523 — Lab Sample ID: 550-201909-41

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Boron	62000	M3	1000		ug/L	10		200.7 Rev 4.4	Total Recoverable
Cobalt	180		1.0		ug/L	1		200.8	Total Recoverable
Molybdenum	150		2.0		ug/L	1		200.8	Total Recoverable

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-201909-1
SDG: APS Four Corners Power Plant

Client Sample ID: FC-CCR-MW77S-0523 — Lab Sample ID: 550-201909-42

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Boron	11000		100		ug/L	1		200.7 Rev 4.4	Total Recoverable
Cobalt	7.3		1.0		ug/L	1		200.8	Total Recoverable
Molybdenum	21		2.0		ug/L	1		200.8	Total Recoverable

Client Sample ID: FC-CCR-MW78S-0523 — Lab Sample ID: 550-201909-43

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Boron	1600		100		ug/L	1		200.7 Rev 4.4	Total Recoverable
Cobalt	6.6		1.0		ug/L	1		200.8	Total Recoverable
Molybdenum	17		2.0		ug/L	1		200.8	Total Recoverable

Client Sample ID: FC-CCR-MW79S-0523 — Lab Sample ID: 550-201909-44

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Boron	8700		100		ug/L	1		200.7 Rev 4.4	Total Recoverable
Cobalt	3.5	M2	1.0		ug/L	1		200.8	Total Recoverable
Molybdenum	4.4		2.0		ug/L	1		200.8	Total Recoverable

Client Sample ID: FC-CCR-MW81-0523 — Lab Sample ID: 550-201909-45

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Boron	49000		100		ug/L	1		200.7 Rev 4.4	Total Recoverable
Cobalt	19		1.0		ug/L	1		200.8	Total Recoverable
Molybdenum	2.1		2.0		ug/L	1		200.8	Total Recoverable

Client Sample ID: FC-CCR-MW82S-0523 — Lab Sample ID: 550-201909-46

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	670	D2	200		mg/L	100		300.0	Total/NA
Sulfate	6100	D2	200		mg/L	100		300.0	Total/NA
Boron	65000		1000		ug/L	10		200.7 Rev 4.4	Total Recoverable
Calcium	460000	B1	200		ug/L	1		200.7 Rev 4.4	Total Recoverable
Magnesium	710000		200		ug/L	1		200.7 Rev 4.4	Total Recoverable
Potassium	28000		3000		ug/L	1		200.7 Rev 4.4	Total Recoverable
Sodium	1400000		10000		ug/L	10		200.7 Rev 4.4	Total Recoverable
Cobalt	96		1.0		ug/L	1		200.8	Total Recoverable
Molybdenum	6.5		2.0		ug/L	1		200.8	Total Recoverable
Alkalinity as CaCO3	270		6.0		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	270		6.0		mg/L	1		SM 2320B	Total/NA

This Detection Summary does not include radiochemical test results.

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Client Sample ID: FC-CCR-MW82S-0523 (Continued) — Lab Sample ID: 550-201909-46

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Total Dissolved Solids	9800		100		mg/L	1		SM 2540C	Total/NA
pH	7.2	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	10.6	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-FD07-0523 — Lab Sample ID: 550-201909-47

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Boron	49000		100		ug/L	1		200.7 Rev 4.4	Total Recoverable
Cobalt	20		1.0		ug/L	1		200.8	Total Recoverable
Molybdenum	2.4		2.0		ug/L	1		200.8	Total Recoverable

Client Sample ID: FC-CCR-FD05-0523 — Lab Sample ID: 550-201909-48

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Boron	2500		100		ug/L	1		200.7 Rev 4.4	Total Recoverable
Cobalt	1.4		1.0		ug/L	1		200.8	Total Recoverable
Molybdenum	3.2		2.0		ug/L	1		200.8	Total Recoverable

Client Sample ID: FC-CCR-SUMP1-0523 — Lab Sample ID: 550-201909-49

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	510	D2	40		mg/L	20		300.0	Total/NA
Boron	79000		1000		ug/L	10		200.7 Rev 4.4	Total Recoverable
Magnesium	460000	T5	200		ug/L	1		200.7 Rev 4.4	Total Recoverable
Cobalt	47		1.0		ug/L	1		200.8	Total Recoverable
Molybdenum	87		2.0		ug/L	1		200.8	Total Recoverable
Total Dissolved Solids	8900		100		mg/L	1		SM 2540C	Total/NA

Client Sample ID: FC-CCR-SUMP2-0523 — Lab Sample ID: 550-201909-50

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	540	D2	40		mg/L	20		300.0	Total/NA
Boron	33000		100		ug/L	1		200.7 Rev 4.4	Total Recoverable
Iron	100	T5	100		ug/L	1		200.7 Rev 4.4	Total Recoverable
Magnesium	370000	T5	200		ug/L	1		200.7 Rev 4.4	Total Recoverable
Molybdenum	6.8		2.0		ug/L	1		200.8	Total Recoverable
Total Dissolved Solids	7600		100		mg/L	1		SM 2540C	Total/NA

Client Sample ID: FC-CCR-SUMP3-0523 — Lab Sample ID: 550-201909-51

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	700	D2	40		mg/L	20		300.0	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: FC-CCR-SUMP3-0523 (Continued) — Lab Sample ID: 550-201909-51

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Boron	41000		100		ug/L	1		200.7 Rev 4.4	Total Recoverable
Iron	100	T5	100		ug/L	1		200.7 Rev 4.4	Total Recoverable
Magnesium	840000	T5	200		ug/L	1		200.7 Rev 4.4	Total Recoverable
Manganese	830	T5	10		ug/L	1		200.7 Rev 4.4	Total Recoverable
Cobalt	2.6		1.0		ug/L	1		200.8	Total Recoverable
Molybdenum	14		2.0		ug/L	1		200.8	Total Recoverable
Total Dissolved Solids	18000		200		mg/L	1		SM 2540C	Total/NA

Client Sample ID: FC-CCR-SUMP7-0523 — Lab Sample ID: 550-201909-52

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	670	D2	100		mg/L	50		300.0	Total/NA
Boron	60000		1000		ug/L	10		200.7 Rev 4.4	Total Recoverable
Iron	1200	T5	100		ug/L	1		200.7 Rev 4.4	Total Recoverable
Magnesium	690000	T5	200		ug/L	1		200.7 Rev 4.4	Total Recoverable
Manganese	76	T5	10		ug/L	1		200.7 Rev 4.4	Total Recoverable
Cobalt	62		1.0		ug/L	1		200.8	Total Recoverable
Molybdenum	3.0		2.0		ug/L	1		200.8	Total Recoverable
Total Dissolved Solids	10000		100		mg/L	1		SM 2540C	Total/NA

Client Sample ID: FC-CCR-SUMP8-0523 — Lab Sample ID: 550-201909-53

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	770	D2	400		mg/L	200		300.0	Total/NA
Boron	44000		100		ug/L	1		200.7 Rev 4.4	Total Recoverable
Iron	2700	T5	100		ug/L	1		200.7 Rev 4.4	Total Recoverable
Magnesium	1300000	T5	2000		ug/L	10		200.7 Rev 4.4	Total Recoverable
Manganese	14	T5	10		ug/L	1		200.7 Rev 4.4	Total Recoverable
Cobalt	26		1.0		ug/L	1		200.8	Total Recoverable
Molybdenum	2.3		2.0		ug/L	1		200.8	Total Recoverable
Total Dissolved Solids	18000		100		mg/L	1		SM 2540C	Total/NA

Client Sample ID: FC-CCR-SUMP9-0523 — Lab Sample ID: 550-201909-54

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	630	D2	40		mg/L	20		300.0	Total/NA
Boron	30000		100		ug/L	1		200.7 Rev 4.4	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: FC-CCR-SUMP9-0523 (Continued) — Lab Sample ID: 550-201909-54

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Iron	9300	T5	100		ug/L	1		200.7 Rev 4.4	Total Recoverable
Magnesium	760000	T5	200		ug/L	1		200.7 Rev 4.4	Total Recoverable
Manganese	65	T5	10		ug/L	1		200.7 Rev 4.4	Total Recoverable
Cobalt	22		1.0		ug/L	1		200.8	Total Recoverable
Molybdenum	27		2.0		ug/L	1		200.8	Total Recoverable
Total Dissolved Solids	10000		100		mg/L	1		SM 2540C	Total/NA

Client Sample ID: FC-CCR-SUMP10-0523 — Lab Sample ID: 550-201909-55

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	550	D2	20		mg/L	10		300.0	Total/NA
Boron	56000		1000		ug/L	10		200.7 Rev 4.4	Total Recoverable
Iron	1400	T5	100		ug/L	1		200.7 Rev 4.4	Total Recoverable
Magnesium	450000	T5	200		ug/L	1		200.7 Rev 4.4	Total Recoverable
Manganese	22	T5	10		ug/L	1		200.7 Rev 4.4	Total Recoverable
Cobalt	150		1.0		ug/L	1		200.8	Total Recoverable
Total Dissolved Solids	7700		100		mg/L	1		SM 2540C	Total/NA

Client Sample ID: FC-CCR-SUMP11-0523 — Lab Sample ID: 550-201909-56

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	530	D2	20		mg/L	10		300.0	Total/NA
Boron	39000		100		ug/L	1		200.7 Rev 4.4	Total Recoverable
Iron	350	T5	100		ug/L	1		200.7 Rev 4.4	Total Recoverable
Magnesium	470000	T5	200		ug/L	1		200.7 Rev 4.4	Total Recoverable
Cobalt	77		1.0		ug/L	1		200.8	Total Recoverable
Total Dissolved Solids	8300		100		mg/L	1		SM 2540C	Total/NA

Client Sample ID: FC-CCR-SUMP12-0523 — Lab Sample ID: 550-201909-57

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	560	D2	20		mg/L	10		300.0	Total/NA
Boron	34000		100		ug/L	1		200.7 Rev 4.4	Total Recoverable
Iron	2600	T5	100		ug/L	1		200.7 Rev 4.4	Total Recoverable
Magnesium	460000	T5	200		ug/L	1		200.7 Rev 4.4	Total Recoverable
Manganese	16	T5	10		ug/L	1		200.7 Rev 4.4	Total Recoverable
Cobalt	61		1.0		ug/L	1		200.8	Total Recoverable
Total Dissolved Solids	8300		100		mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-201909-1
SDG: APS Four Corners Power Plant

Client Sample ID: FC-CCR-SUMP13-0523 — Lab Sample ID: 550-201909-58

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	500	D2	20		mg/L	10		300.0	Total/NA
Boron	43000		100		ug/L	1		200.7 Rev 4.4	Total Recoverable
Magnesium	380000	T5	200		ug/L	1		200.7 Rev 4.4	Total Recoverable
Cobalt	99		1.0		ug/L	1		200.8	Total Recoverable
Total Dissolved Solids	7400		100		mg/L	1		SM 2540C	Total/NA

Client Sample ID: FC-CCR-SUMP14-0523 — Lab Sample ID: 550-201909-59

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	580	D2	40		mg/L	20		300.0	Total/NA
Boron	34000		100		ug/L	1		200.7 Rev 4.4	Total Recoverable
Iron	2100	T5	100		ug/L	1		200.7 Rev 4.4	Total Recoverable
Magnesium	420000	T5	200		ug/L	1		200.7 Rev 4.4	Total Recoverable
Cobalt	67		1.0		ug/L	1		200.8	Total Recoverable
Molybdenum	4.3		2.0		ug/L	1		200.8	Total Recoverable
Total Dissolved Solids	8300		100		mg/L	1		SM 2540C	Total/NA

Client Sample ID: FC-CCR-SUMP15-0523 — Lab Sample ID: 550-201909-60

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	1800	D2	400		mg/L	200		300.0	Total/NA
Boron	6800		100		ug/L	1		200.7 Rev 4.4	Total Recoverable
Iron	340	T5	100		ug/L	1		200.7 Rev 4.4	Total Recoverable
Magnesium	2900000	T5	2000		ug/L	10		200.7 Rev 4.4	Total Recoverable
Manganese	17	T5	10		ug/L	1		200.7 Rev 4.4	Total Recoverable
Cobalt	5.1		1.0		ug/L	1		200.8	Total Recoverable
Molybdenum	2.8		2.0		ug/L	1		200.8	Total Recoverable
Total Dissolved Solids	37000	N1	200		mg/L	1		SM 2540C	Total/NA

Client Sample ID: FC-CCR-SUMP16-0523 — Lab Sample ID: 550-201909-61

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	680	D2	400		mg/L	200		300.0	Total/NA
Boron	21000		100		ug/L	1		200.7 Rev 4.4	Total Recoverable
Iron	140	T5	100		ug/L	1		200.7 Rev 4.4	Total Recoverable
Magnesium	1100000	T5	2000		ug/L	10		200.7 Rev 4.4	Total Recoverable
Cobalt	51		1.0		ug/L	1		200.8	Total Recoverable
Total Dissolved Solids	15000		100		mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-201909-1
SDG: APS Four Corners Power Plant

Client Sample ID: FC-CCR-SUMP17-0523 — Lab Sample ID: 550-201909-62

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	860	D2	100		mg/L	50		300.0	Total/NA
Boron	6600		100		ug/L	1		200.7 Rev 4.4	Total Recoverable
Iron	260	T5	100		ug/L	1		200.7 Rev 4.4	Total Recoverable
Magnesium	690000	T5	200		ug/L	1		200.7 Rev 4.4	Total Recoverable
Manganese	56		10		ug/L	1		200.7 Rev 4.4	Total Recoverable
Total Dissolved Solids	10000		100		mg/L	1		SM 2540C	Total/NA

Client Sample ID: FC-CCR-SUMP18-0523 — Lab Sample ID: 550-201909-63

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	2000	D2	400		mg/L	200		300.0	Total/NA
Iron	250	T5	100		ug/L	1		200.7 Rev 4.4	Total Recoverable
Magnesium	3100		200		ug/L	1		200.7 Rev 4.4	Total Recoverable
Manganese	37		10		ug/L	1		200.7 Rev 4.4	Total Recoverable
Molybdenum	3.2		2.0		ug/L	1		200.8	Total Recoverable
Total Dissolved Solids	41000	E2 N1	200		mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: FC-CCR-MW62-0523

Lab Sample ID: 550-201909-1
Matrix: Water
Date Collected: 05/07/23 14:12
Date Received: 05/08/23 16:00

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND	D1 D5	400		mg/L			05/22/23 13:31	200
Fluoride	ND	D1 D5	80		mg/L			05/22/23 13:31	200
Sulfate	**3500**	**D2**	400		mg/L			05/22/23 13:31	200

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**0.14**		0.020		mg/L		05/17/23 14:58	05/22/23 15:18	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		1.0		ug/L		05/17/23 14:58	05/22/23 15:18	1
Boron	**2200**		100		ug/L		05/17/23 14:58	05/22/23 15:18	1
Calcium	**550000**		200		ug/L		05/17/23 14:58	05/22/23 15:18	1

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0		ug/L		05/17/23 14:58	05/22/23 15:00	1
Arsenic	**11**		5.0		ug/L		05/17/23 14:58	05/22/23 15:00	1
Barium	**26**		3.0		ug/L		05/17/23 14:58	05/22/23 15:00	1
Cadmium	ND		1.0		ug/L		05/17/23 14:58	05/22/23 15:00	1
Chromium	ND		3.0		ug/L		05/17/23 14:58	05/22/23 15:00	1
Cobalt	**3.3**		1.0		ug/L		05/17/23 14:58	05/22/23 15:00	1
Lead	ND		1.0		ug/L		05/17/23 14:58	05/22/23 15:00	1
Molybdenum	ND		2.0		ug/L		05/17/23 14:58	05/22/23 15:00	1
Nickel	**4.5**		3.0		ug/L		05/17/23 14:58	05/22/23 15:00	1
Selenium	ND		5.0		ug/L		05/17/23 14:58	05/22/23 15:00	1
Thallium	ND		1.0		ug/L		05/17/23 14:58	05/22/23 15:00	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.00044**		0.00020		mg/L		05/09/23 16:26	05/09/23 19:26	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**6400**		100		mg/L			05/12/23 21:08	1
pH (SM 4500 H+ B)	**7.0**	**H5**	1.7		SU			05/10/23 12:20	1
Temperature (SM 4500 H+ B)	**10.1**	**H5 T5**	0.1		Degrees C			05/10/23 12:20	1

Client Sample ID: FC-CCR-MW63-0523

Lab Sample ID: 550-201909-2
Matrix: Water
Date Collected: 05/07/23 15:41
Date Received: 05/08/23 16:00

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**76**	**D1**	40		mg/L			05/22/23 14:07	20
Fluoride	ND	D1 D5	8.0		mg/L			05/22/23 14:07	20
Sulfate	**1900**	**D2**	40		mg/L			05/22/23 14:07	20

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**0.055**		0.020		mg/L		05/17/23 14:58	05/22/23 15:30	1

Client Sample ID: FC-CCR-MW63-0523

Lab Sample ID: 550-201909-2

Date Collected: 05/07/23 15:41
Matrix: Water
Date Received: 05/08/23 16:00

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		1.0		ug/L		05/17/23 14:58	05/22/23 15:30	1
Boron	**900**		100		ug/L		05/17/23 14:58	05/22/23 15:30	1
Calcium	**470000**		200		ug/L		05/17/23 14:58	05/22/23 15:30	1

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0		ug/L		05/17/23 14:58	05/22/23 15:02	1
Arsenic	ND		5.0		ug/L		05/17/23 14:58	05/22/23 15:02	1
Barium	**16**		3.0		ug/L		05/17/23 14:58	05/22/23 15:02	1
Cadmium	ND		1.0		ug/L		05/17/23 14:58	05/22/23 15:02	1
Chromium	ND		3.0		ug/L		05/17/23 14:58	05/22/23 15:02	1
Cobalt	ND		1.0		ug/L		05/17/23 14:58	05/22/23 15:02	1
Lead	ND		1.0		ug/L		05/17/23 14:58	05/22/23 15:02	1
Molybdenum	**2.2**		2.0		ug/L		05/17/23 14:58	05/22/23 15:02	1
Nickel	ND		3.0		ug/L		05/17/23 14:58	05/22/23 15:02	1
Selenium	ND		5.0		ug/L		05/17/23 14:58	05/22/23 15:02	1
Thallium	ND		1.0		ug/L		05/17/23 14:58	05/22/23 15:02	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		05/09/23 16:26	05/09/23 19:28	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**3400**		40		mg/L			05/12/23 21:08	1
pH (SM 4500 H+ B)	**7.4**	**H5**	1.7		SU			05/10/23 12:22	1
Temperature (SM 4500 H+ B)	**8.4**	**H5 T5**	0.1		Degrees C			05/10/23 12:22	1

Client Sample ID: FC-CCR-MW64-0523

Lab Sample ID: 550-201909-3

Date Collected: 05/07/23 16:13
Matrix: Water
Date Received: 05/08/23 16:00

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**51**	**D1**	4.0		mg/L			05/22/23 18:07	2
Fluoride	**1.4**	**D1**	0.80		mg/L			05/22/23 18:07	2
Sulfate	**200**	**D2**	4.0		mg/L			05/22/23 18:07	2

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**0.023**		0.020		mg/L		05/17/23 14:58	05/22/23 15:43	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	**5.1**		1.0		ug/L		05/17/23 14:58	05/22/23 15:43	1
Boron	**530**		100		ug/L		05/17/23 14:58	05/22/23 15:43	1
Calcium	**81000**		200		ug/L		05/17/23 14:58	05/22/23 15:43	1

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0		ug/L		05/17/23 14:58	05/22/23 15:04	1

Client Sample ID: FC-CCR-MW64-0523

Lab Sample ID: 550-201909-3

Date Collected: 05/07/23 16:13
Matrix: Water
Date Received: 05/08/23 16:00

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		5.0		ug/L		05/17/23 14:58	05/22/23 15:04	1
Barium	**22**		3.0		ug/L		05/17/23 14:58	05/22/23 15:04	1
Cadmium	ND		1.0		ug/L		05/17/23 14:58	05/22/23 15:04	1
Chromium	ND		3.0		ug/L		05/17/23 14:58	05/22/23 15:04	1
Cobalt	**1.7**		1.0		ug/L		05/17/23 14:58	05/22/23 15:04	1
Lead	ND		1.0		ug/L		05/17/23 14:58	05/22/23 15:04	1
Molybdenum	**5.0**		2.0		ug/L		05/17/23 14:58	05/22/23 15:04	1
Nickel	ND		3.0		ug/L		05/17/23 14:58	05/22/23 15:04	1
Selenium	ND		5.0		ug/L		05/17/23 14:58	05/22/23 15:04	1
Thallium	ND		1.0		ug/L		05/17/23 14:58	05/22/23 15:04	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		05/09/23 16:26	05/09/23 19:30	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**650**		20		mg/L			05/12/23 21:08	1
pH (SM 4500 H+ B)	**7.8**	**H5**	1.7		SU			05/10/23 12:23	1
Temperature (SM 4500 H+ B)	**7.7**	**H5 T5**	0.1		Degrees C			05/10/23 12:23	1

Client Sample ID: FC-CCR-MW65-0523

Lab Sample ID: 550-201909-4

Date Collected: 05/07/23 11:53
Matrix: Water
Date Received: 05/08/23 16:00

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**56**	**D1**	10		mg/L			05/22/23 14:44	5
Fluoride	ND	D1 D5	2.0		mg/L			05/22/23 14:44	5
Sulfate	**300**	**D2**	10		mg/L			05/22/23 14:44	5

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**0.045**		0.020		mg/L		05/17/23 14:58	05/22/23 15:47	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		1.0		ug/L		05/17/23 14:58	05/22/23 15:47	1
Boron	**580**		100		ug/L		05/17/23 14:58	05/22/23 15:47	1
Calcium	**100000**		200		ug/L		05/17/23 14:58	05/22/23 15:47	1

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0		ug/L		05/17/23 14:58	05/22/23 15:06	1
Arsenic	ND		5.0		ug/L		05/17/23 14:58	05/22/23 15:06	1
Barium	**23**		3.0		ug/L		05/17/23 14:58	05/22/23 15:06	1
Cadmium	ND		1.0		ug/L		05/17/23 14:58	05/22/23 15:06	1
Chromium	ND		3.0		ug/L		05/17/23 14:58	05/22/23 15:06	1
Cobalt	**1.8**		1.0		ug/L		05/17/23 14:58	05/22/23 15:06	1
Lead	ND		1.0		ug/L		05/17/23 14:58	05/22/23 15:06	1
Molybdenum	**7.0**		2.0		ug/L		05/17/23 14:58	05/22/23 15:06	1

Client Sample ID: FC-CCR-MW65-0523

Lab Sample ID: 550-201909-4
Date Collected: 05/07/23 11:53
Matrix: Water
Date Received: 05/08/23 16:00

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Nickel	**3.1**		3.0		ug/L		05/17/23 14:58	05/22/23 15:06	1
Selenium	ND		5.0		ug/L		05/17/23 14:58	05/22/23 15:06	1
Thallium	ND		1.0		ug/L		05/17/23 14:58	05/22/23 15:06	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		05/09/23 16:26	05/09/23 19:32	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**900**		20		mg/L			05/12/23 21:08	1
pH (SM 4500 H+ B)	**7.6**	**H5**	1.7		SU			05/10/23 12:26	1
Temperature (SM 4500 H+ B)	**8.8**	**H5 T5**	0.1		Degrees C			05/10/23 12:26	1

Client Sample ID: FC-CCR-SW1-0523

Lab Sample ID: 550-201909-5
Date Collected: 05/07/23 18:42
Matrix: Water
Date Received: 05/08/23 16:00

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**52**	**D1**	4.0		mg/L			05/22/23 16:16	2
Fluoride	**0.91**	**D1**	0.80		mg/L			05/22/23 16:16	2
Sulfate	**450**	**D2**	400		mg/L			05/22/23 16:35	200

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**0.087**		0.020		mg/L		05/17/23 14:58	05/22/23 16:03	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		1.0		ug/L		05/17/23 14:58	05/22/23 16:03	1
Boron	**340**		100		ug/L		05/17/23 14:58	05/22/23 16:03	1
Calcium	**100000**		200		ug/L		05/17/23 14:58	05/22/23 16:03	1

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0		ug/L		05/17/23 14:58	05/22/23 15:07	1
Arsenic	ND		5.0		ug/L		05/17/23 14:58	05/22/23 15:07	1
Barium	**200**		3.0		ug/L		05/17/23 14:58	05/22/23 15:07	1
Cadmium	ND		1.0		ug/L		05/17/23 14:58	05/22/23 15:07	1
Chromium	ND		3.0		ug/L		05/17/23 14:58	05/22/23 15:07	1
Cobalt	ND		1.0		ug/L		05/17/23 14:58	05/22/23 15:07	1
Lead	ND		1.0		ug/L		05/17/23 14:58	05/22/23 15:07	1
Molybdenum	**6.1**		2.0		ug/L		05/17/23 14:58	05/22/23 15:07	1
Nickel	ND		3.0		ug/L		05/17/23 14:58	05/22/23 15:07	1
Selenium	ND		5.0		ug/L		05/17/23 14:58	05/22/23 15:07	1
Thallium	ND		1.0		ug/L		05/17/23 14:58	05/22/23 15:07	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		05/09/23 16:26	05/09/23 19:34	1

Client Sample ID: FC-CCR-SW1-0523

Lab Sample ID: 550-201909-5
Date Collected: 05/07/23 18:42
Matrix: Water
Date Received: 05/08/23 16:00

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	910		20		mg/L			05/12/23 21:08	1
pH (SM 4500 H+ B)	8.6	H5	1.7		SU			05/10/23 12:29	1
Temperature (SM 4500 H+ B)	8.0	H5 T5	0.1		Degrees C			05/10/23 12:29	1

Client Sample ID: FC-CCR-SW2-0523

Lab Sample ID: 550-201909-6
Date Collected: 05/07/23 15:06
Matrix: Water
Date Received: 05/08/23 16:00

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	55	D1	4.0		mg/L			05/22/23 16:53	2
Fluoride	0.98	D1	0.80		mg/L			05/22/23 16:53	2
Sulfate	490	D2	400		mg/L			05/22/23 17:11	200

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	0.085		0.020		mg/L		05/17/23 14:58	05/22/23 16:07	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		1.0		ug/L		05/17/23 14:58	05/22/23 16:07	1
Boron	410		100		ug/L		05/17/23 14:58	05/22/23 16:07	1
Calcium	110000		200		ug/L		05/17/23 14:58	05/22/23 16:07	1

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.4		2.0		ug/L		05/17/23 14:58	05/22/23 15:09	1
Arsenic	ND		5.0		ug/L		05/17/23 14:58	05/22/23 15:09	1
Barium	150		3.0		ug/L		05/17/23 14:58	05/22/23 15:09	1
Cadmium	ND		1.0		ug/L		05/17/23 14:58	05/22/23 15:09	1
Chromium	ND		3.0		ug/L		05/17/23 14:58	05/22/23 15:09	1
Cobalt	ND		1.0		ug/L		05/17/23 14:58	05/22/23 15:09	1
Lead	ND		1.0		ug/L		05/17/23 14:58	05/22/23 15:09	1
Molybdenum	20		2.0		ug/L		05/17/23 14:58	05/22/23 15:09	1
Nickel	ND		3.0		ug/L		05/17/23 14:58	05/22/23 15:09	1
Selenium	ND		5.0		ug/L		05/17/23 14:58	05/22/23 15:09	1
Thallium	ND		1.0		ug/L		05/17/23 14:58	05/22/23 15:09	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		05/09/23 16:26	05/09/23 19:36	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	940		20		mg/L			05/12/23 21:08	1
pH (SM 4500 H+ B)	8.6	H5	1.7		SU			05/10/23 12:31	1
Temperature (SM 4500 H+ B)	8.4	H5 T5	0.1		Degrees C			05/10/23 12:31	1

Client Sample ID: FC-CCR-SW3-0523

Lab Sample ID: 550-201909-7
Date Collected: 05/07/23 15:13
Matrix: Water
Date Received: 05/08/23 16:00

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**51**	**D1**	4.0		mg/L			05/22/23 17:30	2
Fluoride	**0.83**	**D1**	0.80		mg/L			05/22/23 17:30	2
Sulfate	**440**	**D2**	400		mg/L			05/22/23 17:48	200

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**0.089**		0.020		mg/L		05/17/23 14:58	05/22/23 16:11	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		1.0		ug/L		05/17/23 14:58	05/22/23 16:11	1
Boron	**350**		100		ug/L		05/17/23 14:58	05/22/23 16:11	1
Calcium	**100000**		200		ug/L		05/17/23 14:58	05/22/23 16:11	1

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0		ug/L		05/17/23 14:58	05/22/23 15:11	1
Arsenic	ND		5.0		ug/L		05/17/23 14:58	05/22/23 15:11	1
Barium	**190**		3.0		ug/L		05/17/23 14:58	05/22/23 15:11	1
Cadmium	ND		1.0		ug/L		05/17/23 14:58	05/22/23 15:11	1
Chromium	ND		3.0		ug/L		05/17/23 14:58	05/22/23 15:11	1
Cobalt	ND		1.0		ug/L		05/17/23 14:58	05/22/23 15:11	1
Lead	ND		1.0		ug/L		05/17/23 14:58	05/22/23 15:11	1
Molybdenum	**6.5**		2.0		ug/L		05/17/23 14:58	05/22/23 15:11	1
Nickel	ND		3.0		ug/L		05/17/23 14:58	05/22/23 15:11	1
Selenium	ND		5.0		ug/L		05/17/23 14:58	05/22/23 15:11	1
Thallium	ND		1.0		ug/L		05/17/23 14:58	05/22/23 15:11	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		05/09/23 16:26	05/09/23 19:38	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**850**	**N1**	20		mg/L			05/12/23 21:08	1
pH (SM 4500 H+ B)	**8.7**	**H5**	1.7		SU			05/10/23 12:33	1
Temperature (SM 4500 H+ B)	**9.6**	**H5 T5**	0.1		Degrees C			05/10/23 12:33	1

Client Sample ID: FC-CCR-FD08-0523

Lab Sample ID: 550-201909-8
Date Collected: 05/07/23 12:34
Matrix: Water
Date Received: 05/08/23 16:00

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**52**	**D1**	4.0		mg/L			05/22/23 18:43	2
Fluoride	**0.85**	**D1**	0.80		mg/L			05/22/23 18:43	2
Sulfate	**460**	**D2**	400		mg/L			05/22/23 19:02	200

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**0.092**		0.020		mg/L		05/17/23 14:58	05/22/23 16:15	1

Client Sample ID: FC-CCR-FD08-0523

Lab Sample ID: 550-201909-8
Date Collected: 05/07/23 12:34
Matrix: Water
Date Received: 05/08/23 16:00

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		1.0		ug/L		05/17/23 14:58	05/22/23 16:15	1
Boron	**350**		100		ug/L		05/17/23 14:58	05/22/23 16:15	1
Calcium	**110000**		200		ug/L		05/17/23 14:58	05/22/23 16:15	1

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0		ug/L		05/17/23 14:58	05/22/23 15:21	1
Arsenic	ND		5.0		ug/L		05/17/23 14:58	05/22/23 15:21	1
Barium	**190**		3.0		ug/L		05/17/23 14:58	05/22/23 15:21	1
Cadmium	ND		1.0		ug/L		05/17/23 14:58	05/22/23 15:21	1
Chromium	ND		3.0		ug/L		05/17/23 14:58	05/22/23 15:21	1
Cobalt	ND		1.0		ug/L		05/17/23 14:58	05/22/23 15:21	1
Lead	ND		1.0		ug/L		05/17/23 14:58	05/22/23 15:21	1
Molybdenum	**6.5**		2.0		ug/L		05/17/23 14:58	05/22/23 15:21	1
Nickel	ND		3.0		ug/L		05/17/23 14:58	05/22/23 15:21	1
Selenium	ND		5.0		ug/L		05/17/23 14:58	05/22/23 15:21	1
Thallium	ND		1.0		ug/L		05/17/23 14:58	05/22/23 15:21	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		05/09/23 16:26	05/09/23 19:44	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**860**		20		mg/L			05/12/23 21:08	1
pH (SM 4500 H+ B)	**8.7**	**H5**	1.7		SU			05/10/23 12:35	1
Temperature (SM 4500 H+ B)	**10.0**	**H5 T5**	0.1		Degrees C			05/10/23 12:35	1

Client Sample ID: FC-CCR-MW66-0523

Lab Sample ID: 550-201909-9
Date Collected: 05/07/23 12:45
Matrix: Water
Date Received: 05/08/23 16:00

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1600**	**D2**	400		mg/L			05/22/23 20:15	200
Fluoride	ND	D1 D5	80		mg/L			05/22/23 20:15	200
Sulfate	**11000**	**D2**	400		mg/L			05/22/23 20:15	200

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**0.33**		0.020		mg/L		05/17/23 14:58	05/22/23 16:19	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		1.0		ug/L		05/17/23 14:58	05/22/23 16:19	1
Boron	**170000**		1000		ug/L		05/17/23 14:58	06/07/23 04:30	10
Calcium	**490000**		200		ug/L		05/17/23 14:58	05/22/23 16:19	1

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0		ug/L		05/17/23 14:58	05/22/23 15:25	1

Client Sample ID: FC-CCR-MW66-0523

Lab Sample ID: 550-201909-9

Date Collected: 05/07/23 12:45
Matrix: Water
Date Received: 05/08/23 16:00

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		5.0		ug/L		05/17/23 14:58	05/22/23 15:25	1
Barium	**17**		3.0		ug/L		05/17/23 14:58	05/22/23 15:25	1
Cadmium	ND		1.0		ug/L		05/17/23 14:58	05/22/23 15:25	1
Chromium	ND		3.0		ug/L		05/17/23 14:58	05/22/23 15:25	1
Cobalt	**7.9**		1.0		ug/L		05/17/23 14:58	05/22/23 15:25	1
Lead	ND		1.0		ug/L		05/17/23 14:58	05/22/23 15:25	1
Molybdenum	**17**		2.0		ug/L		05/17/23 14:58	05/22/23 15:25	1
Nickel	**20**		3.0		ug/L		05/17/23 14:58	05/22/23 15:25	1
Selenium	ND		5.0		ug/L		05/17/23 14:58	05/22/23 15:25	1
Thallium	ND		1.0		ug/L		05/17/23 14:58	05/22/23 15:25	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		05/09/23 16:26	05/09/23 19:46	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**18000**		100		mg/L			05/12/23 21:08	1
pH (SM 4500 H+ B)	**7.4**	**H5**	1.7		SU			05/10/23 12:36	1
Temperature (SM 4500 H+ B)	**10.2**	**H5 T5**	0.1		Degrees C			05/10/23 12:36	1

Client Sample ID: FC-CCR-MW70-0523

Lab Sample ID: 550-201909-10

Date Collected: 05/07/23 10:59
Matrix: Water
Date Received: 05/08/23 16:00

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1200**	**D2**	400		mg/L			05/22/23 20:52	200
Fluoride	ND	D1 D5	80		mg/L			05/22/23 20:52	200
Sulfate	**5600**	**D2**	400		mg/L			05/22/23 20:52	200

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**0.36**		0.020		mg/L		05/17/23 14:58	05/22/23 16:23	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		1.0		ug/L		05/17/23 14:58	05/22/23 16:23	1
Boron	**110000**		1000		ug/L		05/17/23 14:58	06/07/23 04:34	10
Calcium	**560000**		200		ug/L		05/17/23 14:58	05/22/23 16:23	1

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0		ug/L		05/17/23 14:58	05/22/23 15:30	1
Arsenic	ND		5.0		ug/L		05/17/23 14:58	05/22/23 15:30	1
Barium	**11**		3.0		ug/L		05/17/23 14:58	05/22/23 15:30	1
Cadmium	ND		1.0		ug/L		05/17/23 14:58	05/22/23 15:30	1
Chromium	ND		3.0		ug/L		05/17/23 14:58	05/22/23 15:30	1
Cobalt	**1.7**		1.0		ug/L		05/17/23 14:58	05/22/23 15:30	1
Lead	ND		1.0		ug/L		05/17/23 14:58	05/22/23 15:30	1
Molybdenum	**4.4**		2.0		ug/L		05/17/23 14:58	05/22/23 15:30	1

Client Sample ID: FC-CCR-MW70-0523

Lab Sample ID: 550-201909-10
Date Collected: 05/07/23 10:59
Matrix: Water
Date Received: 05/08/23 16:00

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Nickel	**11**		3.0		ug/L		05/17/23 14:58	05/22/23 15:30	1
Selenium	**140**		5.0		ug/L		05/17/23 14:58	05/22/23 15:30	1
Thallium	ND		1.0		ug/L		05/17/23 14:58	05/22/23 15:30	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		05/09/23 16:26	05/09/23 19:48	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**11000**		100		mg/L			05/12/23 21:08	1
pH (SM 4500 H+ B)	**7.1**	**H5**	1.7		SU			05/10/23 12:37	1
Temperature (SM 4500 H+ B)	**9.8**	**H5 T5**	0.1		Degrees C			05/10/23 12:37	1

Client Sample ID: FC-CCR-MW73-0523

Lab Sample ID: 550-201909-11
Date Collected: 05/07/23 18:15
Matrix: Water
Date Received: 05/08/23 16:00

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**740**	**D2**	400		mg/L			05/22/23 21:29	200
Fluoride	ND	D1 D5	80		mg/L			05/22/23 21:29	200
Sulfate	**8200**	**D2**	400		mg/L			05/22/23 21:29	200

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**0.33**		0.020		mg/L		05/17/23 14:58	05/22/23 16:27	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		1.0		ug/L		05/17/23 14:58	05/22/23 16:27	1
Boron	**1900**		100		ug/L		05/17/23 14:58	05/22/23 16:27	1
Calcium	**510000**		200		ug/L		05/17/23 14:58	05/22/23 16:27	1

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0		ug/L		05/17/23 14:58	05/22/23 15:32	1
Arsenic	ND		5.0		ug/L		05/17/23 14:58	05/22/23 15:32	1
Barium	**18**		3.0		ug/L		05/17/23 14:58	05/22/23 15:32	1
Cadmium	ND		1.0		ug/L		05/17/23 14:58	05/22/23 15:32	1
Chromium	ND		3.0		ug/L		05/17/23 14:58	05/22/23 15:32	1
Cobalt	**4.5**		1.0		ug/L		05/17/23 14:58	05/22/23 15:32	1
Lead	ND		1.0		ug/L		05/17/23 14:58	05/22/23 15:32	1
Molybdenum	ND		2.0		ug/L		05/17/23 14:58	05/22/23 15:32	1
Nickel	**13**		3.0		ug/L		05/17/23 14:58	05/22/23 15:32	1
Selenium	ND		5.0		ug/L		05/17/23 14:58	05/22/23 15:32	1
Thallium	ND		1.0		ug/L		05/17/23 14:58	05/22/23 15:32	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		05/09/23 16:26	05/09/23 19:50	1

Client Sample ID: FC-CCR-MW73-0523

Lab Sample ID: 550-201909-11

Date Collected: 05/07/23 18:15
Matrix: Water
Date Received: 05/08/23 16:00

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	12000		100		mg/L			05/12/23 21:08	1
pH (SM 4500 H+ B)	7.0	H5	1.7		SU			05/10/23 12:39	1
Temperature (SM 4500 H+ B)	8.9	H5 T5	0.1		Degrees C			05/10/23 12:39	1

Client Sample ID: FC-CCR-MW83-0523

Lab Sample ID: 550-201909-12

Date Collected: 05/07/23 17:21
Matrix: Water
Date Received: 05/08/23 16:00

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	120	D2	40		mg/L			05/22/23 22:06	20
Fluoride	ND	D1 D5	8.0		mg/L			05/22/23 22:06	20
Sulfate	3400	D2	400		mg/L			05/22/23 22:24	200

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	0.19		0.020		mg/L		05/17/23 14:58	05/22/23 16:31	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		1.0		ug/L		05/17/23 14:58	05/22/23 16:31	1
Boron	2800		100		ug/L		05/17/23 14:58	05/22/23 16:31	1
Calcium	530000		200		ug/L		05/17/23 14:58	05/22/23 16:31	1

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0		ug/L		05/17/23 14:58	05/22/23 15:34	1
Arsenic	ND		5.0		ug/L		05/17/23 14:58	05/22/23 15:34	1
Barium	8.5		3.0		ug/L		05/17/23 14:58	05/22/23 15:34	1
Cadmium	ND		1.0		ug/L		05/17/23 14:58	05/22/23 15:34	1
Chromium	ND		3.0		ug/L		05/17/23 14:58	05/22/23 15:34	1
Cobalt	1.6		1.0		ug/L		05/17/23 14:58	05/22/23 15:34	1
Lead	ND		1.0		ug/L		05/17/23 14:58	05/22/23 15:34	1
Molybdenum	6.8		2.0		ug/L		05/17/23 14:58	05/22/23 15:34	1
Nickel	7.7		3.0		ug/L		05/17/23 14:58	05/22/23 15:34	1
Selenium	ND		5.0		ug/L		05/17/23 14:58	05/22/23 15:34	1
Thallium	ND		1.0		ug/L		05/17/23 14:58	05/22/23 15:34	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		05/09/23 16:26	05/09/23 19:52	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	5300	B7	100		mg/L			05/13/23 15:46	1
pH (SM 4500 H+ B)	7.4	H5	1.7		SU			05/10/23 12:40	1
Temperature (SM 4500 H+ B)	8.3	H5 T5	0.1		Degrees C			05/10/23 12:40	1

Client Sample ID: FC-CCR-MW86-0523

Lab Sample ID: 550-201909-13
Matrix: Water
Date Collected: 05/07/23 13:25
Date Received: 05/08/23 16:00

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**720**	**D2**	400		mg/L			05/22/23 22:43	200
Fluoride	ND	D1 D5	80		mg/L			05/22/23 22:43	200
Sulfate	**5600**	**D2**	400		mg/L			05/22/23 22:43	200

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**0.25**		0.020		mg/L		05/17/23 14:58	05/22/23 16:35	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		1.0		ug/L		05/17/23 14:58	05/22/23 16:35	1
Boron	**49000**		100		ug/L		05/17/23 14:58	05/22/23 16:35	1
Calcium	**470000**		200		ug/L		05/17/23 14:58	05/22/23 16:35	1

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0		ug/L		05/17/23 14:58	05/22/23 15:36	1
Arsenic	ND		5.0		ug/L		05/17/23 14:58	05/22/23 15:36	1
Barium	**10**		3.0		ug/L		05/17/23 14:58	05/22/23 15:36	1
Cadmium	ND		1.0		ug/L		05/17/23 14:58	05/22/23 15:36	1
Chromium	ND		3.0		ug/L		05/17/23 14:58	05/22/23 15:36	1
Cobalt	**1.3**		1.0		ug/L		05/17/23 14:58	05/22/23 15:36	1
Lead	ND		1.0		ug/L		05/17/23 14:58	05/22/23 15:36	1
Molybdenum	ND		2.0		ug/L		05/17/23 14:58	05/22/23 15:36	1
Nickel	**9.7**		3.0		ug/L		05/17/23 14:58	05/22/23 15:36	1
Selenium	**12**		5.0		ug/L		05/17/23 14:58	05/22/23 15:36	1
Thallium	ND		1.0		ug/L		05/17/23 14:58	05/22/23 15:36	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		05/09/23 16:26	05/09/23 19:54	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**9300**	**B7**	100		mg/L			05/13/23 15:46	1
pH (SM 4500 H+ B)	**7.3**	**H5**	1.7		SU			05/10/23 12:41	1
Temperature (SM 4500 H+ B)	**8.8**	**H5 T5**	0.1		Degrees C			05/10/23 12:41	1

Client Sample ID: FC-CCR-FD02-0523

Lab Sample ID: 550-201909-14
Matrix: Water
Date Collected: 05/07/23 16:20
Date Received: 05/08/23 16:00

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**690**	**D2**	400		mg/L			05/22/23 21:08	200
Fluoride	ND	D1 D5	80		mg/L			05/22/23 21:08	200
Sulfate	**5400**	**D2**	400		mg/L			05/22/23 21:08	200

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**0.25**		0.020		mg/L		05/17/23 14:58	05/22/23 16:39	1

Client Sample ID: FC-CCR-FD02-0523

Lab Sample ID: 550-201909-14
Date Collected: 05/07/23 16:20
Matrix: Water
Date Received: 05/08/23 16:00

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		1.0		ug/L		05/17/23 14:58	05/22/23 16:39	1
Boron	**49000**		100		ug/L		05/17/23 14:58	05/22/23 16:39	1
Calcium	**470000**		200		ug/L		05/17/23 14:58	05/22/23 16:39	1

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0		ug/L		05/17/23 14:58	05/22/23 15:37	1
Arsenic	ND		5.0		ug/L		05/17/23 14:58	05/22/23 15:37	1
Barium	**10**		3.0		ug/L		05/17/23 14:58	05/22/23 15:37	1
Cadmium	ND		1.0		ug/L		05/17/23 14:58	05/22/23 15:37	1
Chromium	ND		3.0		ug/L		05/17/23 14:58	05/22/23 15:37	1
Cobalt	**1.2**		1.0		ug/L		05/17/23 14:58	05/22/23 15:37	1
Lead	ND		1.0		ug/L		05/17/23 14:58	05/22/23 15:37	1
Molybdenum	ND		2.0		ug/L		05/17/23 14:58	05/22/23 15:37	1
Nickel	**10**		3.0		ug/L		05/17/23 14:58	05/22/23 15:37	1
Selenium	**12**		5.0		ug/L		05/17/23 14:58	05/22/23 15:37	1
Thallium	ND		1.0		ug/L		05/17/23 14:58	05/22/23 15:37	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		05/09/23 16:26	05/09/23 19:56	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**9400**	**B7**	100		mg/L			05/13/23 15:46	1
pH (SM 4500 H+ B)	**7.3**	**H5**	1.7		SU			05/10/23 12:44	1
Temperature (SM 4500 H+ B)	**11.0**	**H5 T5**	0.1		Degrees C			05/10/23 12:44	1

Client Sample ID: FC-CCR-MW52-0523

Lab Sample ID: 550-201909-15
Date Collected: 05/02/23 14:10
Matrix: Water
Date Received: 05/08/23 16:00

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	**11000**		100		ug/L		06/07/23 06:34	06/09/23 08:04	1

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	**110**		1.0		ug/L		05/17/23 14:58	05/22/23 15:39	1
Molybdenum	**2.1**		2.0		ug/L		05/17/23 14:58	05/22/23 15:39	1

Client Sample ID: FC-CCR-MW61-0523

Lab Sample ID: 550-201909-16
Date Collected: 05/04/23 09:54
Matrix: Water
Date Received: 05/08/23 16:00

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**380**	**D2**	20		mg/L			05/22/23 22:04	10
Fluoride	ND	D1 D5	4.0		mg/L			05/22/23 22:04	10
Sulfate	**3400**	**D2**	400		mg/L			05/22/23 22:32	200

Client Sample ID: FC-CCR-MW61-0523

Lab Sample ID: 550-201909-16

Date Collected: 05/04/23 09:54
Matrix: Water
Date Received: 05/08/23 16:00

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**0.48**		0.020		mg/L		05/17/23 14:58	05/22/23 16:55	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		1.0		ug/L		05/17/23 14:58	05/22/23 16:55	1
Boron	**45000**		100		ug/L		05/17/23 14:58	05/22/23 16:55	1
Calcium	**560000**		200		ug/L		05/17/23 14:58	05/22/23 16:55	1
Magnesium	**160000**		200		ug/L		05/17/23 14:58	05/22/23 16:55	1
Potassium	**24000**		3000		ug/L		05/17/23 14:58	05/22/23 16:55	1
Sodium	**1100000**		10000		ug/L		05/17/23 14:58	06/07/23 04:38	10

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0		ug/L		05/17/23 14:58	05/22/23 15:52	1
Arsenic	ND		5.0		ug/L		05/17/23 14:58	05/22/23 15:52	1
Barium	**18**		3.0		ug/L		05/17/23 14:58	05/22/23 15:52	1
Cadmium	**1.1**		1.0		ug/L		05/17/23 14:58	05/22/23 15:52	1
Chromium	ND		3.0		ug/L		05/17/23 14:58	05/22/23 15:52	1
Cobalt	**30**		1.0		ug/L		05/17/23 14:58	05/22/23 15:52	1
Lead	**1.2**		1.0		ug/L		05/17/23 14:58	05/22/23 15:52	1
Molybdenum	**110**		2.0		ug/L		05/17/23 14:58	05/22/23 15:52	1
Nickel	**460**		3.0		ug/L		05/17/23 14:58	05/22/23 15:52	1
Selenium	ND		5.0		ug/L		05/17/23 14:58	05/22/23 15:52	1
Thallium	ND		1.0		ug/L		05/17/23 14:58	05/22/23 15:52	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		05/09/23 16:26	05/09/23 19:58	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3 (SM 2320B)	**97**		6.0		mg/L			05/11/23 18:05	1
Alkalinity, Phenolphthalein (SM 2320B)	**12**		6.0		mg/L			05/11/23 18:05	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**74**		6.0		mg/L			05/11/23 18:05	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	**23**		6.0		mg/L			05/11/23 18:05	1
Hydroxide Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			05/11/23 18:05	1
Total Dissolved Solids (SM 2540C)	**5800**		100		mg/L			05/11/23 21:58	1
pH (SM 4500 H+ B)	**8.6**	**H5**	1.7		SU			05/10/23 12:46	1
Temperature (SM 4500 H+ B)	**9.7**	**H5 T5**	0.1		Degrees C			05/10/23 12:46	1

Client Sample ID: FC-CCR-MW75-0523

Lab Sample ID: 550-201909-17

Date Collected: 05/04/23 10:42
Matrix: Water
Date Received: 05/08/23 16:00

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**330**	**D2**	20		mg/L			05/23/23 16:35	10
Fluoride	ND	D1 D5	4.0		mg/L			05/23/23 16:35	10

Client Sample ID: FC-CCR-MW75-0523

Date Collected: 05/04/23 10:42
Date Received: 05/08/23 16:00

Lab Sample ID: 550-201909-17

Matrix: Water

Method: EPA 300.0 - Anions, Ion Chromatography (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**4500**	**D2**	400		mg/L			05/23/23 17:03	200

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**0.47**		0.020		mg/L		05/17/23 14:58	05/22/23 17:00	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		1.0		ug/L		05/17/23 14:58	05/22/23 17:00	1
Boron	**26000**		100		ug/L		05/17/23 14:58	05/22/23 17:00	1
Calcium	**490000**		200		ug/L		05/17/23 14:58	05/22/23 17:00	1
Magnesium	**250000**		200		ug/L		05/17/23 14:58	05/22/23 17:00	1
Potassium	**26000**		3000		ug/L		05/17/23 14:58	05/22/23 17:00	1
Sodium	**1400000**		10000		ug/L		05/17/23 14:58	06/07/23 04:42	10

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0		ug/L		05/17/23 14:58	05/22/23 15:54	1
Arsenic	ND		5.0		ug/L		05/17/23 14:58	05/22/23 15:54	1
Barium	**19**		3.0		ug/L		05/17/23 14:58	05/22/23 15:54	1
Cadmium	**1.7**		1.0		ug/L		05/17/23 14:58	05/22/23 15:54	1
Chromium	ND		3.0		ug/L		05/17/23 14:58	05/22/23 15:54	1
Cobalt	**56**		1.0		ug/L		05/17/23 14:58	05/22/23 15:54	1
Lead	**3.4**		1.0		ug/L		05/17/23 14:58	05/22/23 15:54	1
Molybdenum	**170**		2.0		ug/L		05/17/23 14:58	05/22/23 15:54	1
Nickel	**310**		3.0		ug/L		05/17/23 14:58	05/22/23 15:54	1
Selenium	ND		5.0		ug/L		05/17/23 14:58	05/22/23 15:54	1
Thallium	ND		1.0		ug/L		05/17/23 14:58	05/22/23 15:54	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		05/09/23 16:26	05/09/23 20:00	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3 (SM 2320B)	**100**		6.0		mg/L			05/11/23 18:17	1
Alkalinity, Phenolphthalein (SM 2320B)	ND		6.0		mg/L			05/11/23 18:17	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**100**		6.0		mg/L			05/11/23 18:17	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			05/11/23 18:17	1
Hydroxide Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			05/11/23 18:17	1
Total Dissolved Solids (SM 2540C)	**6800**		100		mg/L			05/11/23 21:58	1
pH (SM 4500 H+ B)	**8.4**	**H5**	1.7		SU			05/10/23 12:47	1
Temperature (SM 4500 H+ B)	**9.0**	**H5 T5**	0.1		Degrees C			05/10/23 12:47	1

Client Sample ID: FC-CCR-MW87-0523

Date Collected: 05/05/23 18:06
Date Received: 05/08/23 16:00

Lab Sample ID: 550-201909-18

Matrix: Water

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2800**	**D2**	400		mg/L			05/23/23 17:31	200
Fluoride	ND	D1 D5	80		mg/L			05/23/23 17:31	200
Sulfate	**33000**	**D2**	400		mg/L			05/23/23 17:31	200

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**2.6**		0.020		mg/L		05/17/23 14:58	05/22/23 17:04	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		1.0		ug/L		05/17/23 14:58	05/22/23 17:04	1
Boron	**2100**		100		ug/L		05/17/23 14:58	05/19/23 03:28	1
Calcium	**400000**		200		ug/L		05/17/23 14:58	05/22/23 17:04	1
Iron	**330**		100		ug/L		05/17/23 14:58	05/19/23 03:28	1
Magnesium	**3900000**		2000		ug/L		05/17/23 14:58	06/07/23 04:46	10
Manganese	**350**		10		ug/L		05/17/23 14:58	05/22/23 17:04	1
Potassium	**110000**		3000		ug/L		05/17/23 14:58	05/22/23 17:04	1
Sodium	**9800000**		10000		ug/L		05/17/23 14:58	06/07/23 04:46	10

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0		ug/L		05/17/23 14:58	05/22/23 15:55	1
Arsenic	ND		5.0		ug/L		05/17/23 14:58	05/22/23 15:55	1
Barium	**7.6**		3.0		ug/L		05/17/23 14:58	05/22/23 15:55	1
Cadmium	ND		1.0		ug/L		05/17/23 14:58	05/22/23 15:55	1
Chromium	ND		3.0		ug/L		05/17/23 14:58	05/22/23 15:55	1
Cobalt	**3.0**		1.0		ug/L		05/17/23 14:58	05/22/23 15:55	1
Lead	ND		1.0		ug/L		05/17/23 14:58	05/22/23 15:55	1
Molybdenum	**36**		2.0		ug/L		05/17/23 14:58	05/22/23 15:55	1
Nickel	**51**		3.0		ug/L		05/17/23 14:58	05/22/23 15:55	1
Selenium	**5.3**		5.0		ug/L		05/17/23 14:58	05/22/23 15:55	1
Thallium	ND		1.0		ug/L		05/17/23 14:58	05/22/23 15:55	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		05/09/23 16:26	05/09/23 20:02	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3 (SM 2320B)	**1200**		6.0		mg/L			05/16/23 18:32	1
Alkalinity, Phenolphthalein (SM 2320B)	ND		6.0		mg/L			05/16/23 18:32	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**1200**		6.0		mg/L			05/16/23 18:32	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			05/16/23 18:32	1
Hydroxide Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			05/16/23 18:32	1
Total Dissolved Solids (SM 2540C)	**54000**	**E2 N1**	40		mg/L			05/12/23 19:33	1
pH (SM 4500 H+ B)	**7.5**	**H5**	1.7		SU			05/10/23 12:49	1
Temperature (SM 4500 H+ B)	**10.1**	**H5 T5**	0.1		Degrees C			05/10/23 12:49	1

Client Sample ID: FC-CCR-FD03-0523

Lab Sample ID: 550-201909-19
Date Collected: 05/02/23 16:20
Matrix: Water
Date Received: 05/08/23 16:00

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	**9300**		100		ug/L		05/17/23 14:58	05/22/23 17:08	1

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	**96**		1.0		ug/L		05/17/23 14:58	05/22/23 15:57	1
Molybdenum	**2.7**		2.0		ug/L		05/17/23 14:58	05/22/23 15:57	1

Client Sample ID: FC-CCR-DMX01-0523

Lab Sample ID: 550-201909-20
Date Collected: 05/03/23 14:08
Matrix: Water
Date Received: 05/08/23 16:00

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	**77000**		500		ug/L		06/07/23 06:34	06/10/23 02:42	5

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	**2.0**	**M2**	1.0		ug/L		05/17/23 14:58	05/22/23 15:59	1
Molybdenum	**11**		2.0		ug/L		05/17/23 14:58	05/22/23 15:59	1

Client Sample ID: FC-CCR-DMX03-0523

Lab Sample ID: 550-201909-21
Date Collected: 05/03/23 16:47
Matrix: Water
Date Received: 05/08/23 16:00

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1200**	**D2**	400		mg/L			05/23/23 17:53	200
Fluoride	ND	D1 D5	80		mg/L			05/23/23 17:53	200
Sulfate	**13000**	**D2**	400		mg/L			05/23/23 17:53	200

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**1.3**		0.020		mg/L		05/15/23 10:30	05/22/23 17:20	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		1.0		ug/L		05/15/23 10:30	05/22/23 17:20	1
Boron	**960**		100		ug/L		05/15/23 10:30	05/22/23 17:20	1
Calcium	**440000**		200		ug/L		05/15/23 10:30	05/22/23 17:20	1
Iron	**160**		100		ug/L		05/15/23 10:30	06/08/23 17:35	1
Magnesium	**2300000**	**M3**	2000		ug/L		05/15/23 10:30	06/07/23 05:30	10
Manganese	**440**		10		ug/L		05/15/23 10:30	05/22/23 17:20	1
Potassium	**67000**		3000		ug/L		05/15/23 10:30	05/22/23 17:20	1
Sodium	**2900000**	**M3**	10000		ug/L		05/15/23 10:30	06/07/23 14:44	10

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0		ug/L		05/15/23 10:30	05/19/23 00:14	1
Arsenic	ND		5.0		ug/L		05/15/23 10:30	05/19/23 00:14	1
Barium	**16**		3.0		ug/L		05/15/23 10:30	05/19/23 00:14	1
Cadmium	ND		1.0		ug/L		05/15/23 10:30	05/19/23 00:14	1
Chromium	ND		3.0		ug/L		05/15/23 10:30	05/19/23 00:14	1

Client Sample ID: FC-CCR-DMX03-0523

Lab Sample ID: 550-201909-21

Date Collected: 05/03/23 16:47
Matrix: Water
Date Received: 05/08/23 16:00

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	**1.3**		1.0		ug/L		05/15/23 10:30	05/19/23 00:14	1
Lead	ND		1.0		ug/L		05/15/23 10:30	05/19/23 00:14	1
Molybdenum	ND		2.0		ug/L		05/15/23 10:30	05/19/23 00:14	1
Nickel	**26**		3.0		ug/L		05/15/23 10:30	05/19/23 00:14	1
Selenium	ND		5.0		ug/L		05/15/23 10:30	05/19/23 00:14	1
Thallium	ND		1.0		ug/L		05/15/23 10:30	05/19/23 00:14	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3 (SM 2320B)	**870**		6.0		mg/L			05/11/23 18:23	1
Alkalinity, Phenolphthalein (SM 2320B)	ND		6.0		mg/L			05/11/23 18:23	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**870**		6.0		mg/L			05/11/23 18:23	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			05/11/23 18:23	1
Hydroxide Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			05/11/23 18:23	1
Total Dissolved Solids (SM 2540C)	**21000**		200		mg/L			05/10/23 23:16	1
pH (SM 4500 H+ B)	**7.2**	**H5**	1.7		SU			05/10/23 12:50	1
Temperature (SM 4500 H+ B)	**9.7**	**H5 T5**	0.1		Degrees C			05/10/23 12:50	1

Client Sample ID: FC-CCR-DMX04-0523

Lab Sample ID: 550-201909-22

Date Collected: 05/04/23 15:25
Matrix: Water
Date Received: 05/08/23 16:00

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**450**	**D2**	100		mg/L			05/23/23 18:30	50
Fluoride	ND	D1 D5	20		mg/L			05/23/23 18:30	50
Sulfate	**6800**	**D2**	400		mg/L			05/23/23 18:48	200

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**0.69**		0.020		mg/L		05/15/23 10:30	05/22/23 17:32	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		1.0		ug/L		05/15/23 10:30	05/22/23 17:32	1
Boron	**1400**		100		ug/L		05/15/23 10:30	05/22/23 17:32	1
Calcium	**430000**		200		ug/L		05/15/23 10:30	05/22/23 17:32	1
Iron	ND		1000		ug/L		05/15/23 10:30	05/24/23 21:53	10
Magnesium	**700000**		200		ug/L		05/15/23 10:30	05/22/23 17:32	1
Manganese	**970**		10		ug/L		05/15/23 10:30	05/22/23 17:32	1
Potassium	**39000**		3000		ug/L		05/15/23 10:30	05/22/23 17:32	1
Sodium	**1700000**	**B1**	10000		ug/L		05/15/23 10:30	05/24/23 21:53	10

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0		ug/L		05/15/23 10:30	05/19/23 00:16	1
Arsenic	ND		5.0		ug/L		05/15/23 10:30	05/19/23 00:16	1
Barium	**8.8**		3.0		ug/L		05/15/23 10:30	05/19/23 00:16	1
Cadmium	ND		1.0		ug/L		05/15/23 10:30	05/19/23 00:16	1

Client Sample ID: FC-CCR-DMX04-0523

Lab Sample ID: 550-201909-22

Date Collected: 05/04/23 15:25
Matrix: Water
Date Received: 05/08/23 16:00

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		3.0		ug/L		05/15/23 10:30	05/19/23 00:16	1
Cobalt	**2.3**		1.0		ug/L		05/15/23 10:30	05/19/23 00:16	1
Lead	ND		1.0		ug/L		05/15/23 10:30	05/19/23 00:16	1
Molybdenum	**9.0**		2.0		ug/L		05/15/23 10:30	05/19/23 00:16	1
Nickel	**28**		3.0		ug/L		05/15/23 10:30	05/19/23 00:16	1
Selenium	ND		5.0		ug/L		05/15/23 10:30	05/19/23 00:16	1
Thallium	ND		1.0		ug/L		05/15/23 10:30	05/19/23 00:16	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3 (SM 2320B)	**370**		6.0		mg/L			05/11/23 18:39	1
Alkalinity, Phenolphthalein (SM 2320B)	ND		6.0		mg/L			05/11/23 18:39	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**370**		6.0		mg/L			05/11/23 18:39	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			05/11/23 18:39	1
Hydroxide Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			05/11/23 18:39	1
Total Dissolved Solids (SM 2540C)	**11000**		100		mg/L			05/11/23 21:58	1
pH (SM 4500 H+ B)	**7.6**	**H5**	1.7		SU			05/10/23 12:51	1
Temperature (SM 4500 H+ B)	**8.5**	**H5 T5**	0.1		Degrees C			05/10/23 12:51	1

Client Sample ID: FC-CCR-MW01-0523

Lab Sample ID: 550-201909-23

Date Collected: 05/02/23 15:42
Matrix: Water
Date Received: 05/08/23 16:00

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	**60000**		1000		ug/L		05/15/23 10:30	05/24/23 22:05	10

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	**47**		1.0		ug/L		05/15/23 10:30	05/19/23 00:21	1
Molybdenum	**23**		2.0		ug/L		05/15/23 10:30	05/19/23 00:21	1

Client Sample ID: FC-CCR-MW03-0523

Lab Sample ID: 550-201909-24

Date Collected: 05/02/23 16:25
Matrix: Water
Date Received: 05/08/23 16:00

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	**9900**		100		ug/L		05/15/23 10:30	05/22/23 18:00	1

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	ND		1.0		ug/L		05/15/23 10:30	05/19/23 00:23	1
Molybdenum	ND		2.0		ug/L		05/15/23 10:30	05/19/23 00:23	1

Client Sample ID: FC-CCR-MW05-0523

Lab Sample ID: 550-201909-25

Date Collected: 05/03/23 17:38
Matrix: Water
Date Received: 05/08/23 16:00

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**4200**	**D2**	400		mg/L			05/23/23 15:07	200
Fluoride	ND	D1 D5	80		mg/L			05/23/23 15:07	200
Sulfate	**14000**	**D2**	400		mg/L			05/23/23 15:07	200

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**2.3**		0.020		mg/L		05/15/23 10:30	05/22/23 18:05	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		1.0		ug/L		05/15/23 10:30	05/22/23 18:05	1
Boron	**1300**		100		ug/L		05/15/23 10:30	05/22/23 18:05	1
Calcium	**460000**		200		ug/L		05/15/23 10:30	05/22/23 18:05	1
Iron	ND		100		ug/L		05/15/23 10:30	06/08/23 17:39	1
Magnesium	**1500000**		2000		ug/L		05/15/23 10:30	06/07/23 06:07	10
Manganese	**830**		10		ug/L		05/15/23 10:30	05/22/23 18:05	1
Potassium	**78000**		3000		ug/L		05/15/23 10:30	05/22/23 18:05	1
Sodium	**8000000**		50000		ug/L		05/15/23 10:30	06/08/23 17:43	50

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	**3.5**		1.0		ug/L		05/15/23 10:30	05/19/23 00:25	1
Molybdenum	ND		2.0		ug/L		05/15/23 10:30	05/19/23 00:25	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3 (SM 2320B)	**830**		6.0		mg/L			05/11/23 18:48	1
Alkalinity, Phenolphthalein (SM 2320B)	ND		6.0		mg/L			05/11/23 18:48	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**830**		6.0		mg/L			05/11/23 18:48	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			05/11/23 18:48	1
Hydroxide Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			05/11/23 18:48	1
Total Dissolved Solids (SM 2540C)	**28000**		200		mg/L			05/10/23 23:16	1
pH (SM 4500 H+ B)	**7.1**	**H5**	1.7		SU			05/10/23 12:52	1
Temperature (SM 4500 H+ B)	**9.2**	**H5 T5**	0.1		Degrees C			05/10/23 12:52	1

Client Sample ID: FC-CCR-MW06-0523

Lab Sample ID: 550-201909-26

Date Collected: 05/04/23 16:13
Matrix: Water
Date Received: 05/08/23 16:00

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2700**	**D2**	400		mg/L			05/23/23 16:39	200
Fluoride	ND	D1 D5	80		mg/L			05/23/23 16:39	200
Sulfate	**20000**	**D2**	2000		mg/L			05/23/23 16:58	1000

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**2.5**		0.020		mg/L		05/15/23 10:30	05/22/23 18:09	1

Client Sample ID: FC-CCR-MW06-0523

Lab Sample ID: 550-201909-26

Date Collected: 05/04/23 16:13
Matrix: Water
Date Received: 05/08/23 16:00

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		1.0		ug/L		05/15/23 10:30	06/07/23 06:11	1
Boron	**6200**		100		ug/L		05/15/23 10:30	05/22/23 18:09	1
Calcium	**420000**		2000		ug/L		05/15/23 10:30	06/07/23 15:18	10
Iron	**2900**		100		ug/L		05/15/23 10:30	06/07/23 06:11	1
Magnesium	**1900000**		2000		ug/L		05/15/23 10:30	06/07/23 06:15	10
Manganese	**500**		10		ug/L		05/15/23 10:30	05/22/23 18:09	1
Potassium	**81000**		3000		ug/L		05/15/23 10:30	05/22/23 18:09	1
Sodium	**6800000**		10000		ug/L		05/15/23 10:30	06/07/23 06:15	10

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0		ug/L		05/15/23 10:30	05/19/23 00:27	1
Arsenic	ND		5.0		ug/L		05/15/23 10:30	05/19/23 00:27	1
Barium	**17**		3.0		ug/L		05/15/23 10:30	05/19/23 00:27	1
Cadmium	ND		1.0		ug/L		05/15/23 10:30	05/19/23 00:27	1
Chromium	ND		3.0		ug/L		05/15/23 10:30	05/19/23 00:27	1
Cobalt	**3.6**		1.0		ug/L		05/15/23 10:30	05/19/23 00:27	1
Lead	ND		1.0		ug/L		05/15/23 10:30	05/19/23 00:27	1
Molybdenum	**4.6**		2.0		ug/L		05/15/23 10:30	05/19/23 00:27	1
Nickel	**45**		3.0		ug/L		05/15/23 10:30	05/19/23 00:27	1
Selenium	ND		5.0		ug/L		05/15/23 10:30	05/19/23 00:27	1
Thallium	ND		1.0		ug/L		05/15/23 10:30	05/19/23 00:27	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3 (SM 2320B)	**610**		6.0		mg/L			05/11/23 19:03	1
Alkalinity, Phenolphthalein (SM 2320B)	ND		6.0		mg/L			05/11/23 19:03	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**610**		6.0		mg/L			05/11/23 19:03	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			05/11/23 19:03	1
Hydroxide Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			05/11/23 19:03	1
Total Dissolved Solids (SM 2540C)	**31000**		200		mg/L			05/11/23 21:58	1
pH (SM 4500 H+ B)	**7.3**	**H5**	1.7		SU			05/10/23 12:54	1
Temperature (SM 4500 H+ B)	**10.2**	**H5 T5**	0.1		Degrees C			05/10/23 12:54	1

Client Sample ID: FC-CCR-MW11-0523

Lab Sample ID: 550-201909-27

Date Collected: 05/05/23 16:31
Matrix: Water
Date Received: 05/08/23 16:00

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3000**	**D2**	400		mg/L			05/23/23 17:16	200
Fluoride	ND	D1 D5	80		mg/L			05/23/23 17:16	200
Sulfate	**60000**	**D2**	2000		mg/L			05/23/23 17:35	1000

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		1.0		ug/L		05/15/23 10:30	05/22/23 18:13	1
Boron	ND		2500		ug/L		05/15/23 10:30	05/24/23 22:14	25

Client Sample ID: FC-CCR-MW11-0523

Lab Sample ID: 550-201909-27
Date Collected: 05/05/23 16:31
Matrix: Water
Date Received: 05/08/23 16:00

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**400000**		200		ug/L		05/15/23 10:30	05/22/23 18:13	1
Magnesium	**11000000**		5000		ug/L		05/15/23 10:30	05/24/23 22:14	25
Potassium	**190000**		3000		ug/L		05/15/23 10:30	05/22/23 18:13	1
Sodium	**15000000**		25000		ug/L		05/15/23 10:30	05/24/23 22:14	25

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	**22**		1.0		ug/L			05/19/23 00:36	1
Molybdenum	ND		2.0		ug/L			05/19/23 00:36	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3 (SM 2320B)	**870**		6.0		mg/L			05/16/23 19:03	1
Alkalinity, Phenolphthalein (SM 2320B)	ND		6.0		mg/L			05/16/23 19:03	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**870**		6.0		mg/L			05/16/23 19:03	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			05/16/23 19:03	1
Hydroxide Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			05/16/23 19:03	1
Total Dissolved Solids (SM 2540C)	**100000**		1000		mg/L			05/12/23 19:33	1
pH (SM 4500 H+ B)	**6.8**	**H5**	1.7		SU			05/10/23 12:55	1
Temperature (SM 4500 H+ B)	**10.1**	**H5 T5**	0.1		Degrees C			05/10/23 12:55	1

Client Sample ID: FC-CCR-FD04-0523

Lab Sample ID: 550-201909-28
Date Collected: 05/03/23 12:34
Matrix: Water
Date Received: 05/08/23 16:00

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	**87000**		1000		ug/L		05/15/23 10:30	05/24/23 22:18	10

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	**1.7**		1.0		ug/L		05/15/23 10:30	05/19/23 00:38	1
Molybdenum	**11**		2.0		ug/L		05/15/23 10:30	05/19/23 00:38	1

Client Sample ID: FC-CCR-MW17R-0523

Lab Sample ID: 550-201909-29
Date Collected: 05/04/23 14:34
Matrix: Water
Date Received: 05/08/23 16:00

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**420**	**D2**	40		mg/L			05/23/23 20:02	20
Fluoride	ND	D1 D5	8.0		mg/L			05/23/23 20:02	20
Sulfate	**4000**	**D2**	400		mg/L			05/23/23 20:20	200

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**0.46**		0.020		mg/L		05/15/23 10:30	05/22/23 18:21	1

Client Sample ID: FC-CCR-MW17R-0523

Lab Sample ID: 550-201909-29

Date Collected: 05/04/23 14:34
Matrix: Water
Date Received: 05/08/23 16:00

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		1.0		ug/L		05/15/23 10:30	05/22/23 18:21	1
Boron	**38000**		100		ug/L		05/15/23 10:30	05/22/23 18:21	1
Calcium	**480000**		200		ug/L		05/15/23 10:30	05/22/23 18:21	1
Iron	ND		100		ug/L		05/15/23 10:30	06/08/23 17:47	1
Magnesium	**300000**		200		ug/L		05/15/23 10:30	05/22/23 18:21	1
Manganese	**930**		10		ug/L		05/15/23 10:30	05/22/23 18:21	1
Potassium	**22000**		3000		ug/L		05/15/23 10:30	05/22/23 18:21	1
Sodium	**970000**		10000		ug/L		05/15/23 10:30	06/07/23 16:16	10

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0		ug/L		05/15/23 10:30	05/19/23 00:39	1
Arsenic	ND		5.0		ug/L		05/15/23 10:30	05/19/23 00:39	1
Barium	**17**		3.0		ug/L		05/15/23 10:30	05/19/23 00:39	1
Cadmium	**1.2**		1.0		ug/L		05/15/23 10:30	05/19/23 00:39	1
Chromium	ND		3.0		ug/L		05/15/23 10:30	05/19/23 00:39	1
Cobalt	**59**		1.0		ug/L		05/15/23 10:30	05/19/23 00:39	1
Lead	**2.3**		1.0		ug/L		05/15/23 10:30	05/19/23 00:39	1
Molybdenum	ND		2.0		ug/L		05/15/23 10:30	05/19/23 00:39	1
Nickel	**520**		3.0		ug/L		05/15/23 10:30	05/19/23 00:39	1
Selenium	ND		5.0		ug/L		05/15/23 10:30	05/19/23 00:39	1
Thallium	ND		1.0		ug/L		05/15/23 10:30	05/19/23 00:39	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3 (SM 2320B)	**140**		6.0		mg/L			05/11/23 19:15	1
Alkalinity, Phenolphthalein (SM 2320B)	ND		6.0		mg/L			05/11/23 19:15	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**140**		6.0		mg/L			05/11/23 19:15	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			05/11/23 19:15	1
Hydroxide Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			05/11/23 19:15	1
Total Dissolved Solids (SM 2540C)	**6200**		100		mg/L			05/11/23 21:58	1
pH (SM 4500 H+ B)	**7.4**	**H5**	1.7		SU			05/10/23 12:56	1
Temperature (SM 4500 H+ B)	**9.4**	**H5 T5**	0.1		Degrees C			05/10/23 12:56	1

Client Sample ID: FC-CCR-MW18-0523

Lab Sample ID: 550-201909-30

Date Collected: 05/04/23 11:50
Matrix: Water
Date Received: 05/08/23 16:00

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5100**	**D2**	400		mg/L			05/23/23 20:39	200
Fluoride	ND	D1 D5	80		mg/L			05/23/23 20:39	200
Sulfate	**16000**	**D2**	400		mg/L			05/23/23 20:39	200

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**2.5**		0.020		mg/L		05/15/23 10:30	05/22/23 18:25	1

Client Sample ID: FC-CCR-MW18-0523

Lab Sample ID: 550-201909-30
Date Collected: 05/04/23 11:50
Matrix: Water
Date Received: 05/08/23 16:00

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		1.0		ug/L		05/15/23 10:30	05/22/23 18:25	1
Boron	**1500**		100		ug/L		05/15/23 10:30	05/22/23 18:25	1
Calcium	**440000**		200		ug/L		05/15/23 10:30	05/22/23 18:25	1
Iron	**140**		100		ug/L		05/15/23 10:30	06/07/23 16:20	1
Magnesium	**890000**		200		ug/L		05/15/23 10:30	05/22/23 18:25	1
Manganese	**2500**		10		ug/L		05/15/23 10:30	05/22/23 18:25	1
Potassium	**81000**		3000		ug/L		05/15/23 10:30	05/22/23 18:25	1
Sodium	**6800000**		10000		ug/L		05/15/23 10:30	06/07/23 16:24	10

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	**9.4**		1.0		ug/L		05/15/23 10:30	05/19/23 00:41	1
Molybdenum	**2.3**		2.0		ug/L		05/15/23 10:30	05/19/23 00:41	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3 (SM 2320B)	**950**		6.0		mg/L			05/11/23 19:21	1
Alkalinity, Phenolphthalein (SM 2320B)	ND		6.0		mg/L			05/11/23 19:21	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**950**		6.0		mg/L			05/11/23 19:21	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			05/11/23 19:21	1
Hydroxide Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			05/11/23 19:21	1
Total Dissolved Solids (SM 2540C)	**29000**		200		mg/L			05/10/23 23:16	1
pH (SM 4500 H+ B)	**7.1**	**H5**	1.7		SU			05/10/23 12:59	1
Temperature (SM 4500 H+ B)	**9.3**	**H5 T5**	0.1		Degrees C			05/10/23 12:59	1

Client Sample ID: FC-CCR-MW19-0523

Lab Sample ID: 550-201909-31
Date Collected: 05/03/23 15:07
Matrix: Water
Date Received: 05/08/23 16:00

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	**2300**		100		ug/L		05/15/23 10:30	05/22/23 18:41	1

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	**1.4**		1.0		ug/L		05/15/23 10:30	05/19/23 00:43	1
Molybdenum	**3.3**		2.0		ug/L		05/15/23 10:30	05/19/23 00:43	1

Client Sample ID: FC-CCR-MW21-0523

Lab Sample ID: 550-201909-32
Date Collected: 05/02/23 17:06
Matrix: Water
Date Received: 05/08/23 16:00

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	**5200**		1000		ug/L		05/15/23 10:30	05/24/23 22:22	10

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	**4.5**		1.0		ug/L		05/15/23 10:30	05/19/23 00:45	1

Client Sample ID: FC-CCR-MW21-0523

Lab Sample ID: 550-201909-32
Date Collected: 05/02/23 17:06
Matrix: Water
Date Received: 05/08/23 16:00

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Molybdenum	**2.2**		2.0		ug/L		05/15/23 10:30	05/19/23 00:45	1

Client Sample ID: FC-CCR-MW23R-0523

Lab Sample ID: 550-201909-33
Date Collected: 05/03/23 16:02
Matrix: Water
Date Received: 05/08/23 16:00

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**750**	**D2**	400		mg/L			05/23/23 21:15	200
Fluoride	ND	D1 D5	80		mg/L			05/23/23 21:15	200
Sulfate	**8800**	**D2**	400		mg/L			05/23/23 21:15	200

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**1.2**		0.020		mg/L		05/15/23 10:30	05/22/23 18:49	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		1.0		ug/L		05/15/23 10:30	05/22/23 18:49	1
Boron	**16000**		100		ug/L		05/15/23 10:30	05/22/23 18:49	1
Calcium	**520000**		200		ug/L		05/15/23 10:30	05/22/23 18:49	1
Iron	ND		100		ug/L		05/15/23 10:30	06/07/23 16:28	1
Magnesium	**1300000**		2000		ug/L		05/15/23 10:30	06/07/23 06:39	10
Manganese	**55**		10		ug/L		05/15/23 10:30	05/22/23 18:49	1
Potassium	**46000**		3000		ug/L		05/15/23 10:30	05/22/23 18:49	1
Sodium	**1900000**		10000		ug/L		05/15/23 10:30	06/07/23 06:39	10

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	ND		1.0		ug/L		05/15/23 10:30	05/19/23 00:50	1
Molybdenum	**3.5**		2.0		ug/L		05/15/23 10:30	05/19/23 00:50	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3 (SM 2320B)	**470**		6.0		mg/L			05/11/23 19:37	1
Alkalinity, Phenolphthalein (SM 2320B)	ND		6.0		mg/L			05/11/23 19:37	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**470**		6.0		mg/L			05/11/23 19:37	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			05/11/23 19:37	1
Hydroxide Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			05/11/23 19:37	1
Total Dissolved Solids (SM 2540C)	**14000**		100		mg/L			05/10/23 22:57	1
pH (SM 4500 H+ B)	**7.2**	**H5**	1.7		SU			05/10/23 13:01	1
Temperature (SM 4500 H+ B)	**9.7**	**H5 T5**	0.1		Degrees C			05/10/23 13:01	1

Client Sample ID: FC-CCR-MW24-0523

Lab Sample ID: 550-201909-34
Date Collected: 05/04/23 18:12
Matrix: Water
Date Received: 05/08/23 16:00

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**4800**	**D2**	400		mg/L			05/23/23 22:10	200
Fluoride	ND	D1 D5	4.0		mg/L			05/23/23 21:42	10
Sulfate	**11000**	**D2**	400		mg/L			05/23/23 22:10	200

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**1.5**		0.020		mg/L		05/15/23 10:30	05/22/23 18:53	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		1.0		ug/L		05/15/23 10:30	05/22/23 18:53	1
Boron	**1100**		100		ug/L		05/15/23 10:30	05/22/23 18:53	1
Calcium	**460000**		200		ug/L		05/15/23 10:30	05/22/23 18:53	1
Iron	**570**		100		ug/L		05/15/23 10:30	06/07/23 06:59	1
Magnesium	**180000**		200		ug/L		05/15/23 10:30	05/22/23 18:53	1
Manganese	**1900**		10		ug/L		05/15/23 10:30	05/22/23 18:53	1
Potassium	**46000**		3000		ug/L		05/15/23 10:30	05/22/23 18:53	1
Sodium	**6600000**		10000		ug/L		05/15/23 10:30	06/07/23 07:03	10

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	**2.7**		1.0		ug/L		05/15/23 10:30	05/19/23 00:52	1
Molybdenum	**30**		2.0		ug/L		05/15/23 10:30	05/19/23 00:52	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3 (SM 2320B)	**290**		6.0		mg/L			05/11/23 19:48	1
Alkalinity, Phenolphthalein (SM 2320B)	ND		6.0		mg/L			05/11/23 19:48	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**290**		6.0		mg/L			05/11/23 19:48	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			05/11/23 19:48	1
Hydroxide Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			05/11/23 19:48	1
Total Dissolved Solids (SM 2540C)	**24000**		200		mg/L			05/10/23 23:16	1
pH (SM 4500 H+ B)	**7.4**	**H5**	1.7		SU			05/10/23 13:02	1
Temperature (SM 4500 H+ B)	**9.7**	**H5 T5**	0.1		Degrees C			05/10/23 13:02	1

Client Sample ID: FC-CCR-MW30-0523

Lab Sample ID: 550-201909-35
Date Collected: 05/03/23 09:50
Matrix: Water
Date Received: 05/08/23 16:00

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	**26000**		100		ug/L		06/07/23 06:34	06/09/23 08:13	1

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	**1.3**		1.0		ug/L		05/15/23 10:30	05/19/23 00:03	1
Molybdenum	**4.8**		2.0		ug/L		05/15/23 10:30	05/19/23 00:03	1

Client Sample ID: FC-CCR-MW36R-0523

Lab Sample ID: 550-201909-36
Matrix: Water
Date Collected: 05/04/23 12:44
Date Received: 05/08/23 16:00

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**510**	**D2**	40		mg/L			05/24/23 00:02	20
Fluoride	ND	D5	8.0		mg/L			05/24/23 00:02	20
Sulfate	**3900**	**D2**	40		mg/L			05/24/23 00:02	20

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**0.69**		0.020		mg/L		05/15/23 10:30	05/22/23 18:57	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		1.0		ug/L		05/15/23 10:30	05/22/23 18:57	1
Boron	**58000**		1000		ug/L		05/15/23 10:30	06/07/23 07:12	10
Calcium	**530000**		200		ug/L		05/15/23 10:30	05/22/23 18:57	1
Iron	ND		100		ug/L		05/15/23 10:30	06/07/23 07:07	1
Magnesium	**440000**		200		ug/L		05/15/23 10:30	05/22/23 18:57	1
Manganese	**180**		10		ug/L		05/15/23 10:30	05/22/23 18:57	1
Potassium	**29000**		3000		ug/L		05/15/23 10:30	05/22/23 18:57	1
Sodium	**1100000**		10000		ug/L		05/15/23 10:30	06/07/23 07:12	10

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	**210**		1.0		ug/L		05/15/23 10:30	05/19/23 00:54	1
Molybdenum	ND		2.0		ug/L		05/15/23 10:30	05/19/23 00:54	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3 (SM 2320B)	**220**		6.0		mg/L			05/11/23 20:08	1
Alkalinity, Phenolphthalein (SM 2320B)	ND		6.0		mg/L			05/11/23 20:08	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**220**		6.0		mg/L			05/11/23 20:08	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			05/11/23 20:08	1
Hydroxide Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			05/11/23 20:08	1
Total Dissolved Solids (SM 2540C)	**6800**		100		mg/L			05/10/23 23:16	1
pH (SM 4500 H+ B)	**7.4**	**H5**	1.7		SU			05/10/23 13:03	1
Temperature (SM 4500 H+ B)	**9.9**	**H5 T5**	0.1		Degrees C			05/10/23 13:03	1

Client Sample ID: FC-CCR-MW38R-0523

Lab Sample ID: 550-201909-37
Matrix: Water
Date Collected: 05/05/23 11:20
Date Received: 05/08/23 16:00

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**350**	**D2**	40		mg/L			05/24/23 00:58	20
Fluoride	ND	D1 D5	8.0		mg/L			05/24/23 00:58	20
Sulfate	**5400**	**D2**	400		mg/L			05/24/23 01:26	200

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**0.60**		0.020		mg/L		05/15/23 10:30	05/22/23 19:02	1

Client Sample ID: FC-CCR-MW38R-0523

Lab Sample ID: 550-201909-37

Date Collected: 05/05/23 11:20
Matrix: Water
Date Received: 05/08/23 16:00

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		1.0		ug/L		05/15/23 10:30	05/22/23 19:02	1
Boron	**27000**		100		ug/L		05/15/23 10:30	05/22/23 19:02	1
Calcium	**480000**		200		ug/L		05/15/23 10:30	05/22/23 19:02	1
Iron	**260**		100		ug/L		05/15/23 10:30	06/07/23 07:16	1
Magnesium	**530000**		200		ug/L		05/15/23 10:30	05/22/23 19:02	1
Manganese	ND		10		ug/L		05/15/23 10:30	05/22/23 19:02	1
Potassium	**28000**		3000		ug/L		05/15/23 10:30	05/22/23 19:02	1
Sodium	**1500000**		10000		ug/L		05/15/23 10:30	06/07/23 07:20	10

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0		ug/L		05/15/23 10:30	05/19/23 00:56	1
Arsenic	ND		5.0		ug/L		05/15/23 10:30	05/19/23 00:56	1
Barium	**14**		3.0		ug/L		05/15/23 10:30	05/19/23 00:56	1
Cadmium	ND		1.0		ug/L		05/15/23 10:30	05/19/23 00:56	1
Chromium	ND		3.0		ug/L		05/15/23 10:30	05/19/23 00:56	1
Cobalt	**170**		1.0		ug/L		05/15/23 10:30	05/19/23 00:56	1
Lead	ND		1.0		ug/L		05/15/23 10:30	05/19/23 00:56	1
Molybdenum	**3.7**		2.0		ug/L		05/15/23 10:30	05/19/23 00:56	1
Nickel	**320**		3.0		ug/L		05/15/23 10:30	05/19/23 00:56	1
Selenium	**9.6**		5.0		ug/L		05/15/23 10:30	05/19/23 00:56	1
Thallium	ND		1.0		ug/L		05/15/23 10:30	05/19/23 00:56	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3 (SM 2320B)	**180**		6.0		mg/L			05/16/23 19:31	1
Alkalinity, Phenolphthalein (SM 2320B)	ND		6.0		mg/L			05/16/23 19:31	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**180**		6.0		mg/L			05/16/23 19:31	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			05/16/23 19:31	1
Hydroxide Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			05/16/23 19:31	1
Total Dissolved Solids (SM 2540C)	**8900**		100		mg/L			05/12/23 19:33	1
pH (SM 4500 H+ B)	**7.4**	**H5**	1.7		SU			05/10/23 13:04	1
Temperature (SM 4500 H+ B)	**10.8**	**H5 T5**	0.1		Degrees C			05/10/23 13:04	1

Client Sample ID: FC-CCR-MW56-0523

Lab Sample ID: 550-201909-38

Date Collected: 05/04/23 13:33
Matrix: Water
Date Received: 05/08/23 16:00

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2300**	**D2**	400		mg/L			05/24/23 14:07	200
Fluoride	ND	D1 D5	80		mg/L			05/24/23 14:07	200
Sulfate	**19000**	**D2**	400		mg/L			05/24/23 14:07	200

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**2.0**		0.020		mg/L		05/15/23 10:30	05/22/23 19:06	1

Client Sample ID: FC-CCR-MW56-0523

Lab Sample ID: 550-201909-38
Date Collected: 05/04/23 13:33
Matrix: Water
Date Received: 05/08/23 16:00

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		1.0		ug/L		05/15/23 10:30	05/22/23 19:06	1
Boron	**1700**		100		ug/L		05/15/23 10:30	05/22/23 19:06	1
Calcium	**440000**		200		ug/L		05/15/23 10:30	05/22/23 19:06	1
Iron	ND		100		ug/L		05/15/23 10:30	06/07/23 07:24	1
Magnesium	**3200000**		2000		ug/L		05/15/23 10:30	06/07/23 07:28	10
Manganese	ND		10		ug/L		05/15/23 10:30	05/22/23 19:06	1
Potassium	**87000**		3000		ug/L		05/15/23 10:30	05/22/23 19:06	1
Sodium	**4900000**		10000		ug/L		05/15/23 10:30	06/07/23 07:28	10

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0		ug/L		05/15/23 10:30	05/19/23 00:58	1
Arsenic	ND		5.0		ug/L		05/15/23 10:30	05/19/23 00:58	1
Barium	**16**		3.0		ug/L		05/15/23 10:30	05/19/23 00:58	1
Cadmium	ND		1.0		ug/L		05/15/23 10:30	05/19/23 00:58	1
Chromium	ND		3.0		ug/L		05/15/23 10:30	05/19/23 00:58	1
Cobalt	ND		1.0		ug/L		05/15/23 10:30	05/19/23 00:58	1
Lead	ND		1.0		ug/L		05/15/23 10:30	05/19/23 00:58	1
Molybdenum	**4.8**		2.0		ug/L		05/15/23 10:30	05/19/23 00:58	1
Nickel	**36**		3.0		ug/L		05/15/23 10:30	05/19/23 00:58	1
Selenium	**220**		5.0		ug/L		05/15/23 10:30	05/19/23 00:58	1
Thallium	**1.1**		1.0		ug/L		05/15/23 10:30	05/19/23 00:58	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3 (SM 2320B)	**880**		6.0		mg/L			05/11/23 20:23	1
Alkalinity, Phenolphthalein (SM 2320B)	ND		6.0		mg/L			05/11/23 20:23	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**880**		6.0		mg/L			05/11/23 20:23	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			05/11/23 20:23	1
Hydroxide Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			05/11/23 20:23	1
Total Dissolved Solids (SM 2540C)	**30000**		200		mg/L			05/10/23 23:16	1
pH (SM 4500 H+ B)	**7.3**	**H5**	1.7		SU			05/10/23 13:05	1
Temperature (SM 4500 H+ B)	**11.0**	**H5 T5**	0.1		Degrees C			05/10/23 13:05	1

Client Sample ID: FC-CCR-FD06-0523

Lab Sample ID: 550-201909-39
Date Collected: 05/03/23 16:20
Matrix: Water
Date Received: 05/08/23 16:00

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	**24000**		100		ug/L		05/15/23 10:30	05/22/23 19:10	1

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	**1.2**		1.0		ug/L		05/15/23 10:30	05/19/23 00:59	1
Molybdenum	**4.8**		2.0		ug/L		05/15/23 10:30	05/19/23 00:59	1

Client Sample Results

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-201909-1
SDG: APS Four Corners Power Plant

Client Sample ID: FC-CCR-MW57-0523

Date Collected: 05/05/23 12:42
Date Received: 05/08/23 16:00

Lab Sample ID: 550-201909-40

Matrix: Water

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**590**	**D2**	200		mg/L			05/24/23 14:44	100
Fluoride	ND	D1 D5	40		mg/L			05/24/23 14:44	100
Sulfate	**9100**	**D2**	200		mg/L			05/24/23 14:44	100

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**1.1**		0.020		mg/L		05/15/23 10:30	05/22/23 19:14	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		1.0		ug/L		05/15/23 10:30	05/22/23 19:14	1
Boron	**1500**		100		ug/L		05/15/23 10:30	05/22/23 19:14	1
Calcium	**480000**		200		ug/L		05/15/23 10:30	05/22/23 19:14	1
Iron	**180**		100		ug/L		05/15/23 10:30	06/07/23 07:32	1
Magnesium	**940000**		200		ug/L		05/15/23 10:30	05/22/23 19:14	1
Manganese	**170**		10		ug/L		05/15/23 10:30	05/22/23 19:14	1
Potassium	**54000**		3000		ug/L		05/15/23 10:30	05/22/23 19:14	1
Sodium	**2300000**		10000		ug/L		05/15/23 10:30	06/07/23 07:36	10

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0		ug/L		05/15/23 10:30	05/19/23 00:09	1
Arsenic	ND		5.0		ug/L		05/15/23 10:30	05/19/23 00:09	1
Barium	**16**		3.0		ug/L		05/15/23 10:30	05/19/23 00:09	1
Cadmium	ND		1.0		ug/L		05/15/23 10:30	05/19/23 00:09	1
Chromium	ND		3.0		ug/L		05/15/23 10:30	05/19/23 00:09	1
Cobalt	**1.5**		1.0		ug/L		05/15/23 10:30	05/19/23 00:09	1
Lead	ND		1.0		ug/L		05/15/23 10:30	05/19/23 00:09	1
Molybdenum	ND		2.0		ug/L		05/15/23 10:30	05/19/23 00:09	1
Nickel	**34**		3.0		ug/L		05/15/23 10:30	05/19/23 00:09	1
Selenium	ND		5.0		ug/L		05/15/23 10:30	05/19/23 00:09	1
Thallium	ND		1.0		ug/L		05/15/23 10:30	05/19/23 00:09	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3 (SM 2320B)	**470**		6.0		mg/L			05/16/23 19:39	1
Alkalinity, Phenolphthalein (SM 2320B)	ND		6.0		mg/L			05/16/23 19:39	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**470**		6.0		mg/L			05/16/23 19:39	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			05/16/23 19:39	1
Hydroxide Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			05/16/23 19:39	1
Total Dissolved Solids (SM 2540C)	**14000**		100		mg/L			05/12/23 19:33	1
pH (SM 4500 H+ B)	**7.4**	**H5**	1.7		SU			05/10/23 13:07	1
Temperature (SM 4500 H+ B)	**10.2**	**H5 T5**	0.1		Degrees C			05/10/23 13:07	1

Client Sample ID: FC-CCR-MW60-0523

Lab Sample ID: 550-201909-41

Date Collected: 05/02/23 15:04
Matrix: Water
Date Received: 05/08/23 16:00

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	62000	M3	1000		ug/L		05/17/23 14:58	05/25/23 02:38	10

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	180		1.0		ug/L		05/17/23 14:58	05/22/23 16:12	1
Molybdenum	150		2.0		ug/L		05/17/23 14:58	05/22/23 16:12	1

Client Sample ID: FC-CCR-MW77S-0523

Lab Sample ID: 550-201909-42

Date Collected: 05/03/23 10:48
Matrix: Water
Date Received: 05/08/23 16:00

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	11000		100		ug/L		05/17/23 14:58	05/18/23 23:46	1

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	7.3		1.0		ug/L		05/17/23 14:58	05/25/23 16:29	1
Molybdenum	21		2.0		ug/L		05/17/23 14:58	05/25/23 16:29	1

Client Sample ID: FC-CCR-MW78S-0523

Lab Sample ID: 550-201909-43

Date Collected: 05/03/23 11:26
Matrix: Water
Date Received: 05/08/23 16:00

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	1600		100		ug/L		05/17/23 14:58	05/18/23 23:58	1

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	6.6		1.0		ug/L		05/17/23 14:58	05/22/23 16:13	1
Molybdenum	17		2.0		ug/L		05/17/23 14:58	05/22/23 16:13	1

Client Sample ID: FC-CCR-MW79S-0523

Lab Sample ID: 550-201909-44

Date Collected: 05/03/23 12:54
Matrix: Water
Date Received: 05/08/23 16:00

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	8700		100		ug/L		05/17/23 14:58	05/19/23 00:02	1

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	3.5	M2	1.0		ug/L		05/17/23 14:58	05/22/23 16:15	1
Molybdenum	4.4		2.0		ug/L		05/17/23 14:58	05/22/23 16:15	1

Client Sample ID: FC-CCR-MW81-0523

Lab Sample ID: 550-201909-45
Date Collected: 05/03/23 12:07
Matrix: Water
Date Received: 05/08/23 16:00

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	**49000**		100		ug/L		06/07/23 06:34	06/09/23 08:18	1

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	**19**		1.0		ug/L		05/17/23 14:58	05/22/23 16:28	1
Molybdenum	**2.1**		2.0		ug/L		05/17/23 14:58	05/22/23 16:28	1

Client Sample ID: FC-CCR-MW82S-0523

Lab Sample ID: 550-201909-46
Date Collected: 05/05/23 15:32
Matrix: Water
Date Received: 05/08/23 16:00

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**670**	**D2**	200		mg/L			05/24/23 16:16	100
Fluoride	ND	D1 D5	40		mg/L			05/24/23 16:16	100
Sulfate	**6100**	**D2**	200		mg/L			05/24/23 16:16	100

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		10		ug/L		05/17/23 14:58	05/25/23 03:03	10
Boron	**65000**		1000		ug/L		05/17/23 14:58	05/25/23 03:03	10
Calcium	**460000**	**B1**	200		ug/L		05/17/23 14:58	05/19/23 00:06	1
Magnesium	**710000**		200		ug/L		05/17/23 14:58	05/19/23 00:06	1
Potassium	**28000**		3000		ug/L		05/17/23 14:58	05/19/23 00:06	1
Sodium	**1400000**		10000		ug/L		05/17/23 14:58	05/25/23 03:03	10

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	**96**		1.0		ug/L		05/17/23 14:58	05/22/23 16:33	1
Molybdenum	**6.5**		2.0		ug/L		05/17/23 14:58	05/22/23 16:33	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3 (SM 2320B)	**270**		6.0		mg/L			05/16/23 19:49	1
Alkalinity, Phenolphthalein (SM 2320B)	ND		6.0		mg/L			05/16/23 19:49	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**270**		6.0		mg/L			05/16/23 19:49	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			05/16/23 19:49	1
Hydroxide Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			05/16/23 19:49	1
Total Dissolved Solids (SM 2540C)	**9800**		100		mg/L			05/12/23 19:33	1
pH (SM 4500 H+ B)	**7.2**	**H5**	1.7		SU			05/10/23 13:08	1
Temperature (SM 4500 H+ B)	**10.6**	**H5 T5**	0.1		Degrees C			05/10/23 13:08	1

Client Sample ID: FC-CCR-FD07-0523

Lab Sample ID: 550-201909-47
Date Collected: 05/03/23 13:31
Matrix: Water
Date Received: 05/08/23 16:00

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	**49000**		100		ug/L		05/17/23 14:58	05/19/23 00:10	1

Client Sample ID: FC-CCR-FD07-0523

Lab Sample ID: 550-201909-47
Date Collected: 05/03/23 13:31
Matrix: Water
Date Received: 05/08/23 16:00

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	20		1.0		ug/L		05/17/23 14:58	05/22/23 16:35	1
Molybdenum	2.4		2.0		ug/L		05/17/23 14:58	05/22/23 16:35	1

Client Sample ID: FC-CCR-FD05-0523

Lab Sample ID: 550-201909-48
Date Collected: 05/03/23 20:02
Matrix: Water
Date Received: 05/08/23 16:00

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	2500		100		ug/L		05/17/23 14:58	05/19/23 00:14	1

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	1.4		1.0		ug/L		05/17/23 14:58	05/22/23 16:37	1
Molybdenum	3.2		2.0		ug/L		05/17/23 14:58	05/22/23 16:37	1

Client Sample ID: FC-CCR-SUMP1-0523

Lab Sample ID: 550-201909-49
Date Collected: 05/05/23 08:14
Matrix: Water
Date Received: 05/08/23 16:00

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	510	D2	40		mg/L			05/24/23 12:35	20

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	79000		1000		ug/L		05/17/23 14:58	05/25/23 03:07	10
Iron	ND	T5	100		ug/L		05/17/23 14:58	05/19/23 00:18	1
Magnesium	460000	T5	200		ug/L		05/17/23 14:58	05/19/23 00:18	1
Manganese	ND	T5	10		ug/L		05/17/23 14:58	05/19/23 00:18	1

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	47		1.0		ug/L		05/17/23 14:58	05/22/23 16:39	1
Molybdenum	87		2.0		ug/L		05/17/23 14:58	05/22/23 16:39	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	8900		100		mg/L			05/12/23 19:33	1

Client Sample ID: FC-CCR-SUMP2-0523

Lab Sample ID: 550-201909-50
Date Collected: 05/05/23 08:27
Matrix: Water
Date Received: 05/08/23 16:00

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	540	D2	40		mg/L			05/24/23 16:53	20

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	33000		100		ug/L		05/17/23 14:58	05/19/23 00:22	1
Iron	100	T5	100		ug/L		05/17/23 14:58	05/19/23 00:22	1

Client Sample ID: FC-CCR-SUMP2-0523

Lab Sample ID: 550-201909-50
Date Collected: 05/05/23 08:27
Matrix: Water
Date Received: 05/08/23 16:00

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Magnesium	**370000**	**T5**	200		ug/L		05/17/23 14:58	05/19/23 00:22	1
Manganese	ND	T5	10		ug/L		05/17/23 14:58	05/19/23 00:22	1

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	ND		1.0		ug/L		05/17/23 14:58	05/22/23 16:41	1
Molybdenum	**6.8**		2.0		ug/L		05/17/23 14:58	05/22/23 16:41	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**7600**		100		mg/L			05/12/23 19:33	1

Client Sample ID: FC-CCR-SUMP3-0523

Lab Sample ID: 550-201909-51
Date Collected: 05/05/23 08:44
Matrix: Water
Date Received: 05/08/23 16:00

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**700**	**D2**	40		mg/L			05/24/23 17:11	20

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	**41000**		100		ug/L		05/17/23 14:58	05/19/23 00:38	1
Iron	**100**	**T5**	100		ug/L		05/17/23 14:58	05/19/23 00:38	1
Magnesium	**840000**	**T5**	200		ug/L		05/17/23 14:58	05/19/23 00:38	1
Manganese	**830**	**T5**	10		ug/L		05/17/23 14:58	05/19/23 00:38	1

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	**2.6**		1.0		ug/L		05/17/23 14:58	05/22/23 16:42	1
Molybdenum	**14**		2.0		ug/L		05/17/23 14:58	05/22/23 16:42	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**18000**		200		mg/L			05/12/23 19:33	1

Client Sample ID: FC-CCR-SUMP7-0523

Lab Sample ID: 550-201909-52
Date Collected: 05/05/23 08:51
Matrix: Water
Date Received: 05/08/23 16:00

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**670**	**D2**	100		mg/L			05/24/23 17:30	50

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	**60000**		1000		ug/L		05/17/23 14:58	05/25/23 03:24	10
Iron	**1200**	**T5**	100		ug/L		05/17/23 14:58	05/19/23 00:42	1
Magnesium	**690000**	**T5**	200		ug/L		05/17/23 14:58	05/19/23 00:42	1
Manganese	**76**	**T5**	10		ug/L		05/17/23 14:58	05/19/23 00:42	1

Client Sample ID: FC-CCR-SUMP7-0523

Lab Sample ID: 550-201909-52
Date Collected: 05/05/23 08:51
Matrix: Water
Date Received: 05/08/23 16:00

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	62		1.0		ug/L		05/17/23 14:58	05/22/23 16:48	1
Molybdenum	3.0		2.0		ug/L		05/17/23 14:58	05/22/23 16:48	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	10000		100		mg/L			05/12/23 19:33	1

Client Sample ID: FC-CCR-SUMP8-0523

Lab Sample ID: 550-201909-53
Date Collected: 05/05/23 09:00
Matrix: Water
Date Received: 05/08/23 16:00

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	770	D2	400		mg/L			05/24/23 17:48	200

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	44000		100		ug/L		05/17/23 14:58	05/19/23 00:46	1
Iron	2700	T5	100		ug/L		05/17/23 14:58	05/19/23 00:46	1
Magnesium	1300000	T5	2000		ug/L		05/17/23 14:58	05/25/23 03:29	10
Manganese	14	T5	10		ug/L		05/17/23 14:58	05/19/23 00:46	1

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	26		1.0		ug/L		05/17/23 14:58	05/22/23 16:50	1
Molybdenum	2.3		2.0		ug/L		05/17/23 14:58	05/22/23 16:50	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	18000		100		mg/L			05/12/23 19:33	1

Client Sample ID: FC-CCR-SUMP9-0523

Lab Sample ID: 550-201909-54
Date Collected: 05/05/23 09:08
Matrix: Water
Date Received: 05/08/23 16:00

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	630	D2	40		mg/L			05/24/23 18:07	20

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	30000		100		ug/L		05/17/23 14:58	05/19/23 00:51	1
Iron	9300	T5	100		ug/L		05/17/23 14:58	05/19/23 00:51	1
Magnesium	760000	T5	200		ug/L		05/17/23 14:58	05/19/23 00:51	1
Manganese	65	T5	10		ug/L		05/17/23 14:58	05/19/23 00:51	1

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	22		1.0		ug/L		05/17/23 14:58	05/22/23 16:52	1
Molybdenum	27		2.0		ug/L		05/17/23 14:58	05/22/23 16:52	1

Client Sample ID: FC-CCR-SUMP9-0523

Lab Sample ID: 550-201909-54

Date Collected: 05/05/23 09:08
Matrix: Water
Date Received: 05/08/23 16:00

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	10000		100		mg/L			05/12/23 19:33	1

Client Sample ID: FC-CCR-SUMP10-0523

Lab Sample ID: 550-201909-55

Date Collected: 05/05/23 09:15
Matrix: Water
Date Received: 05/08/23 16:00

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	550	D2	20		mg/L			05/24/23 18:25	10

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	56000		1000		ug/L		05/17/23 14:58	05/25/23 03:33	10
Iron	1400	T5	100		ug/L		05/17/23 14:58	05/19/23 00:55	1
Magnesium	450000	T5	200		ug/L		05/17/23 14:58	05/19/23 00:55	1
Manganese	22	T5	10		ug/L		05/17/23 14:58	05/19/23 00:55	1

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	150		1.0		ug/L		05/17/23 14:58	05/22/23 16:53	1
Molybdenum	ND		2.0		ug/L		05/17/23 14:58	05/22/23 16:53	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	7700		100		mg/L			05/12/23 19:33	1

Client Sample ID: FC-CCR-SUMP11-0523

Lab Sample ID: 550-201909-56

Date Collected: 05/05/23 09:21
Matrix: Water
Date Received: 05/08/23 16:00

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	530	D2	20		mg/L			05/24/23 18:44	10

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	39000		100		ug/L		05/17/23 14:58	05/19/23 00:59	1
Iron	350	T5	100		ug/L		05/17/23 14:58	05/19/23 00:59	1
Magnesium	470000	T5	200		ug/L		05/17/23 14:58	05/19/23 00:59	1
Manganese	ND	T5	10		ug/L		05/17/23 14:58	05/19/23 00:59	1

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	77		1.0		ug/L		05/17/23 14:58	05/22/23 16:55	1
Molybdenum	ND		2.0		ug/L		05/17/23 14:58	05/22/23 16:55	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	8300		100		mg/L			05/12/23 21:08	1

Client Sample ID: FC-CCR-SUMP12-0523

Lab Sample ID: 550-201909-57
Date Collected: 05/05/23 09:29
Matrix: Water
Date Received: 05/08/23 16:00

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**560**	**D2**	20		mg/L			05/24/23 19:57	10

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	**34000**		100		ug/L		05/17/23 14:58	05/19/23 01:03	1
Iron	**2600**	**T5**	100		ug/L		05/17/23 14:58	05/19/23 01:03	1
Magnesium	**460000**	**T5**	200		ug/L		05/17/23 14:58	05/19/23 01:03	1
Manganese	**16**	**T5**	10		ug/L		05/17/23 14:58	05/19/23 01:03	1

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	**61**		1.0		ug/L		05/17/23 14:58	05/22/23 16:57	1
Molybdenum	ND		2.0		ug/L		05/17/23 14:58	05/22/23 16:57	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**8300**		100		mg/L			05/12/23 21:08	1

Client Sample ID: FC-CCR-SUMP13-0523

Lab Sample ID: 550-201909-58
Date Collected: 05/05/23 09:36
Matrix: Water
Date Received: 05/08/23 16:00

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**500**	**D2**	20		mg/L			05/24/23 20:16	10

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	**43000**		100		ug/L		05/17/23 14:58	05/19/23 01:07	1
Iron	ND	T5	100		ug/L		05/17/23 14:58	05/19/23 01:07	1
Magnesium	**380000**	**T5**	200		ug/L		05/17/23 14:58	05/19/23 01:07	1
Manganese	ND	T5	10		ug/L		05/17/23 14:58	05/19/23 01:07	1

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	**99**		1.0		ug/L		05/17/23 14:58	05/22/23 16:59	1
Molybdenum	ND		2.0		ug/L		05/17/23 14:58	05/22/23 16:59	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**7400**		100		mg/L			05/12/23 21:08	1

Client Sample ID: FC-CCR-SUMP14-0523

Lab Sample ID: 550-201909-59
Date Collected: 05/05/23 09:45
Matrix: Water
Date Received: 05/08/23 16:00

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**580**	**D2**	40		mg/L			05/24/23 20:34	20

Client Sample ID: FC-CCR-SUMP14-0523

Lab Sample ID: 550-201909-59
Date Collected: 05/05/23 09:45
Matrix: Water
Date Received: 05/08/23 16:00

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	34000		100		ug/L		05/17/23 14:58	05/19/23 01:11	1
Iron	2100	T5	100		ug/L		05/17/23 14:58	05/19/23 01:11	1
Magnesium	420000	T5	200		ug/L		05/17/23 14:58	05/19/23 01:11	1
Manganese	ND	T5	10		ug/L		05/17/23 14:58	05/19/23 01:11	1

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	67		1.0		ug/L		05/17/23 14:58	05/22/23 17:01	1
Molybdenum	4.3		2.0		ug/L		05/17/23 14:58	05/22/23 17:01	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	8300		100		mg/L			05/12/23 21:08	1

Client Sample ID: FC-CCR-SUMP15-0523

Lab Sample ID: 550-201909-60
Date Collected: 05/05/23 09:48
Matrix: Water
Date Received: 05/08/23 16:00

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1800	D2	400		mg/L			05/24/23 20:52	200

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	6800		100		ug/L		05/17/23 14:58	05/19/23 01:15	1
Iron	340	T5	100		ug/L		05/17/23 14:58	05/19/23 01:15	1
Magnesium	2900000	T5	2000		ug/L		05/17/23 14:58	05/25/23 03:37	10
Manganese	17	T5	10		ug/L		05/17/23 14:58	05/19/23 01:15	1

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	5.1		1.0		ug/L		05/17/23 14:58	05/22/23 17:02	1
Molybdenum	2.8		2.0		ug/L		05/17/23 14:58	05/22/23 17:02	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	37000	N1	200		mg/L			05/12/23 21:08	1

Client Sample ID: FC-CCR-SUMP16-0523

Lab Sample ID: 550-201909-61
Date Collected: 05/05/23 09:56
Matrix: Water
Date Received: 05/08/23 16:00

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	680	D2	400		mg/L			05/24/23 21:11	200

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	21000		100		ug/L		05/18/23 07:45	05/22/23 19:42	1
Iron	140	T5	100		ug/L		05/18/23 07:45	05/24/23 22:50	1
Magnesium	1100000	T5	2000		ug/L		05/18/23 07:45	05/24/23 22:54	10
Manganese	ND		10		ug/L		05/18/23 07:45	05/22/23 19:42	1

Client Sample ID: FC-CCR-SUMP16-0523

Lab Sample ID: 550-201909-61
Date Collected: 05/05/23 09:56
Matrix: Water
Date Received: 05/08/23 16:00

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	**51**		1.0		ug/L		05/18/23 07:45	05/19/23 01:23	1
Molybdenum	ND		2.0		ug/L		05/18/23 07:45	05/19/23 01:23	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**15000**		100		mg/L			05/12/23 21:08	1

Client Sample ID: FC-CCR-SUMP17-0523

Lab Sample ID: 550-201909-62
Date Collected: 05/05/23 10:03
Matrix: Water
Date Received: 05/08/23 16:00

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**860**	**D2**	100		mg/L			05/24/23 21:29	50

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	**6600**		100		ug/L		05/18/23 07:45	05/22/23 19:46	1
Iron	**260**	**T5**	100		ug/L		05/18/23 07:45	05/24/23 22:59	1
Magnesium	**690000**	**T5**	200		ug/L		05/18/23 07:45	05/24/23 22:59	1
Manganese	**56**		10		ug/L		05/18/23 07:45	05/22/23 19:46	1

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	ND		1.0		ug/L		05/18/23 07:45	05/19/23 01:25	1
Molybdenum	ND		2.0		ug/L		05/18/23 07:45	05/19/23 01:25	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**10000**		100		mg/L			05/12/23 21:08	1

Client Sample ID: FC-CCR-SUMP18-0523

Lab Sample ID: 550-201909-63
Date Collected: 05/05/23 10:08
Matrix: Water
Date Received: 05/08/23 16:00

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2000**	**D2**	400		mg/L			05/24/23 21:48	200

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		100		ug/L		05/18/23 07:45	05/22/23 19:50	1
Iron	**250**	**T5**	100		ug/L		05/18/23 07:45	05/24/23 23:23	1
Magnesium	**3100**		200		ug/L		05/18/23 07:45	05/22/23 19:50	1
Manganese	**37**		10		ug/L		05/18/23 07:45	05/22/23 19:50	1

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	ND		1.0		ug/L		05/18/23 07:45	05/19/23 01:26	1
Molybdenum	**3.2**		2.0		ug/L		05/18/23 07:45	05/19/23 01:26	1

Client Sample Results

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-201909-1
SDG: APS Four Corners Power Plant

Client Sample ID: FC-CCR-SUMP18-0523
Date Collected: 05/05/23 10:08
Date Received: 05/08/23 16:00

Lab Sample ID: 550-201909-63
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	41000	E2 N1	200		mg/L			05/12/23 21:08	1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 550-300790/2
Matrix: Water
Analysis Batch: 300790

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		2.0		mg/L			05/22/23 11:03	1
Fluoride	ND		0.40		mg/L			05/22/23 11:03	1
Sulfate	ND		2.0		mg/L			05/22/23 11:03	1

Lab Sample ID: LCS 550-300790/5
Matrix: Water
Analysis Batch: 300790

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			20.0	20.7		mg/L		103	90 - 110		
Fluoride			4.00	4.04		mg/L		101	90 - 110		
Sulfate			20.0	20.6		mg/L		103	90 - 110		

Lab Sample ID: LCSD 550-300790/6
Matrix: Water
Analysis Batch: 300790

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			20.0	20.7		mg/L		103	90 - 110	0	20
Fluoride			4.00	4.03		mg/L		101	90 - 110	0	20
Sulfate			20.0	20.7		mg/L		103	90 - 110	0	20

Lab Sample ID: 550-201978-F-9 MS ^10
Matrix: Water
Analysis Batch: 300790

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	110		200	321		mg/L		105	80 - 120		
Fluoride	ND		40.0	40.9		mg/L		99	80 - 120		
Sulfate	260		200	462		mg/L		101	80 - 120		

Lab Sample ID: 550-201978-F-9 MSD ^10
Matrix: Water
Analysis Batch: 300790

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	110		200	322		mg/L		105	80 - 120	0	20
Fluoride	ND		40.0	41.7		mg/L		101	80 - 120	2	20
Sulfate	260		200	462		mg/L		101	80 - 120	0	20

Lab Sample ID: MB 550-300792/2
Matrix: Water
Analysis Batch: 300792

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		2.0		mg/L			05/22/23 10:53	1
Fluoride	ND		0.40		mg/L			05/22/23 10:53	1
Sulfate	ND		2.0		mg/L			05/22/23 10:53	1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 550-300792/5
Matrix: Water
Analysis Batch: 300792

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			20.0	21.0		mg/L		105	90 - 110		
Fluoride			4.00	4.03		mg/L		101	90 - 110		
Sulfate			20.0	20.2		mg/L		101	90 - 110		

Lab Sample ID: LCSD 550-300792/6
Matrix: Water
Analysis Batch: 300792

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			20.0	21.0		mg/L		105	90 - 110	0	20
Fluoride			4.00	4.02		mg/L		101	90 - 110	0	20
Sulfate			20.0	20.2		mg/L		101	90 - 110	0	20

Lab Sample ID: 550-201978-F-11 MS ^20
Matrix: Water
Analysis Batch: 300792

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	380		400	832		mg/L		113	80 - 120		
Fluoride	ND		80.0	82.1		mg/L		101	80 - 120		
Sulfate	990		400	1390		mg/L		99	80 - 120		

Lab Sample ID: 550-201978-F-11 MSD ^20
Matrix: Water
Analysis Batch: 300792

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	380		400	831		mg/L		113	80 - 120	0	20
Fluoride	ND		80.0	82.3		mg/L		101	80 - 120	0	20
Sulfate	990		400	1380		mg/L		98	80 - 120	0	20

Lab Sample ID: MB 550-300895/2
Matrix: Water
Analysis Batch: 300895

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		2.0		mg/L			05/23/23 11:08	1
Fluoride	ND		0.40		mg/L			05/23/23 11:08	1
Sulfate	ND		2.0		mg/L			05/23/23 11:08	1

Lab Sample ID: LCS 550-300895/5
Matrix: Water
Analysis Batch: 300895

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			20.0	20.7		mg/L		104	90 - 110		
Fluoride			4.00	4.12		mg/L		103	90 - 110		
Sulfate			20.0	20.8		mg/L		104	90 - 110		

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 550-300895/6
Matrix: Water
Analysis Batch: 300895

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			20.0	20.7		mg/L		104	90 - 110	0	20
Fluoride			4.00	4.16		mg/L		104	90 - 110	1	20
Sulfate			20.0	20.8		mg/L		104	90 - 110	0	20

Lab Sample ID: MB 550-300896/2
Matrix: Water
Analysis Batch: 300896

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		2.0		mg/L			05/23/23 11:28	1
Fluoride	ND		0.40		mg/L			05/23/23 11:28	1
Sulfate	ND		2.0		mg/L			05/23/23 11:28	1

Lab Sample ID: LCS 550-300896/5
Matrix: Water
Analysis Batch: 300896

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			20.0	20.1		mg/L		100	90 - 110		
Fluoride			4.00	4.05		mg/L		101	90 - 110		
Sulfate			20.0	20.5		mg/L		103	90 - 110		

Lab Sample ID: LCSD 550-300896/6
Matrix: Water
Analysis Batch: 300896

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			20.0	20.1		mg/L		101	90 - 110	0	20
Fluoride			4.00	4.06		mg/L		101	90 - 110	0	20
Sulfate			20.0	20.4		mg/L		102	90 - 110	1	20

Lab Sample ID: 550-202566-A-1 MS
Matrix: Water
Analysis Batch: 300896

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	36		20.0	56.5		mg/L		103	80 - 120		
Fluoride	ND		4.00	4.33		mg/L		100	80 - 120		
Sulfate	130	M3	20.0	145	M3	mg/L		73	80 - 120		

Lab Sample ID: 550-202566-A-1 MSD
Matrix: Water
Analysis Batch: 300896

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	36		20.0	57.1		mg/L		106	80 - 120	1	20
Fluoride	ND		4.00	4.45		mg/L		103	80 - 120	3	20
Sulfate	130	M3	20.0	146	M3	mg/L		76	80 - 120	0	20

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 550-300898/2
Matrix: Water
Analysis Batch: 300898

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		2.0		mg/L			05/23/23 10:59	1
Fluoride	ND		0.40		mg/L			05/23/23 10:59	1
Sulfate	ND		2.0		mg/L			05/23/23 10:59	1

Lab Sample ID: LCS 550-300898/5
Matrix: Water
Analysis Batch: 300898

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			20.0	21.0		mg/L		105	90 - 110		
Fluoride			4.00	4.03		mg/L		101	90 - 110		
Sulfate			20.0	20.2		mg/L		101	90 - 110		

Lab Sample ID: LCSD 550-300898/6
Matrix: Water
Analysis Batch: 300898

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			20.0	21.0		mg/L		105	90 - 110	0	20
Fluoride			4.00	4.03		mg/L		101	90 - 110	0	20
Sulfate			20.0	20.2		mg/L		101	90 - 110	0	20

Lab Sample ID: 550-202569-A-1 MS
Matrix: Water
Analysis Batch: 300898

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	240	E2 M3	20.0	246	E2 M3	mg/L		32	80 - 120		
Fluoride	1.2		4.00	5.21		mg/L		100	80 - 120		
Sulfate	230	E2 M3	20.0	240	E2 M3	mg/L		44	80 - 120		

Lab Sample ID: 550-202569-A-1 MSD
Matrix: Water
Analysis Batch: 300898

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	240	E2 M3	20.0	246	E2 M3	mg/L		33	80 - 120	0	20
Fluoride	1.2		4.00	5.28		mg/L		102	80 - 120	1	20
Sulfate	230	E2 M3	20.0	241	E2 M3	mg/L		45	80 - 120	0	20

Lab Sample ID: MB 550-300996/2
Matrix: Water
Analysis Batch: 300996

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		2.0		mg/L			05/24/23 11:03	1
Fluoride	ND		0.40		mg/L			05/24/23 11:03	1
Sulfate	ND		2.0		mg/L			05/24/23 11:03	1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 550-300996/5
Matrix: Water
Analysis Batch: 300996

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			20.0	20.6		mg/L		103	90 - 110		
Fluoride			4.00	4.12		mg/L		103	90 - 110		
Sulfate			20.0	20.6		mg/L		103	90 - 110		

Lab Sample ID: LCSD 550-300996/6
Matrix: Water
Analysis Batch: 300996

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			20.0	20.5		mg/L		103	90 - 110	0	20
Fluoride			4.00	4.11		mg/L		103	90 - 110	0	20
Sulfate			20.0	20.6		mg/L		103	90 - 110	0	20

Lab Sample ID: 550-201909-49 MS
Matrix: Water
Analysis Batch: 300996

Client Sample ID: FC-CCR-SUMP1-0523
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	510	D2	400	904	D2	mg/L		97	80 - 120		
Fluoride	ND	D1	80.0	77.0	D1	mg/L		91	80 - 120		
Sulfate	4900	E2 M3 D1	400	5180	D1 E2 M3	mg/L		69	80 - 120		

Lab Sample ID: 550-201909-49 MSD
Matrix: Water
Analysis Batch: 300996

Client Sample ID: FC-CCR-SUMP1-0523
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	510	D2	400	916	D2	mg/L		100	80 - 120	1	20
Fluoride	ND	D1	80.0	80.9	D1	mg/L		96	80 - 120	5	20
Sulfate	4900	E2 M3 D1	400	5140	D1 E2 M3	mg/L		59	80 - 120	1	20

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: 550-201909-1 MS
Matrix: Water
Analysis Batch: 613473

Client Sample ID: FC-CCR-MW62-0523
Prep Type: Total/NA
Prep Batch: 612031

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Lithium	0.14		1.00	1.16		mg/L		102	70 - 130		
Beryllium	ND		1000	939		ug/L		94	70 - 130		
Boron	2200		2000	4380		ug/L		107	70 - 130		
Calcium	550000	M3	50000	590000	M3	ug/L		72	70 - 130		

Lab Sample ID: 550-201909-1 MSD
Matrix: Water
Analysis Batch: 613473

Client Sample ID: FC-CCR-MW62-0523
Prep Type: Total/NA
Prep Batch: 612031

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Lithium	0.14		1.00	1.14		mg/L		100	70 - 130	2	20
Beryllium	ND		1000	959		ug/L		96	70 - 130	2	20

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: 550-201909-1 MSD — **Client Sample ID: FC-CCR-MW62-0523**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 613473 — **Prep Batch: 612031**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron	2200		2000	4360		ug/L		105	70 - 130	1	20
Calcium	550000	M3	50000	585000	M3	ug/L		61	70 - 130	1	20

Lab Sample ID: 550-201909-2 MS — **Client Sample ID: FC-CCR-MW63-0523**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 613473 — **Prep Batch: 612031**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Lithium	0.055		1.00	1.05		mg/L		99	70 - 130
Beryllium	ND		1000	1000		ug/L		100	70 - 130
Boron	900		2000	3060		ug/L		108	70 - 130
Calcium	470000		50000	525000	M3	ug/L		109	70 - 130

Lab Sample ID: 550-201909-2 MSD — **Client Sample ID: FC-CCR-MW63-0523**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 613473 — **Prep Batch: 612031**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Lithium	0.055		1.00	1.04		mg/L		99	70 - 130	0	20
Beryllium	ND		1000	1020		ug/L		102	70 - 130	2	20
Boron	900		2000	3080		ug/L		109	70 - 130	1	20
Calcium	470000		50000	529000	M3	ug/L		116	70 - 130	1	20

Lab Sample ID: 550-201909-21 MS — **Client Sample ID: FC-CCR-DMX03-0523**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 613473 — **Prep Batch: 612469**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Lithium	1.3		1.00	2.44		mg/L		112	70 - 130
Beryllium	ND		1000	875		ug/L		88	70 - 130
Boron	960		2000	3170		ug/L		111	70 - 130
Calcium	440000	B1	50000	490000	M3	ug/L		93	70 - 130
Manganese	440		1000	1400		ug/L		97	70 - 130
Potassium	67000		50000	126000		ug/L		119	70 - 130

Lab Sample ID: 550-201909-21 MSD — **Client Sample ID: FC-CCR-DMX03-0523**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 613473 — **Prep Batch: 612469**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Lithium	1.3		1.00	2.39		mg/L		107	70 - 130	2	20
Beryllium	ND		1000	883		ug/L		88	70 - 130	1	20
Boron	960		2000	3170		ug/L		110	70 - 130	0	20
Calcium	440000	B1	50000	481000	M3	ug/L		75	70 - 130	2	20
Manganese	440		1000	1380		ug/L		95	70 - 130	1	20
Potassium	67000		50000	124000		ug/L		114	70 - 130	2	20

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: 550-201909-22 MS — **Client Sample ID: FC-CCR-DMX04-0523**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 613473 — **Prep Batch: 612469**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Lithium	0.69		1.00	1.73		mg/L		104	70 - 130
Beryllium	ND		1000	885		ug/L		88	70 - 130
Boron	1400		2000	3490		ug/L		106	70 - 130
Calcium	430000	B1	50000	463000	M3	ug/L		73	70 - 130
Magnesium	700000		50000	733000	M3	ug/L		72	70 - 130
Manganese	970		1000	1890		ug/L		92	70 - 130
Potassium	39000		50000	94500		ug/L		111	70 - 130

Lab Sample ID: 550-201909-22 MS — **Client Sample ID: FC-CCR-DMX04-0523**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 613763 — **Prep Batch: 612469**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Iron	ND		10000	10500		ug/L		102	70 - 130
Sodium	1700000	M3	50000	1900000	M3	ug/L		327	70 - 130

Lab Sample ID: 550-201909-22 MSD — **Client Sample ID: FC-CCR-DMX04-0523**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 613473 — **Prep Batch: 612469**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Lithium	0.69		1.00	1.72		mg/L		102	70 - 130	1	20
Beryllium	ND		1000	911		ug/L		91	70 - 130	3	20
Boron	1400		2000	3470		ug/L		106	70 - 130	0	20
Calcium	430000	B1	50000	468000	M3	ug/L		84	70 - 130	1	20
Magnesium	700000		50000	738000	M3	ug/L		83	70 - 130	1	20
Manganese	970		1000	1920		ug/L		94	70 - 130	1	20
Potassium	39000		50000	94900		ug/L		112	70 - 130	0	20

Lab Sample ID: 550-201909-22 MSD — **Client Sample ID: FC-CCR-DMX04-0523**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 613763 — **Prep Batch: 612469**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Iron	ND		10000	9900		ug/L		96	70 - 130	6	20
Sodium	1700000	M3	50000	1800000	M3	ug/L		113	70 - 130	6	20

Lab Sample ID: 280-177380-A-1-B MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 615611 — **Prep Batch: 615028**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	150		2000	2290		ug/L		107	70 - 130

Lab Sample ID: 280-177380-A-1-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 615611 — **Prep Batch: 615028**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron	150		2000	2280		ug/L		107	70 - 130	0	20

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 280-612031/1-A
Matrix: Water
Analysis Batch: 613473

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 612031

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	ND		0.020		mg/L		05/17/23 14:58	05/22/23 15:10	1
Beryllium	ND		1.0		ug/L		05/17/23 14:58	05/22/23 15:10	1
Boron	ND		100		ug/L		05/17/23 14:58	05/22/23 15:10	1
Calcium	ND		200		ug/L		05/17/23 14:58	05/22/23 15:10	1
Iron	ND		100		ug/L		05/17/23 14:58	05/22/23 15:10	1
Magnesium	ND		200		ug/L		05/17/23 14:58	05/22/23 15:10	1
Manganese	ND		10		ug/L		05/17/23 14:58	05/22/23 15:10	1
Potassium	ND		3000		ug/L		05/17/23 14:58	05/22/23 15:10	1
Sodium	ND		1000		ug/L		05/17/23 14:58	05/22/23 15:10	1

Lab Sample ID: LCS 280-612031/2-A
Matrix: Water
Analysis Batch: 613473

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 612031

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Lithium			1.00	0.956		mg/L		96	90 - 112		
Beryllium			1000	947		ug/L		95	89 - 113		
Boron			2000	2040		ug/L		102	86 - 110		
Calcium			50000	51000		ug/L		102	90 - 111		
Iron			10000	10300		ug/L		103	85 - 115		
Magnesium			50000	50300		ug/L		101	90 - 113		
Manganese			1000	990		ug/L		99	90 - 110		
Potassium			50000	49600		ug/L		99	89 - 114		
Sodium			50000	49600		ug/L		99	90 - 115		

Lab Sample ID: MB 280-612170/1-A
Matrix: Water
Analysis Batch: 613151

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 612170

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		1.0		ug/L		05/17/23 14:58	05/18/23 23:13	1
Boron	ND		100		ug/L		05/17/23 14:58	05/18/23 23:13	1
Calcium	239	B1	200		ug/L		05/17/23 14:58	05/18/23 23:13	1
Iron	ND		100		ug/L		05/17/23 14:58	05/18/23 23:13	1
Magnesium	ND		200		ug/L		05/17/23 14:58	05/18/23 23:13	1
Manganese	ND		10		ug/L		05/17/23 14:58	05/18/23 23:13	1
Potassium	ND		3000		ug/L		05/17/23 14:58	05/18/23 23:13	1

Lab Sample ID: MB 280-612170/1-A
Matrix: Water
Analysis Batch: 613952

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 612170

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Sodium	ND		1000		ug/L		05/17/23 14:58	05/26/23 06:09	1

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: LCS 280-612170/2-B
Matrix: Water
Analysis Batch: 613151

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 612170

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Beryllium	1000	977		ug/L		98	89 - 113
Boron	2000	2060		ug/L		103	86 - 110
Calcium	50000	50500		ug/L		101	90 - 111
Iron	10000	10200		ug/L		102	85 - 115
Magnesium	50000	50500		ug/L		101	90 - 113
Manganese	1000	984		ug/L		98	90 - 110
Potassium	50000	51200		ug/L		102	89 - 114

Lab Sample ID: LCS 280-612170/2-B
Matrix: Water
Analysis Batch: 613952

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 612170

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sodium	50000	47200		ug/L		94	90 - 115

Lab Sample ID: 550-201909-41 MS
Matrix: Water
Analysis Batch: 613779

Client Sample ID: FC-CCR-MW60-0523
Prep Type: Total Recoverable
Prep Batch: 612170

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Beryllium	ND	T5	1000	931		ug/L		93	70 - 130
Boron	62000	M3	2000	61800	M3	ug/L		6	70 - 130

Lab Sample ID: 550-201909-41 MSD
Matrix: Water
Analysis Batch: 613779

Client Sample ID: FC-CCR-MW60-0523
Prep Type: Total Recoverable
Prep Batch: 612170

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Beryllium	ND	T5	1000	947		ug/L		95	70 - 130	2	20
Boron	62000	M3	2000	63800	M3	ug/L		103	70 - 130	3	20

Lab Sample ID: 550-201909-42 MS
Matrix: Water
Analysis Batch: 613151

Client Sample ID: FC-CCR-MW77S-0523
Prep Type: Total Recoverable
Prep Batch: 612170

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	11000		2000	12600	M3	ug/L		96	70 - 130

Lab Sample ID: 550-201909-42 MSD
Matrix: Water
Analysis Batch: 613151

Client Sample ID: FC-CCR-MW77S-0523
Prep Type: Total Recoverable
Prep Batch: 612170

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron	11000		2000	12700	M3	ug/L		102	70 - 130	1	20

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: MB 280-612469/1-A
Matrix: Water
Analysis Batch: 613473

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 612469

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	ND		0.020		mg/L		05/15/23 10:30	05/22/23 17:12	1
Beryllium	ND		1.0		ug/L		05/15/23 10:30	05/22/23 17:12	1
Boron	ND		100		ug/L		05/15/23 10:30	05/22/23 17:12	1
Magnesium	ND		200		ug/L		05/15/23 10:30	05/22/23 17:12	1
Manganese	ND		10		ug/L		05/15/23 10:30	05/22/23 17:12	1
Potassium	ND		3000		ug/L		05/15/23 10:30	05/22/23 17:12	1

Lab Sample ID: MB 280-612469/1-A
Matrix: Water
Analysis Batch: 615185

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 612469

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		200		ug/L		05/15/23 10:30	06/07/23 05:06	1
Iron	ND		100		ug/L		05/15/23 10:30	06/07/23 05:06	1
Sodium	ND		1000		ug/L		05/15/23 10:30	06/07/23 05:06	1

Lab Sample ID: LCS 280-612469/2-A
Matrix: Water
Analysis Batch: 613473

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 612469

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Lithium			1.00	0.986		mg/L		99	90 - 112		
Beryllium			1000	954		ug/L		95	89 - 113		
Boron			2000	2120		ug/L		106	86 - 110		
Magnesium			50000	52500		ug/L		105	90 - 113		
Manganese			1000	1030		ug/L		103	90 - 110		
Potassium			50000	50800		ug/L		102	89 - 114		

Lab Sample ID: LCS 280-612469/2-A
Matrix: Water
Analysis Batch: 615185

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 612469

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Calcium			50000	50500		ug/L		101	90 - 111		
Iron			10000	10200		ug/L		102	85 - 115		
Sodium			50000	50100		ug/L		100	90 - 115		

Lab Sample ID: 550-201909-21 MS
Matrix: Water
Analysis Batch: 615185

Client Sample ID: FC-CCR-DMX03-0523
Prep Type: Total Recoverable
Prep Batch: 612469

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Magnesium	2300000	M3	50000	2220000	M3	ug/L		-240	70 - 130		

Lab Sample ID: 550-201909-21 MS
Matrix: Water
Analysis Batch: 615317

Client Sample ID: FC-CCR-DMX03-0523
Prep Type: Total Recoverable
Prep Batch: 612469

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Iron	160		10000	9470		ug/L		93	70 - 130		

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: 550-201909-21 MS
Matrix: Water
Analysis Batch: 615317

Client Sample ID: FC-CCR-DMX03-0523
Prep Type: Total Recoverable
Prep Batch: 612469

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Sodium	2900000	M3	50000	3000000	M3	ug/L		207	70 - 130

Lab Sample ID: 550-201909-21 MSD
Matrix: Water
Analysis Batch: 615185

Client Sample ID: FC-CCR-DMX03-0523
Prep Type: Total Recoverable
Prep Batch: 612469

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Magnesium	2300000	M3	50000	2180000	M3	ug/L		-308	70 - 130	2	20

Lab Sample ID: 550-201909-21 MSD
Matrix: Water
Analysis Batch: 615317

Client Sample ID: FC-CCR-DMX03-0523
Prep Type: Total Recoverable
Prep Batch: 612469

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Iron	160		10000	9470		ug/L		93	70 - 130	0	20

Lab Sample ID: 550-201909-21 MSD
Matrix: Water
Analysis Batch: 615317

Client Sample ID: FC-CCR-DMX03-0523
Prep Type: Total Recoverable
Prep Batch: 612469

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sodium	2900000	M3	50000	2910000	M3	ug/L		30	70 - 130	3	20

Lab Sample ID: MB 280-612618/1-A
Matrix: Water
Analysis Batch: 613473

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 612618

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		100		ug/L		05/18/23 07:45	05/22/23 19:34	1
Magnesium	ND		200		ug/L		05/18/23 07:45	05/22/23 19:34	1
Manganese	ND		10		ug/L		05/18/23 07:45	05/22/23 19:34	1

Lab Sample ID: MB 280-612618/1-A
Matrix: Water
Analysis Batch: 613763

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 612618

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		100		ug/L		05/18/23 07:45	05/24/23 22:42	1

Lab Sample ID: LCS 280-612618/2-A
Matrix: Water
Analysis Batch: 613473

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 612618

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	2000	2170		ug/L		109	86 - 110
Magnesium	50000	54800		ug/L		110	90 - 113
Manganese	1000	1080		ug/L		108	90 - 110

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: LCS 280-612618/2-A
Matrix: Water
Analysis Batch: 613763

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 612618

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Iron			10000	10100		ug/L		101	85 - 115		

Lab Sample ID: 280-176512-I-3-B MS
Matrix: Water
Analysis Batch: 613473

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 612618

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Boron	ND		2000	2160		ug/L		107	70 - 130		
Magnesium	3400		50000	57700		ug/L		109	70 - 130		
Manganese	63		1000	1130		ug/L		106	70 - 130		

Lab Sample ID: 280-176512-I-3-B MS
Matrix: Water
Analysis Batch: 613763

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 612618

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Iron	960		10000	11300		ug/L		104	70 - 130		

Lab Sample ID: 280-176512-I-3-C MSD
Matrix: Water
Analysis Batch: 613473

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 612618

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron	ND		2000	2250		ug/L		111	70 - 130	4	20
Magnesium	3400		50000	58700		ug/L		111	70 - 130	2	20
Manganese	63		1000	1160		ug/L		110	70 - 130	3	20

Lab Sample ID: 280-176512-I-3-C MSD
Matrix: Water
Analysis Batch: 613763

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 612618

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Iron	960		10000	11300		ug/L		103	70 - 130	1	20

Lab Sample ID: MB 280-615028/1-A
Matrix: Water
Analysis Batch: 615611

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 615028

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		100		ug/L		06/07/23 06:34	06/09/23 07:55	1

Lab Sample ID: LCS 280-615028/2-A
Matrix: Water
Analysis Batch: 615611

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 615028

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Boron			2000	2190		ug/L		110	86 - 110		

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 280-612031/1-A
Matrix: Water
Analysis Batch: 613435

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 612031

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0		ug/L		05/17/23 14:58	05/22/23 14:56	1
Arsenic	ND		5.0		ug/L		05/17/23 14:58	05/22/23 14:56	1
Barium	ND		3.0		ug/L		05/17/23 14:58	05/22/23 14:56	1
Cadmium	ND		1.0		ug/L		05/17/23 14:58	05/22/23 14:56	1
Chromium	ND		3.0		ug/L		05/17/23 14:58	05/22/23 14:56	1
Cobalt	ND		1.0		ug/L		05/17/23 14:58	05/22/23 14:56	1
Lead	ND		1.0		ug/L		05/17/23 14:58	05/22/23 14:56	1
Molybdenum	ND		2.0		ug/L		05/17/23 14:58	05/22/23 14:56	1
Nickel	ND		3.0		ug/L		05/17/23 14:58	05/22/23 14:56	1
Selenium	ND		5.0		ug/L		05/17/23 14:58	05/22/23 14:56	1
Thallium	ND		1.0		ug/L		05/17/23 14:58	05/22/23 14:56	1

Lab Sample ID: LCS 280-612031/25-A
Matrix: Water
Analysis Batch: 613435

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 612031

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Antimony			40.0	40.1		ug/L		100	85 - 115		
Arsenic			40.0	38.2		ug/L		95	89 - 111		
Barium			40.0	40.3		ug/L		101	89 - 115		
Cadmium			40.0	39.9		ug/L		100	89 - 111		
Chromium			40.0	38.4		ug/L		96	86 - 115		
Cobalt			40.0	38.4		ug/L		96	92 - 115		
Lead			40.0	38.9		ug/L		97	88 - 115		
Molybdenum			40.0	40.0		ug/L		100	89 - 112		
Nickel			40.0	38.9		ug/L		97	86 - 115		
Selenium			40.0	38.7		ug/L		97	85 - 114		
Thallium			40.0	38.1		ug/L		95	86 - 115		

Lab Sample ID: 550-201909-15 MS
Matrix: Water
Analysis Batch: 613435

Client Sample ID: FC-CCR-MW52-0523
Prep Type: Total Recoverable
Prep Batch: 612031

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Cobalt	110		40.0	145		ug/L		99	92 - 115		
Molybdenum	2.1		40.0	42.2		ug/L		100	89 - 112		

Lab Sample ID: 550-201909-15 MSD
Matrix: Water
Analysis Batch: 613435

Client Sample ID: FC-CCR-MW52-0523
Prep Type: Total Recoverable
Prep Batch: 612031

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cobalt	110		40.0	150		ug/L		112	92 - 115	4	20
Molybdenum	2.1		40.0	42.7		ug/L		102	89 - 112	1	20

Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: 550-201909-20 MS
Matrix: Water
Analysis Batch: 613435

Client Sample ID: FC-CCR-DMX01-0523
Prep Type: Total Recoverable
Prep Batch: 612031

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Cobalt	2.0	M2	40.0	38.9		ug/L		92	92 - 115
Molybdenum	11		40.0	51.3		ug/L		101	89 - 112

Lab Sample ID: 550-201909-20 MSD
Matrix: Water
Analysis Batch: 613435

Client Sample ID: FC-CCR-DMX01-0523
Prep Type: Total Recoverable
Prep Batch: 612031

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cobalt	2.0	M2	40.0	38.3	M2	ug/L		91	92 - 115	1	20
Molybdenum	11		40.0	49.3		ug/L		96	89 - 112	4	20

Lab Sample ID: MB 280-612170/1-A
Matrix: Water
Analysis Batch: 613435

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 612170

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	ND		1.0	ug/L		05/17/23 14:58	05/22/23 16:08	1
Molybdenum	ND		2.0	ug/L		05/17/23 14:58	05/22/23 16:08	1

Lab Sample ID: LCS 280-612170/26-A
Matrix: Water
Analysis Batch: 613435

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 612170

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cobalt	40.0	36.7		ug/L		92	92 - 115
Molybdenum	40.0	37.9		ug/L		95	89 - 112

Lab Sample ID: 550-201909-44 MS
Matrix: Water
Analysis Batch: 613435

Client Sample ID: FC-CCR-MW79S-0523
Prep Type: Total Recoverable
Prep Batch: 612170

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Cobalt	3.5	M2	40.0	37.8	M2	ug/L		86	92 - 115
Molybdenum	4.4		40.0	42.3		ug/L		95	89 - 112

Lab Sample ID: 550-201909-44 MSD
Matrix: Water
Analysis Batch: 613435

Client Sample ID: FC-CCR-MW79S-0523
Prep Type: Total Recoverable
Prep Batch: 612170

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cobalt	3.5	M2	40.0	39.9	M2	ug/L		91	92 - 115	6	20
Molybdenum	4.4		40.0	44.1		ug/L		99	89 - 112	4	20

Lab Sample ID: 550-201909-45 MS
Matrix: Water
Analysis Batch: 613435

Client Sample ID: FC-CCR-MW81-0523
Prep Type: Total Recoverable
Prep Batch: 612170

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Cobalt	19		40.0	57.4		ug/L		97	92 - 115
Molybdenum	2.1		40.0	43.8		ug/L		104	89 - 112

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: 550-201909-45 MSD
Matrix: Water
Analysis Batch: 613435

Client Sample ID: FC-CCR-MW81-0523
Prep Type: Total Recoverable
Prep Batch: 612170

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cobalt	19		40.0	55.4		ug/L		92	92 - 115	4	20
Molybdenum	2.1		40.0	42.8		ug/L		102	89 - 112	2	20

Lab Sample ID: MB 280-612469/1-A
Matrix: Water
Analysis Batch: 613118

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 612469

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0		ug/L		05/15/23 10:30	05/19/23 00:00	1
Arsenic	ND		5.0		ug/L		05/15/23 10:30	05/19/23 00:00	1
Barium	ND		3.0		ug/L		05/15/23 10:30	05/19/23 00:00	1
Cadmium	ND		1.0		ug/L		05/15/23 10:30	05/19/23 00:00	1
Chromium	ND		3.0		ug/L		05/15/23 10:30	05/19/23 00:00	1
Cobalt	ND		1.0		ug/L		05/15/23 10:30	05/19/23 00:00	1
Lead	ND		1.0		ug/L		05/15/23 10:30	05/19/23 00:00	1
Molybdenum	ND		2.0		ug/L		05/15/23 10:30	05/19/23 00:00	1
Nickel	ND		3.0		ug/L		05/15/23 10:30	05/19/23 00:00	1
Selenium	ND		5.0		ug/L		05/15/23 10:30	05/19/23 00:00	1
Thallium	ND		1.0		ug/L		05/15/23 10:30	05/19/23 00:00	1

Lab Sample ID: LCS 280-612469/25-A
Matrix: Water
Analysis Batch: 613118

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 612469

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	40.0	43.4		ug/L		109	85 - 115
Arsenic	40.0	40.4		ug/L		101	89 - 111
Barium	40.0	43.2		ug/L		108	89 - 115
Cadmium	40.0	43.8		ug/L		110	89 - 111
Chromium	40.0	41.4		ug/L		103	86 - 115
Cobalt	40.0	40.8		ug/L		102	92 - 115
Lead	40.0	42.9		ug/L		107	88 - 115
Molybdenum	40.0	41.9		ug/L		105	89 - 112
Nickel	40.0	40.6		ug/L		102	86 - 115
Selenium	40.0	43.8		ug/L		110	85 - 114
Thallium	40.0	42.2		ug/L		106	86 - 115

Lab Sample ID: 550-201909-35 MS
Matrix: Water
Analysis Batch: 613118

Client Sample ID: FC-CCR-MW30-0523
Prep Type: Total Recoverable
Prep Batch: 612469

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Cobalt	1.3		40.0	42.4		ug/L		103	92 - 115
Molybdenum	4.8		40.0	49.0		ug/L		110	89 - 112

Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: 550-201909-35 MSD
Matrix: Water
Analysis Batch: 613118

Client Sample ID: FC-CCR-MW30-0523
Prep Type: Total Recoverable
Prep Batch: 612469

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cobalt	1.3		40.0	41.7		ug/L		101	92 - 115	2	20
Molybdenum	4.8		40.0	48.7		ug/L		110	89 - 112	1	20

Lab Sample ID: 550-201909-40 MS
Matrix: Water
Analysis Batch: 613118

Client Sample ID: FC-CCR-MW57-0523
Prep Type: Total Recoverable
Prep Batch: 612469

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	ND		40.0	43.9		ug/L		110	85 - 115
Arsenic	ND		40.0	41.4		ug/L		104	79 - 120
Barium	16		40.0	58.1		ug/L		105	89 - 115
Cadmium	ND		40.0	40.6		ug/L		102	89 - 111
Chromium	ND		40.0	43.4		ug/L		108	86 - 115
Cobalt	1.5		40.0	42.3		ug/L		102	92 - 115
Lead	ND		40.0	41.6		ug/L		104	88 - 115
Molybdenum	ND		40.0	46.3		ug/L		111	89 - 112
Nickel	34		40.0	73.7		ug/L		100	86 - 115
Selenium	ND		40.0	43.6		ug/L		109	85 - 114
Thallium	ND		40.0	41.6		ug/L		104	86 - 115

Lab Sample ID: 550-201909-40 MSD
Matrix: Water
Analysis Batch: 613118

Client Sample ID: FC-CCR-MW57-0523
Prep Type: Total Recoverable
Prep Batch: 612469

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	ND		40.0	43.9		ug/L		110	85 - 115	0	20
Arsenic	ND		40.0	42.2		ug/L		105	79 - 120	2	20
Barium	16		40.0	56.7		ug/L		101	89 - 115	2	20
Cadmium	ND		40.0	40.4		ug/L		101	89 - 111	1	20
Chromium	ND		40.0	43.6		ug/L		109	86 - 115	1	20
Cobalt	1.5		40.0	42.3		ug/L		102	92 - 115	0	20
Lead	ND		40.0	40.9		ug/L		102	88 - 115	2	20
Molybdenum	ND		40.0	45.0		ug/L		108	89 - 112	3	20
Nickel	34		40.0	72.2		ug/L		97	86 - 115	2	20
Selenium	ND		40.0	44.6		ug/L		112	85 - 114	2	20
Thallium	ND		40.0	40.7		ug/L		102	86 - 115	2	20

Lab Sample ID: MB 280-612618/1-A
Matrix: Water
Analysis Batch: 613118

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 612618

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	ND		1.0		ug/L		05/18/23 07:45	05/19/23 01:05	1
Molybdenum	ND		2.0		ug/L		05/18/23 07:45	05/19/23 01:05	1

Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 280-612618/20-A
Matrix: Water
Analysis Batch: 613118

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 612618

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Cobalt			40.0	40.9		ug/L		102	92 - 115		
Molybdenum			40.0	44.1		ug/L		110	89 - 112		

Lab Sample ID: 280-176530-B-1-H MS
Matrix: Water
Analysis Batch: 613118

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 612618

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Cobalt	ND		40.0	40.6		ug/L		101	92 - 115		
Molybdenum	ND		40.0	45.1		ug/L		110	89 - 112		

Lab Sample ID: 280-176530-B-1-I MSD
Matrix: Water
Analysis Batch: 613118

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 612618

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cobalt	ND		40.0	40.8		ug/L		102	92 - 115	1	20
Molybdenum	ND		40.0	43.5		ug/L		105	89 - 112	4	20

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 550-299938/1-A
Matrix: Water
Analysis Batch: 299948

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 299938

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		05/09/23 16:26	05/09/23 19:10	1

Lab Sample ID: LCS 550-299938/2-A
Matrix: Water
Analysis Batch: 299948

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 299938

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury			0.00500	0.00503		mg/L		101	85 - 115		

Lab Sample ID: LCSD 550-299938/3-A
Matrix: Water
Analysis Batch: 299948

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 299938

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury			0.00500	0.00507		mg/L		101	85 - 115	1	20

Lab Sample ID: 550-201042-C-3-A MS
Matrix: Water
Analysis Batch: 299948

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 299938

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury	ND		0.00500	0.00502		mg/L		100	70 - 130		

Method: 245.1 - Mercury (CVAA) (Continued)

Lab Sample ID: 550-201042-C-3-B MSD
Matrix: Water
Analysis Batch: 299948

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 299938

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		0.00500	0.00489		mg/L		98	70 - 130	3	20

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 550-300214/5
Matrix: Water
Analysis Batch: 300214

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3	ND		6.0		mg/L			05/11/23 13:17	1
Alkalinity, Phenolphthalein	ND		6.0		mg/L			05/11/23 13:17	1
Bicarbonate Alkalinity as CaCO3	ND		6.0		mg/L			05/11/23 13:17	1
Carbonate Alkalinity as CaCO3	ND		6.0		mg/L			05/11/23 13:17	1
Hydroxide Alkalinity as CaCO3	ND		6.0		mg/L			05/11/23 13:17	1

Lab Sample ID: LCS 550-300214/4
Matrix: Water
Analysis Batch: 300214

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Alkalinity as CaCO3			250	250		mg/L		100	90 - 110		

Lab Sample ID: LCSD 550-300214/17
Matrix: Water
Analysis Batch: 300214

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Alkalinity as CaCO3			250	246		mg/L		98	90 - 110	2	20

Lab Sample ID: 550-201909-16 DU
Matrix: Water
Analysis Batch: 300214

Client Sample ID: FC-CCR-MW61-0523
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Alkalinity as CaCO3	97			97.5		mg/L				0.2	20
Alkalinity, Phenolphthalein	12			11.3		mg/L				2	20
Bicarbonate Alkalinity as CaCO3	74			74.8		mg/L				1	20
Carbonate Alkalinity as CaCO3	23			22.7		mg/L				2	20
Hydroxide Alkalinity as CaCO3	ND			ND		mg/L				NC	20

Lab Sample ID: 550-201909-36 DU
Matrix: Water
Analysis Batch: 300214

Client Sample ID: FC-CCR-MW36R-0523
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Alkalinity as CaCO3	220			216		mg/L				0.1	20
Alkalinity, Phenolphthalein	ND			ND		mg/L				NC	20
Bicarbonate Alkalinity as CaCO3	220			216		mg/L				0.1	20
Carbonate Alkalinity as CaCO3	ND			ND		mg/L				NC	20
Hydroxide Alkalinity as CaCO3	ND			ND		mg/L				NC	20

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 550-300412/3
Matrix: Water
Analysis Batch: 300412

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3	ND		6.0		mg/L			05/16/23 15:23	1
Alkalinity, Phenolphthalein	ND		6.0		mg/L			05/16/23 15:23	1
Bicarbonate Alkalinity as CaCO3	ND		6.0		mg/L			05/16/23 15:23	1
Carbonate Alkalinity as CaCO3	ND		6.0		mg/L			05/16/23 15:23	1
Hydroxide Alkalinity as CaCO3	ND		6.0		mg/L			05/16/23 15:23	1

Lab Sample ID: LCS 550-300412/4
Matrix: Water
Analysis Batch: 300412

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Alkalinity as CaCO3			250	252		mg/L		101	90 - 110		

Lab Sample ID: LCSD 550-300412/17
Matrix: Water
Analysis Batch: 300412

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Alkalinity as CaCO3			250	250		mg/L		100	90 - 110	1	20

Lab Sample ID: 550-201909-27 DU
Matrix: Water
Analysis Batch: 300412

Client Sample ID: FC-CCR-MW11-0523
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Alkalinity as CaCO3	870			868		mg/L				0.1	20
Alkalinity, Phenolphthalein	ND			ND		mg/L				NC	20
Bicarbonate Alkalinity as CaCO3	870			868		mg/L				0.1	20
Carbonate Alkalinity as CaCO3	ND			ND		mg/L				NC	20
Hydroxide Alkalinity as CaCO3	ND			ND		mg/L				NC	20

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 550-300048/1
Matrix: Water
Analysis Batch: 300048

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		20		mg/L			05/10/23 22:57	1

Lab Sample ID: LCS 550-300048/2
Matrix: Water
Analysis Batch: 300048

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Dissolved Solids			1000	944		mg/L		94	90 - 110		

Method: SM 2540C - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: LCSD 550-300048/3
Matrix: Water
Analysis Batch: 300048

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Dissolved Solids			1000	946		mg/L		95	90 - 110	0	10

Lab Sample ID: 550-201909-33 DU
Matrix: Water
Analysis Batch: 300048

Client Sample ID: FC-CCR-MW23R-0523
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	14000			14300		mg/L				1	10

Lab Sample ID: MB 550-300050/1
Matrix: Water
Analysis Batch: 300050

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		20		mg/L			05/10/23 23:16	1

Lab Sample ID: LCS 550-300050/2
Matrix: Water
Analysis Batch: 300050

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Dissolved Solids			1000	1000		mg/L		100	90 - 110		

Lab Sample ID: LCSD 550-300050/3
Matrix: Water
Analysis Batch: 300050

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Dissolved Solids			1000	1020		mg/L		102	90 - 110	2	10

Lab Sample ID: 550-201909-21 DU
Matrix: Water
Analysis Batch: 300050

Client Sample ID: FC-CCR-DMX03-0523
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	21000			19600		mg/L				4	10

Lab Sample ID: MB 550-300137/1
Matrix: Water
Analysis Batch: 300137

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		20		mg/L			05/11/23 21:58	1

Lab Sample ID: LCS 550-300137/2
Matrix: Water
Analysis Batch: 300137

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Dissolved Solids			1000	1010		mg/L		101	90 - 110		

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: LCSD 550-300137/3
Matrix: Water
Analysis Batch: 300137

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Dissolved Solids			1000	1000		mg/L		100	90 - 110	1	10

Lab Sample ID: 550-201909-22 DU
Matrix: Water
Analysis Batch: 300137

Client Sample ID: FC-CCR-DMX04-0523
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	11000			10100		mg/L				7	10

Lab Sample ID: MB 550-300207/1
Matrix: Water
Analysis Batch: 300207

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		20		mg/L			05/12/23 19:33	1

Lab Sample ID: LCS 550-300207/2
Matrix: Water
Analysis Batch: 300207

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Dissolved Solids			1000	1000		mg/L		100	90 - 110		

Lab Sample ID: LCSD 550-300207/3
Matrix: Water
Analysis Batch: 300207

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Dissolved Solids			1000	1020		mg/L		101	90 - 110	2	10

Lab Sample ID: 550-201909-37 DU
Matrix: Water
Analysis Batch: 300207

Client Sample ID: FC-CCR-MW38R-0523
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	8900			8600		mg/L				3	10

Lab Sample ID: MB 550-300208/1
Matrix: Water
Analysis Batch: 300208

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		20		mg/L			05/12/23 21:08	1

Lab Sample ID: LCS 550-300208/2
Matrix: Water
Analysis Batch: 300208

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Dissolved Solids			1000	1020		mg/L		101	90 - 110		

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: LCSD 550-300208/3
Matrix: Water
Analysis Batch: 300208

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Dissolved Solids			1000	1020		mg/L		102	90 - 110	1	10

Lab Sample ID: 550-201909-2 DU
Matrix: Water
Analysis Batch: 300208

Client Sample ID: FC-CCR-MW63-0523
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	3400			3250		mg/L				3	10

Lab Sample ID: 550-201909-56 DU
Matrix: Water
Analysis Batch: 300208

Client Sample ID: FC-CCR-SUMP11-0523
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	8300			8100		mg/L				3	10

Lab Sample ID: MB 550-300213/1
Matrix: Water
Analysis Batch: 300213

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	26.0	B7	20		mg/L			05/13/23 15:46	1

Lab Sample ID: LCS 550-300213/2
Matrix: Water
Analysis Batch: 300213

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Dissolved Solids			1000	1000		mg/L		100	90 - 110		

Lab Sample ID: LCSD 550-300213/3
Matrix: Water
Analysis Batch: 300213

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Dissolved Solids			1000	1010		mg/L		100	90 - 110	1	10

Lab Sample ID: 550-201909-12 DU
Matrix: Water
Analysis Batch: 300213

Client Sample ID: FC-CCR-MW83-0523
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	5300	B7		5250		mg/L				1	10

Method: SM 4500 H+ B - pH

Lab Sample ID: LCSSRM 550-300005/1
Matrix: Water
Analysis Batch: 300005

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
pH	7.00	6.9		SU		99.0	98.5 - 101.5

Lab Sample ID: LCSSRM 550-300005/13
Matrix: Water
Analysis Batch: 300005

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
pH	7.00	7.0		SU		99.3	98.5 - 101.5

Lab Sample ID: LCSSRM 550-300005/25
Matrix: Water
Analysis Batch: 300005

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
pH	7.00	7.0		SU		99.4	98.5 - 101.5

Lab Sample ID: LCSSRM 550-300005/37
Matrix: Water
Analysis Batch: 300005

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
pH	7.00	7.0		SU		99.3	98.5 - 101.5

Lab Sample ID: LCSSRM 550-300005/49
Matrix: Water
Analysis Batch: 300005

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
pH	7.00	7.0		SU		99.4	98.5 - 101.5

Lab Sample ID: 550-201909-4 DU
Matrix: Water
Analysis Batch: 300005

Client Sample ID: FC-CCR-MW65-0523
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH	7.6	H5	7.6	H5	SU		0.1	5
Temperature	8.8	H5 T5	8.8	H5	Degrees C		0	

Lab Sample ID: 550-201909-14 DU
Matrix: Water
Analysis Batch: 300005

Client Sample ID: FC-CCR-FD02-0523
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH	7.3	H5	7.3	H5	SU		0	5
Temperature	11.0	H5 T5	10.9	H5	Degrees C		0.9	

Method: SM 4500 H+ B - pH (Continued)

Lab Sample ID: 550-201909-30 DU
Matrix: Water
Analysis Batch: 300005

Client Sample ID: FC-CCR-MW18-0523
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
pH	7.1	H5		7.1	H5	SU				0.1	5
Temperature	9.3	H5 T5		9.6	H5	Degrees C				3	

HPLC/IC

Analysis Batch: 300790

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-201909-1	FC-CCR-MW62-0523	Total/NA	Water	300.0	
550-201909-2	FC-CCR-MW63-0523	Total/NA	Water	300.0	
550-201909-3	FC-CCR-MW64-0523	Total/NA	Water	300.0	
550-201909-4	FC-CCR-MW65-0523	Total/NA	Water	300.0	
550-201909-5	FC-CCR-SW1-0523	Total/NA	Water	300.0	
550-201909-5	FC-CCR-SW1-0523	Total/NA	Water	300.0	
550-201909-6	FC-CCR-SW2-0523	Total/NA	Water	300.0	
550-201909-6	FC-CCR-SW2-0523	Total/NA	Water	300.0	
550-201909-7	FC-CCR-SW3-0523	Total/NA	Water	300.0	
550-201909-7	FC-CCR-SW3-0523	Total/NA	Water	300.0	
550-201909-8	FC-CCR-FD08-0523	Total/NA	Water	300.0	
550-201909-8	FC-CCR-FD08-0523	Total/NA	Water	300.0	
550-201909-9	FC-CCR-MW66-0523	Total/NA	Water	300.0	
550-201909-10	FC-CCR-MW70-0523	Total/NA	Water	300.0	
550-201909-11	FC-CCR-MW73-0523	Total/NA	Water	300.0	
550-201909-12	FC-CCR-MW83-0523	Total/NA	Water	300.0	
550-201909-12	FC-CCR-MW83-0523	Total/NA	Water	300.0	
550-201909-13	FC-CCR-MW86-0523	Total/NA	Water	300.0	
MB 550-300790/2	Method Blank	Total/NA	Water	300.0	
LCS 550-300790/5	Lab Control Sample	Total/NA	Water	300.0	
LCSD 550-300790/6	Lab Control Sample Dup	Total/NA	Water	300.0	
550-201978-F-9 MS ^10	Matrix Spike	Total/NA	Water	300.0	
550-201978-F-9 MSD ^10	Matrix Spike Duplicate	Total/NA	Water	300.0	

Analysis Batch: 300792

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-201909-14	FC-CCR-FD02-0523	Total/NA	Water	300.0	
550-201909-16	FC-CCR-MW61-0523	Total/NA	Water	300.0	
550-201909-16	FC-CCR-MW61-0523	Total/NA	Water	300.0	
MB 550-300792/2	Method Blank	Total/NA	Water	300.0	
LCS 550-300792/5	Lab Control Sample	Total/NA	Water	300.0	
LCSD 550-300792/6	Lab Control Sample Dup	Total/NA	Water	300.0	
550-201978-F-11 MS ^20	Matrix Spike	Total/NA	Water	300.0	
550-201978-F-11 MSD ^20	Matrix Spike Duplicate	Total/NA	Water	300.0	

Analysis Batch: 300895

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-201909-21	FC-CCR-DMX03-0523	Total/NA	Water	300.0	
550-201909-22	FC-CCR-DMX04-0523	Total/NA	Water	300.0	
550-201909-22	FC-CCR-DMX04-0523	Total/NA	Water	300.0	
550-201909-25	FC-CCR-MW05-0523	Total/NA	Water	300.0	
550-201909-26	FC-CCR-MW06-0523	Total/NA	Water	300.0	
550-201909-26	FC-CCR-MW06-0523	Total/NA	Water	300.0	
550-201909-27	FC-CCR-MW11-0523	Total/NA	Water	300.0	
550-201909-27	FC-CCR-MW11-0523	Total/NA	Water	300.0	
550-201909-29	FC-CCR-MW17R-0523	Total/NA	Water	300.0	
550-201909-29	FC-CCR-MW17R-0523	Total/NA	Water	300.0	
550-201909-30	FC-CCR-MW18-0523	Total/NA	Water	300.0	
550-201909-33	FC-CCR-MW23R-0523	Total/NA	Water	300.0	
MB 550-300895/2	Method Blank	Total/NA	Water	300.0	
LCS 550-300895/5	Lab Control Sample	Total/NA	Water	300.0	

HPLC/IC (Continued)

Analysis Batch: 300895 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 550-300895/6	Lab Control Sample Dup	Total/NA	Water	300.0	

Analysis Batch: 300896

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-201909-17	FC-CCR-MW75-0523	Total/NA	Water	300.0	
550-201909-17	FC-CCR-MW75-0523	Total/NA	Water	300.0	
550-201909-18	FC-CCR-MW87-0523	Total/NA	Water	300.0	
MB 550-300896/2	Method Blank	Total/NA	Water	300.0	
LCS 550-300896/5	Lab Control Sample	Total/NA	Water	300.0	
LCSD 550-300896/6	Lab Control Sample Dup	Total/NA	Water	300.0	
550-202566-A-1 MS	Matrix Spike	Total/NA	Water	300.0	
550-202566-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Analysis Batch: 300898

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-201909-34	FC-CCR-MW24-0523	Total/NA	Water	300.0	
550-201909-34	FC-CCR-MW24-0523	Total/NA	Water	300.0	
550-201909-36	FC-CCR-MW36R-0523	Total/NA	Water	300.0	
550-201909-37	FC-CCR-MW38R-0523	Total/NA	Water	300.0	
550-201909-37	FC-CCR-MW38R-0523	Total/NA	Water	300.0	
MB 550-300898/2	Method Blank	Total/NA	Water	300.0	
LCS 550-300898/5	Lab Control Sample	Total/NA	Water	300.0	
LCSD 550-300898/6	Lab Control Sample Dup	Total/NA	Water	300.0	
550-202569-A-1 MS	Matrix Spike	Total/NA	Water	300.0	
550-202569-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Analysis Batch: 300996

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-201909-38	FC-CCR-MW56-0523	Total/NA	Water	300.0	
550-201909-40	FC-CCR-MW57-0523	Total/NA	Water	300.0	
550-201909-46	FC-CCR-MW82S-0523	Total/NA	Water	300.0	
550-201909-49	FC-CCR-SUMP1-0523	Total/NA	Water	300.0	
550-201909-50	FC-CCR-SUMP2-0523	Total/NA	Water	300.0	
550-201909-51	FC-CCR-SUMP3-0523	Total/NA	Water	300.0	
550-201909-52	FC-CCR-SUMP7-0523	Total/NA	Water	300.0	
550-201909-53	FC-CCR-SUMP8-0523	Total/NA	Water	300.0	
550-201909-54	FC-CCR-SUMP9-0523	Total/NA	Water	300.0	
550-201909-55	FC-CCR-SUMP10-0523	Total/NA	Water	300.0	
550-201909-56	FC-CCR-SUMP11-0523	Total/NA	Water	300.0	
550-201909-57	FC-CCR-SUMP12-0523	Total/NA	Water	300.0	
550-201909-58	FC-CCR-SUMP13-0523	Total/NA	Water	300.0	
550-201909-59	FC-CCR-SUMP14-0523	Total/NA	Water	300.0	
550-201909-60	FC-CCR-SUMP15-0523	Total/NA	Water	300.0	
550-201909-61	FC-CCR-SUMP16-0523	Total/NA	Water	300.0	
550-201909-62	FC-CCR-SUMP17-0523	Total/NA	Water	300.0	
550-201909-63	FC-CCR-SUMP18-0523	Total/NA	Water	300.0	
MB 550-300996/2	Method Blank	Total/NA	Water	300.0	
LCS 550-300996/5	Lab Control Sample	Total/NA	Water	300.0	
LCSD 550-300996/6	Lab Control Sample Dup	Total/NA	Water	300.0	
550-201909-49 MS	FC-CCR-SUMP1-0523	Total/NA	Water	300.0	
550-201909-49 MSD	FC-CCR-SUMP1-0523	Total/NA	Water	300.0	

Metals

Prep Batch: 299938

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-201909-1	FC-CCR-MW62-0523	Total/NA	Water	245.1	
550-201909-2	FC-CCR-MW63-0523	Total/NA	Water	245.1	
550-201909-3	FC-CCR-MW64-0523	Total/NA	Water	245.1	
550-201909-4	FC-CCR-MW65-0523	Total/NA	Water	245.1	
550-201909-5	FC-CCR-SW1-0523	Total/NA	Water	245.1	
550-201909-6	FC-CCR-SW2-0523	Total/NA	Water	245.1	
550-201909-7	FC-CCR-SW3-0523	Total/NA	Water	245.1	
550-201909-8	FC-CCR-FD08-0523	Total/NA	Water	245.1	
550-201909-9	FC-CCR-MW66-0523	Total/NA	Water	245.1	
550-201909-10	FC-CCR-MW70-0523	Total/NA	Water	245.1	
550-201909-11	FC-CCR-MW73-0523	Total/NA	Water	245.1	
550-201909-12	FC-CCR-MW83-0523	Total/NA	Water	245.1	
550-201909-13	FC-CCR-MW86-0523	Total/NA	Water	245.1	
550-201909-14	FC-CCR-FD02-0523	Total/NA	Water	245.1	
550-201909-16	FC-CCR-MW61-0523	Total/NA	Water	245.1	
550-201909-17	FC-CCR-MW75-0523	Total/NA	Water	245.1	
550-201909-18	FC-CCR-MW87-0523	Total/NA	Water	245.1	
MB 550-299938/1-A	Method Blank	Total/NA	Water	245.1	
LCS 550-299938/2-A	Lab Control Sample	Total/NA	Water	245.1	
LCSD 550-299938/3-A	Lab Control Sample Dup	Total/NA	Water	245.1	
550-201042-C-3-A MS	Matrix Spike	Total/NA	Water	245.1	
550-201042-C-3-B MSD	Matrix Spike Duplicate	Total/NA	Water	245.1	

Analysis Batch: 299948

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-201909-1	FC-CCR-MW62-0523	Total/NA	Water	245.1	299938
550-201909-2	FC-CCR-MW63-0523	Total/NA	Water	245.1	299938
550-201909-3	FC-CCR-MW64-0523	Total/NA	Water	245.1	299938
550-201909-4	FC-CCR-MW65-0523	Total/NA	Water	245.1	299938
550-201909-5	FC-CCR-SW1-0523	Total/NA	Water	245.1	299938
550-201909-6	FC-CCR-SW2-0523	Total/NA	Water	245.1	299938
550-201909-7	FC-CCR-SW3-0523	Total/NA	Water	245.1	299938
550-201909-8	FC-CCR-FD08-0523	Total/NA	Water	245.1	299938
550-201909-9	FC-CCR-MW66-0523	Total/NA	Water	245.1	299938
550-201909-10	FC-CCR-MW70-0523	Total/NA	Water	245.1	299938
550-201909-11	FC-CCR-MW73-0523	Total/NA	Water	245.1	299938
550-201909-12	FC-CCR-MW83-0523	Total/NA	Water	245.1	299938
550-201909-13	FC-CCR-MW86-0523	Total/NA	Water	245.1	299938
550-201909-14	FC-CCR-FD02-0523	Total/NA	Water	245.1	299938
550-201909-16	FC-CCR-MW61-0523	Total/NA	Water	245.1	299938
550-201909-17	FC-CCR-MW75-0523	Total/NA	Water	245.1	299938
550-201909-18	FC-CCR-MW87-0523	Total/NA	Water	245.1	299938
MB 550-299938/1-A	Method Blank	Total/NA	Water	245.1	299938
LCS 550-299938/2-A	Lab Control Sample	Total/NA	Water	245.1	299938
LCSD 550-299938/3-A	Lab Control Sample Dup	Total/NA	Water	245.1	299938
550-201042-C-3-A MS	Matrix Spike	Total/NA	Water	245.1	299938
550-201042-C-3-B MSD	Matrix Spike Duplicate	Total/NA	Water	245.1	299938

Prep Batch: 612031

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-201909-1	FC-CCR-MW62-0523	Total Recoverable	Water	200.7	

Metals (Continued)

Prep Batch: 612031 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-201909-1	FC-CCR-MW62-0523	Total/NA	Water	200.7	
550-201909-2	FC-CCR-MW63-0523	Total Recoverable	Water	200.7	
550-201909-2	FC-CCR-MW63-0523	Total/NA	Water	200.7	
550-201909-3	FC-CCR-MW64-0523	Total Recoverable	Water	200.7	
550-201909-3	FC-CCR-MW64-0523	Total/NA	Water	200.7	
550-201909-4	FC-CCR-MW65-0523	Total Recoverable	Water	200.7	
550-201909-4	FC-CCR-MW65-0523	Total/NA	Water	200.7	
550-201909-5	FC-CCR-SW1-0523	Total Recoverable	Water	200.7	
550-201909-5	FC-CCR-SW1-0523	Total/NA	Water	200.7	
550-201909-6	FC-CCR-SW2-0523	Total Recoverable	Water	200.7	
550-201909-6	FC-CCR-SW2-0523	Total/NA	Water	200.7	
550-201909-7	FC-CCR-SW3-0523	Total Recoverable	Water	200.7	
550-201909-7	FC-CCR-SW3-0523	Total/NA	Water	200.7	
550-201909-8	FC-CCR-FD08-0523	Total Recoverable	Water	200.7	
550-201909-8	FC-CCR-FD08-0523	Total/NA	Water	200.7	
550-201909-9	FC-CCR-MW66-0523	Total Recoverable	Water	200.7	
550-201909-9	FC-CCR-MW66-0523	Total/NA	Water	200.7	
550-201909-10	FC-CCR-MW70-0523	Total Recoverable	Water	200.7	
550-201909-10	FC-CCR-MW70-0523	Total/NA	Water	200.7	
550-201909-11	FC-CCR-MW73-0523	Total Recoverable	Water	200.7	
550-201909-11	FC-CCR-MW73-0523	Total/NA	Water	200.7	
550-201909-12	FC-CCR-MW83-0523	Total Recoverable	Water	200.7	
550-201909-12	FC-CCR-MW83-0523	Total/NA	Water	200.7	
550-201909-13	FC-CCR-MW86-0523	Total Recoverable	Water	200.7	
550-201909-13	FC-CCR-MW86-0523	Total/NA	Water	200.7	
550-201909-14	FC-CCR-FD02-0523	Total Recoverable	Water	200.7	
550-201909-14	FC-CCR-FD02-0523	Total/NA	Water	200.7	
550-201909-15	FC-CCR-MW52-0523	Total Recoverable	Water	200.8	
550-201909-16	FC-CCR-MW61-0523	Total Recoverable	Water	200.7	
550-201909-16	FC-CCR-MW61-0523	Total/NA	Water	200.7	
550-201909-17	FC-CCR-MW75-0523	Total Recoverable	Water	200.7	
550-201909-17	FC-CCR-MW75-0523	Total/NA	Water	200.7	
550-201909-18	FC-CCR-MW87-0523	Total Recoverable	Water	200.7	
550-201909-18	FC-CCR-MW87-0523	Total/NA	Water	200.7	
550-201909-19	FC-CCR-FD03-0523	Total Recoverable	Water	200.7	
550-201909-20	FC-CCR-DMX01-0523	Total Recoverable	Water	200.8	
MB 280-612031/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 280-612031/25-A	Lab Control Sample	Total Recoverable	Water	200.7	
LCS 280-612031/2-A	Lab Control Sample	Total Recoverable	Water	200.7	
550-201909-1 MS	FC-CCR-MW62-0523	Total/NA	Water	200.7	
550-201909-1 MSD	FC-CCR-MW62-0523	Total/NA	Water	200.7	
550-201909-2 MS	FC-CCR-MW63-0523	Total/NA	Water	200.7	
550-201909-2 MSD	FC-CCR-MW63-0523	Total/NA	Water	200.7	
550-201909-15 MS	FC-CCR-MW52-0523	Total Recoverable	Water	200.8	
550-201909-15 MSD	FC-CCR-MW52-0523	Total Recoverable	Water	200.8	
550-201909-20 MS	FC-CCR-DMX01-0523	Total Recoverable	Water	200.8	
550-201909-20 MSD	FC-CCR-DMX01-0523	Total Recoverable	Water	200.8	

Prep Batch: 612170

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-201909-41	FC-CCR-MW60-0523	Total Recoverable	Water	200.7	

Metals (Continued)

Prep Batch: 612170 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-201909-42	FC-CCR-MW77S-0523	Total Recoverable	Water	200.8	
550-201909-43	FC-CCR-MW78S-0523	Total Recoverable	Water	200.7	
550-201909-44	FC-CCR-MW79S-0523	Total Recoverable	Water	200.8	
550-201909-44	FC-CCR-MW79S-0523	Total Recoverable	Water	200.8	
550-201909-45	FC-CCR-MW81-0523	Total Recoverable	Water	200.8	
550-201909-46	FC-CCR-MW82S-0523	Total Recoverable	Water	200.7	
550-201909-47	FC-CCR-FD07-0523	Total Recoverable	Water	200.7	
550-201909-48	FC-CCR-FD05-0523	Total Recoverable	Water	200.7	
550-201909-49	FC-CCR-SUMP1-0523	Total Recoverable	Water	200.7	
550-201909-50	FC-CCR-SUMP2-0523	Total Recoverable	Water	200.7	
550-201909-51	FC-CCR-SUMP3-0523	Total Recoverable	Water	200.7	
550-201909-52	FC-CCR-SUMP7-0523	Total Recoverable	Water	200.7	
550-201909-53	FC-CCR-SUMP8-0523	Total Recoverable	Water	200.7	
550-201909-54	FC-CCR-SUMP9-0523	Total Recoverable	Water	200.7	
550-201909-55	FC-CCR-SUMP10-0523	Total Recoverable	Water	200.7	
550-201909-56	FC-CCR-SUMP11-0523	Total Recoverable	Water	200.7	
550-201909-57	FC-CCR-SUMP12-0523	Total Recoverable	Water	200.7	
550-201909-58	FC-CCR-SUMP13-0523	Total Recoverable	Water	200.7	
550-201909-59	FC-CCR-SUMP14-0523	Total Recoverable	Water	200.7	
550-201909-60	FC-CCR-SUMP15-0523	Total Recoverable	Water	200.7	
MB 280-612170/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 280-612170/26-A	Lab Control Sample	Total Recoverable	Water	200.7	
LCS 280-612170/2-B	Lab Control Sample	Total Recoverable	Water	200.7	
550-201909-41 MS	FC-CCR-MW60-0523	Total Recoverable	Water	200.7	
550-201909-41 MSD	FC-CCR-MW60-0523	Total Recoverable	Water	200.7	
550-201909-42 MS	FC-CCR-MW77S-0523	Total Recoverable	Water	200.7	
550-201909-42 MSD	FC-CCR-MW77S-0523	Total Recoverable	Water	200.7	
550-201909-44 MS	FC-CCR-MW79S-0523	Total Recoverable	Water	200.8	
550-201909-44 MSD	FC-CCR-MW79S-0523	Total Recoverable	Water	200.8	
550-201909-45 MS	FC-CCR-MW81-0523	Total Recoverable	Water	200.8	
550-201909-45 MSD	FC-CCR-MW81-0523	Total Recoverable	Water	200.8	

Prep Batch: 612469

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-201909-21	FC-CCR-DMX03-0523	Total Recoverable	Water	200.7	
550-201909-21	FC-CCR-DMX03-0523	Total/NA	Water	200.7	
550-201909-22	FC-CCR-DMX04-0523	Total Recoverable	Water	200.7	
550-201909-22	FC-CCR-DMX04-0523	Total/NA	Water	200.7	
550-201909-23	FC-CCR-MW01-0523	Total Recoverable	Water	200.7	
550-201909-24	FC-CCR-MW03-0523	Total Recoverable	Water	200.7	
550-201909-25	FC-CCR-MW05-0523	Total Recoverable	Water	200.7	
550-201909-25	FC-CCR-MW05-0523	Total/NA	Water	200.7	
550-201909-26	FC-CCR-MW06-0523	Total Recoverable	Water	200.7	
550-201909-26	FC-CCR-MW06-0523	Total/NA	Water	200.7	
550-201909-27	FC-CCR-MW11-0523	Total Recoverable	Water	200.7	
550-201909-28	FC-CCR-FD04-0523	Total Recoverable	Water	200.8	
550-201909-29	FC-CCR-MW17R-0523	Total Recoverable	Water	200.7	
550-201909-29	FC-CCR-MW17R-0523	Total/NA	Water	200.7	
550-201909-30	FC-CCR-MW18-0523	Total Recoverable	Water	200.7	
550-201909-30	FC-CCR-MW18-0523	Total/NA	Water	200.7	
550-201909-31	FC-CCR-MW19-0523	Total Recoverable	Water	200.8	

Metals (Continued)

Prep Batch: 612469 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-201909-32	FC-CCR-MW21-0523	Total Recoverable	Water	200.7	
550-201909-33	FC-CCR-MW23R-0523	Total Recoverable	Water	200.7	
550-201909-33	FC-CCR-MW23R-0523	Total/NA	Water	200.7	
550-201909-34	FC-CCR-MW24-0523	Total Recoverable	Water	200.7	
550-201909-34	FC-CCR-MW24-0523	Total/NA	Water	200.7	
550-201909-35	FC-CCR-MW30-0523	Total Recoverable	Water	200.8	
550-201909-36	FC-CCR-MW36R-0523	Total Recoverable	Water	200.7	
550-201909-36	FC-CCR-MW36R-0523	Total/NA	Water	200.7	
550-201909-37	FC-CCR-MW38R-0523	Total Recoverable	Water	200.7	
550-201909-37	FC-CCR-MW38R-0523	Total/NA	Water	200.7	
550-201909-38	FC-CCR-MW56-0523	Total Recoverable	Water	200.7	
550-201909-38	FC-CCR-MW56-0523	Total/NA	Water	200.7	
550-201909-39	FC-CCR-FD06-0523	Total Recoverable	Water	200.7	
550-201909-40	FC-CCR-MW57-0523	Total Recoverable	Water	200.7	
550-201909-40	FC-CCR-MW57-0523	Total/NA	Water	200.7	
MB 280-612469/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 280-612469/25-A	Lab Control Sample	Total Recoverable	Water	200.7	
LCS 280-612469/2-A	Lab Control Sample	Total Recoverable	Water	200.7	
550-201909-21 MS	FC-CCR-DMX03-0523	Total Recoverable	Water	200.7	
550-201909-21 MS	FC-CCR-DMX03-0523	Total/NA	Water	200.7	
550-201909-21 MSD	FC-CCR-DMX03-0523	Total Recoverable	Water	200.7	
550-201909-21 MSD	FC-CCR-DMX03-0523	Total/NA	Water	200.7	
550-201909-22 MS	FC-CCR-DMX04-0523	Total/NA	Water	200.7	
550-201909-22 MSD	FC-CCR-DMX04-0523	Total/NA	Water	200.7	
550-201909-35 MS	FC-CCR-MW30-0523	Total Recoverable	Water	200.8	
550-201909-35 MSD	FC-CCR-MW30-0523	Total Recoverable	Water	200.8	
550-201909-40 MS	FC-CCR-MW57-0523	Total Recoverable	Water	200.8	
550-201909-40 MSD	FC-CCR-MW57-0523	Total Recoverable	Water	200.8	

Prep Batch: 612618

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-201909-61	FC-CCR-SUMP16-0523	Total Recoverable	Water	200.7	
550-201909-62	FC-CCR-SUMP17-0523	Total Recoverable	Water	200.7	
550-201909-63	FC-CCR-SUMP18-0523	Total Recoverable	Water	200.7	
MB 280-612618/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 280-612618/20-A	Lab Control Sample	Total Recoverable	Water	200.7	
LCS 280-612618/2-A	Lab Control Sample	Total Recoverable	Water	200.7	
280-176512-I-3-B MS	Matrix Spike	Total Recoverable	Water	200.7	
280-176512-I-3-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	200.7	
280-176530-B-1-H MS	Matrix Spike	Total Recoverable	Water	200.8	
280-176530-B-1-I MSD	Matrix Spike Duplicate	Total Recoverable	Water	200.8	

Analysis Batch: 613118

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-201909-21	FC-CCR-DMX03-0523	Total Recoverable	Water	200.8	612469
550-201909-22	FC-CCR-DMX04-0523	Total Recoverable	Water	200.8	612469
550-201909-23	FC-CCR-MW01-0523	Total Recoverable	Water	200.8	612469
550-201909-24	FC-CCR-MW03-0523	Total Recoverable	Water	200.8	612469
550-201909-25	FC-CCR-MW05-0523	Total Recoverable	Water	200.8	612469
550-201909-26	FC-CCR-MW06-0523	Total Recoverable	Water	200.8	612469
550-201909-27	FC-CCR-MW11-0523	Total Recoverable	Water	200.8	

Metals (Continued)

Analysis Batch: 613118 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-201909-28	FC-CCR-FD04-0523	Total Recoverable	Water	200.8	612469
550-201909-29	FC-CCR-MW17R-0523	Total Recoverable	Water	200.8	612469
550-201909-30	FC-CCR-MW18-0523	Total Recoverable	Water	200.8	612469
550-201909-31	FC-CCR-MW19-0523	Total Recoverable	Water	200.8	612469
550-201909-32	FC-CCR-MW21-0523	Total Recoverable	Water	200.8	612469
550-201909-33	FC-CCR-MW23R-0523	Total Recoverable	Water	200.8	612469
550-201909-34	FC-CCR-MW24-0523	Total Recoverable	Water	200.8	612469
550-201909-35	FC-CCR-MW30-0523	Total Recoverable	Water	200.8	612469
550-201909-36	FC-CCR-MW36R-0523	Total Recoverable	Water	200.8	612469
550-201909-37	FC-CCR-MW38R-0523	Total Recoverable	Water	200.8	612469
550-201909-38	FC-CCR-MW56-0523	Total Recoverable	Water	200.8	612469
550-201909-39	FC-CCR-FD06-0523	Total Recoverable	Water	200.8	612469
550-201909-40	FC-CCR-MW57-0523	Total Recoverable	Water	200.8	612469
550-201909-61	FC-CCR-SUMP16-0523	Total Recoverable	Water	200.8	612618
550-201909-62	FC-CCR-SUMP17-0523	Total Recoverable	Water	200.8	612618
550-201909-63	FC-CCR-SUMP18-0523	Total Recoverable	Water	200.8	612618
MB 280-612469/1-A	Method Blank	Total Recoverable	Water	200.8	612469
MB 280-612618/1-A	Method Blank	Total Recoverable	Water	200.8	612618
LCS 280-612469/25-A	Lab Control Sample	Total Recoverable	Water	200.8	612469
LCS 280-612618/20-A	Lab Control Sample	Total Recoverable	Water	200.8	612618
280-176530-B-1-H MS	Matrix Spike	Total Recoverable	Water	200.8	612618
280-176530-B-1-I MSD	Matrix Spike Duplicate	Total Recoverable	Water	200.8	612618
550-201909-35 MS	FC-CCR-MW30-0523	Total Recoverable	Water	200.8	612469
550-201909-35 MSD	FC-CCR-MW30-0523	Total Recoverable	Water	200.8	612469
550-201909-40 MS	FC-CCR-MW57-0523	Total Recoverable	Water	200.8	612469
550-201909-40 MSD	FC-CCR-MW57-0523	Total Recoverable	Water	200.8	612469

Analysis Batch: 613151

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-201909-42	FC-CCR-MW77S-0523	Total Recoverable	Water	200.7 Rev 4.4	612170
550-201909-43	FC-CCR-MW78S-0523	Total Recoverable	Water	200.7 Rev 4.4	612170
550-201909-44	FC-CCR-MW79S-0523	Total Recoverable	Water	200.7 Rev 4.4	612170
550-201909-46	FC-CCR-MW82S-0523	Total Recoverable	Water	200.7 Rev 4.4	612170
550-201909-47	FC-CCR-FD07-0523	Total Recoverable	Water	200.7 Rev 4.4	612170
550-201909-48	FC-CCR-FD05-0523	Total Recoverable	Water	200.7 Rev 4.4	612170
550-201909-49	FC-CCR-SUMP1-0523	Total Recoverable	Water	200.7 Rev 4.4	612170
550-201909-50	FC-CCR-SUMP2-0523	Total Recoverable	Water	200.7 Rev 4.4	612170
550-201909-51	FC-CCR-SUMP3-0523	Total Recoverable	Water	200.7 Rev 4.4	612170
550-201909-52	FC-CCR-SUMP7-0523	Total Recoverable	Water	200.7 Rev 4.4	612170
550-201909-53	FC-CCR-SUMP8-0523	Total Recoverable	Water	200.7 Rev 4.4	612170
550-201909-54	FC-CCR-SUMP9-0523	Total Recoverable	Water	200.7 Rev 4.4	612170
550-201909-55	FC-CCR-SUMP10-0523	Total Recoverable	Water	200.7 Rev 4.4	612170
550-201909-56	FC-CCR-SUMP11-0523	Total Recoverable	Water	200.7 Rev 4.4	612170
550-201909-57	FC-CCR-SUMP12-0523	Total Recoverable	Water	200.7 Rev 4.4	612170
550-201909-58	FC-CCR-SUMP13-0523	Total Recoverable	Water	200.7 Rev 4.4	612170
550-201909-59	FC-CCR-SUMP14-0523	Total Recoverable	Water	200.7 Rev 4.4	612170
550-201909-60	FC-CCR-SUMP15-0523	Total Recoverable	Water	200.7 Rev 4.4	612170
MB 280-612170/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	612170
LCS 280-612170/2-B	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	612170
550-201909-42 MS	FC-CCR-MW77S-0523	Total Recoverable	Water	200.7 Rev 4.4	612170
550-201909-42 MSD	FC-CCR-MW77S-0523	Total Recoverable	Water	200.7 Rev 4.4	612170

Metals

Analysis Batch: 613158

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-201909-18	FC-CCR-MW87-0523	Total Recoverable	Water	200.7 Rev 4.4	612031

Analysis Batch: 613435

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-201909-1	FC-CCR-MW62-0523	Total Recoverable	Water	200.8	612031
550-201909-2	FC-CCR-MW63-0523	Total Recoverable	Water	200.8	612031
550-201909-3	FC-CCR-MW64-0523	Total Recoverable	Water	200.8	612031
550-201909-4	FC-CCR-MW65-0523	Total Recoverable	Water	200.8	612031
550-201909-5	FC-CCR-SW1-0523	Total Recoverable	Water	200.8	612031
550-201909-6	FC-CCR-SW2-0523	Total Recoverable	Water	200.8	612031
550-201909-7	FC-CCR-SW3-0523	Total Recoverable	Water	200.8	612031
550-201909-8	FC-CCR-FD08-0523	Total Recoverable	Water	200.8	612031
550-201909-9	FC-CCR-MW66-0523	Total Recoverable	Water	200.8	612031
550-201909-10	FC-CCR-MW70-0523	Total Recoverable	Water	200.8	612031
550-201909-11	FC-CCR-MW73-0523	Total Recoverable	Water	200.8	612031
550-201909-12	FC-CCR-MW83-0523	Total Recoverable	Water	200.8	612031
550-201909-13	FC-CCR-MW86-0523	Total Recoverable	Water	200.8	612031
550-201909-14	FC-CCR-FD02-0523	Total Recoverable	Water	200.8	612031
550-201909-15	FC-CCR-MW52-0523	Total Recoverable	Water	200.8	612031
550-201909-16	FC-CCR-MW61-0523	Total Recoverable	Water	200.8	612031
550-201909-17	FC-CCR-MW75-0523	Total Recoverable	Water	200.8	612031
550-201909-18	FC-CCR-MW87-0523	Total Recoverable	Water	200.8	612031
550-201909-19	FC-CCR-FD03-0523	Total Recoverable	Water	200.8	612031
550-201909-20	FC-CCR-DMX01-0523	Total Recoverable	Water	200.8	612031
550-201909-41	FC-CCR-MW60-0523	Total Recoverable	Water	200.8	612170
550-201909-43	FC-CCR-MW78S-0523	Total Recoverable	Water	200.8	612170
550-201909-44	FC-CCR-MW79S-0523	Total Recoverable	Water	200.8	612170
550-201909-45	FC-CCR-MW81-0523	Total Recoverable	Water	200.8	612170
550-201909-46	FC-CCR-MW82S-0523	Total Recoverable	Water	200.8	612170
550-201909-47	FC-CCR-FD07-0523	Total Recoverable	Water	200.8	612170
550-201909-48	FC-CCR-FD05-0523	Total Recoverable	Water	200.8	612170
550-201909-49	FC-CCR-SUMP1-0523	Total Recoverable	Water	200.8	612170
550-201909-50	FC-CCR-SUMP2-0523	Total Recoverable	Water	200.8	612170
550-201909-51	FC-CCR-SUMP3-0523	Total Recoverable	Water	200.8	612170
550-201909-52	FC-CCR-SUMP7-0523	Total Recoverable	Water	200.8	612170
550-201909-53	FC-CCR-SUMP8-0523	Total Recoverable	Water	200.8	612170
550-201909-54	FC-CCR-SUMP9-0523	Total Recoverable	Water	200.8	612170
550-201909-55	FC-CCR-SUMP10-0523	Total Recoverable	Water	200.8	612170
550-201909-56	FC-CCR-SUMP11-0523	Total Recoverable	Water	200.8	612170
550-201909-57	FC-CCR-SUMP12-0523	Total Recoverable	Water	200.8	612170
550-201909-58	FC-CCR-SUMP13-0523	Total Recoverable	Water	200.8	612170
550-201909-59	FC-CCR-SUMP14-0523	Total Recoverable	Water	200.8	612170
550-201909-60	FC-CCR-SUMP15-0523	Total Recoverable	Water	200.8	612170
MB 280-612031/1-A	Method Blank	Total Recoverable	Water	200.8	612031
MB 280-612170/1-A	Method Blank	Total Recoverable	Water	200.8	612170
LCS 280-612031/25-A	Lab Control Sample	Total Recoverable	Water	200.8	612031
LCS 280-612170/26-A	Lab Control Sample	Total Recoverable	Water	200.8	612170
550-201909-15 MS	FC-CCR-MW52-0523	Total Recoverable	Water	200.8	612031
550-201909-15 MSD	FC-CCR-MW52-0523	Total Recoverable	Water	200.8	612031
550-201909-20 MS	FC-CCR-DMX01-0523	Total Recoverable	Water	200.8	612031
550-201909-20 MSD	FC-CCR-DMX01-0523	Total Recoverable	Water	200.8	612031

Metals (Continued)

Analysis Batch: 613435 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-201909-44 MS	FC-CCR-MW79S-0523	Total Recoverable	Water	200.8	612170
550-201909-44 MSD	FC-CCR-MW79S-0523	Total Recoverable	Water	200.8	612170
550-201909-45 MS	FC-CCR-MW81-0523	Total Recoverable	Water	200.8	612170
550-201909-45 MSD	FC-CCR-MW81-0523	Total Recoverable	Water	200.8	612170

Analysis Batch: 613473

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-201909-1	FC-CCR-MW62-0523	Total Recoverable	Water	200.7 Rev 4.4	612031
550-201909-1	FC-CCR-MW62-0523	Total/NA	Water	200.7 Rev 4.4	612031
550-201909-2	FC-CCR-MW63-0523	Total Recoverable	Water	200.7 Rev 4.4	612031
550-201909-2	FC-CCR-MW63-0523	Total/NA	Water	200.7 Rev 4.4	612031
550-201909-3	FC-CCR-MW64-0523	Total Recoverable	Water	200.7 Rev 4.4	612031
550-201909-3	FC-CCR-MW64-0523	Total/NA	Water	200.7 Rev 4.4	612031
550-201909-4	FC-CCR-MW65-0523	Total Recoverable	Water	200.7 Rev 4.4	612031
550-201909-4	FC-CCR-MW65-0523	Total/NA	Water	200.7 Rev 4.4	612031
550-201909-5	FC-CCR-SW1-0523	Total Recoverable	Water	200.7 Rev 4.4	612031
550-201909-5	FC-CCR-SW1-0523	Total/NA	Water	200.7 Rev 4.4	612031
550-201909-6	FC-CCR-SW2-0523	Total Recoverable	Water	200.7 Rev 4.4	612031
550-201909-6	FC-CCR-SW2-0523	Total/NA	Water	200.7 Rev 4.4	612031
550-201909-7	FC-CCR-SW3-0523	Total Recoverable	Water	200.7 Rev 4.4	612031
550-201909-7	FC-CCR-SW3-0523	Total/NA	Water	200.7 Rev 4.4	612031
550-201909-8	FC-CCR-FD08-0523	Total Recoverable	Water	200.7 Rev 4.4	612031
550-201909-8	FC-CCR-FD08-0523	Total/NA	Water	200.7 Rev 4.4	612031
550-201909-9	FC-CCR-MW66-0523	Total Recoverable	Water	200.7 Rev 4.4	612031
550-201909-9	FC-CCR-MW66-0523	Total/NA	Water	200.7 Rev 4.4	612031
550-201909-10	FC-CCR-MW70-0523	Total Recoverable	Water	200.7 Rev 4.4	612031
550-201909-10	FC-CCR-MW70-0523	Total/NA	Water	200.7 Rev 4.4	612031
550-201909-11	FC-CCR-MW73-0523	Total Recoverable	Water	200.7 Rev 4.4	612031
550-201909-11	FC-CCR-MW73-0523	Total/NA	Water	200.7 Rev 4.4	612031
550-201909-12	FC-CCR-MW83-0523	Total Recoverable	Water	200.7 Rev 4.4	612031
550-201909-12	FC-CCR-MW83-0523	Total/NA	Water	200.7 Rev 4.4	612031
550-201909-13	FC-CCR-MW86-0523	Total Recoverable	Water	200.7 Rev 4.4	612031
550-201909-13	FC-CCR-MW86-0523	Total/NA	Water	200.7 Rev 4.4	612031
550-201909-14	FC-CCR-FD02-0523	Total Recoverable	Water	200.7 Rev 4.4	612031
550-201909-14	FC-CCR-FD02-0523	Total/NA	Water	200.7 Rev 4.4	612031
550-201909-16	FC-CCR-MW61-0523	Total Recoverable	Water	200.7 Rev 4.4	612031
550-201909-16	FC-CCR-MW61-0523	Total/NA	Water	200.7 Rev 4.4	612031
550-201909-17	FC-CCR-MW75-0523	Total Recoverable	Water	200.7 Rev 4.4	612031
550-201909-17	FC-CCR-MW75-0523	Total/NA	Water	200.7 Rev 4.4	612031
550-201909-18	FC-CCR-MW87-0523	Total Recoverable	Water	200.7 Rev 4.4	612031
550-201909-18	FC-CCR-MW87-0523	Total/NA	Water	200.7 Rev 4.4	612031
550-201909-19	FC-CCR-FD03-0523	Total Recoverable	Water	200.7 Rev 4.4	612031
550-201909-21	FC-CCR-DMX03-0523	Total Recoverable	Water	200.7 Rev 4.4	612469
550-201909-21	FC-CCR-DMX03-0523	Total/NA	Water	200.7 Rev 4.4	612469
550-201909-22	FC-CCR-DMX04-0523	Total Recoverable	Water	200.7 Rev 4.4	612469
550-201909-22	FC-CCR-DMX04-0523	Total/NA	Water	200.7 Rev 4.4	612469
550-201909-24	FC-CCR-MW03-0523	Total Recoverable	Water	200.7 Rev 4.4	612469
550-201909-25	FC-CCR-MW05-0523	Total Recoverable	Water	200.7 Rev 4.4	612469
550-201909-25	FC-CCR-MW05-0523	Total/NA	Water	200.7 Rev 4.4	612469
550-201909-26	FC-CCR-MW06-0523	Total Recoverable	Water	200.7 Rev 4.4	612469
550-201909-26	FC-CCR-MW06-0523	Total/NA	Water	200.7 Rev 4.4	612469

Metals (Continued)

Analysis Batch: 613473 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-201909-27	FC-CCR-MW11-0523	Total Recoverable	Water	200.7 Rev 4.4	612469
550-201909-29	FC-CCR-MW17R-0523	Total Recoverable	Water	200.7 Rev 4.4	612469
550-201909-29	FC-CCR-MW17R-0523	Total/NA	Water	200.7 Rev 4.4	612469
550-201909-30	FC-CCR-MW18-0523	Total Recoverable	Water	200.7 Rev 4.4	612469
550-201909-30	FC-CCR-MW18-0523	Total/NA	Water	200.7 Rev 4.4	612469
550-201909-31	FC-CCR-MW19-0523	Total Recoverable	Water	200.7 Rev 4.4	612469
550-201909-33	FC-CCR-MW23R-0523	Total Recoverable	Water	200.7 Rev 4.4	612469
550-201909-33	FC-CCR-MW23R-0523	Total/NA	Water	200.7 Rev 4.4	612469
550-201909-34	FC-CCR-MW24-0523	Total Recoverable	Water	200.7 Rev 4.4	612469
550-201909-34	FC-CCR-MW24-0523	Total/NA	Water	200.7 Rev 4.4	612469
550-201909-36	FC-CCR-MW36R-0523	Total Recoverable	Water	200.7 Rev 4.4	612469
550-201909-36	FC-CCR-MW36R-0523	Total/NA	Water	200.7 Rev 4.4	612469
550-201909-37	FC-CCR-MW38R-0523	Total Recoverable	Water	200.7 Rev 4.4	612469
550-201909-37	FC-CCR-MW38R-0523	Total/NA	Water	200.7 Rev 4.4	612469
550-201909-38	FC-CCR-MW56-0523	Total Recoverable	Water	200.7 Rev 4.4	612469
550-201909-38	FC-CCR-MW56-0523	Total/NA	Water	200.7 Rev 4.4	612469
550-201909-39	FC-CCR-FD06-0523	Total Recoverable	Water	200.7 Rev 4.4	612469
550-201909-40	FC-CCR-MW57-0523	Total Recoverable	Water	200.7 Rev 4.4	612469
550-201909-40	FC-CCR-MW57-0523	Total/NA	Water	200.7 Rev 4.4	612469
550-201909-61	FC-CCR-SUMP16-0523	Total Recoverable	Water	200.7 Rev 4.4	612618
550-201909-62	FC-CCR-SUMP17-0523	Total Recoverable	Water	200.7 Rev 4.4	612618
550-201909-63	FC-CCR-SUMP18-0523	Total Recoverable	Water	200.7 Rev 4.4	612618
MB 280-612031/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	612031
MB 280-612469/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	612469
MB 280-612618/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	612618
LCS 280-612031/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	612031
LCS 280-612469/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	612469
LCS 280-612618/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	612618
280-176512-I-3-B MS	Matrix Spike	Total Recoverable	Water	200.7 Rev 4.4	612618
280-176512-I-3-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	200.7 Rev 4.4	612618
550-201909-1 MS	FC-CCR-MW62-0523	Total/NA	Water	200.7 Rev 4.4	612031
550-201909-1 MSD	FC-CCR-MW62-0523	Total/NA	Water	200.7 Rev 4.4	612031
550-201909-2 MS	FC-CCR-MW63-0523	Total/NA	Water	200.7 Rev 4.4	612031
550-201909-2 MSD	FC-CCR-MW63-0523	Total/NA	Water	200.7 Rev 4.4	612031
550-201909-21 MS	FC-CCR-DMX03-0523	Total/NA	Water	200.7 Rev 4.4	612469
550-201909-21 MSD	FC-CCR-DMX03-0523	Total/NA	Water	200.7 Rev 4.4	612469
550-201909-22 MS	FC-CCR-DMX04-0523	Total/NA	Water	200.7 Rev 4.4	612469
550-201909-22 MSD	FC-CCR-DMX04-0523	Total/NA	Water	200.7 Rev 4.4	612469

Analysis Batch: 613763

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-201909-22	FC-CCR-DMX04-0523	Total Recoverable	Water	200.7 Rev 4.4	612469
550-201909-23	FC-CCR-MW01-0523	Total Recoverable	Water	200.7 Rev 4.4	612469
550-201909-27	FC-CCR-MW11-0523	Total Recoverable	Water	200.7 Rev 4.4	612469
550-201909-28	FC-CCR-FD04-0523	Total Recoverable	Water	200.7 Rev 4.4	612469
550-201909-32	FC-CCR-MW21-0523	Total Recoverable	Water	200.7 Rev 4.4	612469
550-201909-61	FC-CCR-SUMP16-0523	Total Recoverable	Water	200.7 Rev 4.4	612618
550-201909-61	FC-CCR-SUMP16-0523	Total Recoverable	Water	200.7 Rev 4.4	612618
550-201909-62	FC-CCR-SUMP17-0523	Total Recoverable	Water	200.7 Rev 4.4	612618
550-201909-63	FC-CCR-SUMP18-0523	Total Recoverable	Water	200.7 Rev 4.4	612618
MB 280-612618/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	612618

Metals (Continued)

Analysis Batch: 613763 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 280-612618/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	612618
280-176512-I-3-B MS	Matrix Spike	Total Recoverable	Water	200.7 Rev 4.4	612618
280-176512-I-3-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	200.7 Rev 4.4	612618
550-201909-22 MS	FC-CCR-DMX04-0523	Total/NA	Water	200.7 Rev 4.4	612469
550-201909-22 MSD	FC-CCR-DMX04-0523	Total/NA	Water	200.7 Rev 4.4	612469

Analysis Batch: 613779

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-201909-41	FC-CCR-MW60-0523	Total Recoverable	Water	200.7 Rev 4.4	612170
550-201909-46	FC-CCR-MW82S-0523	Total Recoverable	Water	200.7 Rev 4.4	612170
550-201909-49	FC-CCR-SUMP1-0523	Total Recoverable	Water	200.7 Rev 4.4	612170
550-201909-52	FC-CCR-SUMP7-0523	Total Recoverable	Water	200.7 Rev 4.4	612170
550-201909-53	FC-CCR-SUMP8-0523	Total Recoverable	Water	200.7 Rev 4.4	612170
550-201909-55	FC-CCR-SUMP10-0523	Total Recoverable	Water	200.7 Rev 4.4	612170
550-201909-60	FC-CCR-SUMP15-0523	Total Recoverable	Water	200.7 Rev 4.4	612170
550-201909-41 MS	FC-CCR-MW60-0523	Total Recoverable	Water	200.7 Rev 4.4	612170
550-201909-41 MSD	FC-CCR-MW60-0523	Total Recoverable	Water	200.7 Rev 4.4	612170

Analysis Batch: 613910

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-201909-42	FC-CCR-MW77S-0523	Total Recoverable	Water	200.8	612170

Analysis Batch: 613952

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 280-612170/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	612170
LCS 280-612170/2-B	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	612170

Prep Batch: 615028

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-201909-15	FC-CCR-MW52-0523	Total Recoverable	Water	200.7	
550-201909-20	FC-CCR-DMX01-0523	Total Recoverable	Water	200.7	
550-201909-35	FC-CCR-MW30-0523	Total Recoverable	Water	200.7	
550-201909-45	FC-CCR-MW81-0523	Total Recoverable	Water	200.7	
MB 280-615028/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 280-615028/2-A	Lab Control Sample	Total Recoverable	Water	200.7	
280-177380-A-1-B MS	Matrix Spike	Total/NA	Water	200.7	
280-177380-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	200.7	

Analysis Batch: 615185

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-201909-9	FC-CCR-MW66-0523	Total Recoverable	Water	200.7 Rev 4.4	612031
550-201909-10	FC-CCR-MW70-0523	Total Recoverable	Water	200.7 Rev 4.4	612031
550-201909-16	FC-CCR-MW61-0523	Total Recoverable	Water	200.7 Rev 4.4	612031
550-201909-17	FC-CCR-MW75-0523	Total Recoverable	Water	200.7 Rev 4.4	612031
550-201909-18	FC-CCR-MW87-0523	Total Recoverable	Water	200.7 Rev 4.4	612031
550-201909-21	FC-CCR-DMX03-0523	Total Recoverable	Water	200.7 Rev 4.4	612469
550-201909-25	FC-CCR-MW05-0523	Total Recoverable	Water	200.7 Rev 4.4	612469
550-201909-26	FC-CCR-MW06-0523	Total Recoverable	Water	200.7 Rev 4.4	612469
550-201909-26	FC-CCR-MW06-0523	Total Recoverable	Water	200.7 Rev 4.4	612469
550-201909-33	FC-CCR-MW23R-0523	Total Recoverable	Water	200.7 Rev 4.4	612469
550-201909-34	FC-CCR-MW24-0523	Total Recoverable	Water	200.7 Rev 4.4	612469

Metals (Continued)

Analysis Batch: 615185 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-201909-34	FC-CCR-MW24-0523	Total Recoverable	Water	200.7 Rev 4.4	612469
550-201909-36	FC-CCR-MW36R-0523	Total Recoverable	Water	200.7 Rev 4.4	612469
550-201909-36	FC-CCR-MW36R-0523	Total Recoverable	Water	200.7 Rev 4.4	612469
550-201909-37	FC-CCR-MW38R-0523	Total Recoverable	Water	200.7 Rev 4.4	612469
550-201909-37	FC-CCR-MW38R-0523	Total Recoverable	Water	200.7 Rev 4.4	612469
550-201909-38	FC-CCR-MW56-0523	Total Recoverable	Water	200.7 Rev 4.4	612469
550-201909-38	FC-CCR-MW56-0523	Total Recoverable	Water	200.7 Rev 4.4	612469
550-201909-40	FC-CCR-MW57-0523	Total Recoverable	Water	200.7 Rev 4.4	612469
550-201909-40	FC-CCR-MW57-0523	Total Recoverable	Water	200.7 Rev 4.4	612469
MB 280-612469/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	612469
LCS 280-612469/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	612469
550-201909-21 MS	FC-CCR-DMX03-0523	Total Recoverable	Water	200.7 Rev 4.4	612469
550-201909-21 MSD	FC-CCR-DMX03-0523	Total Recoverable	Water	200.7 Rev 4.4	612469

Analysis Batch: 615317

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-201909-21	FC-CCR-DMX03-0523	Total Recoverable	Water	200.7 Rev 4.4	612469
550-201909-26	FC-CCR-MW06-0523	Total Recoverable	Water	200.7 Rev 4.4	612469
550-201909-29	FC-CCR-MW17R-0523	Total Recoverable	Water	200.7 Rev 4.4	612469
550-201909-30	FC-CCR-MW18-0523	Total Recoverable	Water	200.7 Rev 4.4	612469
550-201909-30	FC-CCR-MW18-0523	Total Recoverable	Water	200.7 Rev 4.4	612469
550-201909-33	FC-CCR-MW23R-0523	Total Recoverable	Water	200.7 Rev 4.4	612469
550-201909-21 MS	FC-CCR-DMX03-0523	Total Recoverable	Water	200.7 Rev 4.4	612469
550-201909-21 MS	FC-CCR-DMX03-0523	Total Recoverable	Water	200.7 Rev 4.4	612469
550-201909-21 MSD	FC-CCR-DMX03-0523	Total Recoverable	Water	200.7 Rev 4.4	612469
550-201909-21 MSD	FC-CCR-DMX03-0523	Total Recoverable	Water	200.7 Rev 4.4	612469

Analysis Batch: 615489

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-201909-21	FC-CCR-DMX03-0523	Total Recoverable	Water	200.7 Rev 4.4	612469
550-201909-25	FC-CCR-MW05-0523	Total Recoverable	Water	200.7 Rev 4.4	612469
550-201909-25	FC-CCR-MW05-0523	Total Recoverable	Water	200.7 Rev 4.4	612469
550-201909-29	FC-CCR-MW17R-0523	Total Recoverable	Water	200.7 Rev 4.4	612469

Analysis Batch: 615611

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-201909-15	FC-CCR-MW52-0523	Total Recoverable	Water	200.7 Rev 4.4	615028
550-201909-35	FC-CCR-MW30-0523	Total Recoverable	Water	200.7 Rev 4.4	615028
550-201909-45	FC-CCR-MW81-0523	Total Recoverable	Water	200.7 Rev 4.4	615028
MB 280-615028/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	615028
LCS 280-615028/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	615028
280-177380-A-1-B MS	Matrix Spike	Total/NA	Water	200.7 Rev 4.4	615028
280-177380-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	200.7 Rev 4.4	615028

Analysis Batch: 615704

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-201909-20	FC-CCR-DMX01-0523	Total Recoverable	Water	200.7 Rev 4.4	615028

General Chemistry

Analysis Batch: 300005

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-201909-1	FC-CCR-MW62-0523	Total/NA	Water	SM 4500 H+ B	
550-201909-2	FC-CCR-MW63-0523	Total/NA	Water	SM 4500 H+ B	
550-201909-3	FC-CCR-MW64-0523	Total/NA	Water	SM 4500 H+ B	
550-201909-4	FC-CCR-MW65-0523	Total/NA	Water	SM 4500 H+ B	
550-201909-5	FC-CCR-SW1-0523	Total/NA	Water	SM 4500 H+ B	
550-201909-6	FC-CCR-SW2-0523	Total/NA	Water	SM 4500 H+ B	
550-201909-7	FC-CCR-SW3-0523	Total/NA	Water	SM 4500 H+ B	
550-201909-8	FC-CCR-FD08-0523	Total/NA	Water	SM 4500 H+ B	
550-201909-9	FC-CCR-MW66-0523	Total/NA	Water	SM 4500 H+ B	
550-201909-10	FC-CCR-MW70-0523	Total/NA	Water	SM 4500 H+ B	
550-201909-11	FC-CCR-MW73-0523	Total/NA	Water	SM 4500 H+ B	
550-201909-12	FC-CCR-MW83-0523	Total/NA	Water	SM 4500 H+ B	
550-201909-13	FC-CCR-MW86-0523	Total/NA	Water	SM 4500 H+ B	
550-201909-14	FC-CCR-FD02-0523	Total/NA	Water	SM 4500 H+ B	
550-201909-16	FC-CCR-MW61-0523	Total/NA	Water	SM 4500 H+ B	
550-201909-17	FC-CCR-MW75-0523	Total/NA	Water	SM 4500 H+ B	
550-201909-18	FC-CCR-MW87-0523	Total/NA	Water	SM 4500 H+ B	
550-201909-21	FC-CCR-DMX03-0523	Total/NA	Water	SM 4500 H+ B	
550-201909-22	FC-CCR-DMX04-0523	Total/NA	Water	SM 4500 H+ B	
550-201909-25	FC-CCR-MW05-0523	Total/NA	Water	SM 4500 H+ B	
550-201909-26	FC-CCR-MW06-0523	Total/NA	Water	SM 4500 H+ B	
550-201909-27	FC-CCR-MW11-0523	Total/NA	Water	SM 4500 H+ B	
550-201909-29	FC-CCR-MW17R-0523	Total/NA	Water	SM 4500 H+ B	
550-201909-30	FC-CCR-MW18-0523	Total/NA	Water	SM 4500 H+ B	
550-201909-33	FC-CCR-MW23R-0523	Total/NA	Water	SM 4500 H+ B	
550-201909-34	FC-CCR-MW24-0523	Total/NA	Water	SM 4500 H+ B	
550-201909-36	FC-CCR-MW36R-0523	Total/NA	Water	SM 4500 H+ B	
550-201909-37	FC-CCR-MW38R-0523	Total/NA	Water	SM 4500 H+ B	
550-201909-38	FC-CCR-MW56-0523	Total/NA	Water	SM 4500 H+ B	
550-201909-40	FC-CCR-MW57-0523	Total/NA	Water	SM 4500 H+ B	
550-201909-46	FC-CCR-MW82S-0523	Total/NA	Water	SM 4500 H+ B	
LCSSRM 550-300005/1	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	
LCSSRM 550-300005/13	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	
LCSSRM 550-300005/25	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	
LCSSRM 550-300005/37	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	
LCSSRM 550-300005/49	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	
550-201909-4 DU	FC-CCR-MW65-0523	Total/NA	Water	SM 4500 H+ B	
550-201909-14 DU	FC-CCR-FD02-0523	Total/NA	Water	SM 4500 H+ B	
550-201909-30 DU	FC-CCR-MW18-0523	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 300048

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-201909-33	FC-CCR-MW23R-0523	Total/NA	Water	SM 2540C	
MB 550-300048/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 550-300048/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 550-300048/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	
550-201909-33 DU	FC-CCR-MW23R-0523	Total/NA	Water	SM 2540C	

Analysis Batch: 300050

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-201909-21	FC-CCR-DMX03-0523	Total/NA	Water	SM 2540C	

General Chemistry (Continued)

Analysis Batch: 300050 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-201909-25	FC-CCR-MW05-0523	Total/NA	Water	SM 2540C	
550-201909-30	FC-CCR-MW18-0523	Total/NA	Water	SM 2540C	
550-201909-34	FC-CCR-MW24-0523	Total/NA	Water	SM 2540C	
550-201909-36	FC-CCR-MW36R-0523	Total/NA	Water	SM 2540C	
550-201909-38	FC-CCR-MW56-0523	Total/NA	Water	SM 2540C	
MB 550-300050/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 550-300050/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 550-300050/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	
550-201909-21 DU	FC-CCR-DMX03-0523	Total/NA	Water	SM 2540C	

Analysis Batch: 300137

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-201909-16	FC-CCR-MW61-0523	Total/NA	Water	SM 2540C	
550-201909-17	FC-CCR-MW75-0523	Total/NA	Water	SM 2540C	
550-201909-22	FC-CCR-DMX04-0523	Total/NA	Water	SM 2540C	
550-201909-26	FC-CCR-MW06-0523	Total/NA	Water	SM 2540C	
550-201909-29	FC-CCR-MW17R-0523	Total/NA	Water	SM 2540C	
MB 550-300137/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 550-300137/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 550-300137/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	
550-201909-22 DU	FC-CCR-DMX04-0523	Total/NA	Water	SM 2540C	

Analysis Batch: 300207

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-201909-18	FC-CCR-MW87-0523	Total/NA	Water	SM 2540C	
550-201909-27	FC-CCR-MW11-0523	Total/NA	Water	SM 2540C	
550-201909-37	FC-CCR-MW38R-0523	Total/NA	Water	SM 2540C	
550-201909-40	FC-CCR-MW57-0523	Total/NA	Water	SM 2540C	
550-201909-46	FC-CCR-MW82S-0523	Total/NA	Water	SM 2540C	
550-201909-49	FC-CCR-SUMP1-0523	Total/NA	Water	SM 2540C	
550-201909-50	FC-CCR-SUMP2-0523	Total/NA	Water	SM 2540C	
550-201909-51	FC-CCR-SUMP3-0523	Total/NA	Water	SM 2540C	
550-201909-52	FC-CCR-SUMP7-0523	Total/NA	Water	SM 2540C	
550-201909-53	FC-CCR-SUMP8-0523	Total/NA	Water	SM 2540C	
550-201909-54	FC-CCR-SUMP9-0523	Total/NA	Water	SM 2540C	
550-201909-55	FC-CCR-SUMP10-0523	Total/NA	Water	SM 2540C	
MB 550-300207/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 550-300207/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 550-300207/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	
550-201909-37 DU	FC-CCR-MW38R-0523	Total/NA	Water	SM 2540C	

Analysis Batch: 300208

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-201909-1	FC-CCR-MW62-0523	Total/NA	Water	SM 2540C	
550-201909-2	FC-CCR-MW63-0523	Total/NA	Water	SM 2540C	
550-201909-3	FC-CCR-MW64-0523	Total/NA	Water	SM 2540C	
550-201909-4	FC-CCR-MW65-0523	Total/NA	Water	SM 2540C	
550-201909-5	FC-CCR-SW1-0523	Total/NA	Water	SM 2540C	
550-201909-6	FC-CCR-SW2-0523	Total/NA	Water	SM 2540C	
550-201909-7	FC-CCR-SW3-0523	Total/NA	Water	SM 2540C	
550-201909-8	FC-CCR-FD08-0523	Total/NA	Water	SM 2540C	

General Chemistry (Continued)

Analysis Batch: 300208 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-201909-9	FC-CCR-MW66-0523	Total/NA	Water	SM 2540C	
550-201909-10	FC-CCR-MW70-0523	Total/NA	Water	SM 2540C	
550-201909-11	FC-CCR-MW73-0523	Total/NA	Water	SM 2540C	
550-201909-56	FC-CCR-SUMP11-0523	Total/NA	Water	SM 2540C	
550-201909-57	FC-CCR-SUMP12-0523	Total/NA	Water	SM 2540C	
550-201909-58	FC-CCR-SUMP13-0523	Total/NA	Water	SM 2540C	
550-201909-59	FC-CCR-SUMP14-0523	Total/NA	Water	SM 2540C	
550-201909-60	FC-CCR-SUMP15-0523	Total/NA	Water	SM 2540C	
550-201909-61	FC-CCR-SUMP16-0523	Total/NA	Water	SM 2540C	
550-201909-62	FC-CCR-SUMP17-0523	Total/NA	Water	SM 2540C	
550-201909-63	FC-CCR-SUMP18-0523	Total/NA	Water	SM 2540C	
MB 550-300208/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 550-300208/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 550-300208/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	
550-201909-2 DU	FC-CCR-MW63-0523	Total/NA	Water	SM 2540C	
550-201909-56 DU	FC-CCR-SUMP11-0523	Total/NA	Water	SM 2540C	

Analysis Batch: 300213

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-201909-12	FC-CCR-MW83-0523	Total/NA	Water	SM 2540C	
550-201909-13	FC-CCR-MW86-0523	Total/NA	Water	SM 2540C	
550-201909-14	FC-CCR-FD02-0523	Total/NA	Water	SM 2540C	
MB 550-300213/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 550-300213/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 550-300213/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	
550-201909-12 DU	FC-CCR-MW83-0523	Total/NA	Water	SM 2540C	

Analysis Batch: 300214

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-201909-16	FC-CCR-MW61-0523	Total/NA	Water	SM 2320B	
550-201909-17	FC-CCR-MW75-0523	Total/NA	Water	SM 2320B	
550-201909-21	FC-CCR-DMX03-0523	Total/NA	Water	SM 2320B	
550-201909-22	FC-CCR-DMX04-0523	Total/NA	Water	SM 2320B	
550-201909-25	FC-CCR-MW05-0523	Total/NA	Water	SM 2320B	
550-201909-26	FC-CCR-MW06-0523	Total/NA	Water	SM 2320B	
550-201909-29	FC-CCR-MW17R-0523	Total/NA	Water	SM 2320B	
550-201909-30	FC-CCR-MW18-0523	Total/NA	Water	SM 2320B	
550-201909-33	FC-CCR-MW23R-0523	Total/NA	Water	SM 2320B	
550-201909-34	FC-CCR-MW24-0523	Total/NA	Water	SM 2320B	
550-201909-36	FC-CCR-MW36R-0523	Total/NA	Water	SM 2320B	
550-201909-38	FC-CCR-MW56-0523	Total/NA	Water	SM 2320B	
MB 550-300214/5	Method Blank	Total/NA	Water	SM 2320B	
LCS 550-300214/4	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 550-300214/17	Lab Control Sample Dup	Total/NA	Water	SM 2320B	
550-201909-16 DU	FC-CCR-MW61-0523	Total/NA	Water	SM 2320B	
550-201909-36 DU	FC-CCR-MW36R-0523	Total/NA	Water	SM 2320B	

Analysis Batch: 300412

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-201909-18	FC-CCR-MW87-0523	Total/NA	Water	SM 2320B	
550-201909-27	FC-CCR-MW11-0523	Total/NA	Water	SM 2320B	

General Chemistry (Continued)

Analysis Batch: 300412 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-201909-37	FC-CCR-MW38R-0523	Total/NA	Water	SM 2320B	
550-201909-40	FC-CCR-MW57-0523	Total/NA	Water	SM 2320B	
550-201909-46	FC-CCR-MW82S-0523	Total/NA	Water	SM 2320B	
MB 550-300412/3	Method Blank	Total/NA	Water	SM 2320B	
LCS 550-300412/4	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 550-300412/17	Lab Control Sample Dup	Total/NA	Water	SM 2320B	
550-201909-27 DU	FC-CCR-MW11-0523	Total/NA	Water	SM 2320B	

Lab Chronicle

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-201909-1
SDG: APS Four Corners Power Plant

Client Sample ID: FC-CCR-MW62-0523
Date Collected: 05/07/23 14:12
Date Received: 05/08/23 16:00

Lab Sample ID: 550-201909-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		200	300790	AS1	EET PHX	05/22/23 13:31
Total Recoverable	Prep	200.7			612031	KMS	EET DEN	05/17/23 14:58
Total Recoverable	Analysis	200.7 Rev 4.4		1	613473	ADL	EET DEN	05/22/23 15:18
Total/NA	Prep	200.7			612031	KMS	EET DEN	05/17/23 14:58
Total/NA	Analysis	200.7 Rev 4.4		1	613473	ADL	EET DEN	05/22/23 15:18
Total Recoverable	Prep	200.7			612031	KMS	EET DEN	05/17/23 14:58
Total Recoverable	Analysis	200.8		1	613435	LMT	EET DEN	05/22/23 15:00
Total/NA	Prep	245.1			299938	SRR	EET PHX	05/09/23 16:26
Total/NA	Analysis	245.1		1	299948	SRR	EET PHX	05/09/23 19:26
Total/NA	Analysis	SM 2540C		1	300208	CXK	EET PHX	05/12/23 21:08 - 05/15/23 17:00 [1]
Total/NA	Analysis	SM 4500 H+ B		1	300005	MAN	EET PHX	05/10/23 12:20

Client Sample ID: FC-CCR-MW63-0523
Date Collected: 05/07/23 15:41
Date Received: 05/08/23 16:00

Lab Sample ID: 550-201909-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		20	300790	AS1	EET PHX	05/22/23 14:07
Total Recoverable	Prep	200.7			612031	KMS	EET DEN	05/17/23 14:58
Total Recoverable	Analysis	200.7 Rev 4.4		1	613473	ADL	EET DEN	05/22/23 15:30
Total/NA	Prep	200.7			612031	KMS	EET DEN	05/17/23 14:58
Total/NA	Analysis	200.7 Rev 4.4		1	613473	ADL	EET DEN	05/22/23 15:30
Total Recoverable	Prep	200.7			612031	KMS	EET DEN	05/17/23 14:58
Total Recoverable	Analysis	200.8		1	613435	LMT	EET DEN	05/22/23 15:02
Total/NA	Prep	245.1			299938	SRR	EET PHX	05/09/23 16:26
Total/NA	Analysis	245.1		1	299948	SRR	EET PHX	05/09/23 19:28
Total/NA	Analysis	SM 2540C		1	300208	CXK	EET PHX	05/12/23 21:08 - 05/15/23 17:00 [1]
Total/NA	Analysis	SM 4500 H+ B		1	300005	MAN	EET PHX	05/10/23 12:22

Client Sample ID: FC-CCR-MW64-0523
Date Collected: 05/07/23 16:13
Date Received: 05/08/23 16:00

Lab Sample ID: 550-201909-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		2	300790	AS1	EET PHX	05/22/23 18:07
Total Recoverable	Prep	200.7			612031	KMS	EET DEN	05/17/23 14:58
Total Recoverable	Analysis	200.7 Rev 4.4		1	613473	ADL	EET DEN	05/22/23 15:43
Total/NA	Prep	200.7			612031	KMS	EET DEN	05/17/23 14:58
Total/NA	Analysis	200.7 Rev 4.4		1	613473	ADL	EET DEN	05/22/23 15:43
Total Recoverable	Prep	200.7			612031	KMS	EET DEN	05/17/23 14:58
Total Recoverable	Analysis	200.8		1	613435	LMT	EET DEN	05/22/23 15:04
Total/NA	Prep	245.1			299938	SRR	EET PHX	05/09/23 16:26
Total/NA	Analysis	245.1		1	299948	SRR	EET PHX	05/09/23 19:30
Total/NA	Analysis	SM 2540C		1	300208	CXK	EET PHX	05/12/23 21:08 - 05/15/23 17:00 [1]

Lab Chronicle

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-201909-1
SDG: APS Four Corners Power Plant

Client Sample ID: FC-CCR-MW64-0523
Date Collected: 05/07/23 16:13
Date Received: 05/08/23 16:00

Lab Sample ID: 550-201909-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	SM 4500 H+ B		1	300005	MAN	EET PHX	05/10/23 12:23

Client Sample ID: FC-CCR-MW65-0523
Date Collected: 05/07/23 11:53
Date Received: 05/08/23 16:00

Lab Sample ID: 550-201909-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		5	300790	AS1	EET PHX	05/22/23 14:44
Total Recoverable	Prep	200.7			612031	KMS	EET DEN	05/17/23 14:58
Total Recoverable	Analysis	200.7 Rev 4.4		1	613473	ADL	EET DEN	05/22/23 15:47
Total/NA	Prep	200.7			612031	KMS	EET DEN	05/17/23 14:58
Total/NA	Analysis	200.7 Rev 4.4		1	613473	ADL	EET DEN	05/22/23 15:47
Total Recoverable	Prep	200.7			612031	KMS	EET DEN	05/17/23 14:58
Total Recoverable	Analysis	200.8		1	613435	LMT	EET DEN	05/22/23 15:06
Total/NA	Prep	245.1			299938	SRR	EET PHX	05/09/23 16:26
Total/NA	Analysis	245.1		1	299948	SRR	EET PHX	05/09/23 19:32
Total/NA	Analysis	SM 2540C		1	300208	CXK	EET PHX	05/12/23 21:08 - 05/15/23 17:00 [1]
Total/NA	Analysis	SM 4500 H+ B		1	300005	MAN	EET PHX	05/10/23 12:26

Client Sample ID: FC-CCR-SW1-0523
Date Collected: 05/07/23 18:42
Date Received: 05/08/23 16:00

Lab Sample ID: 550-201909-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		2	300790	AS1	EET PHX	05/22/23 16:16
Total/NA	Analysis	300.0		200	300790	AS1	EET PHX	05/22/23 16:35
Total Recoverable	Prep	200.7			612031	KMS	EET DEN	05/17/23 14:58
Total Recoverable	Analysis	200.7 Rev 4.4		1	613473	ADL	EET DEN	05/22/23 16:03
Total/NA	Prep	200.7			612031	KMS	EET DEN	05/17/23 14:58
Total/NA	Analysis	200.7 Rev 4.4		1	613473	ADL	EET DEN	05/22/23 16:03
Total Recoverable	Prep	200.7			612031	KMS	EET DEN	05/17/23 14:58
Total Recoverable	Analysis	200.8		1	613435	LMT	EET DEN	05/22/23 15:07
Total/NA	Prep	245.1			299938	SRR	EET PHX	05/09/23 16:26
Total/NA	Analysis	245.1		1	299948	SRR	EET PHX	05/09/23 19:34
Total/NA	Analysis	SM 2540C		1	300208	CXK	EET PHX	05/12/23 21:08 - 05/15/23 17:00 [1]
Total/NA	Analysis	SM 4500 H+ B		1	300005	MAN	EET PHX	05/10/23 12:29

Client Sample ID: FC-CCR-SW2-0523
Date Collected: 05/07/23 15:06
Date Received: 05/08/23 16:00

Lab Sample ID: 550-201909-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		2	300790	AS1	EET PHX	05/22/23 16:53
Total/NA	Analysis	300.0		200	300790	AS1	EET PHX	05/22/23 17:11

Lab Chronicle

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-201909-1
SDG: APS Four Corners Power Plant

Client Sample ID: FC-CCR-SW2-0523
Date Collected: 05/07/23 15:06
Date Received: 05/08/23 16:00

Lab Sample ID: 550-201909-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			612031	KMS	EET DEN	05/17/23 14:58
Total Recoverable	Analysis	200.7 Rev 4.4		1	613473	ADL	EET DEN	05/22/23 16:07
Total/NA	Prep	200.7			612031	KMS	EET DEN	05/17/23 14:58
Total/NA	Analysis	200.7 Rev 4.4		1	613473	ADL	EET DEN	05/22/23 16:07
Total Recoverable	Prep	200.7			612031	KMS	EET DEN	05/17/23 14:58
Total Recoverable	Analysis	200.8		1	613435	LMT	EET DEN	05/22/23 15:09
Total/NA	Prep	245.1			299938	SRR	EET PHX	05/09/23 16:26
Total/NA	Analysis	245.1		1	299948	SRR	EET PHX	05/09/23 19:36
Total/NA	Analysis	SM 2540C		1	300208	CXK	EET PHX	05/12/23 21:08 - 05/15/23 17:00 [1]
Total/NA	Analysis	SM 4500 H+ B		1	300005	MAN	EET PHX	05/10/23 12:31

Client Sample ID: FC-CCR-SW3-0523
Date Collected: 05/07/23 15:13
Date Received: 05/08/23 16:00

Lab Sample ID: 550-201909-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		2	300790	AS1	EET PHX	05/22/23 17:30
Total/NA	Analysis	300.0		200	300790	AS1	EET PHX	05/22/23 17:48
Total Recoverable	Prep	200.7			612031	KMS	EET DEN	05/17/23 14:58
Total Recoverable	Analysis	200.7 Rev 4.4		1	613473	ADL	EET DEN	05/22/23 16:11
Total/NA	Prep	200.7			612031	KMS	EET DEN	05/17/23 14:58
Total/NA	Analysis	200.7 Rev 4.4		1	613473	ADL	EET DEN	05/22/23 16:11
Total Recoverable	Prep	200.7			612031	KMS	EET DEN	05/17/23 14:58
Total Recoverable	Analysis	200.8		1	613435	LMT	EET DEN	05/22/23 15:11
Total/NA	Prep	245.1			299938	SRR	EET PHX	05/09/23 16:26
Total/NA	Analysis	245.1		1	299948	SRR	EET PHX	05/09/23 19:38
Total/NA	Analysis	SM 2540C		1	300208	CXK	EET PHX	05/12/23 21:08 - 05/15/23 17:00 [1]
Total/NA	Analysis	SM 4500 H+ B		1	300005	MAN	EET PHX	05/10/23 12:33

Client Sample ID: FC-CCR-FD08-0523
Date Collected: 05/07/23 12:34
Date Received: 05/08/23 16:00

Lab Sample ID: 550-201909-8
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		2	300790	AS1	EET PHX	05/22/23 18:43
Total/NA	Analysis	300.0		200	300790	AS1	EET PHX	05/22/23 19:02
Total Recoverable	Prep	200.7			612031	KMS	EET DEN	05/17/23 14:58
Total Recoverable	Analysis	200.7 Rev 4.4		1	613473	ADL	EET DEN	05/22/23 16:15
Total/NA	Prep	200.7			612031	KMS	EET DEN	05/17/23 14:58
Total/NA	Analysis	200.7 Rev 4.4		1	613473	ADL	EET DEN	05/22/23 16:15
Total Recoverable	Prep	200.7			612031	KMS	EET DEN	05/17/23 14:58
Total Recoverable	Analysis	200.8		1	613435	LMT	EET DEN	05/22/23 15:21
Total/NA	Prep	245.1			299938	SRR	EET PHX	05/09/23 16:26
Total/NA	Analysis	245.1		1	299948	SRR	EET PHX	05/09/23 19:44

Lab Chronicle

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-201909-1
SDG: APS Four Corners Power Plant

Client Sample ID: FC-CCR-FD08-0523

Lab Sample ID: 550-201909-8

Date Collected: 05/07/23 12:34
Matrix: Water
Date Received: 05/08/23 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	SM 2540C		1	300208	CXK	EET PHX	05/12/23 21:08 - 05/15/23 17:00 [1]
Total/NA	Analysis	SM 4500 H+ B		1	300005	MAN	EET PHX	05/10/23 12:35

Client Sample ID: FC-CCR-MW66-0523

Lab Sample ID: 550-201909-9

Date Collected: 05/07/23 12:45
Matrix: Water
Date Received: 05/08/23 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		200	300790	AS1	EET PHX	05/22/23 20:15
Total Recoverable	Prep	200.7			612031	KMS	EET DEN	05/17/23 14:58
Total Recoverable	Analysis	200.7 Rev 4.4		1	613473	ADL	EET DEN	05/22/23 16:19
Total Recoverable	Prep	200.7			612031	KMS	EET DEN	05/17/23 14:58
Total Recoverable	Analysis	200.7 Rev 4.4		10	615185	LMT	EET DEN	06/07/23 04:30
Total/NA	Prep	200.7			612031	KMS	EET DEN	05/17/23 14:58
Total/NA	Analysis	200.7 Rev 4.4		1	613473	ADL	EET DEN	05/22/23 16:19
Total Recoverable	Prep	200.7			612031	KMS	EET DEN	05/17/23 14:58
Total Recoverable	Analysis	200.8		1	613435	LMT	EET DEN	05/22/23 15:25
Total/NA	Prep	245.1			299938	SRR	EET PHX	05/09/23 16:26
Total/NA	Analysis	245.1		1	299948	SRR	EET PHX	05/09/23 19:46
Total/NA	Analysis	SM 2540C		1	300208	CXK	EET PHX	05/12/23 21:08 - 05/15/23 17:00 [1]
Total/NA	Analysis	SM 4500 H+ B		1	300005	MAN	EET PHX	05/10/23 12:36

Client Sample ID: FC-CCR-MW70-0523

Lab Sample ID: 550-201909-10

Date Collected: 05/07/23 10:59
Matrix: Water
Date Received: 05/08/23 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		200	300790	AS1	EET PHX	05/22/23 20:52
Total Recoverable	Prep	200.7			612031	KMS	EET DEN	05/17/23 14:58
Total Recoverable	Analysis	200.7 Rev 4.4		1	613473	ADL	EET DEN	05/22/23 16:23
Total Recoverable	Prep	200.7			612031	KMS	EET DEN	05/17/23 14:58
Total Recoverable	Analysis	200.7 Rev 4.4		10	615185	LMT	EET DEN	06/07/23 04:34
Total/NA	Prep	200.7			612031	KMS	EET DEN	05/17/23 14:58
Total/NA	Analysis	200.7 Rev 4.4		1	613473	ADL	EET DEN	05/22/23 16:23
Total Recoverable	Prep	200.7			612031	KMS	EET DEN	05/17/23 14:58
Total Recoverable	Analysis	200.8		1	613435	LMT	EET DEN	05/22/23 15:30
Total/NA	Prep	245.1			299938	SRR	EET PHX	05/09/23 16:26
Total/NA	Analysis	245.1		1	299948	SRR	EET PHX	05/09/23 19:48
Total/NA	Analysis	SM 2540C		1	300208	CXK	EET PHX	05/12/23 21:08 - 05/15/23 17:00 [1]
Total/NA	Analysis	SM 4500 H+ B		1	300005	MAN	EET PHX	05/10/23 12:37

Lab Chronicle

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-201909-1
SDG: APS Four Corners Power Plant

Client Sample ID: FC-CCR-MW73-0523

Lab Sample ID: 550-201909-11
Date Collected: 05/07/23 18:15
Matrix: Water
Date Received: 05/08/23 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		200	300790	AS1	EET PHX	05/22/23 21:29
Total Recoverable	Prep	200.7			612031	KMS	EET DEN	05/17/23 14:58
Total Recoverable	Analysis	200.7 Rev 4.4		1	613473	ADL	EET DEN	05/22/23 16:27
Total/NA	Prep	200.7			612031	KMS	EET DEN	05/17/23 14:58
Total/NA	Analysis	200.7 Rev 4.4		1	613473	ADL	EET DEN	05/22/23 16:27
Total Recoverable	Prep	200.7			612031	KMS	EET DEN	05/17/23 14:58
Total Recoverable	Analysis	200.8		1	613435	LMT	EET DEN	05/22/23 15:32
Total/NA	Prep	245.1			299938	SRR	EET PHX	05/09/23 16:26
Total/NA	Analysis	245.1		1	299948	SRR	EET PHX	05/09/23 19:50
Total/NA	Analysis	SM 2540C		1	300208	CXK	EET PHX	05/12/23 21:08 - 05/15/23 17:00 [1]
Total/NA	Analysis	SM 4500 H+ B		1	300005	MAN	EET PHX	05/10/23 12:39

Client Sample ID: FC-CCR-MW83-0523

Lab Sample ID: 550-201909-12
Date Collected: 05/07/23 17:21
Matrix: Water
Date Received: 05/08/23 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		20	300790	AS1	EET PHX	05/22/23 22:06
Total/NA	Analysis	300.0		200	300790	AS1	EET PHX	05/22/23 22:24
Total Recoverable	Prep	200.7			612031	KMS	EET DEN	05/17/23 14:58
Total Recoverable	Analysis	200.7 Rev 4.4		1	613473	ADL	EET DEN	05/22/23 16:31
Total/NA	Prep	200.7			612031	KMS	EET DEN	05/17/23 14:58
Total/NA	Analysis	200.7 Rev 4.4		1	613473	ADL	EET DEN	05/22/23 16:31
Total Recoverable	Prep	200.7			612031	KMS	EET DEN	05/17/23 14:58
Total Recoverable	Analysis	200.8		1	613435	LMT	EET DEN	05/22/23 15:34
Total/NA	Prep	245.1			299938	SRR	EET PHX	05/09/23 16:26
Total/NA	Analysis	245.1		1	299948	SRR	EET PHX	05/09/23 19:52
Total/NA	Analysis	SM 2540C		1	300213	RDC	EET PHX	05/13/23 15:46 - 05/16/23 17:00 [1]
Total/NA	Analysis	SM 4500 H+ B		1	300005	MAN	EET PHX	05/10/23 12:40

Client Sample ID: FC-CCR-MW86-0523

Lab Sample ID: 550-201909-13
Date Collected: 05/07/23 13:25
Matrix: Water
Date Received: 05/08/23 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		200	300790	AS1	EET PHX	05/22/23 22:43
Total Recoverable	Prep	200.7			612031	KMS	EET DEN	05/17/23 14:58
Total Recoverable	Analysis	200.7 Rev 4.4		1	613473	ADL	EET DEN	05/22/23 16:35
Total/NA	Prep	200.7			612031	KMS	EET DEN	05/17/23 14:58
Total/NA	Analysis	200.7 Rev 4.4		1	613473	ADL	EET DEN	05/22/23 16:35
Total Recoverable	Prep	200.7			612031	KMS	EET DEN	05/17/23 14:58
Total Recoverable	Analysis	200.8		1	613435	LMT	EET DEN	05/22/23 15:36
Total/NA	Prep	245.1			299938	SRR	EET PHX	05/09/23 16:26
Total/NA	Analysis	245.1		1	299948	SRR	EET PHX	05/09/23 19:54

Lab Chronicle

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-201909-1
SDG: APS Four Corners Power Plant

Client Sample ID: FC-CCR-MW86-0523
Date Collected: 05/07/23 13:25
Date Received: 05/08/23 16:00

Lab Sample ID: 550-201909-13
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	SM 2540C		1	300213	RDC	EET PHX	05/13/23 15:46 - 05/16/23 17:00 [1]
Total/NA	Analysis	SM 4500 H+ B		1	300005	MAN	EET PHX	05/10/23 12:41

Client Sample ID: FC-CCR-FD02-0523
Date Collected: 05/07/23 16:20
Date Received: 05/08/23 16:00

Lab Sample ID: 550-201909-14
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		200	300792	SMA	EET PHX	05/22/23 21:08
Total Recoverable	Prep	200.7			612031	KMS	EET DEN	05/17/23 14:58
Total Recoverable	Analysis	200.7 Rev 4.4		1	613473	ADL	EET DEN	05/22/23 16:39
Total/NA	Prep	200.7			612031	KMS	EET DEN	05/17/23 14:58
Total/NA	Analysis	200.7 Rev 4.4		1	613473	ADL	EET DEN	05/22/23 16:39
Total Recoverable	Prep	200.7			612031	KMS	EET DEN	05/17/23 14:58
Total Recoverable	Analysis	200.8		1	613435	LMT	EET DEN	05/22/23 15:37
Total/NA	Prep	245.1			299938	SRR	EET PHX	05/09/23 16:26
Total/NA	Analysis	245.1		1	299948	SRR	EET PHX	05/09/23 19:56
Total/NA	Analysis	SM 2540C		1	300213	RDC	EET PHX	05/13/23 15:46 - 05/16/23 17:00 [1]
Total/NA	Analysis	SM 4500 H+ B		1	300005	MAN	EET PHX	05/10/23 12:44

Client Sample ID: FC-CCR-MW52-0523
Date Collected: 05/02/23 14:10
Date Received: 05/08/23 16:00

Lab Sample ID: 550-201909-15
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			615028	LJS	EET DEN	06/07/23 06:34
Total Recoverable	Analysis	200.7 Rev 4.4		1	615611	ADL	EET DEN	06/09/23 08:04
Total Recoverable	Prep	200.8			612031	KMS	EET DEN	05/17/23 14:58
Total Recoverable	Analysis	200.8		1	613435	LMT	EET DEN	05/22/23 15:39

Client Sample ID: FC-CCR-MW61-0523
Date Collected: 05/04/23 09:54
Date Received: 05/08/23 16:00

Lab Sample ID: 550-201909-16
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		10	300792	SMA	EET PHX	05/22/23 22:04
Total/NA	Analysis	300.0		200	300792	SMA	EET PHX	05/22/23 22:32
Total Recoverable	Prep	200.7			612031	KMS	EET DEN	05/17/23 14:58
Total Recoverable	Analysis	200.7 Rev 4.4		1	613473	ADL	EET DEN	05/22/23 16:55
Total Recoverable	Prep	200.7			612031	KMS	EET DEN	05/17/23 14:58
Total Recoverable	Analysis	200.7 Rev 4.4		10	615185	LMT	EET DEN	06/07/23 04:38
Total/NA	Prep	200.7			612031	KMS	EET DEN	05/17/23 14:58
Total/NA	Analysis	200.7 Rev 4.4		1	613473	ADL	EET DEN	05/22/23 16:55
Total Recoverable	Prep	200.7			612031	KMS	EET DEN	05/17/23 14:58
Total Recoverable	Analysis	200.8		1	613435	LMT	EET DEN	05/22/23 15:52

Client Sample ID: FC-CCR-MW61-0523

Lab Sample ID: 550-201909-16

Date Collected: 05/04/23 09:54
Matrix: Water
Date Received: 05/08/23 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	245.1			299938	SRR	EET PHX	05/09/23 16:26
Total/NA	Analysis	245.1		1	299948	SRR	EET PHX	05/09/23 19:58
Total/NA	Analysis	SM 2320B		1	300214	MAN	EET PHX	05/11/23 18:05
Total/NA	Analysis	SM 2540C		1	300137	CXK	EET PHX	05/11/23 21:58 - 05/15/23 14:15 [1]
Total/NA	Analysis	SM 4500 H+ B		1	300005	MAN	EET PHX	05/10/23 12:46

Client Sample ID: FC-CCR-MW75-0523

Lab Sample ID: 550-201909-17

Date Collected: 05/04/23 10:42
Matrix: Water
Date Received: 05/08/23 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		10	300896	AS1	EET PHX	05/23/23 16:35
Total/NA	Analysis	300.0		200	300896	AS1	EET PHX	05/23/23 17:03
Total Recoverable	Prep	200.7			612031	KMS	EET DEN	05/17/23 14:58
Total Recoverable	Analysis	200.7 Rev 4.4		1	613473	ADL	EET DEN	05/22/23 17:00
Total Recoverable	Prep	200.7			612031	KMS	EET DEN	05/17/23 14:58
Total Recoverable	Analysis	200.7 Rev 4.4		10	615185	LMT	EET DEN	06/07/23 04:42
Total/NA	Prep	200.7			612031	KMS	EET DEN	05/17/23 14:58
Total/NA	Analysis	200.7 Rev 4.4		1	613473	ADL	EET DEN	05/22/23 17:00
Total Recoverable	Prep	200.7			612031	KMS	EET DEN	05/17/23 14:58
Total Recoverable	Analysis	200.8		1	613435	LMT	EET DEN	05/22/23 15:54
Total/NA	Prep	245.1			299938	SRR	EET PHX	05/09/23 16:26
Total/NA	Analysis	245.1		1	299948	SRR	EET PHX	05/09/23 20:00
Total/NA	Analysis	SM 2320B		1	300214	MAN	EET PHX	05/11/23 18:17
Total/NA	Analysis	SM 2540C		1	300137	CXK	EET PHX	05/11/23 21:58 - 05/15/23 14:15 [1]
Total/NA	Analysis	SM 4500 H+ B		1	300005	MAN	EET PHX	05/10/23 12:47

Client Sample ID: FC-CCR-MW87-0523

Lab Sample ID: 550-201909-18

Date Collected: 05/05/23 18:06
Matrix: Water
Date Received: 05/08/23 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		200	300896	AS1	EET PHX	05/23/23 17:31
Total Recoverable	Prep	200.7			612031	KMS	EET DEN	05/17/23 14:58
Total Recoverable	Analysis	200.7 Rev 4.4		1	613158	ADL	EET DEN	05/19/23 03:28
Total Recoverable	Prep	200.7			612031	KMS	EET DEN	05/17/23 14:58
Total Recoverable	Analysis	200.7 Rev 4.4		1	613473	ADL	EET DEN	05/22/23 17:04
Total Recoverable	Prep	200.7			612031	KMS	EET DEN	05/17/23 14:58
Total Recoverable	Analysis	200.7 Rev 4.4		10	615185	LMT	EET DEN	06/07/23 04:46
Total/NA	Prep	200.7			612031	KMS	EET DEN	05/17/23 14:58
Total/NA	Analysis	200.7 Rev 4.4		1	613473	ADL	EET DEN	05/22/23 17:04
Total Recoverable	Prep	200.7			612031	KMS	EET DEN	05/17/23 14:58
Total Recoverable	Analysis	200.8		1	613435	LMT	EET DEN	05/22/23 15:55

Lab Chronicle

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-201909-1
SDG: APS Four Corners Power Plant

Client Sample ID: FC-CCR-MW87-0523
Date Collected: 05/05/23 18:06
Date Received: 05/08/23 16:00

Lab Sample ID: 550-201909-18
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	245.1			299938	SRR	EET PHX	05/09/23 16:26
Total/NA	Analysis	245.1		1	299948	SRR	EET PHX	05/09/23 20:02
Total/NA	Analysis	SM 2320B		1	300412	MAN	EET PHX	05/16/23 18:32
Total/NA	Analysis	SM 2540C		1	300207	CXK	EET PHX	05/12/23 19:33 - 05/17/23 13:45 [1]
Total/NA	Analysis	SM 4500 H+ B		1	300005	MAN	EET PHX	05/10/23 12:49

Client Sample ID: FC-CCR-FD03-0523
Date Collected: 05/02/23 16:20
Date Received: 05/08/23 16:00

Lab Sample ID: 550-201909-19
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			612031	KMS	EET DEN	05/17/23 14:58
Total Recoverable	Analysis	200.7 Rev 4.4		1	613473	ADL	EET DEN	05/22/23 17:08
Total Recoverable	Prep	200.7			612031	KMS	EET DEN	05/17/23 14:58
Total Recoverable	Analysis	200.8		1	613435	LMT	EET DEN	05/22/23 15:57

Client Sample ID: FC-CCR-DMX01-0523
Date Collected: 05/03/23 14:08
Date Received: 05/08/23 16:00

Lab Sample ID: 550-201909-20
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			615028	LJS	EET DEN	06/07/23 06:34
Total Recoverable	Analysis	200.7 Rev 4.4		5	615704	ADL	EET DEN	06/10/23 02:42
Total Recoverable	Prep	200.8			612031	KMS	EET DEN	05/17/23 14:58
Total Recoverable	Analysis	200.8		1	613435	LMT	EET DEN	05/22/23 15:59

Client Sample ID: FC-CCR-DMX03-0523
Date Collected: 05/03/23 16:47
Date Received: 05/08/23 16:00

Lab Sample ID: 550-201909-21
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		200	300895	AS1	EET PHX	05/23/23 17:53
Total Recoverable	Prep	200.7			612469	LJS	EET DEN	05/15/23 10:30
Total Recoverable	Analysis	200.7 Rev 4.4		1	613473	ADL	EET DEN	05/22/23 17:20
Total Recoverable	Prep	200.7			612469	LJS	EET DEN	05/15/23 10:30
Total Recoverable	Analysis	200.7 Rev 4.4		10	615185	LMT	EET DEN	06/07/23 05:30
Total Recoverable	Prep	200.7			612469	LJS	EET DEN	05/15/23 10:30
Total Recoverable	Analysis	200.7 Rev 4.4		10	615317	LMT	EET DEN	06/07/23 14:44
Total Recoverable	Prep	200.7			612469	LJS	EET DEN	05/15/23 10:30
Total Recoverable	Analysis	200.7 Rev 4.4		1	615489	LMT	EET DEN	06/08/23 17:35
Total/NA	Prep	200.7			612469	LJS	EET DEN	05/15/23 10:30
Total/NA	Analysis	200.7 Rev 4.4		1	613473	ADL	EET DEN	05/22/23 17:20
Total Recoverable	Prep	200.7			612469	LJS	EET DEN	05/15/23 10:30
Total Recoverable	Analysis	200.8		1	613118	LRD	EET DEN	05/19/23 00:14
Total/NA	Analysis	SM 2320B		1	300214	MAN	EET PHX	05/11/23 18:23

Lab Chronicle

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-201909-1
SDG: APS Four Corners Power Plant

Client Sample ID: FC-CCR-DMX03-0523
Date Collected: 05/03/23 16:47
Date Received: 05/08/23 16:00

Lab Sample ID: 550-201909-21
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	SM 2540C		1	300050	CXK	EET PHX	05/10/23 23:16 - 05/12/23 17:15 ¹
Total/NA	Analysis	SM 4500 H+ B		1	300005	MAN	EET PHX	05/10/23 12:50

Client Sample ID: FC-CCR-DMX04-0523
Date Collected: 05/04/23 15:25
Date Received: 05/08/23 16:00

Lab Sample ID: 550-201909-22
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		50	300895	AS1	EET PHX	05/23/23 18:30
Total/NA	Analysis	300.0		200	300895	AS1	EET PHX	05/23/23 18:48
Total Recoverable	Prep	200.7			612469	LJS	EET DEN	05/15/23 10:30
Total Recoverable	Analysis	200.7 Rev 4.4		1	613473	ADL	EET DEN	05/22/23 17:32
Total Recoverable	Prep	200.7			612469	LJS	EET DEN	05/15/23 10:30
Total Recoverable	Analysis	200.7 Rev 4.4		10	613763	ADL	EET DEN	05/24/23 21:53
Total/NA	Prep	200.7			612469	LJS	EET DEN	05/15/23 10:30
Total/NA	Analysis	200.7 Rev 4.4		1	613473	ADL	EET DEN	05/22/23 17:32
Total Recoverable	Prep	200.7			612469	LJS	EET DEN	05/15/23 10:30
Total Recoverable	Analysis	200.8		1	613118	LRD	EET DEN	05/19/23 00:16
Total/NA	Analysis	SM 2320B		1	300214	MAN	EET PHX	05/11/23 18:39
Total/NA	Analysis	SM 2540C		1	300137	CXK	EET PHX	05/11/23 21:58 - 05/15/23 14:15 ¹
Total/NA	Analysis	SM 4500 H+ B		1	300005	MAN	EET PHX	05/10/23 12:51

Client Sample ID: FC-CCR-MW01-0523
Date Collected: 05/02/23 15:42
Date Received: 05/08/23 16:00

Lab Sample ID: 550-201909-23
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			612469	LJS	EET DEN	05/15/23 10:30
Total Recoverable	Analysis	200.7 Rev 4.4		10	613763	ADL	EET DEN	05/24/23 22:05
Total Recoverable	Prep	200.7			612469	LJS	EET DEN	05/15/23 10:30
Total Recoverable	Analysis	200.8		1	613118	LRD	EET DEN	05/19/23 00:21

Client Sample ID: FC-CCR-MW03-0523
Date Collected: 05/02/23 16:25
Date Received: 05/08/23 16:00

Lab Sample ID: 550-201909-24
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			612469	LJS	EET DEN	05/15/23 10:30
Total Recoverable	Analysis	200.7 Rev 4.4		1	613473	ADL	EET DEN	05/22/23 18:00
Total Recoverable	Prep	200.7			612469	LJS	EET DEN	05/15/23 10:30
Total Recoverable	Analysis	200.8		1	613118	LRD	EET DEN	05/19/23 00:23

Lab Chronicle

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-201909-1
SDG: APS Four Corners Power Plant

Client Sample ID: FC-CCR-MW05-0523

Lab Sample ID: 550-201909-25

Date Collected: 05/03/23 17:38
Matrix: Water
Date Received: 05/08/23 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		200	300895	AS1	EET PHX	05/23/23 15:07
Total Recoverable	Prep	200.7			612469	LJS	EET DEN	05/15/23 10:30
Total Recoverable	Analysis	200.7 Rev 4.4		1	613473	ADL	EET DEN	05/22/23 18:05
Total Recoverable	Prep	200.7			612469	LJS	EET DEN	05/15/23 10:30
Total Recoverable	Analysis	200.7 Rev 4.4		10	615185	LMT	EET DEN	06/07/23 06:07
Total Recoverable	Prep	200.7			612469	LJS	EET DEN	05/15/23 10:30
Total Recoverable	Analysis	200.7 Rev 4.4		1	615489	LMT	EET DEN	06/08/23 17:39
Total Recoverable	Prep	200.7			612469	LJS	EET DEN	05/15/23 10:30
Total Recoverable	Analysis	200.7 Rev 4.4		50	615489	LMT	EET DEN	06/08/23 17:43
Total/NA	Prep	200.7			612469	LJS	EET DEN	05/15/23 10:30
Total/NA	Analysis	200.7 Rev 4.4		1	613473	ADL	EET DEN	05/22/23 18:05
Total Recoverable	Prep	200.7			612469	LJS	EET DEN	05/15/23 10:30
Total Recoverable	Analysis	200.8		1	613118	LRD	EET DEN	05/19/23 00:25
Total/NA	Analysis	SM 2320B		1	300214	MAN	EET PHX	05/11/23 18:48
Total/NA	Analysis	SM 2540C		1	300050	CXK	EET PHX	05/10/23 23:16 - 05/12/23 17:15 [1]
Total/NA	Analysis	SM 4500 H+ B		1	300005	MAN	EET PHX	05/10/23 12:52

Client Sample ID: FC-CCR-MW06-0523

Lab Sample ID: 550-201909-26

Date Collected: 05/04/23 16:13
Matrix: Water
Date Received: 05/08/23 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		200	300895	AS1	EET PHX	05/23/23 16:39
Total/NA	Analysis	300.0		1000	300895	AS1	EET PHX	05/23/23 16:58
Total Recoverable	Prep	200.7			612469	LJS	EET DEN	05/15/23 10:30
Total Recoverable	Analysis	200.7 Rev 4.4		1	613473	ADL	EET DEN	05/22/23 18:09
Total Recoverable	Prep	200.7			612469	LJS	EET DEN	05/15/23 10:30
Total Recoverable	Analysis	200.7 Rev 4.4		1	615185	LMT	EET DEN	06/07/23 06:11
Total Recoverable	Prep	200.7			612469	LJS	EET DEN	05/15/23 10:30
Total Recoverable	Analysis	200.7 Rev 4.4		10	615185	LMT	EET DEN	06/07/23 06:15
Total Recoverable	Prep	200.7			612469	LJS	EET DEN	05/15/23 10:30
Total Recoverable	Analysis	200.7 Rev 4.4		10	615317	LMT	EET DEN	06/07/23 15:18
Total/NA	Prep	200.7			612469	LJS	EET DEN	05/15/23 10:30
Total/NA	Analysis	200.7 Rev 4.4		1	613473	ADL	EET DEN	05/22/23 18:09
Total Recoverable	Prep	200.7			612469	LJS	EET DEN	05/15/23 10:30
Total Recoverable	Analysis	200.8		1	613118	LRD	EET DEN	05/19/23 00:27
Total/NA	Analysis	SM 2320B		1	300214	MAN	EET PHX	05/11/23 19:03
Total/NA	Analysis	SM 2540C		1	300137	CXK	EET PHX	05/11/23 21:58 - 05/15/23 14:15 [1]
Total/NA	Analysis	SM 4500 H+ B		1	300005	MAN	EET PHX	05/10/23 12:54

Lab Chronicle

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-201909-1
SDG: APS Four Corners Power Plant

Client Sample ID: FC-CCR-MW11-0523

Lab Sample ID: 550-201909-27
Date Collected: 05/05/23 16:31
Matrix: Water
Date Received: 05/08/23 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		200	300895	AS1	EET PHX	05/23/23 17:16
Total/NA	Analysis	300.0		1000	300895	AS1	EET PHX	05/23/23 17:35
Total Recoverable	Prep	200.7			612469	LJS	EET DEN	05/15/23 10:30
Total Recoverable	Analysis	200.7 Rev 4.4		1	613473	ADL	EET DEN	05/22/23 18:13
Total Recoverable	Prep	200.7			612469	LJS	EET DEN	05/15/23 10:30
Total Recoverable	Analysis	200.7 Rev 4.4		25	613763	ADL	EET DEN	05/24/23 22:14
Total Recoverable	Analysis	200.8		1	613118	LRD	EET DEN	05/19/23 00:36
Total/NA	Analysis	SM 2320B		1	300412	MAN	EET PHX	05/16/23 19:03
Total/NA	Analysis	SM 2540C		1	300207	CXK	EET PHX	05/12/23 19:33 - 05/17/23 13:45 [1]
Total/NA	Analysis	SM 4500 H+ B		1	300005	MAN	EET PHX	05/10/23 12:55

Client Sample ID: FC-CCR-FD04-0523

Lab Sample ID: 550-201909-28
Date Collected: 05/03/23 12:34
Matrix: Water
Date Received: 05/08/23 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.8			612469	LJS	EET DEN	05/15/23 10:30
Total Recoverable	Analysis	200.7 Rev 4.4		10	613763	ADL	EET DEN	05/24/23 22:18
Total Recoverable	Prep	200.8			612469	LJS	EET DEN	05/15/23 10:30
Total Recoverable	Analysis	200.8		1	613118	LRD	EET DEN	05/19/23 00:38

Client Sample ID: FC-CCR-MW17R-0523

Lab Sample ID: 550-201909-29
Date Collected: 05/04/23 14:34
Matrix: Water
Date Received: 05/08/23 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		20	300895	AS1	EET PHX	05/23/23 20:02
Total/NA	Analysis	300.0		200	300895	AS1	EET PHX	05/23/23 20:20
Total Recoverable	Prep	200.7			612469	LJS	EET DEN	05/15/23 10:30
Total Recoverable	Analysis	200.7 Rev 4.4		1	613473	ADL	EET DEN	05/22/23 18:21
Total Recoverable	Prep	200.7			612469	LJS	EET DEN	05/15/23 10:30
Total Recoverable	Analysis	200.7 Rev 4.4		10	615317	LMT	EET DEN	06/07/23 16:16
Total Recoverable	Prep	200.7			612469	LJS	EET DEN	05/15/23 10:30
Total Recoverable	Analysis	200.7 Rev 4.4		1	615489	LMT	EET DEN	06/08/23 17:47
Total/NA	Prep	200.7			612469	LJS	EET DEN	05/15/23 10:30
Total/NA	Analysis	200.7 Rev 4.4		1	613473	ADL	EET DEN	05/22/23 18:21
Total Recoverable	Prep	200.7			612469	LJS	EET DEN	05/15/23 10:30
Total Recoverable	Analysis	200.8		1	613118	LRD	EET DEN	05/19/23 00:39
Total/NA	Analysis	SM 2320B		1	300214	MAN	EET PHX	05/11/23 19:15
Total/NA	Analysis	SM 2540C		1	300137	CXK	EET PHX	05/11/23 21:58 - 05/15/23 14:15 [1]
Total/NA	Analysis	SM 4500 H+ B		1	300005	MAN	EET PHX	05/10/23 12:56

Client Sample ID: FC-CCR-MW18-0523

Lab Sample ID: 550-201909-30

Date Collected: 05/04/23 11:50

Matrix: Water

Date Received: 05/08/23 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		200	300895	AS1	EET PHX	05/23/23 20:39
Total Recoverable	Prep	200.7			612469	LJS	EET DEN	05/15/23 10:30
Total Recoverable	Analysis	200.7 Rev 4.4		1	613473	ADL	EET DEN	05/22/23 18:25
Total Recoverable	Prep	200.7			612469	LJS	EET DEN	05/15/23 10:30
Total Recoverable	Analysis	200.7 Rev 4.4		1	615317	LMT	EET DEN	06/07/23 16:20
Total Recoverable	Prep	200.7			612469	LJS	EET DEN	05/15/23 10:30
Total Recoverable	Analysis	200.7 Rev 4.4		10	615317	LMT	EET DEN	06/07/23 16:24
Total/NA	Prep	200.7			612469	LJS	EET DEN	05/15/23 10:30
Total/NA	Analysis	200.7 Rev 4.4		1	613473	ADL	EET DEN	05/22/23 18:25
Total Recoverable	Prep	200.7			612469	LJS	EET DEN	05/15/23 10:30
Total Recoverable	Analysis	200.8		1	613118	LRD	EET DEN	05/19/23 00:41
Total/NA	Analysis	SM 2320B		1	300214	MAN	EET PHX	05/11/23 19:21
Total/NA	Analysis	SM 2540C		1	300050	CXK	EET PHX	05/10/23 23:16 - 05/12/23 17:15 [1]
Total/NA	Analysis	SM 4500 H+ B		1	300005	MAN	EET PHX	05/10/23 12:59

Client Sample ID: FC-CCR-MW19-0523

Lab Sample ID: 550-201909-31

Date Collected: 05/03/23 15:07

Matrix: Water

Date Received: 05/08/23 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.8			612469	LJS	EET DEN	05/15/23 10:30
Total Recoverable	Analysis	200.7 Rev 4.4		1	613473	ADL	EET DEN	05/22/23 18:41
Total Recoverable	Prep	200.8			612469	LJS	EET DEN	05/15/23 10:30
Total Recoverable	Analysis	200.8		1	613118	LRD	EET DEN	05/19/23 00:43

Client Sample ID: FC-CCR-MW21-0523

Lab Sample ID: 550-201909-32

Date Collected: 05/02/23 17:06

Matrix: Water

Date Received: 05/08/23 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			612469	LJS	EET DEN	05/15/23 10:30
Total Recoverable	Analysis	200.7 Rev 4.4		10	613763	ADL	EET DEN	05/24/23 22:22
Total Recoverable	Prep	200.7			612469	LJS	EET DEN	05/15/23 10:30
Total Recoverable	Analysis	200.8		1	613118	LRD	EET DEN	05/19/23 00:45

Client Sample ID: FC-CCR-MW23R-0523

Lab Sample ID: 550-201909-33

Date Collected: 05/03/23 16:02

Matrix: Water

Date Received: 05/08/23 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		200	300895	AS1	EET PHX	05/23/23 21:15
Total Recoverable	Prep	200.7			612469	LJS	EET DEN	05/15/23 10:30
Total Recoverable	Analysis	200.7 Rev 4.4		1	613473	ADL	EET DEN	05/22/23 18:49
Total Recoverable	Prep	200.7			612469	LJS	EET DEN	05/15/23 10:30
Total Recoverable	Analysis	200.7 Rev 4.4		10	615185	LMT	EET DEN	06/07/23 06:39

Lab Chronicle

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-201909-1
SDG: APS Four Corners Power Plant

Client Sample ID: FC-CCR-MW23R-0523

Lab Sample ID: 550-201909-33
Date Collected: 05/03/23 16:02
Matrix: Water
Date Received: 05/08/23 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			612469	LJS	EET DEN	05/15/23 10:30
Total Recoverable	Analysis	200.7 Rev 4.4		1	615317	LMT	EET DEN	06/07/23 16:28
Total/NA	Prep	200.7			612469	LJS	EET DEN	05/15/23 10:30
Total/NA	Analysis	200.7 Rev 4.4		1	613473	ADL	EET DEN	05/22/23 18:49
Total Recoverable	Prep	200.7			612469	LJS	EET DEN	05/15/23 10:30
Total Recoverable	Analysis	200.8		1	613118	LRD	EET DEN	05/19/23 00:50
Total/NA	Analysis	SM 2320B		1	300214	MAN	EET PHX	05/11/23 19:37
Total/NA	Analysis	SM 2540C		1	300048	CXK	EET PHX	05/10/23 22:57 - 05/11/23 17:30 [1]
Total/NA	Analysis	SM 4500 H+ B		1	300005	MAN	EET PHX	05/10/23 13:01

Client Sample ID: FC-CCR-MW24-0523

Lab Sample ID: 550-201909-34
Date Collected: 05/04/23 18:12
Matrix: Water
Date Received: 05/08/23 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		10	300898	SMA	EET PHX	05/23/23 21:42
Total/NA	Analysis	300.0		200	300898	SMA	EET PHX	05/23/23 22:10
Total Recoverable	Prep	200.7			612469	LJS	EET DEN	05/15/23 10:30
Total Recoverable	Analysis	200.7 Rev 4.4		1	613473	ADL	EET DEN	05/22/23 18:53
Total Recoverable	Prep	200.7			612469	LJS	EET DEN	05/15/23 10:30
Total Recoverable	Analysis	200.7 Rev 4.4		1	615185	LMT	EET DEN	06/07/23 06:59
Total Recoverable	Prep	200.7			612469	LJS	EET DEN	05/15/23 10:30
Total Recoverable	Analysis	200.7 Rev 4.4		10	615185	LMT	EET DEN	06/07/23 07:03
Total/NA	Prep	200.7			612469	LJS	EET DEN	05/15/23 10:30
Total/NA	Analysis	200.7 Rev 4.4		1	613473	ADL	EET DEN	05/22/23 18:53
Total Recoverable	Prep	200.7			612469	LJS	EET DEN	05/15/23 10:30
Total Recoverable	Analysis	200.8		1	613118	LRD	EET DEN	05/19/23 00:52
Total/NA	Analysis	SM 2320B		1	300214	MAN	EET PHX	05/11/23 19:48
Total/NA	Analysis	SM 2540C		1	300050	CXK	EET PHX	05/10/23 23:16 - 05/12/23 17:15 [1]
Total/NA	Analysis	SM 4500 H+ B		1	300005	MAN	EET PHX	05/10/23 13:02

Client Sample ID: FC-CCR-MW30-0523

Lab Sample ID: 550-201909-35
Date Collected: 05/03/23 09:50
Matrix: Water
Date Received: 05/08/23 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			615028	LJS	EET DEN	06/07/23 06:34
Total Recoverable	Analysis	200.7 Rev 4.4		1	615611	ADL	EET DEN	06/09/23 08:13
Total Recoverable	Prep	200.8			612469	LJS	EET DEN	05/15/23 10:30
Total Recoverable	Analysis	200.8		1	613118	LRD	EET DEN	05/19/23 00:03

Client Sample ID: FC-CCR-MW36R-0523

Lab Sample ID: 550-201909-36

Date Collected: 05/04/23 12:44
Matrix: Water
Date Received: 05/08/23 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		20	300898	SMA	EET PHX	05/24/23 00:02
Total Recoverable	Prep	200.7			612469	LJS	EET DEN	05/15/23 10:30
Total Recoverable	Analysis	200.7 Rev 4.4		1	613473	ADL	EET DEN	05/22/23 18:57
Total Recoverable	Prep	200.7			612469	LJS	EET DEN	05/15/23 10:30
Total Recoverable	Analysis	200.7 Rev 4.4		1	615185	LMT	EET DEN	06/07/23 07:07
Total Recoverable	Prep	200.7			612469	LJS	EET DEN	05/15/23 10:30
Total Recoverable	Analysis	200.7 Rev 4.4		10	615185	LMT	EET DEN	06/07/23 07:12
Total/NA	Prep	200.7			612469	LJS	EET DEN	05/15/23 10:30
Total/NA	Analysis	200.7 Rev 4.4		1	613473	ADL	EET DEN	05/22/23 18:57
Total Recoverable	Prep	200.7			612469	LJS	EET DEN	05/15/23 10:30
Total Recoverable	Analysis	200.8		1	613118	LRD	EET DEN	05/19/23 00:54
Total/NA	Analysis	SM 2320B		1	300214	MAN	EET PHX	05/11/23 20:08
Total/NA	Analysis	SM 2540C		1	300050	CXK	EET PHX	05/10/23 23:16 - 05/12/23 17:15 [1]
Total/NA	Analysis	SM 4500 H+ B		1	300005	MAN	EET PHX	05/10/23 13:03

Client Sample ID: FC-CCR-MW38R-0523

Lab Sample ID: 550-201909-37

Date Collected: 05/05/23 11:20
Matrix: Water
Date Received: 05/08/23 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		20	300898	SMA	EET PHX	05/24/23 00:58
Total/NA	Analysis	300.0		200	300898	SMA	EET PHX	05/24/23 01:26
Total Recoverable	Prep	200.7			612469	LJS	EET DEN	05/15/23 10:30
Total Recoverable	Analysis	200.7 Rev 4.4		1	613473	ADL	EET DEN	05/22/23 19:02
Total Recoverable	Prep	200.7			612469	LJS	EET DEN	05/15/23 10:30
Total Recoverable	Analysis	200.7 Rev 4.4		1	615185	LMT	EET DEN	06/07/23 07:16
Total Recoverable	Prep	200.7			612469	LJS	EET DEN	05/15/23 10:30
Total Recoverable	Analysis	200.7 Rev 4.4		10	615185	LMT	EET DEN	06/07/23 07:20
Total/NA	Prep	200.7			612469	LJS	EET DEN	05/15/23 10:30
Total/NA	Analysis	200.7 Rev 4.4		1	613473	ADL	EET DEN	05/22/23 19:02
Total Recoverable	Prep	200.7			612469	LJS	EET DEN	05/15/23 10:30
Total Recoverable	Analysis	200.8		1	613118	LRD	EET DEN	05/19/23 00:56
Total/NA	Analysis	SM 2320B		1	300412	MAN	EET PHX	05/16/23 19:31
Total/NA	Analysis	SM 2540C		1	300207	CXK	EET PHX	05/12/23 19:33 - 05/17/23 13:45 [1]
Total/NA	Analysis	SM 4500 H+ B		1	300005	MAN	EET PHX	05/10/23 13:04

Client Sample ID: FC-CCR-MW56-0523

Lab Sample ID: 550-201909-38

Date Collected: 05/04/23 13:33
Matrix: Water
Date Received: 05/08/23 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		200	300996	AS1	EET PHX	05/24/23 14:07
Total Recoverable	Prep	200.7			612469	LJS	EET DEN	05/15/23 10:30
Total Recoverable	Analysis	200.7 Rev 4.4		1	613473	ADL	EET DEN	05/22/23 19:06

Lab Chronicle

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-201909-1
SDG: APS Four Corners Power Plant

Client Sample ID: FC-CCR-MW56-0523
Date Collected: 05/04/23 13:33
Date Received: 05/08/23 16:00

Lab Sample ID: 550-201909-38
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			612469	LJS	EET DEN	05/15/23 10:30
Total Recoverable	Analysis	200.7 Rev 4.4		1	615185	LMT	EET DEN	06/07/23 07:24
Total Recoverable	Prep	200.7			612469	LJS	EET DEN	05/15/23 10:30
Total Recoverable	Analysis	200.7 Rev 4.4		10	615185	LMT	EET DEN	06/07/23 07:28
Total/NA	Prep	200.7			612469	LJS	EET DEN	05/15/23 10:30
Total/NA	Analysis	200.7 Rev 4.4		1	613473	ADL	EET DEN	05/22/23 19:06
Total Recoverable	Prep	200.7			612469	LJS	EET DEN	05/15/23 10:30
Total Recoverable	Analysis	200.8		1	613118	LRD	EET DEN	05/19/23 00:58
Total/NA	Analysis	SM 2320B		1	300214	MAN	EET PHX	05/11/23 20:23
Total/NA	Analysis	SM 2540C		1	300050	CXK	EET PHX	05/10/23 23:16 - 05/12/23 17:15 [1]
Total/NA	Analysis	SM 4500 H+ B		1	300005	MAN	EET PHX	05/10/23 13:05

Client Sample ID: FC-CCR-FD06-0523
Date Collected: 05/03/23 16:20
Date Received: 05/08/23 16:00

Lab Sample ID: 550-201909-39
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			612469	LJS	EET DEN	05/15/23 10:30
Total Recoverable	Analysis	200.7 Rev 4.4		1	613473	ADL	EET DEN	05/22/23 19:10
Total Recoverable	Prep	200.7			612469	LJS	EET DEN	05/15/23 10:30
Total Recoverable	Analysis	200.8		1	613118	LRD	EET DEN	05/19/23 00:59

Client Sample ID: FC-CCR-MW57-0523
Date Collected: 05/05/23 12:42
Date Received: 05/08/23 16:00

Lab Sample ID: 550-201909-40
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		100	300996	AS1	EET PHX	05/24/23 14:44
Total Recoverable	Prep	200.7			612469	LJS	EET DEN	05/15/23 10:30
Total Recoverable	Analysis	200.7 Rev 4.4		1	613473	ADL	EET DEN	05/22/23 19:14
Total Recoverable	Prep	200.7			612469	LJS	EET DEN	05/15/23 10:30
Total Recoverable	Analysis	200.7 Rev 4.4		1	615185	LMT	EET DEN	06/07/23 07:32
Total Recoverable	Prep	200.7			612469	LJS	EET DEN	05/15/23 10:30
Total Recoverable	Analysis	200.7 Rev 4.4		10	615185	LMT	EET DEN	06/07/23 07:36
Total/NA	Prep	200.7			612469	LJS	EET DEN	05/15/23 10:30
Total/NA	Analysis	200.7 Rev 4.4		1	613473	ADL	EET DEN	05/22/23 19:14
Total Recoverable	Prep	200.7			612469	LJS	EET DEN	05/15/23 10:30
Total Recoverable	Analysis	200.8		1	613118	LRD	EET DEN	05/19/23 00:09
Total/NA	Analysis	SM 2320B		1	300412	MAN	EET PHX	05/16/23 19:39
Total/NA	Analysis	SM 2540C		1	300207	CXK	EET PHX	05/12/23 19:33 - 05/17/23 13:45 [1]
Total/NA	Analysis	SM 4500 H+ B		1	300005	MAN	EET PHX	05/10/23 13:07

Lab Chronicle

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-201909-1
SDG: APS Four Corners Power Plant

Client Sample ID: FC-CCR-MW60-0523
Date Collected: 05/02/23 15:04
Date Received: 05/08/23 16:00

Lab Sample ID: 550-201909-41
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			612170	LJS	EET DEN	05/17/23 14:58
Total Recoverable	Analysis	200.7 Rev 4.4		10	613779	ADL	EET DEN	05/25/23 02:38
Total Recoverable	Prep	200.7			612170	LJS	EET DEN	05/17/23 14:58
Total Recoverable	Analysis	200.8		1	613435	LMT	EET DEN	05/22/23 16:12

Client Sample ID: FC-CCR-MW77S-0523
Date Collected: 05/03/23 10:48
Date Received: 05/08/23 16:00

Lab Sample ID: 550-201909-42
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.8			612170	LJS	EET DEN	05/17/23 14:58
Total Recoverable	Analysis	200.7 Rev 4.4		1	613151	ADL	EET DEN	05/18/23 23:46
Total Recoverable	Prep	200.8			612170	LJS	EET DEN	05/17/23 14:58
Total Recoverable	Analysis	200.8		1	613910	LMT	EET DEN	05/25/23 16:29

Client Sample ID: FC-CCR-MW78S-0523
Date Collected: 05/03/23 11:26
Date Received: 05/08/23 16:00

Lab Sample ID: 550-201909-43
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			612170	LJS	EET DEN	05/17/23 14:58
Total Recoverable	Analysis	200.7 Rev 4.4		1	613151	ADL	EET DEN	05/18/23 23:58
Total Recoverable	Prep	200.7			612170	LJS	EET DEN	05/17/23 14:58
Total Recoverable	Analysis	200.8		1	613435	LMT	EET DEN	05/22/23 16:13

Client Sample ID: FC-CCR-MW79S-0523
Date Collected: 05/03/23 12:54
Date Received: 05/08/23 16:00

Lab Sample ID: 550-201909-44
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.8			612170	LJS	EET DEN	05/17/23 14:58
Total Recoverable	Analysis	200.7 Rev 4.4		1	613151	ADL	EET DEN	05/19/23 00:02
Total Recoverable	Prep	200.8			612170	LJS	EET DEN	05/17/23 14:58
Total Recoverable	Analysis	200.8		1	613435	LMT	EET DEN	05/22/23 16:15

Client Sample ID: FC-CCR-MW81-0523
Date Collected: 05/03/23 12:07
Date Received: 05/08/23 16:00

Lab Sample ID: 550-201909-45
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			615028	LJS	EET DEN	06/07/23 06:34
Total Recoverable	Analysis	200.7 Rev 4.4		1	615611	ADL	EET DEN	06/09/23 08:18
Total Recoverable	Prep	200.8			612170	LJS	EET DEN	05/17/23 14:58
Total Recoverable	Analysis	200.8		1	613435	LMT	EET DEN	05/22/23 16:28

Client Sample ID: FC-CCR-MW82S-0523

Lab Sample ID: 550-201909-46

Date Collected: 05/05/23 15:32
Matrix: Water
Date Received: 05/08/23 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		100	300996	AS1	EET PHX	05/24/23 16:16
Total Recoverable	Prep	200.7			612170	LJS	EET DEN	05/17/23 14:58
Total Recoverable	Analysis	200.7 Rev 4.4		1	613151	ADL	EET DEN	05/19/23 00:06
Total Recoverable	Prep	200.7			612170	LJS	EET DEN	05/17/23 14:58
Total Recoverable	Analysis	200.7 Rev 4.4		10	613779	ADL	EET DEN	05/25/23 03:03
Total Recoverable	Prep	200.7			612170	LJS	EET DEN	05/17/23 14:58
Total Recoverable	Analysis	200.8		1	613435	LMT	EET DEN	05/22/23 16:33
Total/NA	Analysis	SM 2320B		1	300412	MAN	EET PHX	05/16/23 19:49
Total/NA	Analysis	SM 2540C		1	300207	CXK	EET PHX	05/12/23 19:33 - 05/17/23 13:45 [1]
Total/NA	Analysis	SM 4500 H+ B		1	300005	MAN	EET PHX	05/10/23 13:08

Client Sample ID: FC-CCR-FD07-0523

Lab Sample ID: 550-201909-47

Date Collected: 05/03/23 13:31
Matrix: Water
Date Received: 05/08/23 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			612170	LJS	EET DEN	05/17/23 14:58
Total Recoverable	Analysis	200.7 Rev 4.4		1	613151	ADL	EET DEN	05/19/23 00:10
Total Recoverable	Prep	200.7			612170	LJS	EET DEN	05/17/23 14:58
Total Recoverable	Analysis	200.8		1	613435	LMT	EET DEN	05/22/23 16:35

Client Sample ID: FC-CCR-FD05-0523

Lab Sample ID: 550-201909-48

Date Collected: 05/03/23 20:02
Matrix: Water
Date Received: 05/08/23 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			612170	LJS	EET DEN	05/17/23 14:58
Total Recoverable	Analysis	200.7 Rev 4.4		1	613151	ADL	EET DEN	05/19/23 00:14
Total Recoverable	Prep	200.7			612170	LJS	EET DEN	05/17/23 14:58
Total Recoverable	Analysis	200.8		1	613435	LMT	EET DEN	05/22/23 16:37

Client Sample ID: FC-CCR-SUMP1-0523

Lab Sample ID: 550-201909-49

Date Collected: 05/05/23 08:14
Matrix: Water
Date Received: 05/08/23 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		20	300996	AS1	EET PHX	05/24/23 12:35
Total Recoverable	Prep	200.7			612170	LJS	EET DEN	05/17/23 14:58
Total Recoverable	Analysis	200.7 Rev 4.4		1	613151	ADL	EET DEN	05/19/23 00:18
Total Recoverable	Prep	200.7			612170	LJS	EET DEN	05/17/23 14:58
Total Recoverable	Analysis	200.7 Rev 4.4		10	613779	ADL	EET DEN	05/25/23 03:07
Total Recoverable	Prep	200.7			612170	LJS	EET DEN	05/17/23 14:58
Total Recoverable	Analysis	200.8		1	613435	LMT	EET DEN	05/22/23 16:39
Total/NA	Analysis	SM 2540C		1	300207	CXK	EET PHX	05/12/23 19:33 - 05/17/23 13:45 [1]

Client Sample ID: FC-CCR-SUMP2-0523

Lab Sample ID: 550-201909-50
Date Collected: 05/05/23 08:27
Matrix: Water
Date Received: 05/08/23 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		20	300996	AS1	EET PHX	05/24/23 16:53
Total Recoverable	Prep	200.7			612170	LJS	EET DEN	05/17/23 14:58
Total Recoverable	Analysis	200.7 Rev 4.4		1	613151	ADL	EET DEN	05/19/23 00:22
Total Recoverable	Prep	200.7			612170	LJS	EET DEN	05/17/23 14:58
Total Recoverable	Analysis	200.8		1	613435	LMT	EET DEN	05/22/23 16:41
Total/NA	Analysis	SM 2540C		1	300207	CXK	EET PHX	05/12/23 19:33 - 05/17/23 13:45 [1]

Client Sample ID: FC-CCR-SUMP3-0523

Lab Sample ID: 550-201909-51
Date Collected: 05/05/23 08:44
Matrix: Water
Date Received: 05/08/23 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		20	300996	AS1	EET PHX	05/24/23 17:11
Total Recoverable	Prep	200.7			612170	LJS	EET DEN	05/17/23 14:58
Total Recoverable	Analysis	200.7 Rev 4.4		1	613151	ADL	EET DEN	05/19/23 00:38
Total Recoverable	Prep	200.7			612170	LJS	EET DEN	05/17/23 14:58
Total Recoverable	Analysis	200.8		1	613435	LMT	EET DEN	05/22/23 16:42
Total/NA	Analysis	SM 2540C		1	300207	CXK	EET PHX	05/12/23 19:33 - 05/17/23 13:45 [1]

Client Sample ID: FC-CCR-SUMP7-0523

Lab Sample ID: 550-201909-52
Date Collected: 05/05/23 08:51
Matrix: Water
Date Received: 05/08/23 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		50	300996	AS1	EET PHX	05/24/23 17:30
Total Recoverable	Prep	200.7			612170	LJS	EET DEN	05/17/23 14:58
Total Recoverable	Analysis	200.7 Rev 4.4		1	613151	ADL	EET DEN	05/19/23 00:42
Total Recoverable	Prep	200.7			612170	LJS	EET DEN	05/17/23 14:58
Total Recoverable	Analysis	200.7 Rev 4.4		10	613779	ADL	EET DEN	05/25/23 03:24
Total Recoverable	Prep	200.7			612170	LJS	EET DEN	05/17/23 14:58
Total Recoverable	Analysis	200.8		1	613435	LMT	EET DEN	05/22/23 16:48
Total/NA	Analysis	SM 2540C		1	300207	CXK	EET PHX	05/12/23 19:33 - 05/17/23 13:45 [1]

Client Sample ID: FC-CCR-SUMP8-0523

Lab Sample ID: 550-201909-53
Date Collected: 05/05/23 09:00
Matrix: Water
Date Received: 05/08/23 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		200	300996	AS1	EET PHX	05/24/23 17:48
Total Recoverable	Prep	200.7			612170	LJS	EET DEN	05/17/23 14:58
Total Recoverable	Analysis	200.7 Rev 4.4		1	613151	ADL	EET DEN	05/19/23 00:46
Total Recoverable	Prep	200.7			612170	LJS	EET DEN	05/17/23 14:58
Total Recoverable	Analysis	200.7 Rev 4.4		10	613779	ADL	EET DEN	05/25/23 03:29
Total Recoverable	Prep	200.7			612170	LJS	EET DEN	05/17/23 14:58
Total Recoverable	Analysis	200.8		1	613435	LMT	EET DEN	05/22/23 16:50

Lab Chronicle

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-201909-1
SDG: APS Four Corners Power Plant

Client Sample ID: FC-CCR-SUMP8-0523
Date Collected: 05/05/23 09:00
Date Received: 05/08/23 16:00

Lab Sample ID: 550-201909-53
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	SM 2540C		1	300207	CXK	EET PHX	05/12/23 19:33 - 05/17/23 13:45 [1]

Client Sample ID: FC-CCR-SUMP9-0523
Date Collected: 05/05/23 09:08
Date Received: 05/08/23 16:00

Lab Sample ID: 550-201909-54
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		20	300996	AS1	EET PHX	05/24/23 18:07
Total Recoverable	Prep	200.7			612170	LJS	EET DEN	05/17/23 14:58
Total Recoverable	Analysis	200.7 Rev 4.4		1	613151	ADL	EET DEN	05/19/23 00:51
Total Recoverable	Prep	200.7			612170	LJS	EET DEN	05/17/23 14:58
Total Recoverable	Analysis	200.8		1	613435	LMT	EET DEN	05/22/23 16:52
Total/NA	Analysis	SM 2540C		1	300207	CXK	EET PHX	05/12/23 19:33 - 05/17/23 13:45 [1]

Client Sample ID: FC-CCR-SUMP10-0523
Date Collected: 05/05/23 09:15
Date Received: 05/08/23 16:00

Lab Sample ID: 550-201909-55
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		10	300996	AS1	EET PHX	05/24/23 18:25
Total Recoverable	Prep	200.7			612170	LJS	EET DEN	05/17/23 14:58
Total Recoverable	Analysis	200.7 Rev 4.4		1	613151	ADL	EET DEN	05/19/23 00:55
Total Recoverable	Prep	200.7			612170	LJS	EET DEN	05/17/23 14:58
Total Recoverable	Analysis	200.7 Rev 4.4		10	613779	ADL	EET DEN	05/25/23 03:33
Total Recoverable	Prep	200.7			612170	LJS	EET DEN	05/17/23 14:58
Total Recoverable	Analysis	200.8		1	613435	LMT	EET DEN	05/22/23 16:53
Total/NA	Analysis	SM 2540C		1	300207	CXK	EET PHX	05/12/23 19:33 - 05/17/23 13:45 [1]

Client Sample ID: FC-CCR-SUMP11-0523
Date Collected: 05/05/23 09:21
Date Received: 05/08/23 16:00

Lab Sample ID: 550-201909-56
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		10	300996	AS1	EET PHX	05/24/23 18:44
Total Recoverable	Prep	200.7			612170	LJS	EET DEN	05/17/23 14:58
Total Recoverable	Analysis	200.7 Rev 4.4		1	613151	ADL	EET DEN	05/19/23 00:59
Total Recoverable	Prep	200.7			612170	LJS	EET DEN	05/17/23 14:58
Total Recoverable	Analysis	200.8		1	613435	LMT	EET DEN	05/22/23 16:55
Total/NA	Analysis	SM 2540C		1	300208	CXK	EET PHX	05/12/23 21:08 - 05/15/23 17:00 [1]

Client Sample ID: FC-CCR-SUMP12-0523

Lab Sample ID: 550-201909-57
Matrix: Water
Date Collected: 05/05/23 09:29
Date Received: 05/08/23 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		10	300996	AS1	EET PHX	05/24/23 19:57
Total Recoverable	Prep	200.7			612170	LJS	EET DEN	05/17/23 14:58
Total Recoverable	Analysis	200.7 Rev 4.4		1	613151	ADL	EET DEN	05/19/23 01:03
Total Recoverable	Prep	200.7			612170	LJS	EET DEN	05/17/23 14:58
Total Recoverable	Analysis	200.8		1	613435	LMT	EET DEN	05/22/23 16:57
Total/NA	Analysis	SM 2540C		1	300208	CXK	EET PHX	05/12/23 21:08 - 05/15/23 17:00 [1]

Client Sample ID: FC-CCR-SUMP13-0523

Lab Sample ID: 550-201909-58
Matrix: Water
Date Collected: 05/05/23 09:36
Date Received: 05/08/23 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		10	300996	AS1	EET PHX	05/24/23 20:16
Total Recoverable	Prep	200.7			612170	LJS	EET DEN	05/17/23 14:58
Total Recoverable	Analysis	200.7 Rev 4.4		1	613151	ADL	EET DEN	05/19/23 01:07
Total Recoverable	Prep	200.7			612170	LJS	EET DEN	05/17/23 14:58
Total Recoverable	Analysis	200.8		1	613435	LMT	EET DEN	05/22/23 16:59
Total/NA	Analysis	SM 2540C		1	300208	CXK	EET PHX	05/12/23 21:08 - 05/15/23 17:00 [1]

Client Sample ID: FC-CCR-SUMP14-0523

Lab Sample ID: 550-201909-59
Matrix: Water
Date Collected: 05/05/23 09:45
Date Received: 05/08/23 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		20	300996	AS1	EET PHX	05/24/23 20:34
Total Recoverable	Prep	200.7			612170	LJS	EET DEN	05/17/23 14:58
Total Recoverable	Analysis	200.7 Rev 4.4		1	613151	ADL	EET DEN	05/19/23 01:11
Total Recoverable	Prep	200.7			612170	LJS	EET DEN	05/17/23 14:58
Total Recoverable	Analysis	200.8		1	613435	LMT	EET DEN	05/22/23 17:01
Total/NA	Analysis	SM 2540C		1	300208	CXK	EET PHX	05/12/23 21:08 - 05/15/23 17:00 [1]

Client Sample ID: FC-CCR-SUMP15-0523

Lab Sample ID: 550-201909-60
Matrix: Water
Date Collected: 05/05/23 09:48
Date Received: 05/08/23 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		200	300996	AS1	EET PHX	05/24/23 20:52
Total Recoverable	Prep	200.7			612170	LJS	EET DEN	05/17/23 14:58
Total Recoverable	Analysis	200.7 Rev 4.4		1	613151	ADL	EET DEN	05/19/23 01:15
Total Recoverable	Prep	200.7			612170	LJS	EET DEN	05/17/23 14:58
Total Recoverable	Analysis	200.7 Rev 4.4		10	613779	ADL	EET DEN	05/25/23 03:37
Total Recoverable	Prep	200.7			612170	LJS	EET DEN	05/17/23 14:58
Total Recoverable	Analysis	200.8		1	613435	LMT	EET DEN	05/22/23 17:02
Total/NA	Analysis	SM 2540C		1	300208	CXK	EET PHX	05/12/23 21:08 - 05/15/23 17:00 [1]

Lab Chronicle

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-201909-1
SDG: APS Four Corners Power Plant

Client Sample ID: FC-CCR-SUMP16-0523

Lab Sample ID: 550-201909-61
Date Collected: 05/05/23 09:56
Matrix: Water
Date Received: 05/08/23 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		200	300996	AS1	EET PHX	05/24/23 21:11
Total Recoverable	Prep	200.7			612618	LJS	EET DEN	05/18/23 07:45
Total Recoverable	Analysis	200.7 Rev 4.4		1	613473	ADL	EET DEN	05/22/23 19:42
Total Recoverable	Prep	200.7			612618	LJS	EET DEN	05/18/23 07:45
Total Recoverable	Analysis	200.7 Rev 4.4		1	613763	ADL	EET DEN	05/24/23 22:50
Total Recoverable	Prep	200.7			612618	LJS	EET DEN	05/18/23 07:45
Total Recoverable	Analysis	200.7 Rev 4.4		10	613763	ADL	EET DEN	05/24/23 22:54
Total Recoverable	Prep	200.7			612618	LJS	EET DEN	05/18/23 07:45
Total Recoverable	Analysis	200.8		1	613118	LRD	EET DEN	05/19/23 01:23
Total/NA	Analysis	SM 2540C		1	300208	CXK	EET PHX	05/12/23 21:08 - 05/15/23 17:00 [1]

Client Sample ID: FC-CCR-SUMP17-0523

Lab Sample ID: 550-201909-62
Date Collected: 05/05/23 10:03
Matrix: Water
Date Received: 05/08/23 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		50	300996	AS1	EET PHX	05/24/23 21:29
Total Recoverable	Prep	200.7			612618	LJS	EET DEN	05/18/23 07:45
Total Recoverable	Analysis	200.7 Rev 4.4		1	613473	ADL	EET DEN	05/22/23 19:46
Total Recoverable	Prep	200.7			612618	LJS	EET DEN	05/18/23 07:45
Total Recoverable	Analysis	200.7 Rev 4.4		1	613763	ADL	EET DEN	05/24/23 22:59
Total Recoverable	Prep	200.7			612618	LJS	EET DEN	05/18/23 07:45
Total Recoverable	Analysis	200.8		1	613118	LRD	EET DEN	05/19/23 01:25
Total/NA	Analysis	SM 2540C		1	300208	CXK	EET PHX	05/12/23 21:08 - 05/15/23 17:00 [1]

Client Sample ID: FC-CCR-SUMP18-0523

Lab Sample ID: 550-201909-63
Date Collected: 05/05/23 10:08
Matrix: Water
Date Received: 05/08/23 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		200	300996	AS1	EET PHX	05/24/23 21:48
Total Recoverable	Prep	200.7			612618	LJS	EET DEN	05/18/23 07:45
Total Recoverable	Analysis	200.7 Rev 4.4		1	613473	ADL	EET DEN	05/22/23 19:50
Total Recoverable	Prep	200.7			612618	LJS	EET DEN	05/18/23 07:45
Total Recoverable	Analysis	200.7 Rev 4.4		1	613763	ADL	EET DEN	05/24/23 23:23
Total Recoverable	Prep	200.7			612618	LJS	EET DEN	05/18/23 07:45
Total Recoverable	Analysis	200.8		1	613118	LRD	EET DEN	05/19/23 01:26
Total/NA	Analysis	SM 2540C		1	300208	CXK	EET PHX	05/12/23 21:08 - 05/15/23 17:00 [1]

[1] This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

EET PHX = Eurofins Phoenix, 4625 East Cotton Center Boulevard, Suite #189, Phoenix, AZ 85040, TEL (602)437-3340

Accreditation/Certification Summary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-201909-1
SDG: APS Four Corners Power Plant

Laboratory: Eurofins Phoenix

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Arizona	State	AZ0728	06-09-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
SM 4500 H+ B		Water	Temperature

Laboratory: Eurofins Denver

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arizona	State	AZ0713	12-20-24

Method Summary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-201909-1
SDG: APS Four Corners Power Plant

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	EPA	EET PHX
200.7 Rev 4.4	Metals (ICP)	EPA	EET DEN
200.8	Metals (ICP/MS)	EPA	EET DEN
245.1	Mercury (CVAA)	EPA	EET PHX
SM 2320B	Alkalinity	SM	EET PHX
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET PHX
SM 4500 H+ B	pH	SM	EET PHX
200.7	Preparation, Total Metals	EPA	EET DEN
200.7	Preparation, Total Recoverable Metals	EPA	EET DEN
200.8	Preparation, Total Recoverable Metals	EPA	EET DEN
245.1	Preparation, Mercury	EPA	EET PHX

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

EET PHX = Eurofins Phoenix, 4625 East Cotton Center Boulevard, Suite #189, Phoenix, AZ 85040, TEL (602)437-3340

TestAmerica Phoenix
4625 E Cotton Center Blvd
Suite 189
Phoenix, AZ 85040
phone 602.437.3340 fax 602.454.9303

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☑ Other: CCR

201909

TestAmerica Laboratories, Inc.

6/15/2023

Client Contact	Natalie Chrisman Lazarr	Pam Norris (505-598-8781)	Date:	COC No:
Arizona Public Service	602-250-3608	Lab Contact: Rachel Sester	Carrier:	1 of 8 COCs
PO Box 355, MS 4915	Analysis Turnaround Time			Sampler:
Fruitland, NM 87416	☐ CALENDAR DAYS ☑ WORKING DAYS			For Lab Use Only:
	TAT if different from Below _____			Walk-in Client:
	☑ 2 weeks			Lab Sampling:
Project Name: CCR Groundwater Monitoring	☐ 1 week			
Site: APS Four Corners Power Plant (CWTP)	☐ 2 days			Job / SDG No.:
PO #: 300592358	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	EPA 300.0 (Cl, F, SO4)	SM 4500-HB (pH)	SM 2540C (TDS)	EPA 200.7 - Totals (B, Ca, Be, Li)	EPA 200.7 - Total Lithium	EPA 200.8 - Totals (Sb, As, Ba, Cd, Co, Cr, Pb, Mo, Se, Tl)	EPA 245.1 - Totals (Hg)	Sample Specific Notes:
FC-CCR-MW62-0523 -1	5/7/2023	1412	G	W	3	N	N	X	X	X	X	X	X	X	Low Flow
FC-CCR-MW63-0523 -2	5/7/2023	1541	G	W	3	N	N	X	X	X	X	X	X	X	"
FC-CCR-MW64-0523 -3	5/7/2023	1613	G	W	3	N	N	X	X	X	X	X	X	X	"
FC-CCR-MW65-0523 -4	5/7/2023	1153	G	W	3	N	N	X	X	X	X	X	X	X	"
FC-CCR-SW1-0523 -5	5/7/2023	1842	G	W	3	N		X	X	X	X	X	X	X	Morgan Lake grab sample
FC-CCR-SW2-0523 -6	5/7/2023	1506	G	W	3	N		X	X	X	X	X	X	X	CWTP surface grab sample
FC-CCR-SW3-0523 -7	5/7/2023	1513	G	W	3	N	N	X	X	X	X	X	X	X	Cooling canal grab sample
FC-CCR-FD08-0523 -8	5/7/2023	1234	G	W	3	N	N	X	X	X	X	X	X	X	Surface water sample duplicate
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____								1	1	1	4	4	4	4	

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☑ Disposal by Lab ☐ Archive for_____ Months

Special Instructions/QC Requirements & Comments:

Method 200.8 with collision cell

550-201909 Chain of Custody

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:				
Relinquished by:	Company: WSP	Date/Time: 5May23 0859	Received by:		
Relinquished by:	Company: AHS	Date/Time:	Received by:		
Relinquished by:	Company: AHS	Date/Time: 5/8/23	Received in Laboratory by:	Company: TALSW	Date/Time: 05-08-23 16:00

Temp 1.8-C, 2.4-C, 2.0-C, 2.0-C, 2.0-C 2.0-C, 1.8-C

Form No. CA-C-WI-002, Rev. 4.2, dated 04/02/2013

TestAmerica Phoenix
4625 E Cotton Center Blvd
Suite 189
Phoenix, AZ 85040
phone 602.437.3340 fax 602.454.9303

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☑ Other: CCR

201909

TestAmerica Laboratories, Inc.

Client Contact	Natalie Chrisman Lazarr	Pam Norris (505-598-8781)	Date:	COC No: 8/8/23
Arizona Public Service	602-250-3608	Lab Contact: Rachel Sester	Carrier:	2 of 8 COCs
PO Box 355, MS 4915	Analysis Turnaround Time			Sampler:
Fruitland, NM 87416	☐ CALENDAR DAYS ☑ WORKING DAYS			For Lab Use Only:
	TAT if different from Below _____			Walk-in Client:
	☑ 2 weeks			Lab Sampling:
Project Name: CCR Groundwater Monitoring	☐ 1 week			
Site: APS Four Corners Power Plant (URS)	☐ 2 days			Job / SDG No.:
PO #: 300592358	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	EPA 300.0 (Cl, F, SO4)	EPA 200.7 - Totals (B, Ca, Be, Li)	EPA 200.7 - Total Lithium	EPA 200.8 - Totals (Sb, As, Ba, Cd, Co, Cr, Pb, Mo, Se, Tl)	SM 4500-HB (pH)	SM 2540C (TDS)	EPA 245.1 - Totals (Hg)	Sample Specific Notes:
FC-CCR-MW66-0523 -9	5/7/2023	1245	G	W	3	N	N	X	X	X	X	X	X	X	Low Flow
FC-CCR-MW70-0523 -10	5/7/2023	1059	G	W	3	N	N	X	X	X	X	X	X	X	"
FC-CCR-MW73-0523 -11	5/7/2023	1815	G	W	3	N	N	X	X	X	X	X	X	X	"
FC-CCR-MW83-0523 -12	5/7/2023	1721	G	W	3	N	N	X	X	X	X	X	X	X	"
FC-CCR-MW86-0523 -13	5/7/2023	1325	G	W	3	N	N	X	X	X	X	X	X	X	"
FC-CCR-FD02-0523 -14	5/7/2023	1620	G	W	3	N	N	X	X	X	X	X	X	X	"
								1	4	4	4	1	1	4	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☑ Disposal by Lab ☐ Archive for_____ Months

Special Instructions/QC Requirements & Comments:

Method 200.8 with collision cell

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd:_____ Corr'd:_____ Therm ID No.:_____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	WSP	08 May 23 0854			
[signature]	AHS				
[signature]	AHS	5/8 3:12	[signature]	EETSW	05-08-23 16:00

P&C

TEMP 1.8°C, 2.4°C, 2.0°C, 2.0°C, 2.0°C, 2.0°C, 1.8°C

Form No. CA-C-WI-002, Rev. 4.2, dated 04/02/2013

6/15/2023

Chain of Custody Record

TestAmerica Phoenix
4625 E Cotton Center Blvd
Suite 189
Phoenix, AZ 85040
phone 602.437.3340 fax 602.454.9303

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☑ Other: CCR

201909

TestAmerica Laboratories, Inc.

6/15/2023

Client Contact	Natalie Chrisman Lazarr	Pam Norris (505-598-8781)	Date:	COC No:
Arizona Public Service	602-250-3608	Lab Contact: Rachel Sester	Carrier:	3 of 8 COCs
PO Box 355, MS 4915	Analysis Turnaround Time			Sampler:
Fruitland, NM 87416	☐ CALENDAR DAYS ☑ WORKING DAYS			For Lab Use Only:
Phone	TAT if different from Below _____			Walk-in Client:
FAX	☑ 2 weeks			Lab Sampling:
Project Name: CCR Groundwater Monitoring	☐ 1 week			
Site: APS Four Corners Power Plant (Multiunit)	☐ 2 days			Job / SDG No.:
PO #: 300592358	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	EPA 300.0 (Cl, F, SO4)	EPA 200.7 - Totals (B)	EPA 200.7 - Totals (B, Ca, Be)	EPA 200.7 - Totals (B, Ca, Be, K, Mg, Na)	EPA 200.7 - Totals (B, Ca, Be, K, Mg, Na, Mn, Fe)	EPA 200.7 - Total Lithium	EPA 200.8 - Totals (Sb, As, Ba, Cd, Co, Cr, Pb, Mo, Se, Tl)	EPA 200.8 - Totals (Co, Mo)	EPA 245.1 - Totals (Hg)	SM 4500-HB (pH)	SM 2540C (TDS)	SM 2320B (CO3 Alkalinity as CaCO3, HCO3 Alkalinity as CaCO3)	Sample Specific Notes:
FC-CCR-MW52-0523 -15	5/2/2023	1410	G	W	3	N	Y		X						X					Low Flow, MS/MSD included
FC-CCR-MW61-0523 -16	5/4/2023	954	G	W	3	N		X			X		X	X		X	X	X	X	Low Flow, MS/MSD included
FC-CCR-MW75-0523 -17	5/4/2023	1042	G	W	3	N		X			X		X	X		X	X	X	X	"
FC-CCR-MW87-0523 -18	5/5/2023	1806	G	W	3	N		X				X	X	X		X	X	X	X	"
FC-CCR-FD03-0523 -19	5/2/2023	1620	G	W	1	N	N		X						X					"
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____								1	4	4	4	4	4	4	4	4	1	1	1	

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☑ Disposal by Lab ☐ Archive for_____ Months

Special Instructions/QC Requirements & Comments:

Method 200.8 with collision cell

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd:_____ Corr'd:_____ Therm ID No.:_____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	WSP	8May23 0854			
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	AHS				
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:
	AHS	5/8 312		EEATW	05-08-23 16:00

Form No. CA-C-WI-002, Rev. 4.2, dated 04/02/2013

TEMP 1.8°C, 2.4°C, 2.0°C, 2.0°C, 2.0°C, 2.0°C, 1.8°C

TestAmerica Phoenix
4625 E Cotton Center Blvd
Suite 189
Phoenix, AZ 85040
phone 602.437.3340 fax 602.454.9303

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

6/15/2023

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☑ Other: CCR 201909

TestAmerica Laboratories, Inc.

Client Contact	Natalie Chrisman Lazarr	Pam Norris (505-598-8781)	Date:	COC No:
Arizona Public Service	602-250-3608	Lab Contact: Rachel Sester	Carrier:	4 of 8 COCs
PO Box 355, MS 4915	**Analysis Turnaround Time**			Sampler:
Fruitland, NM 87416	☐ CALENDAR DAYS ☑ WORKING DAYS			**For Lab Use Only:**
Phone	TAT if different from Below _____			Walk-in Client:
FAX	☑ 2 weeks			Lab Sampling:
Project Name: CCR Groundwater Monitoring	☐ 1 week			
Site: APS Four Corners Power Plant (Other)	☐ 2 days			Job / SDG No.:
PO #: 300592358	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	EPA 300.0 (Cl, F, SO4)	EPA 200.7 - Totals (B)	EPA 200.7 - Totals (B, Ca, Be)	EPA 200.7 - Totals (B, Ca, Be, K, Mg, Na, Fe)	EPA 200.7 - Totals (B, Ca, K, Mg, Na)	EPA 200.7 - Totals (B, Ca, K, Mg, Na, Mn, Fe)	EPA 200.7 - Totals (B, Ca, Be, K, Mg, Na, Mn, Fe)	EPA 200.7 - Total Lithium	EPA 200.8 - Totals (Sb, As, Ba, Cd, Co, Cr, Pb, Mo, Se, Tl)	EPA 200.8 - Totals (Co, Mo)	EPA 245.1 - Totals (Hg)	SM 4500-HB (pH)	SM 2540C (TDS)	SM 2320B (CO3 Alkalinity as CaCO3, HCO3 Alkalinity as)	Sample Specific Notes:
FC-CCR-DMX01-0523 -20	5/3/2023	1408	G	W	3	N	Y		X								X					Low Flow, MS/MSD included
FC-CCR-DMX03-0523 -21	5/3/2023	1647	G	W	3	N		X						X	X	X			X	X	X	Low Flow
FC-CCR-DMX04-0523 -22	5/4/2023	1525	G	W	3	N		X						X	X	X			X	X	X	"
FC-CCR-MW01-0523 -23	5/2/2023	1542	G	W	1	N			X								X					"
FC-CCR-MW03-0523 -24	5/2/2023	1625	G	W	1	N			X								X					"
FC-CCR-MW05-0523 -25	5/3/2023	1738	G	W	3	N		X						X	X		X		X	X	X	"
FC-CCR-MW06-0523 -26	5/4/2023	1613	G	W	3	N		X						X	X	X			X	X	X	"
FC-CCR-MW11-0523 -27	5/5/2023	1631	G	W	2	N		X				X					X		X	X	X	"
FC-CCR-FD04-0523 -28	5/3/2023	1234	G	W	1	N			X								X					"
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____								1	4	4	4	4	4	4		4	4	4	1	1	1	

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☑ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

Method 200.8 with collision cell

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd:_____ Corr'd:_____ Therm ID No.:_____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	WSP	8 May 23			
[signature]	AHS	0854			
[signature]	AHS	5.8.23	Received in Laboratory by: [signature]	EEASW	05-08-23 16:00

P/C Temp 1.8°C, 2.4°C, 2.0°C, 2.0°C, 2.0°C, 2.0°C, 1.8°C

Form No. CA-C-WI-002, Rev. 4.2, dated 04/02/2013

TestAmerica Phoenix
4625 E Cotton Center Blvd
Suite 189
Phoenix, AZ 85040
phone 602.437.3340 fax 602.454.9303

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☑ Other: CCR

201909

TestAmerica Laboratories, Inc.

6/15/2023

Client Contact	Natalie Chrisman Lazarr	Pam Norris (505-598-8781)	Date:	COC No:
Arizona Public Service	602-250-3608	Lab Contact: Rachel Sester	Carrier:	5 of 8 COCs
PO Box 355, MS 4915	Analysis Turnaround Time			Sampler:
Fruitland, NM 87416	☐ CALENDAR DAYS ☑ WORKING DAYS			For Lab Use Only:
Phone	TAT if different from Below _____			Walk-in Client:
FAX	☑ 2 weeks			Lab Sampling:
Project Name: CCR Groundwater Monitoring	☐ 1 week			
Site: APS Four Corners Power Plant (Other)	☐ 2 days			Job / SDG No.:
PO #: 300592358	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	EPA 300.0 (Cl, F, SO4)	EPA 200.7 - Totals (B)	EPA 200.7 - Totals (B, Ca, Be)	EPA 200.7 - Totals (B, Ca, Be, K, Mg, Na)	EPA 200.7 - Totals (B, Ca, K, Mg, Na)	EPA 200.7 - Totals (B, Ca, K, Mg, Na, Mn, Fe)	EPA 200.7 - Totals (B, Ca, Be, K, Mg, Na, Mn, Fe)	EPA 200.7 - Total Lithium	EPA 200.8 - Totals (Sb, As, Ba, Cd, Co, Cr, Pb, Mo, Se, Tl)	EPA 200.8 - Totals (Co, Mo)	EPA 245.1 - Totals (Hg)	SM 4500-HB (pH)	SM 2540C (TDS)	SM 2320B (CO3 Alkalinity as CaCO3, HCO3 Alkalinity as CaCO3)	Sample Specific Notes:
FC-CCR-MW17R-0523 -29	5/4/2023	1434	G	W	3	N		X						X	X	X			X	X	X	Low Flow
FC-CCR-MW18-0523 -30	5/4/2023	1150	G	W	3	N		X						X	X		X		X	X	X	"
FC-CCR-MW19-0523 -31	5/3/2023	1507	G	W	1	N			X								X					"
FC-CCR-MW21-0523 -32	5/2/2023	1706	G	W	1	N			X								X					"
FC-CCR-MW23R-0523 -33	5/3/2023	1602	G	W	3	N		X						X	X		X		X	X	X	"
FC-CCR-MW24-0523 -34	~~5/3/2023~~ 5/4/2023	1812	G	W	3	N		X						X	X		X		X	X	X	"
FC-CCR-MW30-0523 -35	5/3/2023	950	G	W	3	N	Y		X								X					Low Flow, MS + MSD included
FC-CCR-MW36R-0523 -36	5/4/2023	1244	G	W	3	N		X						X	X		X		X	X	X	Low Flow
FC-CCR-MW38R-0523 -37	5/5/2023	1120	G	W	3	N		X						X	X	X			X	X	X	"
FC-CCR-MW56-0523 -38	5/4/2023	1333	G	W	3	N		X						X	X	X			X	X	X	"
FC-CCR-FD06-0523 -39	5/3/2023	1620	G	W	1	N			X								X					"
																						"
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____								1	4	4	4	4	4	4	4	4	4	4	1	1	1	

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☑ Return to Client ☑ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

Method 200.8 with collision cell

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd:_____ Corr'd:_____ Therm ID No.:_____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	WSP	8 May 23 0854			
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	AHS				
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:
	AHS	5/8-312		FEDEX 0508-23	16:05

Temp 1.8-C, 2.4-C, 2.0-C, 2.0-C, 2.0-C, 2.0-C, 1.8-C

TestAmerica Phoenix
4625 E Cotton Center Blvd
Suite 189
Phoenix, AZ 85040
phone 602.437.3340 fax 602.454.9303

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

201909

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☑ Other: CCR

TestAmerica Laboratories, Inc.

6/15/2023

Client Contact	Natalie Chrisman Lazarr	Pam Norris (505-598-8781)	Date:	COC No:
Arizona Public Service	602-250-3608	Lab Contact: Rachel Sester	Carrier:	6 of 8 COCs
PO Box 355, MS 4915	Analysis Turnaround Time			Sampler:
Fruitland, NM 87416	☐ CALENDAR DAYS ☑ WORKING DAYS			For Lab Use Only:
Phone	TAT if different from Below _____			Walk-in Client:
FAX	☑ 2 weeks			Lab Sampling:
Project Name: CCR Groundwater Monitoring	☐ 1 week			Job / SDG No.:
Site: APS Four Corners Power Plant (Other)	☐ 2 days			
PO #: 300592358	☐ 1 day			

Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	EPA 300.0 (Cl, F, SO4)	EPA 200.7 - Totals (B)	EPA 200.7 - Totals (B, Ca, Be)	EPA 200.7 - Totals (B, Mn, Fe)	EPA 200.7 - Totals (B, Ca, K, Mg, Na)	EPA 200.7 - Totals (B, Ca, K, Mg, Na, Mn, Fe)	EPA 200.7 - Totals (B, Ca, Be, K, Mg, Na, Mn, Fe)	EPA 200.7 - Total Lithium	EPA 200.8 - Totals (Sb, As, Ba, Cd, Co, Cr, Pb, Mo, Se, Tl)	EPA 200.8 - Totals (Co, Mo)	EPA 245.1 - Totals (Hg)	SM 4500-HB (pH)	SM 2540C (TDS)	SM 2320B (CO3 Alkalinity as CaCO3, HCO3 Alkalinity as	Sample Specific Notes:
FC-CCR-MW57-0523	-40	5/5/2023	1242	G	W	2	N		X						X	X	X			X	X	X	Low Flow
FC-CCR-MW60-0523	-41	5/2/2023	1504	G	W	1	N			X								X					"
FC-CCR-MW77S-0523	-42	5/3/2023	1048	G	W	1	N			X								X					"
FC-CCR-MW78S-0523	-43	5/3/2023	1126	G	W	1	N			X								X					"
FC-CCR-MW79S-0523	-44	5/3/2023	1254	G	W	3	N	Y		X								X					Low Flow, MS + MSD included
FC-CCR-MW81-0523	-45	5/3/2023	1207	G	W	3	N			X								X					Low Flow
FC-CCR-MW82S-0523	-46	5/5/2023	1532	G	W	2	N		X				X					X		X	X	X	"
FC-CCR-FD07-0523	-47	5/3/2023	1331	G	W	1	N	N		X								X					"
FC-CCR-FD05-0523	-48	5/3/2023	2002	G	W	1	N	N		X								X					"
									1	4	4	4	4	4	4	4	4	4	4	1	1	1	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☑ Return to Client ☑ Disposal by Lab ☑ Archive for_____ Months

Special Instructions/QC Requirements & Comments:

Method 200.8 with collision cell

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:	Cooler Temp. (°C): Obs'd:_____ Corr'd:_____ Therm ID No.:_____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	WSP	8May23 0854			
Relinquished by: [signature]	Company: AHS	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by: [signature]	Company: AHS	Date/Time: 5/8/23	Received in Laboratory by: [signature]	Company: TEL-SLC	Date/Time: 05-08-23 16:00

TEMP 1.8-C, 2.4-C, 2-0-C, 2-0-C, 2-0-C, 2-0-C 1.8-C

Chain of Custody Record

TestAmerica Phoenix
4625 E Cotton Center Blvd
Suite 189
Phoenix, AZ 85040
phone 602.437.3340 fax 602.454.9303

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☑ Other: CCR

201909

TestAmerica Laboratories, Inc.

6/15/2023

Client Contact	Natalie Chrisman Lazarr	Pam Norris (505-598-8781)	Date:	COC No:
Arizona Public Service	602-250-3608	Lab Contact: Rachel Sester	Carrier:	7 of 8 COCs
PO Box 355, MS 4915	Analysis Turnaround Time			Sampler:
Fruitland, NM 87416	☐ CALENDAR DAYS ☑ WORKING DAYS			For Lab Use Only:
Phone	TAT if different from Below _____			Walk-in Client:
FAX	☑ 2 weeks			Lab Sampling:
Project Name: CCR Groundwater Monitoring	☐ 1 week			
Site: APS Four Corners Power Plant (Other)	☐ 2 days			Job / SDG No.:
PO #: 300592358	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	EPA 300.0 (Cl)	EPA 200.7 - Totals (B, Mg, Mn, Fe)	EPA 200.8 - Totals (Co, Mo)	SM 2540C (TDS)	Sample Specific Notes:
FC-CCR-SUMP1-0523 -49	5/5/2023	814	G	W	2	N		X	X	X	X	Grab Sample
FC-CCR-SUMP2-0523 -50	5/5/2023	827	G	W	2	N		X	X	X	X	"
FC-CCR-SUMP3-0523 -51	5/5/2023	844	G	W	2	N		X	X	X	X	"
FC-CCR-SUMP7-0523 -52	5/5/2023	851	G	W	2	N		X	X	X	X	"
FC-CCR-SUMP8-0523 -53	5/5/2023	900	G	W	2	N		X	X	X	X	"
FC-CCR-SUMP9-0523 -54	5/5/2023	908	G	W	2	N		X	X	X	X	"
FC-CCR-SUMP10-0523 -55	5/5/2023	915	G	W	2	N		X	X	X	X	"
FC-CCR-SUMP11-0523 -56	5/5/2023	921	G	W	2	N		X	X	X	X	"
FC-CCR-SUMP12-0523 -57	5/5/2023	929	G	W	2	N		X	X	X	X	"
FC-CCR-SUMP13-0523 -58	5/5/2023	936	G	W	2	N		X	X	X	X	"
FC-CCR-SUMP14-0523 -59	5/5/2023	945	G	W	2	N		X	X	X	X	"
FC-CCR-SUMP15-0523 -60	5/5/2023	~~956~~ 948 5/8/23	G	W	2	N		X	X	X	X	"
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____								1	4	4	1	

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☑ Return to Client ☑ Disposal by Lab ☑ Archive for_____ Months

Special Instructions/QC Requirements & Comments:

Method 200.8 with collision cell

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd:_____ Corr'd:_____ | Therm ID No.:_____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	WSP	8 May 23 0854			
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	AHS				
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:
	AHS	5/8 312		TALSW	05-08-23 16:00

TEMP 1.8°C, 2.4°C, 2.0°C, 2.0°C, 2.0°C, 2.0°C, 1.8°C

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Phoenix, AZ 85040
phone 602.437.3340 fax 602.454.9303

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☑ Other: CCR

201909

TestAmerica Laboratories, Inc.

Client Contact	Natalie Chrisman Lazarr	Pam Norris (505-598-8781)	Date:	COC No:
Arizona Public Service	602-250-3608	Lab Contact: Rachel Sester	Carrier:	1 of 8 COCs
PO Box 355, MS 4915	**Analysis Turnaround Time**			Sampler:
Fruitland, NM 87416	☐ CALENDAR DAYS ☑ WORKING DAYS			**For Lab Use Only:**
	TAT if different from Below _____			Walk-in Client:
	☑ 2 weeks			Lab Sampling:
Project Name: CCR Groundwater Monitoring	☐ 1 week			
Site: APS Four Corners Power Plant (CWTP)	☐ 2 days			Job / SDG No.:
PO #: 300592358	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	EPA 300.0 (Cl, F, SO4)	SM 4500-HB (pH)	SM 2540C (TDS)	EPA 200.7 - Totals (B, Ca, Be, Li)	EPA 200.7 - Total Lithium	EPA 200.8 - Totals (Sb, As, Ba, Cd, Co, Cr, Pb, Mo, Se, Tl)	EPA 245.1 - Totals (Hg)	Sample Specific Notes:
FC-CCR-MW62-0523 -1	5/7/2023	1412	G	W	3	N	N	X	X	X	X	X	X	X	Low Flow
FC-CCR-MW63-0523 -2	5/7/2023	1541	G	W	3	N	N	X	X	X	X	X	X	X	"
FC-CCR-MW64-0523 -3	5/7/2023	1613	G	W	3	N	N	X	X	X	X	X	X	X	"
FC-CCR-MW65-0523 -4	5/7/2023	1153	G	W	3	N	N	X	X	X	X	X	X	X	"
FC-CCR-SW1-0523 -5	5/7/2023	1842	G	W	3	N		X	X	X	X	X	X	X	Morgan Lake grab sample
FC-CCR-SW2-0523 -6	5/7/2023	1506	G	W	3	N		X	X	X	X	X	X	X	CWTP surface grab sample
FC-CCR-SW3-0523 -7	5/7/2023	1513	G	W	3	N	N	X	X	X	X	X	X	X	Cooling canal grab sample
FC-CCR-FD08-0523 -8	5/7/2023	1234	G	W	3	N	N	X	X	X	X	X	X	X	Surface water sample duplicate
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____								1	1	1	4	4	4	4	

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☑ Disposal by Lab ☐ Archive for_____ Months

Special Instructions/QC Requirements & Comments:

Method 200.8 with collision cell

550-201909 Chain of Custody

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:				
Relinquished by:	Company: WSP	Date/Time: 5May23 0859	Received by:		
Relinquished by:	Company: AHS	Date/Time:	Received by:		
Relinquished by:	Company: AHS	Date/Time: 5/8/23	Received in Laboratory by:	Company: TASW	Date/Time: 05-08-23 16:00

Temp 1.8-C, 2.4-C, 2.0-C, 2.0-C, 2.0-C 2.0-C, 1.8-C

Form No. CA-C-WI-002, Rev. 4.2, dated 04/02/2013

6/15/2023

TestAmerica Phoenix
4625 E Cotton Center Blvd
Suite 189
Phoenix, AZ 85040
phone 602.437.3340 fax 602.454.9303

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☑ Other: CCR

201909

TestAmerica Laboratories, Inc.

Client Contact	Natalie Chrisman Lazarr	Pam Norris (505-598-8781)	Date:	COC No: 8/8/23
Arizona Public Service	602-250-3608	Lab Contact: Rachel Sester	Carrier:	2 of 8 COCs
PO Box 355, MS 4915	Analysis Turnaround Time			Sampler:
Fruitland, NM 87416	☐ CALENDAR DAYS ☑ WORKING DAYS			For Lab Use Only:
	TAT if different from Below _____			Walk-in Client:
	☑ 2 weeks			Lab Sampling:
Project Name: CCR Groundwater Monitoring	☐ 1 week			
Site: APS Four Corners Power Plant (URS)	☐ 2 days			Job / SDG No.:
PO #: 300592358	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	EPA 300.0 (Cl, F, SO4)	EPA 200.7 - Totals (B, Ca, Be, Li)	EPA 200.7 - Total Lithium	EPA 200.8 - Totals (Sb, As, Ba, Cd, Co, Cr, Pb, Mo, Se, Tl)	SM 4500-HB (pH)	SM 2540C (TDS)	EPA 245.1 - Totals (Hg)	Sample Specific Notes:
FC-CCR-MW66-0523 -9	5/7/2023	1245	G	W	3	N	N	X	X	X	X	X	X	X	Low Flow
FC-CCR-MW70-0523 -10	5/7/2023	1059	G	W	3	N	N	X	X	X	X	X	X	X	"
FC-CCR-MW73-0523 -11	5/7/2023	1815	G	W	3	N	N	X	X	X	X	X	X	X	"
FC-CCR-MW83-0523 -12	5/7/2023	1721	G	W	3	N	N	X	X	X	X	X	X	X	"
FC-CCR-MW86-0523 -13	5/7/2023	1325	G	W	3	N	N	X	X	X	X	X	X	X	"
FC-CCR-FD02-0523 -14	5/7/2023	1620	G	W	3	N	N	X	X	X	X	X	X	X	"
								1	4	4	4	1	1	4	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☑ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

Method 200.8 with collision cell

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd:_____ Corr'd:_____ Therm ID No.:_____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	WSP	08 May 23 0854			
[signature]	AHS				
[signature]	AHS	5/8 3:12	[signature]	EEFSW	05-08-23 16:00

P&C

Temp 1.8°C, 2.4°C, 2.0°C, 2.0°C, 2.0°C, 2.0°C, 1.8°C

Form No. CA-C-WI-002, Rev. 4.2, dated 04/02/2013

6/15/2023

TestAmerica Phoenix
4625 E Cotton Center Blvd
Suite 189
Phoenix, AZ 85040
phone 602.437.3340 fax 602.454.9303

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☑ Other: CCR

201909

TestAmerica Laboratories, Inc.

6/15/2023

Client Contact	Natalie Chrisman Lazarr	Pam Norris (505-598-8781)	Date:	COC No:
Arizona Public Service	602-250-3608	Lab Contact: Rachel Sester	Carrier:	3 of 8 COCs
PO Box 355, MS 4915	Analysis Turnaround Time			Sampler:
Fruitland, NM 87416	☐ CALENDAR DAYS ☑ WORKING DAYS			For Lab Use Only:
Phone	TAT if different from Below _____			Walk-in Client:
FAX	☑ 2 weeks			Lab Sampling:
Project Name: CCR Groundwater Monitoring	☐ 1 week			
Site: APS Four Corners Power Plant (Multiunit)	☐ 2 days			Job / SDG No.:
PO #: 300592358	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	EPA 300.0 (Cl, F, SO4)	EPA 200.7 - Totals (B)	EPA 200.7 - Totals (B, Ca, Be)	EPA 200.7 - Totals (B, Ca, Be, K, Mg, Na)	EPA 200.7 - Totals (B, Ca, Be, K, Mg, Na, Mn, Fe)	EPA 200.7 - Total Lithium	EPA 200.8 - Totals (Sb, As, Ba, Cd, Co, Cr, Pb, Mo, Se, Tl)	EPA 200.8 - Totals (Co, Mo)	EPA 245.1 - Totals (Hg)	SM 4500-HB (pH)	SM 2540C (TDS)	SM 2320B (CO3 Alkalinity as CaCO3, HCO3 Alkalinity as CaCO3)	Sample Specific Notes:
FC-CCR-MW52-0523 -15	5/2/2023	1410	G	W	3	N	Y		X						X					Low Flow, MS/MSD included
FC-CCR-MW61-0523 -16	5/4/2023	954	G	W	3	N		X			X		X	X		X	X	X	X	Low Flow, MS/MSD included
FC-CCR-MW75-0523 -17	5/4/2023	1042	G	W	3	N		X			X		X	X		X	X	X	X	"
FC-CCR-MW87-0523 -18	5/5/2023	1806	G	W	3	N		X				X	X	X		X	X	X	X	"
FC-CCR-FD03-0523 -19	5/2/2023	1620	G	W	1	N	N		X						X					"
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____								1	4	4	4	4	4	4	4	4	1	1	1	

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☑ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

Method 200.8 with collision cell

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd:_____ Corr'd:_____ Therm ID No.:_____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	WSP	8May23 0854			
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	AHS				
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:
	AHS	5/8 312		ECDW	05-08-23 16:00

Form No. CA-C-WI-002, Rev. 4.2, dated 04/02/2013

TEMP 1.8°C, 2.4°C, 2.0°C, 2.0°C, 2.0°C, 2.0°C, 1.8°C

TestAmerica Phoenix
4625 E Cotton Center Blvd
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Phoenix, AZ 85040
phone 602.437.3340 fax 602.454.9303

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

6/15/2023

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☑ Other: CCR 201909

TestAmerica Laboratories, Inc.

Client Contact	Natalie Chrisman Lazarr	Pam Norris (505-598-8781)	Date:	COC No:
Arizona Public Service	602-250-3608	Lab Contact: Rachel Sester	Carrier:	4 of 8 COCs
PO Box 355, MS 4915	**Analysis Turnaround Time**			Sampler:
Fruitland, NM 87416	☐ CALENDAR DAYS ☑ WORKING DAYS			**For Lab Use Only:**
Phone	TAT if different from Below _____			Walk-in Client:
FAX	☑ 2 weeks			Lab Sampling:
Project Name: CCR Groundwater Monitoring	☐ 1 week			
Site: APS Four Corners Power Plant (Other)	☐ 2 days			Job / SDG No.:
PO #: 300592358	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	EPA 300.0 (Cl, F, SO4)	EPA 200.7 - Totals (B)	EPA 200.7 - Totals (B, Ca, Be)	EPA 200.7 - Totals (B, Ca, Be, K, Mg, Na, Fe)	EPA 200.7 - Totals (B, Ca, K, Mg, Na)	EPA 200.7 - Totals (B, Ca, K, Mg, Na, Mn, Fe)	EPA 200.7 - Totals (B, Ca, Be, K, Mg, Na, Mn, Fe)	EPA 200.7 - Total Lithium	EPA 200.8 - Totals (Sb, As, Ba, Cd, Co, Cr, Pb, Mo, Se, Tl)	EPA 200.8 - Totals (Co, Mo)	EPA 245.1 - Totals (Hg)	SM 4500-HB (pH)	SM 2540C (TDS)	SM 2320B (CO3 Alkalinity as CaCO3, HCO3 Alkalinity as	Sample Specific Notes:
FC-CCR-DMX01-0523 -20	5/3/2023	1408	G	W	3	N	Y		X								X					Low Flow, MS/MSD included
FC-CCR-DMX03-0523 -21	5/3/2023	1647	G	W	3	N		X						X	X	X			X	X	X	Low Flow
FC-CCR-DMX04-0523 -22	5/4/2023	1525	G	W	3	N		X						X	X	X			X	X	X	"
FC-CCR-MW01-0523 -23	5/2/2023	1542	G	W	1	N			X								X					"
FC-CCR-MW03-0523 -24	5/2/2023	1625	G	W	1	N			X								X					"
FC-CCR-MW05-0523 -25	5/3/2023	1738	G	W	3	N		X						X	X		X		X	X	X	"
FC-CCR-MW06-0523 -26	5/4/2023	1613	G	W	3	N		X						X	X	X			X	X	X	"
FC-CCR-MW11-0523 -27	5/5/2023	1631	G	W	2	N		X				X					X		X	X	X	"
FC-CCR-FD04-0523 -28	5/3/2023	1234	G	W	1	N			X								X					"
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____								1	4	4	4	4	4	4		4	4	4	1	1	1	

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☑ Disposal by Lab ☐ Archive for_____ Months

Special Instructions/QC Requirements & Comments:

Method 200.8 with collision cell

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:	Cooler Temp. (°C): Obs'd:_____ Corr'd:_____ Therm ID No.:_____		
Relinquished by:	Company: WSP	Date/Time: 8 May 23	Received by:	Company:	Date/Time:
Relinquished by:	Company: AHS	Date/Time: 0854	Received by:	Company:	Date/Time:
Relinquished by:	Company: AHS	Date/Time: 5.8.23 12	Received in Laboratory by:	Company:	Date/Time: 05-08-23 16:00

Form No. CA-C-WI-002, Rev. 4.2, dated 04/02/2013

P/C Temp 1.8-C, 2.4-C, 2.0-C, 2.0-C, 2.0-C, 2.0-C, 1.8-C

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Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

6/15/2023

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☑ Other: CCR

201909

TestAmerica Laboratories, Inc.

Client Contact	Natalie Chrisman Lazarr	Pam Norris (505-598-8781)	Date:	COC No:
Arizona Public Service	602-250-3608	Lab Contact: Rachel Sester	Carrier:	5 of 8 COCs
PO Box 355, MS 4915	**Analysis Turnaround Time**			Sampler:
Fruitland, NM 87416	☐ CALENDAR DAYS ☑ WORKING DAYS			**For Lab Use Only:**
Phone	TAT if different from Below _____			Walk-in Client:
FAX	☑ 2 weeks			Lab Sampling:
Project Name: CCR Groundwater Monitoring	☐ 1 week			
Site: APS Four Corners Power Plant (Other)	☐ 2 days			Job / SDG No.:
PO #: 300592358	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	EPA 300.0 (Cl, F, SO4)	EPA 200.7 - Totals (B)	EPA 200.7 - Totals (B, Ca, Be)	EPA 200.7 - Totals (B, Ca, Be, K, Mg, Na)	EPA 200.7 - Totals (B, Ca, K, Mg, Na)	EPA 200.7 - Totals (B, Ca, K, Mg, Na, Mn, Fe)	EPA 200.7 - Totals (B, Ca, Be, K, Mg, Na, Mn, Fe)	EPA 200.7 - Total Lithium	EPA 200.8 - Totals (Sb, As, Ba, Cd, Co, Cr, Pb, Mo, Se, Tl)	EPA 200.8 - Totals (Co, Mo)	EPA 245.1 - Totals (Hg)	SM 4500-HB (pH)	SM 2540C (TDS)	SW 2320B (CO3 Alkalinity as CaCO3, HCO3 Alkalinity as CaCO3)	Sample Specific Notes:
FC-CCR-MW17R-0523 -29	5/4/2023	1434	G	W	3	N		X						X	X	X			X	X	X	Low Flow
FC-CCR-MW18-0523 -30	5/4/2023	1150	G	W	3	N		X						X	X		X		X	X	X	"
FC-CCR-MW19-0523 -31	5/3/2023	1507	G	W	1	N			X								X					"
FC-CCR-MW21-0523 -32	5/2/2023	1706	G	W	1	N			X								X					"
FC-CCR-MW23R-0523 -33	5/3/2023	1602	G	W	3	N		X						X	X		X		X	X	X	"
FC-CCR-MW24-0523 -34	~~5/3/2023~~ 5/4/2023	1812	G	W	3	N		X						X	X		X		X	X	X	"
FC-CCR-MW30-0523 -35	5/3/2023	950	G	W	3	N	Y		X								X					Low Flow, MS + MSD included
FC-CCR-MW36R-0523 -36	5/4/2023	1244	G	W	3	N		X						X	X		X		X	X	X	Low Flow
FC-CCR-MW38R-0523 -37	5/5/2023	1120	G	W	3	N		X						X	X	X			X	X	X	"
FC-CCR-MW56-0523 -38	5/4/2023	1333	G	W	3	N		X						X	X	X			X	X	X	"
FC-CCR-FD06-0523 -39	5/3/2023	1620	G	W	1	N			X								X					"
																						"
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____								1	4	4	4	4	4	4	4	4	4	4	1	1	1	

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☑ Return to Client ☑ Disposal by Lab ☐ Archive for_____ Months

Special Instructions/QC Requirements & Comments:

Method 200.8 with collision cell

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:	Cooler Temp. (°C): Obs'd:_____ Corr'd:_____ Therm ID No.:_____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	WSP	8 May 23 0854			
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	AHS				
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:
	AHS	5/8/23 12		EETSW	0508-23 16:00

Temp 1.8°C, 2.4°C, 2.0°C, 2.0°C, 2.0°C, 2.0°C, 1.8°C

TestAmerica Phoenix
4625 E Cotton Center Blvd
Suite 189
Phoenix, AZ 85040
phone 602.437.3340 fax 602.454.9303

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

201909

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☑ Other: CCR

TestAmerica Laboratories, Inc.

6/15/2023

Client Contact	Natalie Chrisman Lazarr	Pam Norris (505-598-8781)	Date:	COC No:
Arizona Public Service	602-250-3608	Lab Contact: Rachel Sester	Carrier:	6 of 8 COCs
PO Box 355, MS 4915	Analysis Turnaround Time			Sampler:
Fruitland, NM 87416	☐ CALENDAR DAYS ☑ WORKING DAYS			For Lab Use Only:
Phone	TAT if different from Below _____			Walk-in Client:
FAX	☑ 2 weeks			Lab Sampling:
Project Name: CCR Groundwater Monitoring	☐ 1 week			Job / SDG No.:
Site: APS Four Corners Power Plant (Other)	☐ 2 days			
PO #: 300592358	☐ 1 day			

Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	EPA 300.0 (Cl, F, SO4)	EPA 200.7 - Totals (B)	EPA 200.7 - Totals (B, Ca, Be)	EPA 200.7 - Totals (B, Mn, Fe)	EPA 200.7 - Totals (B, Ca, K, Mg, Na)	EPA 200.7 - Totals (B, Ca, K, Mg, Na, Mn, Fe)	EPA 200.7 - Totals (B, Ca, Be, K, Mg, Na, Mn, Fe)	EPA 200.7 - Total Lithium	EPA 200.8 - Totals (Sb, As, Ba, Cd, Co, Cr, Pb, Mo, Se, Tl)	EPA 200.8 - Totals (Co, Mo)	EPA 245.1 - Totals (Hg)	SM 4500-HB (pH)	SM 2540C (TDS)	SM 2320B (CO3 Alkalinity as CaCO3, HCO3 Alkalinity as				Sample Specific Notes:
FC-CCR-MW57-0523	-40	5/5/2023	1242	G	W	2	N		X						X	X	X			X	X	X				Low Flow
FC-CCR-MW60-0523	-41	5/2/2023	1504	G	W	1	N			X								X								"
FC-CCR-MW77S-0523	-42	5/3/2023	1048	G	W	1	N			X								X								"
FC-CCR-MW78S-0523	-43	5/3/2023	1126	G	W	1	N			X								X								"
FC-CCR-MW79S-0523	-44	5/3/2023	1254	G	W	3	N	Y		X								X								Low Flow, MS + MSD included
FC-CCR-MW81-0523	-45	5/3/2023	1207	G	W	3	N			X								X								Low Flow
FC-CCR-MW82S-0523	-46	5/5/2023	1532	G	W	2	N		X				X					X		X	X	X				"
FC-CCR-FD07-0523	-47	5/3/2023	1331	G	W	1	N	N		X								X								"
FC-CCR-FD05-0523	-48	5/3/2023	2002	G	W	1	N	N		X								X								"
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____									1	4	4	4	4	4	4	4	4	4	4	1	1	1				

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☑ Return to Client ☑ Disposal by Lab ☑ Archive for_____ Months

Special Instructions/QC Requirements & Comments:

Method 200.8 with collision cell

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:		Cooler Temp. (°C): Obs'd:_____ Corr'd:_____ Therm ID No.:_____		
Relinquished by:	Company: WSP	Date/Time: 8 May 23 0854	Received by:	Company:	Date/Time:
Relinquished by:	Company: AHS	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company: AHS	Date/Time: 5/8/23	Received in Laboratory by:	Company:	Date/Time: 05-08-23 16:00

Form No. CA-C-WI-002, Rev. 4.2, dated 04/02/2013

TEMP 1.8°C, 2.4°C, 2.0°C, 2.0°C, 2.0°C, 2.0°C 1.8°C

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phone 602.437.3340 fax 602.454.9303

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☑ Other: CCR

201909

TestAmerica Laboratories, Inc.

6/15/2023

Client Contact	Natalie Chrisman Lazarr	Pam Norris (505-598-8781)	Date:	COC No:
Arizona Public Service	602-250-3608	Lab Contact: Rachel Sester	Carrier:	7 of 8 COCs
PO Box 355, MS 4915	Analysis Turnaround Time			Sampler:
Fruitland, NM 87416	☐ CALENDAR DAYS ☑ WORKING DAYS			For Lab Use Only:
Phone	TAT if different from Below _____			Walk-in Client:
FAX	☑ 2 weeks			Lab Sampling:
Project Name: CCR Groundwater Monitoring	☐ 1 week			
Site: APS Four Corners Power Plant (Other)	☐ 2 days			Job / SDG No.:
PO #: 300592358	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	EPA 300.0 (Cl)	EPA 200.7 - Totals (B, Mg, Mn, Fe)	EPA 200.8 - Totals (Co, Mo)	SM 2540C (TDS)	Sample Specific Notes:
FC-CCR-SUMP1-0523 -49	5/5/2023	814	G	W	2	N		X	X	X	X	Grab Sample
FC-CCR-SUMP2-0523 -50	5/5/2023	827	G	W	2	N		X	X	X	X	"
FC-CCR-SUMP3-0523 -51	5/5/2023	844	G	W	2	N		X	X	X	X	"
FC-CCR-SUMP7-0523 -52	5/5/2023	851	G	W	2	N		X	X	X	X	"
FC-CCR-SUMP8-0523 -53	5/5/2023	900	G	W	2	N		X	X	X	X	"
FC-CCR-SUMP9-0523 -54	5/5/2023	908	G	W	2	N		X	X	X	X	"
FC-CCR-SUMP10-0523 -55	5/5/2023	915	G	W	2	N		X	X	X	X	"
FC-CCR-SUMP11-0523 -56	5/5/2023	921	G	W	2	N		X	X	X	X	"
FC-CCR-SUMP12-0523 -57	5/5/2023	929	G	W	2	N		X	X	X	X	"
FC-CCR-SUMP13-0523 -58	5/5/2023	936	G	W	2	N		X	X	X	X	"
FC-CCR-SUMP14-0523 -59	5/5/2023	945	G	W	2	N		X	X	X	X	"
FC-CCR-SUMP15-0523 -60	5/5/2023	~~956~~ 948 5/8/23	G	W	2	N		X	X	X	X	"
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____								1	4	4	1	

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☑ Return to Client ☑ Disposal by Lab ☑ Archive for_____ Months

Special Instructions/QC Requirements & Comments:

Method 200.8 with collision cell

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd:_____ Corr'd:_____ | Therm ID No.:_____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	WSP	8 May 23 0854			
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	AHS				
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:
	AHS	5/8 312.		TALSW	05-08-23 16:00

TEMP 1.8°C, 2.4°C, 2.0°C, 2.0°C, 2.0°C, 2.0°C, 1.8°C

TestAmerica Phoenix
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Phoenix, AZ 85040
phone 602.437.3340 fax 602.454.9303

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☑ Other: CCR

201909

TestAmerica Laboratories, Inc.

6/15/2023

Client Contact	Natalie Chrisman Lazarr	Pam Norris (505-598-8781)	Date:	COC No:
Arizona Public Service	602-250-3608	Lab Contact: Rachel Sester	Carrier:	8 of 8 COCs
PO Box 355, MS 4915	Analysis Turnaround Time			Sampler:
Fruitland, NM 87416	☐ CALENDAR DAYS ☑ WORKING DAYS			For Lab Use Only:
Phone	TAT if different from Below _____			Walk-in Client:
FAX	☑ 2 weeks			Lab Sampling:
Project Name: CCR Groundwater Monitoring	☐ 1 week			
Site: APS Four Corners Power Plant (Other)	☐ 2 days			Job / SDG No.:
PO #: 300592358	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	EPA 300.0 (Cl)	EPA 200.7 - Totals (B, Mg, Mn, Fe)	EPA 200.8 - Totals (Co, Mo)	SM 2540C (TDS)	Sample Specific Notes:
FC-CCR-SUMP16-0523 -01	5/5/2023	956	G	W	2	N		X	X	X	X	Grab Sample
FC-CCR-SUMP17-0523 -02	5/5/2023	1003	G	W	2	N		X	X	X	X	"
FC-CCR-SUMP18-0523 -03	5/5/2023	1008	G	W	2	N		X	X	X	X	"
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____								1	4	4	1	

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☑ Return to Client ☑ Disposal by Lab ☑ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

Method 200.8 with collision cell

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:		Cooler Temp. (°C): Obs'd:_____ Corr'd:_____	Therm ID No.:_____
Relinquished by:	Company: WSP	Date/Time: 8 May 23 0854	Received by:	Company:	Date/Time:
Relinquished by:	Company: APCI	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company: AHS	Date/Time: 5/8 312	Received in Laboratory by:	Company:	Date/Time: 05-08-23 16:00

Form No. CA-C-WI-002, Rev. 4.2, dated 04/02/2013

Temp 1.8°C, 2.4°C, 2.0°C, 2.0°C, 2.0°C, 2.0°C, 1.8°C

Eurofins Phoenix
4625 East Cotton Center Boulevard Suite #189
Phoenix, AZ 85040
Phone: 602-437-3340

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Roberts, Danielle C	Carrier Tracking No(s):	COC No: 550-36798.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Danielle.Roberts@et.eurofinsus.com	State of Origin: Arizona	Page: Page 1 of 4
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - Arizona; State Program - Arizona		Job #: 550-201909-1
Address: 4955 Yarrow Street, ,	Due Date Requested: 5/22/2023			
City: Arvada	TAT Requested (days):			
State, Zip: CO, 80002				
Phone: 303-736-0100(Tel) 303-431-7171(Fax)	PO #:			
Email:	WO #:			
Project Name: CCR Groundwater Monitoring	Project #: 55009706			
Site: Arizona Public Service	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	200.7/200.7_P_TOT Lithium-ICP	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
FC-CCR-MW62-0523 (550-201909-1)	5/7/23	14:12 Arizona		Water			X	1	AZ Sample
FC-CCR-MW63-0523 (550-201909-2)	5/7/23	15:41 Arizona		Water			X	1	AZ Sample
FC-CCR-MW64-0523 (550-201909-3)	5/7/23	16:13 Arizona		Water			X	1	AZ Sample
FC-CCR-MW65-0523 (550-201909-4)	5/7/23	11:53 Arizona		Water			X	1	AZ Sample
FC-CCR-SW1-0523 (550-201909-5)	5/7/23	18:42 Arizona		Water			X	1	AZ Sample
FC-CCR-SW2-0523 (550-201909-6)	5/7/23	15:06 Arizona		Water			X	1	AZ Sample
FC-CCR-SW3-0523 (550-201909-7)	5/7/23	15:13 Arizona		Water			X	1	AZ Sample
FC-CCR-FD08-0523 (550-201909-8)	5/7/23	12:34 Arizona		Water			X	1	AZ Sample
FC-CCR-MW66-0523 (550-201909-9)	5/7/23	12:45 Arizona		Water			X	1	AZ Sample

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Southwest, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Southwest, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Southwest, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Southwest, LLC.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	[illegible] 05-09-23	14:50	CCSW	[illegible]		
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 5/10/23	Company EATEN
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 0.6 IR14 CF0.1

Ver: 06/08/2021

Eurofins Phoenix
4625 East Cotton Center Boulevard Suite #189
Phoenix, AZ 85040
Phone: 602-437-3340

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Roberts, Danielle C	Carrier Tracking No(s):	COC No: 550-36798.2
Client Contact: Shipping/Receiving	Phone:	E-Mail: Danielle.Roberts@et.eurofinsus.com	State of Origin: Arizona	Page: Page 2 of 4
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - Arizona; State Program - Arizona		Job #: 550-201909-1
Address: 4955 Yarrow Street, ,	Due Date Requested: 5/22/2023			
City: Arvada	TAT Requested (days):			
State, Zip: CO, 80002				
Phone: 303-736-0100(Tel) 303-431-7171(Fax)	PO #:			
Email:	WO #:			
Project Name: CCR Groundwater Monitoring	Project #: 55009706			
Site: Arizona Public Service	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
E - NaHSO4
F - MeOH
G - Amchlor
H - Ascorbic Acid
I - Ice
J - DI Water
K - EDTA
L - EDA

M - Hexane
N - None
O - AsNaO2
P - Na2O4S
Q - Na2SO3
R - Na2S2O3
S - H2SO4
T - TSP Dodecahydrate
U - Acetone
V - MCAA
W - pH 4-5
Y - Trizma
Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	200.7/200.7_P_TOT Lithium-ICP	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
FC-CCR-MW70-0523 (550-201909-10)	5/7/23	10:59 Arizona		Water			X	1	AZ Sample
FC-CCR-MW73-0523 (550-201909-11)	5/7/23	18:15 Arizona		Water			X	1	AZ Sample
FC-CCR-MW83-0523 (550-201909-12)	5/7/23	17:21 Arizona		Water			X	1	AZ Sample
FC-CCR-MW86-0523 (550-201909-13)	5/7/23	13:25 Arizona		Water			X	1	AZ Sample
FC-CCR-FD02-0523 (550-201909-14)	5/7/23	16:20 Arizona		Water			X	1	AZ Sample
FC-CCR-MW61-0523 (550-201909-16)	5/4/23	09:54 Arizona		Water			X	1	AZ Sample
FC-CCR-MW75-0523 (550-201909-17)	5/4/23	10:42 Arizona		Water			X	1	AZ Sample
FC-CCR-MW87-0523 (550-201909-18)	5/5/23	18:06 Arizona		Water			X	1	AZ Sample
FC-CCR-DMX03-0523 (550-201909-21)	5/3/23	16:47 Arizona		Water			X	1	AZ Sample

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Southwest, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Southwest, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Southwest, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Southwest, LLC.

Possible Hazard Identification	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)***
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1		05-09-23 1450	EETSW	Fedex		
2		Date/Time	Company		5/10/23 0950	EHDEN
3		Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Eurofins Phoenix
4625 East Cotton Center Boulevard Suite #189
Phoenix, AZ 85040
Phone: 602-437-3340

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Roberts, Danielle C	Carrier Tracking No(s):	COC No: 550-36798.3
Client Contact: Shipping/Receiving	Phone:	E-Mail: Danielle.Roberts@et.eurofinsus.com	State of Origin: Arizona	Page: Page 3 of 4
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - Arizona; State Program - Arizona		Job #: 550-201909-1
Address: 4955 Yarrow Street, ,	Due Date Requested: 5/22/2023			
City: Arvada	TAT Requested (days):			
State, Zip: CO, 80002				
Phone: 303-736-0100(Tel) 303-431-7171(Fax)	PO #:			
Email:	WO #:			
Project Name: CCR Groundwater Monitoring	Project #: 55009706			
Site: Arizona Public Service	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	200.7/200.7_P_TOT Lithium-ICP	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
FC-CCR-DMX04-0523 (550-201909-22)	5/4/23	15:25 Arizona		Water			X	1	AZ Sample
FC-CCR-MW05-0523 (550-201909-25)	5/3/23	17:38 Arizona		Water			X	1	AZ Sample
FC-CCR-MW06-0523 (550-201909-26)	5/4/23	16:13 Arizona		Water			X	1	AZ Sample
FC-CCR-MW17R-0523 (550-201909-29)	5/4/23	14:34 Arizona		Water			X	1	AZ Sample
FC-CCR-MW18-0523 (550-201909-30)	5/4/23	11:50 Arizona		Water			X	1	AZ Sample
FC-CCR-MW23R-0523 (550-201909-33)	5/3/23	16:02 Arizona		Water			X	1	AZ Sample
FC-CCR-MW24-0523 (550-201909-34)	5/4/23	18:12 Arizona		Water			X	1	AZ Sample
FC-CCR-MW36R-0523 (550-201909-36)	5/4/23	12:44 Arizona		Water			X	1	AZ Sample
FC-CCR-MW38R-0523 (550-201909-37)	5/5/23	11:20 Arizona		Water			X	1	AZ Sample

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Southwest, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Southwest, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Southwest, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Southwest, LLC.

Possible Hazard Identification	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)***
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[illegible] 05-09-23 1450		EGSW	Fedex		
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 05/10/23 0950	Company EDAEN
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

Eurofins Phoenix
4625 East Cotton Center Boulevard Suite #189
Phoenix, AZ 85040
Phone: 602-437-3340

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Roberts, Danielle C	Carrier Tracking No(s):	COC No: 550-36798.4
Client Contact: Shipping/Receiving	Phone:	E-Mail: Danielle.Roberts@et.eurofinsus.com	State of Origin: Arizona	Page: Page 4 of 4
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - Arizona; State Program - Arizona		Job #: 550-201909-1
Address: 4955 Yarrow Street, ,	Due Date Requested: 5/22/2023			
City: Arvada	TAT Requested (days):			
State, Zip: CO, 80002				
Phone: 303-736-0100(Tel) 303-431-7171(Fax)	PO #:			
Email:	WO #:			
Project Name: CCR Groundwater Monitoring	Project #: 55009706			
Site: Arizona Public Service	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
E - NaHSO4
F - MeOH
G - Amchlor
H - Ascorbic Acid
I - Ice
J - DI Water
K - EDTA
L - EDA
M - Hexane
N - None
O - AsNaO2
P - Na2O4S
Q - Na2SO3
R - Na2S2O3
S - H2SO4
T - TSP Dodecahydrate
U - Acetone
V - MCAA
W - pH 4-5
Y - Trizma
Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	200.7/200.7_P_TOT Lithium-ICP	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
FC-CCR-MW56-0523 (550-201909-38)	5/4/23	13:33 Arizona		Water			X	1	AZ Sample
FC-CCR-MW57-0523 (550-201909-40)	5/5/23	12:42 Arizona		Water			X	1	AZ Sample

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Southwest, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Southwest, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Southwest, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Southwest, LLC.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by: [signature]	Date/Time: 05-09-23 14:50	Company: EETSW	Received by: Fedex	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by: [signature]	Date/Time: 5/10/23 0950	Company: EYADEN
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: 0.6 W14CF01		

Ver: 06/08/2021

6/15/2023

Eurofins Phoenix
4625 East Cotton Center Boulevard Suite #189
Phoenix, AZ 85040
Phone: 602-437-3340

Chain of Custody Record

eurofins

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Roberts, Danielle C	Carrier Tracking No(s):	COC No: 550-36834.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Danielle.Roberts@et.eurofinsus.com	State of Origin: Arizona	Page: Page 1 of 2
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - Arizona; State Program - Arizona		Job #: 550-201909-1
Address: 4955 Yarrow Street, ,	Due Date Requested: 5/22/2023			
City: Arvada	TAT Requested (days):			
State, Zip: CO, 80002				
Phone: 303-736-0100(Tel) 303-431-7171(Fax)	PO #:			
Email:	WO #:			
Project Name: CCR Groundwater Monitoring	Project #: 55009706			
Site: Arizona Public Service	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	200.8/200.8_P_TR Sb, As, Ba, Cd, Co, Cr, Pb, Mo, Se, Tl	200.8/200.8_P_TR (MOD) Co, Mo	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
FC-CCR-MW62-0523 (550-201909-1)	5/7/23	14:12 Arizona		Water			X		1	Collision Cell
FC-CCR-MW52-0523 (550-201909-15)	5/2/23	14:10 Arizona		Water				X	1	
FC-CCR-MW52-0523 (550-201909-15MS)	5/2/23	14:10 Arizona	MS	Water				X	1	
FC-CCR-MW52-0523 (550-201909-15MSD)	5/2/23	14:10 Arizona	MSD	Water				X	1	
FC-CCR-FD03-0523 (550-201909-19)	5/2/23	16:20 Arizona		Water				X	1	
FC-CCR-DMX01-0523 (550-201909-20)	5/3/23	14:08 Arizona		Water				X	1	
FC-CCR-DMX01-0523 (550-201909-20MS)	5/3/23	14:08 Arizona	MS	Water				X	1	
FC-CCR-DMX01-0523 (550-201909-20MSD)	5/3/23	14:08 Arizona	MSD	Water				X	1	
FC-CCR-MW01-0523 (550-201909-23)	5/2/23	15:42 Arizona		Water				X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Southwest, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Southwest, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Southwest, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Southwest, LLC.

Possible Hazard Identification	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)***
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	05-12-23 10:10	ECTSW	Fedex		
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 5/13/23 1102	Company EHDEN
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 13 14/4 CF0.1

Ver: 06/08/2021

Eurofins Phoenix
4625 East Cotton Center Boulevard Suite #189
Phoenix, AZ 85040
Phone: 602-437-3340

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Roberts, Danielle C	Carrier Tracking No(s):	COC No: 550-36834.2
Client Contact: Shipping/Receiving	Phone:	E-Mail: Danielle.Roberts@et.eurofinsus.com	State of Origin: Arizona	Page: Page 2 of 2
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - Arizona; State Program - Arizona		Job #: 550-201909-1
Address: 4955 Yarrow Street, ,	Due Date Requested: 5/22/2023			
City: Arvada	TAT Requested (days):			
State, Zip: CO, 80002				
Phone: 303-736-0100(Tel) 303-431-7171(Fax)	PO #:			
Email:	WO #:			
Project Name: CCR Groundwater Monitoring	Project #: 55009706			
Site: Arizona Public Service	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	200.8/200.8_P_TR Sb, As, Ba, Cd, Co, Cr, Pb, Mo, Se, Tl	200.8/200.8_P_TR (MOD) Co, Mo	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
FC-CCR-MW03-0523 (550-201909-24)	5/2/23	16:25 Arizona		Water				X	1	
FC-CCR-MW11-0523 (550-201909-27)	5/5/23	16:31 Arizona		Water				X	1	
FC-CCR-FD04-0523 (550-201909-28)	5/3/23	12:34 Arizona		Water				X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Southwest, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Southwest, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Southwest, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Southwest, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Date/Time:	Company		Date/Time:	Company
Relinquished by: [signature]	5-12-23 10:10	ECTSW	Received by: [signature] Fedex		
Relinquished by:	Date/Time:	Company	Received by: [signature]	5/13/23 1102	EXAM
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

Eurofins Phoenix
4625 East Cotton Center Boulevard Suite #189
Phoenix, AZ 85040
Phone: 602-437-3340

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Roberts, Danielle C	Carrier Tracking No(s):	COC No: 550-36836.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Danielle.Roberts@et.eurofinsus.com	State of Origin: Arizona	Page: Page 1 of 4
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - Arizona; State Program - Arizona		Job #: 550-201909-1
Address: 4955 Yarrow Street, ,	Due Date Requested: 5/22/2023			
City: Arvada	TAT Requested (days):			
State, Zip: CO, 80002				
Phone: 303-736-0100(Tel) 303-431-7171(Fax)	PO #:			
Email:	WO #:			
Project Name. CCR Groundwater Monitoring	Project #: 55009706			
Site. Arizona Public Service	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
E - NaHSO4
F - MeOH
G - Amchlor
H - Ascorbic Acid
I - Ice
J - DI Water
K - EDTA
L - EDA
M - Hexane
N - None
O - AsNaO2
P - Na2O4S
Q - Na2SO3
R - Na2S2O3
S - H2SO4
T - TSP Dodecahydrate
U - Acetone
V - MCAA
W - pH 4-5
Y - Trizma
Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	200.8/200.8_P_TR (MOD) Co, Mo	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
FC-CCR-MW19-0523 (550-201909-31)	5/3/23	15:07 Arizona		Water			X	1	
FC-CCR-MW21-0523 (550-201909-32)	5/2/23	17:06 Arizona		Water			X	1	
FC-CCR-MW30-0523 (550-201909-35)	5/3/23	09:50 Arizona		Water			X	2	
FC-CCR-MW30-0523 (550-201909-35MS)	5/3/23	09:50 Arizona	MS	Water			X	2	
FC-CCR-MW30-0523 (550-201909-35MSD)	5/3/23	09:50 Arizona	MSD	Water			X	2	
FC-CCR-FD06-0523 (550-201909-39)	5/3/23	16:20 Arizona		Water			X	1	
FC-CCR-MW60-0523 (550-201909-41)	5/2/23	15:04 Arizona		Water			X	1	
FC-CCR-MW77S-0523 (550-201909-42)	5/3/23	10:48 Arizona		Water			X	1	
FC-CCR-MW78S-0523 (550-201909-43)	5/3/23	11:26 Arizona		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Southwest, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Southwest, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Southwest, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Southwest, LLC.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by: [signature]	Date/Time: 5-12-23 10:40	Company: EETSW	Received by: Fedex	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by: [signature]	Date/Time: 5/13/23 1102	Company: EXADEN
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

6/15/2023

Eurofins Phoenix
4625 East Cotton Center Boulevard Suite #189
Phoenix, AZ 85040
Phone: 602-437-3340

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Roberts, Danielle C	Carrier Tracking No(s):	COC No: 550-36836.2
Client Contact: Shipping/Receiving	Phone:	E-Mail: Danielle.Roberts@et.eurofinsus.com	State of Origin: Arizona	Page: Page 2 of 4
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - Arizona; State Program - Arizona		Job #: 550-201909-1
Address: 4955 Yarrow Street, ,	Due Date Requested: 5/22/2023			
City: Arvada	TAT Requested (days):			
State, Zip: CO, 80002				
Phone: 303-736-0100(Tel) 303-431-7171(Fax)	PO #:			
Email:	WO #:			
Project Name: CCR Groundwater Monitoring	Project #: 55009706			
Site: Arizona Public Service	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	200.8/200.8_P_TR (MOD) Co, Mo	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
FC-CCR-MW79S-0523 (550-201909-44)	5/3/23	12:54 Arizona		Water			X	1	
FC-CCR-MW79S-0523 (550-201909-44MS)	5/3/23	12:54 Arizona	MS	Water			X	1	
FC-CCR-MW79S-0523 (550-201909-44MSD)	5/3/23	12:54 Arizona	MSD	Water			X	1	
FC-CCR-MW81-0523 (550-201909-45)	5/3/23	12:07 Arizona		Water			X	1	
FC-CCR-MW81-0523 (550-201909-45MS)	5/3/23	12:07 Arizona	MS	Water			X	1	
FC-CCR-MW81-0523 (550-201909-45MSD)	5/3/23	12:07 Arizona	MSD	Water			X	1	
FC-CCR-MW82S-0523 (550-201909-46)	5/5/23	15:32 Arizona		Water			X	1	
FC-CCR-FD07-0523 (550-201909-47)	5/3/23	13:31 Arizona		Water			X	1	
FC-CCR-FD05-0523 (550-201909-48)	5/3/23	20:02 Arizona		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Southwest, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Southwest, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Southwest, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Southwest, LLC.

Possible Hazard Identification	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)***
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature] 05-12-23	10:10	EESW	Fedex		
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
			[signature]	5/13/23 1102	EMAD
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

Eurofins Phoenix
4625 East Cotton Center Boulevard Suite #189
Phoenix, AZ 85040
Phone: 602-437-3340

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Roberts, Danielle C	Carrier Tracking No(s):	COC No: 550-36836.3
Client Contact: Shipping/Receiving	Phone:	E-Mail: Danielle.Roberts@et.eurofinsus.com	State of Origin: Arizona	Page: Page 3 of 4
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - Arizona; State Program - Arizona		Job #: 550-201909-1
Address: 4955 Yarrow Street, ,	Due Date Requested: 5/22/2023			
City: Arvada	TAT Requested (days):			
State, Zip: CO, 80002				
Phone: 303-736-0100(Tel) 303-431-7171(Fax)	PO #:			
Email:	WO #:			
Project Name: CCR Groundwater Monitoring	Project #: 55009706			
Site: Arizona Public Service	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
E - NaHSO4
F - MeOH
G - Amchlor
H - Ascorbic Acid
I - Ice
J - DI Water
K - EDTA
L - EDA
M - Hexane
N - None
O - AsNaO2
P - Na2O4S
Q - Na2SO3
R - Na2S2O3
S - H2SO4
T - TSP Dodecahydrate
U - Acetone
V - MCAA
W - pH 4-5
Y - Trizma
Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	200.8/200.8_P_TR (MOD) Co, Mo	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
FC-CCR-SUMP1-0523 (550-201909-49)	5/5/23	08:14 Arizona		Water			X	1	
FC-CCR-SUMP2-0523 (550-201909-50)	5/5/23	08:27 Arizona		Water			X	1	
FC-CCR-SUMP3-0523 (550-201909-51)	5/5/23	08:44 Arizona		Water			X	1	
FC-CCR-SUMP7-0523 (550-201909-52)	5/5/23	08:51 Arizona		Water			X	1	
FC-CCR-SUMP8-0523 (550-201909-53)	5/5/23	09:00 Arizona		Water			X	1	
FC-CCR-SUMP9-0523 (550-201909-54)	5/5/23	09:08 Arizona		Water			X	1	
FC-CCR-SUMP10-0523 (550-201909-55)	5/5/23	09:15 Arizona		Water			X	1	
FC-CCR-SUMP11-0523 (550-201909-56)	5/5/23	09:21 Arizona		Water			X	1	
FC-CCR-SUMP12-0523 (550-201909-57)	5/5/23	09:29 Arizona		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Southwest, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Southwest, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Southwest, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Southwest, LLC.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[illegible] 05-18-23 10:10		ET SW	Fedex		
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 5/19/23 1102	Company EDADEN
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

Eurofins Phoenix
4625 East Cotton Center Boulevard Suite #189
Phoenix, AZ 85040
Phone: 602-437-3340

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Roberts, Danielle C	Carrier Tracking No(s):	COC No: 550-36836.4
Client Contact: Shipping/Receiving	Phone:	E-Mail: Danielle.Roberts@et.eurofinsus.com	State of Origin: Arizona	Page: Page 4 of 4
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - Arizona; State Program - Arizona		Job #: 550-201909-1
Address: 4955 Yarrow Street, ,	Due Date Requested: 5/22/2023			
City: Arvada	TAT Requested (days):			
State, Zip: CO, 80002				
Phone: 303-736-0100(Tel) 303-431-7171(Fax)	PO #:			
Email:	WO #:			
Project Name: CCR Groundwater Monitoring	Project #: 55009706			
Site: Arizona Public Service	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	200.8/200.8_P_TR (MOD) Co, Mo	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
FC-CCR-SUMP13-0523 (550-201909-58)	5/5/23	09:36 Arizona		Water			X	1	
FC-CCR-SUMP14-0523 (550-201909-59)	5/5/23	09:45 Arizona		Water			X	1	
FC-CCR-SUMP15-0523 (550-201909-60)	5/5/23	09:48 Arizona		Water			X	1	
FC-CCR-SUMP16-0523 (550-201909-61)	5/5/23	09:56 Arizona		Water			X	1	
FC-CCR-SUMP17-0523 (550-201909-62)	5/5/23	10:03 Arizona		Water			X	1	
FC-CCR-SUMP18-0523 (550-201909-63)	5/5/23	10:08 Arizona		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Southwest, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Southwest, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Southwest, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Southwest, LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	[illegible] 5-12-23	10:10	ETSW	Fedex		
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
					5/13/23 1102	EPADW
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

Eurofins Phoenix
4625 East Cotton Center Boulevard Suite #189
Phoenix, AZ 85040
Phone: 602-437-3340

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Roberts, Danielle C	Carrier Tracking No(s):	COC No: 550-36869.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Danielle Roberts@et.eurofinsus.com	State of Origin: Arizona	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - Arizona; State Program - Arizona		Job #: 550-201909-1
Address: 4955 Yarrow Street, ,	Due Date Requested: 5/22/2023			
City: Arvada	TAT Requested (days):			
State, Zip: CO, 80002				
Phone: 303-736-0100(Tel) 303-431-7171(Fax)	PO #:			
Email:	WO #:			
Project Name: CCR Groundwater Monitoring	Project #: 55009706			
Site: Arizona Public Service	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	200.8/200.8_P_TR (MOD) Co, Mo	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
FC-CCR-MW81-0523 (550-201909-45)	5/3/23	12:07 Arizona		Water			X	1	
FC-CCR-MW81-0523 (550-201909-45MS)	5/3/23	12:07 Arizona	MS	Water			X	1	
FC-CCR-MW81-0523 (550-201909-45MSD)	5/3/23	12:07 Arizona	MSD	Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Southwest, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Southwest, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Southwest, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Southwest, LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	05-16-23	15:50	CCTS	Fedex		
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 5.17.23 0920	Company ETADEN
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 6.8°C IR14 CF01

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Arizona Public Service Company

Job Number: 550-201909-1
SDG Number: APS Four Corners Power Plant

Login Number: 201909
List Number: 1
Creator: Maycock, Lisa

List Source: Eurofins Phoenix

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	False	Check done at department level as required.

Login Sample Receipt Checklist

Client: Arizona Public Service Company

Job Number: 550-201909-1
SDG Number: APS Four Corners Power Plant

Login Number: 201909
List Number: 2
Creator: Rystrom, Joshua R

List Source: Eurofins Denver
List Creation: 05/10/23 05:25 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Arizona Public Service Company

Job Number: 550-201909-1
SDG Number: APS Four Corners Power Plant

Login Number: 201909
List Number: 3
Creator: Rystrom, Joshua R

List Source: Eurofins Denver
List Creation: 05/13/23 01:33 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Arizona Public Service Company

Job Number: 550-201909-1
SDG Number: APS Four Corners Power Plant

Login Number: 201909
List Number: 4
Creator: Rystrom, Joshua R

List Source: Eurofins Denver
List Creation: 05/16/23 10:21 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	False	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

PREPARED FOR

Attn: Natalie Chrisman
Arizona Public Service Company
PO BOX 188, Ste. 4458
Joseph City, Arizona 86032

Generated 6/14/2023 5:14:32 AM

JOB DESCRIPTION

CCR Groundwater Monitoring
SDG NUMBER APS Four Corners Power Plant (Other)

JOB NUMBER

550-202029-1

Eurofins Phoenix
4625 East Cotton Center Boulevard
Suite #189
Phoenix AZ 85040

See page two for job notes and contact information.

my EOL

Job Notes

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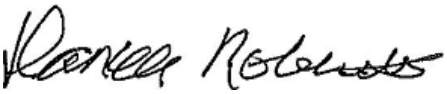

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Authorized for release by
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Table of Contents

Cover Page 1
Table of Contents 3
Definitions/Glossary 4
Case Narrative 6
Sample Summary 7
Detection Summary 8
Client Sample Results 11
QC Sample Results 17
QC Association Summary 27
Lab Chronicle 31
Certification Summary 34
Method Summary 35
Chain of Custody 36
Receipt Checklists 38

Definitions/Glossary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-202029-1
SDG: APS Four Corners Power Plant (Other)

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
D1	Sample required dilution due to matrix.
D2	Sample required dilution due to high concentration of analyte.
D5	Minimum Reporting Limit (MRL) adjusted due to sample dilution; analyte was non-detect in the sample.
E2	Concentration estimated. Analyte exceeded calibration range. Reanalysis not performed due to sample matrix.
M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The associated blank spike was acceptable.

Metals

Qualifier	Qualifier Description
E2	Concentration estimated. Analyte exceeded calibration range. Reanalysis not performed due to sample matrix.
M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The associated blank spike was acceptable.

General Chemistry

Qualifier	Qualifier Description
B7	Target analyte detected in method blank at or above method reporting limit. Concentration found in the sample was 10 times above the concentration found in the blank.
H5	This test is specified to be performed in the field within 15 minutes of sampling; sample was received and analyzed past the regulatory holding time.
T5	Laboratory not licensed for this parameter

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 550-202029-1

Laboratory: Eurofins Phoenix

Narrative

Job Narrative
550-202029-1

Comments
No additional comments.

Receipt
The samples were received on 5/10/2023 5:13 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 1.6º C and 3.3º C.

HPLC/IC
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Metals
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry
Method SM 2540C: The method blank for analytical batch 550-300213 contained Total Dissolved Solids above the reporting limit (RL). Associated sample were not re-extracted and/or re-analyzed because results were greater than 10X the value found in the method blank.

Method SM 2540C: Constant weight was not achieved after 3 drying cycles for the following sample: FC-CCR-EB01-0523 (550-202029-4).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Sample Summary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-202029-1
SDG: APS Four Corners Power Plant (Other)

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
550-202029-1	FC-CCR-DMX06-0523	Water	05/08/23 10:28	05/10/23 17:13
550-202029-2	FC-CCR-MW15-0523	Water	05/08/23 11:18	05/10/23 17:13
550-202029-3	FC-CCR-MW16-0523	Water	05/08/23 12:38	05/10/23 17:13
550-202029-4	FC-CCR-EB01-0523	Water	05/10/23 09:25	05/10/23 17:13
550-202029-5	FC-CCR-EW17-0523	Water	05/08/23 13:22	05/10/23 17:13
550-202029-6	FC-CCR-APV6-0523	Water	05/09/23 09:04	05/10/23 17:13

Detection Summary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-202029-1
SDG: APS Four Corners Power Plant (Other)

Client Sample ID: FC-CCR-DMX06-0523 — Lab Sample ID: 550-202029-1

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	840	D2	40		mg/L	20		300.0	Total/NA
Sulfate	7500	D2	1000		mg/L	500		300.0	Total/NA
Lithium	0.89		0.020		mg/L	1		200.7 Rev 4.4	Total/NA
Boron	6.0		0.050		mg/L	1		200.7 Rev 4.4	Total/NA
Calcium	360		2.0		mg/L	1		200.7 Rev 4.4	Total/NA
Magnesium	550		2.0		mg/L	1		200.7 Rev 4.4	Total/NA
Manganese	0.80		0.010		mg/L	1		200.7 Rev 4.4	Total/NA
Potassium	39		0.50		mg/L	1		200.7 Rev 4.4	Total/NA
Sodium	2900		2.5		mg/L	5		200.7 Rev 4.4	Total/NA
Barium	12		3.0		ug/L	1		200.8	Total Recoverable
Molybdenum	3.8		2.0		ug/L	1		200.8	Total Recoverable
Nickel	110		3.0		ug/L	1		200.8	Total Recoverable
Alkalinity as CaCO3	440		6.0		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	440		6.0		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	12000	B7	100		mg/L	1		SM 2540C	Total/NA
pH	7.4	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	14.0	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-MW15-0523 — Lab Sample ID: 550-202029-2

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	1100	D2	1000		mg/L	500		300.0	Total/NA
Sulfate	6800	D2	1000		mg/L	500		300.0	Total/NA
Lithium	1.0		0.020		mg/L	1		200.7 Rev 4.4	Total/NA
Boron	8.1		0.050		mg/L	1		200.7 Rev 4.4	Total/NA
Calcium	450		2.0		mg/L	1		200.7 Rev 4.4	Total/NA
Iron	0.11		0.10		mg/L	1		200.7 Rev 4.4	Total/NA
Magnesium	690		2.0		mg/L	1		200.7 Rev 4.4	Total/NA
Manganese	1.2		0.010		mg/L	1		200.7 Rev 4.4	Total/NA
Potassium	41		0.50		mg/L	1		200.7 Rev 4.4	Total/NA
Sodium	2400		2.5		mg/L	5		200.7 Rev 4.4	Total/NA
Barium	22		3.0		ug/L	1		200.8	Total Recoverable
Cobalt	2.1		1.0		ug/L	1		200.8	Total Recoverable
Nickel	40		3.0		ug/L	1		200.8	Total Recoverable
Alkalinity as CaCO3	660		6.0		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	660		6.0		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	11000	B7	100		mg/L	1		SM 2540C	Total/NA
pH	7.1	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	14.2	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-MW16-0523 — Lab Sample ID: 550-202029-3

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	980	D2	40		mg/L	20		300.0	Total/NA
Sulfate	13000	D2	1000		mg/L	500		300.0	Total/NA
Lithium	1.5		0.020		mg/L	1		200.7 Rev 4.4	Total/NA
Boron	9.3		0.050		mg/L	1		200.7 Rev 4.4	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: FC-CCR-MW16-0523 (Continued) — Lab Sample ID: 550-202029-3

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Calcium	440		2.0		mg/L	1		200.7 Rev 4.4	Total/NA
Iron	0.15		0.10		mg/L	1		200.7 Rev 4.4	Total/NA
Magnesium	1700		10		mg/L	5		200.7 Rev 4.4	Total/NA
Potassium	63		0.50		mg/L	1		200.7 Rev 4.4	Total/NA
Sodium	3800		2.5		mg/L	5		200.7 Rev 4.4	Total/NA
Barium	21		3.0		ug/L	1		200.8	Total Recoverable
Cobalt	7.5		1.0		ug/L	1		200.8	Total Recoverable
Nickel	99		3.0		ug/L	1		200.8	Total Recoverable
Selenium	28		5.0		ug/L	1		200.8	Total Recoverable
Alkalinity as CaCO3	600		6.0		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	600		6.0		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	21000	B7	200		mg/L	1		SM 2540C	Total/NA
pH	7.3	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	13.3	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-EB01-0523 — Lab Sample ID: 550-202029-4

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Sodium	3.8		0.50		mg/L	1		200.7 Rev 4.4	Total/NA
Total Dissolved Solids	48		20		mg/L	1		SM 2540C	Total/NA
pH	5.8	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	11.4	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-EW17-0523 — Lab Sample ID: 550-202029-5

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	740	D2	40		mg/L	20		300.0	Total/NA
Boron	45		0.050		mg/L	1		200.7 Rev 4.4	Total/NA
Magnesium	820		2.0		mg/L	1		200.7 Rev 4.4	Total/NA
Manganese	0.26		0.010		mg/L	1		200.7 Rev 4.4	Total/NA
Total Dissolved Solids	12000	B7	100		mg/L	1		SM 2540C	Total/NA

Client Sample ID: FC-CCR-APV6-0523 — Lab Sample ID: 550-202029-6

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	750	D2	40		mg/L	20		300.0	Total/NA
Sulfate	9600	D2	1000		mg/L	500		300.0	Total/NA
Lithium	1.1		0.020		mg/L	1		200.7 Rev 4.4	Total/NA
Boron	46		0.050		mg/L	1		200.7 Rev 4.4	Total/NA
Calcium	420		2.0		mg/L	1		200.7 Rev 4.4	Total/NA
Barium	16		3.0		ug/L	1		200.8	Total Recoverable
Cobalt	34		1.0		ug/L	1		200.8	Total Recoverable
Molybdenum	9.9		2.0		ug/L	1		200.8	Total Recoverable
Nickel	360		3.0		ug/L	1		200.8	Total Recoverable
Selenium	25		5.0		ug/L	1		200.8	Total Recoverable
Total Dissolved Solids	16000		100		mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: FC-CCR-APV6-0523 (Continued)

Lab Sample ID: 550-202029-6

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
pH	7.3	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	12.2	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: FC-CCR-DMX06-0523

Lab Sample ID: 550-202029-1

Date Collected: 05/08/23 10:28
Matrix: Water
Date Received: 05/10/23 17:13

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**840**	**D2**	40		mg/L			06/05/23 18:09	20
Fluoride	ND	D1 D5	2.0		mg/L			06/02/23 15:59	5
Sulfate	**7500**	**D2**	1000		mg/L			06/02/23 16:17	500

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		0.0050		mg/L		05/16/23 06:17	06/12/23 19:23	5
Lithium	**0.89**		0.020		mg/L		05/16/23 08:11	05/19/23 20:40	1
Boron	**6.0**		0.050		mg/L		05/16/23 06:17	06/09/23 20:18	1
Calcium	**360**		2.0		mg/L		05/16/23 06:17	06/09/23 20:18	1
Iron	ND		0.10		mg/L		05/16/23 06:17	06/09/23 20:18	1
Magnesium	**550**		2.0		mg/L		05/16/23 06:17	06/09/23 20:18	1
Manganese	**0.80**		0.010		mg/L		05/16/23 06:17	06/09/23 20:18	1
Potassium	**39**		0.50		mg/L		05/16/23 06:17	06/09/23 20:18	1
Sodium	**2900**		2.5		mg/L		05/16/23 06:17	06/12/23 19:23	5

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0		ug/L		05/16/23 08:11	05/17/23 03:54	1
Arsenic	ND		5.0		ug/L		05/16/23 08:11	05/17/23 03:54	1
Barium	**12**		3.0		ug/L		05/16/23 08:11	05/17/23 03:54	1
Cadmium	ND		1.0		ug/L		05/16/23 08:11	05/17/23 03:54	1
Chromium	ND		3.0		ug/L		05/16/23 08:11	05/17/23 03:54	1
Cobalt	ND		1.0		ug/L		05/16/23 08:11	05/17/23 03:54	1
Lead	ND		1.0		ug/L		05/16/23 08:11	05/17/23 03:54	1
Molybdenum	**3.8**		2.0		ug/L		05/16/23 08:11	05/17/23 03:54	1
Nickel	**110**		3.0		ug/L		05/16/23 08:11	05/17/23 03:54	1
Selenium	ND		5.0		ug/L		05/16/23 08:11	05/17/23 03:54	1
Thallium	ND		1.0		ug/L		05/16/23 08:11	05/17/23 03:54	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3 (SM 2320B)	**440**		6.0		mg/L			05/17/23 18:28	1
Alkalinity, Phenolphthalein (SM 2320B)	ND		6.0		mg/L			05/17/23 18:28	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**440**		6.0		mg/L			05/17/23 18:28	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			05/17/23 18:28	1
Hydroxide Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			05/17/23 18:28	1
Total Dissolved Solids (SM 2540C)	**12000**	**B7**	100		mg/L			05/13/23 15:46	1
pH (SM 4500 H+ B)	**7.4**	**H5**	1.7		SU			05/17/23 15:32	1
Temperature (SM 4500 H+ B)	**14.0**	**H5 T5**	0.1		Degrees C			05/17/23 15:32	1

Client Sample ID: FC-CCR-MW15-0523

Lab Sample ID: 550-202029-2

Date Collected: 05/08/23 11:18
Matrix: Water
Date Received: 05/10/23 17:13

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1100**	**D2**	1000		mg/L			06/02/23 16:54	500

Client Sample ID: FC-CCR-MW15-0523

Lab Sample ID: 550-202029-2

Date Collected: 05/08/23 11:18
Matrix: Water
Date Received: 05/10/23 17:13

Method: EPA 300.0 - Anions, Ion Chromatography (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND	D1 D5	2.0		mg/L			06/02/23 16:35	5
Sulfate	**6800**	**D2**	1000		mg/L			06/02/23 16:54	500

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		0.0050		mg/L		05/16/23 06:17	06/12/23 19:26	5
Lithium	**1.0**		0.020		mg/L		05/16/23 08:11	05/19/23 20:44	1
Boron	**8.1**		0.050		mg/L		05/16/23 06:17	06/09/23 20:20	1
Calcium	**450**		2.0		mg/L		05/16/23 06:17	06/09/23 20:20	1
Iron	**0.11**		0.10		mg/L		05/16/23 06:17	06/09/23 20:20	1
Magnesium	**690**		2.0		mg/L		05/16/23 06:17	06/09/23 20:20	1
Manganese	**1.2**		0.010		mg/L		05/16/23 06:17	06/09/23 20:20	1
Potassium	**41**		0.50		mg/L		05/16/23 06:17	06/09/23 20:20	1
Sodium	**2400**		2.5		mg/L		05/16/23 06:17	06/12/23 19:26	5

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0		ug/L		05/16/23 08:11	05/17/23 03:55	1
Arsenic	ND		5.0		ug/L		05/16/23 08:11	05/17/23 03:55	1
Barium	**22**		3.0		ug/L		05/16/23 08:11	05/17/23 03:55	1
Cadmium	ND		1.0		ug/L		05/16/23 08:11	05/17/23 03:55	1
Chromium	ND		3.0		ug/L		05/16/23 08:11	05/17/23 03:55	1
Cobalt	**2.1**		1.0		ug/L		05/16/23 08:11	05/17/23 03:55	1
Lead	ND		1.0		ug/L		05/16/23 08:11	05/17/23 03:55	1
Molybdenum	ND		2.0		ug/L		05/16/23 08:11	05/17/23 03:55	1
Nickel	**40**		3.0		ug/L		05/16/23 08:11	05/17/23 03:55	1
Selenium	ND		5.0		ug/L		05/16/23 08:11	05/17/23 03:55	1
Thallium	ND		1.0		ug/L		05/16/23 08:11	05/17/23 03:55	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3 (SM 2320B)	**660**		6.0		mg/L			05/17/23 18:39	1
Alkalinity, Phenolphthalein (SM 2320B)	ND		6.0		mg/L			05/17/23 18:39	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**660**		6.0		mg/L			05/17/23 18:39	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			05/17/23 18:39	1
Hydroxide Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			05/17/23 18:39	1
Total Dissolved Solids (SM 2540C)	**11000**	**B7**	100		mg/L			05/13/23 15:46	1
pH (SM 4500 H+ B)	**7.1**	**H5**	1.7		SU			05/17/23 15:33	1
Temperature (SM 4500 H+ B)	**14.2**	**H5 T5**	0.1		Degrees C			05/17/23 15:33	1

Client Sample ID: FC-CCR-MW16-0523

Lab Sample ID: 550-202029-3

Date Collected: 05/08/23 12:38
Matrix: Water
Date Received: 05/10/23 17:13

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**980**	**D2**	40		mg/L			06/03/23 18:40	20
Fluoride	ND	D1 D5	2.0		mg/L			06/02/23 18:07	5

Client Sample ID: FC-CCR-MW16-0523

Lab Sample ID: 550-202029-3

Date Collected: 05/08/23 12:38
Matrix: Water
Date Received: 05/10/23 17:13

Method: EPA 300.0 - Anions, Ion Chromatography (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**13000**	**D2**	1000		mg/L			06/02/23 18:26	500

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		0.0050		mg/L		05/16/23 06:17	06/12/23 19:29	5
Lithium	**1.5**		0.020		mg/L		05/16/23 08:11	05/19/23 20:48	1
Boron	**9.3**		0.050		mg/L		05/16/23 06:17	06/09/23 20:23	1
Calcium	**440**		2.0		mg/L		05/16/23 06:17	06/09/23 20:23	1
Iron	**0.15**		0.10		mg/L		05/16/23 06:17	06/09/23 20:23	1
Magnesium	**1700**		10		mg/L		05/16/23 06:17	06/12/23 19:29	5
Potassium	**63**		0.50		mg/L		05/16/23 06:17	06/09/23 20:23	1
Sodium	**3800**		2.5		mg/L		05/16/23 06:17	06/12/23 19:29	5

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0		ug/L		05/16/23 08:11	05/17/23 03:57	1
Arsenic	ND		5.0		ug/L		05/16/23 08:11	05/17/23 03:57	1
Barium	**21**		3.0		ug/L		05/16/23 08:11	05/17/23 03:57	1
Cadmium	ND		1.0		ug/L		05/16/23 08:11	05/17/23 03:57	1
Chromium	ND		3.0		ug/L		05/16/23 08:11	05/17/23 03:57	1
Cobalt	**7.5**		1.0		ug/L		05/16/23 08:11	05/17/23 03:57	1
Lead	ND		1.0		ug/L		05/16/23 08:11	05/17/23 03:57	1
Molybdenum	ND		2.0		ug/L		05/16/23 08:11	05/17/23 03:57	1
Nickel	**99**		3.0		ug/L		05/16/23 08:11	05/17/23 03:57	1
Selenium	**28**		5.0		ug/L		05/16/23 08:11	05/17/23 03:57	1
Thallium	ND		1.0		ug/L		05/16/23 08:11	05/17/23 03:57	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3 (SM 2320B)	**600**		6.0		mg/L			05/17/23 19:04	1
Alkalinity, Phenolphthalein (SM 2320B)	ND		6.0		mg/L			05/17/23 19:04	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**600**		6.0		mg/L			05/17/23 19:04	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			05/17/23 19:04	1
Hydroxide Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			05/17/23 19:04	1
Total Dissolved Solids (SM 2540C)	**21000**	**B7**	200		mg/L			05/13/23 15:46	1
pH (SM 4500 H+ B)	**7.3**	**H5**	1.7		SU			05/17/23 15:34	1
Temperature (SM 4500 H+ B)	**13.3**	**H5 T5**	0.1		Degrees C			05/17/23 15:34	1

Client Sample ID: FC-CCR-EB01-0523

Lab Sample ID: 550-202029-4

Date Collected: 05/10/23 09:25
Matrix: Water
Date Received: 05/10/23 17:13

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		2.0		mg/L			06/02/23 20:35	1
Fluoride	ND		0.40		mg/L			06/02/23 20:35	1
Sulfate	ND		2.0		mg/L			06/02/23 20:35	1

Client Sample ID: FC-CCR-EB01-0523

Lab Sample ID: 550-202029-4

Date Collected: 05/10/23 09:25
Matrix: Water
Date Received: 05/10/23 17:13

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		0.0010		mg/L		05/16/23 06:17	06/12/23 19:31	1
Lithium	ND		0.020		mg/L		05/16/23 08:11	05/19/23 20:52	1
Boron	ND		0.050		mg/L		05/16/23 06:17	06/09/23 20:26	1
Calcium	ND		2.0		mg/L		05/16/23 06:17	06/09/23 20:26	1
Iron	ND		0.10		mg/L		05/16/23 06:17	06/09/23 20:26	1
Magnesium	ND		2.0		mg/L		05/16/23 06:17	06/09/23 20:26	1
Manganese	ND		0.010		mg/L		05/16/23 06:17	06/09/23 20:26	1
Potassium	ND		0.50		mg/L		05/16/23 06:17	06/09/23 20:26	1
Sodium	**3.8**		0.50		mg/L		05/16/23 06:17	06/09/23 20:26	1

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0		ug/L		05/16/23 08:11	05/17/23 03:59	1
Arsenic	ND		5.0		ug/L		05/16/23 08:11	05/17/23 03:59	1
Barium	ND		3.0		ug/L		05/16/23 08:11	05/17/23 03:59	1
Cadmium	ND		1.0		ug/L		05/16/23 08:11	05/17/23 03:59	1
Chromium	ND		3.0		ug/L		05/16/23 08:11	05/17/23 03:59	1
Cobalt	ND		1.0		ug/L		05/16/23 08:11	05/17/23 03:59	1
Lead	ND		1.0		ug/L		05/16/23 08:11	05/17/23 03:59	1
Molybdenum	ND		2.0		ug/L		05/16/23 08:11	05/17/23 03:59	1
Nickel	ND		3.0		ug/L		05/16/23 08:11	05/17/23 03:59	1
Selenium	ND		5.0		ug/L		05/16/23 08:11	05/17/23 03:59	1
Thallium	ND		1.0		ug/L		05/16/23 08:11	05/17/23 03:59	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		05/11/23 15:30	05/11/23 19:55	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			05/18/23 20:05	1
Alkalinity, Phenolphthalein (SM 2320B)	ND		6.0		mg/L			05/18/23 20:05	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			05/18/23 20:05	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			05/18/23 20:05	1
Hydroxide Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			05/18/23 20:05	1
Total Dissolved Solids (SM 2540C)	**48**		20		mg/L			05/16/23 15:59	1
pH (SM 4500 H+ B)	**5.8**	**H5**	1.7		SU			05/17/23 15:36	1
Temperature (SM 4500 H+ B)	**11.4**	**H5 T5**	0.1		Degrees C			05/17/23 15:36	1

Client Sample ID: FC-CCR-EW17-0523

Lab Sample ID: 550-202029-5

Date Collected: 05/08/23 13:22
Matrix: Water
Date Received: 05/10/23 17:13

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**740**	**D2**	40		mg/L			06/03/23 21:07	20

Client Sample ID: FC-CCR-EW17-0523

Lab Sample ID: 550-202029-5

Date Collected: 05/08/23 13:22
Matrix: Water
Date Received: 05/10/23 17:13

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	**45**		0.050		mg/L		05/16/23 06:17	06/09/23 20:29	1
Magnesium	**820**		2.0		mg/L		05/16/23 06:17	06/09/23 20:29	1
Manganese	**0.26**		0.010		mg/L		05/16/23 06:17	06/09/23 20:29	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		05/11/23 15:30	05/11/23 19:57	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**12000**	**B7**	100		mg/L			05/13/23 15:46	1

Client Sample ID: FC-CCR-APV6-0523

Lab Sample ID: 550-202029-6

Date Collected: 05/09/23 09:04
Matrix: Water
Date Received: 05/10/23 17:13

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**750**	**D2**	40		mg/L			06/03/23 18:59	20
Fluoride	ND	D1 D5	2.0		mg/L			06/02/23 18:44	5
Sulfate	**9600**	**D2**	1000		mg/L			06/02/23 19:03	500

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		0.0010		mg/L		05/16/23 06:17	06/12/23 19:37	1
Lithium	**1.1**		0.020		mg/L		05/16/23 08:11	05/19/23 20:56	1
Boron	**46**		0.050		mg/L		05/16/23 06:17	06/09/23 20:32	1
Calcium	**420**		2.0		mg/L		05/16/23 06:17	06/09/23 20:32	1

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0		ug/L		05/16/23 08:11	05/17/23 04:01	1
Arsenic	ND		5.0		ug/L		05/16/23 08:11	05/17/23 04:01	1
Barium	**16**		3.0		ug/L		05/16/23 08:11	05/17/23 04:01	1
Cadmium	ND		1.0		ug/L		05/16/23 08:11	05/17/23 04:01	1
Chromium	ND		3.0		ug/L		05/16/23 08:11	05/17/23 04:01	1
Cobalt	**34**		1.0		ug/L		05/16/23 08:11	05/17/23 04:01	1
Lead	ND		1.0		ug/L		05/16/23 08:11	05/17/23 04:01	1
Molybdenum	**9.9**		2.0		ug/L		05/16/23 08:11	05/17/23 04:01	1
Nickel	**360**		3.0		ug/L		05/16/23 08:11	05/17/23 04:01	1
Selenium	**25**		5.0		ug/L		05/16/23 08:11	05/17/23 04:01	1
Thallium	ND		1.0		ug/L		05/16/23 08:11	05/17/23 04:01	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		05/11/23 15:30	05/11/23 19:59	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**16000**		100		mg/L			05/16/23 15:59	1
pH (SM 4500 H+ B)	**7.3**	**H5**	1.7		SU			05/17/23 15:41	1

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-202029-1
SDG: APS Four Corners Power Plant (Other)

Client Sample ID: FC-CCR-APV6-0523
Date Collected: 05/09/23 09:04
Date Received: 05/10/23 17:13

Lab Sample ID: 550-202029-6
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Temperature (SM 4500 H+ B)	12.2	H5 T5	0.1		Degrees C			05/17/23 15:41	1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 550-301617/2
Matrix: Water
Analysis Batch: 301617

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		2.0		mg/L			06/02/23 11:51	1
Fluoride	ND		0.40		mg/L			06/02/23 11:51	1
Sulfate	ND		2.0		mg/L			06/02/23 11:51	1

Lab Sample ID: LCS 550-301617/5
Matrix: Water
Analysis Batch: 301617

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			20.0	20.5		mg/L		102	90 - 110		
Fluoride			4.00	4.13		mg/L		103	90 - 110		
Sulfate			20.0	20.6		mg/L		103	90 - 110		

Lab Sample ID: LCSD 550-301617/6
Matrix: Water
Analysis Batch: 301617

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			20.0	20.5		mg/L		103	90 - 110	0	20
Fluoride			4.00	4.16		mg/L		104	90 - 110	1	20
Sulfate			20.0	20.6		mg/L		103	90 - 110	0	20

Lab Sample ID: 550-202029-5 MS
Matrix: Water
Analysis Batch: 301617

Client Sample ID: FC-CCR-EW17-0523
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Sulfate	7000	D2	10000	17400	D2	mg/L		103	80 - 120		

Lab Sample ID: 550-202029-5 MSD
Matrix: Water
Analysis Batch: 301617

Client Sample ID: FC-CCR-EW17-0523
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfate	7000	D2	10000	17600	D2	mg/L		106	80 - 120	1	20

Lab Sample ID: MB 550-301658/2
Matrix: Water
Analysis Batch: 301658

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		2.0		mg/L			06/03/23 11:42	1
Fluoride	ND		0.40		mg/L			06/03/23 11:42	1
Sulfate	ND		2.0		mg/L			06/03/23 11:42	1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 550-301658/5
Matrix: Water
Analysis Batch: 301658

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			20.0	20.5		mg/L		103	90 - 110		
Fluoride			4.00	4.08		mg/L		102	90 - 110		
Sulfate			20.0	20.7		mg/L		103	90 - 110		

Lab Sample ID: LCSD 550-301658/6
Matrix: Water
Analysis Batch: 301658

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			20.0	20.5		mg/L		103	90 - 110	0	20
Fluoride			4.00	4.11		mg/L		103	90 - 110	1	20
Sulfate			20.0	20.6		mg/L		103	90 - 110	0	20

Lab Sample ID: 550-202671-A-1 MS
Matrix: Water
Analysis Batch: 301658

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	310	E2 M3	20.0	309	E2 M3	mg/L		16	80 - 120		
Fluoride	ND		4.00	4.45		mg/L		105	80 - 120		
Sulfate	210	E2 M3	20.0	223	E2 M3	mg/L		55	80 - 120		

Lab Sample ID: 550-202671-A-1 MSD
Matrix: Water
Analysis Batch: 301658

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	310	E2 M3	20.0	309	E2 M3	mg/L		16	80 - 120	0	20
Fluoride	ND		4.00	4.59		mg/L		108	80 - 120	3	20
Sulfate	210	E2 M3	20.0	223	E2 M3	mg/L		55	80 - 120	0	20

Lab Sample ID: MB 550-301713/2
Matrix: Water
Analysis Batch: 301713

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		2.0		mg/L			06/05/23 11:28	1
Fluoride	ND		0.40		mg/L			06/05/23 11:28	1
Sulfate	ND		2.0		mg/L			06/05/23 11:28	1

Lab Sample ID: LCS 550-301713/5
Matrix: Water
Analysis Batch: 301713

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			20.0	20.8		mg/L		104	90 - 110		
Fluoride			4.00	4.13		mg/L		103	90 - 110		
Sulfate			20.0	20.9		mg/L		105	90 - 110		

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 550-301713/6
Matrix: Water
Analysis Batch: 301713

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			20.0	20.8		mg/L		104	90 - 110	0	20
Fluoride			4.00	4.18		mg/L		105	90 - 110	1	20
Sulfate			20.0	20.9		mg/L		105	90 - 110	0	20

Lab Sample ID: 550-202672-A-1 MS
Matrix: Water
Analysis Batch: 301713

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	190	E2 M3	20.0	199	E2 M3	mg/L		41	80 - 120		
Fluoride	ND		4.00	4.33		mg/L		103	80 - 120		
Sulfate	140	E2 M3	20.0	158	E2 M3	mg/L		72	80 - 120		

Lab Sample ID: 550-202672-A-1 MSD
Matrix: Water
Analysis Batch: 301713

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	190	E2 M3	20.0	199	E2 M3	mg/L		41	80 - 120	0	20
Fluoride	ND		4.00	4.42		mg/L		105	80 - 120	2	20
Sulfate	140	E2 M3	20.0	158	E2 M3	mg/L		72	80 - 120	0	20

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 550-300305/1-A
Matrix: Water
Analysis Batch: 302083

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 300305

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.050		mg/L		05/16/23 06:17	06/09/23 20:01	1
Calcium	ND		2.0		mg/L		05/16/23 06:17	06/09/23 20:01	1
Iron	ND		0.10		mg/L		05/16/23 06:17	06/09/23 20:01	1
Magnesium	ND		2.0		mg/L		05/16/23 06:17	06/09/23 20:01	1
Potassium	ND		0.50		mg/L		05/16/23 06:17	06/09/23 20:01	1
Sodium	ND		0.50		mg/L		05/16/23 06:17	06/09/23 20:01	1
Manganese	ND		0.010		mg/L		05/16/23 06:17	06/09/23 20:01	1

Lab Sample ID: MB 550-300305/1-A
Matrix: Water
Analysis Batch: 302156

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 300305

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		0.0010		mg/L		05/16/23 06:17	06/12/23 19:14	1

Lab Sample ID: LCS 550-300305/2-A
Matrix: Water
Analysis Batch: 302083

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 300305

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Boron			1.00	1.01		mg/L		101	85 - 115		

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: LCS 550-300305/2-A
Matrix: Water
Analysis Batch: 302083

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 300305

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	21.0	20.0		mg/L		95	85 - 115
Iron	1.00	0.956		mg/L		96	85 - 115
Magnesium	21.0	20.2		mg/L		96	85 - 115
Potassium	20.0	19.1		mg/L		96	85 - 115
Sodium	20.0	18.9		mg/L		94	85 - 115
Manganese	1.00	0.988		mg/L		99	85 - 115

Lab Sample ID: LCS 550-300305/2-A
Matrix: Water
Analysis Batch: 302156

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 300305

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Beryllium	1.00	1.13		mg/L		113	85 - 115

Lab Sample ID: LCSD 550-300305/3-A
Matrix: Water
Analysis Batch: 302083

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 300305

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron	1.00	1.00		mg/L		100	85 - 115	1	20
Calcium	21.0	19.2		mg/L		92	85 - 115	4	20
Iron	1.00	0.915		mg/L		92	85 - 115	4	20
Magnesium	21.0	19.5		mg/L		93	85 - 115	4	20
Potassium	20.0	18.4		mg/L		92	85 - 115	4	20
Sodium	20.0	18.1		mg/L		91	85 - 115	4	20
Manganese	1.00	0.980		mg/L		98	85 - 115	1	20

Lab Sample ID: LCSD 550-300305/3-A
Matrix: Water
Analysis Batch: 302156

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 300305

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Beryllium	1.00	1.10		mg/L		110	85 - 115	3	20

Lab Sample ID: 550-202028-B-1-A MS
Matrix: Water
Analysis Batch: 302083

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 300305

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	0.51		1.00	1.52		mg/L		101	70 - 130
Calcium	79		21.0	100		mg/L		103	70 - 130
Iron	0.56		1.00	1.58		mg/L		102	70 - 130
Magnesium	28		21.0	49.3		mg/L		100	70 - 130
Potassium	3.1		20.0	23.9		mg/L		104	70 - 130
Sodium	830	E2 M3	20.0	866	E2 M3	mg/L		167	70 - 130
Manganese	0.078		1.00	1.05		mg/L		98	70 - 130

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: 550-202028-B-1-B MSD
Matrix: Water
Analysis Batch: 302083

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 300305

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron	0.51		1.00	1.52		mg/L		101	70 - 130	0	20
Calcium	79		21.0	102		mg/L		112	70 - 130	2	20
Iron	0.56		1.00	1.60		mg/L		104	70 - 130	1	20
Magnesium	28		21.0	50.2		mg/L		104	70 - 130	2	20
Potassium	3.1		20.0	24.1		mg/L		105	70 - 130	1	20
Sodium	830	E2 M3	20.0	887	E2 M3	mg/L		276	70 - 130	2	20
Manganese	0.078		1.00	1.05		mg/L		97	70 - 130	0	20

Lab Sample ID: MB 280-612443/1-A
Matrix: Water
Analysis Batch: 613254

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 612443

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	ND		0.020		mg/L		05/16/23 08:11	05/19/23 19:35	1

Lab Sample ID: LCS 280-612443/2-A
Matrix: Water
Analysis Batch: 613254

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 612443

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Lithium			1.00	0.933		mg/L		93	90 - 112		

Lab Sample ID: 280-176448-B-1-B MS
Matrix: Water
Analysis Batch: 613254

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 612443

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Lithium	0.044		1.00	0.975		mg/L		93	70 - 130		

Lab Sample ID: 280-176448-B-1-C MSD
Matrix: Water
Analysis Batch: 613254

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 612443

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Lithium	0.044		1.00	0.951		mg/L		91	70 - 130	3	20

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 280-612443/1-A
Matrix: Water
Analysis Batch: 612777

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 612443

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0		ug/L		05/16/23 08:11	05/17/23 03:27	1
Arsenic	ND		5.0		ug/L		05/16/23 08:11	05/17/23 03:27	1
Barium	ND		3.0		ug/L		05/16/23 08:11	05/17/23 03:27	1
Cadmium	ND		1.0		ug/L		05/16/23 08:11	05/17/23 03:27	1
Chromium	ND		3.0		ug/L		05/16/23 08:11	05/17/23 03:27	1
Cobalt	ND		1.0		ug/L		05/16/23 08:11	05/17/23 03:27	1
Lead	ND		1.0		ug/L		05/16/23 08:11	05/17/23 03:27	1

Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 280-612443/1-A
Matrix: Water
Analysis Batch: 612777

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 612443

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Molybdenum	ND		2.0		ug/L		05/16/23 08:11	05/17/23 03:27	1
Nickel	ND		3.0		ug/L		05/16/23 08:11	05/17/23 03:27	1
Selenium	ND		5.0		ug/L		05/16/23 08:11	05/17/23 03:27	1
Thallium	ND		1.0		ug/L		05/16/23 08:11	05/17/23 03:27	1

Lab Sample ID: LCS 280-612443/18-A
Matrix: Water
Analysis Batch: 612777

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 612443

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Antimony			40.0	41.8		ug/L		105	85 - 115		
Arsenic			40.0	39.9		ug/L		100	89 - 111		
Barium			40.0	40.4		ug/L		101	89 - 115		
Cadmium			40.0	40.2		ug/L		101	89 - 111		
Chromium			40.0	39.5		ug/L		99	86 - 115		
Cobalt			40.0	40.1		ug/L		100	92 - 115		
Lead			40.0	40.6		ug/L		101	88 - 115		
Molybdenum			40.0	39.8		ug/L		99	89 - 112		
Nickel			40.0	38.9		ug/L		97	86 - 115		
Selenium			40.0	39.1		ug/L		98	85 - 114		
Thallium			40.0	40.5		ug/L		101	86 - 115		

Lab Sample ID: 280-176448-B-1-E MS
Matrix: Water
Analysis Batch: 612777

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 612443

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Antimony	ND		40.0	42.3		ug/L		103	85 - 115		
Arsenic	ND		40.0	38.5		ug/L		96	79 - 120		
Barium	ND		40.0	42.8		ug/L		102	89 - 115		
Cadmium	ND		40.0	39.3		ug/L		98	89 - 111		
Chromium	ND		40.0	40.1		ug/L		100	86 - 115		
Cobalt	ND		40.0	39.3		ug/L		98	92 - 115		
Lead	ND		40.0	39.7		ug/L		99	88 - 115		
Molybdenum	47		40.0	86.8		ug/L		99	89 - 112		
Nickel	ND		40.0	41.6		ug/L		98	86 - 115		
Selenium	ND		40.0	38.2		ug/L		95	85 - 114		
Thallium	ND		40.0	39.6		ug/L		99	86 - 115		

Lab Sample ID: 280-176448-B-1-F MSD
Matrix: Water
Analysis Batch: 612777

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 612443

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	ND		40.0	42.3		ug/L		103	85 - 115	0	20
Arsenic	ND		40.0	37.8		ug/L		95	79 - 120	2	20
Barium	ND		40.0	43.3		ug/L		103	89 - 115	1	20
Cadmium	ND		40.0	38.5		ug/L		96	89 - 111	2	20
Chromium	ND		40.0	39.9		ug/L		100	86 - 115	1	20

Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: 280-176448-B-1-F MSD
Matrix: Water
Analysis Batch: 612777

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 612443

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cobalt	ND		40.0	39.3		ug/L		98	92 - 115	0	20
Lead	ND		40.0	40.8		ug/L		102	88 - 115	3	20
Molybdenum	47		40.0	88.9		ug/L		104	89 - 112	2	20
Nickel	ND		40.0	41.4		ug/L		98	86 - 115	0	20
Selenium	ND		40.0	40.1		ug/L		100	85 - 114	5	20
Thallium	ND		40.0	40.1		ug/L		100	86 - 115	1	20

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 550-300113/1-A
Matrix: Water
Analysis Batch: 300133

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 300113

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		05/11/23 15:30	05/11/23 19:11	1

Lab Sample ID: LCS 550-300113/2-A
Matrix: Water
Analysis Batch: 300133

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 300113

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury			0.00500	0.00439		mg/L		88	85 - 115		

Lab Sample ID: LCSD 550-300113/3-A
Matrix: Water
Analysis Batch: 300133

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 300113

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury			0.00500	0.00435		mg/L		87	85 - 115	1	20

Lab Sample ID: 550-201848-L-1-B MS
Matrix: Water
Analysis Batch: 300133

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 300113

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury	ND		0.00500	0.00422		mg/L		84	70 - 130		

Lab Sample ID: 550-201848-L-1-C MSD
Matrix: Water
Analysis Batch: 300133

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 300113

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		0.00500	0.00410		mg/L		82	70 - 130	3	20

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 550-300498/3
Matrix: Water
Analysis Batch: 300498

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3	ND		6.0		mg/L			05/17/23 14:00	1
Alkalinity, Phenolphthalein	ND		6.0		mg/L			05/17/23 14:00	1
Bicarbonate Alkalinity as CaCO3	ND		6.0		mg/L			05/17/23 14:00	1
Carbonate Alkalinity as CaCO3	ND		6.0		mg/L			05/17/23 14:00	1
Hydroxide Alkalinity as CaCO3	ND		6.0		mg/L			05/17/23 14:00	1

Lab Sample ID: LCS 550-300498/4
Matrix: Water
Analysis Batch: 300498

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Alkalinity as CaCO3			250	249		mg/L		100	90 - 110		

Lab Sample ID: LCSD 550-300498/17
Matrix: Water
Analysis Batch: 300498

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Alkalinity as CaCO3			250	248		mg/L		99	90 - 110	1	20

Lab Sample ID: 550-202029-3 DU
Matrix: Water
Analysis Batch: 300498

Client Sample ID: FC-CCR-MW16-0523
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Alkalinity as CaCO3	600			599		mg/L				0.2	20
Alkalinity, Phenolphthalein	ND			ND		mg/L				NC	20
Bicarbonate Alkalinity as CaCO3	600			599		mg/L				0.2	20
Carbonate Alkalinity as CaCO3	ND			ND		mg/L				NC	20
Hydroxide Alkalinity as CaCO3	ND			ND		mg/L				NC	20

Lab Sample ID: MB 550-300721/4
Matrix: Water
Analysis Batch: 300721

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3	ND		6.0		mg/L			05/18/23 13:58	1
Alkalinity, Phenolphthalein	ND		6.0		mg/L			05/18/23 13:58	1
Bicarbonate Alkalinity as CaCO3	ND		6.0		mg/L			05/18/23 13:58	1
Carbonate Alkalinity as CaCO3	ND		6.0		mg/L			05/18/23 13:58	1
Hydroxide Alkalinity as CaCO3	ND		6.0		mg/L			05/18/23 13:58	1

Lab Sample ID: LCS 550-300721/3
Matrix: Water
Analysis Batch: 300721

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Alkalinity as CaCO3			250	252		mg/L		101	90 - 110		

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: LCSD 550-300721/16
Matrix: Water
Analysis Batch: 300721

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Alkalinity as CaCO3			250	250		mg/L		100	90 - 110	1	20

Lab Sample ID: 550-201978-F-42 DU
Matrix: Water
Analysis Batch: 300721

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Alkalinity as CaCO3	77			77.4		mg/L				0.3	20
Alkalinity, Phenolphthalein	ND			ND		mg/L				NC	20
Bicarbonate Alkalinity as CaCO3	77			77.4		mg/L				0.3	20
Carbonate Alkalinity as CaCO3	ND			ND		mg/L				NC	20
Hydroxide Alkalinity as CaCO3	ND			ND		mg/L				NC	20

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 550-300213/1
Matrix: Water
Analysis Batch: 300213

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	26.0	B7	20		mg/L			05/13/23 15:46	1

Lab Sample ID: LCS 550-300213/2
Matrix: Water
Analysis Batch: 300213

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Dissolved Solids			1000	1000		mg/L		100	90 - 110		

Lab Sample ID: LCSD 550-300213/3
Matrix: Water
Analysis Batch: 300213

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Dissolved Solids			1000	1010		mg/L		100	90 - 110	1	10

Lab Sample ID: 550-201909-A-12 DU
Matrix: Water
Analysis Batch: 300213

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	5300	B7		5250		mg/L				1	10

Lab Sample ID: MB 550-300366/1
Matrix: Water
Analysis Batch: 300366

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		20		mg/L			05/16/23 15:59	1

Method: SM 2540C - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: LCS 550-300366/2
Matrix: Water
Analysis Batch: 300366

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Dissolved Solids			1000	1010		mg/L		101	90 - 110		

Lab Sample ID: LCSD 550-300366/3
Matrix: Water
Analysis Batch: 300366

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Dissolved Solids			1000	1010		mg/L		101	90 - 110	1	10

Lab Sample ID: 550-202029-6 DU
Matrix: Water
Analysis Batch: 300366

Client Sample ID: FC-CCR-APV6-0523
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	16000			15300		mg/L				3	10

Method: SM 4500 H+ B - pH

Lab Sample ID: LCSSRM 550-300503/1
Matrix: Water
Analysis Batch: 300503

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits		
pH			7.00	7.0		SU		99.7	98.5 - 101.5		

Lab Sample ID: LCSSRM 550-300503/13
Matrix: Water
Analysis Batch: 300503

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits		
pH			7.00	7.0		SU		100.0	98.5 - 101.5		

Lab Sample ID: 550-202028-A-1 DU
Matrix: Water
Analysis Batch: 300503

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
pH	7.7	H5		7.7	H5	SU				0.1	5
Temperature	12.3	H5		12.3	H5	Degrees C				0	

HPLC/IC

Analysis Batch: 301617

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-202029-1	FC-CCR-DMX06-0523	Total/NA	Water	300.0	
550-202029-1	FC-CCR-DMX06-0523	Total/NA	Water	300.0	
550-202029-2	FC-CCR-MW15-0523	Total/NA	Water	300.0	
550-202029-2	FC-CCR-MW15-0523	Total/NA	Water	300.0	
550-202029-3	FC-CCR-MW16-0523	Total/NA	Water	300.0	
550-202029-3	FC-CCR-MW16-0523	Total/NA	Water	300.0	
550-202029-4	FC-CCR-EB01-0523	Total/NA	Water	300.0	
550-202029-6	FC-CCR-APV6-0523	Total/NA	Water	300.0	
550-202029-6	FC-CCR-APV6-0523	Total/NA	Water	300.0	
MB 550-301617/2	Method Blank	Total/NA	Water	300.0	
LCS 550-301617/5	Lab Control Sample	Total/NA	Water	300.0	
LCSD 550-301617/6	Lab Control Sample Dup	Total/NA	Water	300.0	
550-202029-5 MS	FC-CCR-EW17-0523	Total/NA	Water	300.0	
550-202029-5 MSD	FC-CCR-EW17-0523	Total/NA	Water	300.0	

Analysis Batch: 301658

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-202029-3	FC-CCR-MW16-0523	Total/NA	Water	300.0	
550-202029-5	FC-CCR-EW17-0523	Total/NA	Water	300.0	
550-202029-6	FC-CCR-APV6-0523	Total/NA	Water	300.0	
MB 550-301658/2	Method Blank	Total/NA	Water	300.0	
LCS 550-301658/5	Lab Control Sample	Total/NA	Water	300.0	
LCSD 550-301658/6	Lab Control Sample Dup	Total/NA	Water	300.0	
550-202671-A-1 MS	Matrix Spike	Total/NA	Water	300.0	
550-202671-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Analysis Batch: 301713

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-202029-1	FC-CCR-DMX06-0523	Total/NA	Water	300.0	
MB 550-301713/2	Method Blank	Total/NA	Water	300.0	
LCS 550-301713/5	Lab Control Sample	Total/NA	Water	300.0	
LCSD 550-301713/6	Lab Control Sample Dup	Total/NA	Water	300.0	
550-202672-A-1 MS	Matrix Spike	Total/NA	Water	300.0	
550-202672-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Metals

Prep Batch: 300113

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-202029-4	FC-CCR-EB01-0523	Total/NA	Water	245.1	
550-202029-5	FC-CCR-EW17-0523	Total/NA	Water	245.1	
550-202029-6	FC-CCR-APV6-0523	Total/NA	Water	245.1	
MB 550-300113/1-A	Method Blank	Total/NA	Water	245.1	
LCS 550-300113/2-A	Lab Control Sample	Total/NA	Water	245.1	
LCSD 550-300113/3-A	Lab Control Sample Dup	Total/NA	Water	245.1	
550-201848-L-1-B MS	Matrix Spike	Total/NA	Water	245.1	
550-201848-L-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	245.1	

Analysis Batch: 300133

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-202029-4	FC-CCR-EB01-0523	Total/NA	Water	245.1	300113

Metals (Continued)

Analysis Batch: 300133 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-202029-5	FC-CCR-EW17-0523	Total/NA	Water	245.1	300113
550-202029-6	FC-CCR-APV6-0523	Total/NA	Water	245.1	300113
MB 550-300113/1-A	Method Blank	Total/NA	Water	245.1	300113
LCS 550-300113/2-A	Lab Control Sample	Total/NA	Water	245.1	300113
LCSD 550-300113/3-A	Lab Control Sample Dup	Total/NA	Water	245.1	300113
550-201848-L-1-B MS	Matrix Spike	Total/NA	Water	245.1	300113
550-201848-L-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	245.1	300113

Prep Batch: 300305

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-202029-1	FC-CCR-DMX06-0523	Total/NA	Water	200.7	
550-202029-2	FC-CCR-MW15-0523	Total/NA	Water	200.7	
550-202029-3	FC-CCR-MW16-0523	Total/NA	Water	200.7	
550-202029-4	FC-CCR-EB01-0523	Total/NA	Water	200.7	
550-202029-5	FC-CCR-EW17-0523	Total/NA	Water	200.7	
550-202029-6	FC-CCR-APV6-0523	Total/NA	Water	200.7	
MB 550-300305/1-A	Method Blank	Total/NA	Water	200.7	
LCS 550-300305/2-A	Lab Control Sample	Total/NA	Water	200.7	
LCSD 550-300305/3-A	Lab Control Sample Dup	Total/NA	Water	200.7	
550-202028-B-1-A MS	Matrix Spike	Total/NA	Water	200.7	
550-202028-B-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	200.7	

Analysis Batch: 302083

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-202029-1	FC-CCR-DMX06-0523	Total/NA	Water	200.7 Rev 4.4	300305
550-202029-2	FC-CCR-MW15-0523	Total/NA	Water	200.7 Rev 4.4	300305
550-202029-3	FC-CCR-MW16-0523	Total/NA	Water	200.7 Rev 4.4	300305
550-202029-4	FC-CCR-EB01-0523	Total/NA	Water	200.7 Rev 4.4	300305
550-202029-5	FC-CCR-EW17-0523	Total/NA	Water	200.7 Rev 4.4	300305
550-202029-6	FC-CCR-APV6-0523	Total/NA	Water	200.7 Rev 4.4	300305
MB 550-300305/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	300305
LCS 550-300305/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	300305
LCSD 550-300305/3-A	Lab Control Sample Dup	Total/NA	Water	200.7 Rev 4.4	300305
550-202028-B-1-A MS	Matrix Spike	Total/NA	Water	200.7 Rev 4.4	300305
550-202028-B-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	200.7 Rev 4.4	300305

Analysis Batch: 302156

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-202029-1	FC-CCR-DMX06-0523	Total/NA	Water	200.7 Rev 4.4	300305
550-202029-2	FC-CCR-MW15-0523	Total/NA	Water	200.7 Rev 4.4	300305
550-202029-3	FC-CCR-MW16-0523	Total/NA	Water	200.7 Rev 4.4	300305
550-202029-4	FC-CCR-EB01-0523	Total/NA	Water	200.7 Rev 4.4	300305
550-202029-6	FC-CCR-APV6-0523	Total/NA	Water	200.7 Rev 4.4	300305
MB 550-300305/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	300305
LCS 550-300305/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	300305
LCSD 550-300305/3-A	Lab Control Sample Dup	Total/NA	Water	200.7 Rev 4.4	300305

Prep Batch: 612443

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-202029-1	FC-CCR-DMX06-0523	Total Recoverable	Water	200.8	
550-202029-1	FC-CCR-DMX06-0523	Total/NA	Water	200.8	

Metals (Continued)

Prep Batch: 612443 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-202029-2	FC-CCR-MW15-0523	Total Recoverable	Water	200.8	
550-202029-2	FC-CCR-MW15-0523	Total/NA	Water	200.8	
550-202029-3	FC-CCR-MW16-0523	Total Recoverable	Water	200.8	
550-202029-3	FC-CCR-MW16-0523	Total/NA	Water	200.8	
550-202029-4	FC-CCR-EB01-0523	Total Recoverable	Water	200.8	
550-202029-4	FC-CCR-EB01-0523	Total/NA	Water	200.8	
550-202029-6	FC-CCR-APV6-0523	Total Recoverable	Water	200.8	
550-202029-6	FC-CCR-APV6-0523	Total/NA	Water	200.8	
MB 280-612443/1-A	Method Blank	Total Recoverable	Water	200.8	
MB 280-612443/1-A	Method Blank	Total/NA	Water	200.8	
LCS 280-612443/18-A	Lab Control Sample	Total Recoverable	Water	200.8	
LCS 280-612443/2-A	Lab Control Sample	Total/NA	Water	200.8	
280-176448-B-1-B MS	Matrix Spike	Total/NA	Water	200.7	
280-176448-B-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	200.7	
280-176448-B-1-E MS	Matrix Spike	Total Recoverable	Water	200.8	
280-176448-B-1-F MSD	Matrix Spike Duplicate	Total Recoverable	Water	200.8	

Analysis Batch: 612777

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-202029-1	FC-CCR-DMX06-0523	Total Recoverable	Water	200.8	612443
550-202029-2	FC-CCR-MW15-0523	Total Recoverable	Water	200.8	612443
550-202029-3	FC-CCR-MW16-0523	Total Recoverable	Water	200.8	612443
550-202029-4	FC-CCR-EB01-0523	Total Recoverable	Water	200.8	612443
550-202029-6	FC-CCR-APV6-0523	Total Recoverable	Water	200.8	612443
MB 280-612443/1-A	Method Blank	Total Recoverable	Water	200.8	612443
LCS 280-612443/18-A	Lab Control Sample	Total Recoverable	Water	200.8	612443
280-176448-B-1-E MS	Matrix Spike	Total Recoverable	Water	200.8	612443
280-176448-B-1-F MSD	Matrix Spike Duplicate	Total Recoverable	Water	200.8	612443

Analysis Batch: 613254

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-202029-1	FC-CCR-DMX06-0523	Total/NA	Water	200.7 Rev 4.4	612443
550-202029-2	FC-CCR-MW15-0523	Total/NA	Water	200.7 Rev 4.4	612443
550-202029-3	FC-CCR-MW16-0523	Total/NA	Water	200.7 Rev 4.4	612443
550-202029-4	FC-CCR-EB01-0523	Total/NA	Water	200.7 Rev 4.4	612443
550-202029-6	FC-CCR-APV6-0523	Total/NA	Water	200.7 Rev 4.4	612443
MB 280-612443/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	612443
LCS 280-612443/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	612443
280-176448-B-1-B MS	Matrix Spike	Total/NA	Water	200.7 Rev 4.4	612443
280-176448-B-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	200.7 Rev 4.4	612443

General Chemistry

Analysis Batch: 300213

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-202029-1	FC-CCR-DMX06-0523	Total/NA	Water	SM 2540C	
550-202029-2	FC-CCR-MW15-0523	Total/NA	Water	SM 2540C	
550-202029-3	FC-CCR-MW16-0523	Total/NA	Water	SM 2540C	
550-202029-5	FC-CCR-EW17-0523	Total/NA	Water	SM 2540C	
MB 550-300213/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 550-300213/2	Lab Control Sample	Total/NA	Water	SM 2540C	

General Chemistry (Continued)

Analysis Batch: 300213 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 550-300213/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	
550-201909-A-12 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 300366

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-202029-4	FC-CCR-EB01-0523	Total/NA	Water	SM 2540C	
550-202029-6	FC-CCR-APV6-0523	Total/NA	Water	SM 2540C	
MB 550-300366/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 550-300366/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 550-300366/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	
550-202029-6 DU	FC-CCR-APV6-0523	Total/NA	Water	SM 2540C	

Analysis Batch: 300498

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-202029-1	FC-CCR-DMX06-0523	Total/NA	Water	SM 2320B	
550-202029-2	FC-CCR-MW15-0523	Total/NA	Water	SM 2320B	
550-202029-3	FC-CCR-MW16-0523	Total/NA	Water	SM 2320B	
MB 550-300498/3	Method Blank	Total/NA	Water	SM 2320B	
LCS 550-300498/4	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 550-300498/17	Lab Control Sample Dup	Total/NA	Water	SM 2320B	
550-202029-3 DU	FC-CCR-MW16-0523	Total/NA	Water	SM 2320B	

Analysis Batch: 300503

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-202029-1	FC-CCR-DMX06-0523	Total/NA	Water	SM 4500 H+ B	
550-202029-2	FC-CCR-MW15-0523	Total/NA	Water	SM 4500 H+ B	
550-202029-3	FC-CCR-MW16-0523	Total/NA	Water	SM 4500 H+ B	
550-202029-4	FC-CCR-EB01-0523	Total/NA	Water	SM 4500 H+ B	
550-202029-6	FC-CCR-APV6-0523	Total/NA	Water	SM 4500 H+ B	
LCSSRM 550-300503/1	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	
LCSSRM 550-300503/13	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	
550-202028-A-1 DU	Duplicate	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 300721

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-202029-4	FC-CCR-EB01-0523	Total/NA	Water	SM 2320B	
MB 550-300721/4	Method Blank	Total/NA	Water	SM 2320B	
LCS 550-300721/3	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 550-300721/16	Lab Control Sample Dup	Total/NA	Water	SM 2320B	
550-201978-F-42 DU	Duplicate	Total/NA	Water	SM 2320B	

Lab Chronicle

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-202029-1
SDG: APS Four Corners Power Plant (Other)

Client Sample ID: FC-CCR-DMX06-0523

Lab Sample ID: 550-202029-1

Date Collected: 05/08/23 10:28
Matrix: Water
Date Received: 05/10/23 17:13

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		5	301617	RDC	EET PHX	06/02/23 15:59
Total/NA	Analysis	300.0		500	301617	RDC	EET PHX	06/02/23 16:17
Total/NA	Analysis	300.0		20	301713	RDC	EET PHX	06/05/23 18:09
Total/NA	Prep	200.7			300305	SGO	EET PHX	05/16/23 06:17
Total/NA	Analysis	200.7 Rev 4.4		1	302083	GLW	EET PHX	06/09/23 20:18
Total/NA	Prep	200.7			300305	SGO	EET PHX	05/16/23 06:17
Total/NA	Analysis	200.7 Rev 4.4		5	302156	GLW	EET PHX	06/12/23 19:23
Total/NA	Prep	200.8			612443	LJS	EET DEN	05/16/23 08:11
Total/NA	Analysis	200.7 Rev 4.4		1	613254	ADL	EET DEN	05/19/23 20:40
Total Recoverable	Prep	200.8			612443	LJS	EET DEN	05/16/23 08:11
Total Recoverable	Analysis	200.8		1	612777	LRD	EET DEN	05/17/23 03:54
Total/NA	Analysis	SM 2320B		1	300498	MAN	EET PHX	05/17/23 18:28
Total/NA	Analysis	SM 2540C		1	300213	RDC	EET PHX	05/13/23 15:46 - 05/16/23 17:00 [1]
Total/NA	Analysis	SM 4500 H+ B		1	300503	MAN	EET PHX	05/17/23 15:32

Client Sample ID: FC-CCR-MW15-0523

Lab Sample ID: 550-202029-2

Date Collected: 05/08/23 11:18
Matrix: Water
Date Received: 05/10/23 17:13

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		5	301617	RDC	EET PHX	06/02/23 16:35
Total/NA	Analysis	300.0		500	301617	RDC	EET PHX	06/02/23 16:54
Total/NA	Prep	200.7			300305	SGO	EET PHX	05/16/23 06:17
Total/NA	Analysis	200.7 Rev 4.4		1	302083	GLW	EET PHX	06/09/23 20:20
Total/NA	Prep	200.7			300305	SGO	EET PHX	05/16/23 06:17
Total/NA	Analysis	200.7 Rev 4.4		5	302156	GLW	EET PHX	06/12/23 19:26
Total/NA	Prep	200.8			612443	LJS	EET DEN	05/16/23 08:11
Total/NA	Analysis	200.7 Rev 4.4		1	613254	ADL	EET DEN	05/19/23 20:44
Total Recoverable	Prep	200.8			612443	LJS	EET DEN	05/16/23 08:11
Total Recoverable	Analysis	200.8		1	612777	LRD	EET DEN	05/17/23 03:55
Total/NA	Analysis	SM 2320B		1	300498	MAN	EET PHX	05/17/23 18:39
Total/NA	Analysis	SM 2540C		1	300213	RDC	EET PHX	05/13/23 15:46 - 05/16/23 17:00 [1]
Total/NA	Analysis	SM 4500 H+ B		1	300503	MAN	EET PHX	05/17/23 15:33

Client Sample ID: FC-CCR-MW16-0523

Lab Sample ID: 550-202029-3

Date Collected: 05/08/23 12:38
Matrix: Water
Date Received: 05/10/23 17:13

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		5	301617	RDC	EET PHX	06/02/23 18:07
Total/NA	Analysis	300.0		500	301617	RDC	EET PHX	06/02/23 18:26
Total/NA	Analysis	300.0		20	301658	RDC	EET PHX	06/03/23 18:40

Lab Chronicle

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-202029-1
SDG: APS Four Corners Power Plant (Other)

Client Sample ID: FC-CCR-MW16-0523

Date Collected: 05/08/23 12:38
Date Received: 05/10/23 17:13

Lab Sample ID: 550-202029-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	200.7			300305	SGO	EET PHX	05/16/23 06:17
Total/NA	Analysis	200.7 Rev 4.4		1	302083	GLW	EET PHX	06/09/23 20:23
Total/NA	Prep	200.7			300305	SGO	EET PHX	05/16/23 06:17
Total/NA	Analysis	200.7 Rev 4.4		5	302156	GLW	EET PHX	06/12/23 19:29
Total/NA	Prep	200.8			612443	LJS	EET DEN	05/16/23 08:11
Total/NA	Analysis	200.7 Rev 4.4		1	613254	ADL	EET DEN	05/19/23 20:48
Total Recoverable	Prep	200.8			612443	LJS	EET DEN	05/16/23 08:11
Total Recoverable	Analysis	200.8		1	612777	LRD	EET DEN	05/17/23 03:57
Total/NA	Analysis	SM 2320B		1	300498	MAN	EET PHX	05/17/23 19:04
Total/NA	Analysis	SM 2540C		1	300213	RDC	EET PHX	05/13/23 15:46 - 05/16/23 17:00 [1]
Total/NA	Analysis	SM 4500 H+ B		1	300503	MAN	EET PHX	05/17/23 15:34

Client Sample ID: FC-CCR-EB01-0523

Date Collected: 05/10/23 09:25
Date Received: 05/10/23 17:13

Lab Sample ID: 550-202029-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	301617	RDC	EET PHX	06/02/23 20:35
Total/NA	Prep	200.7			300305	SGO	EET PHX	05/16/23 06:17
Total/NA	Analysis	200.7 Rev 4.4		1	302083	GLW	EET PHX	06/09/23 20:26
Total/NA	Prep	200.7			300305	SGO	EET PHX	05/16/23 06:17
Total/NA	Analysis	200.7 Rev 4.4		1	302156	GLW	EET PHX	06/12/23 19:31
Total/NA	Prep	200.8			612443	LJS	EET DEN	05/16/23 08:11
Total/NA	Analysis	200.7 Rev 4.4		1	613254	ADL	EET DEN	05/19/23 20:52
Total Recoverable	Prep	200.8			612443	LJS	EET DEN	05/16/23 08:11
Total Recoverable	Analysis	200.8		1	612777	LRD	EET DEN	05/17/23 03:59
Total/NA	Prep	245.1			300113	SRR	EET PHX	05/11/23 15:30
Total/NA	Analysis	245.1		1	300133	SRR	EET PHX	05/11/23 19:55
Total/NA	Analysis	SM 2320B		1	300721	MAN	EET PHX	05/18/23 20:05
Total/NA	Analysis	SM 2540C		1	300366	SMA	EET PHX	05/16/23 15:59 - 05/19/23 16:00 [1]
Total/NA	Analysis	SM 4500 H+ B		1	300503	MAN	EET PHX	05/17/23 15:36

Client Sample ID: FC-CCR-EW17-0523

Date Collected: 05/08/23 13:22
Date Received: 05/10/23 17:13

Lab Sample ID: 550-202029-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		20	301658	RDC	EET PHX	06/03/23 21:07
Total/NA	Prep	200.7			300305	SGO	EET PHX	05/16/23 06:17
Total/NA	Analysis	200.7 Rev 4.4		1	302083	GLW	EET PHX	06/09/23 20:29
Total/NA	Prep	245.1			300113	SRR	EET PHX	05/11/23 15:30
Total/NA	Analysis	245.1		1	300133	SRR	EET PHX	05/11/23 19:57
Total/NA	Analysis	SM 2540C		1	300213	RDC	EET PHX	05/13/23 15:46 - 05/16/23 17:00 [1]

Lab Chronicle

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-202029-1
SDG: APS Four Corners Power Plant (Other)

Client Sample ID: FC-CCR-APV6-0523

Date Collected: 05/09/23 09:04
Date Received: 05/10/23 17:13

Lab Sample ID: 550-202029-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		5	301617	RDC	EET PHX	06/02/23 18:44
Total/NA	Analysis	300.0		500	301617	RDC	EET PHX	06/02/23 19:03
Total/NA	Analysis	300.0		20	301658	RDC	EET PHX	06/03/23 18:59
Total/NA	Prep	200.7			300305	SGO	EET PHX	05/16/23 06:17
Total/NA	Analysis	200.7 Rev 4.4		1	302083	GLW	EET PHX	06/09/23 20:32
Total/NA	Prep	200.7			300305	SGO	EET PHX	05/16/23 06:17
Total/NA	Analysis	200.7 Rev 4.4		1	302156	GLW	EET PHX	06/12/23 19:37
Total/NA	Prep	200.8			612443	LJS	EET DEN	05/16/23 08:11
Total/NA	Analysis	200.7 Rev 4.4		1	613254	ADL	EET DEN	05/19/23 20:56
Total Recoverable	Prep	200.8			612443	LJS	EET DEN	05/16/23 08:11
Total Recoverable	Analysis	200.8		1	612777	LRD	EET DEN	05/17/23 04:01
Total/NA	Prep	245.1			300113	SRR	EET PHX	05/11/23 15:30
Total/NA	Analysis	245.1		1	300133	SRR	EET PHX	05/11/23 19:59
Total/NA	Analysis	SM 2540C		1	300366	SMA	EET PHX	05/16/23 15:59 - 05/19/23 16:00 [1]
Total/NA	Analysis	SM 4500 H+ B		1	300503	MAN	EET PHX	05/17/23 15:41

[1] This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

EET PHX = Eurofins Phoenix, 4625 East Cotton Center Boulevard, Suite #189, Phoenix, AZ 85040, TEL (602)437-3340

Accreditation/Certification Summary

Client: Arizona Public Service Company
Job ID: 550-202029-1
Project/Site: CCR Groundwater Monitoring
SDG: APS Four Corners Power Plant (Other)

Laboratory: Eurofins Phoenix

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Arizona	State	AZ0728	06-10-24

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
SM 4500 H+ B		Water	Temperature

Laboratory: Eurofins Denver

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arizona	State	AZ0713	05-22-23

Method Summary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-202029-1
SDG: APS Four Corners Power Plant (Other)

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	EPA	EET PHX
200.7 Rev 4.4	Metals (ICP)	EPA	EET DEN
200.7 Rev 4.4	Metals (ICP)	EPA	EET PHX
200.8	Metals (ICP/MS)	EPA	EET DEN
245.1	Mercury (CVAA)	EPA	EET PHX
SM 2320B	Alkalinity	SM	EET PHX
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET PHX
SM 4500 H+ B	pH	SM	EET PHX
200.7	Preparation, Total Metals	EPA	EET DEN
200.7	Preparation, Total Metals	EPA	EET PHX
200.8	Preparation, Total Recoverable Metals	EPA	EET DEN
245.1	Preparation, Mercury	EPA	EET PHX

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

EET PHX = Eurofins Phoenix, 4625 East Cotton Center Boulevard, Suite #189, Phoenix, AZ 85040, TEL (602)437-3340

TestAmerica Phoenix
4625 E Cotton Center Blvd
Suite 189
Phoenix, AZ 85040
phone 602.437.3340 fax 602.454.9303

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☑ Other: CCR

202029

TestAmerica Laboratories, Inc.

6/14/2023

Client Contact	Natalie Chrisman	Pam Norris (505-598-8781)	Date:	COC No:
Arizona Public Service	602-250-3608	Lab Contact: Rachel Sester	Carrier:	1 of 1 COCs
PO Box 355, MS 4915	Analysis Turnaround Time			Sampler:
Fruitland, NM 87416	☐ CALENDAR DAYS ☑ WORKING DAYS			For Lab Use Only:
Phone	TAT if different from Below _____			Walk-in Client:
FAX	☑ 2 weeks			Lab Sampling:
Project Name: CCR Groundwater Monitoring	☐ 1 week			
Site: APS Four Corners Power Plant (Other)	☐ 2 days			Job / SDG No.:
PO #: 300592358	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	EPA 300.0 (Cl, F, SO4)	EPA 200.7 - Totals (B)	EPA 200.7 - Totals (B, Ca, Be)	EPA 200.7 - Totals (B, Ca, Be, K, Mg, Na, Fe)	EPA 200.7 - Totals (B, Ca, K, Mg, Na)	EPA 200.7 - Totals (B, Ca, K, Mg, Na, Mn, Fe)	EPA 200.7 - Totals (B, Ca, Be, K, Mg, Na, Mn, Fe)	EPA 200.7 - Total Lithium	EPA 200.8 - Totals (Sb, As, Ba, Cd, Co, Cr, Pb, Mo, Se, Tl)	EPA 200.8 - Totals (Co, Mo)	EPA 245.1 - Totals (Hg)	SM 4500-HB (pH)	SM 2540C (TDS)	SM 2320B (CO3 Alkalinity as CaCO3, HCO3 Alkalinity as	EPA 200.7 - Totals (B, Mg, Mn,	EPA 300.0 (Cl)					Sample Specific Notes:
FC-CCR-DMX06-0523 -1	5/8/2023	1028	G	W	3	N		X						X	X	X			X	X	X							Low Flow
FC-CCR-MW15-0523 -2	5/8/2023	1118	G	W	3	N		X						X	X	X			X	X	X							"
FC-CCR-MW16-0523 -3	5/8/2023	1238	G	W	2	N		X			X				X	X			X	X	X							"
FC-CCR-EB01-0523 -4	5/10/2023	0925	G	W	3			X						X	X	X		X	X	X	X							"
FC-CCR-EW17-0523 -5	5/8/2023	1322	G	W	2													X		X		X	X					Grab Sample
FC-CCR-APV6-0523 -6	5/9/2023	904	G	W	3	N	N	X		X					X	X		X	X	X								Grab Sample - Ash Pond 6 Vault

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

								1	4	4	4	4	4	4		4	4	4	1	1	1							

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☑ Disposal by Lab ☐ Archive for_____ Months

Special Instructions/QC Requirements & Comments:

Method 200.8 with collision cell

1.6/3.3 c

550-202029 Chain of Custody

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:	Cooler Temp. (°C): Obs'd:_____ Corr'd:_____ Therm ID No.:_____			
Relinquished by: BSLC	Company: WSP	Date/Time: 10May23 1713	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company: EFTA PHX	Date/Time: 5/10/23 17:13

CDO

Eurofins Phoenix
4625 East Cotton Center Boulevard Suite #189
Phoenix, AZ 85040
Phone: 602-437-3340

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler:	Lab PM: Roberts, Danielle C	Carrier Tracking No(s):	COC No: 550-36826.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Danielle.Roberts@et.eurofinsus.com	State of Origin: Arizona	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - Arizona; State Program - Arizona		Job #: 550-202029-1
Address: 4955 Yarrow Street,	Due Date Requested: 5/23/2023			
City: Arvada	TAT Requested (days):			
State, Zip: CO, 80002				
Phone: 303-736-0100(Tel) 303-431-7171(Fax)	PO #:			
Email:	WO #			
Project Name: CCR Groundwater Monitoring	Project #: 55009706			
Site: Arizona Public Service	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	200.7/200.7_P_TOT Lithium-ICP	200.8/200.8_P_TR Sb, As, Ba, Cd, Co, Cr, Pb, Mo, Se, Tl	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
FC-CCR-DMX06-0523 (550-202029-1)	5/8/23	10:28 Arizona		Water			X	X	1	AZ Sample, Collision Cell
FC-CCR-MW15-0523 (550-202029-2)	5/8/23	11:18 Arizona		Water			X	X	1	AZ Sample, Collision Cell
FC-CCR-MW16-0523 (550-202029-3)	5/8/23	12:38 Arizona		Water			X	X	1	AZ Sample, Collision Cell
FC-CCR-EB01-0523 (550-202029-4)	5/10/23	09:25 Arizona		Water			X	X	1	AZ Sample, Collision Cell
FC-CCR-APV6-0523 (550-202029-6)	5/9/23	09:04 Arizona		Water			X	X	1	AZ Sample, Collision Cell

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Southwest, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Southwest, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Southwest, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Southwest, LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		5/11/23 1610	EETA PHX	FedEx		
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 5/12/23 1210	Company EETA
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 13.1 IR14 CF0.1

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Arizona Public Service Company

Job Number: 550-202029-1
SDG Number: APS Four Corners Power Plant (Other)

Login Number: 202029
List Number: 1
Creator: Maycock, Lisa

List Source: Eurofins Phoenix

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	False	Check done at department level as required.

Login Sample Receipt Checklist

Client: Arizona Public Service Company

Job Number: 550-202029-1
SDG Number: APS Four Corners Power Plant (Other)

Login Number: 202029
List Number: 2
Creator: Rystrom, Joshua R

List Source: Eurofins Denver
List Creation: 05/13/23 09:52 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	False	Thermal preservation not required.
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

PREPARED FOR

Attn: Natalie Chrisman
Arizona Public Service Company
PO BOX 188, Ste. 4458
Joseph City, Arizona 86032

Generated 6/14/2023 5:29:18 AM

JOB DESCRIPTION

CCR Groundwater Monitoring
SDG NUMBER APS Four Corners Power Plant (Mulitunit)

JOB NUMBER

550-202030-1

Eurofins Phoenix
4625 East Cotton Center Boulevard
Suite #189
Phoenix AZ 85040

See page two for job notes and contact information.

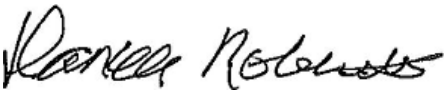
myEOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Southwest, LLC Project Manager.

Authorization



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Authorized for release by
Danielle Roberts, Senior Project Manager
Danielle.Roberts@et.eurofinsus.com
(657)210-6355

Table of Contents

Cover Page 1
Table of Contents 3
Definitions/Glossary 4
Case Narrative 6
Sample Summary 7
Detection Summary 8
Client Sample Results 10
QC Sample Results 13
QC Association Summary 21
Lab Chronicle 24
Certification Summary 26
Method Summary 27
Chain of Custody 28
Receipt Checklists 30

Definitions/Glossary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-202030-1
SDG: APS Four Corners Power Plant (Mulitunit)

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
D1	Sample required dilution due to matrix.
D2	Sample required dilution due to high concentration of analyte.
D5	Minimum Reporting Limit (MRL) adjusted due to sample dilution; analyte was non-detect in the sample.
E2	Concentration estimated. Analyte exceeded calibration range. Reanalysis not performed due to sample matrix.
M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The associated blank spike was acceptable.

Metals

Qualifier	Qualifier Description
E2	Concentration estimated. Analyte exceeded calibration range. Reanalysis not performed due to sample matrix.
M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The associated blank spike was acceptable.

General Chemistry

Qualifier	Qualifier Description
B7	Target analyte detected in method blank at or above method reporting limit. Concentration found in the sample was 10 times above the concentration found in the blank.
H5	This test is specified to be performed in the field within 15 minutes of sampling; sample was received and analyzed past the regulatory holding time.
T5	Laboratory not licensed for this parameter

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 550-202030-1

Laboratory: Eurofins Phoenix

Narrative

Job Narrative
550-202030-1

Comments
No additional comments.

Receipt
The samples were received on 5/10/2023 5:07 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 1.6º C.

HPLC/IC
Method 300.0: The following sample was diluted due to the nature of the sample matrix having a high concentration of metals, which can cause damage to the instrument: FC-CCR-MW49A-0523 (550-202030-3). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
Methods 200.8, 6020B: The continuing calibration verification (CCV) associated with batch 280-613485 recovered above the upper control limit for As. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: (CCV 280-613485/91) and (550-202032-C-1-A).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry
Method SM 2540C: The method blank for analytical batch 550-300213 contained Total Dissolved Solids above the reporting limit (RL). Associated sample were not re-extracted and/or re-analyzed because results were greater than 10X the value found in the method blank.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Sample Summary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-202030-1
SDG: APS Four Corners Power Plant (Mulitunit)

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
550-202030-1	FC-CCR-MW07-0523	Water	05/08/23 15:18	05/10/23 17:07
550-202030-2	FC-CCR-MW08-0523	Water	05/08/23 14:07	05/10/23 17:07
550-202030-3	FC-CCR-MW49A-0523	Water	05/08/23 16:34	05/10/23 17:07

Detection Summary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-202030-1
SDG: APS Four Corners Power Plant (Mulitunit)

Client Sample ID: FC-CCR-MW07-0523 — Lab Sample ID: 550-202030-1

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	520	D2	40		mg/L	20		300.0	Total/NA
Sulfate	5500	D2	1000		mg/L	500		300.0	Total/NA
Lithium	1.1		0.020		mg/L	1		200.7 Rev 4.4	Total/NA
Boron	8.7		0.050		mg/L	1		200.7 Rev 4.4	Total/NA
Calcium	370		2.0		mg/L	1		200.7 Rev 4.4	Total/NA
Barium	15		3.0		ug/L	1		200.8	Total Recoverable
Molybdenum	2.4		2.0		ug/L	1		200.8	Total Recoverable
Nickel	30		3.0		ug/L	1		200.8	Total Recoverable
Selenium	23		5.0		ug/L	1		200.8	Total Recoverable
Total Dissolved Solids	9300	B7	100		mg/L	1		SM 2540C	Total/NA
pH	7.4	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	11.8	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-MW08-0523 — Lab Sample ID: 550-202030-2

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	1100	D2	1000		mg/L	500		300.0	Total/NA
Sulfate	10000	D2	1000		mg/L	500		300.0	Total/NA
Lithium	1.3		0.020		mg/L	1		200.7 Rev 4.4	Total/NA
Boron	17		0.050		mg/L	1		200.7 Rev 4.4	Total/NA
Calcium	420		2.0		mg/L	1		200.7 Rev 4.4	Total/NA
Magnesium	980		2.0		mg/L	1		200.7 Rev 4.4	Total/NA
Potassium	38		0.50		mg/L	1		200.7 Rev 4.4	Total/NA
Sodium	3300		2.5		mg/L	5		200.7 Rev 4.4	Total/NA
Barium	8.8		3.0		ug/L	1		200.8	Total Recoverable
Molybdenum	13		2.0		ug/L	1		200.8	Total Recoverable
Nickel	51		3.0		ug/L	1		200.8	Total Recoverable
Alkalinity as CaCO3	510		6.0		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	510		6.0		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	16000	B7	100		mg/L	1		SM 2540C	Total/NA
pH	7.3	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	12.6	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-MW49A-0523 — Lab Sample ID: 550-202030-3

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	510	D2	100		mg/L	50		300.0	Total/NA
Sulfate	15000	D2	1000		mg/L	500		300.0	Total/NA
Lithium	1.1		0.020		mg/L	1		200.7 Rev 4.4	Total/NA
Boron	4.6		0.050		mg/L	1		200.7 Rev 4.4	Total/NA
Calcium	380		2.0		mg/L	1		200.7 Rev 4.4	Total/NA
Barium	21		3.0		ug/L	1		200.8	Total Recoverable
Cobalt	2.0		1.0		ug/L	1		200.8	Total Recoverable
Molybdenum	29		2.0		ug/L	1		200.8	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: FC-CCR-MW49A-0523 (Continued)

Lab Sample ID: 550-202030-3

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Nickel	78		3.0		ug/L	1		200.8	Total Recoverable
Thallium	1.4		1.0		ug/L	1		200.8	Total Recoverable
Total Dissolved Solids	19000	B7	200		mg/L	1		SM 2540C	Total/NA
pH	7.3	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	14.4	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: FC-CCR-MW07-0523

Lab Sample ID: 550-202030-1

Date Collected: 05/08/23 15:18
Matrix: Water
Date Received: 05/10/23 17:07

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**520**	**D2**	40		mg/L			06/03/23 19:35	20
Fluoride	ND	D1 D5	2.0		mg/L			06/02/23 19:21	5
Sulfate	**5500**	**D2**	1000		mg/L			06/02/23 19:39	500

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		0.0010		mg/L		05/16/23 06:17	06/12/23 19:40	1
Lithium	**1.1**		0.020		mg/L		05/16/23 15:02	05/24/23 14:44	1
Boron	**8.7**		0.050		mg/L		05/16/23 06:17	06/09/23 20:35	1
Calcium	**370**		2.0		mg/L		05/16/23 06:17	06/09/23 20:35	1

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0		ug/L		05/16/23 15:02	05/22/23 18:42	1
Arsenic	ND		5.0		ug/L		05/16/23 15:02	05/22/23 18:42	1
Barium	**15**		3.0		ug/L		05/16/23 15:02	05/22/23 18:42	1
Cadmium	ND		1.0		ug/L		05/16/23 15:02	05/22/23 18:42	1
Chromium	ND		3.0		ug/L		05/16/23 15:02	05/22/23 18:42	1
Cobalt	ND		1.0		ug/L		05/16/23 15:02	05/22/23 18:42	1
Lead	ND		1.0		ug/L		05/16/23 15:02	05/22/23 18:42	1
Molybdenum	**2.4**		2.0		ug/L		05/16/23 15:02	05/22/23 18:42	1
Nickel	**30**		3.0		ug/L		05/16/23 15:02	05/22/23 18:42	1
Selenium	**23**		5.0		ug/L		05/16/23 15:02	05/22/23 18:42	1
Thallium	ND		1.0		ug/L		05/16/23 15:02	05/22/23 18:42	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		05/11/23 15:51	05/11/23 20:21	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**9300**	**B7**	100		mg/L			05/13/23 15:46	1
pH (SM 4500 H+ B)	**7.4**	**H5**	1.7		SU			05/17/23 15:42	1
Temperature (SM 4500 H+ B)	**11.8**	**H5 T5**	0.1		Degrees C			05/17/23 15:42	1

Client Sample ID: FC-CCR-MW08-0523

Lab Sample ID: 550-202030-2

Date Collected: 05/08/23 14:07
Matrix: Water
Date Received: 05/10/23 17:07

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1100**	**D2**	1000		mg/L			06/02/23 20:16	500
Fluoride	ND	D1 D5	2.0		mg/L			06/02/23 19:58	5
Sulfate	**10000**	**D2**	1000		mg/L			06/02/23 20:16	500

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		0.0050		mg/L		05/16/23 06:17	06/12/23 19:43	5
Lithium	**1.3**		0.020		mg/L		05/16/23 15:02	05/24/23 14:57	1
Boron	**17**		0.050		mg/L		05/16/23 06:17	06/09/23 20:37	1
Calcium	**420**		2.0		mg/L		05/16/23 06:17	06/09/23 20:37	1

Client Sample ID: FC-CCR-MW08-0523

Lab Sample ID: 550-202030-2
Date Collected: 05/08/23 14:07
Matrix: Water
Date Received: 05/10/23 17:07

Method: EPA 200.7 Rev 4.4 - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Magnesium	**980**		2.0		mg/L		05/16/23 06:17	06/09/23 20:37	1
Potassium	**38**		0.50		mg/L		05/16/23 06:17	06/09/23 20:37	1
Sodium	**3300**		2.5		mg/L		05/16/23 06:17	06/12/23 19:43	5

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0		ug/L		05/16/23 15:02	05/22/23 18:43	1
Arsenic	ND		5.0		ug/L		05/16/23 15:02	05/22/23 18:43	1
Barium	**8.8**		3.0		ug/L		05/16/23 15:02	05/22/23 18:43	1
Cadmium	ND		1.0		ug/L		05/16/23 15:02	05/22/23 18:43	1
Chromium	ND		3.0		ug/L		05/16/23 15:02	05/22/23 18:43	1
Cobalt	ND		1.0		ug/L		05/16/23 15:02	05/22/23 18:43	1
Lead	ND		1.0		ug/L		05/16/23 15:02	05/22/23 18:43	1
Molybdenum	**13**		2.0		ug/L		05/16/23 15:02	05/22/23 18:43	1
Nickel	**51**		3.0		ug/L		05/16/23 15:02	05/22/23 18:43	1
Selenium	ND		5.0		ug/L		05/16/23 15:02	05/22/23 18:43	1
Thallium	ND		1.0		ug/L		05/16/23 15:02	05/22/23 18:43	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		05/11/23 15:51	05/11/23 20:23	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3 (SM 2320B)	**510**		6.0		mg/L			05/17/23 19:28	1
Alkalinity, Phenolphthalein (SM 2320B)	ND		6.0		mg/L			05/17/23 19:28	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**510**		6.0		mg/L			05/17/23 19:28	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			05/17/23 19:28	1
Hydroxide Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			05/17/23 19:28	1
Total Dissolved Solids (SM 2540C)	**16000**	**B7**	100		mg/L			05/13/23 15:46	1
pH (SM 4500 H+ B)	**7.3**	**H5**	1.7		SU			05/17/23 15:44	1
Temperature (SM 4500 H+ B)	**12.6**	**H5 T5**	0.1		Degrees C			05/17/23 15:44	1

Client Sample ID: FC-CCR-MW49A-0523

Lab Sample ID: 550-202030-3
Date Collected: 05/08/23 16:34
Matrix: Water
Date Received: 05/10/23 17:07

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**510**	**D2**	100		mg/L			06/02/23 21:48	50
Fluoride	ND	D1 D5	20		mg/L			06/02/23 21:48	50
Sulfate	**15000**	**D2**	1000		mg/L			06/02/23 22:07	500

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		0.0010		mg/L		05/16/23 06:17	06/12/23 19:46	1
Lithium	**1.1**		0.020		mg/L		05/16/23 15:02	05/24/23 15:01	1
Boron	**4.6**		0.050		mg/L		05/16/23 06:17	06/09/23 20:40	1
Calcium	**380**		2.0		mg/L		05/16/23 06:17	06/09/23 20:40	1

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-202030-1
SDG: APS Four Corners Power Plant (Mulitunit)

Client Sample ID: FC-CCR-MW49A-0523
Date Collected: 05/08/23 16:34
Date Received: 05/10/23 17:07

Lab Sample ID: 550-202030-3
Matrix: Water

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0		ug/L		05/16/23 15:02	05/22/23 18:45	1
Arsenic	ND		5.0		ug/L		05/16/23 15:02	05/22/23 18:45	1
Barium	**21**		3.0		ug/L		05/16/23 15:02	05/22/23 18:45	1
Cadmium	ND		1.0		ug/L		05/16/23 15:02	05/22/23 18:45	1
Chromium	ND		3.0		ug/L		05/16/23 15:02	05/22/23 18:45	1
Cobalt	**2.0**		1.0		ug/L		05/16/23 15:02	05/22/23 18:45	1
Lead	ND		1.0		ug/L		05/16/23 15:02	05/22/23 18:45	1
Molybdenum	**29**		2.0		ug/L		05/16/23 15:02	05/22/23 18:45	1
Nickel	**78**		3.0		ug/L		05/16/23 15:02	05/22/23 18:45	1
Selenium	ND		5.0		ug/L		05/16/23 15:02	05/22/23 18:45	1
Thallium	**1.4**		1.0		ug/L		05/16/23 15:02	05/22/23 18:45	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		05/11/23 15:51	05/11/23 20:25	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**19000**	**B7**	200		mg/L			05/13/23 15:46	1
pH (SM 4500 H+ B)	**7.3**	**H5**	1.7		SU			05/17/23 15:47	1
Temperature (SM 4500 H+ B)	**14.4**	**H5 T5**	0.1		Degrees C			05/17/23 15:47	1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 550-301617/2
Matrix: Water
Analysis Batch: 301617

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		2.0		mg/L			06/02/23 11:51	1
Fluoride	ND		0.40		mg/L			06/02/23 11:51	1
Sulfate	ND		2.0		mg/L			06/02/23 11:51	1

Lab Sample ID: LCS 550-301617/5
Matrix: Water
Analysis Batch: 301617

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			20.0	20.5		mg/L		102	90 - 110		
Fluoride			4.00	4.13		mg/L		103	90 - 110		
Sulfate			20.0	20.6		mg/L		103	90 - 110		

Lab Sample ID: LCSD 550-301617/6
Matrix: Water
Analysis Batch: 301617

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			20.0	20.5		mg/L		103	90 - 110	0	20
Fluoride			4.00	4.16		mg/L		104	90 - 110	1	20
Sulfate			20.0	20.6		mg/L		103	90 - 110	0	20

Lab Sample ID: 550-202029-A-5 MS ^500
Matrix: Water
Analysis Batch: 301617

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	ND	D1 D5	10000	11100	D2	mg/L		104	80 - 120		
Fluoride	ND	D1 D5	2000	2030	D2	mg/L		102	80 - 120		
Sulfate	7000	D2	10000	17400	D2	mg/L		103	80 - 120		

Lab Sample ID: 550-202029-A-5 MSD ^500
Matrix: Water
Analysis Batch: 301617

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	ND	D1 D5	10000	11200	D2	mg/L		104	80 - 120	1	20
Fluoride	ND	D1 D5	2000	2060	D2	mg/L		103	80 - 120	1	20
Sulfate	7000	D2	10000	17600	D2	mg/L		106	80 - 120	1	20

Lab Sample ID: MB 550-301658/2
Matrix: Water
Analysis Batch: 301658

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		2.0		mg/L			06/03/23 11:42	1
Fluoride	ND		0.40		mg/L			06/03/23 11:42	1
Sulfate	ND		2.0		mg/L			06/03/23 11:42	1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 550-301658/5
Matrix: Water
Analysis Batch: 301658

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			20.0	20.5		mg/L		103	90 - 110		
Fluoride			4.00	4.08		mg/L		102	90 - 110		
Sulfate			20.0	20.7		mg/L		103	90 - 110		

Lab Sample ID: LCSD 550-301658/6
Matrix: Water
Analysis Batch: 301658

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			20.0	20.5		mg/L		103	90 - 110	0	20
Fluoride			4.00	4.11		mg/L		103	90 - 110	1	20
Sulfate			20.0	20.6		mg/L		103	90 - 110	0	20

Lab Sample ID: 550-202671-A-1 MS
Matrix: Water
Analysis Batch: 301658

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	310	E2 M3	20.0	309	E2 M3	mg/L		16	80 - 120		
Fluoride	ND		4.00	4.45		mg/L		105	80 - 120		
Sulfate	210	E2 M3	20.0	223	E2 M3	mg/L		55	80 - 120		

Lab Sample ID: 550-202671-A-1 MSD
Matrix: Water
Analysis Batch: 301658

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	310	E2 M3	20.0	309	E2 M3	mg/L		16	80 - 120	0	20
Fluoride	ND		4.00	4.59		mg/L		108	80 - 120	3	20
Sulfate	210	E2 M3	20.0	223	E2 M3	mg/L		55	80 - 120	0	20

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 550-300305/1-A
Matrix: Water
Analysis Batch: 302083

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 300305

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.050		mg/L		05/16/23 06:17	06/09/23 20:01	1
Calcium	ND		2.0		mg/L		05/16/23 06:17	06/09/23 20:01	1
Magnesium	ND		2.0		mg/L		05/16/23 06:17	06/09/23 20:01	1
Potassium	ND		0.50		mg/L		05/16/23 06:17	06/09/23 20:01	1
Sodium	ND		0.50		mg/L		05/16/23 06:17	06/09/23 20:01	1

Lab Sample ID: MB 550-300305/1-A
Matrix: Water
Analysis Batch: 302156

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 300305

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		0.0010		mg/L		05/16/23 06:17	06/12/23 19:14	1

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: LCS 550-300305/2-A
Matrix: Water
Analysis Batch: 302083

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 300305

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1.00	1.01		mg/L		101	85 - 115
Calcium	21.0	20.0		mg/L		95	85 - 115
Magnesium	21.0	20.2		mg/L		96	85 - 115
Potassium	20.0	19.1		mg/L		96	85 - 115
Sodium	20.0	18.9		mg/L		94	85 - 115

Lab Sample ID: LCS 550-300305/2-A
Matrix: Water
Analysis Batch: 302156

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 300305

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Beryllium	1.00	1.13		mg/L		113	85 - 115

Lab Sample ID: LCSD 550-300305/3-A
Matrix: Water
Analysis Batch: 302083

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 300305

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron	1.00	1.00		mg/L		100	85 - 115	1	20
Calcium	21.0	19.2		mg/L		92	85 - 115	4	20
Magnesium	21.0	19.5		mg/L		93	85 - 115	4	20
Potassium	20.0	18.4		mg/L		92	85 - 115	4	20
Sodium	20.0	18.1		mg/L		91	85 - 115	4	20

Lab Sample ID: LCSD 550-300305/3-A
Matrix: Water
Analysis Batch: 302156

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 300305

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Beryllium	1.00	1.10		mg/L		110	85 - 115	3	20

Lab Sample ID: 550-202028-B-1-A MS
Matrix: Water
Analysis Batch: 302083

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 300305

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	0.51		1.00	1.52		mg/L		101	70 - 130
Calcium	79		21.0	100		mg/L		103	70 - 130
Magnesium	28		21.0	49.3		mg/L		100	70 - 130
Potassium	3.1		20.0	23.9		mg/L		104	70 - 130
Sodium	830	E2 M3	20.0	866	E2 M3	mg/L		167	70 - 130

Lab Sample ID: 550-202028-B-1-B MSD
Matrix: Water
Analysis Batch: 302083

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 300305

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron	0.51		1.00	1.52		mg/L		101	70 - 130	0	20
Calcium	79		21.0	102		mg/L		112	70 - 130	2	20
Magnesium	28		21.0	50.2		mg/L		104	70 - 130	2	20

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: 550-202028-B-1-B MSD
Matrix: Water
Analysis Batch: 302083

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 300305

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Potassium	3.1		20.0	24.1		mg/L		105	70 - 130	1	20
Sodium	830	E2 M3	20.0	887	E2 M3	mg/L		276	70 - 130	2	20

Lab Sample ID: MB 280-612445/1-A
Matrix: Water
Analysis Batch: 613748

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 612445

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	ND		0.020		mg/L		05/16/23 15:02	05/24/23 14:35	1

Lab Sample ID: LCS 280-612445/2-A
Matrix: Water
Analysis Batch: 613748

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 612445

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Lithium			1.00	0.937		mg/L		94	90 - 112		

Lab Sample ID: 550-202030-1 MS
Matrix: Water
Analysis Batch: 613748

Client Sample ID: FC-CCR-MW07-0523
Prep Type: Total/NA
Prep Batch: 612445

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Lithium	1.1		1.00	2.17		mg/L		104	70 - 130		

Lab Sample ID: 550-202030-1 MSD
Matrix: Water
Analysis Batch: 613748

Client Sample ID: FC-CCR-MW07-0523
Prep Type: Total/NA
Prep Batch: 612445

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Lithium	1.1		1.00	2.13		mg/L		101	70 - 130	2	20

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 280-612445/1-A
Matrix: Water
Analysis Batch: 613485

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 612445

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0		ug/L		05/16/23 15:02	05/22/23 18:38	1
Arsenic	ND		5.0		ug/L		05/16/23 15:02	05/22/23 18:38	1
Barium	ND		3.0		ug/L		05/16/23 15:02	05/22/23 18:38	1
Cadmium	ND		1.0		ug/L		05/16/23 15:02	05/22/23 18:38	1
Chromium	ND		3.0		ug/L		05/16/23 15:02	05/22/23 18:38	1
Cobalt	ND		1.0		ug/L		05/16/23 15:02	05/22/23 18:38	1
Lead	ND		1.0		ug/L		05/16/23 15:02	05/22/23 18:38	1
Molybdenum	ND		2.0		ug/L		05/16/23 15:02	05/22/23 18:38	1
Nickel	ND		3.0		ug/L		05/16/23 15:02	05/22/23 18:38	1
Selenium	ND		5.0		ug/L		05/16/23 15:02	05/22/23 18:38	1
Thallium	ND		1.0		ug/L		05/16/23 15:02	05/22/23 18:38	1

Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 280-612445/20-A
Matrix: Water
Analysis Batch: 613485

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 612445

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Antimony			40.0	40.9		ug/L		102	85 - 115		
Arsenic			40.0	40.1		ug/L		100	89 - 111		
Barium			40.0	38.6		ug/L		97	89 - 115		
Cadmium			40.0	40.4		ug/L		101	89 - 111		
Chromium			40.0	41.1		ug/L		103	86 - 115		
Cobalt			40.0	40.0		ug/L		100	92 - 115		
Lead			40.0	40.0		ug/L		100	88 - 115		
Molybdenum			40.0	39.1		ug/L		98	89 - 112		
Nickel			40.0	41.7		ug/L		104	86 - 115		
Selenium			40.0	38.0		ug/L		95	85 - 114		
Thallium			40.0	40.2		ug/L		100	86 - 115		

Lab Sample ID: 550-202032-C-1-B MS
Matrix: Water
Analysis Batch: 613582

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 612445

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Antimony	ND		40.0	40.2		ug/L		101	85 - 115		
Arsenic	ND	V1	40.0	42.1		ug/L		105	79 - 120		
Barium	14		40.0	54.7		ug/L		101	89 - 115		
Cadmium	ND		40.0	37.6		ug/L		93	89 - 111		
Chromium	ND		40.0	42.8		ug/L		106	86 - 115		
Cobalt	66	M2	40.0	109		ug/L		108	92 - 115		
Lead	ND		40.0	41.6		ug/L		104	88 - 115		
Molybdenum	47		40.0	85.7		ug/L		98	89 - 112		
Nickel	420	M3	40.0	464	M3	ug/L		108	86 - 115		
Selenium	14		40.0	54.4		ug/L		100	85 - 114		
Thallium	ND		40.0	40.1		ug/L		100	86 - 115		

Lab Sample ID: 550-202032-C-1-C MSD
Matrix: Water
Analysis Batch: 613582

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 612445

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	ND		40.0	40.9		ug/L		102	85 - 115	4	20
Arsenic	ND	V1	40.0	41.5		ug/L		104	79 - 120	5	20
Barium	14		40.0	55.7		ug/L		103	89 - 115	5	20
Cadmium	ND		40.0	37.8		ug/L		93	89 - 111	1	20
Chromium	ND		40.0	43.0		ug/L		106	86 - 115	15	20
Cobalt	66	M2	40.0	107		ug/L		102	92 - 115	9	20
Lead	ND		40.0	42.0		ug/L		105	88 - 115	9	20
Molybdenum	47		40.0	87.3		ug/L		102	89 - 112	4	20
Nickel	420	M3	40.0	460	M3	ug/L		99	86 - 115	8	20
Selenium	14		40.0	54.2		ug/L		99	85 - 114	6	20
Thallium	ND		40.0	41.0		ug/L		102	86 - 115	7	20

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 550-300116/1-A
Matrix: Water
Analysis Batch: 300134

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 300116

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		05/11/23 15:51	05/11/23 20:09	1

Lab Sample ID: LCS 550-300116/2-A
Matrix: Water
Analysis Batch: 300134

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 300116

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury			0.00500	0.00450		mg/L		90	85 - 115		

Lab Sample ID: LCSD 550-300116/3-A
Matrix: Water
Analysis Batch: 300134

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 300116

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury			0.00500	0.00441		mg/L		88	85 - 115	2	20

Lab Sample ID: 550-201947-O-1-D MS
Matrix: Water
Analysis Batch: 300134

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 300116

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury	ND		0.00500	0.00427		mg/L		85	70 - 130		

Lab Sample ID: 550-201947-O-1-E MSD
Matrix: Water
Analysis Batch: 300134

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 300116

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		0.00500	0.00433		mg/L		87	70 - 130	1	20

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 550-300498/3
Matrix: Water
Analysis Batch: 300498

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3	ND		6.0		mg/L			05/17/23 14:00	1
Alkalinity, Phenolphthalein	ND		6.0		mg/L			05/17/23 14:00	1
Bicarbonate Alkalinity as CaCO3	ND		6.0		mg/L			05/17/23 14:00	1
Carbonate Alkalinity as CaCO3	ND		6.0		mg/L			05/17/23 14:00	1
Hydroxide Alkalinity as CaCO3	ND		6.0		mg/L			05/17/23 14:00	1

Lab Sample ID: LCS 550-300498/4
Matrix: Water
Analysis Batch: 300498

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Alkalinity as CaCO3			250	249		mg/L		100	90 - 110		

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: LCSD 550-300498/17
Matrix: Water
Analysis Batch: 300498

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Alkalinity as CaCO3			250	248		mg/L		99	90 - 110	1	20

Lab Sample ID: 550-202029-A-3 DU
Matrix: Water
Analysis Batch: 300498

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Alkalinity as CaCO3	600			599		mg/L				0.2	20
Alkalinity, Phenolphthalein	ND			ND		mg/L				NC	20
Bicarbonate Alkalinity as CaCO3	600			599		mg/L				0.2	20
Carbonate Alkalinity as CaCO3	ND			ND		mg/L				NC	20
Hydroxide Alkalinity as CaCO3	ND			ND		mg/L				NC	20

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 550-300213/1
Matrix: Water
Analysis Batch: 300213

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	26.0	B7	20		mg/L			05/13/23 15:46	1

Lab Sample ID: LCS 550-300213/2
Matrix: Water
Analysis Batch: 300213

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Dissolved Solids			1000	1000		mg/L		100	90 - 110		

Lab Sample ID: LCSD 550-300213/3
Matrix: Water
Analysis Batch: 300213

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Dissolved Solids			1000	1010		mg/L		100	90 - 110	1	10

Lab Sample ID: 550-202030-3 DU
Matrix: Water
Analysis Batch: 300213

Client Sample ID: FC-CCR-MW49A-0523
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	19000	B7		20600		mg/L				7	10

Method: SM 4500 H+ B - pH

Lab Sample ID: LCSSRM 550-300503/1
Matrix: Water
Analysis Batch: 300503

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
pH	7.00	7.0		SU		99.7	98.5 - 101.5

Lab Sample ID: LCSSRM 550-300503/13
Matrix: Water
Analysis Batch: 300503

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
pH	7.00	7.0		SU		100.0	98.5 - 101.5

Lab Sample ID: LCSSRM 550-300503/25
Matrix: Water
Analysis Batch: 300503

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
pH	7.00	7.0		SU		100.0	98.5 - 101.5

Lab Sample ID: 550-202028-A-1 DU
Matrix: Water
Analysis Batch: 300503

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH	7.7	H5	7.7	H5	SU		0.1	5
Temperature	12.3	H5	12.3	H5	Degrees C		0	

Lab Sample ID: 550-202031-A-2 DU
Matrix: Water
Analysis Batch: 300503

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH	7.1	H5	7.2	H5	SU		0.1	5
Temperature	12.6	H5	12.3	H5	Degrees C		2	

HPLC/IC

Analysis Batch: 301617

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-202030-1	FC-CCR-MW07-0523	Total/NA	Water	300.0	
550-202030-1	FC-CCR-MW07-0523	Total/NA	Water	300.0	
550-202030-2	FC-CCR-MW08-0523	Total/NA	Water	300.0	
550-202030-2	FC-CCR-MW08-0523	Total/NA	Water	300.0	
550-202030-3	FC-CCR-MW49A-0523	Total/NA	Water	300.0	
550-202030-3	FC-CCR-MW49A-0523	Total/NA	Water	300.0	
MB 550-301617/2	Method Blank	Total/NA	Water	300.0	
LCS 550-301617/5	Lab Control Sample	Total/NA	Water	300.0	
LCSD 550-301617/6	Lab Control Sample Dup	Total/NA	Water	300.0	
550-202029-A-5 MS ^500	Matrix Spike	Total/NA	Water	300.0	
550-202029-A-5 MSD ^500	Matrix Spike Duplicate	Total/NA	Water	300.0	

Analysis Batch: 301658

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-202030-1	FC-CCR-MW07-0523	Total/NA	Water	300.0	
MB 550-301658/2	Method Blank	Total/NA	Water	300.0	
LCS 550-301658/5	Lab Control Sample	Total/NA	Water	300.0	
LCSD 550-301658/6	Lab Control Sample Dup	Total/NA	Water	300.0	
550-202671-A-1 MS	Matrix Spike	Total/NA	Water	300.0	
550-202671-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Metals

Prep Batch: 300116

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-202030-1	FC-CCR-MW07-0523	Total/NA	Water	245.1	
550-202030-2	FC-CCR-MW08-0523	Total/NA	Water	245.1	
550-202030-3	FC-CCR-MW49A-0523	Total/NA	Water	245.1	
MB 550-300116/1-A	Method Blank	Total/NA	Water	245.1	
LCS 550-300116/2-A	Lab Control Sample	Total/NA	Water	245.1	
LCSD 550-300116/3-A	Lab Control Sample Dup	Total/NA	Water	245.1	
550-201947-O-1-D MS	Matrix Spike	Total/NA	Water	245.1	
550-201947-O-1-E MSD	Matrix Spike Duplicate	Total/NA	Water	245.1	

Analysis Batch: 300134

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-202030-1	FC-CCR-MW07-0523	Total/NA	Water	245.1	300116
550-202030-2	FC-CCR-MW08-0523	Total/NA	Water	245.1	300116
550-202030-3	FC-CCR-MW49A-0523	Total/NA	Water	245.1	300116
MB 550-300116/1-A	Method Blank	Total/NA	Water	245.1	300116
LCS 550-300116/2-A	Lab Control Sample	Total/NA	Water	245.1	300116
LCSD 550-300116/3-A	Lab Control Sample Dup	Total/NA	Water	245.1	300116
550-201947-O-1-D MS	Matrix Spike	Total/NA	Water	245.1	300116
550-201947-O-1-E MSD	Matrix Spike Duplicate	Total/NA	Water	245.1	300116

Prep Batch: 300305

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-202030-1	FC-CCR-MW07-0523	Total/NA	Water	200.7	
550-202030-2	FC-CCR-MW08-0523	Total/NA	Water	200.7	
550-202030-3	FC-CCR-MW49A-0523	Total/NA	Water	200.7	
MB 550-300305/1-A	Method Blank	Total/NA	Water	200.7	

Metals (Continued)

Prep Batch: 300305 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 550-300305/2-A	Lab Control Sample	Total/NA	Water	200.7	
LCSD 550-300305/3-A	Lab Control Sample Dup	Total/NA	Water	200.7	
550-202028-B-1-A MS	Matrix Spike	Total/NA	Water	200.7	
550-202028-B-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	200.7	

Analysis Batch: 302083

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-202030-1	FC-CCR-MW07-0523	Total/NA	Water	200.7 Rev 4.4	300305
550-202030-2	FC-CCR-MW08-0523	Total/NA	Water	200.7 Rev 4.4	300305
550-202030-3	FC-CCR-MW49A-0523	Total/NA	Water	200.7 Rev 4.4	300305
MB 550-300305/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	300305
LCS 550-300305/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	300305
LCSD 550-300305/3-A	Lab Control Sample Dup	Total/NA	Water	200.7 Rev 4.4	300305
550-202028-B-1-A MS	Matrix Spike	Total/NA	Water	200.7 Rev 4.4	300305
550-202028-B-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	200.7 Rev 4.4	300305

Analysis Batch: 302156

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-202030-1	FC-CCR-MW07-0523	Total/NA	Water	200.7 Rev 4.4	300305
550-202030-2	FC-CCR-MW08-0523	Total/NA	Water	200.7 Rev 4.4	300305
550-202030-3	FC-CCR-MW49A-0523	Total/NA	Water	200.7 Rev 4.4	300305
MB 550-300305/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	300305
LCS 550-300305/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	300305
LCSD 550-300305/3-A	Lab Control Sample Dup	Total/NA	Water	200.7 Rev 4.4	300305

Prep Batch: 612445

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-202030-1	FC-CCR-MW07-0523	Total Recoverable	Water	200.8	
550-202030-1	FC-CCR-MW07-0523	Total/NA	Water	200.8	
550-202030-2	FC-CCR-MW08-0523	Total Recoverable	Water	200.8	
550-202030-2	FC-CCR-MW08-0523	Total/NA	Water	200.8	
550-202030-3	FC-CCR-MW49A-0523	Total Recoverable	Water	200.8	
550-202030-3	FC-CCR-MW49A-0523	Total/NA	Water	200.8	
MB 280-612445/1-A	Method Blank	Total Recoverable	Water	200.8	
MB 280-612445/1-A	Method Blank	Total/NA	Water	200.8	
LCS 280-612445/20-A	Lab Control Sample	Total Recoverable	Water	200.8	
LCS 280-612445/2-A	Lab Control Sample	Total/NA	Water	200.8	
550-202030-1 MS	FC-CCR-MW07-0523	Total/NA	Water	200.7	
550-202030-1 MSD	FC-CCR-MW07-0523	Total/NA	Water	200.7	
550-202032-C-1-B MS	Matrix Spike	Total Recoverable	Water	200.8	
550-202032-C-1-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	200.8	

Analysis Batch: 613485

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-202030-1	FC-CCR-MW07-0523	Total Recoverable	Water	200.8	612445
550-202030-2	FC-CCR-MW08-0523	Total Recoverable	Water	200.8	612445
550-202030-3	FC-CCR-MW49A-0523	Total Recoverable	Water	200.8	612445
MB 280-612445/1-A	Method Blank	Total Recoverable	Water	200.8	612445
LCS 280-612445/20-A	Lab Control Sample	Total Recoverable	Water	200.8	612445

Metals

Analysis Batch: 613582

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-202032-C-1-B MS	Matrix Spike	Total Recoverable	Water	200.8	612445
550-202032-C-1-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	200.8	612445

Analysis Batch: 613748

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-202030-1	FC-CCR-MW07-0523	Total/NA	Water	200.7 Rev 4.4	612445
550-202030-2	FC-CCR-MW08-0523	Total/NA	Water	200.7 Rev 4.4	612445
550-202030-3	FC-CCR-MW49A-0523	Total/NA	Water	200.7 Rev 4.4	612445
MB 280-612445/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	612445
LCS 280-612445/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	612445
550-202030-1 MS	FC-CCR-MW07-0523	Total/NA	Water	200.7 Rev 4.4	612445
550-202030-1 MSD	FC-CCR-MW07-0523	Total/NA	Water	200.7 Rev 4.4	612445

General Chemistry

Analysis Batch: 300213

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-202030-1	FC-CCR-MW07-0523	Total/NA	Water	SM 2540C	
550-202030-2	FC-CCR-MW08-0523	Total/NA	Water	SM 2540C	
550-202030-3	FC-CCR-MW49A-0523	Total/NA	Water	SM 2540C	
MB 550-300213/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 550-300213/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 550-300213/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	
550-202030-3 DU	FC-CCR-MW49A-0523	Total/NA	Water	SM 2540C	

Analysis Batch: 300498

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-202030-2	FC-CCR-MW08-0523	Total/NA	Water	SM 2320B	
MB 550-300498/3	Method Blank	Total/NA	Water	SM 2320B	
LCS 550-300498/4	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 550-300498/17	Lab Control Sample Dup	Total/NA	Water	SM 2320B	
550-202029-A-3 DU	Duplicate	Total/NA	Water	SM 2320B	

Analysis Batch: 300503

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-202030-1	FC-CCR-MW07-0523	Total/NA	Water	SM 4500 H+ B	
550-202030-2	FC-CCR-MW08-0523	Total/NA	Water	SM 4500 H+ B	
550-202030-3	FC-CCR-MW49A-0523	Total/NA	Water	SM 4500 H+ B	
LCSSRM 550-300503/1	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	
LCSSRM 550-300503/13	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	
LCSSRM 550-300503/25	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	
550-202028-A-1 DU	Duplicate	Total/NA	Water	SM 4500 H+ B	
550-202031-A-2 DU	Duplicate	Total/NA	Water	SM 4500 H+ B	

Lab Chronicle

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-202030-1
SDG: APS Four Corners Power Plant (Mulitunit)

Client Sample ID: FC-CCR-MW07-0523

Lab Sample ID: 550-202030-1
Date Collected: 05/08/23 15:18
Matrix: Water
Date Received: 05/10/23 17:07

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		5	301617	RDC	EET PHX	06/02/23 19:21
Total/NA	Analysis	300.0		500	301617	RDC	EET PHX	06/02/23 19:39
Total/NA	Analysis	300.0		20	301658	RDC	EET PHX	06/03/23 19:35
Total/NA	Prep	200.7			300305	SGO	EET PHX	05/16/23 06:17
Total/NA	Analysis	200.7 Rev 4.4		1	302083	GLW	EET PHX	06/09/23 20:35
Total/NA	Prep	200.7			300305	SGO	EET PHX	05/16/23 06:17
Total/NA	Analysis	200.7 Rev 4.4		1	302156	GLW	EET PHX	06/12/23 19:40
Total/NA	Prep	200.8			612445	MSM	EET DEN	05/16/23 15:02
Total/NA	Analysis	200.7 Rev 4.4		1	613748	ADL	EET DEN	05/24/23 14:44
Total Recoverable	Prep	200.8			612445	MSM	EET DEN	05/16/23 15:02
Total Recoverable	Analysis	200.8		1	613485	LMT	EET DEN	05/22/23 18:42
Total/NA	Prep	245.1			300116	SRR	EET PHX	05/11/23 15:51
Total/NA	Analysis	245.1		1	300134	SRR	EET PHX	05/11/23 20:21
Total/NA	Analysis	SM 2540C		1	300213	RDC	EET PHX	05/13/23 15:46 - 05/16/23 17:00 [1]
Total/NA	Analysis	SM 4500 H+ B		1	300503	MAN	EET PHX	05/17/23 15:42

Client Sample ID: FC-CCR-MW08-0523

Lab Sample ID: 550-202030-2
Date Collected: 05/08/23 14:07
Matrix: Water
Date Received: 05/10/23 17:07

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		5	301617	RDC	EET PHX	06/02/23 19:58
Total/NA	Analysis	300.0		500	301617	RDC	EET PHX	06/02/23 20:16
Total/NA	Prep	200.7			300305	SGO	EET PHX	05/16/23 06:17
Total/NA	Analysis	200.7 Rev 4.4		1	302083	GLW	EET PHX	06/09/23 20:37
Total/NA	Prep	200.7			300305	SGO	EET PHX	05/16/23 06:17
Total/NA	Analysis	200.7 Rev 4.4		5	302156	GLW	EET PHX	06/12/23 19:43
Total/NA	Prep	200.8			612445	MSM	EET DEN	05/16/23 15:02
Total/NA	Analysis	200.7 Rev 4.4		1	613748	ADL	EET DEN	05/24/23 14:57
Total Recoverable	Prep	200.8			612445	MSM	EET DEN	05/16/23 15:02
Total Recoverable	Analysis	200.8		1	613485	LMT	EET DEN	05/22/23 18:43
Total/NA	Prep	245.1			300116	SRR	EET PHX	05/11/23 15:51
Total/NA	Analysis	245.1		1	300134	SRR	EET PHX	05/11/23 20:23
Total/NA	Analysis	SM 2320B		1	300498	MAN	EET PHX	05/17/23 19:28
Total/NA	Analysis	SM 2540C		1	300213	RDC	EET PHX	05/13/23 15:46 - 05/16/23 17:00 [1]
Total/NA	Analysis	SM 4500 H+ B		1	300503	MAN	EET PHX	05/17/23 15:44

Client Sample ID: FC-CCR-MW49A-0523

Lab Sample ID: 550-202030-3
Date Collected: 05/08/23 16:34
Matrix: Water
Date Received: 05/10/23 17:07

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		50	301617	RDC	EET PHX	06/02/23 21:48
Total/NA	Analysis	300.0		500	301617	RDC	EET PHX	06/02/23 22:07

Lab Chronicle

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-202030-1
SDG: APS Four Corners Power Plant (Mulitunit)

Client Sample ID: FC-CCR-MW49A-0523

Date Collected: 05/08/23 16:34
Date Received: 05/10/23 17:07

Lab Sample ID: 550-202030-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	200.7			300305	SGO	EET PHX	05/16/23 06:17
Total/NA	Analysis	200.7 Rev 4.4		1	302083	GLW	EET PHX	06/09/23 20:40
Total/NA	Prep	200.7			300305	SGO	EET PHX	05/16/23 06:17
Total/NA	Analysis	200.7 Rev 4.4		1	302156	GLW	EET PHX	06/12/23 19:46
Total/NA	Prep	200.8			612445	MSM	EET DEN	05/16/23 15:02
Total/NA	Analysis	200.7 Rev 4.4		1	613748	ADL	EET DEN	05/24/23 15:01
Total Recoverable	Prep	200.8			612445	MSM	EET DEN	05/16/23 15:02
Total Recoverable	Analysis	200.8		1	613485	LMT	EET DEN	05/22/23 18:45
Total/NA	Prep	245.1			300116	SRR	EET PHX	05/11/23 15:51
Total/NA	Analysis	245.1		1	300134	SRR	EET PHX	05/11/23 20:25
Total/NA	Analysis	SM 2540C		1	300213	RDC	EET PHX	05/13/23 15:46 - 05/16/23 17:00 [1]
Total/NA	Analysis	SM 4500 H+ B		1	300503	MAN	EET PHX	05/17/23 15:47

[1] This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

EET PHX = Eurofins Phoenix, 4625 East Cotton Center Boulevard, Suite #189, Phoenix, AZ 85040, TEL (602)437-3340

Accreditation/Certification Summary

Client: Arizona Public Service Company
Job ID: 550-202030-1
Project/Site: CCR Groundwater Monitoring
SDG: APS Four Corners Power Plant (Mulitunit)

Laboratory: Eurofins Phoenix

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Arizona	State	AZ0728	06-10-24

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
SM 4500 H+ B		Water	Temperature

Laboratory: Eurofins Denver

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arizona	State	AZ0713	12-20-24

Method Summary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-202030-1
SDG: APS Four Corners Power Plant (Mulitunit)

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	EPA	EET PHX
200.7 Rev 4.4	Metals (ICP)	EPA	EET DEN
200.7 Rev 4.4	Metals (ICP)	EPA	EET PHX
200.8	Metals (ICP/MS)	EPA	EET DEN
245.1	Mercury (CVAA)	EPA	EET PHX
SM 2320B	Alkalinity	SM	EET PHX
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET PHX
SM 4500 H+ B	pH	SM	EET PHX
200.7	Preparation, Total Metals	EPA	EET DEN
200.7	Preparation, Total Metals	EPA	EET PHX
200.8	Preparation, Total Recoverable Metals	EPA	EET DEN
245.1	Preparation, Mercury	EPA	EET PHX

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

EET PHX = Eurofins Phoenix, 4625 East Cotton Center Boulevard, Suite #189, Phoenix, AZ 85040, TEL (602)437-3340

TestAmerica Phoenix
4625 E Cotton Center Blvd
Suite 189
Phoenix, AZ 85040
phone 602.437.3340 fax 602.454.9303

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

202030

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☑ Other: CCR

TestAmerica Laboratories, Inc.

6/14/2023

Client Contact	**Natalie Chrisman**	**Pam Norris (505-598-8781)**	**Date:**
Arizona Public Service	**602-250-3608**	**Lab Contact: Rachel Sester**	**Carrier:**
PO Box 355, MS 4915	**Analysis Turnaround Time**		
Fruitland, NM 87416	☐ CALENDAR DAYS ☑ WORKING DAYS		
Phone	TAT if different from Below _____		
FAX	☑ 2 weeks		
Project Name: CCR Groundwater Monitoring	☐ 1 week		
Site: APS Four Corners Power Plant (Multiunit)	☐ 2 days		
PO #: 300592358	☐ 1 day		

COC No: 1 of 1 COCs
Sampler:
For Lab Use Only:
Walk-in Client:
Lab Sampling:
Job / SDG No.:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	EPA 300.0 (Cl, F, SO4)	EPA 200.7 - Totals (B)	EPA 200.7 - Totals (B, Ca, Be)	EPA 200.7 - Totals (B, Ca, Be, K, Mg, Na)	EPA 200.7 - Totals (B, Ca, Be, K, Mg, Na, Mn, Fe)	EPA 200.7 - Total Lithium	EPA 200.8 - Totals (Sb, As, Ba, Cd, Co, Cr, Pb, Mo, Se, Tl)	EPA 200.8 - Totals (Co, Mo)	EPA 245.1 - Totals (Hg)	SM 4500-HB (pH)	SM 2540C (TDS)	SM 2320B (CO3 Alkalinity as CaCO3, HCO3 Alkalinity as CaCO3)	Sample Specific Notes:
FC-CCR-MW07-0523 -1	5/8/2023	1518	G	W	3	N		X		X			X	X		X	X	X		Low Flow
FC-CCR-MW08-0523 -2	5/8/2023	1407	G	W	3	N		X			X		X	X		X	X	X	X	"
FC-CCR-MW49A-0523 -3	5/8/2023	1634	G	W	3	N		X		X			X	X		X	X	X		"
								1	4	4	4	4	4	4	4	4	1	1	1	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

550-202030 Chain of Custody

Page 28 of 31

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☑ Disposal by Lab ☐ Archive for_____ Months

Special Instructions/QC Requirements & Comments:

Method 200.8 with collision cell

1.6

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd:_____ Corr'd:_____ Therm ID No.:_____

Relinquished by:	Company: WSP	Date/Time: 5/10/23 17:00	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company: ETA PHX	Date/Time: 5/10/23 17:07

CDO

Eurofins Phoenix
4625 East Cotton Center Boulevard Suite #189
Phoenix, AZ 85040
Phone: 602-437-3340

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler:	Lab PM: Roberts, Danielle C	Carrier Tracking No(s):	COC No: 550-36826.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Danielle.Roberts@et.eurofinsus.com	State of Origin: Arizona	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - Arizona; State Program - Arizona		Job #: 550-202030-1
Address: 4955 Yarrow Street, ,	Due Date Requested: 5/23/2023			
City: Arvada	TAT Requested (days):			
State, Zip: CO, 80002				
Phone: 303-736-0100(Tel) 303-431-7171(Fax)	PO #:			
Email:	WO #:			
Project Name: CCR Groundwater Monitoring	Project #: 55009706			
Site: Arizona Public Service	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	200.7/200.7_P_TOT Lithium-ICP	200.8/200.8_P_TR Sb, As, Ba, Cd, Co, Cr, Pb, Mo, Se, Tl	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
FC-CCR-MW07-0523 (550-202030-1)	5/8/23	15:18 Arizona		Water			X	X	1	AZ Sample, Collision Cell
FC-CCR-MW08-0523 (550-202030-2)	5/8/23	14:07 Arizona		Water			X	X	1	AZ Sample, Collision Cell
FC-CCR-MW49A-0523 (550-202030-3)	5/8/23	16:34 Arizona		Water			X	X	1	AZ Sample, Collision Cell

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Southwest, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Southwest, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Southwest, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Southwest, LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		5/11/23	EFTA PHX			
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 5/12/23 1210	Company EATON
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 13.1 1.14 CF0.1

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Arizona Public Service Company

Job Number: 550-202030-1
SDG Number: APS Four Corners Power Plant (Mulitunit)

Login Number: 202030
List Number: 1
Creator: Maycock, Lisa

List Source: Eurofins Phoenix

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	False	Check done at department level as required.

Login Sample Receipt Checklist

Client: Arizona Public Service Company

Job Number: 550-202030-1
SDG Number: APS Four Corners Power Plant (Mulitunit)

Login Number: 202030
List Number: 2
Creator: Rystrom, Joshua R

List Source: Eurofins Denver
List Creation: 05/13/23 09:52 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	False	Thermal preservation not required.
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

PREPARED FOR

Attn: Natalie Chrisman
Arizona Public Service Company
PO BOX 188, Ste. 4458
Joseph City, Arizona 86032

Generated 6/14/2023 5:37:43 AM

JOB DESCRIPTION

CCR Groundwater Monitoring
SDG NUMBER APS Four Corners Power Plant (URS)

JOB NUMBER

550-202031-1

Eurofins Phoenix
4625 East Cotton Center Boulevard
Suite #189
Phoenix AZ 85040

See page two for job notes and contact information.

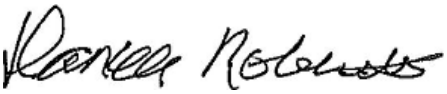
my EOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Southwest, LLC Project Manager.

Authorization



Generated
6/14/2023 5:37:43 AM

Authorized for release by
Danielle Roberts, Senior Project Manager
Danielle.Roberts@et.eurofinsus.com
(657)210-6355

Table of Contents

Cover Page 1
Table of Contents 3
Definitions/Glossary 4
Case Narrative 5
Sample Summary 6
Detection Summary 7
Client Sample Results 12
QC Sample Results 20
QC Association Summary 28
Lab Chronicle 33
Certification Summary 38
Method Summary 39
Chain of Custody 40
Receipt Checklists 43

Definitions/Glossary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-202031-1
SDG: APS Four Corners Power Plant (URS)

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
D1	Sample required dilution due to matrix.
D2	Sample required dilution due to high concentration of analyte.
D5	Minimum Reporting Limit (MRL) adjusted due to sample dilution; analyte was non-detect in the sample.
E2	Concentration estimated. Analyte exceeded calibration range. Reanalysis not performed due to sample matrix.
M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The associated blank spike was acceptable.

Metals

Qualifier	Qualifier Description
M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The associated blank spike was acceptable.
V1	CCV recovery was above method acceptance limits. This target analyte was not detected in the sample.

General Chemistry

Qualifier	Qualifier Description
H5	This test is specified to be performed in the field within 15 minutes of sampling; sample was received and analyzed past the regulatory holding time.
T5	Laboratory not licensed for this parameter

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 550-202031-1

Laboratory: Eurofins Phoenix

Narrative

Job Narrative
550-202031-1

Comments
No additional comments.

Receipt
The samples were received on 5/10/2023 5:07 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 1.6º C and 3.3º C.

HPLC/IC
Method 300.0: The following samples were diluted due to the nature of the sample matrix having a high concentration of metals, which can cause damage to the instrument: FC-CCR-MW67-0523 (550-202031-1), FC-CCR-MW68-0523 (550-202031-2) and FC-CCR-CM01-0523 (550-202031-8). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
Methods 200.8, 6020B: The continuing calibration verification (CCV) associated with batch 280-613485 recovered above the upper control limit for As. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: FC-CCR-MW84-0523 (550-202031-6), FC-CCR-MW85-0523 (550-202031-7), FC-CCR-CM01-0523 (550-202031-8), FC-CCR-CM02-0523 (550-202031-9), FC-CCR-FD01-0523 (550-202031-10), (CCV 280-613485/91) and (550-202032-C-1-A).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry
Method SM 2540C: Constant weight was not achieved after 3 drying cycles for the following sample: FC-CCR-MW67-0523 (550-202031-1) and FC-CCR-MW69-0523 (550-202031-3).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Sample Summary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-202031-1
SDG: APS Four Corners Power Plant (URS)

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
550-202031-1	FC-CCR-MW67-0523	Water	05/09/23 13:25	05/10/23 17:07
550-202031-2	FC-CCR-MW68-0523	Water	05/09/23 10:49	05/10/23 17:07
550-202031-3	FC-CCR-MW69-0523	Water	05/09/23 10:07	05/10/23 17:07
550-202031-4	FC-CCR-MW71-0523	Water	05/09/23 19:13	05/10/23 17:07
550-202031-5	FC-CCR-MW72-0523	Water	05/09/23 18:14	05/10/23 17:07
550-202031-6	FC-CCR-MW84-0523	Water	05/09/23 12:39	05/10/23 17:07
550-202031-7	FC-CCR-MW85-0523	Water	05/09/23 14:13	05/10/23 17:07
550-202031-8	FC-CCR-CM01-0523	Water	05/09/23 11:43	05/10/23 17:07
550-202031-9	FC-CCR-CM02-0523	Water	05/09/23 11:48	05/10/23 17:07
550-202031-10	FC-CCR-FD01-0523	Water	05/09/23 16:20	05/10/23 17:07

Detection Summary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-202031-1
SDG: APS Four Corners Power Plant (URS)

Client Sample ID: FC-CCR-MW67-0523 — Lab Sample ID: 550-202031-1

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	1900	D2	100		mg/L	50		300.0	Total/NA
Sulfate	13000	D2	1000		mg/L	500		300.0	Total/NA
Lithium	0.39		0.020		mg/L	1		200.7 Rev 4.4	Total/NA
Boron	160		0.25		mg/L	5		200.7 Rev 4.4	Total/NA
Calcium	470		2.0		mg/L	1		200.7 Rev 4.4	Total/NA
Barium	35		3.0		ug/L	1		200.8	Total Recoverable
Chromium	4.4		3.0		ug/L	1		200.8	Total Recoverable
Cobalt	8.5		1.0		ug/L	1		200.8	Total Recoverable
Lead	1.7		1.0		ug/L	1		200.8	Total Recoverable
Molybdenum	30		2.0		ug/L	1		200.8	Total Recoverable
Nickel	29		3.0		ug/L	1		200.8	Total Recoverable
Thallium	1.1		1.0		ug/L	1		200.8	Total Recoverable
Total Dissolved Solids	19000		200		mg/L	1		SM 2540C	Total/NA
pH	7.2	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	12.9	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-MW68-0523 — Lab Sample ID: 550-202031-2

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	1400	D2	100		mg/L	50		300.0	Total/NA
Sulfate	14000	D2	1000		mg/L	500		300.0	Total/NA
Lithium	0.48		0.020		mg/L	1		200.7 Rev 4.4	Total/NA
Boron	150		0.25		mg/L	5		200.7 Rev 4.4	Total/NA
Calcium	460		2.0		mg/L	1		200.7 Rev 4.4	Total/NA
Barium	80		3.0		ug/L	1		200.8	Total Recoverable
Chromium	3.0		3.0		ug/L	1		200.8	Total Recoverable
Cobalt	11		1.0		ug/L	1		200.8	Total Recoverable
Lead	1.8		1.0		ug/L	1		200.8	Total Recoverable
Molybdenum	5.5		2.0		ug/L	1		200.8	Total Recoverable
Nickel	28		3.0		ug/L	1		200.8	Total Recoverable
Selenium	5.2		5.0		ug/L	1		200.8	Total Recoverable
Thallium	1.5		1.0		ug/L	1		200.8	Total Recoverable
Total Dissolved Solids	22000		200		mg/L	1		SM 2540C	Total/NA
pH	7.1	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	12.6	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-MW69-0523 — Lab Sample ID: 550-202031-3

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	970	D2	400		mg/L	200		300.0	Total/NA
Fluoride	4.1	D2	2.0		mg/L	5		300.0	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Phoenix

Client Sample ID: FC-CCR-MW69-0523 (Continued) — Lab Sample ID: 550-202031-3

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Sulfate	4800	D2	400		mg/L	200		300.0	Total/NA
Lithium	0.23		0.020		mg/L	1		200.7 Rev 4.4	Total/NA
Boron	49		0.050		mg/L	1		200.7 Rev 4.4	Total/NA
Calcium	530		2.0		mg/L	1		200.7 Rev 4.4	Total/NA
Barium	5.5		3.0		ug/L	1		200.8	Total Recoverable
Cobalt	2.0		1.0		ug/L	1		200.8	Total Recoverable
Molybdenum	5.1		2.0		ug/L	1		200.8	Total Recoverable
Nickel	8.2		3.0		ug/L	1		200.8	Total Recoverable
Selenium	170		5.0		ug/L	1		200.8	Total Recoverable
Total Dissolved Solids	8600		100		mg/L	1		SM 2540C	Total/NA
pH	7.4	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	12.3	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-MW71-0523 — Lab Sample ID: 550-202031-4

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	570	D2	40		mg/L	20		300.0	Total/NA
Sulfate	10000	D2	1000		mg/L	500		300.0	Total/NA
Lithium	0.40		0.020		mg/L	1		200.7 Rev 4.4	Total/NA
Boron	0.58		0.050		mg/L	1		200.7 Rev 4.4	Total/NA
Calcium	470		2.0		mg/L	1		200.7 Rev 4.4	Total/NA
Barium	9.5		3.0		ug/L	1		200.8	Total Recoverable
Nickel	3.5		3.0		ug/L	1		200.8	Total Recoverable
Selenium	200		5.0		ug/L	1		200.8	Total Recoverable
Total Dissolved Solids	17000		100		mg/L	1		SM 2540C	Total/NA
pH	7.2	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	12.5	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-MW72-0523 — Lab Sample ID: 550-202031-5

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	440	D2	10		mg/L	5		300.0	Total/NA
Fluoride	4.2	D2	2.0		mg/L	5		300.0	Total/NA
Sulfate	9800	D2	1000		mg/L	500		300.0	Total/NA
Lithium	0.38		0.020		mg/L	1		200.7 Rev 4.4	Total/NA
Boron	0.28		0.25		mg/L	5		200.7 Rev 4.4	Total/NA
Calcium	440		2.0		mg/L	1		200.7 Rev 4.4	Total/NA
Barium	6.8		3.0		ug/L	1		200.8	Total Recoverable
Cobalt	2.5		1.0		ug/L	1		200.8	Total Recoverable
Nickel	4.7		3.0		ug/L	1		200.8	Total Recoverable
Selenium	64		5.0		ug/L	1		200.8	Total Recoverable
Total Dissolved Solids	15000		100		mg/L	1		SM 2540C	Total/NA
pH	7.2	H5	1.7		SU	1		SM 4500 H+ B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: FC-CCR-MW72-0523 (Continued) — Lab Sample ID: 550-202031-5

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Temperature	13.7	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-MW84-0523 — Lab Sample ID: 550-202031-6

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	380	D2	10		mg/L	5		300.0	Total/NA
Sulfate	6000	D2	1000		mg/L	500		300.0	Total/NA
Lithium	0.31		0.020		mg/L	1		200.7 Rev 4.4	Total/NA
Boron	29		0.050		mg/L	1		200.7 Rev 4.4	Total/NA
Calcium	460		2.0		mg/L	1		200.7 Rev 4.4	Total/NA
Barium	9.4		3.0		ug/L	1		200.8	Total Recoverable
Cobalt	1.6		1.0		ug/L	1		200.8	Total Recoverable
Nickel	7.4		3.0		ug/L	1		200.8	Total Recoverable
Selenium	26		5.0		ug/L	1		200.8	Total Recoverable
Total Dissolved Solids	9200		100		mg/L	1		SM 2540C	Total/NA
pH	7.3	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	12.8	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-MW85-0523 — Lab Sample ID: 550-202031-7

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	680	D2	40		mg/L	20		300.0	Total/NA
Sulfate	6100	D2	1000		mg/L	500		300.0	Total/NA
Lithium	0.36		0.020		mg/L	1		200.7 Rev 4.4	Total/NA
Boron	65		0.050		mg/L	1		200.7 Rev 4.4	Total/NA
Calcium	500		2.0		mg/L	1		200.7 Rev 4.4	Total/NA
Barium	13		3.0		ug/L	1		200.8	Total Recoverable
Chromium	5.0		3.0		ug/L	1		200.8	Total Recoverable
Cobalt	1.0		1.0		ug/L	1		200.8	Total Recoverable
Molybdenum	7.1		2.0		ug/L	1		200.8	Total Recoverable
Nickel	13		3.0		ug/L	1		200.8	Total Recoverable
Selenium	190		5.0		ug/L	1		200.8	Total Recoverable
Total Dissolved Solids	10000		100		mg/L	1		SM 2540C	Total/NA
pH	7.3	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	13.1	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-CM01-0523 — Lab Sample ID: 550-202031-8

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	1500	D2	100		mg/L	50		300.0	Total/NA
Sulfate	9300	D2	1000		mg/L	500		300.0	Total/NA
Lithium	0.43		0.020		mg/L	1		200.7 Rev 4.4	Total/NA
Boron	120		0.25		mg/L	5		200.7 Rev 4.4	Total/NA
Calcium	480		2.0		mg/L	1		200.7 Rev 4.4	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: FC-CCR-CM01-0523 (Continued) — Lab Sample ID: 550-202031-8

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Barium	33		3.0		ug/L	1		200.8	Total Recoverable
Cobalt	8.1		1.0		ug/L	1		200.8	Total Recoverable
Molybdenum	6.3		2.0		ug/L	1		200.8	Total Recoverable
Nickel	29		3.0		ug/L	1		200.8	Total Recoverable
Selenium	34		5.0		ug/L	1		200.8	Total Recoverable
Total Dissolved Solids	16000		100		mg/L	1		SM 2540C	Total/NA
pH	7.6	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	13.8	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-CM02-0523 — Lab Sample ID: 550-202031-9

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	1300	D2	1000		mg/L	500		300.0	Total/NA
Fluoride	4.1	D2	2.0		mg/L	5		300.0	Total/NA
Sulfate	9600	D2	1000		mg/L	500		300.0	Total/NA
Lithium	0.38		0.020		mg/L	1		200.7 Rev 4.4	Total/NA
Boron	110		0.25		mg/L	5		200.7 Rev 4.4	Total/NA
Calcium	450		2.0		mg/L	1		200.7 Rev 4.4	Total/NA
Barium	14		3.0		ug/L	1		200.8	Total Recoverable
Cobalt	8.1		1.0		ug/L	1		200.8	Total Recoverable
Molybdenum	4.4		2.0		ug/L	1		200.8	Total Recoverable
Nickel	23		3.0		ug/L	1		200.8	Total Recoverable
Selenium	14		5.0		ug/L	1		200.8	Total Recoverable
Thallium	1.1		1.0		ug/L	1		200.8	Total Recoverable
Total Dissolved Solids	16000		100		mg/L	1		SM 2540C	Total/NA
pH	7.1	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	13.3	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-FD01-0523 — Lab Sample ID: 550-202031-10

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	380	D2	10		mg/L	5		300.0	Total/NA
Sulfate	6000	D2	1000		mg/L	500		300.0	Total/NA
Lithium	0.31		0.020		mg/L	1		200.7 Rev 4.4	Total/NA
Boron	28		0.050		mg/L	1		200.7 Rev 4.4	Total/NA
Calcium	450		2.0		mg/L	1		200.7 Rev 4.4	Total/NA
Barium	9.9		3.0		ug/L	1		200.8	Total Recoverable
Cobalt	1.9		1.0		ug/L	1		200.8	Total Recoverable
Nickel	8.6		3.0		ug/L	1		200.8	Total Recoverable
Selenium	28		5.0		ug/L	1		200.8	Total Recoverable
Total Dissolved Solids	9600		100		mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: FC-CCR-FD01-0523 (Continued)

Lab Sample ID: 550-202031-10

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
pH	7.3	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	12.9	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: FC-CCR-MW67-0523

Lab Sample ID: 550-202031-1
Date Collected: 05/09/23 13:25
Matrix: Water
Date Received: 05/10/23 17:07

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1900**	**D2**	100		mg/L			06/02/23 22:25	50
Fluoride	ND	D1 D5	20		mg/L			06/02/23 22:25	50
Sulfate	**13000**	**D2**	1000		mg/L			06/02/23 22:43	500

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		0.0050		mg/L		05/16/23 06:17	06/12/23 19:48	5
Lithium	**0.39**		0.020		mg/L		05/16/23 15:02	05/24/23 15:06	1
Boron	**160**		0.25		mg/L		05/16/23 06:17	06/12/23 19:48	5
Calcium	**470**		2.0		mg/L		05/16/23 06:17	06/09/23 20:49	1

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0		ug/L		05/16/23 15:02	05/22/23 18:47	1
Arsenic	ND		5.0		ug/L		05/16/23 15:02	05/22/23 18:47	1
Barium	**35**		3.0		ug/L		05/16/23 15:02	05/22/23 18:47	1
Cadmium	ND		1.0		ug/L		05/16/23 15:02	05/22/23 18:47	1
Chromium	**4.4**		3.0		ug/L		05/16/23 15:02	05/22/23 18:47	1
Cobalt	**8.5**		1.0		ug/L		05/16/23 15:02	05/22/23 18:47	1
Lead	**1.7**		1.0		ug/L		05/16/23 15:02	05/22/23 18:47	1
Molybdenum	**30**		2.0		ug/L		05/16/23 15:02	05/22/23 18:47	1
Nickel	**29**		3.0		ug/L		05/16/23 15:02	05/22/23 18:47	1
Selenium	ND		5.0		ug/L		05/16/23 15:02	05/22/23 18:47	1
Thallium	**1.1**		1.0		ug/L		05/16/23 15:02	05/22/23 18:47	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		05/11/23 15:51	05/11/23 20:27	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**19000**		200		mg/L			05/16/23 15:59	1
pH (SM 4500 H+ B)	**7.2**	**H5**	1.7		SU			05/17/23 15:50	1
Temperature (SM 4500 H+ B)	**12.9**	**H5 T5**	0.1		Degrees C			05/17/23 15:50	1

Client Sample ID: FC-CCR-MW68-0523

Lab Sample ID: 550-202031-2
Date Collected: 05/09/23 10:49
Matrix: Water
Date Received: 05/10/23 17:07

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1400**	**D2**	100		mg/L			06/02/23 23:02	50
Fluoride	ND	D1 D5	20		mg/L			06/02/23 23:02	50
Sulfate	**14000**	**D2**	1000		mg/L			06/02/23 23:20	500

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		0.0050		mg/L		05/16/23 06:17	06/12/23 19:57	5
Lithium	**0.48**		0.020		mg/L		05/16/23 15:02	05/24/23 15:33	1
Boron	**150**		0.25		mg/L		05/16/23 06:17	06/12/23 19:57	5
Calcium	**460**		2.0		mg/L		05/16/23 06:17	06/09/23 20:52	1

Client Sample ID: FC-CCR-MW68-0523

Lab Sample ID: 550-202031-2

Date Collected: 05/09/23 10:49
Matrix: Water
Date Received: 05/10/23 17:07

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0		ug/L		05/16/23 15:02	05/22/23 18:49	1
Arsenic	ND		5.0		ug/L		05/16/23 15:02	05/22/23 18:49	1
Barium	**80**		3.0		ug/L		05/16/23 15:02	05/22/23 18:49	1
Cadmium	ND		1.0		ug/L		05/16/23 15:02	05/22/23 18:49	1
Chromium	**3.0**		3.0		ug/L		05/16/23 15:02	05/22/23 18:49	1
Cobalt	**11**		1.0		ug/L		05/16/23 15:02	05/22/23 18:49	1
Lead	**1.8**		1.0		ug/L		05/16/23 15:02	05/22/23 18:49	1
Molybdenum	**5.5**		2.0		ug/L		05/16/23 15:02	05/22/23 18:49	1
Nickel	**28**		3.0		ug/L		05/16/23 15:02	05/22/23 18:49	1
Selenium	**5.2**		5.0		ug/L		05/16/23 15:02	05/22/23 18:49	1
Thallium	**1.5**		1.0		ug/L		05/16/23 15:02	05/22/23 18:49	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		05/11/23 15:51	05/11/23 20:29	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**22000**		200		mg/L			05/16/23 15:59	1
pH (SM 4500 H+ B)	**7.1**	**H5**	1.7		SU			05/17/23 15:53	1
Temperature (SM 4500 H+ B)	**12.6**	**H5 T5**	0.1		Degrees C			05/17/23 15:53	1

Client Sample ID: FC-CCR-MW69-0523

Lab Sample ID: 550-202031-3

Date Collected: 05/09/23 10:07
Matrix: Water
Date Received: 05/10/23 17:07

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**970**	**D2**	400		mg/L			06/02/23 23:57	200
Fluoride	**4.1**	**D2**	2.0		mg/L			06/03/23 19:17	5
Sulfate	**4800**	**D2**	400		mg/L			06/02/23 23:57	200

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		0.0010		mg/L		05/16/23 06:17	06/12/23 20:00	1
Lithium	**0.23**		0.020		mg/L		05/16/23 15:02	05/24/23 15:37	1
Boron	**49**		0.050		mg/L		05/16/23 06:17	06/09/23 20:55	1
Calcium	**530**		2.0		mg/L		05/16/23 06:17	06/09/23 20:55	1

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0		ug/L		05/16/23 15:02	05/22/23 18:51	1
Arsenic	ND		5.0		ug/L		05/16/23 15:02	05/22/23 18:51	1
Barium	**5.5**		3.0		ug/L		05/16/23 15:02	05/22/23 18:51	1
Cadmium	ND		1.0		ug/L		05/16/23 15:02	05/22/23 18:51	1
Chromium	ND		3.0		ug/L		05/16/23 15:02	05/22/23 18:51	1
Cobalt	**2.0**		1.0		ug/L		05/16/23 15:02	05/22/23 18:51	1
Lead	ND		1.0		ug/L		05/16/23 15:02	05/22/23 18:51	1
Molybdenum	**5.1**		2.0		ug/L		05/16/23 15:02	05/22/23 18:51	1
Nickel	**8.2**		3.0		ug/L		05/16/23 15:02	05/22/23 18:51	1
Selenium	**170**		5.0		ug/L		05/16/23 15:02	05/22/23 18:51	1

Client Sample ID: FC-CCR-MW69-0523

Lab Sample ID: 550-202031-3
Date Collected: 05/09/23 10:07
Matrix: Water
Date Received: 05/10/23 17:07

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Thallium	ND		1.0		ug/L		05/16/23 15:02	05/22/23 18:51	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		05/11/23 15:51	05/11/23 20:31	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**8600**		100		mg/L			05/16/23 15:59	1
pH (SM 4500 H+ B)	**7.4**	**H5**	1.7		SU			05/17/23 15:55	1
Temperature (SM 4500 H+ B)	**12.3**	**H5 T5**	0.1		Degrees C			05/17/23 15:55	1

Client Sample ID: FC-CCR-MW71-0523

Lab Sample ID: 550-202031-4
Date Collected: 05/09/23 19:13
Matrix: Water
Date Received: 05/10/23 17:07

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**570**	**D2**	40		mg/L			06/03/23 21:26	20
Fluoride	ND	D1 D5	2.0		mg/L			06/03/23 01:29	5
Sulfate	**10000**	**D2**	1000		mg/L			06/03/23 00:15	500

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		0.0010		mg/L		05/16/23 06:17	06/12/23 20:03	1
Lithium	**0.40**		0.020		mg/L		05/16/23 15:02	05/24/23 15:41	1
Boron	**0.58**		0.050		mg/L		05/16/23 06:17	06/12/23 20:03	1
Calcium	**470**		2.0		mg/L		05/16/23 06:17	06/09/23 20:57	1

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0		ug/L		05/16/23 15:02	05/22/23 18:52	1
Arsenic	ND		5.0		ug/L		05/16/23 15:02	05/22/23 18:52	1
Barium	**9.5**		3.0		ug/L		05/16/23 15:02	05/22/23 18:52	1
Cadmium	ND		1.0		ug/L		05/16/23 15:02	05/22/23 18:52	1
Chromium	ND		3.0		ug/L		05/16/23 15:02	05/22/23 18:52	1
Cobalt	ND		1.0		ug/L		05/16/23 15:02	05/22/23 18:52	1
Lead	ND		1.0		ug/L		05/16/23 15:02	05/22/23 18:52	1
Molybdenum	ND		2.0		ug/L		05/16/23 15:02	05/22/23 18:52	1
Nickel	**3.5**		3.0		ug/L		05/16/23 15:02	05/22/23 18:52	1
Selenium	**200**		5.0		ug/L		05/16/23 15:02	05/22/23 18:52	1
Thallium	ND		1.0		ug/L		05/16/23 15:02	05/22/23 18:52	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		05/11/23 15:51	05/11/23 20:33	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**17000**		100		mg/L			05/16/23 15:59	1
pH (SM 4500 H+ B)	**7.2**	**H5**	1.7		SU			05/17/23 15:56	1

Client Sample ID: FC-CCR-MW71-0523

Lab Sample ID: 550-202031-4
Matrix: Water
Date Collected: 05/09/23 19:13
Date Received: 05/10/23 17:07

General Chemistry (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Temperature (SM 4500 H+ B)	12.5	H5 T5	0.1		Degrees C			05/17/23 15:56	1

Client Sample ID: FC-CCR-MW72-0523

Lab Sample ID: 550-202031-5
Matrix: Water
Date Collected: 05/09/23 18:14
Date Received: 05/10/23 17:07

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	440	D2	10		mg/L			06/03/23 01:47	5
Fluoride	4.2	D2	2.0		mg/L			06/02/23 23:39	5
Sulfate	9800	D2	1000		mg/L			06/03/23 02:06	500

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		0.0050		mg/L		05/16/23 06:17	06/12/23 20:05	5
Lithium	0.38		0.020		mg/L		05/16/23 15:02	05/24/23 15:46	1
Boron	0.28		0.25		mg/L		05/16/23 06:17	06/12/23 20:05	5
Calcium	440		2.0		mg/L		05/16/23 06:17	06/09/23 21:00	1

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0		ug/L		05/16/23 15:02	05/22/23 18:54	1
Arsenic	ND		5.0		ug/L		05/16/23 15:02	05/22/23 18:54	1
Barium	6.8		3.0		ug/L		05/16/23 15:02	05/22/23 18:54	1
Cadmium	ND		1.0		ug/L		05/16/23 15:02	05/22/23 18:54	1
Chromium	ND		3.0		ug/L		05/16/23 15:02	05/22/23 18:54	1
Cobalt	2.5		1.0		ug/L		05/16/23 15:02	05/22/23 18:54	1
Lead	ND		1.0		ug/L		05/16/23 15:02	05/22/23 18:54	1
Molybdenum	ND		2.0		ug/L		05/16/23 15:02	05/22/23 18:54	1
Nickel	4.7		3.0		ug/L		05/16/23 15:02	05/22/23 18:54	1
Selenium	64		5.0		ug/L		05/16/23 15:02	05/22/23 18:54	1
Thallium	ND		1.0		ug/L		05/16/23 15:02	05/22/23 18:54	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		05/11/23 15:51	05/11/23 20:35	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	15000		100		mg/L			05/16/23 15:59	1
pH (SM 4500 H+ B)	7.2	H5	1.7		SU			05/17/23 15:58	1
Temperature (SM 4500 H+ B)	13.7	H5 T5	0.1		Degrees C			05/17/23 15:58	1

Client Sample ID: FC-CCR-MW84-0523

Lab Sample ID: 550-202031-6
Matrix: Water
Date Collected: 05/09/23 12:39
Date Received: 05/10/23 17:07

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	380	D2	10		mg/L			06/03/23 02:24	5
Fluoride	ND	D1 D5	2.0		mg/L			06/03/23 02:24	5

Client Sample ID: FC-CCR-MW84-0523

Lab Sample ID: 550-202031-6

Date Collected: 05/09/23 12:39
Matrix: Water
Date Received: 05/10/23 17:07

Method: EPA 300.0 - Anions, Ion Chromatography (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**6000**	**D2**	1000		mg/L			06/03/23 02:43	500

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		0.0010		mg/L		05/16/23 06:17	06/12/23 20:08	1
Lithium	**0.31**		0.020		mg/L		05/16/23 15:02	05/24/23 15:50	1
Boron	**29**		0.050		mg/L		05/16/23 06:17	06/09/23 21:03	1
Calcium	**460**		2.0		mg/L		05/16/23 06:17	06/09/23 21:03	1

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0		ug/L		05/16/23 15:02	05/22/23 19:00	1
Arsenic	ND	V1	5.0		ug/L		05/16/23 15:02	05/22/23 19:00	1
Barium	**9.4**		3.0		ug/L		05/16/23 15:02	05/22/23 19:00	1
Cadmium	ND		1.0		ug/L		05/16/23 15:02	05/22/23 19:00	1
Chromium	ND		3.0		ug/L		05/16/23 15:02	05/22/23 19:00	1
Cobalt	**1.6**		1.0		ug/L		05/16/23 15:02	05/22/23 19:00	1
Lead	ND		1.0		ug/L		05/16/23 15:02	05/22/23 19:00	1
Molybdenum	ND		2.0		ug/L		05/16/23 15:02	05/22/23 19:00	1
Nickel	**7.4**		3.0		ug/L		05/16/23 15:02	05/22/23 19:00	1
Selenium	**26**		5.0		ug/L		05/16/23 15:02	05/22/23 19:00	1
Thallium	ND		1.0		ug/L		05/16/23 15:02	05/22/23 19:00	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		05/11/23 15:51	05/11/23 20:37	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**9200**		100		mg/L			05/16/23 14:06	1
pH (SM 4500 H+ B)	**7.3**	**H5**	1.7		SU			05/17/23 15:59	1
Temperature (SM 4500 H+ B)	**12.8**	**H5 T5**	0.1		Degrees C			05/17/23 15:59	1

Client Sample ID: FC-CCR-MW85-0523

Lab Sample ID: 550-202031-7

Date Collected: 05/09/23 14:13
Matrix: Water
Date Received: 05/10/23 17:07

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**680**	**D2**	40		mg/L			06/03/23 21:44	20
Fluoride	ND	D1 D5	2.0		mg/L			06/03/23 03:01	5
Sulfate	**6100**	**D2**	1000		mg/L			06/03/23 03:19	500

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		0.0010		mg/L		05/16/23 06:17	06/12/23 20:11	1
Lithium	**0.36**		0.020		mg/L		05/16/23 15:02	05/24/23 15:55	1
Boron	**65**		0.050		mg/L		05/16/23 06:17	06/09/23 21:06	1
Calcium	**500**		2.0		mg/L		05/16/23 06:17	06/09/23 21:06	1

Client Sample ID: FC-CCR-MW85-0523

Lab Sample ID: 550-202031-7

Date Collected: 05/09/23 14:13
Matrix: Water
Date Received: 05/10/23 17:07

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0		ug/L		05/16/23 15:02	05/22/23 19:01	1
Arsenic	ND	V1	5.0		ug/L		05/16/23 15:02	05/22/23 19:01	1
Barium	**13**		3.0		ug/L		05/16/23 15:02	05/22/23 19:01	1
Cadmium	ND		1.0		ug/L		05/16/23 15:02	05/22/23 19:01	1
Chromium	**5.0**		3.0		ug/L		05/16/23 15:02	05/22/23 19:01	1
Cobalt	**1.0**		1.0		ug/L		05/16/23 15:02	05/22/23 19:01	1
Lead	ND		1.0		ug/L		05/16/23 15:02	05/22/23 19:01	1
Molybdenum	**7.1**		2.0		ug/L		05/16/23 15:02	05/22/23 19:01	1
Nickel	**13**		3.0		ug/L		05/16/23 15:02	05/22/23 19:01	1
Selenium	**190**		5.0		ug/L		05/16/23 15:02	05/22/23 19:01	1
Thallium	ND		1.0		ug/L		05/16/23 15:02	05/22/23 19:01	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		05/11/23 15:51	05/11/23 20:45	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**10000**		100		mg/L			05/16/23 14:06	1
pH (SM 4500 H+ B)	**7.3**	**H5**	1.7		SU			05/17/23 16:00	1
Temperature (SM 4500 H+ B)	**13.1**	**H5 T5**	0.1		Degrees C			05/17/23 16:00	1

Client Sample ID: FC-CCR-CM01-0523

Lab Sample ID: 550-202031-8

Date Collected: 05/09/23 11:43
Matrix: Water
Date Received: 05/10/23 17:07

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1500**	**D2**	100		mg/L			06/03/23 03:38	50
Fluoride	ND	D1 D5	20		mg/L			06/03/23 03:38	50
Sulfate	**9300**	**D2**	1000		mg/L			06/03/23 03:56	500

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		0.0050		mg/L		05/16/23 06:17	06/12/23 20:14	5
Lithium	**0.43**		0.020		mg/L		05/16/23 15:02	05/24/23 15:59	1
Boron	**120**		0.25		mg/L		05/16/23 06:17	06/12/23 20:14	5
Calcium	**480**		2.0		mg/L		05/16/23 06:17	06/09/23 21:09	1

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0		ug/L		05/16/23 15:02	05/22/23 19:03	1
Arsenic	ND	V1	5.0		ug/L		05/16/23 15:02	05/22/23 19:03	1
Barium	**33**		3.0		ug/L		05/16/23 15:02	05/22/23 19:03	1
Cadmium	ND		1.0		ug/L		05/16/23 15:02	05/22/23 19:03	1
Chromium	ND		3.0		ug/L		05/16/23 15:02	05/22/23 19:03	1
Cobalt	**8.1**		1.0		ug/L		05/16/23 15:02	05/22/23 19:03	1
Lead	ND		1.0		ug/L		05/16/23 15:02	05/22/23 19:03	1
Molybdenum	**6.3**		2.0		ug/L		05/16/23 15:02	05/22/23 19:03	1
Nickel	**29**		3.0		ug/L		05/16/23 15:02	05/22/23 19:03	1
Selenium	**34**		5.0		ug/L		05/16/23 15:02	05/22/23 19:03	1

Client Sample ID: FC-CCR-CM01-0523

Lab Sample ID: 550-202031-8

Date Collected: 05/09/23 11:43
Matrix: Water
Date Received: 05/10/23 17:07

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Thallium	ND		1.0		ug/L		05/16/23 15:02	05/22/23 19:03	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		05/11/23 15:51	05/11/23 20:47	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**16000**		100		mg/L			05/16/23 14:06	1
pH (SM 4500 H+ B)	**7.6**	**H5**	1.7		SU			05/17/23 16:01	1
Temperature (SM 4500 H+ B)	**13.8**	**H5 T5**	0.1		Degrees C			05/17/23 16:01	1

Client Sample ID: FC-CCR-CM02-0523

Lab Sample ID: 550-202031-9

Date Collected: 05/09/23 11:48
Matrix: Water
Date Received: 05/10/23 17:07

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1300**	**D2**	1000		mg/L			06/03/23 05:28	500
Fluoride	**4.1**	**D2**	2.0		mg/L			06/03/23 05:10	5
Sulfate	**9600**	**D2**	1000		mg/L			06/03/23 05:28	500

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		0.0050		mg/L		05/16/23 06:17	06/12/23 20:17	5
Lithium	**0.38**		0.020		mg/L		05/16/23 15:02	05/24/23 16:03	1
Boron	**110**		0.25		mg/L		05/16/23 06:17	06/12/23 20:17	5
Calcium	**450**		2.0		mg/L		05/16/23 06:17	06/09/23 21:11	1

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0		ug/L		05/16/23 15:02	05/22/23 19:05	1
Arsenic	ND	V1	5.0		ug/L		05/16/23 15:02	05/22/23 19:05	1
Barium	**14**		3.0		ug/L		05/16/23 15:02	05/22/23 19:05	1
Cadmium	ND		1.0		ug/L		05/16/23 15:02	05/22/23 19:05	1
Chromium	ND		3.0		ug/L		05/16/23 15:02	05/22/23 19:05	1
Cobalt	**8.1**		1.0		ug/L		05/16/23 15:02	05/22/23 19:05	1
Lead	ND		1.0		ug/L		05/16/23 15:02	05/22/23 19:05	1
Molybdenum	**4.4**		2.0		ug/L		05/16/23 15:02	05/22/23 19:05	1
Nickel	**23**		3.0		ug/L		05/16/23 15:02	05/22/23 19:05	1
Selenium	**14**		5.0		ug/L		05/16/23 15:02	05/22/23 19:05	1
Thallium	**1.1**		1.0		ug/L		05/16/23 15:02	05/22/23 19:05	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		05/11/23 15:51	05/11/23 20:49	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**16000**		100		mg/L			05/16/23 14:06	1
pH (SM 4500 H+ B)	**7.1**	**H5**	1.7		SU			05/17/23 16:03	1

Client Sample ID: FC-CCR-CM02-0523

Lab Sample ID: 550-202031-9
Date Collected: 05/09/23 11:48
Matrix: Water
Date Received: 05/10/23 17:07

General Chemistry (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Temperature (SM 4500 H+ B)	**13.3**	**H5 T5**	0.1		Degrees C			05/17/23 16:03	1

Client Sample ID: FC-CCR-FD01-0523

Lab Sample ID: 550-202031-10
Date Collected: 05/09/23 16:20
Matrix: Water
Date Received: 05/10/23 17:07

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**380**	**D2**	10		mg/L			06/03/23 05:47	5
Fluoride	ND	D1	2.0		mg/L			06/03/23 05:47	5
Sulfate	**6000**	**D2**	1000		mg/L			06/03/23 06:05	500

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		0.0010		mg/L		05/16/23 06:17	06/12/23 20:20	1
Lithium	**0.31**		0.020		mg/L		05/16/23 15:02	05/24/23 16:08	1
Boron	**28**		0.050		mg/L		05/16/23 06:17	06/09/23 21:14	1
Calcium	**450**		2.0		mg/L		05/16/23 06:17	06/09/23 21:14	1

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0		ug/L		05/16/23 15:02	05/22/23 19:07	1
Arsenic	ND	V1	5.0		ug/L		05/16/23 15:02	05/22/23 19:07	1
Barium	**9.9**		3.0		ug/L		05/16/23 15:02	05/22/23 19:07	1
Cadmium	ND		1.0		ug/L		05/16/23 15:02	05/22/23 19:07	1
Chromium	ND		3.0		ug/L		05/16/23 15:02	05/22/23 19:07	1
Cobalt	**1.9**		1.0		ug/L		05/16/23 15:02	05/22/23 19:07	1
Lead	ND		1.0		ug/L		05/16/23 15:02	05/22/23 19:07	1
Molybdenum	ND		2.0		ug/L		05/16/23 15:02	05/22/23 19:07	1
Nickel	**8.6**		3.0		ug/L		05/16/23 15:02	05/22/23 19:07	1
Selenium	**28**		5.0		ug/L		05/16/23 15:02	05/22/23 19:07	1
Thallium	ND		1.0		ug/L		05/16/23 15:02	05/22/23 19:07	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		05/11/23 15:51	05/11/23 20:51	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**9600**		100		mg/L			05/16/23 14:06	1
pH (SM 4500 H+ B)	**7.3**	**H5**	1.7		SU			05/17/23 16:04	1
Temperature (SM 4500 H+ B)	**12.9**	**H5 T5**	0.1		Degrees C			05/17/23 16:04	1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 550-301617/2
Matrix: Water
Analysis Batch: 301617

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		2.0		mg/L			06/02/23 11:51	1
Fluoride	ND		0.40		mg/L			06/02/23 11:51	1
Sulfate	ND		2.0		mg/L			06/02/23 11:51	1

Lab Sample ID: LCS 550-301617/5
Matrix: Water
Analysis Batch: 301617

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			20.0	20.5		mg/L		102	90 - 110		
Fluoride			4.00	4.13		mg/L		103	90 - 110		
Sulfate			20.0	20.6		mg/L		103	90 - 110		

Lab Sample ID: LCSD 550-301617/6
Matrix: Water
Analysis Batch: 301617

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			20.0	20.5		mg/L		103	90 - 110	0	20
Fluoride			4.00	4.16		mg/L		104	90 - 110	1	20
Sulfate			20.0	20.6		mg/L		103	90 - 110	0	20

Lab Sample ID: 550-202029-A-5 MS ^500
Matrix: Water
Analysis Batch: 301617

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	ND	D1 D5	10000	11100	D2	mg/L		104	80 - 120		
Fluoride	ND	D1 D5	2000	2030	D2	mg/L		102	80 - 120		
Sulfate	7000	D2	10000	17400	D2	mg/L		103	80 - 120		

Lab Sample ID: 550-202029-A-5 MSD ^500
Matrix: Water
Analysis Batch: 301617

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	ND	D1 D5	10000	11200	D2	mg/L		104	80 - 120	1	20
Fluoride	ND	D1 D5	2000	2060	D2	mg/L		103	80 - 120	1	20
Sulfate	7000	D2	10000	17600	D2	mg/L		106	80 - 120	1	20

Lab Sample ID: MB 550-301658/2
Matrix: Water
Analysis Batch: 301658

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		2.0		mg/L			06/03/23 11:42	1
Fluoride	ND		0.40		mg/L			06/03/23 11:42	1
Sulfate	ND		2.0		mg/L			06/03/23 11:42	1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 550-301658/5
Matrix: Water
Analysis Batch: 301658

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			20.0	20.5		mg/L		103	90 - 110		
Fluoride			4.00	4.08		mg/L		102	90 - 110		
Sulfate			20.0	20.7		mg/L		103	90 - 110		

Lab Sample ID: LCSD 550-301658/6
Matrix: Water
Analysis Batch: 301658

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			20.0	20.5		mg/L		103	90 - 110	0	20
Fluoride			4.00	4.11		mg/L		103	90 - 110	1	20
Sulfate			20.0	20.6		mg/L		103	90 - 110	0	20

Lab Sample ID: 550-202671-A-1 MS
Matrix: Water
Analysis Batch: 301658

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	310	E2 M3	20.0	309	E2 M3	mg/L		16	80 - 120		
Fluoride	ND		4.00	4.45		mg/L		105	80 - 120		
Sulfate	210	E2 M3	20.0	223	E2 M3	mg/L		55	80 - 120		

Lab Sample ID: 550-202671-A-1 MSD
Matrix: Water
Analysis Batch: 301658

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	310	E2 M3	20.0	309	E2 M3	mg/L		16	80 - 120	0	20
Fluoride	ND		4.00	4.59		mg/L		108	80 - 120	3	20
Sulfate	210	E2 M3	20.0	223	E2 M3	mg/L		55	80 - 120	0	20

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 550-300305/1-A
Matrix: Water
Analysis Batch: 302083

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 300305

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.050		mg/L		05/16/23 06:17	06/09/23 20:01	1
Calcium	ND		2.0		mg/L		05/16/23 06:17	06/09/23 20:01	1

Lab Sample ID: MB 550-300305/1-A
Matrix: Water
Analysis Batch: 302156

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 300305

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		0.0010		mg/L		05/16/23 06:17	06/12/23 19:14	1

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: LCS 550-300305/2-A
Matrix: Water
Analysis Batch: 302083

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 300305

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Boron			1.00	1.01		mg/L		101	85 - 115		
Calcium			21.0	20.0		mg/L		95	85 - 115		

Lab Sample ID: LCS 550-300305/2-A
Matrix: Water
Analysis Batch: 302156

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 300305

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Beryllium			1.00	1.13		mg/L		113	85 - 115		

Lab Sample ID: LCSD 550-300305/3-A
Matrix: Water
Analysis Batch: 302083

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 300305

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron			1.00	1.00		mg/L		100	85 - 115	1	20
Calcium			21.0	19.2		mg/L		92	85 - 115	4	20

Lab Sample ID: LCSD 550-300305/3-A
Matrix: Water
Analysis Batch: 302156

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 300305

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Beryllium			1.00	1.10		mg/L		110	85 - 115	3	20

Lab Sample ID: 550-202028-B-1-A MS
Matrix: Water
Analysis Batch: 302083

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 300305

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Boron	0.51		1.00	1.52		mg/L		101	70 - 130		
Calcium	79		21.0	100		mg/L		103	70 - 130		

Lab Sample ID: 550-202028-B-1-B MSD
Matrix: Water
Analysis Batch: 302083

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 300305

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron	0.51		1.00	1.52		mg/L		101	70 - 130	0	20
Calcium	79		21.0	102		mg/L		112	70 - 130	2	20

Lab Sample ID: MB 280-612445/1-A
Matrix: Water
Analysis Batch: 613748

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 612445

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	ND		0.020		mg/L		05/16/23 15:02	05/24/23 14:35	1

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: LCS 280-612445/2-A
Matrix: Water
Analysis Batch: 613748

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 612445

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Lithium			1.00	0.937		mg/L		94	90 - 112		

Lab Sample ID: 550-202031-1 MS
Matrix: Water
Analysis Batch: 613748

Client Sample ID: FC-CCR-MW67-0523
Prep Type: Total/NA
Prep Batch: 612445

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Lithium	0.39		1.00	1.46		mg/L		107	70 - 130		

Lab Sample ID: 550-202031-1 MSD
Matrix: Water
Analysis Batch: 613748

Client Sample ID: FC-CCR-MW67-0523
Prep Type: Total/NA
Prep Batch: 612445

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Lithium	0.39		1.00	1.43		mg/L		103	70 - 130	3	20

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 280-612445/1-A
Matrix: Water
Analysis Batch: 613485

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 612445

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0		ug/L		05/16/23 15:02	05/22/23 18:38	1
Arsenic	ND		5.0		ug/L		05/16/23 15:02	05/22/23 18:38	1
Barium	ND		3.0		ug/L		05/16/23 15:02	05/22/23 18:38	1
Cadmium	ND		1.0		ug/L		05/16/23 15:02	05/22/23 18:38	1
Chromium	ND		3.0		ug/L		05/16/23 15:02	05/22/23 18:38	1
Cobalt	ND		1.0		ug/L		05/16/23 15:02	05/22/23 18:38	1
Lead	ND		1.0		ug/L		05/16/23 15:02	05/22/23 18:38	1
Molybdenum	ND		2.0		ug/L		05/16/23 15:02	05/22/23 18:38	1
Nickel	ND		3.0		ug/L		05/16/23 15:02	05/22/23 18:38	1
Selenium	ND		5.0		ug/L		05/16/23 15:02	05/22/23 18:38	1
Thallium	ND		1.0		ug/L		05/16/23 15:02	05/22/23 18:38	1

Lab Sample ID: LCS 280-612445/20-A
Matrix: Water
Analysis Batch: 613485

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 612445

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Antimony			40.0	40.9		ug/L		102	85 - 115		
Arsenic			40.0	40.1		ug/L		100	89 - 111		
Barium			40.0	38.6		ug/L		97	89 - 115		
Cadmium			40.0	40.4		ug/L		101	89 - 111		
Chromium			40.0	41.1		ug/L		103	86 - 115		
Cobalt			40.0	40.0		ug/L		100	92 - 115		
Lead			40.0	40.0		ug/L		100	88 - 115		
Molybdenum			40.0	39.1		ug/L		98	89 - 112		
Nickel			40.0	41.7		ug/L		104	86 - 115		
Selenium			40.0	38.0		ug/L		95	85 - 114		

Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 280-612445/20-A
Matrix: Water
Analysis Batch: 613485

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 612445

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Thallium			40.0	40.2		ug/L		100	86 - 115		

Lab Sample ID: 550-202032-C-1-B MS
Matrix: Water
Analysis Batch: 613582

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 612445

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Antimony	ND		40.0	40.2		ug/L		101	85 - 115		
Arsenic	ND	V1	40.0	42.1		ug/L		105	79 - 120		
Barium	14		40.0	54.7		ug/L		101	89 - 115		
Cadmium	ND		40.0	37.6		ug/L		93	89 - 111		
Chromium	ND		40.0	42.8		ug/L		106	86 - 115		
Cobalt	66	M2	40.0	109		ug/L		108	92 - 115		
Lead	ND		40.0	41.6		ug/L		104	88 - 115		
Molybdenum	47		40.0	85.7		ug/L		98	89 - 112		
Nickel	420	M3	40.0	464	M3	ug/L		108	86 - 115		
Selenium	14		40.0	54.4		ug/L		100	85 - 114		
Thallium	ND		40.0	40.1		ug/L		100	86 - 115		

Lab Sample ID: 550-202032-C-1-C MSD
Matrix: Water
Analysis Batch: 613582

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 612445

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	ND		40.0	40.9		ug/L		102	85 - 115	4	20
Arsenic	ND	V1	40.0	41.5		ug/L		104	79 - 120	5	20
Barium	14		40.0	55.7		ug/L		103	89 - 115	5	20
Cadmium	ND		40.0	37.8		ug/L		93	89 - 111	1	20
Chromium	ND		40.0	43.0		ug/L		106	86 - 115	15	20
Cobalt	66	M2	40.0	107		ug/L		102	92 - 115	9	20
Lead	ND		40.0	42.0		ug/L		105	88 - 115	9	20
Molybdenum	47		40.0	87.3		ug/L		102	89 - 112	4	20
Nickel	420	M3	40.0	460	M3	ug/L		99	86 - 115	8	20
Selenium	14		40.0	54.2		ug/L		99	85 - 114	6	20
Thallium	ND		40.0	41.0		ug/L		102	86 - 115	7	20

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 550-300116/1-A
Matrix: Water
Analysis Batch: 300134

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 300116

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		05/11/23 15:51	05/11/23 20:09	1

Method: 245.1 - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 550-300116/2-A
Matrix: Water
Analysis Batch: 300134

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 300116

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury			0.00500	0.00450		mg/L		90	85 - 115		

Lab Sample ID: LCSD 550-300116/3-A
Matrix: Water
Analysis Batch: 300134

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 300116

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury			0.00500	0.00441		mg/L		88	85 - 115	2	20

Lab Sample ID: 550-201947-O-1-D MS
Matrix: Water
Analysis Batch: 300134

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 300116

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury	ND		0.00500	0.00427		mg/L		85	70 - 130		

Lab Sample ID: 550-201947-O-1-E MSD
Matrix: Water
Analysis Batch: 300134

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 300116

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		0.00500	0.00433		mg/L		87	70 - 130	1	20

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 550-300354/1
Matrix: Water
Analysis Batch: 300354

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		20		mg/L			05/16/23 14:06	1

Lab Sample ID: LCS 550-300354/2
Matrix: Water
Analysis Batch: 300354

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Dissolved Solids			1000	1010		mg/L		101	90 - 110		

Lab Sample ID: LCSD 550-300354/3
Matrix: Water
Analysis Batch: 300354

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Dissolved Solids			1000	1010		mg/L		101	90 - 110	0	10

Method: SM 2540C - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: 550-202031-6 DU
Matrix: Water
Analysis Batch: 300354

Client Sample ID: FC-CCR-MW84-0523
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	9200			9160		mg/L				0.8	10

Lab Sample ID: MB 550-300366/1
Matrix: Water
Analysis Batch: 300366

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		20		mg/L			05/16/23 15:59	1

Lab Sample ID: LCS 550-300366/2
Matrix: Water
Analysis Batch: 300366

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Dissolved Solids			1000	1010		mg/L		101	90 - 110		

Lab Sample ID: LCSD 550-300366/3
Matrix: Water
Analysis Batch: 300366

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Dissolved Solids			1000	1010		mg/L		101	90 - 110	1	10

Lab Sample ID: 550-202029-A-6 DU
Matrix: Water
Analysis Batch: 300366

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	16000			15300		mg/L				3	10

Method: SM 4500 H+ B - pH

Lab Sample ID: LCSSRM 550-300503/1
Matrix: Water
Analysis Batch: 300503

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits		
pH			7.00	7.0		SU		99.7	98.5 - 101.5		

Lab Sample ID: LCSSRM 550-300503/13
Matrix: Water
Analysis Batch: 300503

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits		
pH			7.00	7.0		SU		100.0	98.5 - 101.5		

Method: SM 4500 H+ B - pH (Continued)

Lab Sample ID: LCSSRM 550-300503/25
Matrix: Water
Analysis Batch: 300503

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits		
pH			7.00	7.0		SU		100.0	98.5 - 101.5		

Lab Sample ID: 550-202031-2 DU
Matrix: Water
Analysis Batch: 300503

Client Sample ID: FC-CCR-MW68-0523
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
pH	7.1	H5		7.2	H5	SU				0.1	5
Temperature	12.6	H5 T5		12.3	H5	Degrees C				2	

HPLC/IC

Analysis Batch: 301617

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-202031-1	FC-CCR-MW67-0523	Total/NA	Water	300.0	
550-202031-1	FC-CCR-MW67-0523	Total/NA	Water	300.0	
550-202031-2	FC-CCR-MW68-0523	Total/NA	Water	300.0	
550-202031-2	FC-CCR-MW68-0523	Total/NA	Water	300.0	
550-202031-3	FC-CCR-MW69-0523	Total/NA	Water	300.0	
550-202031-4	FC-CCR-MW71-0523	Total/NA	Water	300.0	
550-202031-4	FC-CCR-MW71-0523	Total/NA	Water	300.0	
550-202031-5	FC-CCR-MW72-0523	Total/NA	Water	300.0	
550-202031-5	FC-CCR-MW72-0523	Total/NA	Water	300.0	
550-202031-5	FC-CCR-MW72-0523	Total/NA	Water	300.0	
550-202031-6	FC-CCR-MW84-0523	Total/NA	Water	300.0	
550-202031-6	FC-CCR-MW84-0523	Total/NA	Water	300.0	
550-202031-7	FC-CCR-MW85-0523	Total/NA	Water	300.0	
550-202031-7	FC-CCR-MW85-0523	Total/NA	Water	300.0	
550-202031-8	FC-CCR-CM01-0523	Total/NA	Water	300.0	
550-202031-8	FC-CCR-CM01-0523	Total/NA	Water	300.0	
550-202031-9	FC-CCR-CM02-0523	Total/NA	Water	300.0	
550-202031-9	FC-CCR-CM02-0523	Total/NA	Water	300.0	
550-202031-10	FC-CCR-FD01-0523	Total/NA	Water	300.0	
550-202031-10	FC-CCR-FD01-0523	Total/NA	Water	300.0	
MB 550-301617/2	Method Blank	Total/NA	Water	300.0	
LCS 550-301617/5	Lab Control Sample	Total/NA	Water	300.0	
LCSD 550-301617/6	Lab Control Sample Dup	Total/NA	Water	300.0	
550-202029-A-5 MS ^500	Matrix Spike	Total/NA	Water	300.0	
550-202029-A-5 MSD ^500	Matrix Spike Duplicate	Total/NA	Water	300.0	

Analysis Batch: 301658

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-202031-3	FC-CCR-MW69-0523	Total/NA	Water	300.0	
550-202031-4	FC-CCR-MW71-0523	Total/NA	Water	300.0	
550-202031-7	FC-CCR-MW85-0523	Total/NA	Water	300.0	
MB 550-301658/2	Method Blank	Total/NA	Water	300.0	
LCS 550-301658/5	Lab Control Sample	Total/NA	Water	300.0	
LCSD 550-301658/6	Lab Control Sample Dup	Total/NA	Water	300.0	
550-202671-A-1 MS	Matrix Spike	Total/NA	Water	300.0	
550-202671-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Metals

Prep Batch: 300116

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-202031-1	FC-CCR-MW67-0523	Total/NA	Water	245.1	
550-202031-2	FC-CCR-MW68-0523	Total/NA	Water	245.1	
550-202031-3	FC-CCR-MW69-0523	Total/NA	Water	245.1	
550-202031-4	FC-CCR-MW71-0523	Total/NA	Water	245.1	
550-202031-5	FC-CCR-MW72-0523	Total/NA	Water	245.1	
550-202031-6	FC-CCR-MW84-0523	Total/NA	Water	245.1	
550-202031-7	FC-CCR-MW85-0523	Total/NA	Water	245.1	
550-202031-8	FC-CCR-CM01-0523	Total/NA	Water	245.1	
550-202031-9	FC-CCR-CM02-0523	Total/NA	Water	245.1	
550-202031-10	FC-CCR-FD01-0523	Total/NA	Water	245.1	

Metals (Continued)

Prep Batch: 300116 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 550-300116/1-A	Method Blank	Total/NA	Water	245.1	
LCS 550-300116/2-A	Lab Control Sample	Total/NA	Water	245.1	
LCSD 550-300116/3-A	Lab Control Sample Dup	Total/NA	Water	245.1	
550-201947-O-1-D MS	Matrix Spike	Total/NA	Water	245.1	
550-201947-O-1-E MSD	Matrix Spike Duplicate	Total/NA	Water	245.1	

Analysis Batch: 300134

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-202031-1	FC-CCR-MW67-0523	Total/NA	Water	245.1	300116
550-202031-2	FC-CCR-MW68-0523	Total/NA	Water	245.1	300116
550-202031-3	FC-CCR-MW69-0523	Total/NA	Water	245.1	300116
550-202031-4	FC-CCR-MW71-0523	Total/NA	Water	245.1	300116
550-202031-5	FC-CCR-MW72-0523	Total/NA	Water	245.1	300116
550-202031-6	FC-CCR-MW84-0523	Total/NA	Water	245.1	300116
550-202031-7	FC-CCR-MW85-0523	Total/NA	Water	245.1	300116
550-202031-8	FC-CCR-CM01-0523	Total/NA	Water	245.1	300116
550-202031-9	FC-CCR-CM02-0523	Total/NA	Water	245.1	300116
550-202031-10	FC-CCR-FD01-0523	Total/NA	Water	245.1	300116
MB 550-300116/1-A	Method Blank	Total/NA	Water	245.1	300116
LCS 550-300116/2-A	Lab Control Sample	Total/NA	Water	245.1	300116
LCSD 550-300116/3-A	Lab Control Sample Dup	Total/NA	Water	245.1	300116
550-201947-O-1-D MS	Matrix Spike	Total/NA	Water	245.1	300116
550-201947-O-1-E MSD	Matrix Spike Duplicate	Total/NA	Water	245.1	300116

Prep Batch: 300305

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-202031-1	FC-CCR-MW67-0523	Total/NA	Water	200.7	
550-202031-2	FC-CCR-MW68-0523	Total/NA	Water	200.7	
550-202031-3	FC-CCR-MW69-0523	Total/NA	Water	200.7	
550-202031-4	FC-CCR-MW71-0523	Total/NA	Water	200.7	
550-202031-5	FC-CCR-MW72-0523	Total/NA	Water	200.7	
550-202031-6	FC-CCR-MW84-0523	Total/NA	Water	200.7	
550-202031-7	FC-CCR-MW85-0523	Total/NA	Water	200.7	
550-202031-8	FC-CCR-CM01-0523	Total/NA	Water	200.7	
550-202031-9	FC-CCR-CM02-0523	Total/NA	Water	200.7	
550-202031-10	FC-CCR-FD01-0523	Total/NA	Water	200.7	
MB 550-300305/1-A	Method Blank	Total/NA	Water	200.7	
LCS 550-300305/2-A	Lab Control Sample	Total/NA	Water	200.7	
LCSD 550-300305/3-A	Lab Control Sample Dup	Total/NA	Water	200.7	
550-202028-B-1-A MS	Matrix Spike	Total/NA	Water	200.7	
550-202028-B-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	200.7	

Analysis Batch: 302083

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-202031-1	FC-CCR-MW67-0523	Total/NA	Water	200.7 Rev 4.4	300305
550-202031-2	FC-CCR-MW68-0523	Total/NA	Water	200.7 Rev 4.4	300305
550-202031-3	FC-CCR-MW69-0523	Total/NA	Water	200.7 Rev 4.4	300305
550-202031-4	FC-CCR-MW71-0523	Total/NA	Water	200.7 Rev 4.4	300305
550-202031-5	FC-CCR-MW72-0523	Total/NA	Water	200.7 Rev 4.4	300305
550-202031-6	FC-CCR-MW84-0523	Total/NA	Water	200.7 Rev 4.4	300305
550-202031-7	FC-CCR-MW85-0523	Total/NA	Water	200.7 Rev 4.4	300305

Metals (Continued)

Analysis Batch: 302083 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-202031-8	FC-CCR-CM01-0523	Total/NA	Water	200.7 Rev 4.4	300305
550-202031-9	FC-CCR-CM02-0523	Total/NA	Water	200.7 Rev 4.4	300305
550-202031-10	FC-CCR-FD01-0523	Total/NA	Water	200.7 Rev 4.4	300305
MB 550-300305/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	300305
LCS 550-300305/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	300305
LCSD 550-300305/3-A	Lab Control Sample Dup	Total/NA	Water	200.7 Rev 4.4	300305
550-202028-B-1-A MS	Matrix Spike	Total/NA	Water	200.7 Rev 4.4	300305
550-202028-B-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	200.7 Rev 4.4	300305

Analysis Batch: 302156

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-202031-1	FC-CCR-MW67-0523	Total/NA	Water	200.7 Rev 4.4	300305
550-202031-2	FC-CCR-MW68-0523	Total/NA	Water	200.7 Rev 4.4	300305
550-202031-3	FC-CCR-MW69-0523	Total/NA	Water	200.7 Rev 4.4	300305
550-202031-4	FC-CCR-MW71-0523	Total/NA	Water	200.7 Rev 4.4	300305
550-202031-5	FC-CCR-MW72-0523	Total/NA	Water	200.7 Rev 4.4	300305
550-202031-6	FC-CCR-MW84-0523	Total/NA	Water	200.7 Rev 4.4	300305
550-202031-7	FC-CCR-MW85-0523	Total/NA	Water	200.7 Rev 4.4	300305
550-202031-8	FC-CCR-CM01-0523	Total/NA	Water	200.7 Rev 4.4	300305
550-202031-9	FC-CCR-CM02-0523	Total/NA	Water	200.7 Rev 4.4	300305
550-202031-10	FC-CCR-FD01-0523	Total/NA	Water	200.7 Rev 4.4	300305
MB 550-300305/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	300305
LCS 550-300305/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	300305
LCSD 550-300305/3-A	Lab Control Sample Dup	Total/NA	Water	200.7 Rev 4.4	300305

Prep Batch: 612445

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-202031-1	FC-CCR-MW67-0523	Total Recoverable	Water	200.8	
550-202031-1	FC-CCR-MW67-0523	Total/NA	Water	200.8	
550-202031-2	FC-CCR-MW68-0523	Total Recoverable	Water	200.8	
550-202031-2	FC-CCR-MW68-0523	Total/NA	Water	200.8	
550-202031-3	FC-CCR-MW69-0523	Total Recoverable	Water	200.8	
550-202031-3	FC-CCR-MW69-0523	Total/NA	Water	200.8	
550-202031-4	FC-CCR-MW71-0523	Total Recoverable	Water	200.8	
550-202031-4	FC-CCR-MW71-0523	Total/NA	Water	200.8	
550-202031-5	FC-CCR-MW72-0523	Total Recoverable	Water	200.8	
550-202031-5	FC-CCR-MW72-0523	Total/NA	Water	200.8	
550-202031-6	FC-CCR-MW84-0523	Total Recoverable	Water	200.8	
550-202031-6	FC-CCR-MW84-0523	Total/NA	Water	200.8	
550-202031-7	FC-CCR-MW85-0523	Total Recoverable	Water	200.8	
550-202031-7	FC-CCR-MW85-0523	Total/NA	Water	200.8	
550-202031-8	FC-CCR-CM01-0523	Total Recoverable	Water	200.8	
550-202031-8	FC-CCR-CM01-0523	Total/NA	Water	200.8	
550-202031-9	FC-CCR-CM02-0523	Total Recoverable	Water	200.8	
550-202031-9	FC-CCR-CM02-0523	Total/NA	Water	200.8	
550-202031-10	FC-CCR-FD01-0523	Total Recoverable	Water	200.8	
550-202031-10	FC-CCR-FD01-0523	Total/NA	Water	200.8	
MB 280-612445/1-A	Method Blank	Total Recoverable	Water	200.8	
MB 280-612445/1-A	Method Blank	Total/NA	Water	200.8	
LCS 280-612445/20-A	Lab Control Sample	Total Recoverable	Water	200.8	
LCS 280-612445/2-A	Lab Control Sample	Total/NA	Water	200.8	

Metals (Continued)

Prep Batch: 612445 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-202031-1 MS	FC-CCR-MW67-0523	Total/NA	Water	200.7	
550-202031-1 MSD	FC-CCR-MW67-0523	Total/NA	Water	200.7	
550-202032-C-1-B MS	Matrix Spike	Total Recoverable	Water	200.8	
550-202032-C-1-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	200.8	

Analysis Batch: 613485

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-202031-1	FC-CCR-MW67-0523	Total Recoverable	Water	200.8	612445
550-202031-2	FC-CCR-MW68-0523	Total Recoverable	Water	200.8	612445
550-202031-3	FC-CCR-MW69-0523	Total Recoverable	Water	200.8	612445
550-202031-4	FC-CCR-MW71-0523	Total Recoverable	Water	200.8	612445
550-202031-5	FC-CCR-MW72-0523	Total Recoverable	Water	200.8	612445
550-202031-6	FC-CCR-MW84-0523	Total Recoverable	Water	200.8	612445
550-202031-7	FC-CCR-MW85-0523	Total Recoverable	Water	200.8	612445
550-202031-8	FC-CCR-CM01-0523	Total Recoverable	Water	200.8	612445
550-202031-9	FC-CCR-CM02-0523	Total Recoverable	Water	200.8	612445
550-202031-10	FC-CCR-FD01-0523	Total Recoverable	Water	200.8	612445
MB 280-612445/1-A	Method Blank	Total Recoverable	Water	200.8	612445
LCS 280-612445/20-A	Lab Control Sample	Total Recoverable	Water	200.8	612445

Analysis Batch: 613582

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-202032-C-1-B MS	Matrix Spike	Total Recoverable	Water	200.8	612445
550-202032-C-1-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	200.8	612445

Analysis Batch: 613748

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-202031-1	FC-CCR-MW67-0523	Total/NA	Water	200.7 Rev 4.4	612445
550-202031-2	FC-CCR-MW68-0523	Total/NA	Water	200.7 Rev 4.4	612445
550-202031-3	FC-CCR-MW69-0523	Total/NA	Water	200.7 Rev 4.4	612445
550-202031-4	FC-CCR-MW71-0523	Total/NA	Water	200.7 Rev 4.4	612445
550-202031-5	FC-CCR-MW72-0523	Total/NA	Water	200.7 Rev 4.4	612445
550-202031-6	FC-CCR-MW84-0523	Total/NA	Water	200.7 Rev 4.4	612445
550-202031-7	FC-CCR-MW85-0523	Total/NA	Water	200.7 Rev 4.4	612445
550-202031-8	FC-CCR-CM01-0523	Total/NA	Water	200.7 Rev 4.4	612445
550-202031-9	FC-CCR-CM02-0523	Total/NA	Water	200.7 Rev 4.4	612445
550-202031-10	FC-CCR-FD01-0523	Total/NA	Water	200.7 Rev 4.4	612445
MB 280-612445/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	612445
LCS 280-612445/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	612445
550-202031-1 MS	FC-CCR-MW67-0523	Total/NA	Water	200.7 Rev 4.4	612445
550-202031-1 MSD	FC-CCR-MW67-0523	Total/NA	Water	200.7 Rev 4.4	612445

General Chemistry

Analysis Batch: 300354

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-202031-6	FC-CCR-MW84-0523	Total/NA	Water	SM 2540C	
550-202031-7	FC-CCR-MW85-0523	Total/NA	Water	SM 2540C	
550-202031-8	FC-CCR-CM01-0523	Total/NA	Water	SM 2540C	
550-202031-9	FC-CCR-CM02-0523	Total/NA	Water	SM 2540C	
550-202031-10	FC-CCR-FD01-0523	Total/NA	Water	SM 2540C	

General Chemistry (Continued)

Analysis Batch: 300354 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 550-300354/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 550-300354/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 550-300354/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	
550-202031-6 DU	FC-CCR-MW84-0523	Total/NA	Water	SM 2540C	

Analysis Batch: 300366

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-202031-1	FC-CCR-MW67-0523	Total/NA	Water	SM 2540C	
550-202031-2	FC-CCR-MW68-0523	Total/NA	Water	SM 2540C	
550-202031-3	FC-CCR-MW69-0523	Total/NA	Water	SM 2540C	
550-202031-4	FC-CCR-MW71-0523	Total/NA	Water	SM 2540C	
550-202031-5	FC-CCR-MW72-0523	Total/NA	Water	SM 2540C	
MB 550-300366/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 550-300366/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 550-300366/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	
550-202029-A-6 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 300503

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-202031-1	FC-CCR-MW67-0523	Total/NA	Water	SM 4500 H+ B	
550-202031-2	FC-CCR-MW68-0523	Total/NA	Water	SM 4500 H+ B	
550-202031-3	FC-CCR-MW69-0523	Total/NA	Water	SM 4500 H+ B	
550-202031-4	FC-CCR-MW71-0523	Total/NA	Water	SM 4500 H+ B	
550-202031-5	FC-CCR-MW72-0523	Total/NA	Water	SM 4500 H+ B	
550-202031-6	FC-CCR-MW84-0523	Total/NA	Water	SM 4500 H+ B	
550-202031-7	FC-CCR-MW85-0523	Total/NA	Water	SM 4500 H+ B	
550-202031-8	FC-CCR-CM01-0523	Total/NA	Water	SM 4500 H+ B	
550-202031-9	FC-CCR-CM02-0523	Total/NA	Water	SM 4500 H+ B	
550-202031-10	FC-CCR-FD01-0523	Total/NA	Water	SM 4500 H+ B	
LCSSRM 550-300503/1	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	
LCSSRM 550-300503/13	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	
LCSSRM 550-300503/25	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	
550-202031-2 DU	FC-CCR-MW68-0523	Total/NA	Water	SM 4500 H+ B	

Lab Chronicle

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-202031-1
SDG: APS Four Corners Power Plant (URS)

Client Sample ID: FC-CCR-MW67-0523

Date Collected: 05/09/23 13:25
Date Received: 05/10/23 17:07

Lab Sample ID: 550-202031-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		50	301617	RDC	EET PHX	06/02/23 22:25
Total/NA	Analysis	300.0		500	301617	RDC	EET PHX	06/02/23 22:43
Total/NA	Prep	200.7			300305	SGO	EET PHX	05/16/23 06:17
Total/NA	Analysis	200.7 Rev 4.4		1	302083	GLW	EET PHX	06/09/23 20:49
Total/NA	Prep	200.7			300305	SGO	EET PHX	05/16/23 06:17
Total/NA	Analysis	200.7 Rev 4.4		5	302156	GLW	EET PHX	06/12/23 19:48
Total/NA	Prep	200.8			612445	MSM	EET DEN	05/16/23 15:02
Total/NA	Analysis	200.7 Rev 4.4		1	613748	ADL	EET DEN	05/24/23 15:06
Total Recoverable	Prep	200.8			612445	MSM	EET DEN	05/16/23 15:02
Total Recoverable	Analysis	200.8		1	613485	LMT	EET DEN	05/22/23 18:47
Total/NA	Prep	245.1			300116	SRR	EET PHX	05/11/23 15:51
Total/NA	Analysis	245.1		1	300134	SRR	EET PHX	05/11/23 20:27
Total/NA	Analysis	SM 2540C		1	300366	SMA	EET PHX	05/16/23 15:59 - 05/19/23 16:00 [1]
Total/NA	Analysis	SM 4500 H+ B		1	300503	MAN	EET PHX	05/17/23 15:50

Client Sample ID: FC-CCR-MW68-0523

Date Collected: 05/09/23 10:49
Date Received: 05/10/23 17:07

Lab Sample ID: 550-202031-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		50	301617	RDC	EET PHX	06/02/23 23:02
Total/NA	Analysis	300.0		500	301617	RDC	EET PHX	06/02/23 23:20
Total/NA	Prep	200.7			300305	SGO	EET PHX	05/16/23 06:17
Total/NA	Analysis	200.7 Rev 4.4		1	302083	GLW	EET PHX	06/09/23 20:52
Total/NA	Prep	200.7			300305	SGO	EET PHX	05/16/23 06:17
Total/NA	Analysis	200.7 Rev 4.4		5	302156	GLW	EET PHX	06/12/23 19:57
Total/NA	Prep	200.8			612445	MSM	EET DEN	05/16/23 15:02
Total/NA	Analysis	200.7 Rev 4.4		1	613748	ADL	EET DEN	05/24/23 15:33
Total Recoverable	Prep	200.8			612445	MSM	EET DEN	05/16/23 15:02
Total Recoverable	Analysis	200.8		1	613485	LMT	EET DEN	05/22/23 18:49
Total/NA	Prep	245.1			300116	SRR	EET PHX	05/11/23 15:51
Total/NA	Analysis	245.1		1	300134	SRR	EET PHX	05/11/23 20:29
Total/NA	Analysis	SM 2540C		1	300366	SMA	EET PHX	05/16/23 15:59 - 05/19/23 16:00 [1]
Total/NA	Analysis	SM 4500 H+ B		1	300503	MAN	EET PHX	05/17/23 15:53

Client Sample ID: FC-CCR-MW69-0523

Date Collected: 05/09/23 10:07
Date Received: 05/10/23 17:07

Lab Sample ID: 550-202031-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		200	301617	RDC	EET PHX	06/02/23 23:57
Total/NA	Analysis	300.0		5	301658	RDC	EET PHX	06/03/23 19:17
Total/NA	Prep	200.7			300305	SGO	EET PHX	05/16/23 06:17
Total/NA	Analysis	200.7 Rev 4.4		1	302083	GLW	EET PHX	06/09/23 20:55

Client Sample ID: FC-CCR-MW69-0523

Lab Sample ID: 550-202031-3
Date Collected: 05/09/23 10:07
Matrix: Water
Date Received: 05/10/23 17:07

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	200.7			300305	SGO	EET PHX	05/16/23 06:17
Total/NA	Analysis	200.7 Rev 4.4		1	302156	GLW	EET PHX	06/12/23 20:00
Total/NA	Prep	200.8			612445	MSM	EET DEN	05/16/23 15:02
Total/NA	Analysis	200.7 Rev 4.4		1	613748	ADL	EET DEN	05/24/23 15:37
Total Recoverable	Prep	200.8			612445	MSM	EET DEN	05/16/23 15:02
Total Recoverable	Analysis	200.8		1	613485	LMT	EET DEN	05/22/23 18:51
Total/NA	Prep	245.1			300116	SRR	EET PHX	05/11/23 15:51
Total/NA	Analysis	245.1		1	300134	SRR	EET PHX	05/11/23 20:31
Total/NA	Analysis	SM 2540C		1	300366	SMA	EET PHX	05/16/23 15:59 - 05/19/23 16:00 [1]
Total/NA	Analysis	SM 4500 H+ B		1	300503	MAN	EET PHX	05/17/23 15:55

Client Sample ID: FC-CCR-MW71-0523

Lab Sample ID: 550-202031-4
Date Collected: 05/09/23 19:13
Matrix: Water
Date Received: 05/10/23 17:07

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		500	301617	RDC	EET PHX	06/03/23 00:15
Total/NA	Analysis	300.0		5	301617	RDC	EET PHX	06/03/23 01:29
Total/NA	Analysis	300.0		20	301658	RDC	EET PHX	06/03/23 21:26
Total/NA	Prep	200.7			300305	SGO	EET PHX	05/16/23 06:17
Total/NA	Analysis	200.7 Rev 4.4		1	302083	GLW	EET PHX	06/09/23 20:57
Total/NA	Prep	200.7			300305	SGO	EET PHX	05/16/23 06:17
Total/NA	Analysis	200.7 Rev 4.4		1	302156	GLW	EET PHX	06/12/23 20:03
Total/NA	Prep	200.8			612445	MSM	EET DEN	05/16/23 15:02
Total/NA	Analysis	200.7 Rev 4.4		1	613748	ADL	EET DEN	05/24/23 15:41
Total Recoverable	Prep	200.8			612445	MSM	EET DEN	05/16/23 15:02
Total Recoverable	Analysis	200.8		1	613485	LMT	EET DEN	05/22/23 18:52
Total/NA	Prep	245.1			300116	SRR	EET PHX	05/11/23 15:51
Total/NA	Analysis	245.1		1	300134	SRR	EET PHX	05/11/23 20:33
Total/NA	Analysis	SM 2540C		1	300366	SMA	EET PHX	05/16/23 15:59 - 05/19/23 16:00 [1]
Total/NA	Analysis	SM 4500 H+ B		1	300503	MAN	EET PHX	05/17/23 15:56

Client Sample ID: FC-CCR-MW72-0523

Lab Sample ID: 550-202031-5
Date Collected: 05/09/23 18:14
Matrix: Water
Date Received: 05/10/23 17:07

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		5	301617	RDC	EET PHX	06/02/23 23:39
Total/NA	Analysis	300.0		5	301617	RDC	EET PHX	06/03/23 01:47
Total/NA	Analysis	300.0		500	301617	RDC	EET PHX	06/03/23 02:06
Total/NA	Prep	200.7			300305	SGO	EET PHX	05/16/23 06:17
Total/NA	Analysis	200.7 Rev 4.4		1	302083	GLW	EET PHX	06/09/23 21:00
Total/NA	Prep	200.7			300305	SGO	EET PHX	05/16/23 06:17
Total/NA	Analysis	200.7 Rev 4.4		5	302156	GLW	EET PHX	06/12/23 20:05

Client Sample ID: FC-CCR-MW72-0523

Lab Sample ID: 550-202031-5

Date Collected: 05/09/23 18:14
Matrix: Water
Date Received: 05/10/23 17:07

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	200.8			612445	MSM	EET DEN	05/16/23 15:02
Total/NA	Analysis	200.7 Rev 4.4		1	613748	ADL	EET DEN	05/24/23 15:46
Total Recoverable	Prep	200.8			612445	MSM	EET DEN	05/16/23 15:02
Total Recoverable	Analysis	200.8		1	613485	LMT	EET DEN	05/22/23 18:54
Total/NA	Prep	245.1			300116	SRR	EET PHX	05/11/23 15:51
Total/NA	Analysis	245.1		1	300134	SRR	EET PHX	05/11/23 20:35
Total/NA	Analysis	SM 2540C		1	300366	SMA	EET PHX	05/16/23 15:59 - 05/19/23 16:00 [1]
Total/NA	Analysis	SM 4500 H+ B		1	300503	MAN	EET PHX	05/17/23 15:58

Client Sample ID: FC-CCR-MW84-0523

Lab Sample ID: 550-202031-6

Date Collected: 05/09/23 12:39
Matrix: Water
Date Received: 05/10/23 17:07

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		5	301617	RDC	EET PHX	06/03/23 02:24
Total/NA	Analysis	300.0		500	301617	RDC	EET PHX	06/03/23 02:43
Total/NA	Prep	200.7			300305	SGO	EET PHX	05/16/23 06:17
Total/NA	Analysis	200.7 Rev 4.4		1	302083	GLW	EET PHX	06/09/23 21:03
Total/NA	Prep	200.7			300305	SGO	EET PHX	05/16/23 06:17
Total/NA	Analysis	200.7 Rev 4.4		1	302156	GLW	EET PHX	06/12/23 20:08
Total/NA	Prep	200.8			612445	MSM	EET DEN	05/16/23 15:02
Total/NA	Analysis	200.7 Rev 4.4		1	613748	ADL	EET DEN	05/24/23 15:50
Total Recoverable	Prep	200.8			612445	MSM	EET DEN	05/16/23 15:02
Total Recoverable	Analysis	200.8		1	613485	LMT	EET DEN	05/22/23 19:00
Total/NA	Prep	245.1			300116	SRR	EET PHX	05/11/23 15:51
Total/NA	Analysis	245.1		1	300134	SRR	EET PHX	05/11/23 20:37
Total/NA	Analysis	SM 2540C		1	300354	SMA	EET PHX	05/16/23 14:06 - 05/18/23 13:00 [1]
Total/NA	Analysis	SM 4500 H+ B		1	300503	MAN	EET PHX	05/17/23 15:59

Client Sample ID: FC-CCR-MW85-0523

Lab Sample ID: 550-202031-7

Date Collected: 05/09/23 14:13
Matrix: Water
Date Received: 05/10/23 17:07

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		5	301617	RDC	EET PHX	06/03/23 03:01
Total/NA	Analysis	300.0		500	301617	RDC	EET PHX	06/03/23 03:19
Total/NA	Analysis	300.0		20	301658	RDC	EET PHX	06/03/23 21:44
Total/NA	Prep	200.7			300305	SGO	EET PHX	05/16/23 06:17
Total/NA	Analysis	200.7 Rev 4.4		1	302083	GLW	EET PHX	06/09/23 21:06
Total/NA	Prep	200.7			300305	SGO	EET PHX	05/16/23 06:17
Total/NA	Analysis	200.7 Rev 4.4		1	302156	GLW	EET PHX	06/12/23 20:11
Total/NA	Prep	200.8			612445	MSM	EET DEN	05/16/23 15:02
Total/NA	Analysis	200.7 Rev 4.4		1	613748	ADL	EET DEN	05/24/23 15:55

Lab Chronicle

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-202031-1
SDG: APS Four Corners Power Plant (URS)

Client Sample ID: FC-CCR-MW85-0523

Lab Sample ID: 550-202031-7

Date Collected: 05/09/23 14:13
Matrix: Water
Date Received: 05/10/23 17:07

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.8			612445	MSM	EET DEN	05/16/23 15:02
Total Recoverable	Analysis	200.8		1	613485	LMT	EET DEN	05/22/23 19:01
Total/NA	Prep	245.1			300116	SRR	EET PHX	05/11/23 15:51
Total/NA	Analysis	245.1		1	300134	SRR	EET PHX	05/11/23 20:45
Total/NA	Analysis	SM 2540C		1	300354	SMA	EET PHX	05/16/23 14:06 - 05/18/23 13:00 [1]
Total/NA	Analysis	SM 4500 H+ B		1	300503	MAN	EET PHX	05/17/23 16:00

Client Sample ID: FC-CCR-CM01-0523

Lab Sample ID: 550-202031-8

Date Collected: 05/09/23 11:43
Matrix: Water
Date Received: 05/10/23 17:07

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		50	301617	RDC	EET PHX	06/03/23 03:38
Total/NA	Analysis	300.0		500	301617	RDC	EET PHX	06/03/23 03:56
Total/NA	Prep	200.7			300305	SGO	EET PHX	05/16/23 06:17
Total/NA	Analysis	200.7 Rev 4.4		1	302083	GLW	EET PHX	06/09/23 21:09
Total/NA	Prep	200.7			300305	SGO	EET PHX	05/16/23 06:17
Total/NA	Analysis	200.7 Rev 4.4		5	302156	GLW	EET PHX	06/12/23 20:14
Total/NA	Prep	200.8			612445	MSM	EET DEN	05/16/23 15:02
Total/NA	Analysis	200.7 Rev 4.4		1	613748	ADL	EET DEN	05/24/23 15:59
Total Recoverable	Prep	200.8			612445	MSM	EET DEN	05/16/23 15:02
Total Recoverable	Analysis	200.8		1	613485	LMT	EET DEN	05/22/23 19:03
Total/NA	Prep	245.1			300116	SRR	EET PHX	05/11/23 15:51
Total/NA	Analysis	245.1		1	300134	SRR	EET PHX	05/11/23 20:47
Total/NA	Analysis	SM 2540C		1	300354	SMA	EET PHX	05/16/23 14:06 - 05/18/23 13:00 [1]
Total/NA	Analysis	SM 4500 H+ B		1	300503	MAN	EET PHX	05/17/23 16:01

Client Sample ID: FC-CCR-CM02-0523

Lab Sample ID: 550-202031-9

Date Collected: 05/09/23 11:48
Matrix: Water
Date Received: 05/10/23 17:07

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		5	301617	RDC	EET PHX	06/03/23 05:10
Total/NA	Analysis	300.0		500	301617	RDC	EET PHX	06/03/23 05:28
Total/NA	Prep	200.7			300305	SGO	EET PHX	05/16/23 06:17
Total/NA	Analysis	200.7 Rev 4.4		1	302083	GLW	EET PHX	06/09/23 21:11
Total/NA	Prep	200.7			300305	SGO	EET PHX	05/16/23 06:17
Total/NA	Analysis	200.7 Rev 4.4		5	302156	GLW	EET PHX	06/12/23 20:17
Total/NA	Prep	200.8			612445	MSM	EET DEN	05/16/23 15:02
Total/NA	Analysis	200.7 Rev 4.4		1	613748	ADL	EET DEN	05/24/23 16:03
Total Recoverable	Prep	200.8			612445	MSM	EET DEN	05/16/23 15:02
Total Recoverable	Analysis	200.8		1	613485	LMT	EET DEN	05/22/23 19:05
Total/NA	Prep	245.1			300116	SRR	EET PHX	05/11/23 15:51
Total/NA	Analysis	245.1		1	300134	SRR	EET PHX	05/11/23 20:49

Lab Chronicle

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-202031-1
SDG: APS Four Corners Power Plant (URS)

Client Sample ID: FC-CCR-CM02-0523

Lab Sample ID: 550-202031-9

Date Collected: 05/09/23 11:48
Matrix: Water
Date Received: 05/10/23 17:07

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	SM 2540C		1	300354	SMA	EET PHX	05/16/23 14:06 - 05/18/23 13:00 [1]
Total/NA	Analysis	SM 4500 H+ B		1	300503	MAN	EET PHX	05/17/23 16:03

Client Sample ID: FC-CCR-FD01-0523

Lab Sample ID: 550-202031-10

Date Collected: 05/09/23 16:20
Matrix: Water
Date Received: 05/10/23 17:07

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		5	301617	RDC	EET PHX	06/03/23 05:47
Total/NA	Analysis	300.0		500	301617	RDC	EET PHX	06/03/23 06:05
Total/NA	Prep	200.7			300305	SGO	EET PHX	05/16/23 06:17
Total/NA	Analysis	200.7 Rev 4.4		1	302083	GLW	EET PHX	06/09/23 21:14
Total/NA	Prep	200.7			300305	SGO	EET PHX	05/16/23 06:17
Total/NA	Analysis	200.7 Rev 4.4		1	302156	GLW	EET PHX	06/12/23 20:20
Total/NA	Prep	200.8			612445	MSM	EET DEN	05/16/23 15:02
Total/NA	Analysis	200.7 Rev 4.4		1	613748	ADL	EET DEN	05/24/23 16:08
Total Recoverable	Prep	200.8			612445	MSM	EET DEN	05/16/23 15:02
Total Recoverable	Analysis	200.8		1	613485	LMT	EET DEN	05/22/23 19:07
Total/NA	Prep	245.1			300116	SRR	EET PHX	05/11/23 15:51
Total/NA	Analysis	245.1		1	300134	SRR	EET PHX	05/11/23 20:51
Total/NA	Analysis	SM 2540C		1	300354	SMA	EET PHX	05/16/23 14:06 - 05/18/23 13:00 [1]
Total/NA	Analysis	SM 4500 H+ B		1	300503	MAN	EET PHX	05/17/23 16:04

[1] This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

EET PHX = Eurofins Phoenix, 4625 East Cotton Center Boulevard, Suite #189, Phoenix, AZ 85040, TEL (602)437-3340

Accreditation/Certification Summary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-202031-1
SDG: APS Four Corners Power Plant (URS)

Laboratory: Eurofins Phoenix

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Arizona	State	AZ0728	06-10-24

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
SM 4500 H+ B		Water	Temperature

Laboratory: Eurofins Denver

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arizona	State	AZ0713	12-20-24

Method Summary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-202031-1
SDG: APS Four Corners Power Plant (URS)

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	EPA	EET PHX
200.7 Rev 4.4	Metals (ICP)	EPA	EET DEN
200.7 Rev 4.4	Metals (ICP)	EPA	EET PHX
200.8	Metals (ICP/MS)	EPA	EET DEN
245.1	Mercury (CVAA)	EPA	EET PHX
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET PHX
SM 4500 H+ B	pH	SM	EET PHX
200.7	Preparation, Total Metals	EPA	EET DEN
200.7	Preparation, Total Metals	EPA	EET PHX
200.8	Preparation, Total Recoverable Metals	EPA	EET DEN
245.1	Preparation, Mercury	EPA	EET PHX

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

EET PHX = Eurofins Phoenix, 4625 East Cotton Center Boulevard, Suite #189, Phoenix, AZ 85040, TEL (602)437-3340

TestAmerica Phoenix
4625 E Cotton Center Blvd
Suite 189
Phoenix, AZ 85040
phone 602.437.3340 fax 602.454.9303

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

202031

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☑ Other: CCR

TestAmerica Laboratories, Inc.

6/14/2023

Client Contact	Natalie Chrisman	Pam Norris (505-598-8781)	Date:	COC No:
Arizona Public Service	602-250-3608	Lab Contact: Rachel Sester	Carrier:	1 of 1 COCs
PO Box 355, MS 4915	Analysis Turnaround Time			Sampler:
Fruitland, NM 87416	☐ CALENDAR DAYS ☑ WORKING DAYS			For Lab Use Only:
	TAT if different from Below ____			Walk-in Client:
	☑ 2 weeks			
Project Name: CCR Groundwater Monitoring	☐ 1 week			550-202031 Chain of Custody
Site: APS Four Corners Power Plant (URS)	☐ 2 days			
PO #: 300592358	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	EPA 300.0 (Cl, F, SO4)	EPA 200.7 - Totals (B, Ca, Be)	EPA 200.7 - Total Lithium	EPA 200.8 - Totals (Sb, As, Ba, Cd, Co, Cr, Pb, Mo, Se, Tl)	SM 4500-HB (pH)	SM 2540C (TDS)	EPA 245.1 - Totals (Hg)			Sample Specific Notes:
FC-CCR-MW67-0523	5/9/2023	1325	G	W	3	N	N	X	X	X	X	X	X	X		-01	Low Flow
FC-CCR-MW68-0523	5/9/2023	1049	G	W	3	N	N	X	X	X	X	X	X	X		-02	"
FC-CCR-MW69-0523	5/9/2023	1007	G	W	3	N	N	X	X	X	X	X	X	X		-03	"
FC-CCR-MW71-0523	5/8/2023	1913	G	W	3	N	N	X	X	X	X	X	X	X		-04	"
FC-CCR-MW72-0523	5/8/2023	1814	G	W	3	N	N	X	X	X	X	X	X	X		-05	"
FC-CCR-MW84-0523	5/9/2023	1239	G	W	3	N	N	X	X	X	X	X	X	X		-06	"
FC-CCR-MW85-0523	5/9/2023	1413	G	W	3	N	N	X	X	X	X	X	X	X		-07	"
FC-CCR-CM01-0523	5/9/2023	1143	G	W	3	N	N	X	X	X	X	X	X	X		-08	Grab Sample
FC-CCR-CM02-0523	5/9/2023	1148	G	W	3	N	N	X	X	X	X	X	X	X		-09	"
FC-CCR-FD01-0523	5/9/2023	1620	G	W	3	N	N	X	X	X	X	X	X	X		-10	Low Flow
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other ____								1	4	4	4	1	1	4			

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☑ Disposal by Lab ☐ Archive for ____ Months

Special Instructions/QC Requirements & Comments:

Method 200.8 with collision cell

3.3/1.6°

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:	Cooler Temp. (°C): Obs'd: ____ Corr'd: ____ Therm ID No.: ____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	WSP	5/10/23 17:07			
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company: EETA PHX	Date/Time: 5/10/23 17:07

COO

Eurofins Phoenix
4625 East Cotton Center Boulevard Suite #189
Phoenix, AZ 85040
Phone: 602-437-3340

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Roberts, Danielle C	Carrier Tracking No(s):	COC No: 550-36826.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Danielle.Roberts@et.eurofinsus.com	State of Origin: Arizona	Page: Page 1 of 2
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - Arizona; State Program - Arizona		Job #: 550-202031-1
Address: 4955 Yarrow Street, ,	Due Date Requested: 5/23/2023			
City: Arvada	TAT Requested (days):			
State, Zip: CO, 80002				
Phone: 303-736-0100(Tel) 303-431-7171(Fax)	PO #:			
Email:	WO #:			
Project Name: CCR Groundwater Monitoring	Project #: 55009706			
Site: Arizona Public Service	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	200.7/200.7_P_TOT Lithium-ICP	200.8/200.8_P_TR Sb, As, Ba, Cd, Co, Cr, Pb, Mo, Se, Tl	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
FC-CCR-MW67-0523 (550-202031-1)	5/9/23	13:25 Arizona		Water			X	X	1	AZ Sample, Collision Cell
FC-CCR-MW68-0523 (550-202031-2)	5/9/23	10:49 Arizona		Water			X	X	1	AZ Sample, Collision Cell
FC-CCR-MW69-0523 (550-202031-3)	5/9/23	10:07 Arizona		Water			X	X	1	AZ Sample, Collision Cell
FC-CCR-MW71-0523 (550-202031-4)	5/9/23	19:13 Arizona		Water			X	X	1	AZ Sample, Collision Cell
FC-CCR-MW72-0523 (550-202031-5)	5/9/23	18:14 Arizona		Water			X	X	1	AZ Sample, Collision Cell
FC-CCR-MW84-0523 (550-202031-6)	5/9/23	12:39 Arizona		Water			X	X	1	AZ Sample, Collision Cell
FC-CCR-MW85-0523 (550-202031-7)	5/9/23	14:13 Arizona		Water			X	X	1	AZ Sample, Collision Cell
FC-CCR-CM01-0523 (550-202031-8)	5/9/23	11:43 Arizona		Water			X	X	1	AZ Sample, Collision Cell
FC-CCR-CM02-0523 (550-202031-9)	5/9/23	11:48 Arizona		Water			X	X	1	AZ Sample, Collision Cell

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Southwest, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Southwest, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Southwest, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Southwest, LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	5/11/23 16:10	ETA PHX			
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 5/10/23 1610	Company ETAPHX
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 13.1 IR4 CF0.1

Ver: 06/08/2021

Eurofins Phoenix
4625 East Cotton Center Boulevard Suite #189
Phoenix, AZ 85040
Phone: 602-437-3340

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Roberts, Danielle C	Carrier Tracking No(s):	COC No: 550-36826.2
Client Contact: Shipping/Receiving	Phone:	E-Mail: Danielle.Roberts@et.eurofinsus.com	State of Origin: Arizona	Page: Page 2 of 2
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - Arizona; State Program - Arizona		Job #: 550-202031-1
Address: 4955 Yarrow Street, ,	Due Date Requested: 5/23/2023			
City: Arvada	TAT Requested (days):			
State, Zip: CO, 80002				
Phone: 303-736-0100(Tel) 303-431-7171(Fax)	PO #:			
Email:	WO #:			
Project Name: CCR Groundwater Monitoring	Project #: 55009706			
Site: Arizona Public Service	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
E - NaHSO4
F - MeOH
G - Amchlor
H - Ascorbic Acid
I - Ice
J - DI Water
K - EDTA
L - EDA
M - Hexane
N - None
O - AsNaO2
P - Na2O4S
Q - Na2SO3
R - Na2S2O3
S - H2SO4
T - TSP Dodecahydrate
U - Acetone
V - MCAA
W - pH 4-5
Y - Trizma
Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	200.7/200.7_P_TOT Lithium-ICP	200.8/200.8_P_TR Sb, As, Ba, Cd, Co, Cr, Pb, Mo, Se, Tl	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
FC-CCR-FD01-0523 (550-202031-10)	5/9/23	16:20 Arizona		Water			X	X	1	AZ Sample, Collision Cell

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Southwest, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Southwest, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Southwest, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Southwest, LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by	Date/Time:	Company	Received by:	Date/Time:	Company
	5/11/23 16:00	FEDEX PHX	FedEx		
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
				5/13/23 0:10	EXAM
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 13.1 IR14 CF0.1

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Arizona Public Service Company

Job Number: 550-202031-1
SDG Number: APS Four Corners Power Plant (URS)

Login Number: 202031
List Number: 1
Creator: Gravlin, Andrea

List Source: Eurofins Phoenix

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	False	Check done at department level as required.

Login Sample Receipt Checklist

Client: Arizona Public Service Company

Job Number: 550-202031-1
SDG Number: APS Four Corners Power Plant (URS)

Login Number: 202031
List Number: 2
Creator: Rystrom, Joshua R

List Source: Eurofins Denver
List Creation: 05/13/23 09:52 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	False	Thermal preservation not required.
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Radiation Safety Engineering, Inc.

3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121 (480) 897-9459
Website: www.radsafe.com FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Arizona Public Service
400 N. 5th Street
Phoenix, AZ 85004

Sampling Date: June 27, 2023
Sample Received: June 29, 2023
Analysis Completed: July 12, 2023

Sample ID	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
FC-CCR-MW71-0623	< 0.4	2.2 ± 0.3	2.2 ± 0.3
Date of Analysis	6/30/2023	6/30/2023	6/30/2023

Alex Myers, Ph.D. 7/10/2023
Date

Laboratory License Number AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

June 27, 2023 (Sample Date) 18:34 (Sample Time) (24 hour clock)

_____ Owner/Contact Person

_____ Owner/Contact Fax Number

_____ Owner/Contact Phone Number

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring — Date Q1 collected: _____

☐ Quarterly — Date Q2 collected: _____

☐ Composite of four quarterly samples — Date Q3 collected: _____

Date Q4 collected: _____

*****RADIOCHEMICAL ANALYSIS*****

>>>To be filled out by laboratory personnel<<<

*****Combined Uranium must be reported in micrograms per liter*****

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result		Exceed MCL
	15 pCi/L		Adjusted Gross Alpha	4000				
600/00-02		3 pCi/L	Gross Alpha	4002				
7500 - Rn			Radon	4004				
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L	
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	6/30/2023	2.2 ± 0.3		
GammaRay HPGE		1 pCi/L	Radium 226	4020	6/30/2023	< 0.4		
		1 pCi/L	Radium 228	4030	6/30/2023	2.2 ± 0.3		

*****LABORATORY INFORMATION*****

>>>To be filled out by laboratory personnel<<<

Specimen Number: RSE72135

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: FC-CCR-MW71-0623

Authorized Signature: _____

Date Public Water System Notified: _____

DWAR 6: 11/2007

Radiation Safety Engineering, Inc.

3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121 (480) 897-9459
Website: www.radsafe.com FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Arizona Public Service
400 N. 5th Street
Phoenix, AZ 85004

Sampling Date: June 27, 2023
Sample Received: June 29, 2023
Analysis Completed: July 12, 2023

Sample ID	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
FC-CCR-MW72-0623	0.5 ± 0.2	1.4 ± 0.3	1.9 ± 0.4

Date of Analysis	6/30/2023	6/30/2023	6/30/2023

7/10/2023

Alex Myers, Ph.D. Date

Laboratory License Number AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

June 27, 2023 (Sample Date) 17:31 (Sample Time) (24 hour clock) _____ Owner/Contact Person

_____ Owner/Contact Fax Number _____ Owner/Contact Phone Number

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring Date Q1 collected: _____

☐ Quarterly Date Q2 collected: _____

☐ Composite of four quarterly samples Date Q3 collected: _____

Date Q4 collected: _____

*****RADIOCHEMICAL ANALYSIS*****

>>>To be filled out by laboratory personnel<<<

*****Combined Uranium must be reported in micrograms per liter*****

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result		Exceed MCL
	15 pCi/L		Adjusted Gross Alpha	4000				
600/00-02		3 pCi/L	Gross Alpha	4002				
7500 - Rn			Radon	4004				
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L	
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	6/30/2023	1.9 ± 0.4		
GammaRay HPGE		1 pCi/L	Radium 226	4020	6/30/2023	0.5 ± 0.2		
		1 pCi/L	Radium 228	4030	6/30/2023	1.4 ± 0.3		

*****LABORATORY INFORMATION*****

>>>To be filled out by laboratory personnel<<<

Specimen Number: RSE72136

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: FC-CCR-MW72-0623

Authorized Signature: _____

Date Public Water System Notified: _____

DWAR 6: 11/2007

Radiation Safety Engineering, Inc.

3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121
Website: www.radsafe.com

(480) 897-9459
FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Arizona Public Service
400 N. 5th Street
Phoenix, AZ 85004

Sampling Date: June 27, 2023
Sample Received: June 29, 2023
Analysis Completed: July 12, 2023

Sample ID	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
FC-CCR-MW73-0623	1.5 ± 0.2	1.7 ± 0.3	3.2 ± 0.4

Date of Analysis	6/30/2023	6/30/2023	6/30/2023

Alex Myers, Ph.D. 7/10/2023
Date

Laboratory License Number AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

June 27, 2023 (Sample Date) 16:23 (Sample Time) (24 hour clock) _____ Owner/Contact Person

_____ Owner/Contact Fax Number _____ Owner/Contact Phone Number

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring Date Q1 collected: _____

☐ Quarterly Date Q2 collected: _____

☐ Composite of four quarterly samples Date Q3 collected: _____

Date Q4 collected: _____

*****RADIOCHEMICAL ANALYSIS*****

>>>To be filled out by laboratory personnel<<<

*****Combined Uranium must be reported in micrograms per liter*****

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result		Exceed MCL
	15 pCi/L		Adjusted Gross Alpha	4000				
600/00-02		3 pCi/L	Gross Alpha	4002				
7500 - Rn			Radon	4004				
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L	
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	6/30/2023	3.2 ± 0.4		
GammaRay HPGE		1 pCi/L	Radium 226	4020	6/30/2023	1.5 ± 0.2		
		1 pCi/L	Radium 228	4030	6/30/2023	1.7 ± 0.3		

*****LABORATORY INFORMATION*****

>>>To be filled out by laboratory personnel<<<

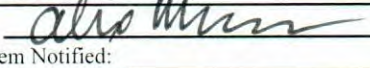
Specimen Number: RSE72137

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: FC-CCR-MW73-0623

Authorized Signature: 

Date Public Water System Notified: _____

DWAR 6: 11/2007

Client Information	
Name:	Natalie Chrisman/602-250-3608 Pam Norris/505-598-8781
Company	Arizona Public Service
Address	PO Box 355, MS 4915 Fruitland, NM 87416
Phone	
Site	APS Four Corners Power Plant (URS)

Radiation Safety Engineering, Inc.
3245 North Washington Street, Chandler, Arizona 85225
Analysis Request

Sample ID & Location (DWR#)	Collection Date	Collection Time	Media (DW* WW* Other)	Drinking Water Compliance	Gross Alpha	Gross Beta	Total Uranium	Isotopic Uranium	Ra-226	Ra-228	Ra-226 + Ra-228, Combined	H-3	Gamma Spectroscopy	Sr-89/Sr-90	Radon in Water	Radon in Air
FC-CCR-MW71-~~0523~~0623	6/27/2023	1834	GW						X	X	X					
FC-CCR-MW72-~~0523~~0623	6/27/2023	1731	GW						X	X	X					
FC-CCR-MW73-~~0523~~0623	6/27/2023	1623	GW						X	X	X					

Sample Receipt	
Total No. of Containers	
Chain of Custody Seals	
Container Condition	
Lab No.	

Invoice to:
PO#: 300592346

Instructions/Comments
Method HPGe

Relinquished By: [illegible]	Company: WSP	Date/time: 6-24-23 1108	Received By: [illegible]		Company: RSE	Date/time: 6-29-23 11:08
Relinquished By:	Company:	Date/time:	Received By:		Company:	Date/time:
Relinquished By:	Company:	Date/time:	Received By:		Company:	Date/time:

* DW = Drinking Water, WW = Waste Water, GW = Groundwater.

w/client/forms/cofc.frm

Radiation Safety Engineering, Inc.
3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121
Website: www.radsafe.com
(480) 897-9459
FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Arizona Public Service
400 N. 5th Street
Phoenix, AZ 85004

Sampling Date: June 28, 2023
Sample Received: June 29, 2023
Analysis Completed: July 12, 2023

Sample ID	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
FC-CCR-MW62-0623	< 0.4	0.9 ± 0.3	0.9 ± 0.3
Date of Analysis	6/30/2023	6/30/2023	6/30/2023

Alex Myers, Ph.D. 7/11/2023
Date

Laboratory License Number AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

June 28, 2023 (Sample Date) 11:55 (Sample Time) (24 hour clock) _____ Owner/Contact Person

_____ Owner/Contact Fax Number _____ Owner/Contact Phone Number

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring Date Q1 collected: _____

☐ Quarterly Date Q2 collected: _____

☐ Composite of four quarterly samples Date Q3 collected: _____

Date Q4 collected: _____

*****RADIOCHEMICAL ANALYSIS*****

>>>To be filled out by laboratory personnel<<<

*****Combined Uranium must be reported in micrograms per liter*****

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result		Exceed MCL
	15 pCi/L		Adjusted Gross Alpha	4000				
600/00-02		3 pCi/L	Gross Alpha	4002				
7500 - Rn			Radon	4004				
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L	
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	6/30/2023	0.9 ± 0.3		
GammaRay HPGE		1 pCi/L	Radium 226	4020	6/30/2023	< 0.4		
		1 pCi/L	Radium 228	4030	6/30/2023	0.9 ± 0.3		

*****LABORATORY INFORMATION*****

>>>To be filled out by laboratory personnel<<<

Specimen Number: RSE72138

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: FC-CCR-MW62-0623

Authorized Signature: _____

Date Public Water System Notified: _____

DWAR 6: 11/2007

Radiation Safety Engineering, Inc.
3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121
Website: www.radsafe.com
(480) 897-9459
FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Arizona Public Service
400 N. 5th Street
Phoenix, AZ 85004

Sampling Date: June 27, 2023
Sample Received: June 29, 2023
Analysis Completed: July 12, 2023

Sample ID	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
FC-CCR-MW63-0623	< 0.4	< 0.6	< 0.6

Date of Analysis	6/30/2023	6/30/2023	6/30/2023

Alex Myers, Ph.D. 7/11/2023
Date

Laboratory License Number AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

June 27, 2023 (Sample Date) 14:41 (Sample Time) (24 hour clock)

_____ Owner/Contact Person

_____ Owner/Contact Fax Number

_____ Owner/Contact Phone Number

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring — Date Q1 collected: _____

☐ Quarterly — Date Q2 collected: _____

☐ Composite of four quarterly samples — Date Q3 collected: _____

Date Q4 collected: _____

*****RADIOCHEMICAL ANALYSIS*****

>>>To be filled out by laboratory personnel<<<

*****Combined Uranium must be reported in micrograms per liter*****

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result		Exceed MCL
	15 pCi/L		Adjusted Gross Alpha	4000				
600/00-02		3 pCi/L	Gross Alpha	4002				
7500 - Rn			Radon	4004				
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L	
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	6/30/2023	< 0.6		
GammaRay HPGE		1 pCi/L	Radium 226	4020	6/30/2023	< 0.4		
		1 pCi/L	Radium 228	4030	6/30/2023	< 0.6		

*****LABORATORY INFORMATION*****

>>>To be filled out by laboratory personnel<<<

Specimen Number: RSE72139

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: FC-CCR-MW62-0623

Authorized Signature: _____

Date Public Water System Notified: _____

DWAR 6: 11/2007

Radiation Safety Engineering, Inc.

3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121
Website: www.radsafe.com

(480) 897-9459
FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Arizona Public Service
400 N. 5th Street
Phoenix, AZ 85004

Sampling Date: June 27, 2023
Sample Received: June 29, 2023
Analysis Completed: July 12, 2023

Sample ID	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
FC-CCR-MW64-0623	0.5 ± 0.2	1.2 ± 0.3	1.7 ± 0.4
Date of Analysis	6/30/2023	6/30/2023	6/30/2023

Alex Myers, Ph.D. 7/11/2023
Date

Laboratory License Number AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

June 27, 2023 (Sample Date) 12:33 (Sample Time) (24 hour clock)

_____ Owner/Contact Person

_____ Owner/Contact Fax Number

_____ Owner/Contact Phone Number

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring — Date Q1 collected: _____

☐ Quarterly — Date Q2 collected: _____

☐ Composite of four quarterly samples — Date Q3 collected: _____

Date Q4 collected: _____

RADIOCHEMICAL ANALYSIS

>>>To be filled out by laboratory personnel<<<

*****Combined Uranium must be reported in micrograms per liter*****

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result		Exceed MCL
	15 pCi/L		Adjusted Gross Alpha	4000				
600/00-02		3 pCi/L	Gross Alpha	4002				
7500 - Rn			Radon	4004				
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L	
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	6/30/2023	1.7 ± 0.4		
GammaRay HPGE		1 pCi/L	Radium 226	4020	6/30/2023	0.5 ± 0.2		
		1 pCi/L	Radium 228	4030	6/30/2023	1.2 ± 0.3		

LABORATORY INFORMATION

>>>To be filled out by laboratory personnel<<<

Specimen Number: RSE72140

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: FC-CCR-MW64-0623

Authorized Signature: _____

Date Public Water System Notified: _____

DWAR 6: 11/2007

Radiation Safety Engineering, Inc.

3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121
Website: www.radsafe.com

(480) 897-9459
FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Arizona Public Service
400 N. 5th Street
Phoenix, AZ 85004

Sampling Date: June 28, 2023
Sample Received: June 29, 2023
Analysis Completed: July 12, 2023

Sample ID	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
FC-CCR-MW65-0623	< 0.4	0.7 ± 0.3	0.7 ± 0.3
Date of Analysis	6/30/2023	6/30/2023	6/30/2023

7/11/2023

Alex Myers, Ph.D. Date

Laboratory License Number AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

June 28, 2023 (Sample Date) 13:01 (Sample Time) (24 hour clock) _____ Owner/Contact Person

_____ Owner/Contact Fax Number _____ Owner/Contact Phone Number

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring Date Q1 collected: _____

☐ Quarterly Date Q2 collected: _____

☐ Composite of four quarterly samples Date Q3 collected: _____

Date Q4 collected: _____

*****RADIOCHEMICAL ANALYSIS*****

>>>To be filled out by laboratory personnel<<<

*****Combined Uranium must be reported in micrograms per liter*****

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result		Exceed MCL
	15 pCi/L		Adjusted Gross Alpha	4000				
600/00-02		3 pCi/L	Gross Alpha	4002				
7500 - Rn			Radon	4004				
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L	
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	6/30/2023	0.7 ± 0.3		
GammaRay HPGE		1 pCi/L	Radium 226	4020	6/30/2023	< 0.4		
		1 pCi/L	Radium 228	4030	6/30/2023	0.7 ± 0.3		

*****LABORATORY INFORMATION*****

>>>To be filled out by laboratory personnel<<<

Specimen Number: RSE72141

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: FC-CCR-MW05-0623

Authorized Signature: _____

Date Public Water System Notified: _____

DWAR 6: 11/2007

Radiation Safety Engineering, Inc.

3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121
Website: www.radsafe.com

(480) 897-9459
FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Arizona Public Service
400 N. 5th Street
Phoenix, AZ 85004

Sampling Date: June 28, 2023
Sample Received: June 29, 2023
Analysis Completed: July 12, 2023

Sample ID	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
FC-CCR-SW1-0623	< 0.4	< 0.6	< 0.6
Date of Analysis	6/30/2023	6/30/2023	6/30/2023

7/11/2023

Alex Myers, Ph.D. Date

Laboratory License Number AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

June 28, 2023 (Sample Date) 10:08 (Sample Time) (24 hour clock) _____ (Owner/Contact Person)

_____ (Owner/Contact Fax Number) _____ (Owner/Contact Phone Number)

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring — Date Q1 collected: _____

☐ Quarterly — Date Q2 collected: _____

☐ Composite of four quarterly samples — Date Q3 collected: _____

Date Q4 collected: _____

*****RADIOCHEMICAL ANALYSIS*****

>>>To be filled out by laboratory personnel<<<

*****Combined Uranium must be reported in micrograms per liter*****

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result		Exceed MCL
	15 pCi/L		Adjusted Gross Alpha	4000				
600/00-02		3 pCi/L	Gross Alpha	4002				
7500 - Rn			Radon	4004				
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L	
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	6/30/2023	< 0.6		
GammaRay HPGE		1 pCi/L	Radium 226	4020	6/30/2023	< 0.4		
		1 pCi/L	Radium 228	4030	6/30/2023	< 0.6		

*****LABORATORY INFORMATION*****

>>>To be filled out by laboratory personnel<<<

Specimen Number: RSE72142

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: FC-CCR-SW1-0623

Authorized Signature: _____

Date Public Water System Notified: _____

DWAR 6: 11/2007

Radiation Safety Engineering, Inc.

3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121 (480) 897-9459
Website: www.radsafe.com FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Arizona Public Service
400 N. 5th Street
Phoenix, AZ 85004

Sampling Date: June 27, 2023
Sample Received: June 22, 2023
Analysis Completed: July 12, 2023

Sample ID	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
FC-CCR-SW2-0623	< 0.4	1.7 ± 0.4	1.7 ± 0.4

Date of Analysis	6/30/2023	6/30/2023	6/30/2023

Alex Myers, Ph.D. 7/11/2023
Date

Laboratory License Number AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

June 27, 2023 (Sample Date) 13:17 (24 hour clock) (Sample Time) _____ Owner/Contact Person

_____ Owner/Contact Fax Number _____ Owner/Contact Phone Number

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring Date Q1 collected: _____

☐ Quarterly Date Q2 collected: _____

☐ Composite of four quarterly samples Date Q3 collected: _____

Date Q4 collected: _____

RADIOCHEMICAL ANALYSIS

>>>To be filled out by laboratory personnel<<<

*****Combined Uranium must be reported in micrograms per liter*****

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result		Exceed MCL
	15 pCi/L		Adjusted Gross Alpha	4000				
600/00-02		3 pCi/L	Gross Alpha	4002				
7500 - Rn			Radon	4004				
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L	
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	6/30/2023	1.7 ± 0.4		
GammaRay HPGE		1 pCi/L	Radium 226	4020	6/30/2023	< 0.4		
		1 pCi/L	Radium 228	4030	6/30/2023	1.7 ± 0.4		

LABORATORY INFORMATION

>>>To be filled out by laboratory personnel<<<

Specimen Number: RSE72143

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: FC-CCR-SW2-0623

Authorized Signature: _____

Date Public Water System Notified: _____

DWAR 6: 11/2007

Radiation Safety Engineering, Inc.

3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121 (480) 897-9459
Website: www.radsafe.com FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Arizona Public Service
400 N. 5th Street
Phoenix, AZ 85004

Sampling Date: June 27, 2023
Sample Received: June 29, 2023
Analysis Completed: July 12, 2023

Sample ID	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
FC-CCR-SW3-0623	0.6 ± 0.2	< 0.6	0.6 ± 0.2

Date of Analysis	6/30/2023	6/30/2023	6/30/2023

7/11/2023

Alex Myers, Ph.D. Date

Laboratory License Number AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

June 27, 2023 (Sample Date) 13:31 (Sample Time) (24 hour clock) _____ (Owner/Contact Person)

_____ (Owner/Contact Fax Number) _____ (Owner/Contact Phone Number)

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring — Date Q1 collected: _____

☐ Quarterly — Date Q2 collected: _____

☐ Composite of four quarterly samples — Date Q3 collected: _____

Date Q4 collected: _____

*****RADIOCHEMICAL ANALYSIS*****

>>>To be filled out by laboratory personnel<<<

*****Combined Uranium must be reported in micrograms per liter*****

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result		Exceed MCL
	15 pCi/L		Adjusted Gross Alpha	4000				
600/00-02		3 pCi/L	Gross Alpha	4002				
7500 - Rn			Radon	4004				
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L	
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	6/30/2023	0.6 ± 0.2		
GammaRay HPGE		1 pCi/L	Radium 226	4020	6/30/2023	0.6 ± 0.2		
		1 pCi/L	Radium 228	4030	6/30/2023	< 0.6		

*****LABORATORY INFORMATION*****

>>>To be filled out by laboratory personnel<<<

Specimen Number: RSE72144

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: FC-CCR-SW3-0623

Authorized Signature: _____

Date Public Water System Notified: _____

DWAR 6: 11/2007

Radiation Safety Engineering, Inc.
3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121 (480) 897-9459
Website: www.radsafe.com FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Arizona Public Service
400 N. 5th Street
Phoenix, AZ 85004

Sampling Date: June 28, 2023
Sample Received: June 29, 2023
Analysis Completed: July 12, 2023

Sample ID	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
FC-CCR-FD01-0623	< 0.4	< 0.6	< 0.6

Date of Analysis	6/30/2023	6/30/2023	6/30/2023

7/11/2023
Alex Myers, Ph.D. Date
Laboratory License Number AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

June 28, 2023 (Sample Date) 14:20 (Sample Time) (24 hour clock) _____ (Owner/Contact Person)

_____ (Owner/Contact Fax Number) _____ (Owner/Contact Phone Number)

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring — Date Q1 collected: _____

☐ Quarterly — Date Q2 collected: _____

☐ Composite of four quarterly samples — Date Q3 collected: _____

Date Q4 collected: _____

*****RADIOCHEMICAL ANALYSIS*****

>>>To be filled out by laboratory personnel<<<

*****Combined Uranium must be reported in micrograms per liter*****

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result		Exceed MCL
	15 pCi/L		Adjusted Gross Alpha	4000				
600/00-02		3 pCi/L	Gross Alpha	4002				
7500 - Rn			Radon	4004				
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L	
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	6/30/2023	< 0.6		
GammaRay HPGE		1 pCi/L	Radium 226	4020	6/30/2023	< 0.4		
		1 pCi/L	Radium 228	4030	6/30/2023	< 0.6		

*****LABORATORY INFORMATION*****

>>>To be filled out by laboratory personnel<<<

Specimen Number: RSE72145

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: FC-CCR-FD01-0623

Authorized Signature: _____

Date Public Water System Notified: _____

DWAR 6: 11/2007

Client Information	
Name:	Natalie Chrisman/602-250-3608 Pam Norris/505-598-8781
Company	Arizona Public Service
Address	PO Box 355, MS 4915 Fruitland, NM 87416
Phone	
Site	APS Four Corners Power Plant (CWTP)

Radiation Safety Engineering, Inc.
3245 North Washington Street, Chandler, Arizona 85225
Analysis Request

Sample ID & Location (DWR#)	Collection Date	Collection Time	Media (DW* WW* Other)	Drinking Water Compliance	Gross Alpha	Gross Beta	Total Uranium	Isotopic Uranium	Ra-226	Ra-228	Ra-226 + Ra-228, Combined	H-3	Gamma Spectroscopy	Sr-89/Sr-90	Radon in Water	Radon in Air
FC-CCR-MW62-0523~~0623~~	6/28/2023	1155	GW						X	X	X					
FC-CCR-MW63-0523~~0623~~	6/27/2023	1441	GW						X	X	X					
FC-CCR-MW64-0523~~0623~~	6/27/2023	1233	GW						X	X	X					
FC-CCR-MW65-0523~~0623~~	6/28/2023	1301	GW						X	X	X					
FC-CCR-SW1-0523~~0623~~	6/28/2023	1008	GW						X	X	X					
FC-CCR-SW2-0523~~0623~~	6/27/2023	1317	GW						X	X	X					
FC-CCR-SW3-0523~~0623~~	6/27/2023	1331	GW						X	X	X					
FC-CCR-FD01-0523~~0623~~	6/28/2023	1420	GW						X	X	X					

Sample Receipt	
Total No. of Containers	
Chain of Custody Seals	
Container Condition	
Lab No.	

Invoice to:
PO#: 300592346

Instructions/Comments
Method HPGe

Relinquished By:	Company: WSP	Date/time: 1105 6-29-23	Received By:		Company: RSE	Date/time: 6.29.23 11:05
Relinquished By:	Company:	Date/time:	Received By:		Company:	Date/time:
Relinquished By:	Company:	Date/time:	Received By:		Company:	Date/time:

* DW = Drinking Water, WW = Waste Water, GW = Groundwater.

u/client/forms/cofc.frm

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Natalie Chrisman
Arizona Public Service Company
PO BOX 188, Ste. 4458
Joseph City, Arizona 86032

Generated 7/18/2023 5:26:39 AM

JOB DESCRIPTION

CCR Groundwater Monitoring
SDG NUMBER APS Dour Corners Power Plant (CWTP)

JOB NUMBER

550-204018-1

Eurofins Phoenix
4625 East Cotton Center Boulevard
Suite #189
Phoenix AZ 85040

See page two for job notes and contact information.

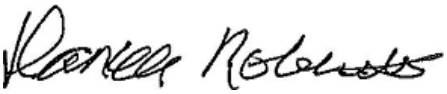
myEOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Southwest, LLC Project Manager.

Authorization



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Authorized for release by
Danielle Roberts, Senior Project Manager
Danielle.Roberts@et.eurofinsus.com
(657)210-6355

Table of Contents

Cover Page 1
Table of Contents 3
Definitions/Glossary 4
Case Narrative 5
Sample Summary 6
Detection Summary 7
Client Sample Results 10
QC Sample Results 16
QC Association Summary 24
Lab Chronicle 29
Certification Summary 33
Method Summary 34
Chain of Custody 35
Receipt Checklists 38

Definitions/Glossary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-204018-1
SDG: APS Dour Corners Power Plant (CWTP)

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
D1	Sample required dilution due to matrix.
D2	Sample required dilution due to high concentration of analyte.
M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The associated blank spike was acceptable.

Metals

Qualifier	Qualifier Description
M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The associated blank spike was acceptable.

General Chemistry

Qualifier	Qualifier Description
H5	This test is specified to be performed in the field within 15 minutes of sampling; sample was received and analyzed past the regulatory holding time.
T5	Laboratory not licensed for this parameter

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 550-204018-1

Laboratory: Eurofins Phoenix

Narrative

Job Narrative
550-204018-1

Comments
No additional comments.

Receipt
The samples were received on 6/29/2023 10:39 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 3.4º C.

HPLC/IC
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Metals
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Sample Summary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-204018-1
SDG: APS Dour Corners Power Plant (CWTP)

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
550-204018-1	FC-CCR-MW62-0523	Water	06/28/23 11:55	06/29/23 10:39
550-204018-2	FC-CCR-MW63-0523	Water	06/27/23 14:41	06/29/23 10:39
550-204018-3	FC-CCR-MW64-0523	Water	06/27/23 12:33	06/29/23 10:39
550-204018-4	FC-CCR-MW65-0523	Water	06/28/23 13:01	06/29/23 10:39
550-204018-5	FC-CCR-SW1-0523	Water	06/28/23 10:08	06/29/23 10:39
550-204018-6	FC-CCR-SW2-0523	Water	06/27/23 13:17	06/29/23 10:39
550-204018-7	FC-CCR-SW3-0523	Water	06/27/23 13:31	06/29/23 10:39
550-204018-8	FC-CCR-FD01-0523	Water	06/28/23 14:20	06/29/23 10:39

Detection Summary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-204018-1
SDG: APS Dour Corners Power Plant (CWTP)

Client Sample ID: FC-CCR-MW62-0523 — Lab Sample ID: 550-204018-1

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	120	D1	4.0		mg/L	2		300.0	Total/NA
Fluoride	2.0	D1	0.80		mg/L	2		300.0	Total/NA
Sulfate	3600	D2	400		mg/L	200		300.0	Total/NA
Lithium	0.13		0.020		mg/L	1		200.7 Rev 4.4	Total/NA
Boron	2.2		0.050		mg/L	1		200.7 Rev 4.4	Total/NA
Calcium	550		2.0		mg/L	1		200.7 Rev 4.4	Total/NA
Arsenic	12		0.50		ug/L	1		200.8 LL	Total/NA
Barium	22		0.50		ug/L	1		200.8 LL	Total/NA
Cobalt	2.9		0.50		ug/L	1		200.8 LL	Total/NA
Molybdenum	1.2		0.50		ug/L	1		200.8 LL	Total/NA
Selenium	0.94		0.50		ug/L	1		200.8 LL	Total/NA
Total Dissolved Solids	6300		100		mg/L	1		SM 2540C	Total/NA
pH	6.9	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	16.4	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-MW63-0523 — Lab Sample ID: 550-204018-2

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	66	D1	4.0		mg/L	2		300.0	Total/NA
Fluoride	1.8	D1	0.80		mg/L	2		300.0	Total/NA
Sulfate	1300	D2	40		mg/L	20		300.0	Total/NA
Lithium	0.045		0.020		mg/L	1		200.7 Rev 4.4	Total/NA
Boron	0.79		0.050		mg/L	1		200.7 Rev 4.4	Total/NA
Calcium	330		2.0		mg/L	1		200.7 Rev 4.4	Total/NA
Arsenic	1.2		0.50		ug/L	1		200.8 LL	Total/NA
Barium	14		0.50		ug/L	1		200.8 LL	Total/NA
Cobalt	1.5		0.50		ug/L	1		200.8 LL	Total/NA
Molybdenum	3.0		0.50		ug/L	1		200.8 LL	Total/NA
Selenium	0.68		0.50		ug/L	1		200.8 LL	Total/NA
Total Dissolved Solids	2400		20		mg/L	1		SM 2540C	Total/NA
pH	7.3	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	15.9	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-MW64-0523 — Lab Sample ID: 550-204018-3

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	53		2.0		mg/L	1		300.0	Total/NA
Fluoride	1.3		0.40		mg/L	1		300.0	Total/NA
Sulfate	240	D2	20		mg/L	10		300.0	Total/NA
Lithium	0.020		0.020		mg/L	1		200.7 Rev 4.4	Total/NA
Boron	0.51		0.050		mg/L	1		200.7 Rev 4.4	Total/NA
Calcium	75		2.0		mg/L	1		200.7 Rev 4.4	Total/NA
Arsenic	1.0		0.50		ug/L	1		200.8 LL	Total/NA
Barium	22		0.50		ug/L	1		200.8 LL	Total/NA
Cobalt	1.7		0.50		ug/L	1		200.8 LL	Total/NA
Molybdenum	4.6		0.50		ug/L	1		200.8 LL	Total/NA
Thallium	0.12		0.10		ug/L	1		200.8 LL	Total/NA
Total Dissolved Solids	640		20		mg/L	1		SM 2540C	Total/NA
pH	7.7	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	16.1	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-204018-1
SDG: APS Dour Corners Power Plant (CWTP)

Client Sample ID: FC-CCR-MW65-0523 — Lab Sample ID: 550-204018-4

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	57		2.0		mg/L	1		300.0	Total/NA
Fluoride	1.4		0.40		mg/L	1		300.0	Total/NA
Sulfate	310	D2	20		mg/L	10		300.0	Total/NA
Lithium	0.050		0.020		mg/L	1		200.7 Rev 4.4	Total/NA
Boron	0.57		0.050		mg/L	1		200.7 Rev 4.4	Total/NA
Calcium	97		2.0		mg/L	1		200.7 Rev 4.4	Total/NA
Arsenic	1.3		0.50		ug/L	1		200.8 LL	Total/NA
Barium	22		0.50		ug/L	1		200.8 LL	Total/NA
Cobalt	1.7		0.50		ug/L	1		200.8 LL	Total/NA
Molybdenum	7.3		0.50		ug/L	1		200.8 LL	Total/NA
Total Dissolved Solids	880		20		mg/L	1		SM 2540C	Total/NA
pH	7.6	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	16.0	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-SW1-0523 — Lab Sample ID: 550-204018-5

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	51	D1	4.0		mg/L	2		300.0	Total/NA
Fluoride	0.83	D1	0.80		mg/L	2		300.0	Total/NA
Sulfate	450	D2 M3	40		mg/L	20		300.0	Total/NA
Lithium	0.093		0.020		mg/L	1		200.7 Rev 4.4	Total/NA
Boron	0.34		0.050		mg/L	1		200.7 Rev 4.4	Total/NA
Calcium	84		2.0		mg/L	1		200.7 Rev 4.4	Total/NA
Arsenic	3.1		0.50		ug/L	1		200.8 LL	Total/NA
Barium	180		0.50		ug/L	1		200.8 LL	Total/NA
Molybdenum	6.5		0.50		ug/L	1		200.8 LL	Total/NA
Selenium	0.66		0.50		ug/L	1		200.8 LL	Total/NA
Thallium	0.13		0.10		ug/L	1		200.8 LL	Total/NA
Total Dissolved Solids	820		20		mg/L	1		SM 2540C	Total/NA
pH	8.6	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	16.6	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-SW2-0523 — Lab Sample ID: 550-204018-6

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	53	D1	4.0		mg/L	2		300.0	Total/NA
Fluoride	0.87	D1	0.80		mg/L	2		300.0	Total/NA
Sulfate	470	D2	40		mg/L	20		300.0	Total/NA
Lithium	0.10		0.020		mg/L	1		200.7 Rev 4.4	Total/NA
Boron	0.40		0.050		mg/L	1		200.7 Rev 4.4	Total/NA
Calcium	92		2.0		mg/L	1		200.7 Rev 4.4	Total/NA
Antimony	8.7		1.0		ug/L	1		200.8 LL	Total/NA
Arsenic	4.9		0.50		ug/L	1		200.8 LL	Total/NA
Barium	300		0.50		ug/L	1		200.8 LL	Total/NA
Chromium	2.7		1.0		ug/L	1		200.8 LL	Total/NA
Cobalt	1.5		0.50		ug/L	1		200.8 LL	Total/NA
Lead	3.4		0.50		ug/L	1		200.8 LL	Total/NA
Molybdenum	11		0.50		ug/L	1		200.8 LL	Total/NA
Selenium	1.5		0.50		ug/L	1		200.8 LL	Total/NA
Total Dissolved Solids	840		20		mg/L	1		SM 2540C	Total/NA
pH	8.6	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	17.0	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-204018-1
SDG: APS Dour Corners Power Plant (CWTP)

Client Sample ID: FC-CCR-SW3-0523 — Lab Sample ID: 550-204018-7

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	50	D1	4.0		mg/L	2		300.0	Total/NA
Fluoride	0.83	D1	0.80		mg/L	2		300.0	Total/NA
Sulfate	450	D2	40		mg/L	20		300.0	Total/NA
Lithium	0.094		0.020		mg/L	1		200.7 Rev 4.4	Total/NA
Boron	0.37		0.050		mg/L	1		200.7 Rev 4.4	Total/NA
Calcium	96		2.0		mg/L	1		200.7 Rev 4.4	Total/NA
Arsenic	3.1		0.50		ug/L	1		200.8 LL	Total/NA
Barium	170		0.50		ug/L	1		200.8 LL	Total/NA
Molybdenum	6.3		0.50		ug/L	1		200.8 LL	Total/NA
Selenium	0.92		0.50		ug/L	1		200.8 LL	Total/NA
Total Dissolved Solids	800		20		mg/L	1		SM 2540C	Total/NA
pH	8.4	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	17.4	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-FD01-0523 — Lab Sample ID: 550-204018-8

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	51	D1	4.0		mg/L	2		300.0	Total/NA
Fluoride	0.84	D1	0.80		mg/L	2		300.0	Total/NA
Sulfate	450	D2	40		mg/L	20		300.0	Total/NA
Lithium	0.095		0.020		mg/L	1		200.7 Rev 4.4	Total/NA
Boron	0.35		0.050		mg/L	1		200.7 Rev 4.4	Total/NA
Calcium	89		2.0		mg/L	1		200.7 Rev 4.4	Total/NA
Arsenic	3.3		0.50		ug/L	1		200.8 LL	Total/NA
Barium	170		0.50		ug/L	1		200.8 LL	Total/NA
Molybdenum	6.5		0.50		ug/L	1		200.8 LL	Total/NA
Selenium	0.92		0.50		ug/L	1		200.8 LL	Total/NA
Total Dissolved Solids	800		20		mg/L	1		SM 2540C	Total/NA
pH	8.5	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	18.2	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: FC-CCR-MW62-0523

Lab Sample ID: 550-204018-1
Date Collected: 06/28/23 11:55
Matrix: Water
Date Received: 06/29/23 10:39

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**120**	**D1**	4.0		mg/L			07/01/23 14:11	2
Fluoride	**2.0**	**D1**	0.80		mg/L			07/01/23 14:11	2
Sulfate	**3600**	**D2**	400		mg/L			07/01/23 14:30	200

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		0.0010		mg/L		07/03/23 06:34	07/14/23 22:17	1
Lithium	**0.13**		0.020		mg/L		07/06/23 08:43	07/13/23 20:17	1
Boron	**2.2**		0.050		mg/L		07/03/23 06:34	07/14/23 22:17	1
Calcium	**550**		2.0		mg/L		07/03/23 06:34	07/11/23 17:49	1

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.0		ug/L		07/03/23 10:49	07/06/23 23:54	1
Arsenic	**12**		0.50		ug/L		07/03/23 10:49	07/06/23 23:54	1
Barium	**22**		0.50		ug/L		07/03/23 10:49	07/06/23 23:54	1
Cadmium	ND		0.10		ug/L		07/03/23 10:49	07/06/23 23:54	1
Chromium	ND		1.0		ug/L		07/03/23 10:49	07/06/23 23:54	1
Cobalt	**2.9**		0.50		ug/L		07/03/23 10:49	07/06/23 23:54	1
Lead	ND		0.50		ug/L		07/03/23 10:49	07/06/23 23:54	1
Molybdenum	**1.2**		0.50		ug/L		07/03/23 10:49	07/06/23 23:54	1
Selenium	**0.94**		0.50		ug/L		07/03/23 10:49	07/06/23 23:54	1
Thallium	ND		0.10		ug/L		07/03/23 10:49	07/06/23 23:54	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		06/29/23 13:33	06/29/23 16:54	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**6300**		100		mg/L			07/03/23 14:16	1
pH (SM 4500 H+ B)	**6.9**	**H5**	1.7		SU			06/29/23 14:22	1
Temperature (SM 4500 H+ B)	**16.4**	**H5 T5**	0.1		Degrees C			06/29/23 14:22	1

Client Sample ID: FC-CCR-MW63-0523

Lab Sample ID: 550-204018-2
Date Collected: 06/27/23 14:41
Matrix: Water
Date Received: 06/29/23 10:39

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**66**	**D1**	4.0		mg/L			07/01/23 14:48	2
Fluoride	**1.8**	**D1**	0.80		mg/L			07/01/23 14:48	2
Sulfate	**1300**	**D2**	40		mg/L			07/01/23 16:02	20

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		0.0010		mg/L		07/03/23 06:34	07/14/23 22:20	1
Lithium	**0.045**		0.020		mg/L		07/06/23 08:43	07/13/23 20:21	1
Boron	**0.79**		0.050		mg/L		07/03/23 06:34	07/14/23 22:20	1
Calcium	**330**		2.0		mg/L		07/03/23 06:34	07/11/23 17:52	1

Client Sample ID: FC-CCR-MW63-0523

Lab Sample ID: 550-204018-2

Date Collected: 06/27/23 14:41
Matrix: Water
Date Received: 06/29/23 10:39

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.0		ug/L		07/03/23 10:49	07/06/23 23:56	1
Arsenic	**1.2**		0.50		ug/L		07/03/23 10:49	07/06/23 23:56	1
Barium	**14**		0.50		ug/L		07/03/23 10:49	07/06/23 23:56	1
Cadmium	ND		0.10		ug/L		07/03/23 10:49	07/06/23 23:56	1
Chromium	ND		1.0		ug/L		07/03/23 10:49	07/06/23 23:56	1
Cobalt	**1.5**		0.50		ug/L		07/03/23 10:49	07/06/23 23:56	1
Lead	ND		0.50		ug/L		07/03/23 10:49	07/06/23 23:56	1
Molybdenum	**3.0**		0.50		ug/L		07/03/23 10:49	07/06/23 23:56	1
Selenium	**0.68**		0.50		ug/L		07/03/23 10:49	07/06/23 23:56	1
Thallium	ND		0.10		ug/L		07/03/23 10:49	07/06/23 23:56	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		06/29/23 13:33	06/29/23 16:56	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**2400**		20		mg/L			07/03/23 12:35	1
pH (SM 4500 H+ B)	**7.3**	**H5**	1.7		SU			06/29/23 14:23	1
Temperature (SM 4500 H+ B)	**15.9**	**H5 T5**	0.1		Degrees C			06/29/23 14:23	1

Client Sample ID: FC-CCR-MW64-0523

Lab Sample ID: 550-204018-3

Date Collected: 06/27/23 12:33
Matrix: Water
Date Received: 06/29/23 10:39

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**53**		2.0		mg/L			07/01/23 16:20	1
Fluoride	**1.3**		0.40		mg/L			07/01/23 16:20	1
Sulfate	**240**	**D2**	20		mg/L			07/01/23 16:38	10

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		0.0010		mg/L		07/03/23 06:34	07/14/23 22:23	1
Lithium	**0.020**		0.020		mg/L		07/06/23 08:43	07/13/23 20:26	1
Boron	**0.51**		0.050		mg/L		07/03/23 06:34	07/14/23 22:23	1
Calcium	**75**		2.0		mg/L		07/03/23 06:34	07/11/23 17:55	1

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.0		ug/L		07/03/23 10:49	07/06/23 23:58	1
Arsenic	**1.0**		0.50		ug/L		07/03/23 10:49	07/06/23 23:58	1
Barium	**22**		0.50		ug/L		07/03/23 10:49	07/06/23 23:58	1
Cadmium	ND		0.10		ug/L		07/03/23 10:49	07/06/23 23:58	1
Chromium	ND		1.0		ug/L		07/03/23 10:49	07/06/23 23:58	1
Cobalt	**1.7**		0.50		ug/L		07/03/23 10:49	07/06/23 23:58	1
Lead	ND		0.50		ug/L		07/03/23 10:49	07/06/23 23:58	1
Molybdenum	**4.6**		0.50		ug/L		07/03/23 10:49	07/06/23 23:58	1
Selenium	ND		0.50		ug/L		07/03/23 10:49	07/06/23 23:58	1
Thallium	**0.12**		0.10		ug/L		07/03/23 10:49	07/06/23 23:58	1

Client Sample ID: FC-CCR-MW64-0523

Lab Sample ID: 550-204018-3

Date Collected: 06/27/23 12:33
Matrix: Water
Date Received: 06/29/23 10:39

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		06/29/23 13:33	06/29/23 16:58	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**640**		20		mg/L			07/03/23 12:35	1
pH (SM 4500 H+ B)	**7.7**	**H5**	1.7		SU			06/29/23 14:24	1
Temperature (SM 4500 H+ B)	**16.1**	**H5 T5**	0.1		Degrees C			06/29/23 14:24	1

Client Sample ID: FC-CCR-MW65-0523

Lab Sample ID: 550-204018-4

Date Collected: 06/28/23 13:01
Matrix: Water
Date Received: 06/29/23 10:39

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**57**		2.0		mg/L			07/01/23 16:57	1
Fluoride	**1.4**		0.40		mg/L			07/01/23 16:57	1
Sulfate	**310**	**D2**	20		mg/L			07/01/23 17:15	10

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		0.0010		mg/L		07/03/23 06:34	07/14/23 22:26	1
Lithium	**0.050**		0.020		mg/L		07/06/23 08:43	07/13/23 20:30	1
Boron	**0.57**		0.050		mg/L		07/03/23 06:34	07/14/23 22:26	1
Calcium	**97**		2.0		mg/L		07/03/23 06:34	07/11/23 17:58	1

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.0		ug/L		07/03/23 10:49	07/07/23 00:00	1
Arsenic	**1.3**		0.50		ug/L		07/03/23 10:49	07/07/23 00:00	1
Barium	**22**		0.50		ug/L		07/03/23 10:49	07/07/23 00:00	1
Cadmium	ND		0.10		ug/L		07/03/23 10:49	07/07/23 00:00	1
Chromium	ND		1.0		ug/L		07/03/23 10:49	07/07/23 00:00	1
Cobalt	**1.7**		0.50		ug/L		07/03/23 10:49	07/07/23 00:00	1
Lead	ND		0.50		ug/L		07/03/23 10:49	07/07/23 00:00	1
Molybdenum	**7.3**		0.50		ug/L		07/03/23 10:49	07/07/23 00:00	1
Selenium	ND		0.50		ug/L		07/03/23 10:49	07/07/23 00:00	1
Thallium	ND		0.10		ug/L		07/03/23 10:49	07/07/23 00:00	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		06/29/23 13:33	06/29/23 17:00	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**880**		20		mg/L			07/03/23 14:16	1
pH (SM 4500 H+ B)	**7.6**	**H5**	1.7		SU			06/29/23 14:25	1
Temperature (SM 4500 H+ B)	**16.0**	**H5 T5**	0.1		Degrees C			06/29/23 14:25	1

Client Sample ID: FC-CCR-SW1-0523

Lab Sample ID: 550-204018-5

Date Collected: 06/28/23 10:08
Matrix: Water
Date Received: 06/29/23 10:39

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	51	D1	4.0		mg/L			07/01/23 12:21	2
Fluoride	0.83	D1	0.80		mg/L			07/01/23 12:21	2
Sulfate	450	D2 M3	40		mg/L			07/01/23 13:16	20

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		0.0010		mg/L		07/03/23 06:34	07/14/23 22:14	1
Lithium	0.093		0.020		mg/L		07/06/23 08:43	07/13/23 20:47	1
Boron	0.34		0.050		mg/L		07/03/23 06:34	07/14/23 22:14	1
Calcium	84		2.0		mg/L		07/03/23 06:34	07/11/23 17:46	1

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.0		ug/L		07/03/23 10:49	07/06/23 23:52	1
Arsenic	3.1		0.50		ug/L		07/03/23 10:49	07/06/23 23:52	1
Barium	180		0.50		ug/L		07/03/23 10:49	07/06/23 23:52	1
Cadmium	ND		0.10		ug/L		07/03/23 10:49	07/06/23 23:52	1
Chromium	ND		1.0		ug/L		07/03/23 10:49	07/06/23 23:52	1
Cobalt	ND		0.50		ug/L		07/03/23 10:49	07/06/23 23:52	1
Lead	ND		0.50		ug/L		07/03/23 10:49	07/06/23 23:52	1
Molybdenum	6.5		0.50		ug/L		07/03/23 10:49	07/06/23 23:52	1
Selenium	0.66		0.50		ug/L		07/03/23 10:49	07/06/23 23:52	1
Thallium	0.13		0.10		ug/L		07/03/23 10:49	07/06/23 23:52	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		06/29/23 13:33	06/29/23 16:52	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	820		20		mg/L			07/03/23 14:16	1
pH (SM 4500 H+ B)	8.6	H5	1.7		SU			06/29/23 14:26	1
Temperature (SM 4500 H+ B)	16.6	H5 T5	0.1		Degrees C			06/29/23 14:26	1

Client Sample ID: FC-CCR-SW2-0523

Lab Sample ID: 550-204018-6

Date Collected: 06/27/23 13:17
Matrix: Water
Date Received: 06/29/23 10:39

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	53	D1	4.0		mg/L			07/01/23 17:34	2
Fluoride	0.87	D1	0.80		mg/L			07/01/23 17:34	2
Sulfate	470	D2	40		mg/L			07/01/23 17:52	20

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		0.0010		mg/L		07/03/23 06:34	07/14/23 22:29	1
Lithium	0.10		0.020		mg/L		07/06/23 08:43	07/13/23 21:00	1
Boron	0.40		0.050		mg/L		07/03/23 06:34	07/14/23 22:29	1
Calcium	92		2.0		mg/L		07/03/23 06:34	07/11/23 18:01	1

Client Sample ID: FC-CCR-SW2-0523

Lab Sample ID: 550-204018-6

Date Collected: 06/27/23 13:17
Matrix: Water
Date Received: 06/29/23 10:39

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**8.7**		1.0		ug/L		07/03/23 10:49	07/07/23 00:02	1
Arsenic	**4.9**		0.50		ug/L		07/03/23 10:49	07/07/23 00:02	1
Barium	**300**		0.50		ug/L		07/03/23 10:49	07/07/23 00:02	1
Cadmium	ND		0.10		ug/L		07/03/23 10:49	07/07/23 00:02	1
Chromium	**2.7**		1.0		ug/L		07/03/23 10:49	07/07/23 00:02	1
Cobalt	**1.5**		0.50		ug/L		07/03/23 10:49	07/07/23 00:02	1
Lead	**3.4**		0.50		ug/L		07/03/23 10:49	07/07/23 00:02	1
Molybdenum	**11**		0.50		ug/L		07/03/23 10:49	07/07/23 00:02	1
Selenium	**1.5**		0.50		ug/L		07/03/23 10:49	07/07/23 00:02	1
Thallium	ND		0.10		ug/L		07/03/23 10:49	07/07/23 00:02	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		06/29/23 13:33	06/29/23 17:02	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**840**		20		mg/L			07/03/23 12:35	1
pH (SM 4500 H+ B)	**8.6**	**H5**	1.7		SU			06/29/23 14:27	1
Temperature (SM 4500 H+ B)	**17.0**	**H5 T5**	0.1		Degrees C			06/29/23 14:27	1

Client Sample ID: FC-CCR-SW3-0523

Lab Sample ID: 550-204018-7

Date Collected: 06/27/23 13:31
Matrix: Water
Date Received: 06/29/23 10:39

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**50**	**D1**	4.0		mg/L			07/01/23 18:11	2
Fluoride	**0.83**	**D1**	0.80		mg/L			07/01/23 18:11	2
Sulfate	**450**	**D2**	40		mg/L			07/01/23 18:29	20

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		0.0010		mg/L		07/03/23 06:34	07/14/23 22:37	1
Lithium	**0.094**		0.020		mg/L		07/06/23 08:43	07/13/23 21:04	1
Boron	**0.37**		0.050		mg/L		07/03/23 06:34	07/14/23 22:37	1
Calcium	**96**		2.0		mg/L		07/03/23 06:34	07/11/23 18:03	1

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.0		ug/L		07/03/23 10:49	07/07/23 00:04	1
Arsenic	**3.1**		0.50		ug/L		07/03/23 10:49	07/07/23 00:04	1
Barium	**170**		0.50		ug/L		07/03/23 10:49	07/07/23 00:04	1
Cadmium	ND		0.10		ug/L		07/03/23 10:49	07/07/23 00:04	1
Chromium	ND		1.0		ug/L		07/03/23 10:49	07/07/23 00:04	1
Cobalt	ND		0.50		ug/L		07/03/23 10:49	07/07/23 00:04	1
Lead	ND		0.50		ug/L		07/03/23 10:49	07/07/23 00:04	1
Molybdenum	**6.3**		0.50		ug/L		07/03/23 10:49	07/07/23 00:04	1
Selenium	**0.92**		0.50		ug/L		07/03/23 10:49	07/07/23 00:04	1
Thallium	ND		0.10		ug/L		07/03/23 10:49	07/07/23 00:04	1

Client Sample ID: FC-CCR-SW3-0523

Lab Sample ID: 550-204018-7
Date Collected: 06/27/23 13:31
Matrix: Water
Date Received: 06/29/23 10:39

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		06/29/23 13:33	06/29/23 17:04	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	800		20		mg/L			07/03/23 12:35	1
pH (SM 4500 H+ B)	8.4	H5	1.7		SU			06/29/23 14:29	1
Temperature (SM 4500 H+ B)	17.4	H5 T5	0.1		Degrees C			06/29/23 14:29	1

Client Sample ID: FC-CCR-FD01-0523

Lab Sample ID: 550-204018-8
Date Collected: 06/28/23 14:20
Matrix: Water
Date Received: 06/29/23 10:39

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	51	D1	4.0		mg/L			07/01/23 19:43	2
Fluoride	0.84	D1	0.80		mg/L			07/01/23 19:43	2
Sulfate	450	D2	40		mg/L			07/01/23 20:01	20

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		0.0010		mg/L		07/03/23 06:34	07/14/23 22:40	1
Lithium	0.095		0.020		mg/L		07/06/23 08:43	07/13/23 21:09	1
Boron	0.35		0.050		mg/L		07/03/23 06:34	07/14/23 22:40	1
Calcium	89		2.0		mg/L		07/03/23 06:34	07/11/23 18:06	1

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.0		ug/L		07/03/23 10:49	07/07/23 00:06	1
Arsenic	3.3		0.50		ug/L		07/03/23 10:49	07/07/23 00:06	1
Barium	170		0.50		ug/L		07/03/23 10:49	07/07/23 00:06	1
Cadmium	ND		0.10		ug/L		07/03/23 10:49	07/07/23 00:06	1
Chromium	ND		1.0		ug/L		07/03/23 10:49	07/07/23 00:06	1
Cobalt	ND		0.50		ug/L		07/03/23 10:49	07/07/23 00:06	1
Lead	ND		0.50		ug/L		07/03/23 10:49	07/07/23 00:06	1
Molybdenum	6.5		0.50		ug/L		07/03/23 10:49	07/07/23 00:06	1
Selenium	0.92		0.50		ug/L		07/03/23 10:49	07/07/23 00:06	1
Thallium	ND		0.10		ug/L		07/03/23 10:49	07/07/23 00:06	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		06/29/23 13:33	06/29/23 17:06	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	800		20		mg/L			07/03/23 14:16	1
pH (SM 4500 H+ B)	8.5	H5	1.7		SU			06/29/23 14:32	1
Temperature (SM 4500 H+ B)	18.2	H5 T5	0.1		Degrees C			06/29/23 14:32	1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 550-303309/2
Matrix: Water
Analysis Batch: 303309

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		2.0		mg/L			07/01/23 10:49	1
Fluoride	ND		0.40		mg/L			07/01/23 10:49	1
Sulfate	ND		2.0		mg/L			07/01/23 10:49	1

Lab Sample ID: LCS 550-303309/5
Matrix: Water
Analysis Batch: 303309

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			20.0	21.5		mg/L		108	90 - 110		
Fluoride			4.00	4.26		mg/L		107	90 - 110		
Sulfate			20.0	21.9		mg/L		110	90 - 110		

Lab Sample ID: LCSD 550-303309/6
Matrix: Water
Analysis Batch: 303309

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			20.0	21.2		mg/L		106	90 - 110	1	20
Fluoride			4.00	4.10		mg/L		103	90 - 110	4	20
Sulfate			20.0	21.7		mg/L		108	90 - 110	1	20

Lab Sample ID: 550-204018-5 MS
Matrix: Water
Analysis Batch: 303309

Client Sample ID: FC-CCR-SW1-0523
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	50		40.0	91.4	D2	mg/L		104	80 - 120		
Fluoride	ND		8.00	8.94	D2	mg/L		100	80 - 120		

Lab Sample ID: 550-204018-5 MS
Matrix: Water
Analysis Batch: 303309

Client Sample ID: FC-CCR-SW1-0523
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Sulfate	450	M3 D2	400	853	D2	mg/L		102	80 - 120		

Lab Sample ID: 550-204018-5 MSD
Matrix: Water
Analysis Batch: 303309

Client Sample ID: FC-CCR-SW1-0523
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	50		40.0	94.3	D2	mg/L		111	80 - 120	NC	20
Fluoride	ND		8.00	9.45	D2	mg/L		106	80 - 120	NC	20

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 550-204018-5 MSD
Matrix: Water
Analysis Batch: 303309

Client Sample ID: FC-CCR-SW1-0523
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfate	450	M3 D2	400	867	D2	mg/L		105	80 - 120	NC	20

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 550-303317/1-A
Matrix: Water
Analysis Batch: 303792

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 303317

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		2.0		mg/L		07/03/23 06:34	07/11/23 17:32	1

Lab Sample ID: MB 550-303317/1-A
Matrix: Water
Analysis Batch: 304057

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 303317

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		0.0010		mg/L		07/03/23 06:34	07/14/23 22:00	1
Boron	ND		0.050		mg/L		07/03/23 06:34	07/14/23 22:00	1

Lab Sample ID: LCS 550-303317/2-A
Matrix: Water
Analysis Batch: 303792

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 303317

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Calcium			21.0	21.1		mg/L		101	85 - 115		

Lab Sample ID: LCS 550-303317/2-A
Matrix: Water
Analysis Batch: 304057

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 303317

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Beryllium			1.00	1.05		mg/L		105	85 - 115		
Boron			1.00	1.04		mg/L		104	85 - 115		

Lab Sample ID: LCSD 550-303317/3-A
Matrix: Water
Analysis Batch: 303792

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 303317

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Calcium			21.0	21.3		mg/L		101	85 - 115	1	20

Lab Sample ID: LCSD 550-303317/3-A
Matrix: Water
Analysis Batch: 304057

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 303317

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Beryllium			1.00	1.03		mg/L		103	85 - 115	1	20
Boron			1.00	1.06		mg/L		106	85 - 115	1	20

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: 550-204018-5 MS
Matrix: Water
Analysis Batch: 303792

Client Sample ID: FC-CCR-SW1-0523
Prep Type: Total/NA
Prep Batch: 303317

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	84		21.0	103	M3	mg/L		88	70 - 130

Lab Sample ID: 550-204018-5 MS
Matrix: Water
Analysis Batch: 304057

Client Sample ID: FC-CCR-SW1-0523
Prep Type: Total/NA
Prep Batch: 303317

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Beryllium	ND		1.00	1.04		mg/L		104	70 - 130
Boron	0.34		1.00	1.38		mg/L		104	70 - 130

Lab Sample ID: 550-204018-5 MSD
Matrix: Water
Analysis Batch: 303792

Client Sample ID: FC-CCR-SW1-0523
Prep Type: Total/NA
Prep Batch: 303317

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Calcium	84		21.0	102	M3	mg/L		84	70 - 130	1	20

Lab Sample ID: 550-204018-5 MSD
Matrix: Water
Analysis Batch: 304057

Client Sample ID: FC-CCR-SW1-0523
Prep Type: Total/NA
Prep Batch: 303317

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Beryllium	ND		1.00	1.06		mg/L		106	70 - 130	2	20
Boron	0.34		1.00	1.38		mg/L		104	70 - 130	0	20

Lab Sample ID: MB 280-618462/1-A
Matrix: Water
Analysis Batch: 619581

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 618462

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	ND		0.020		mg/L		07/06/23 08:43	07/13/23 19:52	1

Lab Sample ID: LCS 280-618462/2-A
Matrix: Water
Analysis Batch: 619581

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 618462

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Lithium			1.00	0.950		mg/L		95	90 - 112

Lab Sample ID: 280-178526-B-3-C MS
Matrix: Water
Analysis Batch: 619581

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 618462

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Lithium	0.030		1.00	0.952		mg/L		92	70 - 130

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: 280-178526-B-3-D MSD
Matrix: Water
Analysis Batch: 619581

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 618462

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Lithium	0.030		1.00	0.947		mg/L		92	70 - 130	1	20

Lab Sample ID: 550-204018-5 MS
Matrix: Water
Analysis Batch: 619581

Client Sample ID: FC-CCR-SW1-0523
Prep Type: Total/NA
Prep Batch: 618462

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Lithium	0.093		1.00	1.06		mg/L		97	70 - 130

Lab Sample ID: 550-204018-5 MSD
Matrix: Water
Analysis Batch: 619581

Client Sample ID: FC-CCR-SW1-0523
Prep Type: Total/NA
Prep Batch: 618462

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Lithium	0.093		1.00	1.06		mg/L		96	70 - 130	1	20

Method: 200.8 LL - Metals (ICP/MS)

Lab Sample ID: MB 550-303341/1-A
Matrix: Water
Analysis Batch: 303599

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 303341

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.0		ug/L		07/03/23 10:49	07/06/23 23:42	1
Arsenic	ND		0.50		ug/L		07/03/23 10:49	07/06/23 23:42	1
Barium	ND		0.50		ug/L		07/03/23 10:49	07/06/23 23:42	1
Cadmium	ND		0.10		ug/L		07/03/23 10:49	07/06/23 23:42	1
Chromium	ND		1.0		ug/L		07/03/23 10:49	07/06/23 23:42	1
Cobalt	ND		0.50		ug/L		07/03/23 10:49	07/06/23 23:42	1
Lead	ND		0.50		ug/L		07/03/23 10:49	07/06/23 23:42	1
Molybdenum	ND		0.50		ug/L		07/03/23 10:49	07/06/23 23:42	1
Selenium	ND		0.50		ug/L		07/03/23 10:49	07/06/23 23:42	1
Thallium	ND		0.10		ug/L		07/03/23 10:49	07/06/23 23:42	1

Lab Sample ID: LCS 550-303341/2-A
Matrix: Water
Analysis Batch: 303599

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 303341

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	100	101		ug/L		101	85 - 115
Arsenic	100	102		ug/L		102	85 - 115
Barium	100	112		ug/L		112	85 - 115
Cadmium	100	98.5		ug/L		99	85 - 115
Chromium	100	101		ug/L		101	85 - 115
Cobalt	100	99.9		ug/L		100	85 - 115
Lead	100	103		ug/L		103	85 - 115
Molybdenum	100	102		ug/L		102	85 - 115
Selenium	100	98.3		ug/L		98	85 - 115
Thallium	100	99.3		ug/L		99	85 - 115

Method: 200.8 LL - Metals (ICP/MS) (Continued)

Lab Sample ID: LCSD 550-303341/3-A
Matrix: Water
Analysis Batch: 303599

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 303341

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony			100	101		ug/L		101	85 - 115	0	20
Arsenic			100	102		ug/L		102	85 - 115	0	20
Barium			100	112		ug/L		112	85 - 115	1	20
Cadmium			100	99.0		ug/L		99	85 - 115	1	20
Chromium			100	102		ug/L		102	85 - 115	0	20
Cobalt			100	98.9		ug/L		99	85 - 115	1	20
Lead			100	105		ug/L		105	85 - 115	3	20
Molybdenum			100	101		ug/L		101	85 - 115	1	20
Selenium			100	98.4		ug/L		98	85 - 115	0	20
Thallium			100	102		ug/L		102	85 - 115	3	20

Lab Sample ID: 550-204018-5 MS
Matrix: Water
Analysis Batch: 303599

Client Sample ID: FC-CCR-SW1-0523
Prep Type: Total/NA
Prep Batch: 303341

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Antimony	ND		100	101		ug/L		101	70 - 130		
Arsenic	3.1		100	108		ug/L		105	70 - 130		
Barium	180		100	283		ug/L		108	70 - 130		
Cadmium	ND		100	95.4		ug/L		95	70 - 130		
Chromium	ND		100	95.4		ug/L		95	70 - 130		
Cobalt	ND		100	97.5		ug/L		97	70 - 130		
Lead	ND		100	102		ug/L		102	70 - 130		
Molybdenum	6.5		100	112		ug/L		105	70 - 130		
Selenium	0.66		100	102		ug/L		102	70 - 130		
Thallium	0.13		100	99.5		ug/L		99	70 - 130		

Lab Sample ID: 550-204018-5 MSD
Matrix: Water
Analysis Batch: 303599

Client Sample ID: FC-CCR-SW1-0523
Prep Type: Total/NA
Prep Batch: 303341

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	ND		100	101		ug/L		101	70 - 130	0	20
Arsenic	3.1		100	108		ug/L		105	70 - 130	0	20
Barium	180		100	291		ug/L		116	70 - 130	3	20
Cadmium	ND		100	94.8		ug/L		95	70 - 130	1	20
Chromium	ND		100	95.3		ug/L		95	70 - 130	0	20
Cobalt	ND		100	96.0		ug/L		96	70 - 130	2	20
Lead	ND		100	99.0		ug/L		99	70 - 130	3	20
Molybdenum	6.5		100	112		ug/L		105	70 - 130	0	20
Selenium	0.66		100	105		ug/L		104	70 - 130	2	20
Thallium	0.13		100	95.4		ug/L		95	70 - 130	4	20

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 550-303184/1-A
Matrix: Water
Analysis Batch: 303220

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 303184

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		06/29/23 13:33	06/29/23 16:42	1

Lab Sample ID: LCS 550-303184/2-A
Matrix: Water
Analysis Batch: 303220

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 303184

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury			0.00500	0.00484		mg/L		97	85 - 115		

Lab Sample ID: LCSD 550-303184/3-A
Matrix: Water
Analysis Batch: 303220

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 303184

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury			0.00500	0.00494		mg/L		99	85 - 115	2	20

Lab Sample ID: 550-204018-5 MS
Matrix: Water
Analysis Batch: 303220

Client Sample ID: FC-CCR-SW1-0523
Prep Type: Total/NA
Prep Batch: 303184

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury	ND		0.00500	0.00503		mg/L		101	70 - 130		

Lab Sample ID: 550-204018-5 MSD
Matrix: Water
Analysis Batch: 303220

Client Sample ID: FC-CCR-SW1-0523
Prep Type: Total/NA
Prep Batch: 303184

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		0.00500	0.00482		mg/L		96	70 - 130	4	20

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 550-303363/1
Matrix: Water
Analysis Batch: 303363

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		20		mg/L			07/03/23 12:35	1

Lab Sample ID: LCS 550-303363/2
Matrix: Water
Analysis Batch: 303363

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Dissolved Solids			1000	984		mg/L		98	90 - 110		

Method: SM 2540C - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: LCSD 550-303363/3
Matrix: Water
Analysis Batch: 303363

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Dissolved Solids			1000	984		mg/L		98	90 - 110	0	10

Lab Sample ID: 550-203941-A-7 DU
Matrix: Water
Analysis Batch: 303363

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	820			818		mg/L				0.7	10

Lab Sample ID: MB 550-303367/1
Matrix: Water
Analysis Batch: 303367

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		20		mg/L			07/03/23 14:16	1

Lab Sample ID: LCS 550-303367/2
Matrix: Water
Analysis Batch: 303367

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Dissolved Solids			1000	976		mg/L		98	90 - 110		

Lab Sample ID: LCSD 550-303367/3
Matrix: Water
Analysis Batch: 303367

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Dissolved Solids			1000	968		mg/L		97	90 - 110	1	10

Lab Sample ID: 550-204001-E-1 DU
Matrix: Water
Analysis Batch: 303367

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	970			960		mg/L				0.6	10

Method: SM 4500 H+ B - pH

Lab Sample ID: LCSSRM 550-303313/13
Matrix: Water
Analysis Batch: 303313

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits		
pH			7.00	7.0		SU		100.0	98.5 - 101.5		

Method: SM 4500 H+ B - pH (Continued)

Lab Sample ID: LCSSRM 550-303313/25
Matrix: Water
Analysis Batch: 303313

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits		
pH			7.00	7.0		SU		99.9	98.5 - 101.5		

Lab Sample ID: LCSSRM 550-303313/33
Matrix: Water
Analysis Batch: 303313

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits		
pH			7.00	7.0		SU		99.9	98.5 - 101.5		

Lab Sample ID: 550-204018-8 DU
Matrix: Water
Analysis Batch: 303313

Client Sample ID: FC-CCR-FD01-0523
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
pH	8.5	H5		8.5	H5	SU				0.1	5
Temperature	18.2	H5 T5		18.2	H5	Degrees C				0	

HPLC/IC

Analysis Batch: 303309

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-204018-1	FC-CCR-MW62-0523	Total/NA	Water	300.0	
550-204018-1	FC-CCR-MW62-0523	Total/NA	Water	300.0	
550-204018-2	FC-CCR-MW63-0523	Total/NA	Water	300.0	
550-204018-2	FC-CCR-MW63-0523	Total/NA	Water	300.0	
550-204018-3	FC-CCR-MW64-0523	Total/NA	Water	300.0	
550-204018-3	FC-CCR-MW64-0523	Total/NA	Water	300.0	
550-204018-4	FC-CCR-MW65-0523	Total/NA	Water	300.0	
550-204018-4	FC-CCR-MW65-0523	Total/NA	Water	300.0	
550-204018-5	FC-CCR-SW1-0523	Total/NA	Water	300.0	
550-204018-5	FC-CCR-SW1-0523	Total/NA	Water	300.0	
550-204018-6	FC-CCR-SW2-0523	Total/NA	Water	300.0	
550-204018-6	FC-CCR-SW2-0523	Total/NA	Water	300.0	
550-204018-7	FC-CCR-SW3-0523	Total/NA	Water	300.0	
550-204018-7	FC-CCR-SW3-0523	Total/NA	Water	300.0	
550-204018-8	FC-CCR-FD01-0523	Total/NA	Water	300.0	
550-204018-8	FC-CCR-FD01-0523	Total/NA	Water	300.0	
MB 550-303309/2	Method Blank	Total/NA	Water	300.0	
LCS 550-303309/5	Lab Control Sample	Total/NA	Water	300.0	
LCSD 550-303309/6	Lab Control Sample Dup	Total/NA	Water	300.0	
550-204018-5 MS	FC-CCR-SW1-0523	Total/NA	Water	300.0	
550-204018-5 MS	FC-CCR-SW1-0523	Total/NA	Water	300.0	
550-204018-5 MSD	FC-CCR-SW1-0523	Total/NA	Water	300.0	
550-204018-5 MSD	FC-CCR-SW1-0523	Total/NA	Water	300.0	

Metals

Prep Batch: 303184

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-204018-1	FC-CCR-MW62-0523	Total/NA	Water	245.1	
550-204018-2	FC-CCR-MW63-0523	Total/NA	Water	245.1	
550-204018-3	FC-CCR-MW64-0523	Total/NA	Water	245.1	
550-204018-4	FC-CCR-MW65-0523	Total/NA	Water	245.1	
550-204018-5	FC-CCR-SW1-0523	Total/NA	Water	245.1	
550-204018-6	FC-CCR-SW2-0523	Total/NA	Water	245.1	
550-204018-7	FC-CCR-SW3-0523	Total/NA	Water	245.1	
550-204018-8	FC-CCR-FD01-0523	Total/NA	Water	245.1	
MB 550-303184/1-A	Method Blank	Total/NA	Water	245.1	
LCS 550-303184/2-A	Lab Control Sample	Total/NA	Water	245.1	
LCSD 550-303184/3-A	Lab Control Sample Dup	Total/NA	Water	245.1	
550-204018-5 MS	FC-CCR-SW1-0523	Total/NA	Water	245.1	
550-204018-5 MSD	FC-CCR-SW1-0523	Total/NA	Water	245.1	

Analysis Batch: 303220

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-204018-1	FC-CCR-MW62-0523	Total/NA	Water	245.1	303184
550-204018-2	FC-CCR-MW63-0523	Total/NA	Water	245.1	303184
550-204018-3	FC-CCR-MW64-0523	Total/NA	Water	245.1	303184
550-204018-4	FC-CCR-MW65-0523	Total/NA	Water	245.1	303184
550-204018-5	FC-CCR-SW1-0523	Total/NA	Water	245.1	303184
550-204018-6	FC-CCR-SW2-0523	Total/NA	Water	245.1	303184
550-204018-7	FC-CCR-SW3-0523	Total/NA	Water	245.1	303184

Metals (Continued)

Analysis Batch: 303220 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-204018-8	FC-CCR-FD01-0523	Total/NA	Water	245.1	303184
MB 550-303184/1-A	Method Blank	Total/NA	Water	245.1	303184
LCS 550-303184/2-A	Lab Control Sample	Total/NA	Water	245.1	303184
LCSD 550-303184/3-A	Lab Control Sample Dup	Total/NA	Water	245.1	303184
550-204018-5 MS	FC-CCR-SW1-0523	Total/NA	Water	245.1	303184
550-204018-5 MSD	FC-CCR-SW1-0523	Total/NA	Water	245.1	303184

Prep Batch: 303317

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-204018-1	FC-CCR-MW62-0523	Total/NA	Water	200.7	
550-204018-2	FC-CCR-MW63-0523	Total/NA	Water	200.7	
550-204018-3	FC-CCR-MW64-0523	Total/NA	Water	200.7	
550-204018-4	FC-CCR-MW65-0523	Total/NA	Water	200.7	
550-204018-5	FC-CCR-SW1-0523	Total/NA	Water	200.7	
550-204018-6	FC-CCR-SW2-0523	Total/NA	Water	200.7	
550-204018-7	FC-CCR-SW3-0523	Total/NA	Water	200.7	
550-204018-8	FC-CCR-FD01-0523	Total/NA	Water	200.7	
MB 550-303317/1-A	Method Blank	Total/NA	Water	200.7	
LCS 550-303317/2-A	Lab Control Sample	Total/NA	Water	200.7	
LCSD 550-303317/3-A	Lab Control Sample Dup	Total/NA	Water	200.7	
550-204018-5 MS	FC-CCR-SW1-0523	Total/NA	Water	200.7	
550-204018-5 MSD	FC-CCR-SW1-0523	Total/NA	Water	200.7	

Prep Batch: 303341

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-204018-1	FC-CCR-MW62-0523	Total/NA	Water	200.8	
550-204018-2	FC-CCR-MW63-0523	Total/NA	Water	200.8	
550-204018-3	FC-CCR-MW64-0523	Total/NA	Water	200.8	
550-204018-4	FC-CCR-MW65-0523	Total/NA	Water	200.8	
550-204018-5	FC-CCR-SW1-0523	Total/NA	Water	200.8	
550-204018-6	FC-CCR-SW2-0523	Total/NA	Water	200.8	
550-204018-7	FC-CCR-SW3-0523	Total/NA	Water	200.8	
550-204018-8	FC-CCR-FD01-0523	Total/NA	Water	200.8	
MB 550-303341/1-A	Method Blank	Total/NA	Water	200.8	
LCS 550-303341/2-A	Lab Control Sample	Total/NA	Water	200.8	
LCSD 550-303341/3-A	Lab Control Sample Dup	Total/NA	Water	200.8	
550-204018-5 MS	FC-CCR-SW1-0523	Total/NA	Water	200.8	
550-204018-5 MSD	FC-CCR-SW1-0523	Total/NA	Water	200.8	

Analysis Batch: 303599

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-204018-1	FC-CCR-MW62-0523	Total/NA	Water	200.8 LL	303341
550-204018-2	FC-CCR-MW63-0523	Total/NA	Water	200.8 LL	303341
550-204018-3	FC-CCR-MW64-0523	Total/NA	Water	200.8 LL	303341
550-204018-4	FC-CCR-MW65-0523	Total/NA	Water	200.8 LL	303341
550-204018-5	FC-CCR-SW1-0523	Total/NA	Water	200.8 LL	303341
550-204018-6	FC-CCR-SW2-0523	Total/NA	Water	200.8 LL	303341
550-204018-7	FC-CCR-SW3-0523	Total/NA	Water	200.8 LL	303341
550-204018-8	FC-CCR-FD01-0523	Total/NA	Water	200.8 LL	303341
MB 550-303341/1-A	Method Blank	Total/NA	Water	200.8 LL	303341
LCS 550-303341/2-A	Lab Control Sample	Total/NA	Water	200.8 LL	303341

Metals (Continued)

Analysis Batch: 303599 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 550-303341/3-A	Lab Control Sample Dup	Total/NA	Water	200.8 LL	303341
550-204018-5 MS	FC-CCR-SW1-0523	Total/NA	Water	200.8 LL	303341
550-204018-5 MSD	FC-CCR-SW1-0523	Total/NA	Water	200.8 LL	303341

Analysis Batch: 303792

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-204018-1	FC-CCR-MW62-0523	Total/NA	Water	200.7 Rev 4.4	303317
550-204018-2	FC-CCR-MW63-0523	Total/NA	Water	200.7 Rev 4.4	303317
550-204018-3	FC-CCR-MW64-0523	Total/NA	Water	200.7 Rev 4.4	303317
550-204018-4	FC-CCR-MW65-0523	Total/NA	Water	200.7 Rev 4.4	303317
550-204018-5	FC-CCR-SW1-0523	Total/NA	Water	200.7 Rev 4.4	303317
550-204018-6	FC-CCR-SW2-0523	Total/NA	Water	200.7 Rev 4.4	303317
550-204018-7	FC-CCR-SW3-0523	Total/NA	Water	200.7 Rev 4.4	303317
550-204018-8	FC-CCR-FD01-0523	Total/NA	Water	200.7 Rev 4.4	303317
MB 550-303317/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	303317
LCS 550-303317/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	303317
LCSD 550-303317/3-A	Lab Control Sample Dup	Total/NA	Water	200.7 Rev 4.4	303317
550-204018-5 MS	FC-CCR-SW1-0523	Total/NA	Water	200.7 Rev 4.4	303317
550-204018-5 MSD	FC-CCR-SW1-0523	Total/NA	Water	200.7 Rev 4.4	303317

Analysis Batch: 304057

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-204018-1	FC-CCR-MW62-0523	Total/NA	Water	200.7 Rev 4.4	303317
550-204018-2	FC-CCR-MW63-0523	Total/NA	Water	200.7 Rev 4.4	303317
550-204018-3	FC-CCR-MW64-0523	Total/NA	Water	200.7 Rev 4.4	303317
550-204018-4	FC-CCR-MW65-0523	Total/NA	Water	200.7 Rev 4.4	303317
550-204018-5	FC-CCR-SW1-0523	Total/NA	Water	200.7 Rev 4.4	303317
550-204018-6	FC-CCR-SW2-0523	Total/NA	Water	200.7 Rev 4.4	303317
550-204018-7	FC-CCR-SW3-0523	Total/NA	Water	200.7 Rev 4.4	303317
550-204018-8	FC-CCR-FD01-0523	Total/NA	Water	200.7 Rev 4.4	303317
MB 550-303317/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	303317
LCS 550-303317/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	303317
LCSD 550-303317/3-A	Lab Control Sample Dup	Total/NA	Water	200.7 Rev 4.4	303317
550-204018-5 MS	FC-CCR-SW1-0523	Total/NA	Water	200.7 Rev 4.4	303317
550-204018-5 MSD	FC-CCR-SW1-0523	Total/NA	Water	200.7 Rev 4.4	303317

Prep Batch: 618462

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-204018-1	FC-CCR-MW62-0523	Total/NA	Water	200.7	
550-204018-2	FC-CCR-MW63-0523	Total/NA	Water	200.7	
550-204018-3	FC-CCR-MW64-0523	Total/NA	Water	200.7	
550-204018-4	FC-CCR-MW65-0523	Total/NA	Water	200.7	
550-204018-5	FC-CCR-SW1-0523	Total/NA	Water	200.7	
550-204018-6	FC-CCR-SW2-0523	Total/NA	Water	200.7	
550-204018-7	FC-CCR-SW3-0523	Total/NA	Water	200.7	
550-204018-8	FC-CCR-FD01-0523	Total/NA	Water	200.7	
MB 280-618462/1-A	Method Blank	Total/NA	Water	200.7	
LCS 280-618462/2-A	Lab Control Sample	Total/NA	Water	200.7	
280-178526-B-3-C MS	Matrix Spike	Total/NA	Water	200.7	
280-178526-B-3-D MSD	Matrix Spike Duplicate	Total/NA	Water	200.7	
550-204018-5 MS	FC-CCR-SW1-0523	Total/NA	Water	200.7	

Metals (Continued)

Prep Batch: 618462 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-204018-5 MSD	FC-CCR-SW1-0523	Total/NA	Water	200.7	

Analysis Batch: 619581

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-204018-1	FC-CCR-MW62-0523	Total/NA	Water	200.7 Rev 4.4	618462
550-204018-2	FC-CCR-MW63-0523	Total/NA	Water	200.7 Rev 4.4	618462
550-204018-3	FC-CCR-MW64-0523	Total/NA	Water	200.7 Rev 4.4	618462
550-204018-4	FC-CCR-MW65-0523	Total/NA	Water	200.7 Rev 4.4	618462
550-204018-5	FC-CCR-SW1-0523	Total/NA	Water	200.7 Rev 4.4	618462
550-204018-6	FC-CCR-SW2-0523	Total/NA	Water	200.7 Rev 4.4	618462
550-204018-7	FC-CCR-SW3-0523	Total/NA	Water	200.7 Rev 4.4	618462
550-204018-8	FC-CCR-FD01-0523	Total/NA	Water	200.7 Rev 4.4	618462
MB 280-618462/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	618462
LCS 280-618462/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	618462
280-178526-B-3-C MS	Matrix Spike	Total/NA	Water	200.7 Rev 4.4	618462
280-178526-B-3-D MSD	Matrix Spike Duplicate	Total/NA	Water	200.7 Rev 4.4	618462
550-204018-5 MS	FC-CCR-SW1-0523	Total/NA	Water	200.7 Rev 4.4	618462
550-204018-5 MSD	FC-CCR-SW1-0523	Total/NA	Water	200.7 Rev 4.4	618462

General Chemistry

Analysis Batch: 303313

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-204018-1	FC-CCR-MW62-0523	Total/NA	Water	SM 4500 H+ B	
550-204018-2	FC-CCR-MW63-0523	Total/NA	Water	SM 4500 H+ B	
550-204018-3	FC-CCR-MW64-0523	Total/NA	Water	SM 4500 H+ B	
550-204018-4	FC-CCR-MW65-0523	Total/NA	Water	SM 4500 H+ B	
550-204018-5	FC-CCR-SW1-0523	Total/NA	Water	SM 4500 H+ B	
550-204018-6	FC-CCR-SW2-0523	Total/NA	Water	SM 4500 H+ B	
550-204018-7	FC-CCR-SW3-0523	Total/NA	Water	SM 4500 H+ B	
550-204018-8	FC-CCR-FD01-0523	Total/NA	Water	SM 4500 H+ B	
LCSSRM 550-303313/13	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	
LCSSRM 550-303313/25	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	
LCSSRM 550-303313/33	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	
550-204018-8 DU	FC-CCR-FD01-0523	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 303363

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-204018-2	FC-CCR-MW63-0523	Total/NA	Water	SM 2540C	
550-204018-3	FC-CCR-MW64-0523	Total/NA	Water	SM 2540C	
550-204018-6	FC-CCR-SW2-0523	Total/NA	Water	SM 2540C	
550-204018-7	FC-CCR-SW3-0523	Total/NA	Water	SM 2540C	
MB 550-303363/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 550-303363/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 550-303363/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	
550-203941-A-7 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 303367

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-204018-1	FC-CCR-MW62-0523	Total/NA	Water	SM 2540C	
550-204018-4	FC-CCR-MW65-0523	Total/NA	Water	SM 2540C	

General Chemistry (Continued)

Analysis Batch: 303367 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-204018-5	FC-CCR-SW1-0523	Total/NA	Water	SM 2540C	
550-204018-8	FC-CCR-FD01-0523	Total/NA	Water	SM 2540C	
MB 550-303367/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 550-303367/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 550-303367/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	
550-204001-E-1 DU	Duplicate	Total/NA	Water	SM 2540C	

Lab Chronicle

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-204018-1
SDG: APS Dour Corners Power Plant (CWTP)

Client Sample ID: FC-CCR-MW62-0523

Lab Sample ID: 550-204018-1
Date Collected: 06/28/23 11:55
Matrix: Water
Date Received: 06/29/23 10:39

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		2	303309	RDC	EET PHX	07/01/23 14:11
Total/NA	Analysis	300.0		200	303309	RDC	EET PHX	07/01/23 14:30
Total/NA	Prep	200.7			303317	SGO	EET PHX	07/03/23 06:34
Total/NA	Analysis	200.7 Rev 4.4		1	303792	GLW	EET PHX	07/11/23 17:49
Total/NA	Prep	200.7			303317	SGO	EET PHX	07/03/23 06:34
Total/NA	Analysis	200.7 Rev 4.4		1	304057	GLW	EET PHX	07/14/23 22:17
Total/NA	Prep	200.7			618462	MSM	EET DEN	07/06/23 08:43
Total/NA	Analysis	200.7 Rev 4.4		1	619581	ADL	EET DEN	07/13/23 20:17
Total/NA	Prep	200.8			303341	SGO	EET PHX	07/03/23 10:49
Total/NA	Analysis	200.8 LL		1	303599	DSJ	EET PHX	07/06/23 23:54
Total/NA	Prep	245.1			303184	HHL	EET PHX	06/29/23 13:33
Total/NA	Analysis	245.1		1	303220	HHL	EET PHX	06/29/23 16:54
Total/NA	Analysis	SM 2540C		1	303367	JJI	EET PHX	07/03/23 14:16 - 07/12/23 14:51 [1]
Total/NA	Analysis	SM 4500 H+ B		1	303313	MAN	EET PHX	06/29/23 14:22

Client Sample ID: FC-CCR-MW63-0523

Lab Sample ID: 550-204018-2
Date Collected: 06/27/23 14:41
Matrix: Water
Date Received: 06/29/23 10:39

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		2	303309	RDC	EET PHX	07/01/23 14:48
Total/NA	Analysis	300.0		20	303309	RDC	EET PHX	07/01/23 16:02
Total/NA	Prep	200.7			303317	SGO	EET PHX	07/03/23 06:34
Total/NA	Analysis	200.7 Rev 4.4		1	303792	GLW	EET PHX	07/11/23 17:52
Total/NA	Prep	200.7			303317	SGO	EET PHX	07/03/23 06:34
Total/NA	Analysis	200.7 Rev 4.4		1	304057	GLW	EET PHX	07/14/23 22:20
Total/NA	Prep	200.7			618462	MSM	EET DEN	07/06/23 08:43
Total/NA	Analysis	200.7 Rev 4.4		1	619581	ADL	EET DEN	07/13/23 20:21
Total/NA	Prep	200.8			303341	SGO	EET PHX	07/03/23 10:49
Total/NA	Analysis	200.8 LL		1	303599	DSJ	EET PHX	07/06/23 23:56
Total/NA	Prep	245.1			303184	HHL	EET PHX	06/29/23 13:33
Total/NA	Analysis	245.1		1	303220	HHL	EET PHX	06/29/23 16:56
Total/NA	Analysis	SM 2540C		1	303363	JJI	EET PHX	07/03/23 12:35 - 07/12/23 14:40 [1]
Total/NA	Analysis	SM 4500 H+ B		1	303313	MAN	EET PHX	06/29/23 14:23

Client Sample ID: FC-CCR-MW64-0523

Lab Sample ID: 550-204018-3
Date Collected: 06/27/23 12:33
Matrix: Water
Date Received: 06/29/23 10:39

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	303309	RDC	EET PHX	07/01/23 16:20
Total/NA	Analysis	300.0		10	303309	RDC	EET PHX	07/01/23 16:38
Total/NA	Prep	200.7			303317	SGO	EET PHX	07/03/23 06:34
Total/NA	Analysis	200.7 Rev 4.4		1	303792	GLW	EET PHX	07/11/23 17:55

Lab Chronicle

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-204018-1
SDG: APS Dour Corners Power Plant (CWTP)

Client Sample ID: FC-CCR-MW64-0523

Lab Sample ID: 550-204018-3
Date Collected: 06/27/23 12:33
Matrix: Water
Date Received: 06/29/23 10:39

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	200.7			303317	SGO	EET PHX	07/03/23 06:34
Total/NA	Analysis	200.7 Rev 4.4		1	304057	GLW	EET PHX	07/14/23 22:23
Total/NA	Prep	200.7			618462	MSM	EET DEN	07/06/23 08:43
Total/NA	Analysis	200.7 Rev 4.4		1	619581	ADL	EET DEN	07/13/23 20:26
Total/NA	Prep	200.8			303341	SGO	EET PHX	07/03/23 10:49
Total/NA	Analysis	200.8 LL		1	303599	DSJ	EET PHX	07/06/23 23:58
Total/NA	Prep	245.1			303184	HHL	EET PHX	06/29/23 13:33
Total/NA	Analysis	245.1		1	303220	HHL	EET PHX	06/29/23 16:58
Total/NA	Analysis	SM 2540C		1	303363	JJI	EET PHX	07/03/23 12:35 - 07/12/23 14:40 [1]
Total/NA	Analysis	SM 4500 H+ B		1	303313	MAN	EET PHX	06/29/23 14:24

Client Sample ID: FC-CCR-MW65-0523

Lab Sample ID: 550-204018-4
Date Collected: 06/28/23 13:01
Matrix: Water
Date Received: 06/29/23 10:39

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	303309	RDC	EET PHX	07/01/23 16:57
Total/NA	Analysis	300.0		10	303309	RDC	EET PHX	07/01/23 17:15
Total/NA	Prep	200.7			303317	SGO	EET PHX	07/03/23 06:34
Total/NA	Analysis	200.7 Rev 4.4		1	303792	GLW	EET PHX	07/11/23 17:58
Total/NA	Prep	200.7			303317	SGO	EET PHX	07/03/23 06:34
Total/NA	Analysis	200.7 Rev 4.4		1	304057	GLW	EET PHX	07/14/23 22:26
Total/NA	Prep	200.7			618462	MSM	EET DEN	07/06/23 08:43
Total/NA	Analysis	200.7 Rev 4.4		1	619581	ADL	EET DEN	07/13/23 20:30
Total/NA	Prep	200.8			303341	SGO	EET PHX	07/03/23 10:49
Total/NA	Analysis	200.8 LL		1	303599	DSJ	EET PHX	07/07/23 00:00
Total/NA	Prep	245.1			303184	HHL	EET PHX	06/29/23 13:33
Total/NA	Analysis	245.1		1	303220	HHL	EET PHX	06/29/23 17:00
Total/NA	Analysis	SM 2540C		1	303367	JJI	EET PHX	07/03/23 14:16 - 07/12/23 14:51 [1]
Total/NA	Analysis	SM 4500 H+ B		1	303313	MAN	EET PHX	06/29/23 14:25

Client Sample ID: FC-CCR-SW1-0523

Lab Sample ID: 550-204018-5
Date Collected: 06/28/23 10:08
Matrix: Water
Date Received: 06/29/23 10:39

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		2	303309	RDC	EET PHX	07/01/23 12:21
Total/NA	Analysis	300.0		20	303309	RDC	EET PHX	07/01/23 13:16
Total/NA	Prep	200.7			303317	SGO	EET PHX	07/03/23 06:34
Total/NA	Analysis	200.7 Rev 4.4		1	303792	GLW	EET PHX	07/11/23 17:46
Total/NA	Prep	200.7			303317	SGO	EET PHX	07/03/23 06:34
Total/NA	Analysis	200.7 Rev 4.4		1	304057	GLW	EET PHX	07/14/23 22:14
Total/NA	Prep	200.7			618462	MSM	EET DEN	07/06/23 08:43
Total/NA	Analysis	200.7 Rev 4.4		1	619581	ADL	EET DEN	07/13/23 20:47

Lab Chronicle

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-204018-1
SDG: APS Dour Corners Power Plant (CWTP)

Client Sample ID: FC-CCR-SW1-0523

Lab Sample ID: 550-204018-5
Date Collected: 06/28/23 10:08
Matrix: Water
Date Received: 06/29/23 10:39

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	200.8			303341	SGO	EET PHX	07/03/23 10:49
Total/NA	Analysis	200.8 LL		1	303599	DSJ	EET PHX	07/06/23 23:52
Total/NA	Prep	245.1			303184	HHL	EET PHX	06/29/23 13:33
Total/NA	Analysis	245.1		1	303220	HHL	EET PHX	06/29/23 16:52
Total/NA	Analysis	SM 2540C		1	303367	JJI	EET PHX	07/03/23 14:16 - 07/12/23 14:51 [1]
Total/NA	Analysis	SM 4500 H+ B		1	303313	MAN	EET PHX	06/29/23 14:26

Client Sample ID: FC-CCR-SW2-0523

Lab Sample ID: 550-204018-6
Date Collected: 06/27/23 13:17
Matrix: Water
Date Received: 06/29/23 10:39

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		2	303309	RDC	EET PHX	07/01/23 17:34
Total/NA	Analysis	300.0		20	303309	RDC	EET PHX	07/01/23 17:52
Total/NA	Prep	200.7			303317	SGO	EET PHX	07/03/23 06:34
Total/NA	Analysis	200.7 Rev 4.4		1	303792	GLW	EET PHX	07/11/23 18:01
Total/NA	Prep	200.7			303317	SGO	EET PHX	07/03/23 06:34
Total/NA	Analysis	200.7 Rev 4.4		1	304057	GLW	EET PHX	07/14/23 22:29
Total/NA	Prep	200.7			618462	MSM	EET DEN	07/06/23 08:43
Total/NA	Analysis	200.7 Rev 4.4		1	619581	ADL	EET DEN	07/13/23 21:00
Total/NA	Prep	200.8			303341	SGO	EET PHX	07/03/23 10:49
Total/NA	Analysis	200.8 LL		1	303599	DSJ	EET PHX	07/07/23 00:02
Total/NA	Prep	245.1			303184	HHL	EET PHX	06/29/23 13:33
Total/NA	Analysis	245.1		1	303220	HHL	EET PHX	06/29/23 17:02
Total/NA	Analysis	SM 2540C		1	303363	JJI	EET PHX	07/03/23 12:35 - 07/12/23 14:40 [1]
Total/NA	Analysis	SM 4500 H+ B		1	303313	MAN	EET PHX	06/29/23 14:27

Client Sample ID: FC-CCR-SW3-0523

Lab Sample ID: 550-204018-7
Date Collected: 06/27/23 13:31
Matrix: Water
Date Received: 06/29/23 10:39

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		2	303309	RDC	EET PHX	07/01/23 18:11
Total/NA	Analysis	300.0		20	303309	RDC	EET PHX	07/01/23 18:29
Total/NA	Prep	200.7			303317	SGO	EET PHX	07/03/23 06:34
Total/NA	Analysis	200.7 Rev 4.4		1	303792	GLW	EET PHX	07/11/23 18:03
Total/NA	Prep	200.7			303317	SGO	EET PHX	07/03/23 06:34
Total/NA	Analysis	200.7 Rev 4.4		1	304057	GLW	EET PHX	07/14/23 22:37
Total/NA	Prep	200.7			618462	MSM	EET DEN	07/06/23 08:43
Total/NA	Analysis	200.7 Rev 4.4		1	619581	ADL	EET DEN	07/13/23 21:04
Total/NA	Prep	200.8			303341	SGO	EET PHX	07/03/23 10:49
Total/NA	Analysis	200.8 LL		1	303599	DSJ	EET PHX	07/07/23 00:04
Total/NA	Prep	245.1			303184	HHL	EET PHX	06/29/23 13:33
Total/NA	Analysis	245.1		1	303220	HHL	EET PHX	06/29/23 17:04

Lab Chronicle

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-204018-1
SDG: APS Dour Corners Power Plant (CWTP)

Client Sample ID: FC-CCR-SW3-0523

Date Collected: 06/27/23 13:31
Date Received: 06/29/23 10:39

Lab Sample ID: 550-204018-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	SM 2540C		1	303363	JJI	EET PHX	07/03/23 12:35 - 07/12/23 14:40 [1]
Total/NA	Analysis	SM 4500 H+ B		1	303313	MAN	EET PHX	06/29/23 14:29

Client Sample ID: FC-CCR-FD01-0523

Date Collected: 06/28/23 14:20
Date Received: 06/29/23 10:39

Lab Sample ID: 550-204018-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		2	303309	RDC	EET PHX	07/01/23 19:43
Total/NA	Analysis	300.0		20	303309	RDC	EET PHX	07/01/23 20:01
Total/NA	Prep	200.7			303317	SGO	EET PHX	07/03/23 06:34
Total/NA	Analysis	200.7 Rev 4.4		1	303792	GLW	EET PHX	07/11/23 18:06
Total/NA	Prep	200.7			303317	SGO	EET PHX	07/03/23 06:34
Total/NA	Analysis	200.7 Rev 4.4		1	304057	GLW	EET PHX	07/14/23 22:40
Total/NA	Prep	200.7			618462	MSM	EET DEN	07/06/23 08:43
Total/NA	Analysis	200.7 Rev 4.4		1	619581	ADL	EET DEN	07/13/23 21:09
Total/NA	Prep	200.8			303341	SGO	EET PHX	07/03/23 10:49
Total/NA	Analysis	200.8 LL		1	303599	DSJ	EET PHX	07/07/23 00:06
Total/NA	Prep	245.1			303184	HHL	EET PHX	06/29/23 13:33
Total/NA	Analysis	245.1		1	303220	HHL	EET PHX	06/29/23 17:06
Total/NA	Analysis	SM 2540C		1	303367	JJI	EET PHX	07/03/23 14:16 - 07/12/23 14:51 [1]
Total/NA	Analysis	SM 4500 H+ B		1	303313	MAN	EET PHX	06/29/23 14:32

[1] This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

EET PHX = Eurofins Phoenix, 4625 East Cotton Center Boulevard, Suite #189, Phoenix, AZ 85040, TEL (602)437-3340

Accreditation/Certification Summary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-204018-1
SDG: APS Dour Corners Power Plant (CWTP)

Laboratory: Eurofins Phoenix

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Arizona	State	AZ0728	06-10-24

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
SM 4500 H+ B		Water	Temperature

Laboratory: Eurofins Denver

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arizona	State	AZ0713	12-20-24

Method Summary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-204018-1
SDG: APS Dour Corners Power Plant (CWTP)

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	EPA	EET PHX
200.7 Rev 4.4	Metals (ICP)	EPA	EET DEN
200.7 Rev 4.4	Metals (ICP)	EPA	EET PHX
200.8 LL	Metals (ICP/MS)	EPA	EET PHX
245.1	Mercury (CVAA)	EPA	EET PHX
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET PHX
SM 4500 H+ B	pH	SM	EET PHX
200.7	Preparation, Total Metals	EPA	EET DEN
200.7	Preparation, Total Metals	EPA	EET PHX
200.8	Preparation, Total Metals	EPA	EET PHX
245.1	Preparation, Mercury	EPA	EET PHX

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

EET PHX = Eurofins Phoenix, 4625 East Cotton Center Boulevard, Suite #189, Phoenix, AZ 85040, TEL (602)437-3340

TestAmerica Phoenix
4625 E Cotton Center Blvd
Suite 189
Phoenix, AZ 85040
phone 602.437.3340 fax 602.454.9303

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☑ Other: CCR 204018

TestAmerica Laboratories, Inc.

7/18/2023

Client Contact	Natalie Chrisman	Pam Norris (505-598-8781)	Date:	COC No:
Arizona Public Service	602-250-3608	Lab Contact: Rachel Sester	Carrier:	1 of 1 COCs
PO Box 355, MS 4915	Analysis Turnaround Time			Sampler:
Fruitland, NM 87416	☐ CALENDAR DAYS ☑ WORKING DAYS			For Lab Use Only:
	TAT if different from Below ____			Walk-in Client:
	☑ 2 weeks			Lab Sampling:
Project Name: CCR Groundwater Monitoring	☐ 1 week			
Site: APS Four Corners Power Plant (CWTP)	☐ 2 days			Job / SDG No.:
PO #: 300592358	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	EPA 300.0 (Cl, F, SO4)	SM 4500-HB (pH)	SM 2540C (TDS)	EPA 200.7 - Totals (B, Ca, Be, Li)	EPA 200.7 - Total Lithium	EPA 200.8 - Totals (Sb, As, Ba, Cd, Co, Cr, Pb, Mo, Se, Tl)	EPA 245.1 - Totals (Hg)	Sample Specific Notes:
FC-CCR-MW62-0523	6/28/2023	1155	G	W	3	N	N	X	X	X	X	X	X	X	-01 Low Flow
FC-CCR-MW63-0523	6/27/2023	1441	G	W	3	N	N	X	X	X	X	X	X	X	-02 "
FC-CCR-MW64-0523	6/27/2023	1233	G	W	3	N	N	X	X	X	X	X	X	X	-03 "
FC-CCR-MW65-0523	6/28/2023	1301	G	W	3	N	N	X	X	X	X	X	X	X	-04 "
FC-CCR-SW1-0523	6/28/2023	1008	G	W	3	N		X	X	X	X	X	X	X	-05 Morgan Lake grab sample, MS/MSD
FC-CCR-SW2-0523	6/27/2023	1317	G	W	3	N		X	X	X	X	X	X	X	-06 CWTP surface grab sample
FC-CCR-SW3-0523	6/27/2023	1331	G	W	3	N	N	X	X	X	X	X	X	X	-07 Cooling canal grab sample
FC-CCR-FD01-0523	6/28/2023	1420	G	W	3	N	N	X	X	X	X	X	X	X	-08 Surface water sample duplicate
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other ____								1	1	1	4	4	4	4	

550-204018 Chain of Custody

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☑ Disposal by Lab ☐ Archive for_____ Months

Special Instructions/QC Requirements & Comments:

Method 200.8 with collision cell

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.:

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Bradley Hartman	WSP	6-29-23 1039			
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:
				EGAW	06-29-23 10:39

TEMP 3-4°C

Eurofins Phoenix
4625 East Cotton Center Boulevard Suite #189
Phoenix, AZ 85040
Phone: 602-437-3340

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Roberts, Danielle C	Carrier Tracking No(s):	COC No: 550-37236.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Danielle.Roberts@et.eurofinsus.com	State of Origin: New Mexico	Page: Page 1 of 2
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - Arizona; State Program - Arizona		Job #: 550-204018-1
Address: 4955 Yarrow Street, ,	Due Date Requested: 7/13/2023			
City: Arvada	TAT Requested (days):			
State, Zip: CO, 80002				
Phone: 303-736-0100(Tel) 303-431-7171(Fax)	PO #:			
Email:	WO #:			
Project Name: CCR Groundwater Monitoring	Project #: 55009706			
Site: Arizona Public Service	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	200.7/200.7_P_TOT Lithium-ICP	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
FC-CCR-MW62-0523 (550-204018-1)	6/28/23	11:55 Mountain		Water			X	1	AZ Sample
FC-CCR-MW63-0523 (550-204018-2)	6/27/23	14:41 Mountain		Water			X	1	AZ Sample
FC-CCR-MW64-0523 (550-204018-3)	6/27/23	12:33 Mountain		Water			X	1	AZ Sample
FC-CCR-MW65-0523 (550-204018-4)	6/28/23	13:01 Mountain		Water			X	1	AZ Sample
FC-CCR-SW1-0523 (550-204018-5)	6/28/23	10:08 Mountain		Water			X	3	AZ Sample
FC-CCR-SW1-0523 (550-204018-5MS)	6/28/23	10:08 Mountain	MS	Water			X	3	AZ Sample
FC-CCR-SW1-0523 (550-204018-5MSD)	6/28/23	10:08 Mountain	MSD	Water			X	3	AZ Sample
FC-CCR-SW2-0523 (550-204018-6)	6/27/23	13:17 Mountain		Water			X	1	AZ Sample
FC-CCR-SW3-0523 (550-204018-7)	6/27/23	13:31 Mountain		Water			X	1	AZ Sample

Note. Since laboratory accreditations are subject to change, Eurofins Environment Testing Southwest, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Southwest, LLC laboratory or other instructions will be provided Any changes to accreditation status should be brought to Eurofins Environment Testing Southwest, LLC attention immediately If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Southwest, LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested. I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		6-29-23 13:00	EETSW	Fedex		
2	Relinquished by	Date/Time	Company	Received by:	Date/Time: 6/30/23 0910	Company
3	Relinquished by	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 0.6 Tm (CF) 0.0

Ver: 06/08/2021

Eurofins Phoenix
4625 East Cotton Center Boulevard Suite #189
Phoenix, AZ 85040
Phone: 602-437-3340

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler:	Lab PM: Roberts, Danielle C	Carrier Tracking No(s):	COC No: 550-37236.2
Client Contact: Shipping/Receiving	Phone:	E-Mail: Danielle.Roberts@et.eurofinsus.com	State of Origin: New Mexico	Page: Page 2 of 2
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - Arizona; State Program - Arizona		Job #: 550-204018-1
Address: 4955 Yarrow Street, ,	Due Date Requested: 7/13/2023			
City: Arvada	TAT Requested (days):			
State, Zip: CO, 80002				
Phone: 303-736-0100(Tel) 303-431-7171(Fax)	PO #:			
Email:	WO #:			
Project Name: CCR Groundwater Monitoring	Project #: 55009706			
Site: Arizona Public Service	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
E - NaHSO4
F - MeOH
G - Amchlor
H - Ascorbic Acid
I - Ice
J - DI Water
K - EDTA
L - EDA
M - Hexane
N - None
O - AsNaO2
P - Na2O4S
Q - Na2SO3
R - Na2S2O3
S - H2SO4
T - TSP Dodecahydrate
U - Acetone
V - MCAA
W - pH 4-5
Y - Trizma
Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	200.7/200.7_P_TOT Lithium-ICP	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X		X	
FC-CCR-FD01-0523 (550-204018-8)	6/28/23	14:20 Mountain		Water			X	1	AZ Sample

Note Since laboratory accreditations are subject to change, Eurofins Environment Testing Southwest, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Southwest, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Southwest, LLC attention immediately If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Southwest, LLC

Possible Hazard Identification
Unconfirmed

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by: [signature]	Date/Time: 6-29-23 13:40	Company: EETSW	Received by: Fedex	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by: [signature]	Date/Time: 6/30/23 0920	Company: [signature]
Relinquished by	Date/Time.	Company	Received by:	Date/Time:	Company
Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: [signature] 0.6 Tmi (PO.)		

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Arizona Public Service Company

Job Number: 550-204018-1
SDG Number: APS Dour Corners Power Plant (CWTP)

Login Number: 204018
List Number: 1
Creator: Gravlin, Andrea

List Source: Eurofins Phoenix

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	False	Check done at department level as required.

Login Sample Receipt Checklist

Client: Arizona Public Service Company

Job Number: 550-204018-1
SDG Number: APS Dour Corners Power Plant (CWTP)

Login Number: 204018
List Number: 2
Creator: Naylis, Patrick J

List Source: Eurofins Denver
List Creation: 06/30/23 03:34 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

PREPARED FOR

Attn: Natalie Chrisman
Arizona Public Service Company
PO BOX 188, Ste. 4458
Joseph City, Arizona 86032

Generated 7/18/2023 5:43:52 AM

JOB DESCRIPTION

CCR Groundwater Monitoring
SDG NUMBER APS Four Corners Power Plant (URS)

JOB NUMBER

550-204020-1

Eurofins Phoenix
4625 East Cotton Center Boulevard
Suite #189
Phoenix AZ 85040

See page two for job notes and contact information.

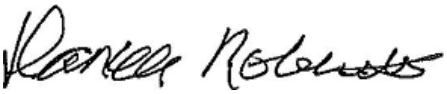
my EOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Southwest, LLC Project Manager.

Authorization



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Authorized for release by
Danielle Roberts, Senior Project Manager
Danielle.Roberts@et.eurofinsus.com
(657)210-6355

Table of Contents

Cover Page 1
Table of Contents 3
Definitions/Glossary 4
Case Narrative 5
Sample Summary 6
Detection Summary 7
Client Sample Results 8
QC Sample Results 11
QC Association Summary 18
Lab Chronicle 21
Certification Summary 23
Method Summary 24
Chain of Custody 25
Receipt Checklists 27

Definitions/Glossary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-204020-1
SDG: APS Four Corners Power Plant (URS)

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
D1	Sample required dilution due to matrix.
D2	Sample required dilution due to high concentration of analyte.
D5	Minimum Reporting Limit (MRL) adjusted due to sample dilution; analyte was non-detect in the sample.

Metals

Qualifier	Qualifier Description
M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The associated blank spike was acceptable.

General Chemistry

Qualifier	Qualifier Description
H5	This test is specified to be performed in the field within 15 minutes of sampling; sample was received and analyzed past the regulatory holding time.
T5	Laboratory not licensed for this parameter

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 550-204020-1

Laboratory: Eurofins Phoenix

Narrative

Job Narrative
550-204020-1

Comments
No additional comments.

Receipt
The samples were received on 6/29/2023 10:39 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.0º C.

HPLC/IC
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Metals
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Sample Summary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-204020-1
SDG: APS Four Corners Power Plant (URS)

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
550-204020-1	FC-CCR-MW71-0523	Water	06/27/23 18:34	06/29/23 10:39
550-204020-2	FC-CCR-MW72-0523	Water	06/27/23 17:31	06/29/23 10:39
550-204020-3	FC-CCR-MW73-0523	Water	06/27/23 16:23	06/29/23 10:39

Detection Summary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-204020-1
SDG: APS Four Corners Power Plant (URS)

Client Sample ID: FC-CCR-MW71-0523 — Lab Sample ID: 550-204020-1

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	600	D2	100		mg/L	50		300.0	Total/NA
Sulfate	14000	D2	400		mg/L	200		300.0	Total/NA
Beryllium	0.0022		0.0010		mg/L	1		200.7 Rev 4.4	Total/NA
Lithium	0.45		0.020		mg/L	1		200.7 Rev 4.4	Total/NA
Boron	0.57		0.050		mg/L	1		200.7 Rev 4.4	Total/NA
Calcium	530		2.0		mg/L	1		200.7 Rev 4.4	Total/NA
Barium	11		5.0		ug/L	10		200.8 LL	Total/NA
Selenium	250		5.0		ug/L	10		200.8 LL	Total/NA
Thallium	0.39		0.10		ug/L	1		200.8 LL	Total/NA
Total Dissolved Solids	20000		200		mg/L	1		SM 2540C	Total/NA
pH	7.0	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	18.2	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-MW72-0523 — Lab Sample ID: 550-204020-2

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	430	D2	100		mg/L	50		300.0	Total/NA
Sulfate	9700	D2	400		mg/L	200		300.0	Total/NA
Beryllium	0.0011		0.0010		mg/L	1		200.7 Rev 4.4	Total/NA
Lithium	0.37		0.020		mg/L	1		200.7 Rev 4.4	Total/NA
Boron	0.18		0.050		mg/L	1		200.7 Rev 4.4	Total/NA
Calcium	510		2.0		mg/L	1		200.7 Rev 4.4	Total/NA
Arsenic	1.4		0.50		ug/L	1		200.8 LL	Total/NA
Barium	7.3		5.0		ug/L	10		200.8 LL	Total/NA
Cobalt	2.3		0.50		ug/L	1		200.8 LL	Total/NA
Selenium	110		0.50		ug/L	1		200.8 LL	Total/NA
Thallium	0.93		0.10		ug/L	1		200.8 LL	Total/NA
Total Dissolved Solids	15000		100		mg/L	1		SM 2540C	Total/NA
pH	7.1	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	18.1	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-MW73-0523 — Lab Sample ID: 550-204020-3

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	640	D2	100		mg/L	50		300.0	Total/NA
Sulfate	7000	D2	400		mg/L	200		300.0	Total/NA
Beryllium	0.0014		0.0010		mg/L	1		200.7 Rev 4.4	Total/NA
Lithium	0.34		0.020		mg/L	1		200.7 Rev 4.4	Total/NA
Boron	1.7		0.050		mg/L	1		200.7 Rev 4.4	Total/NA
Calcium	520		2.0		mg/L	1		200.7 Rev 4.4	Total/NA
Barium	16		5.0		ug/L	10		200.8 LL	Total/NA
Thallium	0.21		0.10		ug/L	1		200.8 LL	Total/NA
Total Dissolved Solids	12000		100		mg/L	1		SM 2540C	Total/NA
pH	6.9	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	18.8	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: FC-CCR-MW71-0523

Lab Sample ID: 550-204020-1
Date Collected: 06/27/23 18:34
Matrix: Water
Date Received: 06/29/23 10:39

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**600**	**D2**	100		mg/L			07/01/23 20:19	50
Fluoride	ND	D1 D5	20		mg/L			07/01/23 20:19	50
Sulfate	**14000**	**D2**	400		mg/L			07/01/23 20:38	200

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	**0.0022**		0.0010		mg/L		07/03/23 06:34	07/14/23 22:43	1
Lithium	**0.45**		0.020		mg/L		07/06/23 08:43	07/13/23 21:13	1
Boron	**0.57**		0.050		mg/L		07/03/23 06:34	07/14/23 22:43	1
Calcium	**530**		2.0		mg/L		07/03/23 06:34	07/14/23 22:43	1

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		10		ug/L		07/03/23 10:49	07/12/23 08:59	10
Arsenic	ND		5.0		ug/L		07/03/23 10:49	07/07/23 21:16	10
Barium	**11**		5.0		ug/L		07/03/23 10:49	07/07/23 21:16	10
Cadmium	ND		1.0		ug/L		07/03/23 10:49	07/07/23 21:16	10
Chromium	ND		10		ug/L		07/03/23 10:49	07/07/23 21:16	10
Cobalt	ND		5.0		ug/L		07/03/23 10:49	07/07/23 21:16	10
Lead	ND		0.50		ug/L		07/03/23 10:49	07/07/23 00:09	1
Molybdenum	ND		5.0		ug/L		07/03/23 10:49	07/07/23 21:16	10
Selenium	**250**		5.0		ug/L		07/03/23 10:49	07/07/23 21:16	10
Thallium	**0.39**		0.10		ug/L		07/03/23 10:49	07/07/23 00:09	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		06/30/23 13:10	06/30/23 16:36	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**20000**		200		mg/L			07/03/23 12:35	1
pH (SM 4500 H+ B)	**7.0**	**H5**	1.7		SU			06/29/23 14:34	1
Temperature (SM 4500 H+ B)	**18.2**	**H5 T5**	0.1		Degrees C			06/29/23 14:34	1

Client Sample ID: FC-CCR-MW72-0523

Lab Sample ID: 550-204020-2
Date Collected: 06/27/23 17:31
Matrix: Water
Date Received: 06/29/23 10:39

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**430**	**D2**	100		mg/L			07/01/23 20:56	50
Fluoride	ND	D1 D5	20		mg/L			07/01/23 20:56	50
Sulfate	**9700**	**D2**	400		mg/L			07/01/23 21:15	200

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	**0.0011**		0.0010		mg/L		07/03/23 06:34	07/14/23 22:46	1
Lithium	**0.37**		0.020		mg/L		07/06/23 08:43	07/13/23 21:17	1
Boron	**0.18**		0.050		mg/L		07/03/23 06:34	07/14/23 22:46	1
Calcium	**510**		2.0		mg/L		07/03/23 06:34	07/14/23 22:46	1

Client Sample ID: FC-CCR-MW72-0523

Lab Sample ID: 550-204020-2
Date Collected: 06/27/23 17:31
Matrix: Water
Date Received: 06/29/23 10:39

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		10		ug/L		07/03/23 10:49	07/12/23 09:01	10
Arsenic	**1.4**		0.50		ug/L		07/03/23 10:49	07/07/23 00:11	1
Barium	**7.3**		5.0		ug/L		07/03/23 10:49	07/07/23 21:18	10
Cadmium	ND		1.0		ug/L		07/03/23 10:49	07/07/23 21:18	10
Chromium	ND		1.0		ug/L		07/03/23 10:49	07/07/23 00:11	1
Cobalt	**2.3**		0.50		ug/L		07/03/23 10:49	07/07/23 00:11	1
Lead	ND		0.50		ug/L		07/03/23 10:49	07/07/23 00:11	1
Molybdenum	ND		5.0		ug/L		07/03/23 10:49	07/07/23 21:18	10
Selenium	**110**		0.50		ug/L		07/03/23 10:49	07/07/23 00:11	1
Thallium	**0.93**		0.10		ug/L		07/03/23 10:49	07/07/23 00:11	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		06/30/23 13:10	06/30/23 16:38	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**15000**		100		mg/L			07/03/23 12:35	1
pH (SM 4500 H+ B)	**7.1**	**H5**	1.7		SU			06/29/23 14:35	1
Temperature (SM 4500 H+ B)	**18.1**	**H5 T5**	0.1		Degrees C			06/29/23 14:35	1

Client Sample ID: FC-CCR-MW73-0523

Lab Sample ID: 550-204020-3
Date Collected: 06/27/23 16:23
Matrix: Water
Date Received: 06/29/23 10:39

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**640**	**D2**	100		mg/L			07/01/23 21:33	50
Fluoride	ND	D1 D5	20		mg/L			07/01/23 21:33	50
Sulfate	**7000**	**D2**	400		mg/L			07/01/23 21:51	200

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	**0.0014**		0.0010		mg/L		07/03/23 06:34	07/14/23 22:48	1
Lithium	**0.34**		0.020		mg/L		07/06/23 08:43	07/13/23 21:22	1
Boron	**1.7**		0.050		mg/L		07/03/23 06:34	07/14/23 22:48	1
Calcium	**520**		2.0		mg/L		07/03/23 06:34	07/14/23 22:48	1

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		10		ug/L		07/03/23 10:49	07/12/23 09:03	10
Arsenic	ND		5.0		ug/L		07/03/23 10:49	07/07/23 21:20	10
Barium	**16**		5.0		ug/L		07/03/23 10:49	07/07/23 21:20	10
Cadmium	ND		1.0		ug/L		07/03/23 10:49	07/07/23 21:20	10
Chromium	ND		10		ug/L		07/03/23 10:49	07/07/23 21:20	10
Cobalt	ND		5.0		ug/L		07/03/23 10:49	07/07/23 21:20	10
Lead	ND		0.50		ug/L		07/03/23 10:49	07/07/23 00:13	1
Molybdenum	ND		5.0		ug/L		07/03/23 10:49	07/07/23 21:20	10
Selenium	ND		5.0		ug/L		07/03/23 10:49	07/07/23 21:20	10
Thallium	**0.21**		0.10		ug/L		07/03/23 10:49	07/07/23 00:13	1

Client Sample Results

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-204020-1
SDG: APS Four Corners Power Plant (URS)

Client Sample ID: FC-CCR-MW73-0523
Date Collected: 06/27/23 16:23
Date Received: 06/29/23 10:39

Lab Sample ID: 550-204020-3
Matrix: Water

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		06/30/23 13:10	06/30/23 16:40	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	12000		100		mg/L			07/03/23 12:35	1
pH (SM 4500 H+ B)	6.9	H5	1.7		SU			06/29/23 14:36	1
Temperature (SM 4500 H+ B)	18.8	H5 T5	0.1		Degrees C			06/29/23 14:36	1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 550-303309/2
Matrix: Water
Analysis Batch: 303309

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		2.0		mg/L			07/01/23 10:49	1
Fluoride	ND		0.40		mg/L			07/01/23 10:49	1
Sulfate	ND		2.0		mg/L			07/01/23 10:49	1

Lab Sample ID: LCS 550-303309/5
Matrix: Water
Analysis Batch: 303309

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			20.0	21.5		mg/L		108	90 - 110		
Fluoride			4.00	4.26		mg/L		107	90 - 110		
Sulfate			20.0	21.9		mg/L		110	90 - 110		

Lab Sample ID: LCSD 550-303309/6
Matrix: Water
Analysis Batch: 303309

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			20.0	21.2		mg/L		106	90 - 110	1	20
Fluoride			4.00	4.10		mg/L		103	90 - 110	4	20
Sulfate			20.0	21.7		mg/L		108	90 - 110	1	20

Lab Sample ID: 550-204018-A-5 MS ^2
Matrix: Water
Analysis Batch: 303309

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	50		40.0	91.4	D2	mg/L		104	80 - 120		
Fluoride	ND		8.00	8.94	D2	mg/L		100	80 - 120		

Lab Sample ID: 550-204018-A-5 MS ^20
Matrix: Water
Analysis Batch: 303309

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Sulfate	450	M3 D2	400	853	D2	mg/L		102	80 - 120		

Lab Sample ID: 550-204018-A-5 MSD ^2
Matrix: Water
Analysis Batch: 303309

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	50		40.0	94.3	D2	mg/L		111	80 - 120	NC	20
Fluoride	ND		8.00	9.45	D2	mg/L		106	80 - 120	NC	20

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 550-204018-A-5 MSD ^20
Matrix: Water
Analysis Batch: 303309

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfate	450	M3 D2	400	867	D2	mg/L		105	80 - 120	NC	20

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 550-303317/1-A
Matrix: Water
Analysis Batch: 304057

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 303317

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		0.0010		mg/L		07/03/23 06:34	07/14/23 22:00	1
Boron	ND		0.050		mg/L		07/03/23 06:34	07/14/23 22:00	1
Calcium	ND		2.0		mg/L		07/03/23 06:34	07/14/23 22:00	1

Lab Sample ID: LCS 550-303317/2-A
Matrix: Water
Analysis Batch: 304057

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 303317

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Beryllium			1.00	1.05		mg/L		105	85 - 115		
Boron			1.00	1.04		mg/L		104	85 - 115		
Calcium			21.0	22.5		mg/L		107	85 - 115		

Lab Sample ID: LCSD 550-303317/3-A
Matrix: Water
Analysis Batch: 304057

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 303317

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Beryllium			1.00	1.03		mg/L		103	85 - 115	1	20
Boron			1.00	1.06		mg/L		106	85 - 115	1	20
Calcium			21.0	22.3		mg/L		106	85 - 115	1	20

Lab Sample ID: 550-204018-D-5-A MS
Matrix: Water
Analysis Batch: 304057

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 303317

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Beryllium	ND		1.00	1.04		mg/L		104	70 - 130		
Boron	0.34		1.00	1.38		mg/L		104	70 - 130		
Calcium	90		21.0	108	M3	mg/L		87	70 - 130		

Lab Sample ID: 550-204018-D-5-B MSD
Matrix: Water
Analysis Batch: 304057

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 303317

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Beryllium	ND		1.00	1.06		mg/L		106	70 - 130	2	20
Boron	0.34		1.00	1.38		mg/L		104	70 - 130	0	20
Calcium	90		21.0	108	M3	mg/L		88	70 - 130	0	20

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: MB 280-618462/1-A
Matrix: Water
Analysis Batch: 619581

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 618462

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	ND		0.020		mg/L		07/06/23 08:43	07/13/23 19:52	1

Lab Sample ID: LCS 280-618462/2-A
Matrix: Water
Analysis Batch: 619581

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 618462

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Lithium			1.00	0.950		mg/L		95	90 - 112		

Lab Sample ID: 280-178526-B-3-C MS
Matrix: Water
Analysis Batch: 619581

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 618462

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Lithium	0.030		1.00	0.952		mg/L		92	70 - 130		

Lab Sample ID: 280-178526-B-3-D MSD
Matrix: Water
Analysis Batch: 619581

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 618462

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Lithium	0.030		1.00	0.947		mg/L		92	70 - 130	1	20

Lab Sample ID: 550-204018-B-5-B MS
Matrix: Water
Analysis Batch: 619581

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 618462

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Lithium	0.093		1.00	1.06		mg/L		97	70 - 130		

Lab Sample ID: 550-204018-B-5-C MSD
Matrix: Water
Analysis Batch: 619581

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 618462

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Lithium	0.093		1.00	1.06		mg/L		96	70 - 130	1	20

Method: 200.8 LL - Metals (ICP/MS)

Lab Sample ID: MB 550-303341/1-A
Matrix: Water
Analysis Batch: 303599

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 303341

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.50		ug/L		07/03/23 10:49	07/06/23 23:42	1
Chromium	ND		1.0		ug/L		07/03/23 10:49	07/06/23 23:42	1
Cobalt	ND		0.50		ug/L		07/03/23 10:49	07/06/23 23:42	1
Lead	ND		0.50		ug/L		07/03/23 10:49	07/06/23 23:42	1
Selenium	ND		0.50		ug/L		07/03/23 10:49	07/06/23 23:42	1
Thallium	ND		0.10		ug/L		07/03/23 10:49	07/06/23 23:42	1

Method: 200.8 LL - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 550-303341/1-A
Matrix: Water
Analysis Batch: 303767

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 303341

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.50		ug/L		07/03/23 10:49	07/07/23 21:06	1
Barium	ND		0.50		ug/L		07/03/23 10:49	07/07/23 21:06	1
Cadmium	ND		0.10		ug/L		07/03/23 10:49	07/07/23 21:06	1
Chromium	ND		1.0		ug/L		07/03/23 10:49	07/07/23 21:06	1
Cobalt	ND		0.50		ug/L		07/03/23 10:49	07/07/23 21:06	1
Lead	ND		0.50		ug/L		07/03/23 10:49	07/07/23 21:06	1
Molybdenum	ND		0.50		ug/L		07/03/23 10:49	07/07/23 21:06	1
Selenium	ND		0.50		ug/L		07/03/23 10:49	07/07/23 21:06	1
Thallium	ND		0.10		ug/L		07/03/23 10:49	07/07/23 21:06	1

Lab Sample ID: MB 550-303341/1-A
Matrix: Water
Analysis Batch: 303799

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 303341

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.0		ug/L		07/03/23 10:49	07/12/23 08:47	1

Lab Sample ID: LCS 550-303341/2-A
Matrix: Water
Analysis Batch: 303599

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 303341

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Arsenic			100	102		ug/L		102	85 - 115		
Chromium			100	101		ug/L		101	85 - 115		
Cobalt			100	99.9		ug/L		100	85 - 115		
Lead			100	103		ug/L		103	85 - 115		
Selenium			100	98.3		ug/L		98	85 - 115		
Thallium			100	99.3		ug/L		99	85 - 115		

Lab Sample ID: LCS 550-303341/2-A
Matrix: Water
Analysis Batch: 303767

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 303341

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Arsenic			100	88.9		ug/L		89	85 - 115		
Barium			100	97.3		ug/L		97	85 - 115		
Cadmium			100	88.7		ug/L		89	85 - 115		
Chromium			100	90.2		ug/L		90	85 - 115		
Cobalt			100	89.8		ug/L		90	85 - 115		
Lead			100	88.9		ug/L		89	85 - 115		
Molybdenum			100	89.7		ug/L		90	85 - 115		
Selenium			100	87.6		ug/L		88	85 - 115		
Thallium			100	85.2		ug/L		85	85 - 115		

Method: 200.8 LL - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 550-303341/2-A
Matrix: Water
Analysis Batch: 303799

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 303341

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Antimony			100	89.7		ug/L		90	85 - 115		

Lab Sample ID: LCSD 550-303341/3-A
Matrix: Water
Analysis Batch: 303599

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 303341

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic			100	102		ug/L		102	85 - 115	0	20
Chromium			100	102		ug/L		102	85 - 115	0	20
Cobalt			100	98.9		ug/L		99	85 - 115	1	20
Lead			100	105		ug/L		105	85 - 115	3	20
Selenium			100	98.4		ug/L		98	85 - 115	0	20
Thallium			100	102		ug/L		102	85 - 115	3	20

Lab Sample ID: LCSD 550-303341/3-A
Matrix: Water
Analysis Batch: 303767

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 303341

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic			100	89.5		ug/L		90	85 - 115	1	20
Barium			100	98.7		ug/L		99	85 - 115	1	20
Cadmium			100	90.3		ug/L		90	85 - 115	2	20
Chromium			100	90.1		ug/L		90	85 - 115	0	20
Cobalt			100	92.0		ug/L		92	85 - 115	3	20
Lead			100	90.3		ug/L		90	85 - 115	2	20
Molybdenum			100	91.5		ug/L		91	85 - 115	2	20
Selenium			100	88.3		ug/L		88	85 - 115	1	20
Thallium			100	86.8		ug/L		87	85 - 115	2	20

Lab Sample ID: LCSD 550-303341/3-A
Matrix: Water
Analysis Batch: 303799

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 303341

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony			100	92.5		ug/L		92	85 - 115	3	20

Lab Sample ID: 550-204018-F-5-A MS
Matrix: Water
Analysis Batch: 303599

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 303341

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Arsenic	3.1		100	108		ug/L		105	70 - 130		
Chromium	ND		100	95.4		ug/L		95	70 - 130		
Cobalt	ND		100	97.5		ug/L		97	70 - 130		
Lead	ND		100	102		ug/L		102	70 - 130		
Selenium	0.66		100	102		ug/L		102	70 - 130		
Thallium	0.13		100	99.5		ug/L		99	70 - 130		

Method: 200.8 LL - Metals (ICP/MS) (Continued)

Lab Sample ID: 550-204018-F-5-B MSD
Matrix: Water
Analysis Batch: 303599

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 303341

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	3.1		100	108		ug/L		105	70 - 130	0	20
Chromium	ND		100	95.3		ug/L		95	70 - 130	0	20
Cobalt	ND		100	96.0		ug/L		96	70 - 130	2	20
Lead	ND		100	99.0		ug/L		99	70 - 130	3	20
Selenium	0.66		100	105		ug/L		104	70 - 130	2	20
Thallium	0.13		100	95.4		ug/L		95	70 - 130	4	20

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 550-303261/1-A
Matrix: Water
Analysis Batch: 303296

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 303261

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		06/30/23 13:10	06/30/23 16:22	1

Lab Sample ID: LCS 550-303261/2-A
Matrix: Water
Analysis Batch: 303296

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 303261

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury			0.00500	0.00471		mg/L		94	85 - 115		

Lab Sample ID: LCSD 550-303261/3-A
Matrix: Water
Analysis Batch: 303296

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 303261

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury			0.00500	0.00455		mg/L		91	85 - 115	3	20

Lab Sample ID: 550-203989-V-1-A MS
Matrix: Water
Analysis Batch: 303296

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 303261

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury	ND		0.00500	0.00472		mg/L		94	70 - 130		

Lab Sample ID: 550-203989-V-1-B MSD
Matrix: Water
Analysis Batch: 303296

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 303261

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		0.00500	0.00456		mg/L		91	70 - 130	3	20

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 550-303363/1
Matrix: Water
Analysis Batch: 303363

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		20		mg/L			07/03/23 12:35	1

Lab Sample ID: LCS 550-303363/2
Matrix: Water
Analysis Batch: 303363

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Dissolved Solids			1000	984		mg/L		98	90 - 110		

Lab Sample ID: LCSD 550-303363/3
Matrix: Water
Analysis Batch: 303363

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Dissolved Solids			1000	984		mg/L		98	90 - 110	0	10

Lab Sample ID: 550-203941-A-7 DU
Matrix: Water
Analysis Batch: 303363

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	820			818		mg/L				0.7	10

Method: SM 4500 H+ B - pH

Lab Sample ID: LCSSRM 550-303313/25
Matrix: Water
Analysis Batch: 303313

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits		
pH			7.00	7.0		SU		99.9	98.5 - 101.5		

Lab Sample ID: LCSSRM 550-303313/33
Matrix: Water
Analysis Batch: 303313

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits		
pH			7.00	7.0		SU		99.9	98.5 - 101.5		

Lab Sample ID: 550-204018-A-8 DU
Matrix: Water
Analysis Batch: 303313

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
pH	8.5	H5		8.5	H5	SU				0.1	5
Temperature	18.2	H5		18.2	H5	Degrees C				0	

HPLC/IC

Analysis Batch: 303309

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-204020-1	FC-CCR-MW71-0523	Total/NA	Water	300.0	
550-204020-1	FC-CCR-MW71-0523	Total/NA	Water	300.0	
550-204020-2	FC-CCR-MW72-0523	Total/NA	Water	300.0	
550-204020-2	FC-CCR-MW72-0523	Total/NA	Water	300.0	
550-204020-3	FC-CCR-MW73-0523	Total/NA	Water	300.0	
550-204020-3	FC-CCR-MW73-0523	Total/NA	Water	300.0	
MB 550-303309/2	Method Blank	Total/NA	Water	300.0	
LCS 550-303309/5	Lab Control Sample	Total/NA	Water	300.0	
LCSD 550-303309/6	Lab Control Sample Dup	Total/NA	Water	300.0	
550-204018-A-5 MS ^2	Matrix Spike	Total/NA	Water	300.0	
550-204018-A-5 MS ^20	Matrix Spike	Total/NA	Water	300.0	
550-204018-A-5 MSD ^2	Matrix Spike Duplicate	Total/NA	Water	300.0	
550-204018-A-5 MSD ^20	Matrix Spike Duplicate	Total/NA	Water	300.0	

Metals

Prep Batch: 303261

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-204020-1	FC-CCR-MW71-0523	Total/NA	Water	245.1	
550-204020-2	FC-CCR-MW72-0523	Total/NA	Water	245.1	
550-204020-3	FC-CCR-MW73-0523	Total/NA	Water	245.1	
MB 550-303261/1-A	Method Blank	Total/NA	Water	245.1	
LCS 550-303261/2-A	Lab Control Sample	Total/NA	Water	245.1	
LCSD 550-303261/3-A	Lab Control Sample Dup	Total/NA	Water	245.1	
550-203989-V-1-A MS	Matrix Spike	Total/NA	Water	245.1	
550-203989-V-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	245.1	

Analysis Batch: 303296

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-204020-1	FC-CCR-MW71-0523	Total/NA	Water	245.1	303261
550-204020-2	FC-CCR-MW72-0523	Total/NA	Water	245.1	303261
550-204020-3	FC-CCR-MW73-0523	Total/NA	Water	245.1	303261
MB 550-303261/1-A	Method Blank	Total/NA	Water	245.1	303261
LCS 550-303261/2-A	Lab Control Sample	Total/NA	Water	245.1	303261
LCSD 550-303261/3-A	Lab Control Sample Dup	Total/NA	Water	245.1	303261
550-203989-V-1-A MS	Matrix Spike	Total/NA	Water	245.1	303261
550-203989-V-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	245.1	303261

Prep Batch: 303317

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-204020-1	FC-CCR-MW71-0523	Total/NA	Water	200.7	
550-204020-2	FC-CCR-MW72-0523	Total/NA	Water	200.7	
550-204020-3	FC-CCR-MW73-0523	Total/NA	Water	200.7	
MB 550-303317/1-A	Method Blank	Total/NA	Water	200.7	
LCS 550-303317/2-A	Lab Control Sample	Total/NA	Water	200.7	
LCSD 550-303317/3-A	Lab Control Sample Dup	Total/NA	Water	200.7	
550-204018-D-5-A MS	Matrix Spike	Total/NA	Water	200.7	
550-204018-D-5-B MSD	Matrix Spike Duplicate	Total/NA	Water	200.7	

Metals

Prep Batch: 303341

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-204020-1	FC-CCR-MW71-0523	Total/NA	Water	200.8	
550-204020-2	FC-CCR-MW72-0523	Total/NA	Water	200.8	
550-204020-3	FC-CCR-MW73-0523	Total/NA	Water	200.8	
MB 550-303341/1-A	Method Blank	Total/NA	Water	200.8	
LCS 550-303341/2-A	Lab Control Sample	Total/NA	Water	200.8	
LCSD 550-303341/3-A	Lab Control Sample Dup	Total/NA	Water	200.8	
550-204018-F-5-A MS	Matrix Spike	Total/NA	Water	200.8	
550-204018-F-5-B MSD	Matrix Spike Duplicate	Total/NA	Water	200.8	

Analysis Batch: 303599

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-204020-1	FC-CCR-MW71-0523	Total/NA	Water	200.8 LL	303341
550-204020-2	FC-CCR-MW72-0523	Total/NA	Water	200.8 LL	303341
550-204020-3	FC-CCR-MW73-0523	Total/NA	Water	200.8 LL	303341
MB 550-303341/1-A	Method Blank	Total/NA	Water	200.8 LL	303341
LCS 550-303341/2-A	Lab Control Sample	Total/NA	Water	200.8 LL	303341
LCSD 550-303341/3-A	Lab Control Sample Dup	Total/NA	Water	200.8 LL	303341
550-204018-F-5-A MS	Matrix Spike	Total/NA	Water	200.8 LL	303341
550-204018-F-5-B MSD	Matrix Spike Duplicate	Total/NA	Water	200.8 LL	303341

Analysis Batch: 303767

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-204020-1	FC-CCR-MW71-0523	Total/NA	Water	200.8 LL	303341
550-204020-2	FC-CCR-MW72-0523	Total/NA	Water	200.8 LL	303341
550-204020-3	FC-CCR-MW73-0523	Total/NA	Water	200.8 LL	303341
MB 550-303341/1-A	Method Blank	Total/NA	Water	200.8 LL	303341
LCS 550-303341/2-A	Lab Control Sample	Total/NA	Water	200.8 LL	303341
LCSD 550-303341/3-A	Lab Control Sample Dup	Total/NA	Water	200.8 LL	303341

Analysis Batch: 303768

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-204020-1	FC-CCR-MW71-0523	Total/NA	Water	200.8 LL	303341
550-204020-2	FC-CCR-MW72-0523	Total/NA	Water	200.8 LL	303341
550-204020-3	FC-CCR-MW73-0523	Total/NA	Water	200.8 LL	303341
MB 550-303341/1-A	Method Blank	Total/NA	Water	200.8 LL	303341
LCS 550-303341/2-A	Lab Control Sample	Total/NA	Water	200.8 LL	303341
LCSD 550-303341/3-A	Lab Control Sample Dup	Total/NA	Water	200.8 LL	303341

Analysis Batch: 303799

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-204020-1	FC-CCR-MW71-0523	Total/NA	Water	200.8 LL	303341
550-204020-2	FC-CCR-MW72-0523	Total/NA	Water	200.8 LL	303341
550-204020-3	FC-CCR-MW73-0523	Total/NA	Water	200.8 LL	303341
MB 550-303341/1-A	Method Blank	Total/NA	Water	200.8 LL	303341
LCS 550-303341/2-A	Lab Control Sample	Total/NA	Water	200.8 LL	303341
LCSD 550-303341/3-A	Lab Control Sample Dup	Total/NA	Water	200.8 LL	303341

Analysis Batch: 304057

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-204020-1	FC-CCR-MW71-0523	Total/NA	Water	200.7 Rev 4.4	303317
550-204020-2	FC-CCR-MW72-0523	Total/NA	Water	200.7 Rev 4.4	303317

Metals (Continued)

Analysis Batch: 304057 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-204020-3	FC-CCR-MW73-0523	Total/NA	Water	200.7 Rev 4.4	303317
MB 550-303317/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	303317
LCS 550-303317/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	303317
LCSD 550-303317/3-A	Lab Control Sample Dup	Total/NA	Water	200.7 Rev 4.4	303317
550-204018-D-5-A MS	Matrix Spike	Total/NA	Water	200.7 Rev 4.4	303317
550-204018-D-5-B MSD	Matrix Spike Duplicate	Total/NA	Water	200.7 Rev 4.4	303317

Prep Batch: 618462

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-204020-1	FC-CCR-MW71-0523	Total/NA	Water	200.7	
550-204020-2	FC-CCR-MW72-0523	Total/NA	Water	200.7	
550-204020-3	FC-CCR-MW73-0523	Total/NA	Water	200.7	
MB 280-618462/1-A	Method Blank	Total/NA	Water	200.7	
LCS 280-618462/2-A	Lab Control Sample	Total/NA	Water	200.7	
280-178526-B-3-C MS	Matrix Spike	Total/NA	Water	200.7	
280-178526-B-3-D MSD	Matrix Spike Duplicate	Total/NA	Water	200.7	
550-204018-B-5-B MS	Matrix Spike	Total/NA	Water	200.7	
550-204018-B-5-C MSD	Matrix Spike Duplicate	Total/NA	Water	200.7	

Analysis Batch: 619581

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-204020-1	FC-CCR-MW71-0523	Total/NA	Water	200.7 Rev 4.4	618462
550-204020-2	FC-CCR-MW72-0523	Total/NA	Water	200.7 Rev 4.4	618462
550-204020-3	FC-CCR-MW73-0523	Total/NA	Water	200.7 Rev 4.4	618462
MB 280-618462/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	618462
LCS 280-618462/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	618462
280-178526-B-3-C MS	Matrix Spike	Total/NA	Water	200.7 Rev 4.4	618462
280-178526-B-3-D MSD	Matrix Spike Duplicate	Total/NA	Water	200.7 Rev 4.4	618462
550-204018-B-5-B MS	Matrix Spike	Total/NA	Water	200.7 Rev 4.4	618462
550-204018-B-5-C MSD	Matrix Spike Duplicate	Total/NA	Water	200.7 Rev 4.4	618462

General Chemistry

Analysis Batch: 303313

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-204020-1	FC-CCR-MW71-0523	Total/NA	Water	SM 4500 H+ B	
550-204020-2	FC-CCR-MW72-0523	Total/NA	Water	SM 4500 H+ B	
550-204020-3	FC-CCR-MW73-0523	Total/NA	Water	SM 4500 H+ B	
LCSSRM 550-303313/25	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	
LCSSRM 550-303313/33	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	
550-204018-A-8 DU	Duplicate	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 303363

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-204020-1	FC-CCR-MW71-0523	Total/NA	Water	SM 2540C	
550-204020-2	FC-CCR-MW72-0523	Total/NA	Water	SM 2540C	
550-204020-3	FC-CCR-MW73-0523	Total/NA	Water	SM 2540C	
MB 550-303363/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 550-303363/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 550-303363/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	
550-203941-A-7 DU	Duplicate	Total/NA	Water	SM 2540C	

Lab Chronicle

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-204020-1
SDG: APS Four Corners Power Plant (URS)

Client Sample ID: FC-CCR-MW71-0523

Date Collected: 06/27/23 18:34
Date Received: 06/29/23 10:39

Lab Sample ID: 550-204020-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		50	303309	RDC	EET PHX	07/01/23 20:19
Total/NA	Analysis	300.0		200	303309	RDC	EET PHX	07/01/23 20:38
Total/NA	Prep	200.7			303317	SGO	EET PHX	07/03/23 06:34
Total/NA	Analysis	200.7 Rev 4.4		1	304057	GLW	EET PHX	07/14/23 22:43
Total/NA	Prep	200.7			618462	MSM	EET DEN	07/06/23 08:43
Total/NA	Analysis	200.7 Rev 4.4		1	619581	ADL	EET DEN	07/13/23 21:13
Total/NA	Prep	200.8			303341	SGO	EET PHX	07/03/23 10:49
Total/NA	Analysis	200.8 LL		1	303599	DSJ	EET PHX	07/07/23 00:09
Total/NA	Prep	200.8			303341	SGO	EET PHX	07/03/23 10:49
Total/NA	Analysis	200.8 LL		10	303767	DSJ	EET PHX	07/07/23 21:16
Total/NA	Prep	200.8			303341	SGO	EET PHX	07/03/23 10:49
Total/NA	Analysis	200.8 LL		10	303768	DSJ	EET PHX	07/07/23 21:16
Total/NA	Prep	200.8			303341	SGO	EET PHX	07/03/23 10:49
Total/NA	Analysis	200.8 LL		10	303799	DSJ	EET PHX	07/12/23 08:59
Total/NA	Prep	245.1			303261	HHL	EET PHX	06/30/23 13:10
Total/NA	Analysis	245.1		1	303296	HHL	EET PHX	06/30/23 16:36
Total/NA	Analysis	SM 2540C		1	303363	JJI	EET PHX	07/03/23 12:35 - 07/12/23 14:40 [1]
Total/NA	Analysis	SM 4500 H+ B		1	303313	MAN	EET PHX	06/29/23 14:34

Client Sample ID: FC-CCR-MW72-0523

Date Collected: 06/27/23 17:31
Date Received: 06/29/23 10:39

Lab Sample ID: 550-204020-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		50	303309	RDC	EET PHX	07/01/23 20:56
Total/NA	Analysis	300.0		200	303309	RDC	EET PHX	07/01/23 21:15
Total/NA	Prep	200.7			303317	SGO	EET PHX	07/03/23 06:34
Total/NA	Analysis	200.7 Rev 4.4		1	304057	GLW	EET PHX	07/14/23 22:46
Total/NA	Prep	200.7			618462	MSM	EET DEN	07/06/23 08:43
Total/NA	Analysis	200.7 Rev 4.4		1	619581	ADL	EET DEN	07/13/23 21:17
Total/NA	Prep	200.8			303341	SGO	EET PHX	07/03/23 10:49
Total/NA	Analysis	200.8 LL		1	303599	DSJ	EET PHX	07/07/23 00:11
Total/NA	Prep	200.8			303341	SGO	EET PHX	07/03/23 10:49
Total/NA	Analysis	200.8 LL		10	303767	DSJ	EET PHX	07/07/23 21:18
Total/NA	Prep	200.8			303341	SGO	EET PHX	07/03/23 10:49
Total/NA	Analysis	200.8 LL		10	303768	DSJ	EET PHX	07/07/23 21:18
Total/NA	Prep	200.8			303341	SGO	EET PHX	07/03/23 10:49
Total/NA	Analysis	200.8 LL		10	303799	DSJ	EET PHX	07/12/23 09:01
Total/NA	Prep	245.1			303261	HHL	EET PHX	06/30/23 13:10
Total/NA	Analysis	245.1		1	303296	HHL	EET PHX	06/30/23 16:38
Total/NA	Analysis	SM 2540C		1	303363	JJI	EET PHX	07/03/23 12:35 - 07/12/23 14:40 [1]
Total/NA	Analysis	SM 4500 H+ B		1	303313	MAN	EET PHX	06/29/23 14:35

Lab Chronicle

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-204020-1
SDG: APS Four Corners Power Plant (URS)

Client Sample ID: FC-CCR-MW73-0523

Date Collected: 06/27/23 16:23
Date Received: 06/29/23 10:39

Lab Sample ID: 550-204020-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		50	303309	RDC	EET PHX	07/01/23 21:33
Total/NA	Analysis	300.0		200	303309	RDC	EET PHX	07/01/23 21:51
Total/NA	Prep	200.7			303317	SGO	EET PHX	07/03/23 06:34
Total/NA	Analysis	200.7 Rev 4.4		1	304057	GLW	EET PHX	07/14/23 22:48
Total/NA	Prep	200.7			618462	MSM	EET DEN	07/06/23 08:43
Total/NA	Analysis	200.7 Rev 4.4		1	619581	ADL	EET DEN	07/13/23 21:22
Total/NA	Prep	200.8			303341	SGO	EET PHX	07/03/23 10:49
Total/NA	Analysis	200.8 LL		1	303599	DSJ	EET PHX	07/07/23 00:13
Total/NA	Prep	200.8			303341	SGO	EET PHX	07/03/23 10:49
Total/NA	Analysis	200.8 LL		10	303767	DSJ	EET PHX	07/07/23 21:20
Total/NA	Prep	200.8			303341	SGO	EET PHX	07/03/23 10:49
Total/NA	Analysis	200.8 LL		10	303768	DSJ	EET PHX	07/07/23 21:20
Total/NA	Prep	200.8			303341	SGO	EET PHX	07/03/23 10:49
Total/NA	Analysis	200.8 LL		10	303799	DSJ	EET PHX	07/12/23 09:03
Total/NA	Prep	245.1			303261	HHL	EET PHX	06/30/23 13:10
Total/NA	Analysis	245.1		1	303296	HHL	EET PHX	06/30/23 16:40
Total/NA	Analysis	SM 2540C		1	303363	JJI	EET PHX	07/03/23 12:35 - 07/12/23 14:40 [1]
Total/NA	Analysis	SM 4500 H+ B		1	303313	MAN	EET PHX	06/29/23 14:36

[1] This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

EET PHX = Eurofins Phoenix, 4625 East Cotton Center Boulevard, Suite #189, Phoenix, AZ 85040, TEL (602)437-3340

Accreditation/Certification Summary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-204020-1
SDG: APS Four Corners Power Plant (URS)

Laboratory: Eurofins Phoenix

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Arizona	State	AZ0728	06-10-24

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
SM 4500 H+ B		Water	Temperature

Laboratory: Eurofins Denver

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arizona	State	AZ0713	12-20-24

Method Summary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-204020-1
SDG: APS Four Corners Power Plant (URS)

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	EPA	EET PHX
200.7 Rev 4.4	Metals (ICP)	EPA	EET DEN
200.7 Rev 4.4	Metals (ICP)	EPA	EET PHX
200.8 LL	Metals (ICP/MS)	EPA	EET PHX
245.1	Mercury (CVAA)	EPA	EET PHX
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET PHX
SM 4500 H+ B	pH	SM	EET PHX
200.7	Preparation, Total Metals	EPA	EET DEN
200.7	Preparation, Total Metals	EPA	EET PHX
200.8	Preparation, Total Metals	EPA	EET PHX
245.1	Preparation, Mercury	EPA	EET PHX

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

EET PHX = Eurofins Phoenix, 4625 East Cotton Center Boulevard, Suite #189, Phoenix, AZ 85040, TEL (602)437-3340

TestAmerica Phoenix
4625 E Cotton Center Blvd
Suite 189
Phoenix, AZ 85040
phone 602.437.3340 fax 602.454.9303

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☑ Other: **CCR** 204020

TestAmerica Laboratories, Inc.

Client Contact	**Natalie Chrisman**	**Pam Norris (505-598-8781)**	**Date:**	COC No:
Arizona Public Service	**602-250-3608**	**Lab Contact: Rachel Sester**	**Carrier:**	1 of 1 COCs
PO Box 355, MS 4915	**Analysis Turnaround Time**			Sampler:
Fruitland, NM 87416	☐ CALENDAR DAYS ☑ WORKING DAYS			**For Lab Use Only:**
	TAT if different from Below _____			Walk-in Client:
	☑ 2 weeks			Lab Sampling:
Project Name: CCR Groundwater Monitoring	☐ 1 week			
Site: APS Four Corners Power Plant (URS)	☐ 2 days			Job / SDG No.:
PO #: 300592358	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	EPA 300.0 (Cl, F, SO4)	SM 4500-HB (pH)	SM 2540C (TDS)	EPA 200.7 - Totals (B, Ca, Be, Li)	EPA 200.7 - Total Lithium	EPA 200.8 - Totals (Sb, As, Ba, Cd, Co, Cr, Pb, Mo, Se, Tl)	EPA 245.1 - Totals (Hg)							Sample Specific Notes:
FC-CCR-MW71-0523	6/27/2023	1834	G	W	3	N	N	X	X	X	X	X	X	X			-01				Low Flow
FC-CCR-MW72-0523	6/27/2023	1731	G	W	3	N	N	X	X	X	X	X	X	X			-02				"
FC-CCR-MW73-0523	6/27/2023	1623	G	W	3	N	N	X	X	X	X	X	X	X			-03				"
								1	1	1	4	4	4	4							

550-204020 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☑ Disposal by Lab ☐ Archive for_____ Months

Special Instructions/QC Requirements & Comments:

Method 200.8 with collision cell

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.:

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Bradley Hartman	WSP	6-29-23 10:39			
			Received in Laboratory by:	Company:	Date/Time:
			EETSW	06-29-23	10:39

TEMP 2-0-C

Form No. CA-C-WI-002, Rev. 4.2, dated 04/02/2013

7/18/2023

Eurofins Phoenix
4625 East Cotton Center Boulevard Suite #189
Phoenix, AZ 85040
Phone: 602-437-3340

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Roberts, Danielle C	Carrier Tracking No(s):	COC No: 550-37236.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Danielle.Roberts@et.eurofinsus.com	State of Origin: Arizona	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - Arizona; State Program - Arizona		Job #: 550-204020-1
Address: 4955 Yarrow Street, ,	Due Date Requested: 7/13/2023			
City: Arvada	TAT Requested (days):			
State, Zip: CO, 80002				
Phone: 303-736-0100(Tel) 303-431-7171(Fax)	PO #:			
Email:	WO #:			
Project Name: CCR Groundwater Monitoring	Project #: 55009706			
Site: Arizona Public Service	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	200.7/200.7_P_TOT Lithium-ICP	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
FC-CCR-MW71-0523 (550-204020-1)	6/27/23	18:34 Arizona		Water			X	1	AZ Sample
FC-CCR-MW72-0523 (550-204020-2)	6/27/23	17:31 Arizona		Water			X	1	AZ Sample
FC-CCR-MW73-0523 (550-204020-3)	6/27/23	16:23 Arizona		Water			X	1	AZ Sample

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Southwest, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Southwest, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Southwest, LLC attention immediately If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Southwest, LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date: 13:40 ES	Time:	Method of Shipment:	
Relinquished by: 06-29-23 13:40 ES	Date/Time:	Company: FEDEX	Received by: FedEx	Date/Time: Company
Relinquished by	Date/Time	Company	Received by:	Date/Time: 06/30/23 0900 Company
Relinquished by:	Date/Time	Company	Received by:	Date/Time Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 0.6 Tm (-1.2)

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Arizona Public Service Company

Job Number: 550-204020-1
SDG Number: APS Four Corners Power Plant (URS)

Login Number: 204020
List Number: 1
Creator: Gravlin, Andrea

List Source: Eurofins Phoenix

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	False	Check done at department level as required.

Login Sample Receipt Checklist

Client: Arizona Public Service Company

Job Number: 550-204020-1
SDG Number: APS Four Corners Power Plant (URS)

Login Number: 204020
List Number: 2
Creator: Naylis, Patrick J

List Source: Eurofins Denver
List Creation: 06/30/23 03:33 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Radiation Safety Engineering, Inc.
3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121 (480) 897-9459
Website: www.radsafe.com FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Arizona Public Service
400 N. 5th Street
Phoenix, AZ 85004

Sampling Date: November 06, 2023
Sample Received: November 10, 2023
Analysis Completed: November 28, 2023

Sample ID	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
FC-CCR-MW62-1123	< 0.4	< 0.8	< 0.8
Date of Analysis	11/17/2023	11/17/2023	11/17/2023

Robert L. Metzger, Ph.D, C.H.P. 11/28/2023 Date
Laboratory License Number AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

November 6, 2023 (Sample Date) 11:27 (Sample Time) (24 hour clock) _____ (Owner/Contact Person)

_____ (Owner/Contact Fax Number) _____ (Owner/Contact Phone Number)

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring — Date Q1 collected: _____

☐ Quarterly — Date Q2 collected: _____

☐ Composite of four quarterly samples — Date Q3 collected: _____

Date Q4 collected: _____

*****RADIOCHEMICAL ANALYSIS*****

>>>To be filled out by laboratory personnel<<<

*****Combined Uranium must be reported in micrograms per liter*****

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result		Exceed MCL
Calculated	15 pCi/L		Adjusted Gross Alpha	4000				
EPA 00-02		3 pCi/L	Gross Alpha	4002				
7500 - Rn			Radon	4004				
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L	
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	11/17/2023	< 0.8		
GammaRay HPGE		1 pCi/L	Radium 226	4020	11/17/2023	< 0.4		
GammaRay HPGE		1 pCi/L	Radium 228	4030	11/17/2023	< 0.8		

*****LABORATORY INFORMATION*****

>>>To be filled out by laboratory personnel<<<

Specimen Number: RSE73178

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: FC-CCR-MW62-1123

Authorized Signature: Robert L Metzger

Date Public Water System Notified: _____

DWAR 6: 11/2007

Radiation Safety Engineering, Inc.
3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121 (480) 897-9459
Website: www.radsafe.com FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Arizona Public Service
400 N. 5th Street
Phoenix, AZ 85004

Sampling Date: November 06, 2023
Sample Received: November 10, 2023
Analysis Completed: November 28, 2023

Sample ID	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
FC-CCR-MW63-1123	< 0.4	< 0.8	< 0.8
Date of Analysis	11/17/2023	11/17/2023	11/17/2023

11/28/2023
Robert L. Metzger, Ph.D, C.H.P. Date
Laboratory License Number AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

November 6, 2023 (Sample Date) 12:35 (Sample Time) (24 hour clock) _____ (Owner/Contact Person)

_____ (Owner/Contact Fax Number) _____ (Owner/Contact Phone Number)

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring — Date Q1 collected: _____

☐ Quarterly — Date Q2 collected: _____

☐ Composite of four quarterly samples — Date Q3 collected: _____

Date Q4 collected: _____

RADIOCHEMICAL ANALYSIS

>>>To be filled out by laboratory personnel<<<

*****Combined Uranium must be reported in micrograms per liter*****

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result		Exceed MCL
Calculated	15 pCi/L		Adjusted Gross Alpha	4000				
EPA 00-02		3 pCi/L	Gross Alpha	4002				
7500 - Rn			Radon	4004				
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L	
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	11/17/2023	< 0.8		
GammaRay HPGE		1 pCi/L	Radium 226	4020	11/17/2023	< 0.4		
GammaRay HPGE		1 pCi/L	Radium 228	4030	11/17/2023	< 0.8		

LABORATORY INFORMATION

>>>To be filled out by laboratory personnel<<<

Specimen Number: RSE73179

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: FC-CCR-MW63-1123

Authorized Signature: Robert L. Metzger

Date Public Water System Notified: _____

DWAR 6: 11/2007

Radiation Safety Engineering, Inc.

3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121 (480) 897-9459
Website: www.radsafe.com FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Arizona Public Service
400 N. 5th Street
Phoenix, AZ 85004

Sampling Date: November 06, 2023
Sample Received: November 10, 2023
Analysis Completed: November 28, 2023

Sample ID	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
FC-CCR-MW64-1123	< 0.4	< 0.8	< 0.8
Date of Analysis	11/17/2023	11/17/2023	11/17/2023

11/28/2023

Robert L. Metzger, Ph.D, C.H.P. Date

Laboratory License Number AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

November 6, 2023 (Sample Date) 13:29 (Sample Time) (24 hour clock) _____ (Owner/Contact Person)

_____ (Owner/Contact Fax Number) _____ (Owner/Contact Phone Number)

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring — Date Q1 collected: _____

☐ Quarterly — Date Q2 collected: _____

☐ Composite of four quarterly samples — Date Q3 collected: _____

Date Q4 collected: _____

*****RADIOCHEMICAL ANALYSIS*****

>>>To be filled out by laboratory personnel<<<

*****Combined Uranium must be reported in micrograms per liter*****

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result		Exceed MCL
Calculated	15 pCi/L		Adjusted Gross Alpha	4000				
EPA 00-02		3 pCi/L	Gross Alpha	4002				
7500 - Rn			Radon	4004				
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L	
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	11/17/2023	< 0.8		
GammaRay HPGE		1 pCi/L	Radium 226	4020	11/17/2023	< 0.4		
GammaRay HPGE		1 pCi/L	Radium 228	4030	11/17/2023	< 0.8		

*****LABORATORY INFORMATION*****

>>>To be filled out by laboratory personnel<<<

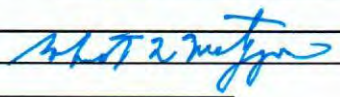
Specimen Number: RSE73180

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: FC-CCR-MW64-1123

Authorized Signature: 

Date Public Water System Notified: _____

DWAR 6: 11/2007

Radiation Safety Engineering, Inc.

3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121 (480) 897-9459
Website: www.radsafe.com FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Arizona Public Service
400 N. 5th Street
Phoenix, AZ 85004

Sampling Date: November 06, 2023
Sample Received: November 10, 2023
Analysis Completed: November 28, 2023

Sample ID	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
FC-CCR-MW65-1123	< 0.4	< 0.8	< 0.8

Date of Analysis	11/17/2023	11/17/2023	11/17/2023

11/28/2023

Robert L. Metzger, Ph.D, C.H.P. Date

Laboratory License Number AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

November 6, 2023 (Sample Date) 14:34 (Sample Time) (24 hour clock) _____ (Owner/Contact Person)

_____ (Owner/Contact Fax Number) _____ (Owner/Contact Phone Number)

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring — Date Q1 collected: _____

☐ Quarterly — Date Q2 collected: _____

☐ Composite of four quarterly samples — Date Q3 collected: _____

Date Q4 collected: _____

*****RADIOCHEMICAL ANALYSIS*****

>>>To be filled out by laboratory personnel<<<

*****Combined Uranium must be reported in micrograms per liter*****

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result		Exceed MCL
Calculated	15 pCi/L		Adjusted Gross Alpha	4000				
EPA 00-02		3 pCi/L	Gross Alpha	4002				
7500 - Rn			Radon	4004				
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L	
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	11/17/2023	< 0.8		
GammaRay HPGE		1 pCi/L	Radium 226	4020	11/17/2023	< 0.4		
GammaRay HPGE		1 pCi/L	Radium 228	4030	11/17/2023	< 0.8		

*****LABORATORY INFORMATION*****

>>>To be filled out by laboratory personnel<<<

Specimen Number: RSE73181

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: FC-CCR-MW65-1123

Authorized Signature: _____

Date Public Water System Notified: _____

DWAR 6: 11/2007

Client Information

Name:	Natalie Chrisman/602-250-3608 Pam Norris/505-598-8781
Company	Arizona Public Service
Address	PO Box 355, MS 4915 Fruitland, NM 87416
Phone	
Site	APS Four Corners Power Plant (CWTP)

Radiation Safety Engineering, Inc.

3245 North Washington Street, Chandler, Arizona 85225

Analysis Request

Sample ID & Location (DWR#)	Collection Date	Collection Time	Media (DW* WW* Other)	Drinking Water Compliance	Gross Alpha	Gross Beta	Total Uranium	Isotopic Uranium	Ra-226	Ra-228	Ra-226 + Ra-228, Combined	H-3	Gamma Spectroscopy	Sr-89/Sr-90	Radon in Water	Radon in Air	
FC-CCR-MW62-1123	11/6/2023	1127	GW						X	X	X						73178
FC-CCR-MW63-1123	11/6/2023	1235	GW						X	X	X						73179
FC-CCR-MW64-1123	11/6/2023	1329	GW						X	X	X						73180
FC-CCR-MW65-1123	11/6/2023	1434	GW						X	X	X						73181

Sample Receipt	
Total No. of Containers	
Chain of Custody Seals	
Container Condition	
Lab No.	

Invoice to:
PO#: 100622094

Instructions/Comments
Method HPGe

Relinquished By: BSLC	Company: WSP	Date/time: 11-10-23 0745	Received By: Pat Flanning		Company: RSE	Date/time: 11-30-23 1:55
Relinquished By:	Company: Ambersant	Date/time: 11-10-23	Received By:		Company:	Date/time:
Relinquished By:	Company: AGS	Date/time: 11-10-23 1:55 pm	Received By:		Company:	Date/time:

* DW = Drinking Water, WW = Waste Water, GW = Groundwater.

u/client/forms/cofc.frm

Radiation Safety Engineering, Inc.

3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121 (480) 897-9459
Website: www.radsafe.com FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Arizona Public Service
400 N. 5th Street
Phoenix, AZ 85004

Sampling Date: November 06, 2023
Sample Received: November 10, 2023
Analysis Completed: November 28, 2023

Sample ID	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
FC-CCR-MW66-1123	0.7 ± 0.2	1.3 ± 0.4	2.0 ± 0.4
Date of Analysis	11/17/2023	11/17/2023	11/17/2023

Robert L. Metzger, Ph.D, C.H.P. 11/28/2023
Date

Laboratory License Number AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

November 6, 2023 (Sample Date) 16:10 (Sample Time) (24 hour clock) _____ (Owner/Contact Person)

_____ (Owner/Contact Fax Number) _____ (Owner/Contact Phone Number)

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring — Date Q1 collected: _____

☐ Quarterly — Date Q2 collected: _____

☐ Composite of four quarterly samples — Date Q3 collected: _____

Date Q4 collected: _____

*****RADIOCHEMICAL ANALYSIS*****

>>>To be filled out by laboratory personnel<<<

*****Combined Uranium must be reported in micrograms per liter*****

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result		Exceed MCL
Calculated	15 pCi/L		Adjusted Gross Alpha	4000				
EPA 00-02		3 pCi/L	Gross Alpha	4002				
7500 - Rn			Radon	4004				
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L	
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	11/17/2023	2.0 ± 0.4		
GammaRay HPGE		1 pCi/L	Radium 226	4020	11/17/2023	0.7 ± 0.2		
GammaRay HPGE		1 pCi/L	Radium 228	4030	11/17/2023	1.3 ± 0.4		

*****LABORATORY INFORMATION*****

>>>To be filled out by laboratory personnel<<<

Specimen Number: RSE73172

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: FC-CCR-MW66-1123

Authorized Signature: Robert L Metzger

Date Public Water System Notified: _____

DWAR 6: 11/2007

Radiation Safety Engineering, Inc.
3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121 (480) 897-9459
Website: www.radsafe.com FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Arizona Public Service
400 N. 5th Street
Phoenix, AZ 85004

Sampling Date: November 06, 2023
Sample Received: November 10, 2023
Analysis Completed: November 28, 2023

Sample ID	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
FC-CCR-MW70-1123	< 0.5	1.4 ± 0.4	1.4 ± 0.4
Date of Analysis	11/17/2023	11/17/2023	11/17/2023

11/28/2023
Robert L. Metzger, Ph.D, C.H.P. Date
Laboratory License Number AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

November 6, 2023 (Sample Date) 17:08 (Sample Time) (24 hour clock) _____ (Owner/Contact Person)

_____ (Owner/Contact Fax Number) _____ (Owner/Contact Phone Number)

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring — Date Q1 collected: _____

☐ Quarterly — Date Q2 collected: _____

☐ Composite of four quarterly samples — Date Q3 collected: _____

Date Q4 collected: _____

*****RADIOCHEMICAL ANALYSIS*****

>>>To be filled out by laboratory personnel<<<

*****Combined Uranium must be reported in micrograms per liter*****

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result		Exceed MCL
Calculated	15 pCi/L		Adjusted Gross Alpha	4000				
EPA 00-02		3 pCi/L	Gross Alpha	4002				
7500 - Rn			Radon	4004				
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L	
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	11/17/2023	1.4 ± 0.4		
GammaRay HPGE		1 pCi/L	Radium 226	4020	11/17/2023	< 0.5		
GammaRay HPGE		1 pCi/L	Radium 228	4030	11/17/2023	1.4 ± 0.4		

*****LABORATORY INFORMATION*****

>>>To be filled out by laboratory personnel<<<

Specimen Number: RSE73173

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: FC-CCR-MW70-1123

Authorized Signature: _____

Date Public Water System Notified: _____

DWAR 6: 11/2007

Radiation Safety Engineering, Inc.
3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121 (480) 897-9459
Website: www.radsafe.com FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Arizona Public Service
400 N. 5th Street
Phoenix, AZ 85004

Sampling Date: November 08, 2023
Sample Received: November 10, 2023
Analysis Completed: November 28, 2023

Sample ID	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
FC-CCR-MW71-1123	0.8 ± 0.2	1.0 ± 0.3	1.8 ± 0.4

Date of Analysis	11/17/2023	11/17/2023	11/17/2023

11/28/2023

Robert L. Metzger, Ph.D, C.H.P. Date

Laboratory License Number AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

November 8, 2023 (Sample Date) 11:06 (Sample Time) (24 hour clock) _____ (Owner/Contact Person)

_____ (Owner/Contact Fax Number) _____ (Owner/Contact Phone Number)

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring — Date Q1 collected: _____

☐ Quarterly — Date Q2 collected: _____

☐ Composite of four quarterly samples — Date Q3 collected: _____

Date Q4 collected: _____

*****RADIOCHEMICAL ANALYSIS*****

>>>To be filled out by laboratory personnel<<<

*****Combined Uranium must be reported in micrograms per liter*****

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result		Exceed MCL
Calculated	15 pCi/L		Adjusted Gross Alpha	4000				
EPA 00-02		3 pCi/L	Gross Alpha	4002				
7500 - Rn			Radon	4004				
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L	
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	11/17/2023	1.8 ± 0.4		
GammaRay HPGE		1 pCi/L	Radium 226	4020	11/17/2023	0.8 ± 0.2		
GammaRay HPGE		1 pCi/L	Radium 228	4030	11/17/2023	1.0 ± 0.3		

*****LABORATORY INFORMATION*****

>>>To be filled out by laboratory personnel<<<

Specimen Number: RSE73174

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: FC-CCR-MW71-1123

Authorized Signature: Robert L Metzger

Date Public Water System Notified: _____

DWAR 6: 11/2007

Radiation Safety Engineering, Inc.
3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121 (480) 897-9459
Website: www.radsafe.com FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Arizona Public Service
400 N. 5th Street
Phoenix, AZ 85004

Sampling Date: November 08, 2023
Sample Received: November 10, 2023
Analysis Completed: November 28, 2023

Sample ID	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
FC-CCR-MW72-1123	0.6 ± 0.2	4.5 ± 0.5	5.1 ± 0.5

Date of Analysis	11/17/2023	11/17/2023	11/17/2023

11/28/2023
Robert L. Metzger, Ph.D, C.H.P. Date
Laboratory License Number AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

November 8, 2023 (Sample Date) 12:13 (Sample Time) (24 hour clock) _____ (Owner/Contact Person)

_____ (Owner/Contact Fax Number) _____ (Owner/Contact Phone Number)

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring

☐ Quarterly

☐ Composite of four quarterly samples

Date Q1 collected: _____

Date Q2 collected: _____

Date Q3 collected: _____

Date Q4 collected: _____

RADIOCHEMICAL ANALYSIS

>>>To be filled out by laboratory personnel<<<

*****Combined Uranium must be reported in micrograms per liter*****

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result		Exceed MCL
Calculated	15 pCi/L		Adjusted Gross Alpha	4000				
EPA 00-02		3 pCi/L	Gross Alpha	4002				
7500 - Rn			Radon	4004				
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L	
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	11/17/2023	5.1 ± 0.5		X
GammaRay HPGE		1 pCi/L	Radium 226	4020	11/17/2023	0.6 ± 0.2		
GammaRay HPGE		1 pCi/L	Radium 228	4030	11/17/2023	4.5 ± 0.5		

LABORATORY INFORMATION

>>>To be filled out by laboratory personnel<<<

Specimen Number: RSE73175

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: FC-CCR-MW72-1123

Authorized Signature: _____

Date Public Water System Notified: _____

DWAR 6: 11/2007

Radiation Safety Engineering, Inc.

3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121 (480) 897-9459
Website: www.radsafe.com FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Arizona Public Service
400 N. 5th Street
Phoenix, AZ 85004

Sampling Date: November 08, 2023
Sample Received: November 10, 2023
Analysis Completed: November 28, 2023

Sample ID	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
FC-CCR-MW73-1123	< 0.4	2.3 ± 0.4	2.3 ± 0.4
Date of Analysis	11/17/2023	11/17/2023	11/17/2023

Robert L. Metzger, Ph.D, C.H.P. 11/28/2023 Date

Laboratory License Number AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

November 8, 2023 (Sample Date) 13:16 (Sample Time) (24 hour clock) _____ (Owner/Contact Person)

_____ (Owner/Contact Fax Number) _____ (Owner/Contact Phone Number)

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring — Date Q1 collected: _____

☐ Quarterly — Date Q2 collected: _____

☐ Composite of four quarterly samples — Date Q3 collected: _____

Date Q4 collected: _____

*****RADIOCHEMICAL ANALYSIS*****

>>>To be filled out by laboratory personnel<<<

*****Combined Uranium must be reported in micrograms per liter*****

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result		Exceed MCL
Calculated	15 pCi/L		Adjusted Gross Alpha	4000				
EPA 00-02		3 pCi/L	Gross Alpha	4002				
7500 - Rn			Radon	4004				
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L	
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	11/17/2023	2.3 ± 0.4		
GammaRay HPGE		1 pCi/L	Radium 226	4020	11/17/2023	< 0.4		
GammaRay HPGE		1 pCi/L	Radium 228	4030	11/17/2023	2.3 ± 0.4		

*****LABORATORY INFORMATION*****

>>>To be filled out by laboratory personnel<<<

Specimen Number: RSE73176

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: FC-CCR-MW73-1123

Authorized Signature: _____

Date Public Water System Notified: _____

DWAR 6: 11/2007

Radiation Safety Engineering, Inc.
3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121 (480) 897-9459
Website: www.radsafe.com FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Arizona Public Service
400 N. 5th Street
Phoenix, AZ 85004

Sampling Date: November 06, 2023
Sample Received: November 10, 2023
Analysis Completed: November 28, 2023

Sample ID	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
FC-CCR-MW86-1123	< 0.4	1.7 ± 0.4	1.7 ± 0.4
Date of Analysis	11/17/2023	11/17/2023	11/17/2023

Robert L. Metzger, Ph.D, C.H.P. 11/28/2023
Date

Laboratory License Number AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

November 6, 2023 (Sample Date) 15:25 (Sample Time) (24 hour clock) _____ Owner/Contact Person

_____ Owner/Contact Fax Number _____ Owner/Contact Phone Number

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring — Date Q1 collected: _____

☐ Quarterly — Date Q2 collected: _____

☐ Composite of four quarterly samples — Date Q3 collected: _____

Date Q4 collected: _____

*****RADIOCHEMICAL ANALYSIS*****

>>>To be filled out by laboratory personnel<<<

*****Combined Uranium must be reported in micrograms per liter*****

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result		Exceed MCL
Calculated	15 pCi/L		Adjusted Gross Alpha	4000				
EPA 00-02		3 pCi/L	Gross Alpha	4002				
7500 - Rn			Radon	4004				
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L	
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	11/17/2023	1.7 ± 0.4		
GammaRay HPGE		1 pCi/L	Radium 226	4020	11/17/2023	< 0.4		
GammaRay HPGE		1 pCi/L	Radium 228	4030	11/17/2023	1.7 ± 0.4		

*****LABORATORY INFORMATION*****

>>>To be filled out by laboratory personnel<<<

Specimen Number: RSE73177

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: FC-CCR-MW86-1123

Authorized Signature: Robert L Metzger

Date Public Water System Notified: _____

DWAR 6: 11/2007

Client Information	
Name:	**Natalie Chrisman/602-250-3608** **Pam Norris/505-598-8781**
Company	**Arizona Public Service**
Address	**PO Box 355, MS 4915** **Fruitland, NM 87416**
Phone	
Site	**APS Four Corners Power Plant (URS)**

Radiation Safety Engineering, Inc.
3245 North Washington Street, Chandler, Arizona 85225
Analysis Request

Sample ID & Location (DWR#)	Collection Date	Collection Time	Media (DW* WW* Other)	Drinking Water Compliance	Gross Alpha	Gross Beta	Total Uranium	Isotopic Uranium	Ra-226	Ra-228	Ra-226 + Ra-228, Combined	H-3	Gamma Spectroscopy	Sr-89/Sr-90	Radon in Water	Radon in Air	
FC-CCR-MW66-1123	11/6/2023	1610	**GW**						X	X	X					73	172
FC-CCR-MW70-1123	11/6/2023	1708	**GW**						X	X	X					73	173
FC-CCR-MW71-1123	11/8/2023	1106	**GW**						X	X	X					73	174
FC-CCR-MW72-1123	11/8/2023	1213	**GW**						X	X	X					73	175
FC-CCR-MW73-1123	11/8/2023	1316	**GW**						X	X	X					73	176
FC-CCR-MW86-1123	11/6/2023	1525	**GW**						X	X	X					73	177

Sample Receipt	
Total No. of Containers	
Chain of Custody Seals	
Container Condition	
Lab No.	

Invoice to:
PO#: 100622094

Instructions/Comments
Method HPGe

Relinquished By: [signature]	Company: WSP	Date/time: 11-10-23 0745	Received By: [signature]		Company: RSE	Date/time: 11-10-23	1:58
Relinquished By: [signature]	Company: AHS	Date/time: 11-10-23	Received By:		Company:	Date/time:	
Relinquished By: [signature]	Company: AHS	Date/time: 11/10 155	Received By:		Company:	Date/time:	

* DW = Drinking Water, WW = Waste Water, GW = Groundwater.

u/client/forms/cofc.frm

Radiation Safety Engineering, Inc.
3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121 (480) 897-9459
Website: www.radsafe.com FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Arizona Public Service
400 N. 5th Street
Phoenix, AZ 85004

Sampling Date: November 09, 2023
Sample Received: November 10, 2023
Analysis Completed: November 28, 2023

Sample ID	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
FC-CCR-MW61-1123	< 0.4	< 0.8	< 0.8
Date of Analysis	11/17/2023	11/17/2023	11/17/2023

Robert L. Metzger, Ph.D, C.H.P. 11/28/2023
Date

Laboratory License Number AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

November 9, 2023 (Sample Date) 12:50 (Sample Time) (24 hour clock) _____ (Owner/Contact Person)

_____ (Owner/Contact Fax Number) _____ (Owner/Contact Phone Number)

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring — Date Q1 collected: _____

☐ Quarterly — Date Q2 collected: _____

☐ Composite of four quarterly samples — Date Q3 collected: _____

Date Q4 collected: _____

*****RADIOCHEMICAL ANALYSIS*****

>>>To be filled out by laboratory personnel<<<

*****Combined Uranium must be reported in micrograms per liter*****

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result		Exceed MCL
Calculated	15 pCi/L		Adjusted Gross Alpha	4000				
EPA 00-02		3 pCi/L	Gross Alpha	4002				
7500 - Rn			Radon	4004				
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L	
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	11/17/2023	< 0.8		
GammaRay HPGE		1 pCi/L	Radium 226	4020	11/17/2023	< 0.4		
GammaRay HPGE		1 pCi/L	Radium 228	4030	11/17/2023	< 0.8		

*****LABORATORY INFORMATION*****

>>>To be filled out by laboratory personnel<<<

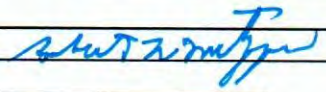
Specimen Number: RSE73182

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: FC-CCR-MW61-1123

Authorized Signature: 

Date Public Water System Notified: _____

DWAR 6: 11/2007

Radiation Safety Engineering, Inc.

3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121 (480) 897-9459
Website: www.radsafe.com FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Arizona Public Service
400 N. 5th Street
Phoenix, AZ 85004

Sampling Date: November 08, 2023
Sample Received: November 10, 2023
Analysis Completed: November 28, 2023

Sample ID	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
FC-CCR-MW75-1123	< 0.4	< 0.8	< 0.8
Date of Analysis	11/17/2023	11/17/2023	11/17/2023

Robert L. Metzger, Ph.D, C.H.P. 11/28/2023
Date

Laboratory License Number AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

November 8, 2023 (Sample Date) 15:39 (Sample Time) (24 hour clock)

_____ Owner/Contact Person

_____ Owner/Contact Fax Number

_____ Owner/Contact Phone Number

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring

☐ Quarterly

☐ Composite of four quarterly samples

Date Q1 collected: _____

Date Q2 collected: _____

Date Q3 collected: _____

Date Q4 collected: _____

RADIOCHEMICAL ANALYSIS

>>>To be filled out by laboratory personnel<<<

*****Combined Uranium must be reported in micrograms per liter*****

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result		Exceed MCL
Calculated	15 pCi/L		Adjusted Gross Alpha	4000				
EPA 00-02		3 pCi/L	Gross Alpha	4002				
7500 - Rn			Radon	4004				
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L	
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	11/17/2023	< 0.8		
GammaRay HPGE		1 pCi/L	Radium 226	4020	11/17/2023	< 0.4		
GammaRay HPGE		1 pCi/L	Radium 228	4030	11/17/2023	< 0.8		

LABORATORY INFORMATION

>>>To be filled out by laboratory personnel<<<

Specimen Number: RSE73183

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: FC-CCR-MW75-1123

Authorized Signature: _____

Date Public Water System Notified: _____

DWAR 6: 11/2007

Client Information	
Name:	Natalie Chrisman/602-250-3608 Pam Norris/505-598-8781
Company	Arizona Public Service
Address	PO Box 355, MS 4915 Fruitland, NM 87416
Phone	
Site	APS Four Corners Power Plant (Multiunit)

Radiation Safety Engineering, Inc.
3245 North Washington Street, Chandler, Arizona 85225
Analysis Request

Sample ID & Location (DWR#)	Collection Date	Collection Time	Media (DW* WW* Other)	Drinking Water Compliance	Gross Alpha	Gross Beta	Total Uranium	Isotopic Uranium	Ra-226	Ra-228	Ra-226 + Ra-228, Combined	H-3	Gamma Spectroscopy	Sr-89/Sr-90	Radon in Water	Radon in Air	
FC-CCR-MW61-1123	11/9/2023		GW						X	X	X						73182
FC-CCR-MW75-1123	11/8/2023	1539	GW						X	X	X						73183

Sample Receipt	
Total No. of Containers	
Chain of Custody Seals	
Container Condition	
Lab No.	

Invoice to:
PO#: 100622094

Instructions/Comments
Method HPGe

Relinquished By: BSLC	Company: WSP	Date/time: 11-10-23 0745	Received By: Pat Hammy		Company: RSE	Date/time: 11-10-23 1:58
Relinquished By:	Company: AHS	Date/time: 11-10-23	Received By:		Company:	Date/time:
Relinquished By:	Company: AHS	Date/time: 11-10-23	Received By:		Company:	Date/time:

* DW = Drinking Water, WW = Waste Water, GW = Groundwater.

u/client/forms/cofc.frm

Radiation Safety Engineering, Inc.

3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121
Website: www.radsafe.com

(480) 897-9459
FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Arizona Public Service
400 N. 5th Street
Phoenix, AZ 85004

Sampling Date: November 13, 2023
Sample Received: November 17, 2023
Analysis Completed: December 05, 2023

Sample ID	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
FC-CCR-SW1-1123 (CWTP)	< 0.5	< 0.8	< 0.8
Date of Analysis	11/23/2023	11/23/2023	11/23/2023

Robert L. Metzger, Ph.D, C.H.P. 12/5/2023
Date

Laboratory License Number AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

November 13, 2023 (Sample Date) 11:13 (Sample Time) (24 hour clock)

_____ Owner/Contact Person

_____ Owner/Contact Fax Number

_____ Owner/Contact Phone Number

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring

☐ Quarterly

☐ Composite of four quarterly samples

Date Q1 collected: _____

Date Q2 collected: _____

Date Q3 collected: _____

Date Q4 collected: _____

RADIOCHEMICAL ANALYSIS

>>>To be filled out by laboratory personnel<<<

*****Combined Uranium must be reported in micrograms per liter*****

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result		Exceed MCL
Calculated	15 pCi/L		Adjusted Gross Alpha	4000				
EPA 00-02		3 pCi/L	Gross Alpha	4002				
7500 - Rn			Radon	4004				
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L	
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	11/23/2023	< 0.8		
GammaRay HPGE		1 pCi/L	Radium 226	4020	11/23/2023	< 0.5		
GammaRay HPGE		1 pCi/L	Radium 228	4030	11/23/2023	< 0.8		

LABORATORY INFORMATION

>>>To be filled out by laboratory personnel<<<

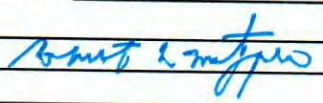
Specimen Number: RSE73264

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: FC-CCR-SW1-1123 (CWTP)

Authorized Signature: 

Date Public Water System Notified: _____

DWAR 6: 11/2007

Radiation Safety Engineering, Inc.
3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121 (480) 897-9459
Website: www.radsafe.com FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Arizona Public Service
400 N. 5th Street
Phoenix, AZ 85004

Sampling Date: November 13, 2023
Sample Received: November 17, 2023
Analysis Completed: December 05, 2023

Sample ID	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
FC-CCR-SW2-1123 (CWTP)	< 0.5	< 0.8	< 0.8
Date of Analysis	11/23/2023	11/23/2023	11/23/2023

12/5/2023
Robert L. Metzger, Ph.D, C.H.P. Date
Laboratory License Number AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

November 13, 2023 (Sample Date) 10:45 (Sample Time) (24 hour clock)

_____ Owner/Contact Person

_____ Owner/Contact Fax Number

_____ Owner/Contact Phone Number

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring

☐ Quarterly

☐ Composite of four quarterly samples

Date Q1 collected: _____

Date Q2 collected: _____

Date Q3 collected: _____

Date Q4 collected: _____

RADIOCHEMICAL ANALYSIS

>>>To be filled out by laboratory personnel<<<

*****Combined Uranium must be reported in micrograms per liter*****

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result		Exceed MCL
Calculated	15 pCi/L		Adjusted Gross Alpha	4000				
EPA 00-02		3 pCi/L	Gross Alpha	4002				
7500 - Rn			Radon	4004				
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L	
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	11/23/2023	< 0.8		
GammaRay HPGE		1 pCi/L	Radium 226	4020	11/23/2023	< 0.5		
GammaRay HPGE		1 pCi/L	Radium 228	4030	11/23/2023	< 0.8		

LABORATORY INFORMATION

>>>To be filled out by laboratory personnel<<<

Specimen Number: RSE73265

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: FC-CCR-SW2-1123 (CWTP)

Authorized Signature: _____

Date Public Water System Notified: _____

DWAR 6: 11/2007

Radiation Safety Engineering, Inc.
3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121 (480) 897-9459
Website: www.radsafe.com FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Arizona Public Service
400 N. 5th Street
Phoenix, AZ 85004

Sampling Date: November 13, 2023
Sample Received: November 17, 2023
Analysis Completed: December 05, 2023

Sample ID	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
FC-CCR-SW3-1123 (CWTP)	< 0.5	0.9 ± 0.4	0.9 ± 0.4
Date of Analysis	11/23/2023	11/23/2023	11/23/2023

Robert L. Metzger, Ph.D, C.H.P. 12/5/2023
Date

Laboratory License Number AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

November 13, 2023 (Sample Date) 10:20 (Sample Time) (24 hour clock)

_____ Owner/Contact Person

_____ Owner/Contact Fax Number

_____ Owner/Contact Phone Number

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring

☐ Quarterly

☐ Composite of four quarterly samples

Date Q1 collected: _____

Date Q2 collected: _____

Date Q3 collected: _____

Date Q4 collected: _____

RADIOCHEMICAL ANALYSIS

>>>To be filled out by laboratory personnel<<<

*****Combined Uranium must be reported in micrograms per liter*****

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result		Exceed MCL
Calculated	15 pCi/L		Adjusted Gross Alpha	4000				
EPA 00-02		3 pCi/L	Gross Alpha	4002				
7500 - Rn			Radon	4004				
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L	
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	11/23/2023	0.9 ± 0.4		
GammaRay HPGE		1 pCi/L	Radium 226	4020	11/23/2023	< 0.5		
GammaRay HPGE		1 pCi/L	Radium 228	4030	11/23/2023	0.9 ± 0.4		

LABORATORY INFORMATION

>>>To be filled out by laboratory personnel<<<

Specimen Number: RSE73266

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: FC-CCR-SW3-1123 (CWTP)

Authorized Signature: _____

Date Public Water System Notified: _____

DWAR 6: 11/2007

Radiation Safety Engineering, Inc.
3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121 (480) 897-9459
Website: www.radsafe.com FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Arizona Public Service
400 N. 5th Street
Phoenix, AZ 85004

Sampling Date: November 13, 2023
Sample Received: November 17, 2023
Analysis Completed: December 05, 2023

Sample ID	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
FC-CCR-FD08-1123 (CWTP)	< 0.5	< 0.8	< 0.8
Date of Analysis	11/23/2023	11/23/2023	11/23/2023

Robert L. Metzger, Ph.D, C.H.P. 12/5/2023
Date

Laboratory License Number AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

November 13, 2023 (Sample Date) 16:20 (Sample Time) (24 hour clock)

_____ Owner/Contact Person

_____ Owner/Contact Fax Number

_____ Owner/Contact Phone Number

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring

☐ Quarterly

☐ Composite of four quarterly samples

Date Q1 collected: _____

Date Q2 collected: _____

Date Q3 collected: _____

Date Q4 collected: _____

RADIOCHEMICAL ANALYSIS

>>>To be filled out by laboratory personnel<<<

*****Combined Uranium must be reported in micrograms per liter*****

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result		Exceed MCL
Calculated	15 pCi/L		Adjusted Gross Alpha	4000				
EPA 00-02		3 pCi/L	Gross Alpha	4002				
7500 - Rn			Radon	4004				
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L	
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	11/23/2023	< 0.8		
GammaRay HPGE		1 pCi/L	Radium 226	4020	11/23/2023	< 0.5		
GammaRay HPGE		1 pCi/L	Radium 228	4030	11/23/2023	< 0.8		

LABORATORY INFORMATION

>>>To be filled out by laboratory personnel<<<

Specimen Number: RSE73267

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: FC-CCR-FD08-1123 (CWTP)

Authorized Signature: Robert L Metzger

Date Public Water System Notified: _____

DWAR 6: 11/2007

Client Information

Name:	**Natalie Chrisman/602-250-3608** **Pam Norris/505-598-8781**
Company	**Arizona Public Service**
Address	**PO Box 355, MS 4915** **Fruitland, NM 87416**
Phone	
Site	**APS Four Corners Power Plant (CWTP)**

Radiation Safety Engineering, Inc.

3245 North Washington Street, Chandler, Arizona 85225

Analysis Request

Sample ID & Location (DWR#)	Collection Date	Collection Time	Media (DW* WW* Other)	Drinking Water Compliance	Gross Alpha	Gross Beta	Total Uranium	Isotopic Uranium	Ra-226	Ra-228	Ra-226 + Ra-228, Combined	H-3	Gamma Spectroscopy	Sr-89/Sr-90	Radon in Water	Radon in Air
FC-CCR-SW1-1123	11/13/2023	1113	**GW**						X	X	X					73264
FC-CCR-SW2-1123	11/13/2023	1045	**GW**						X	X	X					73265
FC-CCR-SW3-1123	11/13/2023	1020	**GW**						X	X	X					73266
FC-CCR-FD08-1123	11/13/2023	1620	**GW**						X	X	X					73267
																~~73268~~

Sample Receipt

Total No. of Containers	
Chain of Custody Seals	
Container Condition	
Lab No.	

Invoice to:

PO#: 100622094

Instructions/Comments

Method HPGe

Relinguished By:	Company: WSP	Date/time: 11/17/23 1645	Received By:		Company: RSE	Date/time: 11/17/2023 16:46pm
Relinguished By:	Company:	Date/time:	Received By:		Company:	Date/time:
Relinguished By:	Company:	Date/time:	Received By:		Company:	Date/time:

* DW = Drinking Water, WW = Waste Water, GW = Groundwater.

u/client/forms/cofc.frm

Radiation Safety Engineering, Inc.

3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121 (480) 897-9459
Website: www.radsafe.com FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Arizona Public Service
400 N. 5th Street
Phoenix, AZ 85004

Sampling Date: November 13, 2023
Sample Received: November 17, 2023
Analysis Completed: December 04, 2023

Sample ID	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
FC-CCR-DMX03-1123 (Other)	< 0.5	< 0.8	< 0.8
Date of Analysis	11/23/2023	11/23/2023	11/23/2023

12/4/2023

Robert L. Metzger, Ph.D, C.H.P. Date

Laboratory License Number AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

November 13, 2023 (Sample Date) 14:51 (Sample Time) (24 hour clock) _____ (Owner/Contact Person)

_____ (Owner/Contact Fax Number) _____ (Owner/Contact Phone Number)

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring — Date Q1 collected: _____

☐ Quarterly — Date Q2 collected: _____

☐ Composite of four quarterly samples — Date Q3 collected: _____

Date Q4 collected: _____

RADIOCHEMICAL ANALYSIS

>>>To be filled out by laboratory personnel<<<

*****Combined Uranium must be reported in micrograms per liter*****

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result		Exceed MCL
Calculated	15 pCi/L		Adjusted Gross Alpha	4000				
EPA 00-02		3 pCi/L	Gross Alpha	4002				
7500 - Rn			Radon	4004				
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L	
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	11/23/2023	< 0.8		
GammaRay HPGE		1 pCi/L	Radium 226	4020	11/23/2023	< 0.5		
GammaRay HPGE		1 pCi/L	Radium 228	4030	11/23/2023	< 0.8		

LABORATORY INFORMATION

>>>To be filled out by laboratory personnel<<<

Specimen Number: RSE73252

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: FC-CCR-DMX03-1123 (Other)

Authorized Signature: _____

Date Public Water System Notified: _____

DWAR 6: 11/2007

Radiation Safety Engineering, Inc.

3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121 (480) 897-9459
Website: www.radsafe.com FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Arizona Public Service
400 N. 5th Street
Phoenix, AZ 85004

Sampling Date: November 14, 2023
Sample Received: November 17, 2023
Analysis Completed: December 04, 2023

Sample ID	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
FC-CCR-DMX04-1123 (Other)	< 0.5	< 0.8	< 0.8

Date of Analysis	11/23/2023	11/23/2023	11/23/2023

12/4/2023

Robert L. Metzger, Ph.D, C.H.P. Date

Laboratory License Number AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

November 14, 2023 (Sample Date) 17:30 (Sample Time) (24 hour clock) _____ (Owner/Contact Person)

_____ (Owner/Contact Fax Number) _____ (Owner/Contact Phone Number)

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring — Date Q1 collected: _____

☐ Quarterly — Date Q2 collected: _____

☐ Composite of four quarterly samples — Date Q3 collected: _____

Date Q4 collected: _____

*****RADIOCHEMICAL ANALYSIS*****

>>>To be filled out by laboratory personnel<<<

*****Combined Uranium must be reported in micrograms per liter*****

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result		Exceed MCL
Calculated	15 pCi/L		Adjusted Gross Alpha	4000				
EPA 00-02		3 pCi/L	Gross Alpha	4002				
7500 - Rn			Radon	4004				
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L	
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	11/23/2023	< 0.8		
GammaRay HPGE		1 pCi/L	Radium 226	4020	11/23/2023	< 0.5		
GammaRay HPGE		1 pCi/L	Radium 228	4030	11/23/2023	< 0.8		

*****LABORATORY INFORMATION*****

>>>To be filled out by laboratory personnel<<<

Specimen Number: RSE73253

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: FC-CCR-DMX04-1123 (Other)

Authorized Signature: Robert L Metzger

Date Public Water System Notified: _____

DWAR 6: 11/2007

Radiation Safety Engineering, Inc.

3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121 (480) 897-9459
Website: www.radsafe.com FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Arizona Public Service
400 N. 5th Street
Phoenix, AZ 85004

Sampling Date: November 15, 2023
Sample Received: November 17, 2023
Analysis Completed: December 04, 2023

Sample ID	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
FC-CCR-DMX06-1123 (Other	< 0.5	< 0.8	< 0.8
Date of Analysis	11/23/2023	11/23/2023	11/23/2023

Robert L. Metzger, Ph.D, C.H.P. 12/4/2023
Date

Laboratory License Number AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

November 15, 2023 (Sample Date) 9:15 (Sample Time) (24 hour clock) _____ (Owner/Contact Person)

_____ (Owner/Contact Fax Number) _____ (Owner/Contact Phone Number)

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring — Date Q1 collected: _____

☐ Quarterly — Date Q2 collected: _____

☐ Composite of four quarterly samples — Date Q3 collected: _____

Date Q4 collected: _____

*****RADIOCHEMICAL ANALYSIS*****

>>>To be filled out by laboratory personnel<<<

*****Combined Uranium must be reported in micrograms per liter*****

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result		Exceed MCL
Calculated	15 pCi/L		Adjusted Gross Alpha	4000				
EPA 00-02		3 pCi/L	Gross Alpha	4002				
7500 - Rn			Radon	4004				
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L	
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	11/23/2023	< 0.8		
GammaRay HPGE		1 pCi/L	Radium 226	4020	11/23/2023	< 0.5		
GammaRay HPGE		1 pCi/L	Radium 228	4030	11/23/2023	< 0.8		

*****LABORATORY INFORMATION*****

>>>To be filled out by laboratory personnel<<<

Specimen Number: RSE73254

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: FC-CCR-DMX06-1123 (Other

Authorized Signature: Robert L Metzger

Date Public Water System Notified: _____

DWAR 6: 11/2007

Radiation Safety Engineering, Inc.

3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121 (480) 897-9459
Website: www.radsafe.com FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Arizona Public Service
400 N. 5th Street
Phoenix, AZ 85004

Sampling Date: November 14, 2023
Sample Received: November 17, 2023
Analysis Completed: December 04, 2023

Sample ID	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
FC-CCR-MW06R-1123 (Other)	< 0.5	3.0 ± 0.5	3.0 ± 0.5
Date of Analysis	11/23/2023	11/23/2023	11/23/2023

12/4/2023

Robert L. Metzger, Ph.D, C.H.P. Date

Laboratory License Number AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

November 14, 2023 (Sample Date) 18:21 (Sample Time) (24 hour clock)

_____ Owner/Contact Person

_____ Owner/Contact Fax Number

_____ Owner/Contact Phone Number

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring

☐ Quarterly

☐ Composite of four quarterly samples

Date Q1 collected: _____

Date Q2 collected: _____

Date Q3 collected: _____

Date Q4 collected: _____

*****RADIOCHEMICAL ANALYSIS*****

>>>To be filled out by laboratory personnel<<<

*****Combined Uranium must be reported in micrograms per liter*****

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result		Exceed MCL
Calculated	15 pCi/L		Adjusted Gross Alpha	4000				
EPA 00-02		3 pCi/L	Gross Alpha	4002				
7500 - Rn			Radon	4004				
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L	
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	11/23/2023	3.0 ± 0.5		
GammaRay HPGE		1 pCi/L	Radium 226	4020	11/23/2023	< 0.5		
GammaRay HPGE		1 pCi/L	Radium 228	4030	11/23/2023	3.0 ± 0.5		

*****LABORATORY INFORMATION*****

>>>To be filled out by laboratory personnel<<<

Specimen Number: RSE73255

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: FC-CCR-MW06R-1123 (Other)

Authorized Signature: Robert L Metzger

Date Public Water System Notified: _____

DWAR 6: 11/2007

Radiation Safety Engineering, Inc.

3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121 (480) 897-9459
Website: www.radsafe.com FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Arizona Public Service
400 N. 5th Street
Phoenix, AZ 85004

Sampling Date: November 15, 2023
Sample Received: November 17, 2023
Analysis Completed: December 04, 2023

Sample ID	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
FC-CCR-MW15-1123 (Other)	< 0.5	1.3 ± 0.4	1.3 ± 0.4
Date of Analysis	11/23/2023	11/23/2023	11/23/2023

Robert L. Metzger, Ph.D, C.H.P. 12/4/2023
Date

Laboratory License Number AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

November 15, 2023 (Sample Date) 10:33 (Sample Time) (24 hour clock)

_____ Owner/Contact Person

_____ Owner/Contact Fax Number

_____ Owner/Contact Phone Number

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring — Date Q1 collected: _____

☐ Quarterly — Date Q2 collected: _____

☐ Composite of four quarterly samples — Date Q3 collected: _____

Date Q4 collected: _____

*****RADIOCHEMICAL ANALYSIS*****

>>>To be filled out by laboratory personnel<<<

*****Combined Uranium must be reported in micrograms per liter*****

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result		Exceed MCL
Calculated	15 pCi/L		Adjusted Gross Alpha	4000				
EPA 00-02		3 pCi/L	Gross Alpha	4002				
7500 - Rn			Radon	4004				
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L	
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	11/23/2023	1.3 ± 0.4		
GammaRay HPGE		1 pCi/L	Radium 226	4020	11/23/2023	< 0.5		
GammaRay HPGE		1 pCi/L	Radium 228	4030	11/23/2023	1.3 ± 0.4		

*****LABORATORY INFORMATION*****

>>>To be filled out by laboratory personnel<<<

Specimen Number: RSE73256

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: FC-CCR-MW15-1123 (Other)

Authorized Signature: _____

Date Public Water System Notified: _____

DWAR 6: 11/2007

Radiation Safety Engineering, Inc.

3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121 (480) 897-9459
Website: www.radsafe.com FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Arizona Public Service
400 N. 5th Street
Phoenix, AZ 85004

Sampling Date: November 15, 2023
Sample Received: November 17, 2023
Analysis Completed: December 04, 2023

Sample ID	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
FC-CCR-MW16-1123 (Other)	< 0.5	3.5 ± 0.5	3.5 ± 0.5
Date of Analysis	11/23/2023	11/23/2023	11/23/2023

12/4/2023

Robert L. Metzger, Ph.D, C.H.P. Date

Laboratory License Number AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

November 15, 2023 (Sample Date) 11:47 (Sample Time) (24 hour clock) _____ (Owner/Contact Person)

_____ (Owner/Contact Fax Number) _____ (Owner/Contact Phone Number)

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring — Date Q1 collected: _____

☐ Quarterly — Date Q2 collected: _____

☐ Composite of four quarterly samples — Date Q3 collected: _____

Date Q4 collected: _____

*****RADIOCHEMICAL ANALYSIS*****

>>>To be filled out by laboratory personnel<<<

*****Combined Uranium must be reported in micrograms per liter*****

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result		Exceed MCL
Calculated	15 pCi/L		Adjusted Gross Alpha	4000				
EPA 00-02		3 pCi/L	Gross Alpha	4002				
7500 - Rn			Radon	4004				
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L	
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	11/23/2023	3.5 ± 0.5		
GammaRay HPGE		1 pCi/L	Radium 226	4020	11/23/2023	< 0.5		
GammaRay HPGE		1 pCi/L	Radium 228	4030	11/23/2023	3.5 ± 0.5		

*****LABORATORY INFORMATION*****

>>>To be filled out by laboratory personnel<<<

Specimen Number: RSE73257

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: FC-CCR-MW16-1123 (Other)

Authorized Signature: Robert L Metzger

Date Public Water System Notified: _____

DWAR 6: 11/2007

Radiation Safety Engineering, Inc.

3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121
Website: www.radsafe.com

(480) 897-9459
FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Arizona Public Service
400 N. 5th Street
Phoenix, AZ 85004

Sampling Date: November 14, 2023
Sample Received: November 17, 2023
Analysis Completed: December 04, 2023

Sample ID	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
FC-CCR-MW17R-1123 (Other)	< 0.5	1.6 ± 0.4	1.6 ± 0.4
Date of Analysis	11/23/2023	11/23/2023	11/23/2023

Robert L. Metzger, Ph.D, C.H.P. 12/4/2023
Date

Laboratory License Number AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

November 14, 2023 (Sample Date) 14:07 (Sample Time) (24 hour clock) _____ (Owner/Contact Person)

_____ (Owner/Contact Fax Number) _____ (Owner/Contact Phone Number)

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring — Date Q1 collected: _____

☐ Quarterly — Date Q2 collected: _____

☐ Composite of four quarterly samples — Date Q3 collected: _____

Date Q4 collected: _____

*****RADIOCHEMICAL ANALYSIS*****

>>>To be filled out by laboratory personnel<<<

*****Combined Uranium must be reported in micrograms per liter*****

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result		Exceed MCL
Calculated	15 pCi/L		Adjusted Gross Alpha	4000				
EPA 00-02		3 pCi/L	Gross Alpha	4002				
7500 - Rn			Radon	4004				
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L	
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	11/23/2023	1.6 ± 0.4		
GammaRay HPGE		1 pCi/L	Radium 226	4020	11/23/2023	< 0.5		
GammaRay HPGE		1 pCi/L	Radium 228	4030	11/23/2023	1.6 ± 0.4		

*****LABORATORY INFORMATION*****

>>>To be filled out by laboratory personnel<<<

Specimen Number: RSE73258

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: FC-CCR-MW17R-1123 (Other)

Authorized Signature: Robert L Metzger

Date Public Water System Notified: _____

DWAR 6: 11/2007

Radiation Safety Engineering, Inc.

3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121 (480) 897-9459
Website: www.radsafe.com FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Arizona Public Service
400 N. 5th Street
Phoenix, AZ 85004

Sampling Date: November 14, 2023
Sample Received: November 17, 2023
Analysis Completed: December 04, 2023

Sample ID	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
FC-CCR-MW38R-1123 (Other)	< 0.5	1.2 ± 0.4	1.2 ± 0.4

Date of Analysis	11/23/2023	11/23/2023	11/23/2023

Robert L. Metzger, Ph.D, C.H.P. 12/4/2023
Date

Laboratory License Number AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

November 14, 2023 (Sample Date) 14:54 (Sample Time) (24 hour clock)

_____ Owner/Contact Person

_____ Owner/Contact Fax Number

_____ Owner/Contact Phone Number

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring

☐ Quarterly

☐ Composite of four quarterly samples

Date Q1 collected: _____

Date Q2 collected: _____

Date Q3 collected: _____

Date Q4 collected: _____

RADIOCHEMICAL ANALYSIS

>>>To be filled out by laboratory personnel<<<

*****Combined Uranium must be reported in micrograms per liter*****

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result		Exceed MCL
Calculated	15 pCi/L		Adjusted Gross Alpha	4000				
EPA 00-02		3 pCi/L	Gross Alpha	4002				
7500 - Rn			Radon	4004				
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L	
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	11/23/2023	1.2 ± 0.4		
GammaRay HPGE		1 pCi/L	Radium 226	4020	11/23/2023	< 0.5		
GammaRay HPGE		1 pCi/L	Radium 228	4030	11/23/2023	1.2 ± 0.4		

LABORATORY INFORMATION

>>>To be filled out by laboratory personnel<<<

Specimen Number: RSE73259

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: FC-CCR-MW38R-1123 (Other)

Authorized Signature: _____

Date Public Water System Notified: _____

DWAR 6: 11/2007

Radiation Safety Engineering, Inc.
3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121 (480) 897-9459
Website: www.radsafe.com FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Arizona Public Service
400 N. 5th Street
Phoenix, AZ 85004

Sampling Date: November 14, 2023
Sample Received: November 17, 2023
Analysis Completed: December 04, 2023

Sample ID	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
FC-CCR-MW56-1123 (Other)	< 0.5	6.4 ± 0.6	6.4 ± 0.6

Date of Analysis	11/23/2023	11/23/2023	11/23/2023

Robert L. Metzger, Ph.D, C.H.P. 12/4/2023
Date

Laboratory License Number AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

November 14, 2023 (Sample Date) 12:52 (Sample Time) (24 hour clock)

_____ Owner/Contact Person

_____ Owner/Contact Fax Number

_____ Owner/Contact Phone Number

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring

☐ Quarterly

☐ Composite of four quarterly samples

Date Q1 collected: _____

Date Q2 collected: _____

Date Q3 collected: _____

Date Q4 collected: _____

*****RADIOCHEMICAL ANALYSIS*****

>>>To be filled out by laboratory personnel<<<

*****Combined Uranium must be reported in micrograms per liter*****

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result		Exceed MCL
Calculated	15 pCi/L		Adjusted Gross Alpha	4000				
EPA 00-02		3 pCi/L	Gross Alpha	4002				
7500 - Rn			Radon	4004				
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L	
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	11/23/2023	6.4 ± 0.6		X
GammaRay HPGE		1 pCi/L	Radium 226	4020	11/23/2023	< 0.5		
GammaRay HPGE		1 pCi/L	Radium 228	4030	11/23/2023	6.4 ± 0.6		

*****LABORATORY INFORMATION*****

>>>To be filled out by laboratory personnel<<<

Specimen Number: RSE73260

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: FC-CCR-MW56-1123 (Other)

Authorized Signature: _____

Date Public Water System Notified: _____

DWAR 6: 11/2007

Radiation Safety Engineering, Inc.
3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121
Website: www.radsafe.com
(480) 897-9459
FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Arizona Public Service
400 N. 5th Street
Phoenix, AZ 85004

Sampling Date: November 14, 2023
Sample Received: November 17, 2023
Analysis Completed: December 04, 2023

Sample ID	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
FC-CCR-MW57-1123 (Other)	< 0.5	1.2 ± 0.4	1.2 ± 0.4
Date of Analysis	11/23/2023	11/23/2023	11/23/2023

Robert L. Metzger, Ph.D, C.H.P. 12/4/2023
Date

Laboratory License Number AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

November 14, 2023 (Sample Date) 16:03 (Sample Time) (24 hour clock)

_____ Owner/Contact Person

_____ Owner/Contact Fax Number

_____ Owner/Contact Phone Number

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring — Date Q1 collected: _____

☐ Quarterly — Date Q2 collected: _____

☐ Composite of four quarterly samples — Date Q3 collected: _____

Date Q4 collected: _____

RADIOCHEMICAL ANALYSIS

>>>To be filled out by laboratory personnel<<<

*****Combined Uranium must be reported in micrograms per liter*****

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result		Exceed MCL
Calculated	15 pCi/L		Adjusted Gross Alpha	4000				
EPA 00-02		3 pCi/L	Gross Alpha	4002				
7500 - Rn			Radon	4004				
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L	
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	11/23/2023	1.2 ± 0.4		
GammaRay HPGE		1 pCi/L	Radium 226	4020	11/23/2023	< 0.5		
GammaRay HPGE		1 pCi/L	Radium 228	4030	11/23/2023	1.2 ± 0.4		

LABORATORY INFORMATION

>>>To be filled out by laboratory personnel<<<

Specimen Number: RSE73261

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: FC-CCR-MW57-1123 (Other)

Authorized Signature: Robert L Metzger

Date Public Water System Notified: _____

DWAR 6: 11/2007

Radiation Safety Engineering, Inc.
3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121
Website: www.radsafe.com
(480) 897-9459
FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Arizona Public Service
400 N. 5th Street
Phoenix, AZ 85004

Sampling Date: November 16, 2023
Sample Received: November 17, 2023
Analysis Completed: December 04, 2023

Sample ID	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
FC-CCR-DMX05R-1123 (Other)	1.3 ± 0.2	4.1 ± 0.5	5.4 ± 0.5
Date of Analysis	11/23/2023	11/23/2023	11/23/2023

Robert L. Metzger, Ph.D, C.H.P. 12/4/2023
Date

Laboratory License Number AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

November 16, 2023 (Sample Date) 11:38 (Sample Time) (24 hour clock)

_____ Owner/Contact Person

_____ Owner/Contact Fax Number

_____ Owner/Contact Phone Number

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring

☐ Quarterly

☐ Composite of four quarterly samples

Date Q1 collected: _____

Date Q2 collected: _____

Date Q3 collected: _____

Date Q4 collected: _____

RADIOCHEMICAL ANALYSIS

>>>To be filled out by laboratory personnel<<<

*****Combined Uranium must be reported in micrograms per liter*****

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result		Exceed MCL
Calculated	15 pCi/L		Adjusted Gross Alpha	4000				
EPA 00-02		3 pCi/L	Gross Alpha	4002				
7500 - Rn			Radon	4004				
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L	
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	11/23/2023	5.4 ± 0.5		X
GammaRay HPGE		1 pCi/L	Radium 226	4020	11/23/2023	1.3 ± 0.2		
GammaRay HPGE		1 pCi/L	Radium 228	4030	11/23/2023	4.1 ± 0.5		

LABORATORY INFORMATION

>>>To be filled out by laboratory personnel<<<

Specimen Number: RSE73262

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: FC-CCR-DMX05R-1123 (Other)

Authorized Signature: Robert L. Metzger

Date Public Water System Notified: _____

DWAR 6: 11/2007

Radiation Safety Engineering, Inc.

3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121 (480) 897-9459
Website: www.radsafe.com FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Arizona Public Service
400 N. 5th Street
Phoenix, AZ 85004

Sampling Date: November 16, 2023
Sample Received: November 17, 2023
Analysis Completed: December 04, 2023

Sample ID	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
FC-CCR-EB01-1123 (Other)	< 0.5	< 0.8	< 0.8

Date of Analysis	11/23/2023	11/23/2023	11/23/2023

12/4/2023

Robert L. Metzger, Ph.D, C.H.P. Date

Laboratory License Number AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

November 16, 2023 (Sample Date) 17:37 (Sample Time) (24 hour clock)

_____ Owner/Contact Person

_____ Owner/Contact Fax Number

_____ Owner/Contact Phone Number

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring

☐ Quarterly

☐ Composite of four quarterly samples

Date Q1 collected: _____

Date Q2 collected: _____

Date Q3 collected: _____

Date Q4 collected: _____

RADIOCHEMICAL ANALYSIS

>>>To be filled out by laboratory personnel<<<

*****Combined Uranium must be reported in micrograms per liter*****

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result		Exceed MCL
Calculated	15 pCi/L		Adjusted Gross Alpha	4000				
EPA 00-02		3 pCi/L	Gross Alpha	4002				
7500 - Rn			Radon	4004				
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L	
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	11/23/2023	< 0.8		
GammaRay HPGE		1 pCi/L	Radium 226	4020	11/23/2023	< 0.5		
GammaRay HPGE		1 pCi/L	Radium 228	4030	11/23/2023	< 0.8		

LABORATORY INFORMATION

>>>To be filled out by laboratory personnel<<<

Specimen Number: RSE73263

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: FC-CCR-EB01-1123 (Other)

Authorized Signature: Robert L Metzger

Date Public Water System Notified: _____

DWAR 6: 11/2007

Client Information	
Name:	**Natalie Chrisman/602-250-3608** **Pam Norris/505-598-8781**
Company	**Arizona Public Service**
Address	**PO Box 355, MS 4915** **Fruitland, NM 87416**
Phone	
Site	**APS Four Corners Power Plant (Other)**

Radiation Safety Engineering, Inc.
3245 North Washington Street, Chandler, Arizona 85225
Analysis Request

Sample ID & Location (DWR#)	Collection Date	Collection Time	Media (DW* WW* Other)	Drinking Water Compliance	Gross Alpha	Gross Beta	Total Uranium	Isotopic Uranium	Ra-226	Ra-228	Ra-226 + Ra-228, Combined	H-3	Gamma Spectroscopy	Sr-89/Sr-90	Radon in Water	Radon in Air
FC-CCR-DMX03-1123	11/13/2023	1451	**GW**						X	X	X				73252	
FC-CCR-DMX04-1123	11/14/2023	1730	**GW**						X	X	X				73253	
FC-CCR-DMX06-1123	11/15/2023	915	**GW**						X	X	X				73254	
FC-CCR-MW06R-1123	11/14/2023	1821	**GW**						X	X	X				73255	
FC-CCR-MW15-1123	11/15/2023	1033	**GW**						X	X	X				73256	
FC-CCR-MW16-1123	11/15/2023	1147	**GW**						X	X	X				73257	
FC-CCR-MW17R-1123	11/14/2023	1407	**GW**						X	X	X				73258	
FC-CCR-MW38R-1123	11/14/2023	1454	**GW**						X	X	X				73259	
FC-CCR-MW56-1123	11/14/2023	1252	**GW**						X	X	X				73260	
FC-CCR-MW57-1123	11/14/2023	1603	**GW**						X	X	X				73261	

Sample Receipt	
Total No. of Containers	
Chain of Custody Seals	
Container Condition	
Lab No.	

Invoice to:
PO#: 100622094

Instructions/Comments
Method HPGe

Relinquished By: Hunter	Company: WSP	Date/time: 11/17/23 1624	Received By: Kevin Brown		Company: RSE	Date/time: 11/17/2023 16:46 pm
Relinquished By:	Company:	Date/time:	Received By:		Company:	Date/time:
Relinquished By:	Company:	Date/time:	Received By:		Company:	Date/time:

* DW = Drinking Water, WW = Waste Water, GW = Groundwater.

u/client/forms/cofc.frm

Client Information	
Name:	**Natalie Chrisman/602-250-3608** **Pam Norris/505-598-8781**
Company	**Arizona Public Service**
Address	**PO Box 355, MS 4915** **Fruitland, NM 87416**
Phone	
Site	**APS Four Corners Power Plant (Other)**

Radiation Safety Engineering, Inc.
3245 North Washington Street, Chandler, Arizona 85225
Analysis Request

Sample ID & Location (DWR#)	Collection Date	Collection Time	Media (DW* WW* Other)	Drinking Water Compliance	Gross Alpha	Gross Beta	Total Uranium	Isotopic Uranium	Ra-226	Ra-228	Ra-226 + Ra-228, Combined	H-3	Gamma Spectroscopy	Sr-89/Sr-90	Radon in Water	Radon in Air
FC-CCR-DMX05R-1123	11/16/2023	1138	**GW**						X	X	X				73262	
FC-CCR-EB01-1123	11/16/2023	1737	**GW**						X	X	X				73263	

Sample Receipt	
Total No. of Containers	
Chain of Custody Seals	
Container Condition	
Lab No.	

Invoice to:
PO#: 100622094

Instructions/Comments
Method HPGe

Relinguished By:	Company: WSP	Date/time: 11/17/23 1645	Received By:		Company: RSE	Date/time: 11/17/23 16:46pm
Relinguished By:	Company:	Date/time:	Received By:		Company:	Date/time:
Relinguished By:	Company:	Date/time:	Received By:		Company:	Date/time:

* DW = Drinking Water, WW = Waste Water, GW = Groundwater.

u/client/forms/cofc.frm

Radiation Safety Engineering, Inc.

3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121 (480) 897-9459
Website: www.radsafe.com FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Arizona Public Service
400 N. 5th Street
Phoenix, AZ 85004

Sampling Date: November 13, 2023
Sample Received: November 17, 2023
Analysis Completed: December 01, 2023

Sample ID	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
FC-CCR-MW67-1123 (URS)	1.0 ± 0.3	2.6 ± 0.4	3.6 ± 0.5
Date of Analysis	11/24/2023	11/24/2023	11/24/2023

12/1/2023

Robert L. Metzger, Ph.D, C.H.P. Date

Laboratory License Number AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

November 13, 2023 (Sample Date) 9:18 (Sample Time) (24 hour clock)

_____ Owner/Contact Person

_____ Owner/Contact Fax Number

_____ Owner/Contact Phone Number

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring — Date Q1 collected: _____

☐ Quarterly — Date Q2 collected: _____

☐ Composite of four quarterly samples — Date Q3 collected: _____

Date Q4 collected: _____

*****RADIOCHEMICAL ANALYSIS*****

>>>To be filled out by laboratory personnel<<<

*****Combined Uranium must be reported in micrograms per liter*****

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result		Exceed MCL
Calculated	15 pCi/L		Adjusted Gross Alpha	4000				
EPA 00-02		3 pCi/L	Gross Alpha	4002				
7500 - Rn			Radon	4004				
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L	
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	11/24/2023	3.6 ± 0.5		
GammaRay HPGE		1 pCi/L	Radium 226	4020	11/24/2023	1.0 ± 0.3		
GammaRay HPGE		1 pCi/L	Radium 228	4030	11/24/2023	2.6 ± 0.4		

*****LABORATORY INFORMATION*****

>>>To be filled out by laboratory personnel<<<

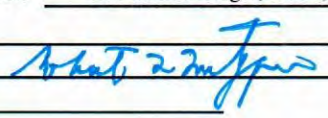
Specimen Number: RSE73268

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: FC-CCR-MW67-1123 (URS)

Authorized Signature: 

Date Public Water System Notified: _____

DWAR 6: 11/2007

Radiation Safety Engineering, Inc.

3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121 (480) 897-9459
Website: www.radsafe.com FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Arizona Public Service
400 N. 5th Street
Phoenix, AZ 85004

Sampling Date: November 11, 2023
Sample Received: November 17, 2023
Analysis Completed: December 01, 2023

Sample ID	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
FC-CCR-MW68-1123 (URS)	< 0.6	< 0.8	< 0.8
Date of Analysis	11/24/2023	11/24/2023	11/24/2023

12/1/2023

Robert L. Metzger, Ph.D, C.H.P. Date

Laboratory License Number AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

November 11, 2023 (Sample Date) 11:28 (Sample Time) (24 hour clock)

_____ Owner/Contact Person

_____ Owner/Contact Fax Number

_____ Owner/Contact Phone Number

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring

☐ Quarterly

☐ Composite of four quarterly samples

Date Q1 collected: _____

Date Q2 collected: _____

Date Q3 collected: _____

Date Q4 collected: _____

*****RADIOCHEMICAL ANALYSIS*****

>>>To be filled out by laboratory personnel<<<

*****Combined Uranium must be reported in micrograms per liter*****

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result		Exceed MCL
Calculated	15 pCi/L		Adjusted Gross Alpha	4000				
EPA 00-02		3 pCi/L	Gross Alpha	4002				
7500 - Rn			Radon	4004				
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L	
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	11/24/2023	< 0.8		
GammaRay HPGE		1 pCi/L	Radium 226	4020	11/24/2023	< 0.6		
GammaRay HPGE		1 pCi/L	Radium 228	4030	11/24/2023	< 0.8		

*****LABORATORY INFORMATION*****

>>>To be filled out by laboratory personnel<<<

Specimen Number: RSE73269

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: FC-CCR-MW68-1123 (URS)

Authorized Signature: _____

Date Public Water System Notified: _____

DWAR 6: 11/2007

Radiation Safety Engineering, Inc.

3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121 (480) 897-9459
Website: www.radsafe.com FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Arizona Public Service
400 N. 5th Street
Phoenix, AZ 85004

Sampling Date: November 11, 2023
Sample Received: November 17, 2023
Analysis Completed: December 01, 2023

Sample ID	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
FC-CCR-MW69-1123 (URS)	< 0.6	< 0.8	< 0.8
Date of Analysis	11/24/2023	11/24/2023	11/24/2023

Robert L. Metzger, Ph.D, C.H.P. 12/1/2023
Date

Laboratory License Number AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

November 11, 2023 (Sample Date) 10:33 (Sample Time) (24 hour clock) _____ Owner/Contact Person

_____ Owner/Contact Fax Number _____ Owner/Contact Phone Number

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring Date Q1 collected: _____

☐ Quarterly Date Q2 collected: _____

☐ Composite of four quarterly samples Date Q3 collected: _____

Date Q4 collected: _____

*****RADIOCHEMICAL ANALYSIS*****

>>>To be filled out by laboratory personnel<<<

*****Combined Uranium must be reported in micrograms per liter*****

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result		Exceed MCL
Calculated	15 pCi/L		Adjusted Gross Alpha	4000				
EPA 00-02		3 pCi/L	Gross Alpha	4002				
7500 - Rn			Radon	4004				
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L	
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	11/24/2023	< 0.8		
GammaRay HPGE		1 pCi/L	Radium 226	4020	11/24/2023	< 0.6		
GammaRay HPGE		1 pCi/L	Radium 228	4030	11/24/2023	< 0.8		

*****LABORATORY INFORMATION*****

>>>To be filled out by laboratory personnel<<<

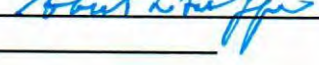
Specimen Number: RSE73270

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: FC-CCR-MW69-1123 (URS)

Authorized Signature: 

Date Public Water System Notified: _____

DWAR 6: 11/2007

Radiation Safety Engineering, Inc.
3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121 (480) 897-9459
Website: www.radsafe.com FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Arizona Public Service
400 N. 5th Street
Phoenix, AZ 85004

Sampling Date: November 11, 2023
Sample Received: November 17, 2023
Analysis Completed: December 01, 2023

Sample ID	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
FC-CCR-MW83-1123 (URS)	< 0.6	< 0.8	< 0.8

Date of Analysis	11/24/2023	11/24/2023	11/24/2023

Robert L. Metzger, Ph.D, C.H.P. 12/1/2023
Date

Laboratory License Number AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

November 11, 2023 (Sample Date) 14:10 (Sample Time) (24 hour clock)

_____ Owner/Contact Person

_____ Owner/Contact Fax Number

_____ Owner/Contact Phone Number

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring

☐ Quarterly

☐ Composite of four quarterly samples

Date Q1 collected: _____

Date Q2 collected: _____

Date Q3 collected: _____

Date Q4 collected: _____

RADIOCHEMICAL ANALYSIS

>>>To be filled out by laboratory personnel<<<

*****Combined Uranium must be reported in micrograms per liter*****

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result		Exceed MCL
Calculated	15 pCi/L		Adjusted Gross Alpha	4000				
EPA 00-02		3 pCi/L	Gross Alpha	4002				
7500 - Rn			Radon	4004				
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L	
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	11/24/2023	< 0.8		
GammaRay HPGE		1 pCi/L	Radium 226	4020	11/24/2023	< 0.6		
GammaRay HPGE		1 pCi/L	Radium 228	4030	11/24/2023	< 0.8		

LABORATORY INFORMATION

>>>To be filled out by laboratory personnel<<<

Specimen Number: RSE73271

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: FC-CCR-MW83-1123 (URS)

Authorized Signature: Robert L. Metzger

Date Public Water System Notified: _____

DWAR 6: 11/2007

Radiation Safety Engineering, Inc.

3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121 (480) 897-9459
Website: www.radsafe.com FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Arizona Public Service
400 N. 5th Street
Phoenix, AZ 85004

Sampling Date: November 11, 2023
Sample Received: November 17, 2023
Analysis Completed: December 01, 2023

Sample ID	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
FC-CCR-MW84-1123 (URS)	< 0.5	1.5 ± 0.4	1.5 ± 0.4
Date of Analysis	11/24/2023	11/24/2023	11/24/2023

Robert L. Metzger, Ph.D, C.H.P. 12/1/2023
Date

Laboratory License Number AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

November 11, 2023 (Sample Date) 15:53 (Sample Time) (24 hour clock)

_____ Owner/Contact Person

_____ Owner/Contact Fax Number

_____ Owner/Contact Phone Number

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring

☐ Quarterly

☐ Composite of four quarterly samples

Date Q1 collected: _____

Date Q2 collected: _____

Date Q3 collected: _____

Date Q4 collected: _____

*****RADIOCHEMICAL ANALYSIS*****

>>>To be filled out by laboratory personnel<<<

*****Combined Uranium must be reported in micrograms per liter*****

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result		Exceed MCL
Calculated	15 pCi/L		Adjusted Gross Alpha	4000				
EPA 00-02		3 pCi/L	Gross Alpha	4002				
7500 - Rn			Radon	4004				
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L	
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	11/24/2023	1.5 ± 0.4		
GammaRay HPGE		1 pCi/L	Radium 226	4020	11/24/2023	< 0.5		
GammaRay HPGE		1 pCi/L	Radium 228	4030	11/24/2023	1.5 ± 0.4		

*****LABORATORY INFORMATION*****

>>>To be filled out by laboratory personnel<<<

Specimen Number: RSE73272

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: FC-CCR-MW84-1123 (URS)

Authorized Signature: _____

Date Public Water System Notified: _____

DWAR 6: 11/2007

Radiation Safety Engineering, Inc.

3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121 (480) 897-9459
Website: www.radsafe.com FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Arizona Public Service
400 N. 5th Street
Phoenix, AZ 85004

Sampling Date: November 11, 2023
Sample Received: November 17, 2023
Analysis Completed: December 01, 2023

Sample ID	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
FC-CCR-MW85-1123 (URS)	0.7 ± 0.2	1.7 ± 0.4	2.4 ± 0.4

Date of Analysis	11/24/2023	11/24/2023	11/24/2023

12/1/2023

Robert L. Metzger, Ph.D, C.H.P. Date

Laboratory License Number AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

November 11, 2023 (Sample Date) 15:03 (Sample Time) (24 hour clock)

Owner/Contact Person: _____

Owner/Contact Fax Number: _____

Owner/Contact Phone Number: _____

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring

☐ Quarterly

☐ Composite of four quarterly samples

Date Q1 collected: _____

Date Q2 collected: _____

Date Q3 collected: _____

Date Q4 collected: _____

RADIOCHEMICAL ANALYSIS

>>>To be filled out by laboratory personnel<<<

*****Combined Uranium must be reported in micrograms per liter*****

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result		Exceed MCL
Calculated	15 pCi/L		Adjusted Gross Alpha	4000				
EPA 00-02		3 pCi/L	Gross Alpha	4002				
7500 - Rn			Radon	4004				
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L	
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	11/24/2023	2.4 ± 0.4		
GammaRay HPGE		1 pCi/L	Radium 226	4020	11/24/2023	0.7 ± 0.2		
GammaRay HPGE		1 pCi/L	Radium 228	4030	11/24/2023	1.7 ± 0.4		

LABORATORY INFORMATION

>>>To be filled out by laboratory personnel<<<

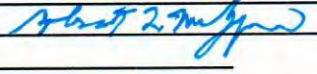
Specimen Number: RSE73273

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: FC-CCR-MW85-1123 (URS)

Authorized Signature: 

Date Public Water System Notified: _____

DWAR 6: 11/2007

Radiation Safety Engineering, Inc.
3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121 (480) 897-9459
Website: www.radsafe.com FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Arizona Public Service
400 N. 5th Street
Phoenix, AZ 85004

Sampling Date: November 11, 2023
Sample Received: November 17, 2023
Analysis Completed: December 01, 2023

Sample ID	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
FC-CCR-FD01-1123 (URS)	1.5 ± 0.3	3.0 ± 0.4	4.5 ± 0.5
Date of Analysis	11/24/2023	11/24/2023	11/24/2023

12/1/2023
Robert L. Metzger, Ph.D, C.H.P. Date
Laboratory License Number AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

November 11, 2023 (Sample Date) 8:53 (Sample Time) (24 hour clock) _____ (Owner/Contact Person)

_____ (Owner/Contact Fax Number) _____ (Owner/Contact Phone Number)

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring — Date Q1 collected: _____

☐ Quarterly — Date Q2 collected: _____

☐ Composite of four quarterly samples — Date Q3 collected: _____

Date Q4 collected: _____

RADIOCHEMICAL ANALYSIS

>>>To be filled out by laboratory personnel<<<

*****Combined Uranium must be reported in micrograms per liter*****

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result		Exceed MCL
Calculated	15 pCi/L		Adjusted Gross Alpha	4000				
EPA 00-02		3 pCi/L	Gross Alpha	4002				
7500 - Rn			Radon	4004				
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L	
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	11/24/2023	4.5 ± 0.5		
GammaRay HPGE		1 pCi/L	Radium 226	4020	11/24/2023	1.5 ± 0.3		
GammaRay HPGE		1 pCi/L	Radium 228	4030	11/24/2023	3.0 ± 0.4		

LABORATORY INFORMATION

>>>To be filled out by laboratory personnel<<<

Specimen Number: RSE73274

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: FC-CCR-FD01-1123 (URS)

Authorized Signature: Robert L Metzger

Date Public Water System Notified: _____

DWAR 6: 11/2007

Radiation Safety Engineering, Inc.

3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121 (480) 897-9459
Website: www.radsafe.com FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Arizona Public Service
400 N. 5th Street
Phoenix, AZ 85004

Sampling Date: November 13, 2023
Sample Received: November 17, 2023
Analysis Completed: December 01, 2023

Sample ID	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
FC-CCR-CM01-1123 (URS)	< 0.5	1.0 ± 0.3	1.0 ± 0.3
Date of Analysis	11/24/2023	11/24/2023	11/24/2023

12/1/2023

Robert L. Metzger, Ph.D, C.H.P. Date

Laboratory License Number AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

November 13, 2023 (Sample Date) 9:41 (Sample Time) (24 hour clock) _____ Owner/Contact Person

_____ Owner/Contact Fax Number _____ Owner/Contact Phone Number

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring — Date Q1 collected: _____

☐ Quarterly — Date Q2 collected: _____

☐ Composite of four quarterly samples — Date Q3 collected: _____

Date Q4 collected: _____

RADIOCHEMICAL ANALYSIS

>>>To be filled out by laboratory personnel<<<

*****Combined Uranium must be reported in micrograms per liter*****

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result		Exceed MCL
Calculated	15 pCi/L		Adjusted Gross Alpha	4000				
EPA 00-02		3 pCi/L	Gross Alpha	4002				
7500 - Rn			Radon	4004				
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L	
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	11/24/2023	1.0 ± 0.3		
GammaRay HPGE		1 pCi/L	Radium 226	4020	11/24/2023	< 0.5		
GammaRay HPGE		1 pCi/L	Radium 228	4030	11/24/2023	1.0 ± 0.3		

LABORATORY INFORMATION

>>>To be filled out by laboratory personnel<<<

Specimen Number: RSE73275

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: FC-CCR-CM01-1123 (URS)

Authorized Signature: Robert L. Metzger

Date Public Water System Notified: _____

DWAR 6: 11/2007

Radiation Safety Engineering, Inc.

3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121 (480) 897-9459
Website: www.radsafe.com FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Arizona Public Service
400 N. 5th Street
Phoenix, AZ 85004

Sampling Date: November 13, 2023
Sample Received: November 17, 2023
Analysis Completed: December 01, 2023

Sample ID	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
FC-CCR-CM02-1123 (URS)	< 0.6	2.3 ± 0.4	2.3 ± 0.4
Date of Analysis	11/24/2023	11/24/2023	11/24/2023

12/1/2023

Robert L. Metzger, Ph.D, C.H.P. Date

Laboratory License Number AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

November 13, 2023 (Sample Date) 9:52 (Sample Time) (24 hour clock) _____ (Owner/Contact Person)

_____ (Owner/Contact Fax Number) _____ (Owner/Contact Phone Number)

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring — Date Q1 collected: _____

☐ Quarterly — Date Q2 collected: _____

☐ Composite of four quarterly samples — Date Q3 collected: _____

Date Q4 collected: _____

*****RADIOCHEMICAL ANALYSIS*****

>>>To be filled out by laboratory personnel<<<

*****Combined Uranium must be reported in micrograms per liter*****

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result		Exceed MCL
Calculated	15 pCi/L		Adjusted Gross Alpha	4000				
EPA 00-02		3 pCi/L	Gross Alpha	4002				
7500 - Rn			Radon	4004				
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L	
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	11/24/2023	2.3 ± 0.4		
GammaRay HPGE		1 pCi/L	Radium 226	4020	11/24/2023	< 0.6		
GammaRay HPGE		1 pCi/L	Radium 228	4030	11/24/2023	2.3 ± 0.4		

*****LABORATORY INFORMATION*****

>>>To be filled out by laboratory personnel<<<

Specimen Number: RSE73276

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: FC-CCR-CM02-1123 (URS)

Authorized Signature: Robert L. Metzger

Date Public Water System Notified: _____

DWAR 6: 11/2007

Client Information

Name:	**Natalie Chrisman/602-250-3608** **Pam Norris/505-598-8781**
Company	**Arizona Public Service**
Address	**PO Box 355, MS 4915** **Fruitland, NM 87416**
Phone	
Site	**APS Four Corners Power Plant (URS)**

Radiation Safety Engineering, Inc.
3245 North Washington Street, Chandler, Arizona 85225
Analysis Request

Sample ID & Location (DWR#)	Collection Date	Collection Time	Media (DW* WW* Other)	Drinking Water Compliance	Gross Alpha	Gross Beta	Total Uranium	Isotopic Uranium	Ra-226	Ra-228	Ra-226 + Ra-228, Combined	H-3	Gamma Spectroscopy	Sr-89/Sr-90	Radon in Water	Radon in Air	
FC-CCR-MW67-1123	11/13/2023	918	**GW**						X	X	X					73268	
FC-CCR-MW68-1123	11/11/2023	1128	**GW**						X	X	X					73269	
FC-CCR-MW69-1123	11/11/2023	1033	**GW**						X	X	X					73270	
FC-CCR-MW83-1123	11/11/2023	1410	**GW**						X	X	X					73271	
FC-CCR-MW84-1123	11/11/2023	1553	**GW**						X	X	X					73272	
FC-CCR-MW85-1123	11/11/2023	1503	**GW**						X	X	X					73273	
FC-CCR-FD01-1123	11/11/2023	853	**GW**						X	X	X					73274	
FC-CCR-CM01-1123	11/13/2023	941	**GW**						X	X	X					73275	
FC-CCR-CM02-1123	11/13/2023	952	**GW**						X	X	X					73276	

Sample Receipt

Total No. of Containers	
Chain of Custody Seals	
Container Condition	
Lab No.	

Invoice to:
PO#: 100622094

Instructions/Comments
Method HPGe

Relinguished By:	Company: WSP	Date/time: 11/17/23 1645	Received By:		Company: RSE	Date/time: 11/17/2023 16:46
Relinguished By:	Company:	Date/time:	Received By:		Company:	Date/time:
Relinguished By:	Company:	Date/time:	Received By:		Company:	Date/time:

* DW = Drinking Water, WW = Waste Water, GW = Groundwater.

u/client/forms/cofc.frm

Radiation Safety Engineering, Inc.

3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121 (480) 897-9459
Website: www.radsafe.com FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Arizona Public Service
400 N. 5th Street
Phoenix, AZ 85004

Sampling Date: November 15, 2023
Sample Received: November 17, 2023
Analysis Completed: December 01, 2023

Sample ID	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
FC-CCR-MW07-1123 (Multiunit)	< 0.5	2.1 ± 0.4	2.1 ± 0.4
Date of Analysis	11/24/2023	11/24/2023	11/24/2023

Robert L. Metzger, Ph.D, C.H.P. 12/1/2023
Date

Laboratory License Number AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

November 15, 2023 (Sample Date) 14:31 (Sample Time) (24 hour clock) _____ Owner/Contact Person

_____ Owner/Contact Fax Number _____ Owner/Contact Phone Number

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring

☐ Quarterly

☐ Composite of four quarterly samples

Date Q1 collected: _____

Date Q2 collected: _____

Date Q3 collected: _____

Date Q4 collected: _____

RADIOCHEMICAL ANALYSIS

>>>To be filled out by laboratory personnel<<<

*****Combined Uranium must be reported in micrograms per liter*****

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result		Exceed MCL
Calculated	15 pCi/L		Adjusted Gross Alpha	4000				
EPA 00-02		3 pCi/L	Gross Alpha	4002				
7500 - Rn			Radon	4004				
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L	
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	11/24/2023	2.1 ± 0.4		
GammaRay HPGE		1 pCi/L	Radium 226	4020	11/24/2023	< 0.5		
GammaRay HPGE		1 pCi/L	Radium 228	4030	11/24/2023	2.1 ± 0.4		

LABORATORY INFORMATION

>>>To be filled out by laboratory personnel<<<

Specimen Number: RSE73277

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: FC-CCR-MW07-1123 (Multiunit)

Authorized Signature: Robert L. Metzger

Date Public Water System Notified: _____

DWAR 6: 11/2007

Radiation Safety Engineering, Inc.

3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121 (480) 897-9459
Website: www.radsafe.com FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Arizona Public Service
400 N. 5th Street
Phoenix, AZ 85004

Sampling Date: November 15, 2023
Sample Received: November 17, 2023
Analysis Completed: December 01, 2023

Sample ID	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
FC-CCR-MW08-1123 (Multiunit)	< 0.5	1.7 ± 0.4	1.7 ± 0.4
Date of Analysis	11/24/2023	11/24/2023	11/24/2023

Robert L. Metzger, Ph.D, C.H.P. 12/1/2023
Date

Laboratory License Number AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

November 15, 2023 (Sample Date) 13:33 (Sample Time) (24 hour clock)

_____ Owner/Contact Person

_____ Owner/Contact Fax Number

_____ Owner/Contact Phone Number

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring

☐ Quarterly

☐ Composite of four quarterly samples

Date Q1 collected: _____

Date Q2 collected: _____

Date Q3 collected: _____

Date Q4 collected: _____

*****RADIOCHEMICAL ANALYSIS*****

>>>To be filled out by laboratory personnel<<<

*****Combined Uranium must be reported in micrograms per liter*****

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result		Exceed MCL
Calculated	15 pCi/L		Adjusted Gross Alpha	4000				
EPA 00-02		3 pCi/L	Gross Alpha	4002				
7500 - Rn			Radon	4004				
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L	
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	11/24/2023	1.7 ± 0.4		
GammaRay HPGE		1 pCi/L	Radium 226	4020	11/24/2023	< 0.5		
GammaRay HPGE		1 pCi/L	Radium 228	4030	11/24/2023	1.7 ± 0.4		

*****LABORATORY INFORMATION*****

>>>To be filled out by laboratory personnel<<<

Specimen Number: RSE73278

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: FC-CCR-MW08-1123 (Multiunit)

Authorized Signature: Robert L Metzger

Date Public Water System Notified: _____

DWAR 6: 11/2007

Radiation Safety Engineering, Inc.
3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121 (480) 897-9459
Website: www.radsafe.com FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Arizona Public Service
400 N. 5th Street
Phoenix, AZ 85004

Sampling Date: November 15, 2023
Sample Received: November 17, 2023
Analysis Completed: December 01, 2023

Sample ID	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
FC-CCR-MW49A-1123 (Multiunit)	< 0.5	2.1 ± 0.4	2.1 ± 0.4
Date of Analysis	11/24/2023	11/24/2023	11/24/2023

Robert L. Metzger, Ph.D, C.H.P. 12/1/2023
Date

Laboratory License Number AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

November 15, 2023 (Sample Date) 16:59 (Sample Time) (24 hour clock) _____ (Owner/Contact Person)

_____ (Owner/Contact Fax Number) _____ (Owner/Contact Phone Number)

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring — Date Q1 collected: _____

☐ Quarterly — Date Q2 collected: _____

☐ Composite of four quarterly samples — Date Q3 collected: _____

Date Q4 collected: _____

*****RADIOCHEMICAL ANALYSIS*****

>>>To be filled out by laboratory personnel<<<

*****Combined Uranium must be reported in micrograms per liter*****

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result		Exceed MCL
Calculated	15 pCi/L		Adjusted Gross Alpha	4000				
EPA 00-02		3 pCi/L	Gross Alpha	4002				
7500 - Rn			Radon	4004				
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L	
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	11/24/2023	2.1 ± 0.4		
GammaRay HPGE		1 pCi/L	Radium 226	4020	11/24/2023	< 0.5		
GammaRay HPGE		1 pCi/L	Radium 228	4030	11/24/2023	2.1 ± 0.4		

*****LABORATORY INFORMATION*****

>>>To be filled out by laboratory personnel<<<

Specimen Number: RSE73279

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: FC-CCR-MW49A-1123 (Multiunit)

Authorized Signature: _____

Date Public Water System Notified: _____

DWAR 6: 11/2007

Client Information	
Name:	Natalie Chrisman/602-250-3608 Pam Norris/505-598-8781
Company	Arizona Public Service
Address	PO Box 355, MS 4915 Fruitland, NM 87416
Phone	
Site	APS Four Corners Power Plant (Multiunit)

Radiation Safety Engineering, Inc.
3245 North Washington Street, Chandler, Arizona 85225
Analysis Request

Sample ID & Location (DWR#)	Collection Date	Collection Time	Media (DW* WW* Other)	Drinking Water Compliance	Gross Alpha	Gross Beta	Total Uranium	Isotopic Uranium	Ra-226	Ra-228	Ra-226 + Ra-228, Combined	H-3	Gamma Spectroscopy	Sr-89/Sr-90	Radon in Water	Radon in Air
FC-CCR-MW07-1123	11/15/2023	1431	GW						X	X	X					73277
FC-CCR-MW08-1123	11/15/2023	1333	GW						X	X	X					73278
FC-CCR-MW49A-1123	11/15/2023	1659	GW						X	X	X					73279

Sample Receipt	
Total No. of Containers	
Chain of Custody Seals	
Container Condition	
Lab No.	

Invoice to:
PO#: 100622094

Instructions/Comments
Method HPGe

Relinquished By:	Company: WSP	Date/time: 11/17/23 1645	Received By:		Company: RSE	Date/time: 11/17/2023 16:46
Relinquished By:	Company:	Date/time:	Received By:		Company:	Date/time:
Relinquished By:	Company:	Date/time:	Received By:		Company:	Date/time:

* DW = Drinking Water, WW = Waste Water, GW = Groundwater.

u/client/forms/cofc.frm

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ANALYTICAL REPORT

PREPARED FOR

Attn: Natalie Chrisman
Arizona Public Service Company
PO BOX 188, Ste. 4458
Joseph City, Arizona 86032

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JOB DESCRIPTION

CCR Groundwater Monitoring
Four Corners Power Plant (Other)

JOB NUMBER

550-210428-1

Eurofins Phoenix
4625 East Cotton Center Boulevard
Suite #189
Phoenix AZ 85040

See page two for job notes and contact information.

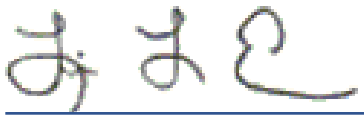
my EOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Southwest, LLC Project Manager.

Authorization



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Authorized for release by
Linda Eshelman, Project Manager II
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(602)659-7681

Table of Contents

Cover Page 1
Table of Contents 3
Definitions/Glossary 4
Case Narrative 5
Sample Summary 6
Detection Summary 7
Client Sample Results 11
QC Sample Results 20
QC Association Summary 26
Lab Chronicle 31
Certification Summary 37
Method Summary 38
Chain of Custody 39
Receipt Checklists 42

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
D2	Sample required dilution due to high concentration of analyte.
E2	Concentration estimated. Analyte exceeded calibration range. Reanalysis not performed due to sample matrix.
M2	Matrix spike recovery was low, the associated blank spike recovery was acceptable.
M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The associated blank spike was acceptable.

Metals

Qualifier	Qualifier Description
M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The associated blank spike was acceptable.
T5	Laboratory not licensed for this parameter

General Chemistry

Qualifier	Qualifier Description
D1	Sample required dilution due to matrix.
H2	Initial analysis within holding time. Reanalysis for the required dilution was past holding time.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 550-210428-1

Laboratory: Eurofins Phoenix

Narrative

Job Narrative
550-210428-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 11/10/2023 4:12 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 0.8°C and 2.4°C

HPLC/IC
Method 300_ORGFMS: Spike compounds were inadvertently omitted during the extraction process for the matrix spike (MS); therefore, matrix spike recoveries are unavailable for analytical batch 550-311323. The associated laboratory control sample (LCS) met acceptance criteria.

Method 300_ORGFMS: The matrix spike / matrix spike duplicate (MS/MSD) precision for analytical batch 550-311323 was outside control limits. Spike omitted from matrix spike (MS). Laboratory control sample duplicate (LCS/LCSD) precision was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
Method 2540C_Calcd: Reanalysis of the following sample was performed outside of the analytical holding time due to residue being >0.2000 g at 5 mL : FC-CCR-SUMP18-1123 (550-210428-19).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Sample Summary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-210428-1
SDG: Four Corners Power Plant (Other)

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
550-210428-1	FC-CCR-MW01-1123	Water	11/09/23 15:20	11/10/23 16:12
550-210428-2	FC-CCR-MW03-1123	Water	11/09/23 16:05	11/10/23 16:12
550-210428-3	FC-CCR-MW-21-1123	Water	11/09/23 16:52	11/10/23 16:12
550-210428-4	FC-CCR-MW60-1123	Water	11/09/23 14:30	11/10/23 16:12
550-210428-5	FC-CCR-SUMP1-1123	Water	11/09/23 07:47	11/10/23 16:12
550-210428-6	FC-CCR-SUMP2-1123	Water	11/09/23 08:01	11/10/23 16:12
550-210428-7	FC-CCR-SUMP3-1123	Water	11/09/23 08:10	11/10/23 16:12
550-210428-8	FC-CCR-SUMP7-1123	Water	11/09/23 08:35	11/10/23 16:12
550-210428-9	FC-CCR-SUMP8-1123	Water	11/09/23 08:26	11/10/23 16:12
550-210428-10	FC-CCR-SUMP9-1123	Water	11/09/23 08:45	11/10/23 16:12
550-210428-11	FC-CCR-SUMP10-1123	Water	11/09/23 08:50	11/10/23 16:12
550-210428-12	FC-CCR-SUMP11-1123	Water	11/09/23 08:55	11/10/23 16:12
550-210428-13	FC-CCR-SUMP12-1123	Water	11/09/23 09:01	11/10/23 16:12
550-210428-14	FC-CCR-SUMP13-1123	Water	11/09/23 09:07	11/10/23 16:12
550-210428-15	FC-CCR-SUMP14-1123	Water	11/09/23 09:17	11/10/23 16:12
550-210428-16	FC-CCR-SUMP15-1123	Water	11/09/23 09:23	11/10/23 16:12
550-210428-17	FC-CCR-SUMP16-1123	Water	11/09/23 09:30	11/10/23 16:12
550-210428-18	FC-CCR-SUMP17-1123	Water	11/09/23 09:33	11/10/23 16:12
550-210428-19	FC-CCR-SUMP18-1123	Water	11/09/23 09:40	11/10/23 16:12
550-210428-20	FC-CCR-AshPond6-1123	Water	11/09/23 09:53	11/10/23 16:12

Detection Summary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-210428-1
SDG: Four Corners Power Plant (Other)

Client Sample ID: FC-CCR-MW01-1123 — Lab Sample ID: 550-210428-1

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Boron	54		0.25		mg/L	5		200.7 Rev 4.4	Total/NA
Cobalt	40		0.50		ug/L	1		200.8 LL	Total/NA
Molybdenum	20	T5	0.50		ug/L	1		200.8 LL	Total/NA

Client Sample ID: FC-CCR-MW03-1123 — Lab Sample ID: 550-210428-2

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Boron	11		0.25		mg/L	5		200.7 Rev 4.4	Total/NA
Cobalt	1.5		0.50		ug/L	1		200.8 LL	Total/NA
Molybdenum	1.8	T5	0.50		ug/L	1		200.8 LL	Total/NA

Client Sample ID: FC-CCR-MW-21-1123 — Lab Sample ID: 550-210428-3

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Boron	6.2		0.25		mg/L	5		200.7 Rev 4.4	Total/NA
Cobalt	4.5		2.0		ug/L	4		200.8 LL	Total/NA
Molybdenum	2.2	T5	2.0		ug/L	4		200.8 LL	Total/NA

Client Sample ID: FC-CCR-MW60-1123 — Lab Sample ID: 550-210428-4

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Boron	78		0.25		mg/L	5		200.7 Rev 4.4	Total/NA
Cobalt	190		0.50		ug/L	1		200.8 LL	Total/NA
Molybdenum	180	T5	0.50		ug/L	1		200.8 LL	Total/NA

Client Sample ID: FC-CCR-SUMP1-1123 — Lab Sample ID: 550-210428-5

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	510	D2	20		mg/L	10		300.0	Total/NA
Boron	72		0.25		mg/L	5		200.7 Rev 4.4	Total/NA
Magnesium	540		2.0		mg/L	1		200.7 Rev 4.4	Total/NA
Cobalt	45		0.50		ug/L	1		200.8 LL	Total/NA
Molybdenum	120	T5	0.50		ug/L	1		200.8 LL	Total/NA
Total Dissolved Solids	8300		100		mg/L	1		SM 2540C	Total/NA

Client Sample ID: FC-CCR-SUMP2-1123 — Lab Sample ID: 550-210428-6

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	180	D2	4.0		mg/L	2		300.0	Total/NA
Boron	38	M3	0.25		mg/L	5		200.7 Rev 4.4	Total/NA
Iron	0.20		0.10		mg/L	1		200.7 Rev 4.4	Total/NA
Magnesium	470	M3	2.0		mg/L	1		200.7 Rev 4.4	Total/NA
Molybdenum	3.4	T5	0.50		ug/L	1		200.8 LL	Total/NA
Total Dissolved Solids	7700		100		mg/L	1		SM 2540C	Total/NA

Client Sample ID: FC-CCR-SUMP3-1123 — Lab Sample ID: 550-210428-7

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	830	D2	400		mg/L	200		300.0	Total/NA
Boron	29		0.25		mg/L	5		200.7 Rev 4.4	Total/NA
Iron	0.11		0.10		mg/L	1		200.7 Rev 4.4	Total/NA
Magnesium	880		10		mg/L	5		200.7 Rev 4.4	Total/NA
Manganese	0.50		0.010		mg/L	1		200.7 Rev 4.4	Total/NA
Cobalt	1.9		0.50		ug/L	1		200.8 LL	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Phoenix

Client Sample ID: FC-CCR-SUMP3-1123 (Continued) — Lab Sample ID: 550-210428-7

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Molybdenum	14	T5	0.50		ug/L	1		200.8 LL	Total/NA
Total Dissolved Solids	23000		200		mg/L	1		SM 2540C	Total/NA

Client Sample ID: FC-CCR-SUMP7-1123 — Lab Sample ID: 550-210428-8

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	710	D2	400		mg/L	200		300.0	Total/NA
Boron	59		0.25		mg/L	5		200.7 Rev 4.4	Total/NA
Iron	2.2		0.10		mg/L	1		200.7 Rev 4.4	Total/NA
Magnesium	770		2.0		mg/L	1		200.7 Rev 4.4	Total/NA
Manganese	0.084		0.010		mg/L	1		200.7 Rev 4.4	Total/NA
Cobalt	69		0.50		ug/L	1		200.8 LL	Total/NA
Molybdenum	3.8	T5	0.50		ug/L	1		200.8 LL	Total/NA
Total Dissolved Solids	9800		100		mg/L	1		SM 2540C	Total/NA

Client Sample ID: FC-CCR-SUMP8-1123 — Lab Sample ID: 550-210428-9

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	790	D2	400		mg/L	200		300.0	Total/NA
Boron	44		0.25		mg/L	5		200.7 Rev 4.4	Total/NA
Iron	1.5		0.10		mg/L	1		200.7 Rev 4.4	Total/NA
Magnesium	1400		10		mg/L	5		200.7 Rev 4.4	Total/NA
Cobalt	28		0.50		ug/L	1		200.8 LL	Total/NA
Molybdenum	2.4	T5	0.50		ug/L	1		200.8 LL	Total/NA
Total Dissolved Solids	17000		100		mg/L	1		SM 2540C	Total/NA

Client Sample ID: FC-CCR-SUMP9-1123 — Lab Sample ID: 550-210428-10

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	610	D2	400		mg/L	200		300.0	Total/NA
Boron	26		0.25		mg/L	5		200.7 Rev 4.4	Total/NA
Iron	29		0.10		mg/L	1		200.7 Rev 4.4	Total/NA
Magnesium	840		2.0		mg/L	1		200.7 Rev 4.4	Total/NA
Manganese	0.059		0.010		mg/L	1		200.7 Rev 4.4	Total/NA
Cobalt	23		0.50		ug/L	1		200.8 LL	Total/NA
Molybdenum	9.8	T5	0.50		ug/L	1		200.8 LL	Total/NA
Total Dissolved Solids	9600		100		mg/L	1		SM 2540C	Total/NA

Client Sample ID: FC-CCR-SUMP10-1123 — Lab Sample ID: 550-210428-11

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	530	D2	400		mg/L	200		300.0	Total/NA
Boron	48		0.25		mg/L	5		200.7 Rev 4.4	Total/NA
Iron	1.2		0.10		mg/L	1		200.7 Rev 4.4	Total/NA
Magnesium	470		2.0		mg/L	1		200.7 Rev 4.4	Total/NA
Manganese	0.016		0.010		mg/L	1		200.7 Rev 4.4	Total/NA
Cobalt	150		0.50		ug/L	1		200.8 LL	Total/NA
Molybdenum	0.85	T5	0.50		ug/L	1		200.8 LL	Total/NA
Total Dissolved Solids	7200		100		mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-210428-1
SDG: Four Corners Power Plant (Other)

Client Sample ID: FC-CCR-SUMP11-1123 — Lab Sample ID: 550-210428-12

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	550	D2	400		mg/L	200		300.0	Total/NA
Boron	41		0.25		mg/L	5		200.7 Rev 4.4	Total/NA
Iron	0.89		0.10		mg/L	1		200.7 Rev 4.4	Total/NA
Magnesium	620		2.0		mg/L	1		200.7 Rev 4.4	Total/NA
Cobalt	84		0.50		ug/L	1		200.8 LL	Total/NA
Molybdenum	0.75	T5	0.50		ug/L	1		200.8 LL	Total/NA
Total Dissolved Solids	8400		100		mg/L	1		SM 2540C	Total/NA

Client Sample ID: FC-CCR-SUMP12-1123 — Lab Sample ID: 550-210428-13

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	470	D2	400		mg/L	200		300.0	Total/NA
Boron	32		0.25		mg/L	5		200.7 Rev 4.4	Total/NA
Iron	1.2		0.10		mg/L	1		200.7 Rev 4.4	Total/NA
Magnesium	440		2.0		mg/L	1		200.7 Rev 4.4	Total/NA
Cobalt	50		0.50		ug/L	1		200.8 LL	Total/NA
Molybdenum	0.57	T5	0.50		ug/L	1		200.8 LL	Total/NA
Total Dissolved Solids	7100		100		mg/L	1		SM 2540C	Total/NA

Client Sample ID: FC-CCR-SUMP13-1123 — Lab Sample ID: 550-210428-14

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	470	D2	400		mg/L	200		300.0	Total/NA
Boron	40		0.25		mg/L	5		200.7 Rev 4.4	Total/NA
Magnesium	420		2.0		mg/L	1		200.7 Rev 4.4	Total/NA
Cobalt	95		0.50		ug/L	1		200.8 LL	Total/NA
Molybdenum	1.6	T5	0.50		ug/L	1		200.8 LL	Total/NA
Total Dissolved Solids	7400		100		mg/L	1		SM 2540C	Total/NA

Client Sample ID: FC-CCR-SUMP14-1123 — Lab Sample ID: 550-210428-15

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	460	D2	400		mg/L	200		300.0	Total/NA
Boron	39		0.25		mg/L	5		200.7 Rev 4.4	Total/NA
Iron	5.0		0.10		mg/L	1		200.7 Rev 4.4	Total/NA
Magnesium	410		2.0		mg/L	1		200.7 Rev 4.4	Total/NA
Cobalt	96		0.50		ug/L	1		200.8 LL	Total/NA
Molybdenum	7.6	T5	0.50		ug/L	1		200.8 LL	Total/NA
Total Dissolved Solids	7400		100		mg/L	1		SM 2540C	Total/NA

Client Sample ID: FC-CCR-SUMP15-1123 — Lab Sample ID: 550-210428-16

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	1700	D2	400		mg/L	200		300.0	Total/NA
Boron	5.7		0.25		mg/L	5		200.7 Rev 4.4	Total/NA
Iron	3.4		0.10		mg/L	1		200.7 Rev 4.4	Total/NA
Magnesium	3600		10		mg/L	5		200.7 Rev 4.4	Total/NA
Manganese	0.024		0.010		mg/L	1		200.7 Rev 4.4	Total/NA
Cobalt	3.8		2.0		ug/L	4		200.8 LL	Total/NA
Molybdenum	3.5	T5	2.0		ug/L	4		200.8 LL	Total/NA
Total Dissolved Solids	38000		200		mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-210428-1
SDG: Four Corners Power Plant (Other)

Client Sample ID: FC-CCR-SUMP16-1123 — Lab Sample ID: 550-210428-17

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	820	D2	400		mg/L	200		300.0	Total/NA
Boron	16		0.25		mg/L	5		200.7 Rev 4.4	Total/NA
Iron	1.1		0.10		mg/L	1		200.7 Rev 4.4	Total/NA
Magnesium	1100		10		mg/L	5		200.7 Rev 4.4	Total/NA
Cobalt	14		0.50		ug/L	1		200.8 LL	Total/NA
Molybdenum	1.4	T5	0.50		ug/L	1		200.8 LL	Total/NA
Total Dissolved Solids	14000		100		mg/L	1		SM 2540C	Total/NA

Client Sample ID: FC-CCR-SUMP17-1123 — Lab Sample ID: 550-210428-18

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	730	D2	400		mg/L	200		300.0	Total/NA
Boron	15		0.25		mg/L	5		200.7 Rev 4.4	Total/NA
Iron	0.58		0.10		mg/L	1		200.7 Rev 4.4	Total/NA
Magnesium	670		2.0		mg/L	1		200.7 Rev 4.4	Total/NA
Manganese	0.017		0.010		mg/L	1		200.7 Rev 4.4	Total/NA
Cobalt	0.91		0.50		ug/L	1		200.8 LL	Total/NA
Molybdenum	1.0	T5	0.50		ug/L	1		200.8 LL	Total/NA
Total Dissolved Solids	9400		100		mg/L	1		SM 2540C	Total/NA

Client Sample ID: FC-CCR-SUMP18-1123 — Lab Sample ID: 550-210428-19

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	1600	D2 M2	400		mg/L	200		300.0	Total/NA
Boron	4.6		0.25		mg/L	5		200.7 Rev 4.4	Total/NA
Iron	0.75		0.10		mg/L	1		200.7 Rev 4.4	Total/NA
Magnesium	3000		10		mg/L	5		200.7 Rev 4.4	Total/NA
Manganese	0.035		0.010		mg/L	1		200.7 Rev 4.4	Total/NA
Molybdenum	3.0	T5	2.0		ug/L	4		200.8 LL	Total/NA
Total Dissolved Solids	40000	D1 H2	1000		mg/L	1		SM 2540C	Total/NA

Client Sample ID: FC-CCR-AshPond6-1123 — Lab Sample ID: 550-210428-20

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	750	D2	400		mg/L	200		300.0	Total/NA
Boron	47		0.25		mg/L	5		200.7 Rev 4.4	Total/NA
Iron	0.18		0.10		mg/L	1		200.7 Rev 4.4	Total/NA
Magnesium	1400		10		mg/L	5		200.7 Rev 4.4	Total/NA
Cobalt	31		0.50		ug/L	1		200.8 LL	Total/NA
Molybdenum	4.3	T5	0.50		ug/L	1		200.8 LL	Total/NA
Total Dissolved Solids	16000		100		mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: FC-CCR-MW01-1123

Lab Sample ID: 550-210428-1

Date Collected: 11/09/23 15:20
Matrix: Water
Date Received: 11/10/23 16:12

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	54		0.25		mg/L		11/14/23 10:15	11/28/23 13:40	5

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	40		0.50		ug/L		11/14/23 08:50	11/20/23 17:15	1
Molybdenum	20	T5	0.50		ug/L		11/14/23 08:50	11/20/23 17:15	1

Client Sample ID: FC-CCR-MW03-1123

Lab Sample ID: 550-210428-2

Date Collected: 11/09/23 16:05
Matrix: Water
Date Received: 11/10/23 16:12

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	11		0.25		mg/L		11/14/23 10:15	11/28/23 13:43	5

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	1.5		0.50		ug/L		11/14/23 08:50	11/20/23 17:17	1
Molybdenum	1.8	T5	0.50		ug/L		11/14/23 08:50	11/20/23 17:17	1

Client Sample ID: FC-CCR-MW-21-1123

Lab Sample ID: 550-210428-3

Date Collected: 11/09/23 16:52
Matrix: Water
Date Received: 11/10/23 16:12

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	6.2		0.25		mg/L		11/14/23 10:15	11/28/23 13:45	5

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	4.5		2.0		ug/L		11/14/23 08:50	11/21/23 18:26	4
Molybdenum	2.2	T5	2.0		ug/L		11/14/23 08:50	11/21/23 18:26	4

Client Sample ID: FC-CCR-MW60-1123

Lab Sample ID: 550-210428-4

Date Collected: 11/09/23 14:30
Matrix: Water
Date Received: 11/10/23 16:12

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	78		0.25		mg/L		11/14/23 10:15	11/28/23 13:48	5

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	190		0.50		ug/L		11/14/23 08:50	11/20/23 17:21	1
Molybdenum	180	T5	0.50		ug/L		11/14/23 08:50	11/20/23 17:21	1

Client Sample ID: FC-CCR-SUMP1-1123

Lab Sample ID: 550-210428-5

Date Collected: 11/09/23 07:47
Matrix: Water
Date Received: 11/10/23 16:12

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**510**	**D2**	20		mg/L			11/16/23 16:34	10

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	**72**		0.25		mg/L		11/14/23 10:15	11/28/23 13:51	5
Iron	ND		0.10		mg/L		11/14/23 10:15	11/22/23 15:54	1
Magnesium	**540**		2.0		mg/L		11/14/23 10:15	11/22/23 15:54	1
Manganese	ND		0.010		mg/L		11/14/23 10:15	11/22/23 15:54	1

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	**45**		0.50		ug/L		11/14/23 08:50	11/20/23 17:23	1
Molybdenum	**120**	**T5**	0.50		ug/L		11/14/23 08:50	11/20/23 17:23	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**8300**		100		mg/L			11/15/23 11:03	1

Client Sample ID: FC-CCR-SUMP2-1123

Lab Sample ID: 550-210428-6

Date Collected: 11/09/23 08:01
Matrix: Water
Date Received: 11/10/23 16:12

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**180**	**D2**	4.0		mg/L			11/16/23 17:48	2

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	**38**	**M3**	0.25		mg/L		11/14/23 10:15	11/28/23 13:37	5
Iron	**0.20**		0.10		mg/L		11/14/23 10:15	11/22/23 15:40	1
Magnesium	**470**	**M3**	2.0		mg/L		11/14/23 10:15	11/22/23 15:40	1
Manganese	ND		0.010		mg/L		11/14/23 10:15	11/22/23 15:40	1

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	ND		0.50		ug/L		11/14/23 08:50	11/20/23 17:25	1
Molybdenum	**3.4**	**T5**	0.50		ug/L		11/14/23 08:50	11/20/23 17:25	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**7700**		100		mg/L			11/15/23 11:03	1

Client Sample ID: FC-CCR-SUMP3-1123

Lab Sample ID: 550-210428-7

Date Collected: 11/09/23 08:10
Matrix: Water
Date Received: 11/10/23 16:12

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**830**	**D2**	400		mg/L			11/17/23 03:39	200

Client Sample ID: FC-CCR-SUMP3-1123

Lab Sample ID: 550-210428-7
Date Collected: 11/09/23 08:10
Matrix: Water
Date Received: 11/10/23 16:12

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	29		0.25		mg/L		11/14/23 10:15	11/28/23 13:54	5
Iron	0.11		0.10		mg/L		11/14/23 10:15	11/22/23 15:57	1
Magnesium	880		10		mg/L		11/14/23 10:15	11/28/23 13:54	5
Manganese	0.50		0.010		mg/L		11/14/23 10:15	11/22/23 15:57	1

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	1.9		0.50		ug/L		11/14/23 08:50	11/20/23 17:27	1
Molybdenum	14	T5	0.50		ug/L		11/14/23 08:50	11/20/23 17:27	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	23000		200		mg/L			11/15/23 11:03	1

Client Sample ID: FC-CCR-SUMP7-1123

Lab Sample ID: 550-210428-8
Date Collected: 11/09/23 08:35
Matrix: Water
Date Received: 11/10/23 16:12

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	710	D2	400		mg/L			11/17/23 04:16	200

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	59		0.25		mg/L		11/14/23 10:15	11/28/23 13:57	5
Iron	2.2		0.10		mg/L		11/14/23 10:15	11/22/23 16:00	1
Magnesium	770		2.0		mg/L		11/14/23 10:15	11/22/23 16:00	1
Manganese	0.084		0.010		mg/L		11/14/23 10:15	11/22/23 16:00	1

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	69		0.50		ug/L		11/14/23 08:50	11/20/23 17:29	1
Molybdenum	3.8	T5	0.50		ug/L		11/14/23 08:50	11/20/23 17:29	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	9800		100		mg/L			11/15/23 11:03	1

Client Sample ID: FC-CCR-SUMP8-1123

Lab Sample ID: 550-210428-9
Date Collected: 11/09/23 08:26
Matrix: Water
Date Received: 11/10/23 16:12

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	790	D2	400		mg/L			11/17/23 05:48	200

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	44		0.25		mg/L		11/14/23 10:15	11/28/23 14:00	5
Iron	1.5		0.10		mg/L		11/14/23 10:15	11/22/23 16:02	1
Magnesium	1400		10		mg/L		11/14/23 10:15	11/28/23 14:00	5
Manganese	ND		0.010		mg/L		11/14/23 10:15	11/22/23 16:02	1

Client Sample ID: FC-CCR-SUMP8-1123

Lab Sample ID: 550-210428-9

Date Collected: 11/09/23 08:26
Matrix: Water
Date Received: 11/10/23 16:12

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	28		0.50		ug/L		11/14/23 08:50	11/20/23 17:31	1
Molybdenum	2.4	T5	0.50		ug/L		11/14/23 08:50	11/20/23 17:31	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	17000		100		mg/L			11/15/23 11:03	1

Client Sample ID: FC-CCR-SUMP9-1123

Lab Sample ID: 550-210428-10

Date Collected: 11/09/23 08:45
Matrix: Water
Date Received: 11/10/23 16:12

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	610	D2	400		mg/L			11/17/23 06:25	200

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	26		0.25		mg/L		11/14/23 10:15	11/28/23 14:02	5
Iron	29		0.10		mg/L		11/14/23 10:15	11/22/23 16:05	1
Magnesium	840		2.0		mg/L		11/14/23 10:15	11/22/23 16:05	1
Manganese	0.059		0.010		mg/L		11/14/23 10:15	11/22/23 16:05	1

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	23		0.50		ug/L		11/14/23 08:50	11/20/23 17:33	1
Molybdenum	9.8	T5	0.50		ug/L		11/14/23 08:50	11/20/23 17:33	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	9600		100		mg/L			11/15/23 11:03	1

Client Sample ID: FC-CCR-SUMP10-1123

Lab Sample ID: 550-210428-11

Date Collected: 11/09/23 08:50
Matrix: Water
Date Received: 11/10/23 16:12

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	530	D2	400		mg/L			11/17/23 07:01	200

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	48		0.25		mg/L		11/14/23 10:15	11/28/23 14:11	5
Iron	1.2		0.10		mg/L		11/14/23 10:15	11/22/23 16:14	1
Magnesium	470		2.0		mg/L		11/14/23 10:15	11/22/23 16:14	1
Manganese	0.016		0.010		mg/L		11/14/23 10:15	11/22/23 16:14	1

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	150		0.50		ug/L		11/14/23 08:50	11/20/23 17:42	1
Molybdenum	0.85	T5	0.50		ug/L		11/14/23 08:50	11/20/23 17:42	1

Client Sample ID: FC-CCR-SUMP10-1123

Lab Sample ID: 550-210428-11

Date Collected: 11/09/23 08:50
Matrix: Water
Date Received: 11/10/23 16:12

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	7200		100		mg/L			11/15/23 11:03	1

Client Sample ID: FC-CCR-SUMP11-1123

Lab Sample ID: 550-210428-12

Date Collected: 11/09/23 08:55
Matrix: Water
Date Received: 11/10/23 16:12

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	550	D2	400		mg/L			11/17/23 07:38	200

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	41		0.25		mg/L		11/14/23 10:15	11/28/23 14:14	5
Iron	0.89		0.10		mg/L		11/14/23 10:15	11/22/23 16:17	1
Magnesium	620		2.0		mg/L		11/14/23 10:15	11/22/23 16:17	1
Manganese	ND		0.010		mg/L		11/14/23 10:15	11/22/23 16:17	1

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	84		0.50		ug/L		11/14/23 08:50	11/20/23 17:44	1
Molybdenum	0.75	T5	0.50		ug/L		11/14/23 08:50	11/20/23 17:44	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	8400		100		mg/L			11/15/23 11:03	1

Client Sample ID: FC-CCR-SUMP12-1123

Lab Sample ID: 550-210428-13

Date Collected: 11/09/23 09:01
Matrix: Water
Date Received: 11/10/23 16:12

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	470	D2	400		mg/L			11/17/23 09:10	200

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	32		0.25		mg/L		11/14/23 10:15	11/28/23 14:17	5
Iron	1.2		0.10		mg/L		11/14/23 10:15	11/22/23 16:19	1
Magnesium	440		2.0		mg/L		11/14/23 10:15	11/22/23 16:19	1
Manganese	ND		0.010		mg/L		11/14/23 10:15	11/22/23 16:19	1

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	50		0.50		ug/L		11/14/23 08:50	11/20/23 17:46	1
Molybdenum	0.57	T5	0.50		ug/L		11/14/23 08:50	11/20/23 17:46	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	7100		100		mg/L			11/15/23 11:03	1

Client Sample ID: FC-CCR-SUMP13-1123

Lab Sample ID: 550-210428-14

Date Collected: 11/09/23 09:07
Matrix: Water
Date Received: 11/10/23 16:12

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**470**	**D2**	400		mg/L			11/17/23 09:47	200

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	**40**		0.25		mg/L		11/14/23 10:15	11/28/23 14:19	5
Iron	ND		0.10		mg/L		11/14/23 10:15	11/22/23 16:24	1
Magnesium	**420**		2.0		mg/L		11/14/23 10:15	11/22/23 16:24	1
Manganese	ND		0.010		mg/L		11/14/23 10:15	11/22/23 16:24	1

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	**95**		0.50		ug/L		11/14/23 08:50	11/20/23 17:48	1
Molybdenum	**1.6**	**T5**	0.50		ug/L		11/14/23 08:50	11/20/23 17:48	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**7400**		100		mg/L			11/15/23 11:03	1

Client Sample ID: FC-CCR-SUMP14-1123

Lab Sample ID: 550-210428-15

Date Collected: 11/09/23 09:17
Matrix: Water
Date Received: 11/10/23 16:12

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**460**	**D2**	400		mg/L			11/17/23 10:24	200

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	**39**		0.25		mg/L		11/14/23 10:15	11/28/23 14:22	5
Iron	**5.0**		0.10		mg/L		11/14/23 10:15	11/22/23 16:27	1
Magnesium	**410**		2.0		mg/L		11/14/23 10:15	11/22/23 16:27	1
Manganese	ND		0.010		mg/L		11/14/23 10:15	11/22/23 16:27	1

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	**96**		0.50		ug/L		11/14/23 08:50	11/20/23 17:50	1
Molybdenum	**7.6**	**T5**	0.50		ug/L		11/14/23 08:50	11/20/23 17:50	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**7400**		100		mg/L			11/15/23 11:03	1

Client Sample ID: FC-CCR-SUMP15-1123

Lab Sample ID: 550-210428-16

Date Collected: 11/09/23 09:23
Matrix: Water
Date Received: 11/10/23 16:12

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1700**	**D2**	400		mg/L			11/17/23 11:01	200

Client Sample ID: FC-CCR-SUMP15-1123

Lab Sample ID: 550-210428-16

Date Collected: 11/09/23 09:23
Matrix: Water
Date Received: 11/10/23 16:12

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	5.7		0.25		mg/L		11/14/23 10:15	11/28/23 14:25	5
Iron	3.4		0.10		mg/L		11/14/23 10:15	11/22/23 16:30	1
Magnesium	3600		10		mg/L		11/14/23 10:15	11/28/23 14:25	5
Manganese	0.024		0.010		mg/L		11/14/23 10:15	11/22/23 16:30	1

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	3.8		2.0		ug/L		11/14/23 08:50	11/21/23 18:28	4
Molybdenum	3.5	T5	2.0		ug/L		11/14/23 08:50	11/21/23 18:28	4

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	38000		200		mg/L			11/15/23 11:03	1

Client Sample ID: FC-CCR-SUMP16-1123

Lab Sample ID: 550-210428-17

Date Collected: 11/09/23 09:30
Matrix: Water
Date Received: 11/10/23 16:12

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	820	D2	400		mg/L			11/17/23 11:37	200

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	16		0.25		mg/L		11/14/23 10:15	11/28/23 14:28	5
Iron	1.1		0.10		mg/L		11/14/23 10:15	11/22/23 16:32	1
Magnesium	1100		10		mg/L		11/14/23 10:15	11/28/23 14:28	5
Manganese	ND		0.010		mg/L		11/14/23 10:15	11/22/23 16:32	1

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	14		0.50		ug/L		11/14/23 08:50	11/20/23 17:54	1
Molybdenum	1.4	T5	0.50		ug/L		11/14/23 08:50	11/20/23 17:54	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	14000		100		mg/L			11/15/23 11:03	1

Client Sample ID: FC-CCR-SUMP17-1123

Lab Sample ID: 550-210428-18

Date Collected: 11/09/23 09:33
Matrix: Water
Date Received: 11/10/23 16:12

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	730	D2	400		mg/L			11/17/23 16:17	200

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	15		0.25		mg/L		11/14/23 10:15	11/28/23 14:31	5
Iron	0.58		0.10		mg/L		11/14/23 10:15	11/22/23 16:35	1
Magnesium	670		2.0		mg/L		11/14/23 10:15	11/22/23 16:35	1
Manganese	0.017		0.010		mg/L		11/14/23 10:15	11/22/23 16:35	1

Client Sample ID: FC-CCR-SUMP17-1123

Lab Sample ID: 550-210428-18

Date Collected: 11/09/23 09:33
Matrix: Water
Date Received: 11/10/23 16:12

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	**0.91**		0.50		ug/L		11/14/23 08:50	11/20/23 17:56	1
Molybdenum	**1.0**	**T5**	0.50		ug/L		11/14/23 08:50	11/20/23 17:56	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**9400**		100		mg/L			11/15/23 11:03	1

Client Sample ID: FC-CCR-SUMP18-1123

Lab Sample ID: 550-210428-19

Date Collected: 11/09/23 09:40
Matrix: Water
Date Received: 11/10/23 16:12

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1600**	**D2 M2**	400		mg/L			11/17/23 14:45	200

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	**4.6**		0.25		mg/L		11/14/23 10:15	11/28/23 14:34	5
Iron	**0.75**		0.10		mg/L		11/14/23 10:15	11/22/23 16:38	1
Magnesium	**3000**		10		mg/L		11/14/23 10:15	11/28/23 14:34	5
Manganese	**0.035**		0.010		mg/L		11/14/23 10:15	11/22/23 16:38	1

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	ND		2.0		ug/L		11/14/23 08:50	11/21/23 18:30	4
Molybdenum	**3.0**	**T5**	2.0		ug/L		11/14/23 08:50	11/21/23 18:30	4

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**40000**	**D1 H2**	1000		mg/L			11/17/23 11:54	1

Client Sample ID: FC-CCR-AshPond6-1123

Lab Sample ID: 550-210428-20

Date Collected: 11/09/23 09:53
Matrix: Water
Date Received: 11/10/23 16:12

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**750**	**D2**	400		mg/L			11/17/23 16:54	200

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	**47**		0.25		mg/L		11/14/23 10:15	11/28/23 14:36	5
Iron	**0.18**		0.10		mg/L		11/14/23 10:15	11/22/23 16:41	1
Magnesium	**1400**		10		mg/L		11/14/23 10:15	11/28/23 14:36	5
Manganese	ND		0.010		mg/L		11/14/23 10:15	11/22/23 16:41	1

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	**31**		0.50		ug/L		11/14/23 08:50	11/20/23 18:00	1
Molybdenum	**4.3**	**T5**	0.50		ug/L		11/14/23 08:50	11/20/23 18:00	1

Client Sample Results

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-210428-1
SDG: Four Corners Power Plant (Other)

Client Sample ID: FC-CCR-AshPond6-1123
Date Collected: 11/09/23 09:53
Date Received: 11/10/23 16:12

Lab Sample ID: 550-210428-20
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	16000		100		mg/L			11/15/23 11:03	1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 550-311263/2
Matrix: Water
Analysis Batch: 311263

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		2.0		mg/L			11/16/23 11:44	1

Lab Sample ID: 550-210589-A-8 MS
Matrix: Water
Analysis Batch: 311263

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	130	E2 M3	20.0	142	E2 M3	mg/L		55	80 - 120		

Lab Sample ID: 550-210589-A-8 MSD
Matrix: Water
Analysis Batch: 311263

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	130	E2 M3	20.0	142	E2 M3	mg/L		57	80 - 120	0	20

Lab Sample ID: MB 550-311264/2
Matrix: Water
Analysis Batch: 311264

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		2.0		mg/L			11/16/23 11:44	1

Lab Sample ID: LCS 550-311264/43
Matrix: Water
Analysis Batch: 311264

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			20.0	20.6		mg/L		103	90 - 110		

Lab Sample ID: LCSD 550-311264/44
Matrix: Water
Analysis Batch: 311264

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			20.0	20.7		mg/L		103	90 - 110	0	20

Lab Sample ID: 550-210673-B-14 MS
Matrix: Water
Analysis Batch: 311264

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	120	E2 M3	20.0	134	E2 M3	mg/L		57	80 - 120		

Lab Sample ID: 550-210673-B-14 MSD
Matrix: Water
Analysis Batch: 311264

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	120	E2 M3	20.0	134	E2 M3	mg/L		57	80 - 120	0	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 550-311323/2
Matrix: Water
Analysis Batch: 311323

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		2.0		mg/L			11/17/23 13:13	1

Lab Sample ID: LCS 550-311323/69
Matrix: Water
Analysis Batch: 311323

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			20.0	20.7		mg/L		103	90 - 110		

Lab Sample ID: LCSD 550-311323/70
Matrix: Water
Analysis Batch: 311323

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			20.0	20.7		mg/L		103	90 - 110	0	20

Lab Sample ID: 550-210428-19 MS
Matrix: Water
Analysis Batch: 311323

Client Sample ID: FC-CCR-SUMP18-1123
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	1600	D2 M2	4000	ND	D2 M2	mg/L		0	80 - 120		

Lab Sample ID: 550-210428-19 MSD
Matrix: Water
Analysis Batch: 311323

Client Sample ID: FC-CCR-SUMP18-1123
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	1600	D2 M2	4000	5830	D2	mg/L		106	80 - 120	NC	20

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 550-311066/1-A
Matrix: Water
Analysis Batch: 311651

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 311066

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.10		mg/L		11/14/23 10:15	11/22/23 15:26	1
Magnesium	ND		2.0		mg/L		11/14/23 10:15	11/22/23 15:26	1
Manganese	ND		0.010		mg/L		11/14/23 10:15	11/22/23 15:26	1

Lab Sample ID: MB 550-311066/1-A
Matrix: Water
Analysis Batch: 311831

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 311066

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.050		mg/L		11/14/23 10:15	11/28/23 13:23	1

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: LCS 550-311066/2-A
Matrix: Water
Analysis Batch: 311651

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 311066

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Iron	1.00	1.04		mg/L		104	85 - 115
Magnesium	21.0	21.3		mg/L		101	85 - 115
Manganese	1.00	0.979		mg/L		98	85 - 115

Lab Sample ID: LCS 550-311066/2-A
Matrix: Water
Analysis Batch: 311831

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 311066

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1.00	1.04		mg/L		104	85 - 115

Lab Sample ID: LCSD 550-311066/3-A
Matrix: Water
Analysis Batch: 311651

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 311066

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Iron	1.00	1.03		mg/L		103	85 - 115	1	20
Magnesium	21.0	21.6		mg/L		103	85 - 115	2	20
Manganese	1.00	0.978		mg/L		98	85 - 115	0	20

Lab Sample ID: LCSD 550-311066/3-A
Matrix: Water
Analysis Batch: 311831

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 311066

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron	1.00	1.04		mg/L		104	85 - 115	0	20

Lab Sample ID: 550-210428-6 MS
Matrix: Water
Analysis Batch: 311651

Client Sample ID: FC-CCR-SUMP2-1123
Prep Type: Total/NA
Prep Batch: 311066

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Iron	0.20		1.00	1.34		mg/L		115	70 - 130
Magnesium	470	M3	21.0	484	M3	mg/L		58	70 - 130
Manganese	ND		1.00	0.988		mg/L		98	70 - 130

Lab Sample ID: 550-210428-6 MS
Matrix: Water
Analysis Batch: 311831

Client Sample ID: FC-CCR-SUMP2-1123
Prep Type: Total/NA
Prep Batch: 311066

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	38	M3	1.00	37.2	M3	mg/L		-110	70 - 130

Lab Sample ID: 550-210428-6 MSD
Matrix: Water
Analysis Batch: 311651

Client Sample ID: FC-CCR-SUMP2-1123
Prep Type: Total/NA
Prep Batch: 311066

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Iron	0.20		1.00	1.32		mg/L		112	70 - 130	2	20
Magnesium	470	M3	21.0	477	M3	mg/L		25	70 - 130	1	20

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: 550-210428-6 MSD — **Client Sample ID: FC-CCR-SUMP2-1123**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 311651 — **Prep Batch: 311066**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Manganese	ND		1.00	0.976		mg/L		97	70 - 130	1	20

Lab Sample ID: 550-210428-6 MSD — **Client Sample ID: FC-CCR-SUMP2-1123**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 311831 — **Prep Batch: 311066**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron	38	M3	1.00	37.5	M3	mg/L		-86	70 - 130	1	20

Method: 200.8 LL - Metals (ICP/MS)

Lab Sample ID: MB 550-311056/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 311525 — **Prep Batch: 311056**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	ND		0.50		ug/L		11/14/23 08:50	11/20/23 17:01	1
Molybdenum	ND		0.50		ug/L		11/14/23 08:50	11/20/23 17:01	1

Lab Sample ID: MB 550-311056/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 311598 — **Prep Batch: 311056**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	ND		0.50		ug/L		11/14/23 08:50	11/21/23 18:16	1
Molybdenum	ND		0.50		ug/L		11/14/23 08:50	11/21/23 18:16	1

Lab Sample ID: LCS 550-311056/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 311525 — **Prep Batch: 311056**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Cobalt			100	94.3		ug/L		94	85 - 115		
Molybdenum			100	89.8		ug/L		90	85 - 115		

Lab Sample ID: LCS 550-311056/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 311598 — **Prep Batch: 311056**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Cobalt			100	96.6		ug/L		97	85 - 115		
Molybdenum			100	103		ug/L		103	85 - 115		

Lab Sample ID: LCSD 550-311056/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 311525 — **Prep Batch: 311056**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cobalt			100	93.0		ug/L		93	85 - 115	1	20
Molybdenum			100	89.5		ug/L		90	85 - 115	0	20

Method: 200.8 LL - Metals (ICP/MS) (Continued)

Lab Sample ID: LCSD 550-311056/3-A
Matrix: Water
Analysis Batch: 311598

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 311056

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cobalt			100	99.4		ug/L		99	85 - 115	3	20
Molybdenum			100	101		ug/L		101	85 - 115	1	20

Lab Sample ID: 550-210428-1 MS
Matrix: Water
Analysis Batch: 311525

Client Sample ID: FC-CCR-MW01-1123
Prep Type: Total/NA
Prep Batch: 311056

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Cobalt	40		100	126		ug/L		86	70 - 130
Molybdenum	20	T5	100	114		ug/L		94	70 - 130

Lab Sample ID: 550-210428-1 MSD
Matrix: Water
Analysis Batch: 311525

Client Sample ID: FC-CCR-MW01-1123
Prep Type: Total/NA
Prep Batch: 311056

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cobalt	40		100	133		ug/L		93	70 - 130	5	20
Molybdenum	20	T5	100	119		ug/L		99	70 - 130	5	20

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 550-311147/1
Matrix: Water
Analysis Batch: 311147

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		20		mg/L			11/15/23 11:03	1

Lab Sample ID: LCS 550-311147/2
Matrix: Water
Analysis Batch: 311147

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids			1000	990		mg/L		99	90 - 110

Lab Sample ID: LCSD 550-311147/3
Matrix: Water
Analysis Batch: 311147

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Dissolved Solids			1000	982		mg/L		98	90 - 110	1	10

Lab Sample ID: 550-210327-A-2 DU
Matrix: Water
Analysis Batch: 311147

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	4100			4090		mg/L				1	10

Method: SM 2540C - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: 550-210428-12 DU
Matrix: Water
Analysis Batch: 311147

Client Sample ID: FC-CCR-SUMP11-1123
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	8400			8610		mg/L				2	10

Lab Sample ID: MB 550-311341/1
Matrix: Water
Analysis Batch: 311341

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		20		mg/L			11/17/23 11:54	1

Lab Sample ID: LCS 550-311341/2
Matrix: Water
Analysis Batch: 311341

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Dissolved Solids			1000	990		mg/L		99	90 - 110		

Lab Sample ID: LCSD 550-311341/3
Matrix: Water
Analysis Batch: 311341

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Dissolved Solids			1000	994		mg/L		99	90 - 110	0	10

Lab Sample ID: 550-210497-A-1 DU
Matrix: Water
Analysis Batch: 311341

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	1400			1370		mg/L				0.9	10

HPLC/IC

Analysis Batch: 311263

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210428-5	FC-CCR-SUMP1-1123	Total/NA	Water	300.0	
550-210428-6	FC-CCR-SUMP2-1123	Total/NA	Water	300.0	
MB 550-311263/2	Method Blank	Total/NA	Water	300.0	
550-210589-A-8 MS	Matrix Spike	Total/NA	Water	300.0	
550-210589-A-8 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Analysis Batch: 311264

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210428-7	FC-CCR-SUMP3-1123	Total/NA	Water	300.0	
550-210428-8	FC-CCR-SUMP7-1123	Total/NA	Water	300.0	
550-210428-9	FC-CCR-SUMP8-1123	Total/NA	Water	300.0	
550-210428-10	FC-CCR-SUMP9-1123	Total/NA	Water	300.0	
550-210428-11	FC-CCR-SUMP10-1123	Total/NA	Water	300.0	
550-210428-12	FC-CCR-SUMP11-1123	Total/NA	Water	300.0	
550-210428-13	FC-CCR-SUMP12-1123	Total/NA	Water	300.0	
550-210428-14	FC-CCR-SUMP13-1123	Total/NA	Water	300.0	
550-210428-15	FC-CCR-SUMP14-1123	Total/NA	Water	300.0	
550-210428-16	FC-CCR-SUMP15-1123	Total/NA	Water	300.0	
550-210428-17	FC-CCR-SUMP16-1123	Total/NA	Water	300.0	
MB 550-311264/2	Method Blank	Total/NA	Water	300.0	
LCS 550-311264/43	Lab Control Sample	Total/NA	Water	300.0	
LCSD 550-311264/44	Lab Control Sample Dup	Total/NA	Water	300.0	
550-210673-B-14 MS	Matrix Spike	Total/NA	Water	300.0	
550-210673-B-14 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Analysis Batch: 311323

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210428-18	FC-CCR-SUMP17-1123	Total/NA	Water	300.0	
550-210428-19	FC-CCR-SUMP18-1123	Total/NA	Water	300.0	
550-210428-20	FC-CCR-AshPond6-1123	Total/NA	Water	300.0	
MB 550-311323/2	Method Blank	Total/NA	Water	300.0	
LCS 550-311323/69	Lab Control Sample	Total/NA	Water	300.0	
LCSD 550-311323/70	Lab Control Sample Dup	Total/NA	Water	300.0	
550-210428-19 MS	FC-CCR-SUMP18-1123	Total/NA	Water	300.0	
550-210428-19 MSD	FC-CCR-SUMP18-1123	Total/NA	Water	300.0	

Metals

Prep Batch: 311056

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210428-1	FC-CCR-MW01-1123	Total/NA	Water	200.8	
550-210428-2	FC-CCR-MW03-1123	Total/NA	Water	200.8	
550-210428-3	FC-CCR-MW-21-1123	Total/NA	Water	200.8	
550-210428-4	FC-CCR-MW60-1123	Total/NA	Water	200.8	
550-210428-5	FC-CCR-SUMP1-1123	Total/NA	Water	200.8	
550-210428-6	FC-CCR-SUMP2-1123	Total/NA	Water	200.8	
550-210428-7	FC-CCR-SUMP3-1123	Total/NA	Water	200.8	
550-210428-8	FC-CCR-SUMP7-1123	Total/NA	Water	200.8	
550-210428-9	FC-CCR-SUMP8-1123	Total/NA	Water	200.8	
550-210428-10	FC-CCR-SUMP9-1123	Total/NA	Water	200.8	
550-210428-11	FC-CCR-SUMP10-1123	Total/NA	Water	200.8	

Metals (Continued)

Prep Batch: 311056 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210428-12	FC-CCR-SUMP11-1123	Total/NA	Water	200.8	
550-210428-13	FC-CCR-SUMP12-1123	Total/NA	Water	200.8	
550-210428-14	FC-CCR-SUMP13-1123	Total/NA	Water	200.8	
550-210428-15	FC-CCR-SUMP14-1123	Total/NA	Water	200.8	
550-210428-16	FC-CCR-SUMP15-1123	Total/NA	Water	200.8	
550-210428-17	FC-CCR-SUMP16-1123	Total/NA	Water	200.8	
550-210428-18	FC-CCR-SUMP17-1123	Total/NA	Water	200.8	
550-210428-19	FC-CCR-SUMP18-1123	Total/NA	Water	200.8	
550-210428-20	FC-CCR-AshPond6-1123	Total/NA	Water	200.8	
MB 550-311056/1-A	Method Blank	Total/NA	Water	200.8	
LCS 550-311056/2-A	Lab Control Sample	Total/NA	Water	200.8	
LCSD 550-311056/3-A	Lab Control Sample Dup	Total/NA	Water	200.8	
550-210428-1 MS	FC-CCR-MW01-1123	Total/NA	Water	200.8	
550-210428-1 MSD	FC-CCR-MW01-1123	Total/NA	Water	200.8	

Prep Batch: 311066

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210428-1	FC-CCR-MW01-1123	Total/NA	Water	200.7	
550-210428-2	FC-CCR-MW03-1123	Total/NA	Water	200.7	
550-210428-3	FC-CCR-MW-21-1123	Total/NA	Water	200.7	
550-210428-4	FC-CCR-MW60-1123	Total/NA	Water	200.7	
550-210428-5	FC-CCR-SUMP1-1123	Total/NA	Water	200.7	
550-210428-6	FC-CCR-SUMP2-1123	Total/NA	Water	200.7	
550-210428-7	FC-CCR-SUMP3-1123	Total/NA	Water	200.7	
550-210428-8	FC-CCR-SUMP7-1123	Total/NA	Water	200.7	
550-210428-9	FC-CCR-SUMP8-1123	Total/NA	Water	200.7	
550-210428-10	FC-CCR-SUMP9-1123	Total/NA	Water	200.7	
550-210428-11	FC-CCR-SUMP10-1123	Total/NA	Water	200.7	
550-210428-12	FC-CCR-SUMP11-1123	Total/NA	Water	200.7	
550-210428-13	FC-CCR-SUMP12-1123	Total/NA	Water	200.7	
550-210428-14	FC-CCR-SUMP13-1123	Total/NA	Water	200.7	
550-210428-15	FC-CCR-SUMP14-1123	Total/NA	Water	200.7	
550-210428-16	FC-CCR-SUMP15-1123	Total/NA	Water	200.7	
550-210428-17	FC-CCR-SUMP16-1123	Total/NA	Water	200.7	
550-210428-18	FC-CCR-SUMP17-1123	Total/NA	Water	200.7	
550-210428-19	FC-CCR-SUMP18-1123	Total/NA	Water	200.7	
550-210428-20	FC-CCR-AshPond6-1123	Total/NA	Water	200.7	
MB 550-311066/1-A	Method Blank	Total/NA	Water	200.7	
LCS 550-311066/2-A	Lab Control Sample	Total/NA	Water	200.7	
LCSD 550-311066/3-A	Lab Control Sample Dup	Total/NA	Water	200.7	
550-210428-6 MS	FC-CCR-SUMP2-1123	Total/NA	Water	200.7	
550-210428-6 MSD	FC-CCR-SUMP2-1123	Total/NA	Water	200.7	

Analysis Batch: 311525

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210428-1	FC-CCR-MW01-1123	Total/NA	Water	200.8 LL	311056
550-210428-2	FC-CCR-MW03-1123	Total/NA	Water	200.8 LL	311056
550-210428-4	FC-CCR-MW60-1123	Total/NA	Water	200.8 LL	311056
550-210428-5	FC-CCR-SUMP1-1123	Total/NA	Water	200.8 LL	311056
550-210428-6	FC-CCR-SUMP2-1123	Total/NA	Water	200.8 LL	311056
550-210428-7	FC-CCR-SUMP3-1123	Total/NA	Water	200.8 LL	311056

Metals (Continued)

Analysis Batch: 311525 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210428-8	FC-CCR-SUMP7-1123	Total/NA	Water	200.8 LL	311056
550-210428-9	FC-CCR-SUMP8-1123	Total/NA	Water	200.8 LL	311056
550-210428-10	FC-CCR-SUMP9-1123	Total/NA	Water	200.8 LL	311056
550-210428-11	FC-CCR-SUMP10-1123	Total/NA	Water	200.8 LL	311056
550-210428-12	FC-CCR-SUMP11-1123	Total/NA	Water	200.8 LL	311056
550-210428-13	FC-CCR-SUMP12-1123	Total/NA	Water	200.8 LL	311056
550-210428-14	FC-CCR-SUMP13-1123	Total/NA	Water	200.8 LL	311056
550-210428-15	FC-CCR-SUMP14-1123	Total/NA	Water	200.8 LL	311056
550-210428-17	FC-CCR-SUMP16-1123	Total/NA	Water	200.8 LL	311056
550-210428-18	FC-CCR-SUMP17-1123	Total/NA	Water	200.8 LL	311056
550-210428-20	FC-CCR-AshPond6-1123	Total/NA	Water	200.8 LL	311056
MB 550-311056/1-A	Method Blank	Total/NA	Water	200.8 LL	311056
LCS 550-311056/2-A	Lab Control Sample	Total/NA	Water	200.8 LL	311056
LCSD 550-311056/3-A	Lab Control Sample Dup	Total/NA	Water	200.8 LL	311056
550-210428-1 MS	FC-CCR-MW01-1123	Total/NA	Water	200.8 LL	311056
550-210428-1 MSD	FC-CCR-MW01-1123	Total/NA	Water	200.8 LL	311056

Analysis Batch: 311598

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210428-3	FC-CCR-MW-21-1123	Total/NA	Water	200.8 LL	311056
550-210428-16	FC-CCR-SUMP15-1123	Total/NA	Water	200.8 LL	311056
550-210428-19	FC-CCR-SUMP18-1123	Total/NA	Water	200.8 LL	311056
MB 550-311056/1-A	Method Blank	Total/NA	Water	200.8 LL	311056
LCS 550-311056/2-A	Lab Control Sample	Total/NA	Water	200.8 LL	311056
LCSD 550-311056/3-A	Lab Control Sample Dup	Total/NA	Water	200.8 LL	311056

Analysis Batch: 311651

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210428-5	FC-CCR-SUMP1-1123	Total/NA	Water	200.7 Rev 4.4	311066
550-210428-6	FC-CCR-SUMP2-1123	Total/NA	Water	200.7 Rev 4.4	311066
550-210428-7	FC-CCR-SUMP3-1123	Total/NA	Water	200.7 Rev 4.4	311066
550-210428-8	FC-CCR-SUMP7-1123	Total/NA	Water	200.7 Rev 4.4	311066
550-210428-9	FC-CCR-SUMP8-1123	Total/NA	Water	200.7 Rev 4.4	311066
550-210428-10	FC-CCR-SUMP9-1123	Total/NA	Water	200.7 Rev 4.4	311066
550-210428-11	FC-CCR-SUMP10-1123	Total/NA	Water	200.7 Rev 4.4	311066
550-210428-12	FC-CCR-SUMP11-1123	Total/NA	Water	200.7 Rev 4.4	311066
550-210428-13	FC-CCR-SUMP12-1123	Total/NA	Water	200.7 Rev 4.4	311066
550-210428-14	FC-CCR-SUMP13-1123	Total/NA	Water	200.7 Rev 4.4	311066
550-210428-15	FC-CCR-SUMP14-1123	Total/NA	Water	200.7 Rev 4.4	311066
550-210428-16	FC-CCR-SUMP15-1123	Total/NA	Water	200.7 Rev 4.4	311066
550-210428-17	FC-CCR-SUMP16-1123	Total/NA	Water	200.7 Rev 4.4	311066
550-210428-18	FC-CCR-SUMP17-1123	Total/NA	Water	200.7 Rev 4.4	311066
550-210428-19	FC-CCR-SUMP18-1123	Total/NA	Water	200.7 Rev 4.4	311066
550-210428-20	FC-CCR-AshPond6-1123	Total/NA	Water	200.7 Rev 4.4	311066
MB 550-311066/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	311066
LCS 550-311066/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	311066
LCSD 550-311066/3-A	Lab Control Sample Dup	Total/NA	Water	200.7 Rev 4.4	311066
550-210428-6 MS	FC-CCR-SUMP2-1123	Total/NA	Water	200.7 Rev 4.4	311066
550-210428-6 MSD	FC-CCR-SUMP2-1123	Total/NA	Water	200.7 Rev 4.4	311066

Metals

Analysis Batch: 311831

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210428-1	FC-CCR-MW01-1123	Total/NA	Water	200.7 Rev 4.4	311066
550-210428-2	FC-CCR-MW03-1123	Total/NA	Water	200.7 Rev 4.4	311066
550-210428-3	FC-CCR-MW-21-1123	Total/NA	Water	200.7 Rev 4.4	311066
550-210428-4	FC-CCR-MW60-1123	Total/NA	Water	200.7 Rev 4.4	311066
550-210428-5	FC-CCR-SUMP1-1123	Total/NA	Water	200.7 Rev 4.4	311066
550-210428-6	FC-CCR-SUMP2-1123	Total/NA	Water	200.7 Rev 4.4	311066
550-210428-7	FC-CCR-SUMP3-1123	Total/NA	Water	200.7 Rev 4.4	311066
550-210428-8	FC-CCR-SUMP7-1123	Total/NA	Water	200.7 Rev 4.4	311066
550-210428-9	FC-CCR-SUMP8-1123	Total/NA	Water	200.7 Rev 4.4	311066
550-210428-10	FC-CCR-SUMP9-1123	Total/NA	Water	200.7 Rev 4.4	311066
550-210428-11	FC-CCR-SUMP10-1123	Total/NA	Water	200.7 Rev 4.4	311066
550-210428-12	FC-CCR-SUMP11-1123	Total/NA	Water	200.7 Rev 4.4	311066
550-210428-13	FC-CCR-SUMP12-1123	Total/NA	Water	200.7 Rev 4.4	311066
550-210428-14	FC-CCR-SUMP13-1123	Total/NA	Water	200.7 Rev 4.4	311066
550-210428-15	FC-CCR-SUMP14-1123	Total/NA	Water	200.7 Rev 4.4	311066
550-210428-16	FC-CCR-SUMP15-1123	Total/NA	Water	200.7 Rev 4.4	311066
550-210428-17	FC-CCR-SUMP16-1123	Total/NA	Water	200.7 Rev 4.4	311066
550-210428-18	FC-CCR-SUMP17-1123	Total/NA	Water	200.7 Rev 4.4	311066
550-210428-19	FC-CCR-SUMP18-1123	Total/NA	Water	200.7 Rev 4.4	311066
550-210428-20	FC-CCR-AshPond6-1123	Total/NA	Water	200.7 Rev 4.4	311066
MB 550-311066/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	311066
LCS 550-311066/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	311066
LCSD 550-311066/3-A	Lab Control Sample Dup	Total/NA	Water	200.7 Rev 4.4	311066
550-210428-6 MS	FC-CCR-SUMP2-1123	Total/NA	Water	200.7 Rev 4.4	311066
550-210428-6 MSD	FC-CCR-SUMP2-1123	Total/NA	Water	200.7 Rev 4.4	311066

General Chemistry

Analysis Batch: 311147

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210428-5	FC-CCR-SUMP1-1123	Total/NA	Water	SM 2540C	
550-210428-6	FC-CCR-SUMP2-1123	Total/NA	Water	SM 2540C	
550-210428-7	FC-CCR-SUMP3-1123	Total/NA	Water	SM 2540C	
550-210428-8	FC-CCR-SUMP7-1123	Total/NA	Water	SM 2540C	
550-210428-9	FC-CCR-SUMP8-1123	Total/NA	Water	SM 2540C	
550-210428-10	FC-CCR-SUMP9-1123	Total/NA	Water	SM 2540C	
550-210428-11	FC-CCR-SUMP10-1123	Total/NA	Water	SM 2540C	
550-210428-12	FC-CCR-SUMP11-1123	Total/NA	Water	SM 2540C	
550-210428-13	FC-CCR-SUMP12-1123	Total/NA	Water	SM 2540C	
550-210428-14	FC-CCR-SUMP13-1123	Total/NA	Water	SM 2540C	
550-210428-15	FC-CCR-SUMP14-1123	Total/NA	Water	SM 2540C	
550-210428-16	FC-CCR-SUMP15-1123	Total/NA	Water	SM 2540C	
550-210428-17	FC-CCR-SUMP16-1123	Total/NA	Water	SM 2540C	
550-210428-18	FC-CCR-SUMP17-1123	Total/NA	Water	SM 2540C	
550-210428-20	FC-CCR-AshPond6-1123	Total/NA	Water	SM 2540C	
MB 550-311147/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 550-311147/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 550-311147/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	
550-210327-A-2 DU	Duplicate	Total/NA	Water	SM 2540C	
550-210428-12 DU	FC-CCR-SUMP11-1123	Total/NA	Water	SM 2540C	

QC Association Summary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-210428-1
SDG: Four Corners Power Plant (Other)

General Chemistry

Analysis Batch: 311341

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210428-19	FC-CCR-SUMP18-1123	Total/NA	Water	SM 2540C	
MB 550-311341/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 550-311341/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 550-311341/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	
550-210497-A-1 DU	Duplicate	Total/NA	Water	SM 2540C	

Lab Chronicle

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-210428-1
SDG: Four Corners Power Plant (Other)

Client Sample ID: FC-CCR-MW01-1123
Date Collected: 11/09/23 15:20
Date Received: 11/10/23 16:12

Lab Sample ID: 550-210428-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	200.7			311066	SGO	EET PHX	11/14/23 10:15
Total/NA	Analysis	200.7 Rev 4.4		5	311831	GLW	EET PHX	11/28/23 13:40
Total/NA	Prep	200.8			311056	SGO	EET PHX	11/14/23 08:50
Total/NA	Analysis	200.8 LL		1	311525	DSJ	EET PHX	11/20/23 17:15

Client Sample ID: FC-CCR-MW03-1123
Date Collected: 11/09/23 16:05
Date Received: 11/10/23 16:12

Lab Sample ID: 550-210428-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	200.7			311066	SGO	EET PHX	11/14/23 10:15
Total/NA	Analysis	200.7 Rev 4.4		5	311831	GLW	EET PHX	11/28/23 13:43
Total/NA	Prep	200.8			311056	SGO	EET PHX	11/14/23 08:50
Total/NA	Analysis	200.8 LL		1	311525	DSJ	EET PHX	11/20/23 17:17

Client Sample ID: FC-CCR-MW-21-1123
Date Collected: 11/09/23 16:52
Date Received: 11/10/23 16:12

Lab Sample ID: 550-210428-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	200.7			311066	SGO	EET PHX	11/14/23 10:15
Total/NA	Analysis	200.7 Rev 4.4		5	311831	GLW	EET PHX	11/28/23 13:45
Total/NA	Prep	200.8			311056	SGO	EET PHX	11/14/23 08:50
Total/NA	Analysis	200.8 LL		4	311598	DSJ	EET PHX	11/21/23 18:26

Client Sample ID: FC-CCR-MW60-1123
Date Collected: 11/09/23 14:30
Date Received: 11/10/23 16:12

Lab Sample ID: 550-210428-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	200.7			311066	SGO	EET PHX	11/14/23 10:15
Total/NA	Analysis	200.7 Rev 4.4		5	311831	GLW	EET PHX	11/28/23 13:48
Total/NA	Prep	200.8			311056	SGO	EET PHX	11/14/23 08:50
Total/NA	Analysis	200.8 LL		1	311525	DSJ	EET PHX	11/20/23 17:21

Client Sample ID: FC-CCR-SUMP1-1123
Date Collected: 11/09/23 07:47
Date Received: 11/10/23 16:12

Lab Sample ID: 550-210428-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		10	311263	MMH	EET PHX	11/16/23 16:34
Total/NA	Prep	200.7			311066	SGO	EET PHX	11/14/23 10:15
Total/NA	Analysis	200.7 Rev 4.4		1	311651	GLW	EET PHX	11/22/23 15:54
Total/NA	Prep	200.7			311066	SGO	EET PHX	11/14/23 10:15
Total/NA	Analysis	200.7 Rev 4.4		5	311831	GLW	EET PHX	11/28/23 13:51

Lab Chronicle

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-210428-1
SDG: Four Corners Power Plant (Other)

Client Sample ID: FC-CCR-SUMP1-1123
Date Collected: 11/09/23 07:47
Date Received: 11/10/23 16:12

Lab Sample ID: 550-210428-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	200.8			311056	SGO	EET PHX	11/14/23 08:50
Total/NA	Analysis	200.8 LL		1	311525	DSJ	EET PHX	11/20/23 17:23
Total/NA	Analysis	SM 2540C		1	311147	KMG	EET PHX	11/15/23 11:03 - 11/21/23 15:28 [1]

Client Sample ID: FC-CCR-SUMP2-1123
Date Collected: 11/09/23 08:01
Date Received: 11/10/23 16:12

Lab Sample ID: 550-210428-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		2	311263	MMH	EET PHX	11/16/23 17:48
Total/NA	Prep	200.7			311066	SGO	EET PHX	11/14/23 10:15
Total/NA	Analysis	200.7 Rev 4.4		1	311651	GLW	EET PHX	11/22/23 15:40
Total/NA	Prep	200.7			311066	SGO	EET PHX	11/14/23 10:15
Total/NA	Analysis	200.7 Rev 4.4		5	311831	GLW	EET PHX	11/28/23 13:37
Total/NA	Prep	200.8			311056	SGO	EET PHX	11/14/23 08:50
Total/NA	Analysis	200.8 LL		1	311525	DSJ	EET PHX	11/20/23 17:25
Total/NA	Analysis	SM 2540C		1	311147	KMG	EET PHX	11/15/23 11:03 - 11/21/23 15:28 [1]

Client Sample ID: FC-CCR-SUMP3-1123
Date Collected: 11/09/23 08:10
Date Received: 11/10/23 16:12

Lab Sample ID: 550-210428-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		200	311264	MMH	EET PHX	11/17/23 03:39
Total/NA	Prep	200.7			311066	SGO	EET PHX	11/14/23 10:15
Total/NA	Analysis	200.7 Rev 4.4		1	311651	GLW	EET PHX	11/22/23 15:57
Total/NA	Prep	200.7			311066	SGO	EET PHX	11/14/23 10:15
Total/NA	Analysis	200.7 Rev 4.4		5	311831	GLW	EET PHX	11/28/23 13:54
Total/NA	Prep	200.8			311056	SGO	EET PHX	11/14/23 08:50
Total/NA	Analysis	200.8 LL		1	311525	DSJ	EET PHX	11/20/23 17:27
Total/NA	Analysis	SM 2540C		1	311147	KMG	EET PHX	11/15/23 11:03 - 11/21/23 15:28 [1]

Client Sample ID: FC-CCR-SUMP7-1123
Date Collected: 11/09/23 08:35
Date Received: 11/10/23 16:12

Lab Sample ID: 550-210428-8
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		200	311264	MMH	EET PHX	11/17/23 04:16
Total/NA	Prep	200.7			311066	SGO	EET PHX	11/14/23 10:15
Total/NA	Analysis	200.7 Rev 4.4		1	311651	GLW	EET PHX	11/22/23 16:00
Total/NA	Prep	200.7			311066	SGO	EET PHX	11/14/23 10:15
Total/NA	Analysis	200.7 Rev 4.4		5	311831	GLW	EET PHX	11/28/23 13:57
Total/NA	Prep	200.8			311056	SGO	EET PHX	11/14/23 08:50
Total/NA	Analysis	200.8 LL		1	311525	DSJ	EET PHX	11/20/23 17:29
Total/NA	Analysis	SM 2540C		1	311147	KMG	EET PHX	11/15/23 11:03 - 11/21/23 15:28 [1]

Lab Chronicle

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-210428-1
SDG: Four Corners Power Plant (Other)

Client Sample ID: FC-CCR-SUMP8-1123
Date Collected: 11/09/23 08:26
Date Received: 11/10/23 16:12

Lab Sample ID: 550-210428-9
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		200	311264	MMH	EET PHX	11/17/23 05:48
Total/NA	Prep	200.7			311066	SGO	EET PHX	11/14/23 10:15
Total/NA	Analysis	200.7 Rev 4.4		1	311651	GLW	EET PHX	11/22/23 16:02
Total/NA	Prep	200.7			311066	SGO	EET PHX	11/14/23 10:15
Total/NA	Analysis	200.7 Rev 4.4		5	311831	GLW	EET PHX	11/28/23 14:00
Total/NA	Prep	200.8			311056	SGO	EET PHX	11/14/23 08:50
Total/NA	Analysis	200.8 LL		1	311525	DSJ	EET PHX	11/20/23 17:31
Total/NA	Analysis	SM 2540C		1	311147	KMG	EET PHX	11/15/23 11:03 - 11/21/23 15:28 [1]

Client Sample ID: FC-CCR-SUMP9-1123
Date Collected: 11/09/23 08:45
Date Received: 11/10/23 16:12

Lab Sample ID: 550-210428-10
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		200	311264	MMH	EET PHX	11/17/23 06:25
Total/NA	Prep	200.7			311066	SGO	EET PHX	11/14/23 10:15
Total/NA	Analysis	200.7 Rev 4.4		1	311651	GLW	EET PHX	11/22/23 16:05
Total/NA	Prep	200.7			311066	SGO	EET PHX	11/14/23 10:15
Total/NA	Analysis	200.7 Rev 4.4		5	311831	GLW	EET PHX	11/28/23 14:02
Total/NA	Prep	200.8			311056	SGO	EET PHX	11/14/23 08:50
Total/NA	Analysis	200.8 LL		1	311525	DSJ	EET PHX	11/20/23 17:33
Total/NA	Analysis	SM 2540C		1	311147	KMG	EET PHX	11/15/23 11:03 - 11/21/23 15:28 [1]

Client Sample ID: FC-CCR-SUMP10-1123
Date Collected: 11/09/23 08:50
Date Received: 11/10/23 16:12

Lab Sample ID: 550-210428-11
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		200	311264	MMH	EET PHX	11/17/23 07:01
Total/NA	Prep	200.7			311066	SGO	EET PHX	11/14/23 10:15
Total/NA	Analysis	200.7 Rev 4.4		1	311651	GLW	EET PHX	11/22/23 16:14
Total/NA	Prep	200.7			311066	SGO	EET PHX	11/14/23 10:15
Total/NA	Analysis	200.7 Rev 4.4		5	311831	GLW	EET PHX	11/28/23 14:11
Total/NA	Prep	200.8			311056	SGO	EET PHX	11/14/23 08:50
Total/NA	Analysis	200.8 LL		1	311525	DSJ	EET PHX	11/20/23 17:42
Total/NA	Analysis	SM 2540C		1	311147	KMG	EET PHX	11/15/23 11:03 - 11/21/23 15:28 [1]

Client Sample ID: FC-CCR-SUMP11-1123
Date Collected: 11/09/23 08:55
Date Received: 11/10/23 16:12

Lab Sample ID: 550-210428-12
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		200	311264	MMH	EET PHX	11/17/23 07:38
Total/NA	Prep	200.7			311066	SGO	EET PHX	11/14/23 10:15
Total/NA	Analysis	200.7 Rev 4.4		1	311651	GLW	EET PHX	11/22/23 16:17

Lab Chronicle

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-210428-1
SDG: Four Corners Power Plant (Other)

Client Sample ID: FC-CCR-SUMP11-1123
Date Collected: 11/09/23 08:55
Date Received: 11/10/23 16:12

Lab Sample ID: 550-210428-12
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	200.7			311066	SGO	EET PHX	11/14/23 10:15
Total/NA	Analysis	200.7 Rev 4.4		5	311831	GLW	EET PHX	11/28/23 14:14
Total/NA	Prep	200.8			311056	SGO	EET PHX	11/14/23 08:50
Total/NA	Analysis	200.8 LL		1	311525	DSJ	EET PHX	11/20/23 17:44
Total/NA	Analysis	SM 2540C		1	311147	KMG	EET PHX	11/15/23 11:03 - 11/21/23 15:28 [1]

Client Sample ID: FC-CCR-SUMP12-1123
Date Collected: 11/09/23 09:01
Date Received: 11/10/23 16:12

Lab Sample ID: 550-210428-13
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		200	311264	MMH	EET PHX	11/17/23 09:10
Total/NA	Prep	200.7			311066	SGO	EET PHX	11/14/23 10:15
Total/NA	Analysis	200.7 Rev 4.4		1	311651	GLW	EET PHX	11/22/23 16:19
Total/NA	Prep	200.7			311066	SGO	EET PHX	11/14/23 10:15
Total/NA	Analysis	200.7 Rev 4.4		5	311831	GLW	EET PHX	11/28/23 14:17
Total/NA	Prep	200.8			311056	SGO	EET PHX	11/14/23 08:50
Total/NA	Analysis	200.8 LL		1	311525	DSJ	EET PHX	11/20/23 17:46
Total/NA	Analysis	SM 2540C		1	311147	KMG	EET PHX	11/15/23 11:03 - 11/21/23 15:28 [1]

Client Sample ID: FC-CCR-SUMP13-1123
Date Collected: 11/09/23 09:07
Date Received: 11/10/23 16:12

Lab Sample ID: 550-210428-14
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		200	311264	MMH	EET PHX	11/17/23 09:47
Total/NA	Prep	200.7			311066	SGO	EET PHX	11/14/23 10:15
Total/NA	Analysis	200.7 Rev 4.4		1	311651	GLW	EET PHX	11/22/23 16:24
Total/NA	Prep	200.7			311066	SGO	EET PHX	11/14/23 10:15
Total/NA	Analysis	200.7 Rev 4.4		5	311831	GLW	EET PHX	11/28/23 14:19
Total/NA	Prep	200.8			311056	SGO	EET PHX	11/14/23 08:50
Total/NA	Analysis	200.8 LL		1	311525	DSJ	EET PHX	11/20/23 17:48
Total/NA	Analysis	SM 2540C		1	311147	KMG	EET PHX	11/15/23 11:03 - 11/21/23 15:28 [1]

Client Sample ID: FC-CCR-SUMP14-1123
Date Collected: 11/09/23 09:17
Date Received: 11/10/23 16:12

Lab Sample ID: 550-210428-15
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		200	311264	MMH	EET PHX	11/17/23 10:24
Total/NA	Prep	200.7			311066	SGO	EET PHX	11/14/23 10:15
Total/NA	Analysis	200.7 Rev 4.4		1	311651	GLW	EET PHX	11/22/23 16:27
Total/NA	Prep	200.7			311066	SGO	EET PHX	11/14/23 10:15
Total/NA	Analysis	200.7 Rev 4.4		5	311831	GLW	EET PHX	11/28/23 14:22

Lab Chronicle

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-210428-1
SDG: Four Corners Power Plant (Other)

Client Sample ID: FC-CCR-SUMP14-1123
Date Collected: 11/09/23 09:17
Date Received: 11/10/23 16:12

Lab Sample ID: 550-210428-15
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	200.8			311056	SGO	EET PHX	11/14/23 08:50
Total/NA	Analysis	200.8 LL		1	311525	DSJ	EET PHX	11/20/23 17:50
Total/NA	Analysis	SM 2540C		1	311147	KMG	EET PHX	11/15/23 11:03 - 11/21/23 15:28 [1]

Client Sample ID: FC-CCR-SUMP15-1123
Date Collected: 11/09/23 09:23
Date Received: 11/10/23 16:12

Lab Sample ID: 550-210428-16
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		200	311264	MMH	EET PHX	11/17/23 11:01
Total/NA	Prep	200.7			311066	SGO	EET PHX	11/14/23 10:15
Total/NA	Analysis	200.7 Rev 4.4		1	311651	GLW	EET PHX	11/22/23 16:30
Total/NA	Prep	200.7			311066	SGO	EET PHX	11/14/23 10:15
Total/NA	Analysis	200.7 Rev 4.4		5	311831	GLW	EET PHX	11/28/23 14:25
Total/NA	Prep	200.8			311056	SGO	EET PHX	11/14/23 08:50
Total/NA	Analysis	200.8 LL		4	311598	DSJ	EET PHX	11/21/23 18:28
Total/NA	Analysis	SM 2540C		1	311147	KMG	EET PHX	11/15/23 11:03 - 11/21/23 15:28 [1]

Client Sample ID: FC-CCR-SUMP16-1123
Date Collected: 11/09/23 09:30
Date Received: 11/10/23 16:12

Lab Sample ID: 550-210428-17
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		200	311264	MMH	EET PHX	11/17/23 11:37
Total/NA	Prep	200.7			311066	SGO	EET PHX	11/14/23 10:15
Total/NA	Analysis	200.7 Rev 4.4		1	311651	GLW	EET PHX	11/22/23 16:32
Total/NA	Prep	200.7			311066	SGO	EET PHX	11/14/23 10:15
Total/NA	Analysis	200.7 Rev 4.4		5	311831	GLW	EET PHX	11/28/23 14:28
Total/NA	Prep	200.8			311056	SGO	EET PHX	11/14/23 08:50
Total/NA	Analysis	200.8 LL		1	311525	DSJ	EET PHX	11/20/23 17:54
Total/NA	Analysis	SM 2540C		1	311147	KMG	EET PHX	11/15/23 11:03 - 11/21/23 15:28 [1]

Client Sample ID: FC-CCR-SUMP17-1123
Date Collected: 11/09/23 09:33
Date Received: 11/10/23 16:12

Lab Sample ID: 550-210428-18
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		200	311323	MMH	EET PHX	11/17/23 16:17
Total/NA	Prep	200.7			311066	SGO	EET PHX	11/14/23 10:15
Total/NA	Analysis	200.7 Rev 4.4		1	311651	GLW	EET PHX	11/22/23 16:35
Total/NA	Prep	200.7			311066	SGO	EET PHX	11/14/23 10:15
Total/NA	Analysis	200.7 Rev 4.4		5	311831	GLW	EET PHX	11/28/23 14:31
Total/NA	Prep	200.8			311056	SGO	EET PHX	11/14/23 08:50
Total/NA	Analysis	200.8 LL		1	311525	DSJ	EET PHX	11/20/23 17:56
Total/NA	Analysis	SM 2540C		1	311147	KMG	EET PHX	11/15/23 11:03 - 11/21/23 15:28 [1]

Lab Chronicle

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-210428-1
SDG: Four Corners Power Plant (Other)

Client Sample ID: FC-CCR-SUMP18-1123

Date Collected: 11/09/23 09:40
Date Received: 11/10/23 16:12

Lab Sample ID: 550-210428-19

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		200	311323	MMH	EET PHX	11/17/23 14:45
Total/NA	Prep	200.7			311066	SGO	EET PHX	11/14/23 10:15
Total/NA	Analysis	200.7 Rev 4.4		1	311651	GLW	EET PHX	11/22/23 16:38
Total/NA	Prep	200.7			311066	SGO	EET PHX	11/14/23 10:15
Total/NA	Analysis	200.7 Rev 4.4		5	311831	GLW	EET PHX	11/28/23 14:34
Total/NA	Prep	200.8			311056	SGO	EET PHX	11/14/23 08:50
Total/NA	Analysis	200.8 LL		4	311598	DSJ	EET PHX	11/21/23 18:30
Total/NA	Analysis	SM 2540C		1	311341	KMG	EET PHX	11/17/23 11:54 - 12/01/23 16:42 [1]

Client Sample ID: FC-CCR-AshPond6-1123

Date Collected: 11/09/23 09:53
Date Received: 11/10/23 16:12

Lab Sample ID: 550-210428-20

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		200	311323	MMH	EET PHX	11/17/23 16:54
Total/NA	Prep	200.7			311066	SGO	EET PHX	11/14/23 10:15
Total/NA	Analysis	200.7 Rev 4.4		1	311651	GLW	EET PHX	11/22/23 16:41
Total/NA	Prep	200.7			311066	SGO	EET PHX	11/14/23 10:15
Total/NA	Analysis	200.7 Rev 4.4		5	311831	GLW	EET PHX	11/28/23 14:36
Total/NA	Prep	200.8			311056	SGO	EET PHX	11/14/23 08:50
Total/NA	Analysis	200.8 LL		1	311525	DSJ	EET PHX	11/20/23 18:00
Total/NA	Analysis	SM 2540C		1	311147	KMG	EET PHX	11/15/23 11:03 - 11/21/23 15:28 [1]

[1] This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:

EET PHX = Eurofins Phoenix, 4625 East Cotton Center Boulevard, Suite #189, Phoenix, AZ 85040, TEL (602)437-3340

Accreditation/Certification Summary

Client: Arizona Public Service Company
Job ID: 550-210428-1
Project/Site: CCR Groundwater Monitoring
SDG: Four Corners Power Plant (Other)

Laboratory: Eurofins Phoenix

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Arizona	State	AZ0728	06-10-24

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
200.8 LL	200.8	Water	Molybdenum

Method Summary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-210428-1
SDG: Four Corners Power Plant (Other)

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	EPA	EET PHX
200.7 Rev 4.4	Metals (ICP)	EPA	EET PHX
200.8 LL	Metals (ICP/MS)	EPA	EET PHX
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET PHX
200.7	Preparation, Total Metals	EPA	EET PHX
200.8	Preparation, Total Metals	EPA	EET PHX

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:

EET PHX = Eurofins Phoenix, 4625 East Cotton Center Boulevard, Suite #189, Phoenix, AZ 85040, TEL (602)437-3340

TestAmerica Phoenix
4625 E Cotton Center Blvd
Suite 189
Phoenix, AZ 85040
phone 602.437.3340 fax 602.454.9303

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

12/4/2023

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☑ Other: CCR

210428

TestAmerica Laboratories, Inc.

Client Contact	Natalie Chrisman	Pam Norris (505-598-8781)	Date:	COC No:
Arizona Public Service	602-250-3608	Lab Contact: Rachel Sester	Carrier:	1 of 3 COCs
PO Box 355, MS 4915	Analysis Turnaround Time			Sampler:
Fruitland, NM 87416	☐ CALENDAR DAYS ☑ WORKING DAYS			For Lab Use Only:
Phone	TAT if different from Below _____			Walk-in Client:
FAX	☑ 2 weeks			Lab Sampling:
Project Name: CCR Groundwater Monitoring	☐ 1 week			
Site: APS Four Corners Power Plant (Other)	☐ 2 days			Job / SDG No.:
PO #: 100622298	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	EPA 300.0 (Cl, F, SO4)	EPA 200.7 - Totals (B)	EPA 200.7 - Totals (B, Ca, Be)	EPA 200.7 - Totals (B, Ca, Be, K, Mg, Na, Fe)	EPA 200.7 - Totals (B, Ca, K, Mg, Na)	EPA 200.7 - Totals (B, Ca, K, Mg, Na, Mn, Fe)	EPA 200.7 - Totals (B, Ca, Be, K, Mg, Na, Mn, Fe)	EPA 200.7 - Total Lithium	EPA 200.8 - Totals (Sb, As, Ba, Cd, Co, Cr, Pb, Mo, Se, Tl)	EPA 200.8 - Totals (Co, Mo)	EPA 245.1 - Totals (Hg)	SM 4500-HB (pH)	SM 2540C (TDS)	SM 2320B (CO3 Alkalinity as CaCO3, HCO3 Alkalinity as)	Sample Specific Notes:
FC-CCR-MW01-1123 -1	11/9/2023	1520	G	W	1	N			X								X					Low Flow
FC-CCR-MW03-1123 -2	11/9/2023	1605	G	W	1	N			X								X					"
FC-CCR-MW21-1123 -3	11/9/2023	1652	G	W	1	N			X								X					"
FC-CCR-MW60-1123 -4	11/9/2023	1430	G	W	1	N			X								X					"
								1	4	4	4	4	4	4		4	4	4	1	1	1	

550-210428 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☑ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

Method 200.8 with collision cell

2.4°C | 0.8°C - ENICE-pc

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd:_____ Corr'd:_____ Therm ID No.:_____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	WSP	11-10-23 0749			
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	APS	11-10-23 745			
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:
	APS	11-10-23 2:28		ETA PHX	11/10/23 1488

TestAmerica Phoenix
4625 E Cotton Center Blvd
Suite 189
Phoenix, AZ 85040
phone 602.437.3340 fax 602.454.9303

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☑ Other: CCR

210428

TestAmerica Laboratories, Inc.

12/4/2023

Client Contact	Natalie Chrisman	Pam Norris (505-598-8781)	Date:	COC No:
Arizona Public Service	602-250-3608	Lab Contact: Rachel Sester	Carrier:	2 of 3 COCs
PO Box 355, MS 4915	Analysis Turnaround Time			Sampler:
Fruitland, NM 87416	☐ CALENDAR DAYS ☑ WORKING DAYS			For Lab Use Only:
Phone	TAT if different from Below _____			Walk-in Client:
FAX	☑ 2 weeks			Lab Sampling:
Project Name: CCR Groundwater Monitoring	☐ 1 week			Job / SDG No.:
Site: APS Four Corners Power Plant (Other)	☐ 2 days			
PO #: 100622298	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	EPA 300.0 (Cl)	EPA 200.7 - Totals (B, Mg, Mn, Fe)	EPA 200.8 - Totals (Co, Mo)	SM 2540C (TDS)	Sample Specific Notes:
FC-CCR-SUMP1-1123 -5	11/9/2023	747	G	W	2	N		X	X	X	X	Grab Sample
FC-CCR-SUMP2-1123 -6	11/9/2023	801	G	W	2	N		X	X	X	X	"
FC-CCR-SUMP3-1123 -7	11/9/2023	810	G	W	2	N		X	X	X	X	"
FC-CCR-SUMP7-1123 -8	11/9/2023	835	G	W	2	N		X	X	X	X	"
FC-CCR-SUMP8-1123 -9	11/9/2023	826	G	W	2	N		X	X	X	X	"
FC-CCR-SUMP9-1123 -10	11/9/2023	845	G	W	2	N		X	X	X	X	"
FC-CCR-SUMP10-1123 -11	11/9/2023	850	G	W	2	N		X	X	X	X	"
FC-CCR-SUMP11-1123 -12	11/9/2023	855	G	W	2	N		X	X	X	X	"
FC-CCR-SUMP12-1123 -13	11/9/2023	901	G	W	2	N		X	X	X	X	"
FC-CCR-SUMP13-1123 -14	11/9/2023	907	G	W	2	N		X	X	X	X	"
FC-CCR-SUMP14-1123 -15	11/9/2023	917	G	W	2	N		X	X	X	X	"
FC-CCR-SUMP15-1123 -16	11/9/2023	923	G	W	2	N		X	X	X	X	"
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____								1	4	4	1	

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☑ Return to Client ☑ Disposal by Lab ☑ Archive for_____ Months

Special Instructions/QC Requirements & Comments:

Method 200.8 with collision cell

2.4°C | 0.8°C - ONICE - PC

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd:_____ Corr'd:_____ Therm ID No.:_____

Relinquished by:	Company: WSP	Date/Time: 11-10-23 0745	Received by:	Company:	Date/Time:
Relinquished by: Derick Cuch	Company: WS	Date/Time: 11-10-23 745	Received by:	Company:	Date/Time:
Relinquished by: Derick Cuch	Company: AHS	Date/Time: 11-10-23 2108	Received in Laboratory by: Jose Vela	Company: EETA PHX	Date/Time: 11/10/23 1458

TestAmerica Phoenix
4625 E Cotton Center Blvd
Suite 189
Phoenix, AZ 85040
phone 602.437.3340 fax 602.454.9303

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

12/4/2023

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☑ Other: CCR

2104428

TestAmerica Laboratories, Inc.

Client Contact	Natalie Chrisman	Pam Norris (505-598-8781)	Date:	COC No:
Arizona Public Service	602-250-3608	Lab Contact: Rachel Sester	Carrier:	3 of 3 COCs
PO Box 355, MS 4915	**Analysis Turnaround Time**			Sampler:
Fruitland, NM 87416	☐ CALENDAR DAYS ☑ WORKING DAYS			**For Lab Use Only:**
Phone	TAT if different from Below _____			Walk-in Client:
FAX	☑ 2 weeks			Lab Sampling:
Project Name: CCR Groundwater Monitoring	☐ 1 week			
Site: APS Four Corners Power Plant (Other)	☐ 2 days			Job / SDG No.:
PO #: 100622298	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	EPA 300.0 (Cl)	EPA 200.7 - Totals (B, Mg, Mn, Fe)	EPA 200.8 - Totals (Co, Mo)	SM 2540C (TDS)	Sample Specific Notes:
FC-CCR-SUMP16-1123 -17	11/9/2023	930	G	W	2	N		X	X	X	X	Grab Sample
FC-CCR-SUMP17-1123 -18	11/9/2023	933	G	W	2	N		X	X	X	X	"
FC-CCR-SUMP18-1123 -19	11/9/2023	940	G	W	2	N		X	X	X	X	"
FC-CCR-AshPond6-1123 -20	11/9/2023	953	G	W	2	N		X	X	X	X	"
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____								1	4	4	1	

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☑ Return to Client ☑ Disposal by Lab ☑ Archive for_____ Months

Special Instructions/QC Requirements & Comments:

Method 200.8 with collision cell

0.8°C - ON ICE - DY 11/10/23 PC

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd:_____ Corr'd:_____ | Therm ID No.:_____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	WSP	11-10-23 0745			
Relinquished by: [signature]	Company: AWS	Date/Time: 11-10-23	Received by:	Company:	Date/Time:
Relinquished by: [signature]	Company: AHS	Date/Time: 11-10-23 2200	Received in Laboratory by: [signature]	Company: EETA PHX	Date/Time: 11/10/23 1438

Login Sample Receipt Checklist

Client: Arizona Public Service Company

Job Number: 550-210428-1
SDG Number: Four Corners Power Plant (Other)

Login Number: 210428
List Number: 1
Creator: Maycock, Lisa

List Source: Eurofins Phoenix

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	False	Check done at department level as required.

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Natalie Chrisman
Arizona Public Service Company
PO BOX 188, Ste. 4458
Joseph City, Arizona 86032

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JOB DESCRIPTION

CCR Groundwater Monitoring
APS Four Corners Power Plant (CWTP)

JOB NUMBER

550-210426-1

Eurofins Phoenix
4625 East Cotton Center Boulevard
Suite #189
Phoenix AZ 85040

See page two for job notes and contact information.

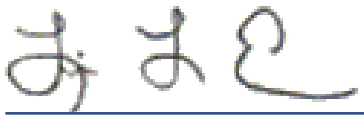
my EOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Southwest, LLC Project Manager.

Authorization



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Authorized for release by
Linda Eshelman, Project Manager II
linda.eshelman@et.eurofinsus.com
(602)659-7681

Table of Contents

Cover Page 1
Table of Contents 3
Definitions/Glossary 4
Case Narrative 6
Sample Summary 7
Detection Summary 8
Client Sample Results 10
QC Sample Results 14
QC Association Summary 23
Lab Chronicle 27
Certification Summary 29
Method Summary 30
Chain of Custody 31
Receipt Checklists 33

Definitions/Glossary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-210426-1
SDG: APS Four Corners Power Plant (CWTP)

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
D2	Sample required dilution due to high concentration of analyte.
E2	Concentration estimated. Analyte exceeded calibration range. Reanalysis not performed due to sample matrix.
M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The associated blank spike was acceptable.

Metals

Qualifier	Qualifier Description
E2	Concentration estimated. Analyte exceeded calibration range. Reanalysis not performed due to sample matrix.
L3	The associated blank spike recovery was above method acceptance limits.
M1	Matrix spike recovery was high, the associated blank spike recovery was acceptable.
M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The associated blank spike was acceptable.
R6	LFB/LFBD RPD exceeded method control limit. Recovery met acceptance criteria.
T5	Laboratory not licensed for this parameter

General Chemistry

Qualifier	Qualifier Description
H5	This test is specified to be performed in the field within 15 minutes of sampling; sample was received and analyzed past the regulatory holding time.
T5	Laboratory not licensed for this parameter

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 550-210426-1

Laboratory: Eurofins Phoenix

Narrative

Job Narrative
550-210426-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 11/10/2023 2:28 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.7°C

HPLC/IC
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals
Method 200.8_CWA_LL: The laboratory control sample (LCS) associated with preparation batch 550-311057 and analytical batch 550-311226 was outside acceptance criteria for the analytes Barium and Lead. Re-extraction and/or re-analysis could not be performed; therefore, the data has been reported. The batch matrix spike/matrix spike duplicate (MS/MSD) was within acceptance limits and may be used to evaluate matrix performance. FC-CCR-MW62-1123 (550-210426-1), FC-CCR-MW63-1123 (550-210426-2), FC-CCR-MW64-1123 (550-210426-3) and FC-CCR-MW65-1123 (550-210426-4)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Sample Summary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-210426-1
SDG: APS Four Corners Power Plant (CWTP)

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
550-210426-1	FC-CCR-MW62-1123	Water	11/06/23 11:27	11/10/23 14:28
550-210426-2	FC-CCR-MW63-1123	Water	11/06/23 12:35	11/10/23 14:28
550-210426-3	FC-CCR-MW64-1123	Water	11/06/23 13:29	11/10/23 14:28
550-210426-4	FC-CCR-MW65-1123	Water	11/06/23 14:34	11/10/23 14:28

Detection Summary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-210426-1
SDG: APS Four Corners Power Plant (CWTP)

Client Sample ID: FC-CCR-MW62-1123 — Lab Sample ID: 550-210426-1

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	140		2.0		mg/L	1		300.0	Total/NA
Fluoride	1.6		0.40		mg/L	1		300.0	Total/NA
Sulfate	2100	D2	200		mg/L	100		300.0	Total/NA
Boron	2.9		0.050		mg/L	1		200.7 Rev 4.4	Total/NA
Calcium	610		2.0		mg/L	1		200.7 Rev 4.4	Total/NA
Iron	24		0.10		mg/L	1		200.7 Rev 4.4	Total/NA
Magnesium	520		2.0		mg/L	1		200.7 Rev 4.4	Total/NA
Potassium	10		0.50		mg/L	1		200.7 Rev 4.4	Total/NA
Sodium	840		2.5		mg/L	5		200.7 Rev 4.4	Total/NA
Manganese	8.9		0.010		mg/L	1		200.7 Rev 4.4	Total/NA
Lithium	0.14		0.050		mg/L	1		200.7 Rev 4.4	Total Recoverable
Arsenic	12		0.50		ug/L	1		200.8 LL	Total/NA
Barium	23	L3 R6	0.50		ug/L	1		200.8 LL	Total/NA
Cobalt	11		0.50		ug/L	1		200.8 LL	Total/NA
Molybdenum	3.1	T5	0.50		ug/L	1		200.8 LL	Total/NA
Selenium	0.55		0.50		ug/L	1		200.8 LL	Total/NA
Alkalinity as CaCO3	940		6.0		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	940		6.0		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	6800		100		mg/L	1		SM 2540C	Total/NA
pH	7.0	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	10.0	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-MW63-1123 — Lab Sample ID: 550-210426-2

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	71	D2	4.0		mg/L	2		300.0	Total/NA
Fluoride	2.2	D2	0.80		mg/L	2		300.0	Total/NA
Sulfate	1500	D2	400		mg/L	200		300.0	Total/NA
Boron	1.2		0.050		mg/L	1		200.7 Rev 4.4	Total/NA
Calcium	440		2.0		mg/L	1		200.7 Rev 4.4	Total/NA
Iron	0.19		0.10		mg/L	1		200.7 Rev 4.4	Total/NA
Magnesium	150		2.0		mg/L	1		200.7 Rev 4.4	Total/NA
Potassium	6.6		0.50		mg/L	1		200.7 Rev 4.4	Total/NA
Sodium	290		0.50		mg/L	1		200.7 Rev 4.4	Total/NA
Manganese	3.0		0.010		mg/L	1		200.7 Rev 4.4	Total/NA
Lithium	0.053		0.050		mg/L	1		200.7 Rev 4.4	Total Recoverable
Arsenic	1.3		0.50		ug/L	1		200.8 LL	Total/NA
Barium	25	L3 R6	0.50		ug/L	1		200.8 LL	Total/NA
Cobalt	3.7		0.50		ug/L	1		200.8 LL	Total/NA
Molybdenum	3.3	T5	0.50		ug/L	1		200.8 LL	Total/NA
Alkalinity as CaCO3	320		6.0		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	320		6.0		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	2700		20		mg/L	1		SM 2540C	Total/NA
pH	7.4	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	9.6	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-MW64-1123 — Lab Sample ID: 550-210426-3

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	52	D2	4.0		mg/L	2		300.0	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: FC-CCR-MW64-1123 (Continued) — Lab Sample ID: 550-210426-3

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Fluoride	1.5	D2	0.80		mg/L	2		300.0	Total/NA
Boron	0.58		0.050		mg/L	1		200.7 Rev 4.4	Total/NA
Calcium	87		2.0		mg/L	1		200.7 Rev 4.4	Total/NA
Iron	0.48		0.10		mg/L	1		200.7 Rev 4.4	Total/NA
Magnesium	34		2.0		mg/L	1		200.7 Rev 4.4	Total/NA
Potassium	6.4		0.50		mg/L	1		200.7 Rev 4.4	Total/NA
Sodium	130		0.50		mg/L	1		200.7 Rev 4.4	Total/NA
Manganese	0.38		0.010		mg/L	1		200.7 Rev 4.4	Total/NA
Arsenic	0.97		0.50		ug/L	1		200.8 LL	Total/NA
Barium	29	L3 R6	0.50		ug/L	1		200.8 LL	Total/NA
Cobalt	1.6		0.50		ug/L	1		200.8 LL	Total/NA
Molybdenum	4.4	T5	0.50		ug/L	1		200.8 LL	Total/NA
Thallium	0.15		0.10		ug/L	1		200.8 LL	Total/NA
Alkalinity as CaCO3	260		6.0		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	260		6.0		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	710		20		mg/L	1		SM 2540C	Total/NA
pH	7.9	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	9.4	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-MW65-1123 — Lab Sample ID: 550-210426-4

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	54		2.0		mg/L	1		300.0	Total/NA
Fluoride	1.5		0.40		mg/L	1		300.0	Total/NA
Sulfate	300	D2	20		mg/L	10		300.0	Total/NA
Boron	0.67		0.050		mg/L	1		200.7 Rev 4.4	Total/NA
Calcium	110		2.0		mg/L	1		200.7 Rev 4.4	Total/NA
Magnesium	53		2.0		mg/L	1		200.7 Rev 4.4	Total/NA
Potassium	5.9		0.50		mg/L	1		200.7 Rev 4.4	Total/NA
Sodium	160		0.50		mg/L	1		200.7 Rev 4.4	Total/NA
Manganese	1.3		0.010		mg/L	1		200.7 Rev 4.4	Total/NA
Arsenic	1.1		0.50		ug/L	1		200.8 LL	Total/NA
Barium	21	L3 R6	0.50		ug/L	1		200.8 LL	Total/NA
Cobalt	1.6		0.50		ug/L	1		200.8 LL	Total/NA
Molybdenum	7.3	T5	0.50		ug/L	1		200.8 LL	Total/NA
Alkalinity as CaCO3	340		6.0		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	340		6.0		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	840		20		mg/L	1		SM 2540C	Total/NA
pH	7.7	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	10.5	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: FC-CCR-MW62-1123

Date Collected: 11/06/23 11:27
Date Received: 11/10/23 14:28

Lab Sample ID: 550-210426-1

Matrix: Water

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**140**		2.0		mg/L			11/30/23 04:24	1
Fluoride	**1.6**		0.40		mg/L			11/30/23 04:24	1
Sulfate	**2100**	**D2**	200		mg/L			11/30/23 19:47	100

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		0.0010		mg/L		11/14/23 10:09	11/20/23 17:00	1
Boron	**2.9**		0.050		mg/L		11/14/23 10:09	11/20/23 17:00	1
Calcium	**610**		2.0		mg/L		11/14/23 10:09	11/20/23 17:00	1
Iron	**24**		0.10		mg/L		11/14/23 10:09	11/20/23 17:00	1
Magnesium	**520**		2.0		mg/L		11/14/23 10:09	11/20/23 17:00	1
Potassium	**10**		0.50		mg/L		11/14/23 10:09	11/20/23 17:00	1
Sodium	**840**		2.5		mg/L		11/14/23 10:09	11/21/23 12:12	5
Manganese	**8.9**		0.010		mg/L		11/14/23 10:09	11/20/23 17:00	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**0.14**		0.050		mg/L		11/15/23 07:10	11/16/23 19:11	1

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.0		ug/L		11/14/23 08:56	11/16/23 00:51	1
Arsenic	**12**		0.50		ug/L		11/14/23 08:56	11/16/23 00:51	1
Barium	**23**	**L3 R6**	0.50		ug/L		11/14/23 08:56	11/16/23 00:51	1
Cadmium	ND		0.10		ug/L		11/14/23 08:56	11/16/23 00:51	1
Chromium	ND		1.0		ug/L		11/14/23 08:56	11/16/23 00:51	1
Cobalt	**11**		0.50		ug/L		11/14/23 08:56	11/16/23 00:51	1
Lead	ND	L3	0.50		ug/L		11/14/23 08:56	11/16/23 00:51	1
Molybdenum	**3.1**	**T5**	0.50		ug/L		11/14/23 08:56	11/16/23 00:51	1
Selenium	**0.55**		0.50		ug/L		11/14/23 08:56	11/20/23 15:36	1
Thallium	ND		0.10		ug/L		11/14/23 08:56	11/16/23 00:51	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		11/14/23 13:28	11/14/23 17:55	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3 (SM 2320B)	**940**		6.0		mg/L			11/15/23 17:54	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**940**		6.0		mg/L			11/15/23 17:54	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			11/15/23 17:54	1
Alkalinity, Phenolphthalein (SM 2320B)	ND		6.0		mg/L			11/15/23 17:54	1
Hydroxide Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			11/15/23 17:54	1
Total Dissolved Solids (SM 2540C)	**6800**		100		mg/L			11/13/23 11:06	1
pH (SM 4500 H+ B)	**7.0**	**H5**	1.7		SU			11/15/23 13:31	1
Temperature (SM 4500 H+ B)	**10.0**	**H5 T5**	0.1		Degrees C			11/15/23 13:31	1

Client Sample ID: FC-CCR-MW63-1123

Date Collected: 11/06/23 12:35
Date Received: 11/10/23 14:28

Lab Sample ID: 550-210426-2

Matrix: Water

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**71**	**D2**	4.0		mg/L			11/16/23 06:50	2
Fluoride	**2.2**	**D2**	0.80		mg/L			11/16/23 06:50	2
Sulfate	**1500**	**D2**	400		mg/L			11/16/23 07:08	200

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		0.0010		mg/L		11/14/23 10:09	11/20/23 17:03	1
Boron	**1.2**		0.050		mg/L		11/14/23 10:09	11/20/23 17:03	1
Calcium	**440**		2.0		mg/L		11/14/23 10:09	11/20/23 17:03	1
Iron	**0.19**		0.10		mg/L		11/14/23 10:09	11/20/23 17:03	1
Magnesium	**150**		2.0		mg/L		11/14/23 10:09	11/20/23 17:03	1
Potassium	**6.6**		0.50		mg/L		11/14/23 10:09	11/20/23 17:03	1
Sodium	**290**		0.50		mg/L		11/14/23 10:09	11/20/23 17:03	1
Manganese	**3.0**		0.010		mg/L		11/14/23 10:09	11/20/23 17:03	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**0.053**		0.050		mg/L		11/15/23 07:10	11/16/23 19:13	1

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.0		ug/L		11/14/23 08:56	11/16/23 00:53	1
Arsenic	**1.3**		0.50		ug/L		11/14/23 08:56	11/16/23 00:53	1
Barium	**25**	**L3 R6**	0.50		ug/L		11/14/23 08:56	11/16/23 00:53	1
Cadmium	ND		0.10		ug/L		11/14/23 08:56	11/16/23 00:53	1
Chromium	ND		1.0		ug/L		11/14/23 08:56	11/16/23 00:53	1
Cobalt	**3.7**		0.50		ug/L		11/14/23 08:56	11/16/23 00:53	1
Lead	ND	L3	0.50		ug/L		11/14/23 08:56	11/16/23 00:53	1
Molybdenum	**3.3**	**T5**	0.50		ug/L		11/14/23 08:56	11/16/23 00:53	1
Selenium	ND		0.50		ug/L		11/14/23 08:56	11/20/23 15:38	1
Thallium	ND		0.10		ug/L		11/14/23 08:56	11/16/23 00:53	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		11/14/23 13:28	11/14/23 17:57	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3 (SM 2320B)	**320**		6.0		mg/L			11/15/23 18:09	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**320**		6.0		mg/L			11/15/23 18:09	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			11/15/23 18:09	1
Alkalinity, Phenolphthalein (SM 2320B)	ND		6.0		mg/L			11/15/23 18:09	1
Hydroxide Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			11/15/23 18:09	1
Total Dissolved Solids (SM 2540C)	**2700**		20		mg/L			11/13/23 11:06	1
pH (SM 4500 H+ B)	**7.4**	**H5**	1.7		SU			11/15/23 13:33	1
Temperature (SM 4500 H+ B)	**9.6**	**H5 T5**	0.1		Degrees C			11/15/23 13:33	1

Client Sample ID: FC-CCR-MW64-1123

Date Collected: 11/06/23 13:29
Date Received: 11/10/23 14:28

Lab Sample ID: 550-210426-3

Matrix: Water

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**52**	**D2**	4.0		mg/L			11/16/23 07:27	2
Fluoride	**1.5**	**D2**	0.80		mg/L			11/16/23 07:27	2
Sulfate	ND	D2	400		mg/L			11/16/23 07:45	200

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		0.0010		mg/L		11/14/23 10:09	11/20/23 17:06	1
Boron	**0.58**		0.050		mg/L		11/14/23 10:09	11/20/23 17:06	1
Calcium	**87**		2.0		mg/L		11/14/23 10:09	11/20/23 17:06	1
Iron	**0.48**		0.10		mg/L		11/14/23 10:09	11/20/23 17:06	1
Magnesium	**34**		2.0		mg/L		11/14/23 10:09	11/20/23 17:06	1
Potassium	**6.4**		0.50		mg/L		11/14/23 10:09	11/20/23 17:06	1
Sodium	**130**		0.50		mg/L		11/14/23 10:09	11/20/23 17:06	1
Manganese	**0.38**		0.010		mg/L		11/14/23 10:09	11/20/23 17:06	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	ND		0.050		mg/L		11/15/23 07:10	11/16/23 19:25	1

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.0		ug/L		11/14/23 08:56	11/16/23 00:55	1
Arsenic	**0.97**		0.50		ug/L		11/14/23 08:56	11/16/23 00:55	1
Barium	**29**	**L3 R6**	0.50		ug/L		11/14/23 08:56	11/16/23 00:55	1
Cadmium	ND		0.10		ug/L		11/14/23 08:56	11/16/23 00:55	1
Chromium	ND		1.0		ug/L		11/14/23 08:56	11/16/23 00:55	1
Cobalt	**1.6**		0.50		ug/L		11/14/23 08:56	11/16/23 00:55	1
Lead	ND	L3	0.50		ug/L		11/14/23 08:56	11/16/23 00:55	1
Molybdenum	**4.4**	**T5**	0.50		ug/L		11/14/23 08:56	11/16/23 00:55	1
Selenium	ND		0.50		ug/L		11/14/23 08:56	11/20/23 15:40	1
Thallium	**0.15**		0.10		ug/L		11/14/23 08:56	11/16/23 00:55	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		11/14/23 13:28	11/14/23 17:59	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3 (SM 2320B)	**260**		6.0		mg/L			11/15/23 18:18	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**260**		6.0		mg/L			11/15/23 18:18	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			11/15/23 18:18	1
Alkalinity, Phenolphthalein (SM 2320B)	ND		6.0		mg/L			11/15/23 18:18	1
Hydroxide Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			11/15/23 18:18	1
Total Dissolved Solids (SM 2540C)	**710**		20		mg/L			11/13/23 11:06	1
pH (SM 4500 H+ B)	**7.9**	**H5**	1.7		SU			11/15/23 13:34	1
Temperature (SM 4500 H+ B)	**9.4**	**H5 T5**	0.1		Degrees C			11/15/23 13:34	1

Client Sample ID: FC-CCR-MW65-1123

Date Collected: 11/06/23 14:34
Date Received: 11/10/23 14:28

Lab Sample ID: 550-210426-4

Matrix: Water

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**54**		2.0		mg/L			11/30/23 05:20	1
Fluoride	**1.5**		0.40		mg/L			11/30/23 05:20	1
Sulfate	**300**	**D2**	20		mg/L			11/30/23 05:48	10

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		0.0010		mg/L		11/14/23 10:09	11/20/23 17:08	1
Boron	**0.67**		0.050		mg/L		11/14/23 10:09	11/20/23 17:08	1
Calcium	**110**		2.0		mg/L		11/14/23 10:09	11/20/23 17:08	1
Iron	ND		0.10		mg/L		11/14/23 10:09	11/20/23 17:08	1
Magnesium	**53**		2.0		mg/L		11/14/23 10:09	11/20/23 17:08	1
Potassium	**5.9**		0.50		mg/L		11/14/23 10:09	11/20/23 17:08	1
Sodium	**160**		0.50		mg/L		11/14/23 10:09	11/20/23 17:08	1
Manganese	**1.3**		0.010		mg/L		11/14/23 10:09	11/20/23 17:08	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	ND		0.050		mg/L		11/15/23 07:10	11/16/23 19:27	1

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.0		ug/L		11/14/23 08:56	11/16/23 00:57	1
Arsenic	**1.1**		0.50		ug/L		11/14/23 08:56	11/16/23 00:57	1
Barium	**21**	**L3 R6**	0.50		ug/L		11/14/23 08:56	11/16/23 00:57	1
Cadmium	ND		0.10		ug/L		11/14/23 08:56	11/16/23 00:57	1
Chromium	ND		1.0		ug/L		11/14/23 08:56	11/16/23 00:57	1
Cobalt	**1.6**		0.50		ug/L		11/14/23 08:56	11/16/23 00:57	1
Lead	ND	L3	0.50		ug/L		11/14/23 08:56	11/16/23 00:57	1
Molybdenum	**7.3**	**T5**	0.50		ug/L		11/14/23 08:56	11/16/23 00:57	1
Selenium	ND		0.50		ug/L		11/14/23 08:56	11/20/23 15:42	1
Thallium	ND		0.10		ug/L		11/14/23 08:56	11/16/23 00:57	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		11/14/23 13:28	11/14/23 18:05	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3 (SM 2320B)	**340**		6.0		mg/L			11/15/23 18:26	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**340**		6.0		mg/L			11/15/23 18:26	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			11/15/23 18:26	1
Alkalinity, Phenolphthalein (SM 2320B)	ND		6.0		mg/L			11/15/23 18:26	1
Hydroxide Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			11/15/23 18:26	1
Total Dissolved Solids (SM 2540C)	**840**		20		mg/L			11/13/23 11:06	1
pH (SM 4500 H+ B)	**7.7**	**H5**	1.7		SU			11/15/23 13:35	1
Temperature (SM 4500 H+ B)	**10.5**	**H5 T5**	0.1		Degrees C			11/15/23 13:35	1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 550-311191/2
Matrix: Water
Analysis Batch: 311191

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		2.0		mg/L			11/15/23 10:17	1
Fluoride	ND		0.40		mg/L			11/15/23 10:17	1
Sulfate	ND		2.0		mg/L			11/15/23 10:17	1

Lab Sample ID: LCS 550-311191/45
Matrix: Water
Analysis Batch: 311191

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			20.0	21.0		mg/L		105	90 - 110		
Fluoride			4.00	4.15		mg/L		104	90 - 110		
Sulfate			20.0	21.1		mg/L		106	90 - 110		

Lab Sample ID: LCSD 550-311191/46
Matrix: Water
Analysis Batch: 311191

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			20.0	20.9		mg/L		105	90 - 110	0	20
Fluoride			4.00	4.20		mg/L		105	90 - 110	1	20
Sulfate			20.0	21.0		mg/L		105	90 - 110	0	20

Lab Sample ID: 550-210555-B-1 MS ^2
Matrix: Water
Analysis Batch: 311191

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	32		40.0	76.5		mg/L		111	80 - 120		
Fluoride	2.0		8.00	10.2		mg/L		103	80 - 120		
Sulfate	400	E2 M3	40.0	432	E2 M3	mg/L		73	80 - 120		

Lab Sample ID: 550-210555-B-1 MSD ^2
Matrix: Water
Analysis Batch: 311191

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	32		40.0	75.5		mg/L		108	80 - 120	1	20
Fluoride	2.0		8.00	10.2		mg/L		103	80 - 120	0	20
Sulfate	400	E2 M3	40.0	431	E2 M3	mg/L		71	80 - 120	0	20

Lab Sample ID: MB 550-311928/2
Matrix: Water
Analysis Batch: 311928

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		2.0		mg/L			11/29/23 13:57	1
Fluoride	ND		0.40		mg/L			11/29/23 13:57	1
Sulfate	ND		2.0		mg/L			11/29/23 13:57	1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 550-311928/5
Matrix: Water
Analysis Batch: 311928

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			20.0	19.6		mg/L		98	90 - 110		
Fluoride			4.00	4.16		mg/L		104	90 - 110		
Sulfate			20.0	20.7		mg/L		104	90 - 110		

Lab Sample ID: LCSD 550-311928/6
Matrix: Water
Analysis Batch: 311928

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			20.0	19.5		mg/L		98	90 - 110	0	20
Fluoride			4.00	4.17		mg/L		104	90 - 110	0	20
Sulfate			20.0	20.7		mg/L		103	90 - 110	0	20

Lab Sample ID: 550-211048-A-1 MS
Matrix: Water
Analysis Batch: 311928

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	470	E2 M3	20.0	469	E2 M3	mg/L		-19	80 - 120		
Fluoride	ND		4.00	4.45		mg/L		102	80 - 120		
Sulfate	200	M3	20.0	207	E2 M3	mg/L		57	80 - 120		

Lab Sample ID: 550-211048-A-1 MSD
Matrix: Water
Analysis Batch: 311928

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	470	E2 M3	20.0	468	E2 M3	mg/L		-22	80 - 120	0	20
Fluoride	ND		4.00	4.51		mg/L		103	80 - 120	1	20
Sulfate	200	M3	20.0	208	E2 M3	mg/L		58	80 - 120	0	20

Lab Sample ID: MB 550-312090/2
Matrix: Water
Analysis Batch: 312090

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		2.0		mg/L			11/30/23 16:06	1
Fluoride	ND		0.40		mg/L			11/30/23 16:06	1
Sulfate	ND		2.0		mg/L			11/30/23 16:06	1

Lab Sample ID: LCS 550-312090/5
Matrix: Water
Analysis Batch: 312090

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			20.0	21.2		mg/L		106	90 - 110		
Fluoride			4.00	4.26		mg/L		107	90 - 110		
Sulfate			20.0	21.4		mg/L		107	90 - 110		

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 550-312090/6
Matrix: Water
Analysis Batch: 312090

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			20.0	21.2		mg/L		106	90 - 110	0	20
Fluoride			4.00	4.29		mg/L		107	90 - 110	1	20
Sulfate			20.0	21.4		mg/L		107	90 - 110	0	20

Lab Sample ID: 550-211106-A-2 MS
Matrix: Water
Analysis Batch: 312090

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	670	E2 M3	20.0	663	E2 M3	mg/L		-60	80 - 120
Fluoride	1.9		4.00	5.90		mg/L		99	80 - 120
Sulfate	700	E2 M3	20.0	690	E2 M3	mg/L		-50	80 - 120

Lab Sample ID: 550-211106-A-2 MSD
Matrix: Water
Analysis Batch: 312090

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	670	E2 M3	20.0	663	E2 M3	mg/L		-61	80 - 120	0	20
Fluoride	1.9		4.00	5.98		mg/L		101	80 - 120	1	20
Sulfate	700	E2 M3	20.0	689	E2 M3	mg/L		-54	80 - 120	0	20

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 550-311064/1-A
Matrix: Water
Analysis Batch: 311482

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 311064

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		0.0010		mg/L		11/14/23 10:09	11/20/23 16:34	1
Boron	ND		0.050		mg/L		11/14/23 10:09	11/20/23 16:34	1
Calcium	ND		2.0		mg/L		11/14/23 10:09	11/20/23 16:34	1
Iron	ND		0.10		mg/L		11/14/23 10:09	11/20/23 16:34	1
Magnesium	ND		2.0		mg/L		11/14/23 10:09	11/20/23 16:34	1
Potassium	ND		0.50		mg/L		11/14/23 10:09	11/20/23 16:34	1
Sodium	ND		0.50		mg/L		11/14/23 10:09	11/20/23 16:34	1
Manganese	ND		0.010		mg/L		11/14/23 10:09	11/20/23 16:34	1

Lab Sample ID: LCS 550-311064/2-A
Matrix: Water
Analysis Batch: 311482

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 311064

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Beryllium			1.00	1.17		mg/L		117	85 - 115
Boron			1.00	1.16		mg/L		116	85 - 115
Calcium			21.0	24.5		mg/L		117	85 - 115
Iron			1.00	1.18		mg/L		118	85 - 115
Magnesium			21.0	23.9		mg/L		114	85 - 115
Potassium			20.0	23.0		mg/L		115	85 - 115
Sodium			20.0	22.8		mg/L		114	85 - 115

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: LCS 550-311064/2-A
Matrix: Water
Analysis Batch: 311482

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 311064

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Manganese			1.00	1.14		mg/L		114	85 - 115		

Lab Sample ID: LCSD 550-311064/3-A
Matrix: Water
Analysis Batch: 311482

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 311064

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Beryllium			1.00	1.17		mg/L		117	85 - 115	0	20
Boron			1.00	1.14		mg/L		114	85 - 115	2	20
Calcium			21.0	24.2		mg/L		115	85 - 115	1	20
Iron			1.00	1.16		mg/L		116	85 - 115	2	20
Magnesium			21.0	23.7		mg/L		113	85 - 115	1	20
Potassium			20.0	22.6		mg/L		113	85 - 115	2	20
Sodium			20.0	22.4		mg/L		112	85 - 115	2	20
Manganese			1.00	1.13		mg/L		113	85 - 115	1	20

Lab Sample ID: 550-210429-A-1-A MS
Matrix: Water
Analysis Batch: 311482

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 311064

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Beryllium	ND		1.00	1.28		mg/L		128	70 - 130		
Boron	11	M3	1.00	11.3	M3	mg/L		56	70 - 130		
Calcium	570	M3	21.0	530	M3	mg/L		-172	70 - 130		
Iron	0.35	M1	1.00	1.65	M1	mg/L		131	70 - 130		
Magnesium	780	M3	21.0	720	M3	mg/L		-292	70 - 130		
Potassium	37		20.0	62.7		mg/L		128	70 - 130		
Sodium	1400	E2 M3	20.0	1270	E2 M3	mg/L		-581	70 - 130		
Manganese	0.49		1.00	1.64		mg/L		115	70 - 130		

Lab Sample ID: 550-210429-A-1-B MSD
Matrix: Water
Analysis Batch: 311482

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 311064

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Beryllium	ND		1.00	1.25		mg/L		125	70 - 130	3	20
Boron	11	M3	1.00	11.3	M3	mg/L		52	70 - 130	0	20
Calcium	570	M3	21.0	512	M3	mg/L		-255	70 - 130	3	20
Iron	0.35	M1	1.00	1.57		mg/L		123	70 - 130	5	20
Magnesium	780	M3	21.0	696	M3	mg/L		-406	70 - 130	3	20
Potassium	37		20.0	60.4		mg/L		117	70 - 130	4	20
Sodium	1400	E2 M3	20.0	1220	E2 M3	mg/L		-828	70 - 130	4	20
Manganese	0.49		1.00	1.64		mg/L		114	70 - 130	0	20

Lab Sample ID: MB 570-383775/1-A
Matrix: Water
Analysis Batch: 384611

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 383775

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	ND		0.050		mg/L		11/15/23 07:10	11/16/23 18:55	1

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: LCS 570-383775/2-A
Matrix: Water
Analysis Batch: 384611

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 383775

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Lithium			0.500	0.499		mg/L		100	85 - 115		

Lab Sample ID: LCSD 570-383775/3-A
Matrix: Water
Analysis Batch: 384611

Client Sample ID: Lab Control Sample Dup
Prep Type: Total Recoverable
Prep Batch: 383775

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Lithium			0.500	0.497		mg/L		99	85 - 115	0	20

Lab Sample ID: 570-160842-L-8-B MS
Matrix: Water
Analysis Batch: 384611

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 383775

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Lithium	ND		0.500	0.531		mg/L		106	80 - 120		

Lab Sample ID: 570-160842-L-8-C MSD
Matrix: Water
Analysis Batch: 384611

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 383775

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Lithium	ND		0.500	0.529		mg/L		106	80 - 120	0	20

Method: 200.8 LL - Metals (ICP/MS)

Lab Sample ID: MB 550-311057/1-A
Matrix: Water
Analysis Batch: 311226

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 311057

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.0		ug/L		11/14/23 08:56	11/16/23 00:22	1
Arsenic	ND		0.50		ug/L		11/14/23 08:56	11/16/23 00:22	1
Barium	ND		0.50		ug/L		11/14/23 08:56	11/16/23 00:22	1
Cadmium	ND		0.10		ug/L		11/14/23 08:56	11/16/23 00:22	1
Chromium	ND		1.0		ug/L		11/14/23 08:56	11/16/23 00:22	1
Cobalt	ND		0.50		ug/L		11/14/23 08:56	11/16/23 00:22	1
Lead	ND		0.50		ug/L		11/14/23 08:56	11/16/23 00:22	1
Molybdenum	ND		0.50		ug/L		11/14/23 08:56	11/16/23 00:22	1
Selenium	ND		0.50		ug/L		11/14/23 08:56	11/16/23 00:22	1
Thallium	ND		0.10		ug/L		11/14/23 08:56	11/16/23 00:22	1

Lab Sample ID: MB 550-311057/1-A
Matrix: Water
Analysis Batch: 311523

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 311057

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Selenium	ND		0.50		ug/L		11/14/23 08:56	11/20/23 15:03	1

Method: 200.8 LL - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 550-311057/2-A
Matrix: Water
Analysis Batch: 311226

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 311057

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Antimony			100	102		ug/L		102	85 - 115		
Arsenic			100	97.9		ug/L		98	85 - 115		
Barium			100	145	L3	ug/L		145	85 - 115		
Cadmium			100	99.5		ug/L		99	85 - 115		
Chromium			100	96.5		ug/L		96	85 - 115		
Cobalt			100	99.9		ug/L		100	85 - 115		
Lead			100	126	L3	ug/L		126	85 - 115		
Molybdenum			100	101		ug/L		101	85 - 115		
Thallium			100	113		ug/L		113	85 - 115		

Lab Sample ID: LCS 550-311057/2-A
Matrix: Water
Analysis Batch: 311523

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 311057

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Selenium			100	87.3		ug/L		87	85 - 115		

Lab Sample ID: LCSD 550-311057/3-A
Matrix: Water
Analysis Batch: 311226

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 311057

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony			100	101		ug/L		101	85 - 115	1	20
Arsenic			100	96.8		ug/L		97	85 - 115	1	20
Barium			100	115	R6	ug/L		115	85 - 115	23	20
Cadmium			100	97.8		ug/L		98	85 - 115	2	20
Chromium			100	96.1		ug/L		96	85 - 115	0	20
Cobalt			100	98.2		ug/L		98	85 - 115	2	20
Lead			100	119	L3	ug/L		119	85 - 115	6	20
Molybdenum			100	99.0		ug/L		99	85 - 115	2	20
Thallium			100	114		ug/L		114	85 - 115	1	20

Lab Sample ID: LCSD 550-311057/3-A
Matrix: Water
Analysis Batch: 311523

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 311057

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Selenium			100	88.5		ug/L		88	85 - 115	1	20

Lab Sample ID: 550-210429-C-1-A MS
Matrix: Water
Analysis Batch: 311226

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 311057

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Antimony	ND		100	107		ug/L		106	70 - 130		
Arsenic	1.3		100	112		ug/L		111	70 - 130		
Barium	14	L3 R6	100	138		ug/L		124	70 - 130		
Cadmium	0.19		100	94.1		ug/L		94	70 - 130		
Chromium	ND		100	99.3		ug/L		99	70 - 130		

Method: 200.8 LL - Metals (ICP/MS) (Continued)

Lab Sample ID: 550-210429-C-1-A MS
Matrix: Water
Analysis Batch: 311226

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 311057

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Cobalt	100		100	199		ug/L		98	70 - 130
Lead	0.74	L3	100	110		ug/L		110	70 - 130
Molybdenum	2.2		100	108		ug/L		106	70 - 130
Thallium	0.50		100	103		ug/L		103	70 - 130

Lab Sample ID: 550-210429-C-1-B MSD
Matrix: Water
Analysis Batch: 311226

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 311057

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	ND		100	101		ug/L		101	70 - 130	5	20
Arsenic	1.3		100	113		ug/L		111	70 - 130	0	20
Barium	14	L3 R6	100	120		ug/L		105	70 - 130	14	20
Cadmium	0.19		100	91.6		ug/L		91	70 - 130	3	20
Chromium	ND		100	97.9		ug/L		97	70 - 130	1	20
Cobalt	100		100	194		ug/L		93	70 - 130	2	20
Lead	0.74	L3	100	106		ug/L		105	70 - 130	4	20
Molybdenum	2.2		100	107		ug/L		105	70 - 130	1	20
Thallium	0.50		100	105		ug/L		105	70 - 130	2	20

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 550-311086/1-A
Matrix: Water
Analysis Batch: 311105

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 311086

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		11/14/23 13:28	11/14/23 17:17	1

Lab Sample ID: LCS 550-311086/2-A
Matrix: Water
Analysis Batch: 311105

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 311086

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury			0.00500	0.00499		mg/L		100	85 - 115

Lab Sample ID: LCSD 550-311086/3-A
Matrix: Water
Analysis Batch: 311105

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 311086

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury			0.00500	0.00488		mg/L		98	85 - 115	2	20

Lab Sample ID: 550-210432-I-2-D MSD
Matrix: Water
Analysis Batch: 311105

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 311086

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		0.00500	0.00504		mg/L		101	70 - 130	1	20

Method: 245.1 - Mercury (CVAA) (Continued)

Lab Sample ID: 550-210449-H-2-C MS
Matrix: Water
Analysis Batch: 311105

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 311086

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	ND		0.00500	0.00520		mg/L		104	70 - 130

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 550-311195/5
Matrix: Water
Analysis Batch: 311195

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3	ND		6.0		mg/L			11/15/23 12:58	1
Bicarbonate Alkalinity as CaCO3	ND		6.0		mg/L			11/15/23 12:58	1
Carbonate Alkalinity as CaCO3	ND		6.0		mg/L			11/15/23 12:58	1
Alkalinity, Phenolphthalein	ND		6.0		mg/L			11/15/23 12:58	1
Hydroxide Alkalinity as CaCO3	ND		6.0		mg/L			11/15/23 12:58	1

Lab Sample ID: LCS 550-311195/4
Matrix: Water
Analysis Batch: 311195

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Alkalinity as CaCO3			250	244		mg/L		98	90 - 110

Lab Sample ID: LCSD 550-311195/8
Matrix: Water
Analysis Batch: 311195

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Alkalinity as CaCO3			250	245		mg/L		98	90 - 110	0	20

Lab Sample ID: 550-210253-E-3 DU
Matrix: Water
Analysis Batch: 311195

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Alkalinity as CaCO3	300			300		mg/L				0.5	20
Bicarbonate Alkalinity as CaCO3	300			300		mg/L				0.5	20
Carbonate Alkalinity as CaCO3	ND			ND		mg/L				NC	20
Alkalinity, Phenolphthalein	ND			ND		mg/L				NC	20
Hydroxide Alkalinity as CaCO3	ND			ND		mg/L				NC	20

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 550-310997/1
Matrix: Water
Analysis Batch: 310997

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		20		mg/L			11/13/23 11:06	1

Method: SM 2540C - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: LCS 550-310997/2
Matrix: Water
Analysis Batch: 310997

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Dissolved Solids			1000	1010		mg/L		101	90 - 110		

Lab Sample ID: LCSD 550-310997/3
Matrix: Water
Analysis Batch: 310997

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Dissolved Solids			1000	998		mg/L		100	90 - 110	1	10

Lab Sample ID: 550-210396-A-2 DU
Matrix: Water
Analysis Batch: 310997

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	480			474		mg/L				2	10

Method: SM 4500 H+ B - pH

Lab Sample ID: LCSSRM 550-311239/13
Matrix: Water
Analysis Batch: 311239

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits		
pH			7.00	7.1		SU		100.9	98.5 - 101.5		

Lab Sample ID: LCSSRM 550-311239/25
Matrix: Water
Analysis Batch: 311239

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits		
pH			7.00	7.1		SU		100.7	98.5 - 101.5		

Lab Sample ID: 550-210426-1 DU
Matrix: Water
Analysis Batch: 311239

Client Sample ID: FC-CCR-MW62-1123
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
pH	7.0	H5		7.0		SU				0.1	5
Temperature	10.0	H5 T5		10.0		Degrees C				0	

HPLC/IC

Analysis Batch: 311191

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210426-2	FC-CCR-MW63-1123	Total/NA	Water	300.0	
550-210426-2	FC-CCR-MW63-1123	Total/NA	Water	300.0	
550-210426-3	FC-CCR-MW64-1123	Total/NA	Water	300.0	
550-210426-3	FC-CCR-MW64-1123	Total/NA	Water	300.0	
MB 550-311191/2	Method Blank	Total/NA	Water	300.0	
LCS 550-311191/45	Lab Control Sample	Total/NA	Water	300.0	
LCSD 550-311191/46	Lab Control Sample Dup	Total/NA	Water	300.0	
550-210555-B-1 MS ^2	Matrix Spike	Total/NA	Water	300.0	
550-210555-B-1 MSD ^2	Matrix Spike Duplicate	Total/NA	Water	300.0	

Analysis Batch: 311928

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210426-1	FC-CCR-MW62-1123	Total/NA	Water	300.0	
550-210426-4	FC-CCR-MW65-1123	Total/NA	Water	300.0	
550-210426-4	FC-CCR-MW65-1123	Total/NA	Water	300.0	
MB 550-311928/2	Method Blank	Total/NA	Water	300.0	
LCS 550-311928/5	Lab Control Sample	Total/NA	Water	300.0	
LCSD 550-311928/6	Lab Control Sample Dup	Total/NA	Water	300.0	
550-211048-A-1 MS	Matrix Spike	Total/NA	Water	300.0	
550-211048-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Analysis Batch: 312090

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210426-1	FC-CCR-MW62-1123	Total/NA	Water	300.0	
MB 550-312090/2	Method Blank	Total/NA	Water	300.0	
LCS 550-312090/5	Lab Control Sample	Total/NA	Water	300.0	
LCSD 550-312090/6	Lab Control Sample Dup	Total/NA	Water	300.0	
550-211106-A-2 MS	Matrix Spike	Total/NA	Water	300.0	
550-211106-A-2 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Metals

Prep Batch: 311057

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210426-1	FC-CCR-MW62-1123	Total/NA	Water	200.8	
550-210426-2	FC-CCR-MW63-1123	Total/NA	Water	200.8	
550-210426-3	FC-CCR-MW64-1123	Total/NA	Water	200.8	
550-210426-4	FC-CCR-MW65-1123	Total/NA	Water	200.8	
MB 550-311057/1-A	Method Blank	Total/NA	Water	200.8	
LCS 550-311057/2-A	Lab Control Sample	Total/NA	Water	200.8	
LCSD 550-311057/3-A	Lab Control Sample Dup	Total/NA	Water	200.8	
550-210429-C-1-A MS	Matrix Spike	Total/NA	Water	200.8	
550-210429-C-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	200.8	

Prep Batch: 311064

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210426-1	FC-CCR-MW62-1123	Total/NA	Water	200.7	
550-210426-2	FC-CCR-MW63-1123	Total/NA	Water	200.7	
550-210426-3	FC-CCR-MW64-1123	Total/NA	Water	200.7	
550-210426-4	FC-CCR-MW65-1123	Total/NA	Water	200.7	
MB 550-311064/1-A	Method Blank	Total/NA	Water	200.7	

Metals (Continued)

Prep Batch: 311064 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 550-311064/2-A	Lab Control Sample	Total/NA	Water	200.7	
LCSD 550-311064/3-A	Lab Control Sample Dup	Total/NA	Water	200.7	
550-210429-A-1-A MS	Matrix Spike	Total/NA	Water	200.7	
550-210429-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	200.7	

Prep Batch: 311086

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210426-1	FC-CCR-MW62-1123	Total/NA	Water	245.1	
550-210426-2	FC-CCR-MW63-1123	Total/NA	Water	245.1	
550-210426-3	FC-CCR-MW64-1123	Total/NA	Water	245.1	
550-210426-4	FC-CCR-MW65-1123	Total/NA	Water	245.1	
MB 550-311086/1-A	Method Blank	Total/NA	Water	245.1	
LCS 550-311086/2-A	Lab Control Sample	Total/NA	Water	245.1	
LCSD 550-311086/3-A	Lab Control Sample Dup	Total/NA	Water	245.1	
550-210432-I-2-D MSD	Matrix Spike Duplicate	Total/NA	Water	245.1	
550-210449-H-2-C MS	Matrix Spike	Total/NA	Water	245.1	

Analysis Batch: 311105

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210426-1	FC-CCR-MW62-1123	Total/NA	Water	245.1	311086
550-210426-2	FC-CCR-MW63-1123	Total/NA	Water	245.1	311086
550-210426-3	FC-CCR-MW64-1123	Total/NA	Water	245.1	311086
550-210426-4	FC-CCR-MW65-1123	Total/NA	Water	245.1	311086
MB 550-311086/1-A	Method Blank	Total/NA	Water	245.1	311086
LCS 550-311086/2-A	Lab Control Sample	Total/NA	Water	245.1	311086
LCSD 550-311086/3-A	Lab Control Sample Dup	Total/NA	Water	245.1	311086
550-210432-I-2-D MSD	Matrix Spike Duplicate	Total/NA	Water	245.1	311086
550-210449-H-2-C MS	Matrix Spike	Total/NA	Water	245.1	311086

Analysis Batch: 311226

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210426-1	FC-CCR-MW62-1123	Total/NA	Water	200.8 LL	311057
550-210426-2	FC-CCR-MW63-1123	Total/NA	Water	200.8 LL	311057
550-210426-3	FC-CCR-MW64-1123	Total/NA	Water	200.8 LL	311057
550-210426-4	FC-CCR-MW65-1123	Total/NA	Water	200.8 LL	311057
MB 550-311057/1-A	Method Blank	Total/NA	Water	200.8 LL	311057
LCS 550-311057/2-A	Lab Control Sample	Total/NA	Water	200.8 LL	311057
LCSD 550-311057/3-A	Lab Control Sample Dup	Total/NA	Water	200.8 LL	311057
550-210429-C-1-A MS	Matrix Spike	Total/NA	Water	200.8 LL	311057
550-210429-C-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	200.8 LL	311057

Analysis Batch: 311482

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210426-1	FC-CCR-MW62-1123	Total/NA	Water	200.7 Rev 4.4	311064
550-210426-2	FC-CCR-MW63-1123	Total/NA	Water	200.7 Rev 4.4	311064
550-210426-3	FC-CCR-MW64-1123	Total/NA	Water	200.7 Rev 4.4	311064
550-210426-4	FC-CCR-MW65-1123	Total/NA	Water	200.7 Rev 4.4	311064
MB 550-311064/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	311064
LCS 550-311064/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	311064
LCSD 550-311064/3-A	Lab Control Sample Dup	Total/NA	Water	200.7 Rev 4.4	311064
550-210429-A-1-A MS	Matrix Spike	Total/NA	Water	200.7 Rev 4.4	311064

Metals (Continued)

Analysis Batch: 311482 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210429-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	200.7 Rev 4.4	311064

Analysis Batch: 311523

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210426-1	FC-CCR-MW62-1123	Total/NA	Water	200.8 LL	311057
550-210426-2	FC-CCR-MW63-1123	Total/NA	Water	200.8 LL	311057
550-210426-3	FC-CCR-MW64-1123	Total/NA	Water	200.8 LL	311057
550-210426-4	FC-CCR-MW65-1123	Total/NA	Water	200.8 LL	311057
MB 550-311057/1-A	Method Blank	Total/NA	Water	200.8 LL	311057
LCS 550-311057/2-A	Lab Control Sample	Total/NA	Water	200.8 LL	311057
LCSD 550-311057/3-A	Lab Control Sample Dup	Total/NA	Water	200.8 LL	311057

Analysis Batch: 311591

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210426-1	FC-CCR-MW62-1123	Total/NA	Water	200.7 Rev 4.4	311064

Prep Batch: 383775

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210426-1	FC-CCR-MW62-1123	Total Recoverable	Water	200.7	
550-210426-2	FC-CCR-MW63-1123	Total Recoverable	Water	200.7	
550-210426-3	FC-CCR-MW64-1123	Total Recoverable	Water	200.7	
550-210426-4	FC-CCR-MW65-1123	Total Recoverable	Water	200.7	
MB 570-383775/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 570-383775/2-A	Lab Control Sample	Total Recoverable	Water	200.7	
LCSD 570-383775/3-A	Lab Control Sample Dup	Total Recoverable	Water	200.7	
570-160842-L-8-B MS	Matrix Spike	Total Recoverable	Water	200.7	
570-160842-L-8-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	200.7	

Analysis Batch: 384611

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210426-1	FC-CCR-MW62-1123	Total Recoverable	Water	200.7 Rev 4.4	383775
550-210426-2	FC-CCR-MW63-1123	Total Recoverable	Water	200.7 Rev 4.4	383775
550-210426-3	FC-CCR-MW64-1123	Total Recoverable	Water	200.7 Rev 4.4	383775
550-210426-4	FC-CCR-MW65-1123	Total Recoverable	Water	200.7 Rev 4.4	383775
MB 570-383775/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	383775
LCS 570-383775/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	383775
LCSD 570-383775/3-A	Lab Control Sample Dup	Total Recoverable	Water	200.7 Rev 4.4	383775
570-160842-L-8-B MS	Matrix Spike	Total Recoverable	Water	200.7 Rev 4.4	383775
570-160842-L-8-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	200.7 Rev 4.4	383775

General Chemistry

Analysis Batch: 310997

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210426-1	FC-CCR-MW62-1123	Total/NA	Water	SM 2540C	
550-210426-2	FC-CCR-MW63-1123	Total/NA	Water	SM 2540C	
550-210426-3	FC-CCR-MW64-1123	Total/NA	Water	SM 2540C	
550-210426-4	FC-CCR-MW65-1123	Total/NA	Water	SM 2540C	
MB 550-310997/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 550-310997/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 550-310997/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	

General Chemistry (Continued)

Analysis Batch: 310997 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210396-A-2 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 311195

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210426-1	FC-CCR-MW62-1123	Total/NA	Water	SM 2320B	
550-210426-2	FC-CCR-MW63-1123	Total/NA	Water	SM 2320B	
550-210426-3	FC-CCR-MW64-1123	Total/NA	Water	SM 2320B	
550-210426-4	FC-CCR-MW65-1123	Total/NA	Water	SM 2320B	
MB 550-311195/5	Method Blank	Total/NA	Water	SM 2320B	
LCS 550-311195/4	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 550-311195/8	Lab Control Sample Dup	Total/NA	Water	SM 2320B	
550-210253-E-3 DU	Duplicate	Total/NA	Water	SM 2320B	

Analysis Batch: 311239

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210426-1	FC-CCR-MW62-1123	Total/NA	Water	SM 4500 H+ B	
550-210426-2	FC-CCR-MW63-1123	Total/NA	Water	SM 4500 H+ B	
550-210426-3	FC-CCR-MW64-1123	Total/NA	Water	SM 4500 H+ B	
550-210426-4	FC-CCR-MW65-1123	Total/NA	Water	SM 4500 H+ B	
LCSSRM 550-311239/13	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	
LCSSRM 550-311239/25	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	
550-210426-1 DU	FC-CCR-MW62-1123	Total/NA	Water	SM 4500 H+ B	

Lab Chronicle

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-210426-1
SDG: APS Four Corners Power Plant (CWTP)

Client Sample ID: FC-CCR-MW62-1123

Lab Sample ID: 550-210426-1
Date Collected: 11/06/23 11:27
Matrix: Water
Date Received: 11/10/23 14:28

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		100	312090	MMH	EET PHX	11/30/23 19:47
Total/NA	Analysis	300.0		1	311928	MMH	EET PHX	11/30/23 04:24
Total Recoverable	Prep	200.7			383775	JP8N	EET CAL 4	11/15/23 07:10
Total Recoverable	Analysis	200.7 Rev 4.4		1	384611	P1R	EET CAL 4	11/16/23 19:11
Total/NA	Prep	200.7			311064	SGO	EET PHX	11/14/23 10:09
Total/NA	Analysis	200.7 Rev 4.4		1	311482	GLW	EET PHX	11/20/23 17:00
Total/NA	Prep	200.7			311064	SGO	EET PHX	11/14/23 10:09
Total/NA	Analysis	200.7 Rev 4.4		5	311591	GLW	EET PHX	11/21/23 12:12
Total/NA	Prep	200.8			311057	SGO	EET PHX	11/14/23 08:56
Total/NA	Analysis	200.8 LL		1	311226	DSJ	EET PHX	11/16/23 00:51
Total/NA	Prep	200.8			311057	SGO	EET PHX	11/14/23 08:56
Total/NA	Analysis	200.8 LL		1	311523	DSJ	EET PHX	11/20/23 15:36
Total/NA	Prep	245.1			311086	HHL	EET PHX	11/14/23 13:28
Total/NA	Analysis	245.1		1	311105	HHL	EET PHX	11/14/23 17:55
Total/NA	Analysis	SM 2320B		1	311195	MAN	EET PHX	11/15/23 17:54
Total/NA	Analysis	SM 2540C		1	310997	KMG	EET PHX	11/13/23 11:06 - 11/17/23 17:12 [1]
Total/NA	Analysis	SM 4500 H+ B		1	311239	MAN	EET PHX	11/15/23 13:31

Client Sample ID: FC-CCR-MW63-1123

Lab Sample ID: 550-210426-2
Date Collected: 11/06/23 12:35
Matrix: Water
Date Received: 11/10/23 14:28

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		2	311191	SMA	EET PHX	11/16/23 06:50
Total/NA	Analysis	300.0		200	311191	SMA	EET PHX	11/16/23 07:08
Total Recoverable	Prep	200.7			383775	JP8N	EET CAL 4	11/15/23 07:10
Total Recoverable	Analysis	200.7 Rev 4.4		1	384611	P1R	EET CAL 4	11/16/23 19:13
Total/NA	Prep	200.7			311064	SGO	EET PHX	11/14/23 10:09
Total/NA	Analysis	200.7 Rev 4.4		1	311482	GLW	EET PHX	11/20/23 17:03
Total/NA	Prep	200.8			311057	SGO	EET PHX	11/14/23 08:56
Total/NA	Analysis	200.8 LL		1	311226	DSJ	EET PHX	11/16/23 00:53
Total/NA	Prep	200.8			311057	SGO	EET PHX	11/14/23 08:56
Total/NA	Analysis	200.8 LL		1	311523	DSJ	EET PHX	11/20/23 15:38
Total/NA	Prep	245.1			311086	HHL	EET PHX	11/14/23 13:28
Total/NA	Analysis	245.1		1	311105	HHL	EET PHX	11/14/23 17:57
Total/NA	Analysis	SM 2320B		1	311195	MAN	EET PHX	11/15/23 18:09
Total/NA	Analysis	SM 2540C		1	310997	KMG	EET PHX	11/13/23 11:06 - 11/17/23 17:12 [1]
Total/NA	Analysis	SM 4500 H+ B		1	311239	MAN	EET PHX	11/15/23 13:33

Lab Chronicle

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-210426-1
SDG: APS Four Corners Power Plant (CWTP)

Client Sample ID: FC-CCR-MW64-1123

Date Collected: 11/06/23 13:29
Date Received: 11/10/23 14:28

Lab Sample ID: 550-210426-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		2	311191	SMA	EET PHX	11/16/23 07:27
Total/NA	Analysis	300.0		200	311191	SMA	EET PHX	11/16/23 07:45
Total Recoverable	Prep	200.7			383775	JP8N	EET CAL 4	11/15/23 07:10
Total Recoverable	Analysis	200.7 Rev 4.4		1	384611	P1R	EET CAL 4	11/16/23 19:25
Total/NA	Prep	200.7			311064	SGO	EET PHX	11/14/23 10:09
Total/NA	Analysis	200.7 Rev 4.4		1	311482	GLW	EET PHX	11/20/23 17:06
Total/NA	Prep	200.8			311057	SGO	EET PHX	11/14/23 08:56
Total/NA	Analysis	200.8 LL		1	311226	DSJ	EET PHX	11/16/23 00:55
Total/NA	Prep	200.8			311057	SGO	EET PHX	11/14/23 08:56
Total/NA	Analysis	200.8 LL		1	311523	DSJ	EET PHX	11/20/23 15:40
Total/NA	Prep	245.1			311086	HHL	EET PHX	11/14/23 13:28
Total/NA	Analysis	245.1		1	311105	HHL	EET PHX	11/14/23 17:59
Total/NA	Analysis	SM 2320B		1	311195	MAN	EET PHX	11/15/23 18:18
Total/NA	Analysis	SM 2540C		1	310997	KMG	EET PHX	11/13/23 11:06 - 11/17/23 17:12 [1]
Total/NA	Analysis	SM 4500 H+ B		1	311239	MAN	EET PHX	11/15/23 13:34

Client Sample ID: FC-CCR-MW65-1123

Date Collected: 11/06/23 14:34
Date Received: 11/10/23 14:28

Lab Sample ID: 550-210426-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	311928	MMH	EET PHX	11/30/23 05:20
Total/NA	Analysis	300.0		10	311928	MMH	EET PHX	11/30/23 05:48
Total Recoverable	Prep	200.7			383775	JP8N	EET CAL 4	11/15/23 07:10
Total Recoverable	Analysis	200.7 Rev 4.4		1	384611	P1R	EET CAL 4	11/16/23 19:27
Total/NA	Prep	200.7			311064	SGO	EET PHX	11/14/23 10:09
Total/NA	Analysis	200.7 Rev 4.4		1	311482	GLW	EET PHX	11/20/23 17:08
Total/NA	Prep	200.8			311057	SGO	EET PHX	11/14/23 08:56
Total/NA	Analysis	200.8 LL		1	311226	DSJ	EET PHX	11/16/23 00:57
Total/NA	Prep	200.8			311057	SGO	EET PHX	11/14/23 08:56
Total/NA	Analysis	200.8 LL		1	311523	DSJ	EET PHX	11/20/23 15:42
Total/NA	Prep	245.1			311086	HHL	EET PHX	11/14/23 13:28
Total/NA	Analysis	245.1		1	311105	HHL	EET PHX	11/14/23 18:05
Total/NA	Analysis	SM 2320B		1	311195	MAN	EET PHX	11/15/23 18:26
Total/NA	Analysis	SM 2540C		1	310997	KMG	EET PHX	11/13/23 11:06 - 11/17/23 17:12 [1]
Total/NA	Analysis	SM 4500 H+ B		1	311239	MAN	EET PHX	11/15/23 13:35

[1] This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:

EET CAL 4 = Eurofins Calscience Tustin, 2841 Dow Avenue, Tustin, CA 92780, TEL (714)895-5494

EET PHX = Eurofins Phoenix, 4625 East Cotton Center Boulevard, Suite #189, Phoenix, AZ 85040, TEL (602)437-3340

Accreditation/Certification Summary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-210426-1
SDG: APS Four Corners Power Plant (CWTP)

Laboratory: Eurofins Phoenix

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Arizona	State	AZ0728	06-10-24

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
200.8 LL	200.8	Water	Molybdenum
SM 4500 H+ B		Water	Temperature

Laboratory: Eurofins Calscience

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Arizona	State	AZ0830	11-16-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
200.7 Rev 4.4	200.7	Water	Lithium

Method Summary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-210426-1
SDG: APS Four Corners Power Plant (CWTP)

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	EPA	EET PHX
200.7 Rev 4.4	Metals (ICP)	EPA	EET CAL 4
200.7 Rev 4.4	Metals (ICP)	EPA	EET PHX
200.8 LL	Metals (ICP/MS)	EPA	EET PHX
245.1	Mercury (CVAA)	EPA	EET PHX
SM 2320B	Alkalinity	SM	EET PHX
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET PHX
SM 4500 H+ B	pH	SM	EET PHX
200.7	Preparation, Total Recoverable Metals	EPA	EET CAL 4
200.7	Preparation, Total Metals	EPA	EET PHX
200.8	Preparation, Total Metals	EPA	EET PHX
245.1	Preparation, Mercury	EPA	EET PHX

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:

EET CAL 4 = Eurofins Calscience Tustin, 2841 Dow Avenue, Tustin, CA 92780, TEL (714)895-5494

EET PHX = Eurofins Phoenix, 4625 East Cotton Center Boulevard, Suite #189, Phoenix, AZ 85040, TEL (602)437-3340

TestAmerica Phoenix
4625 E Cotton Center Blvd
Suite 189
Phoenix, AZ 85040
phone 602.437.3340 fax 602.454.9303

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

210426

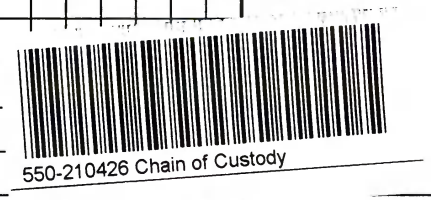
Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☑ Other: CCR

TestAmerica Laboratories, Inc.

12/4/2023

Client Contact	Natalie Chrisman	Pam Norris (505-598-8781)	Date:	COC No:
Arizona Public Service	602-250-3608	Lab Contact: Rachel Sester	Carrier:	1 of 1 COCs
PO Box 355, MS 4915	Analysis Turnaround Time			Sampler:
Fruitland, NM 87416	☐ CALENDAR DAYS ☑ WORKING DAYS			For Lab Use Only:
	TAT if different from Below _____			Walk-in Client:
	☑ 2 weeks			Lab Sampling:
Project Name: CCR Groundwater Monitoring	☐ 1 week			
Site: APS Four Corners Power Plant (CWTP)	☐ 2 days			Job / SDG No.:
PO #: 100622298	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	EPA 300.0 (Cl, F, SO4)	SM 4500-HB (pH)	SM 2540C (TDS)	EPA 200.7 - Totals (B, Ca, Be, K, Mg, Na, Mn, Fe)	EPA 200.7 - Total Lithium	EPA 200.8 - Totals (Sb, As, Ba, Cd, Co, Cr, Pb, Mo, Se, Tl)	EPA 245.1 - Totals (Hg)	SM 2320B (CO3 Alkalinity as CaCO3, HCO3 Alkalinity as CaCO3)	Sample Specific Notes:
FC-CCR-MW62-1123 -1	11/6/2023	1127	G	W	3	N	N	X	X	X	X	X	X	X	X	Low Flow
FC-CCR-MW63-1123 -2	11/6/2023	1235	G	W	3	N	N	X	X	X	X	X	X	X	X	"
FC-CCR-MW64-1123 -3	11/6/2023	1329	G	W	3	N	N	X	X	X	X	X	X	X	X	"
FC-CCR-MW65-1123 -4	11/6/2023	1434	G	W	3	N	N	X	X	X	X	X	X	X	X	"
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____								1	1	1	4	4	4	4	1	



Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☑ Disposal by Lab ☐ Archive for_____ Months

Special Instructions/QC Requirements & Comments:

Method 200.8 with collision cell

4.7°C - ICE - PC

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:				
Relinquished by:	Company: WSP	Date/Time: 11-10-23 @745	Received by:	Company:	Date/Time:
Relinquished by:	Company: AHS	Date/Time: 11-10-23 7:45	Received by:	Company:	Date/Time:
Relinquished by:	Company: AHS	Date/Time: 11-10-23 2:28	Received in Laboratory by:	Company: EETA PHX	Date/Time: 11/10/23 1428

Eurofins Phoenix
4625 East Cotton Center Boulevard Suite #189
Phoenix, AZ 85040
Phone: 602-437-3340

Chain of Custody Record

eurofins | En

Loc: 550
210426

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Eshelman, Linda	Carrier Tracking No(s):	COC No: 550-38211.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: linda.eshelman@et.eurofinsus.com	State of Origin: Arizona	Page: Page 1 of 1

Company: Eurofins Environment Testing Southwest,
Accreditations Required (See note): State - Arizona; State Program - Arizona
Job #: 550-210426-1

Address: 2841 Dow Avenue, Suite 100, ,
City: Tustin
State, Zip: CA, 92780
Phone: 714-895-5494(Tel)
Email:
Due Date Requested: 11/27/2023
TAT Requested (days):
PO #:
WO #:
Project Name: CCR Groundwater Monitoring
Project #: 55009706
Site: Arizona Public Service
SSOW#:

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	200.7/200.7_P_TR (MOD) Lithium	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
FC-CCR-MW62-1123 (550-210426-1)	11/6/23	11:27 Arizona		Water			X	1	
FC-CCR-MW63-1123 (550-210426-2)	11/6/23	12:35 Arizona		Water			X	1	
FC-CCR-MW64-1123 (550-210426-3)	11/6/23	13:29 Arizona		Water			X	1	
FC-CCR-MW65-1123 (550-210426-4)	11/6/23	14:34 Arizona		Water			X	1	

550-210426 Chain of Custody

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Southwest, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Southwest, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Southwest, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Southwest, LLC.

Possible Hazard Identification
Unconfirmed

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Erica 11-13-23	15:15	EETSW	Fedex		
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
				11/14/23 0940	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ☐ Yes ☐ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks: 1.6/1.5 592

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Arizona Public Service Company

Job Number: 550-210426-1
SDG Number: APS Four Corners Power Plant (CWTP)

Login Number: 210426
List Number: 1
Creator: Maycock, Lisa

List Source: Eurofins Phoenix

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	False	Check done at department level as required.

Login Sample Receipt Checklist

Client: Arizona Public Service Company

Job Number: 550-210426-1
SDG Number: APS Four Corners Power Plant (CWTP)

Login Number: 210426
List Number: 2
Creator: Khana, Piyush

List Source: Eurofins Calscience
List Creation: 11/14/23 02:12 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	2264027
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.5
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

PREPARED FOR

Attn: Natalie Chrisman
Arizona Public Service Company
PO BOX 188, Ste. 4458
Joseph City, Arizona 86032

Generated 11/30/2023 6:25:05 PM

JOB DESCRIPTION

CCR Groundwater Monitoring
APS Four Corners Power Plant

JOB NUMBER

550-210427-1

Eurofins Phoenix
4625 East Cotton Center Boulevard
Suite #189
Phoenix AZ 85040

See page two for job notes and contact information.

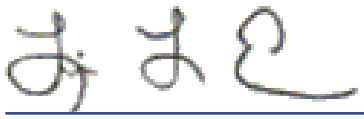
my EOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Southwest, LLC Project Manager.

Authorization



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11/30/2023 6:25:05 PM

Authorized for release by
Linda Eshelman, Project Manager II
linda.eshelman@et.eurofinsus.com
(602)659-7681

Table of Contents

Cover Page 1
Table of Contents 3
Definitions/Glossary 4
Case Narrative 6
Sample Summary 7
Detection Summary 8
Client Sample Results 11
QC Sample Results 16
QC Association Summary 25
Lab Chronicle 29
Certification Summary 32
Method Summary 33
Chain of Custody 34
Receipt Checklists 36

Definitions/Glossary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-210427-1
SDG: APS Four Corners Power Plant

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
D2	Sample required dilution due to high concentration of analyte.
E2	Concentration estimated. Analyte exceeded calibration range. Reanalysis not performed due to sample matrix.
M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The associated blank spike was acceptable.

Metals

Qualifier	Qualifier Description
L3	The associated blank spike recovery was above method acceptance limits.
M1	Matrix spike recovery was high, the associated blank spike recovery was acceptable.
M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The associated blank spike was acceptable.
R6	LFB/LFBD RPD exceeded method control limit. Recovery met acceptance criteria.
T5	Laboratory not licensed for this parameter

General Chemistry

Qualifier	Qualifier Description
D1	Sample required dilution due to matrix.
H2	Initial analysis within holding time. Reanalysis for the required dilution was past holding time.
H5	This test is specified to be performed in the field within 15 minutes of sampling; sample was received and analyzed past the regulatory holding time.
T5	Laboratory not licensed for this parameter

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 550-210427-1

Laboratory: Eurofins Phoenix

Narrative

Job Narrative
550-210427-1

Receipt
The samples were received on 11/10/2023 2:28 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 4.7º C.

HPLC/IC
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Metals
Method 200.8 LL: The laboratory control sample (LCS) associated with preparation batch 550-311057 and analytical batch 550-311226 was outside acceptance criteria for the analytes Barium and Lead. Re-extraction and/or re-analysis could not be performed; therefore, the data have been reported. The batch matrix spike/matrix spike duplicate (MS/MSD) was within acceptance limits and may be used to evaluate matrix performance. FC-CCR-MW66-1123 (550-210427-1), FC-CCR-MW70-1123 (550-210427-2), FC-CCR-MW71-1123 (550-210427-3), FC-CCR-MW72-1123 (550-210427-4), FC-CCR-MW73-1123 (550-210427-5) and FC-CCR-MW86-1123 (550-210427-6)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry
Method SM 2540C: Reanalysis of the following sample was performed outside of the analytical holding time due to residue being > 0.200 g at 10 mL : FC-CCR-MW71-1123 (550-210427-3).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Sample Summary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-210427-1
SDG: APS Four Corners Power Plant

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
550-210427-1	FC-CCR-MW66-1123	Water	11/06/23 16:10	11/10/23 14:28
550-210427-2	FC-CCR-MW70-1123	Water	11/06/23 17:08	11/10/23 14:28
550-210427-3	FC-CCR-MW71-1123	Water	11/08/23 11:06	11/10/23 14:28
550-210427-4	FC-CCR-MW72-1123	Water	11/08/23 12:13	11/10/23 14:28
550-210427-5	FC-CCR-MW73-1123	Water	11/08/23 13:16	11/10/23 14:28
550-210427-6	FC-CCR-MW86-1123	Water	11/06/23 15:25	11/10/23 14:28

Detection Summary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-210427-1
SDG: APS Four Corners Power Plant

Client Sample ID: FC-CCR-MW66-1123 — Lab Sample ID: 550-210427-1

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	1500	D2	400		mg/L	200		300.0	Total/NA
Fluoride	19	D2	0.80		mg/L	2		300.0	Total/NA
Sulfate	11000	D2	400		mg/L	200		300.0	Total/NA
Boron	140		0.25		mg/L	5		200.7 Rev 4.4	Total/NA
Calcium	550		2.0		mg/L	1		200.7 Rev 4.4	Total/NA
Lithium	0.27		0.25		mg/L	5		200.7 Rev 4.4	Total Recoverable
Arsenic	0.0028		0.0020		mg/L	4		200.8 LL	Total/NA
Barium	0.019	L3 R6	0.00050		mg/L	1		200.8 LL	Total/NA
Cobalt	0.0092		0.0020		mg/L	4		200.8 LL	Total/NA
Molybdenum	0.017	T5	0.00050		mg/L	1		200.8 LL	Total/NA
Selenium	0.0022		0.0020		mg/L	4		200.8 LL	Total/NA
Thallium	0.0010		0.00010		mg/L	1		200.8 LL	Total/NA
Total Dissolved Solids	18000		100		mg/L	1		SM 2540C	Total/NA
pH	7.4	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	9.2	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-MW70-1123 — Lab Sample ID: 550-210427-2

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	1100	D2	400		mg/L	200		300.0	Total/NA
Fluoride	1.5	D2	0.80		mg/L	2		300.0	Total/NA
Sulfate	5800	D2	400		mg/L	200		300.0	Total/NA
Boron	99		0.25		mg/L	5		200.7 Rev 4.4	Total/NA
Calcium	590		2.0		mg/L	1		200.7 Rev 4.4	Total/NA
Lithium	0.34		0.10		mg/L	2		200.7 Rev 4.4	Total Recoverable
Arsenic	0.0027		0.0020		mg/L	4		200.8 LL	Total/NA
Barium	0.013	L3 R6	0.00050		mg/L	1		200.8 LL	Total/NA
Cadmium	0.00010		0.00010		mg/L	1		200.8 LL	Total/NA
Cobalt	0.0021		0.0020		mg/L	4		200.8 LL	Total/NA
Molybdenum	0.0035	T5	0.00050		mg/L	1		200.8 LL	Total/NA
Selenium	0.15		0.0020		mg/L	4		200.8 LL	Total/NA
Thallium	0.00039		0.00010		mg/L	1		200.8 LL	Total/NA
Total Dissolved Solids	11000		100		mg/L	1		SM 2540C	Total/NA
pH	7.2	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	10.1	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-MW71-1123 — Lab Sample ID: 550-210427-3

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	640	D2	400		mg/L	200		300.0	Total/NA
Sulfate	14000	D2	400		mg/L	200		300.0	Total/NA
Boron	0.67		0.050		mg/L	1		200.7 Rev 4.4	Total/NA
Calcium	540		2.0		mg/L	1		200.7 Rev 4.4	Total/NA
Lithium	0.40		0.25		mg/L	5		200.7 Rev 4.4	Total Recoverable
Arsenic	0.0024		0.0020		mg/L	4		200.8 LL	Total/NA
Barium	0.010		0.0020		mg/L	4		200.8 LL	Total/NA
Selenium	0.28		0.0020		mg/L	4		200.8 LL	Total/NA
Thallium	0.00040		0.00010		mg/L	1		200.8 LL	Total/NA
Total Dissolved Solids	20000	D1 H2	200		mg/L	1		SM 2540C	Total/NA
pH	7.2	H5	1.7		SU	1		SM 4500 H+ B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: FC-CCR-MW71-1123 (Continued) — Lab Sample ID: 550-210427-3

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Temperature	10.6	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-MW72-1123 — Lab Sample ID: 550-210427-4

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	430	D2	400		mg/L	200		300.0	Total/NA
Sulfate	9500	D2	400		mg/L	200		300.0	Total/NA
Boron	0.21		0.050		mg/L	1		200.7 Rev 4.4	Total/NA
Calcium	500		2.0		mg/L	1		200.7 Rev 4.4	Total/NA
Lithium	0.29		0.25		mg/L	5		200.7 Rev 4.4	Total Recoverable
Arsenic	0.0024		0.0020		mg/L	4		200.8 LL	Total/NA
Barium	0.0080	L3 R6	0.00050		mg/L	1		200.8 LL	Total/NA
Cobalt	0.0023		0.0020		mg/L	4		200.8 LL	Total/NA
Molybdenum	0.00080	T5	0.00050		mg/L	1		200.8 LL	Total/NA
Selenium	0.076		0.0020		mg/L	4		200.8 LL	Total/NA
Thallium	0.00096		0.00010		mg/L	1		200.8 LL	Total/NA
Total Dissolved Solids	15000		100		mg/L	1		SM 2540C	Total/NA
pH	7.3	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	9.7	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-MW73-1123 — Lab Sample ID: 550-210427-5

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	650	D2	400		mg/L	200		300.0	Total/NA
Sulfate	7000	D2	400		mg/L	200		300.0	Total/NA
Boron	1.7		0.050		mg/L	1		200.7 Rev 4.4	Total/NA
Calcium	550		2.0		mg/L	1		200.7 Rev 4.4	Total/NA
Lithium	0.32		0.10		mg/L	2		200.7 Rev 4.4	Total Recoverable
Arsenic	0.0021		0.0020		mg/L	4		200.8 LL	Total/NA
Barium	0.017	L3 R6	0.00050		mg/L	1		200.8 LL	Total/NA
Cadmium	0.00018		0.00010		mg/L	1		200.8 LL	Total/NA
Cobalt	0.0037		0.0020		mg/L	4		200.8 LL	Total/NA
Molybdenum	0.0011	T5	0.00050		mg/L	1		200.8 LL	Total/NA
Selenium	0.0020		0.0020		mg/L	4		200.8 LL	Total/NA
Thallium	0.00025		0.00010		mg/L	1		200.8 LL	Total/NA
Total Dissolved Solids	12000		100		mg/L	1		SM 2540C	Total/NA
pH	7.2	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	9.7	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-MW86-1123 — Lab Sample ID: 550-210427-6

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	970	D2	400		mg/L	200		300.0	Total/NA
Fluoride	0.95		0.80		mg/L	2		300.0	Total/NA
Sulfate	7200	D2	400		mg/L	200		300.0	Total/NA
Boron	90		0.050		mg/L	1		200.7 Rev 4.4	Total/NA
Calcium	530		2.0		mg/L	1		200.7 Rev 4.4	Total/NA
Lithium	0.25		0.25		mg/L	5		200.7 Rev 4.4	Total Recoverable
Arsenic	0.0027		0.0020		mg/L	4		200.8 LL	Total/NA
Barium	0.013	L3 R6	0.00050		mg/L	1		200.8 LL	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: FC-CCR-MW86-1123 (Continued)

Lab Sample ID: 550-210427-6

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Cadmium	0.00013		0.00010		mg/L	1		200.8 LL	Total/NA
Cobalt	0.0030		0.0020		mg/L	4		200.8 LL	Total/NA
Molybdenum	0.0016	T5	0.00050		mg/L	1		200.8 LL	Total/NA
Selenium	0.0078		0.0020		mg/L	4		200.8 LL	Total/NA
Thallium	0.00060		0.00010		mg/L	1		200.8 LL	Total/NA
Total Dissolved Solids	12000		100		mg/L	1		SM 2540C	Total/NA
pH	7.4	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	10.7	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: FC-CCR-MW66-1123

Lab Sample ID: 550-210427-1
Date Collected: 11/06/23 16:10
Matrix: Water
Date Received: 11/10/23 14:28

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1500**	**D2**	400		mg/L			11/16/23 18:43	200
Fluoride	**19**	**D2**	0.80		mg/L			11/16/23 18:25	2
Sulfate	**11000**	**D2**	400		mg/L			11/16/23 18:43	200

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	**140**		0.25		mg/L		11/14/23 10:09	11/21/23 12:15	5
Calcium	**550**		2.0		mg/L		11/14/23 10:09	11/20/23 17:17	1
Beryllium	ND		0.0010		mg/L		11/14/23 10:09	11/20/23 17:17	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**0.27**		0.25		mg/L		11/15/23 08:57	11/16/23 17:59	5

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.0010		mg/L		11/14/23 08:56	11/16/23 00:59	1
Arsenic	**0.0028**		0.0020		mg/L		11/14/23 08:56	11/20/23 15:17	4
Barium	**0.019**	**L3 R6**	0.00050		mg/L		11/14/23 08:56	11/16/23 00:59	1
Cadmium	ND		0.00010		mg/L		11/14/23 08:56	11/16/23 00:59	1
Chromium	ND		0.0040		mg/L		11/14/23 08:56	11/20/23 15:17	4
Cobalt	**0.0092**		0.0020		mg/L		11/14/23 08:56	11/20/23 15:17	4
Lead	ND	L3	0.00050		mg/L		11/14/23 08:56	11/16/23 00:59	1
Molybdenum	**0.017**	**T5**	0.00050		mg/L		11/14/23 08:56	11/16/23 00:59	1
Selenium	**0.0022**		0.0020		mg/L		11/14/23 08:56	11/20/23 15:17	4
Thallium	**0.0010**		0.00010		mg/L		11/14/23 08:56	11/16/23 00:59	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		11/14/23 13:28	11/14/23 18:07	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**18000**		100		mg/L			11/13/23 11:06	1
pH (SM 4500 H+ B)	**7.4**	**H5**	1.7		SU			11/15/23 13:36	1
Temperature (SM 4500 H+ B)	**9.2**	**H5 T5**	0.1		Degrees C			11/15/23 13:36	1

Client Sample ID: FC-CCR-MW70-1123

Lab Sample ID: 550-210427-2
Date Collected: 11/06/23 17:08
Matrix: Water
Date Received: 11/10/23 14:28

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1100**	**D2**	400		mg/L			11/16/23 19:22	200
Fluoride	**1.5**	**D2**	0.80		mg/L			11/16/23 19:04	2
Sulfate	**5800**	**D2**	400		mg/L			11/16/23 19:22	200

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	**99**		0.25		mg/L		11/14/23 10:09	11/21/23 12:18	5
Calcium	**590**		2.0		mg/L		11/14/23 10:09	11/20/23 17:20	1

Client Sample ID: FC-CCR-MW70-1123

Lab Sample ID: 550-210427-2
Date Collected: 11/06/23 17:08
Matrix: Water
Date Received: 11/10/23 14:28

Method: EPA 200.7 Rev 4.4 - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		0.0010		mg/L		11/14/23 10:09	11/20/23 17:20	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**0.34**		0.10		mg/L		11/15/23 08:57	11/16/23 18:06	2

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.0010		mg/L		11/14/23 08:56	11/16/23 01:02	1
Arsenic	**0.0027**		0.0020		mg/L		11/14/23 08:56	11/20/23 15:19	4
Barium	**0.013**	**L3 R6**	0.00050		mg/L		11/14/23 08:56	11/16/23 01:02	1
Cadmium	**0.00010**		0.00010		mg/L		11/14/23 08:56	11/16/23 01:02	1
Chromium	ND		0.0040		mg/L		11/14/23 08:56	11/20/23 15:19	4
Cobalt	**0.0021**		0.0020		mg/L		11/14/23 08:56	11/20/23 15:19	4
Lead	ND	L3	0.00050		mg/L		11/14/23 08:56	11/16/23 01:02	1
Molybdenum	**0.0035**	**T5**	0.00050		mg/L		11/14/23 08:56	11/16/23 01:02	1
Selenium	**0.15**		0.0020		mg/L		11/14/23 08:56	11/20/23 15:19	4
Thallium	**0.00039**		0.00010		mg/L		11/14/23 08:56	11/16/23 01:02	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		11/14/23 13:28	11/14/23 18:09	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**11000**		100		mg/L			11/13/23 11:06	1
pH (SM 4500 H+ B)	**7.2**	**H5**	1.7		SU			11/15/23 13:38	1
Temperature (SM 4500 H+ B)	**10.1**	**H5 T5**	0.1		Degrees C			11/15/23 13:38	1

Client Sample ID: FC-CCR-MW71-1123

Lab Sample ID: 550-210427-3
Date Collected: 11/08/23 11:06
Matrix: Water
Date Received: 11/10/23 14:28

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**640**	**D2**	400		mg/L			11/17/23 03:02	200
Fluoride	ND	D2	0.80		mg/L			11/17/23 02:44	2
Sulfate	**14000**	**D2**	400		mg/L			11/17/23 03:02	200

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	**0.67**		0.050		mg/L		11/14/23 10:09	11/20/23 17:23	1
Calcium	**540**		2.0		mg/L		11/14/23 10:09	11/20/23 17:23	1
Beryllium	ND		0.0010		mg/L		11/14/23 10:09	11/20/23 17:23	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**0.40**		0.25		mg/L		11/15/23 08:57	11/16/23 18:53	5

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.0040		mg/L		11/14/23 08:56	11/20/23 15:21	4

Client Sample ID: FC-CCR-MW71-1123

Lab Sample ID: 550-210427-3
Date Collected: 11/08/23 11:06
Matrix: Water
Date Received: 11/10/23 14:28

Method: EPA 200.8 LL - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0024**		0.0020		mg/L		11/14/23 08:56	11/20/23 15:21	4
Barium	**0.010**		0.0020		mg/L		11/14/23 08:56	11/20/23 15:21	4
Cadmium	ND		0.00040		mg/L		11/14/23 08:56	11/20/23 15:21	4
Chromium	ND		0.0040		mg/L		11/14/23 08:56	11/20/23 15:21	4
Cobalt	ND		0.0020		mg/L		11/14/23 08:56	11/20/23 15:21	4
Lead	ND	L3	0.00050		mg/L		11/14/23 08:56	11/16/23 01:04	1
Molybdenum	ND	T5	0.0020		mg/L		11/14/23 08:56	11/20/23 15:21	4
Selenium	**0.28**		0.0020		mg/L		11/14/23 08:56	11/20/23 15:21	4
Thallium	**0.00040**		0.00010		mg/L		11/14/23 08:56	11/16/23 01:04	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		11/14/23 13:28	11/14/23 18:11	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**20000**	**D1 H2**	200		mg/L			11/16/23 12:33	1
pH (SM 4500 H+ B)	**7.2**	**H5**	1.7		SU			11/15/23 13:39	1
Temperature (SM 4500 H+ B)	**10.6**	**H5 T5**	0.1		Degrees C			11/15/23 13:39	1

Client Sample ID: FC-CCR-MW72-1123

Lab Sample ID: 550-210427-4
Date Collected: 11/08/23 12:13
Matrix: Water
Date Received: 11/10/23 14:28

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**430**	**D2**	400		mg/L			11/16/23 19:59	200
Fluoride	ND	D2	0.80		mg/L			11/16/23 19:40	2
Sulfate	**9500**	**D2**	400		mg/L			11/16/23 19:59	200

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	**0.21**		0.050		mg/L		11/14/23 10:09	11/20/23 17:25	1
Calcium	**500**		2.0		mg/L		11/14/23 10:09	11/20/23 17:25	1
Beryllium	ND		0.0010		mg/L		11/14/23 10:09	11/20/23 17:25	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**0.29**		0.25		mg/L		11/15/23 08:57	11/16/23 18:11	5

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.0010		mg/L		11/14/23 08:56	11/16/23 01:06	1
Arsenic	**0.0024**		0.0020		mg/L		11/14/23 08:56	11/20/23 15:24	4
Barium	**0.0080**	**L3 R6**	0.00050		mg/L		11/14/23 08:56	11/16/23 01:06	1
Cadmium	ND		0.00010		mg/L		11/14/23 08:56	11/16/23 01:06	1
Chromium	ND		0.0040		mg/L		11/14/23 08:56	11/20/23 15:24	4
Cobalt	**0.0023**		0.0020		mg/L		11/14/23 08:56	11/20/23 15:24	4
Lead	ND	L3	0.00050		mg/L		11/14/23 08:56	11/16/23 01:06	1
Molybdenum	**0.00080**	**T5**	0.00050		mg/L		11/14/23 08:56	11/16/23 01:06	1
Selenium	**0.076**		0.0020		mg/L		11/14/23 08:56	11/20/23 15:24	4

Client Sample ID: FC-CCR-MW72-1123

Lab Sample ID: 550-210427-4
Date Collected: 11/08/23 12:13
Matrix: Water
Date Received: 11/10/23 14:28

Method: EPA 200.8 LL - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Thallium	**0.00096**		0.00010		mg/L		11/14/23 08:56	11/16/23 01:06	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		11/14/23 13:28	11/14/23 18:13	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**15000**		100		mg/L			11/14/23 11:18	1
pH (SM 4500 H+ B)	**7.3**	**H5**	1.7		SU			11/15/23 13:40	1
Temperature (SM 4500 H+ B)	**9.7**	**H5 T5**	0.1		Degrees C			11/15/23 13:40	1

Client Sample ID: FC-CCR-MW73-1123

Lab Sample ID: 550-210427-5
Date Collected: 11/08/23 13:16
Matrix: Water
Date Received: 11/10/23 14:28

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**650**	**D2**	400		mg/L			11/16/23 21:31	200
Fluoride	ND	D2	0.80		mg/L			11/16/23 20:17	2
Sulfate	**7000**	**D2**	400		mg/L			11/16/23 21:31	200

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	**1.7**		0.050		mg/L		11/14/23 10:09	11/20/23 17:28	1
Calcium	**550**		2.0		mg/L		11/14/23 10:09	11/20/23 17:28	1
Beryllium	ND		0.0010		mg/L		11/14/23 10:09	11/20/23 17:28	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**0.32**		0.10		mg/L		11/15/23 08:57	11/16/23 18:13	2

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.0010		mg/L		11/14/23 08:56	11/16/23 01:08	1
Arsenic	**0.0021**		0.0020		mg/L		11/14/23 08:56	11/20/23 15:26	4
Barium	**0.017**	**L3 R6**	0.00050		mg/L		11/14/23 08:56	11/16/23 01:08	1
Cadmium	**0.00018**		0.00010		mg/L		11/14/23 08:56	11/16/23 01:08	1
Chromium	ND		0.0040		mg/L		11/14/23 08:56	11/20/23 15:26	4
Cobalt	**0.0037**		0.0020		mg/L		11/14/23 08:56	11/20/23 15:26	4
Lead	ND	L3	0.00050		mg/L		11/14/23 08:56	11/16/23 01:08	1
Molybdenum	**0.0011**	**T5**	0.00050		mg/L		11/14/23 08:56	11/16/23 01:08	1
Selenium	**0.0020**		0.0020		mg/L		11/14/23 08:56	11/20/23 15:26	4
Thallium	**0.00025**		0.00010		mg/L		11/14/23 08:56	11/16/23 01:08	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		11/14/23 13:28	11/14/23 18:15	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**12000**		100		mg/L			11/14/23 11:18	1

Client Sample ID: FC-CCR-MW73-1123

Lab Sample ID: 550-210427-5

Date Collected: 11/08/23 13:16
Matrix: Water
Date Received: 11/10/23 14:28

General Chemistry (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
pH (SM 4500 H+ B)	7.2	H5	1.7		SU			11/15/23 13:42	1
Temperature (SM 4500 H+ B)	9.7	H5 T5	0.1		Degrees C			11/15/23 13:42	1

Client Sample ID: FC-CCR-MW86-1123

Lab Sample ID: 550-210427-6

Date Collected: 11/06/23 15:25
Matrix: Water
Date Received: 11/10/23 14:28

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	970	D2	400		mg/L			11/16/23 15:57	200
Fluoride	0.95		0.80		mg/L			11/16/23 15:39	2
Sulfate	7200	D2	400		mg/L			11/16/23 15:57	200

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	90		0.050		mg/L		11/14/23 10:09	11/20/23 17:31	1
Calcium	530		2.0		mg/L		11/14/23 10:09	11/20/23 17:31	1
Beryllium	ND		0.0010		mg/L		11/14/23 10:09	11/20/23 17:31	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	0.25		0.25		mg/L		11/15/23 08:57	11/16/23 18:20	5

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.0010		mg/L		11/14/23 08:56	11/16/23 01:10	1
Arsenic	0.0027		0.0020		mg/L		11/14/23 08:56	11/20/23 15:28	4
Barium	0.013	L3 R6	0.00050		mg/L		11/14/23 08:56	11/16/23 01:10	1
Cadmium	0.00013		0.00010		mg/L		11/14/23 08:56	11/16/23 01:10	1
Chromium	ND		0.0040		mg/L		11/14/23 08:56	11/20/23 15:28	4
Cobalt	0.0030		0.0020		mg/L		11/14/23 08:56	11/20/23 15:28	4
Lead	ND	L3	0.00050		mg/L		11/14/23 08:56	11/16/23 01:10	1
Molybdenum	0.0016	T5	0.00050		mg/L		11/14/23 08:56	11/16/23 01:10	1
Selenium	0.0078		0.0020		mg/L		11/14/23 08:56	11/20/23 15:28	4
Thallium	0.00060		0.00010		mg/L		11/14/23 08:56	11/16/23 01:10	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		11/14/23 13:28	11/14/23 18:17	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	12000		100		mg/L			11/13/23 11:06	1
pH (SM 4500 H+ B)	7.4	H5	1.7		SU			11/15/23 13:43	1
Temperature (SM 4500 H+ B)	10.7	H5 T5	0.1		Degrees C			11/15/23 13:43	1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 550-311263/2
Matrix: Water
Analysis Batch: 311263

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		2.0		mg/L			11/16/23 11:44	1
Fluoride	ND		0.40		mg/L			11/16/23 11:44	1
Sulfate	ND		2.0		mg/L			11/16/23 11:44	1

Lab Sample ID: 550-210589-A-8 MS
Matrix: Water
Analysis Batch: 311263

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	130	E2 M3	20.0	142	E2 M3	mg/L		55	80 - 120		
Fluoride	ND		4.00	4.74		mg/L		109	80 - 120		
Sulfate	74		20.0	91.0		mg/L		86	80 - 120		

Lab Sample ID: 550-210589-A-8 MSD
Matrix: Water
Analysis Batch: 311263

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	130	E2 M3	20.0	142	E2 M3	mg/L		57	80 - 120	0	20
Fluoride	ND		4.00	4.84		mg/L		111	80 - 120	2	20
Sulfate	74		20.0	91.3		mg/L		88	80 - 120	0	20

Lab Sample ID: MB 550-311264/2
Matrix: Water
Analysis Batch: 311264

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		2.0		mg/L			11/16/23 11:44	1
Fluoride	ND		0.40		mg/L			11/16/23 11:44	1
Sulfate	ND		2.0		mg/L			11/16/23 11:44	1

Lab Sample ID: LCS 550-311264/43
Matrix: Water
Analysis Batch: 311264

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			20.0	20.6		mg/L		103	90 - 110		
Fluoride			4.00	4.38		mg/L		109	90 - 110		
Sulfate			20.0	20.8		mg/L		104	90 - 110		

Lab Sample ID: LCSD 550-311264/44
Matrix: Water
Analysis Batch: 311264

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			20.0	20.7		mg/L		103	90 - 110	0	20
Fluoride			4.00	4.41		mg/L		110	90 - 110	1	20
Sulfate			20.0	20.8		mg/L		104	90 - 110	0	20

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 550-210673-B-14 MS
Matrix: Water
Analysis Batch: 311264

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	120	E2 M3	20.0	134	E2 M3	mg/L		57	80 - 120		
Fluoride	0.43		4.00	4.67		mg/L		106	80 - 120		
Sulfate	71		20.0	87.8		mg/L		85	80 - 120		

Lab Sample ID: 550-210673-B-14 MSD
Matrix: Water
Analysis Batch: 311264

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	120	E2 M3	20.0	134	E2 M3	mg/L		57	80 - 120	0	20
Fluoride	0.43		4.00	4.72		mg/L		107	80 - 120	1	20
Sulfate	71		20.0	87.9		mg/L		86	80 - 120	0	20

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 550-311064/1-A
Matrix: Water
Analysis Batch: 311482

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 311064

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.050		mg/L		11/14/23 10:09	11/20/23 16:34	1
Calcium	ND		2.0		mg/L		11/14/23 10:09	11/20/23 16:34	1
Beryllium	ND		0.0010		mg/L		11/14/23 10:09	11/20/23 16:34	1

Lab Sample ID: LCS 550-311064/2-A
Matrix: Water
Analysis Batch: 311482

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 311064

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Boron			1.00	1.16		mg/L		116	85 - 115		
Calcium			21.0	24.5		mg/L		117	85 - 115		
Beryllium			1.00	1.17		mg/L		117	85 - 115		

Lab Sample ID: LCSD 550-311064/3-A
Matrix: Water
Analysis Batch: 311482

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 311064

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron			1.00	1.14		mg/L		114	85 - 115	2	20
Calcium			21.0	24.2		mg/L		115	85 - 115	1	20
Beryllium			1.00	1.17		mg/L		117	85 - 115	0	20

Lab Sample ID: 550-210429-A-1-A MS
Matrix: Water
Analysis Batch: 311482

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 311064

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Boron	11	M3	1.00	11.3	M3	mg/L		56	70 - 130		
Calcium	570	M3	21.0	530	M3	mg/L		-172	70 - 130		
Beryllium	ND		1.00	1.28		mg/L		128	70 - 130		

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: 550-210429-A-1-B MSD
Matrix: Water
Analysis Batch: 311482

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 311064

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron	11	M3	1.00	11.3	M3	mg/L		52	70 - 130	0	20
Calcium	570	M3	21.0	512	M3	mg/L		-255	70 - 130	3	20
Beryllium	ND		1.00	1.25		mg/L		125	70 - 130	3	20

Lab Sample ID: MB 570-383821/1-A
Matrix: Water
Analysis Batch: 384611

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 383821

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	ND		0.050		mg/L		11/15/23 08:57	11/16/23 17:52	1

Lab Sample ID: LCS 570-383821/2-A
Matrix: Water
Analysis Batch: 384611

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 383821

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Lithium			0.500	0.510		mg/L		102	85 - 115		

Lab Sample ID: LCSD 570-383821/3-A
Matrix: Water
Analysis Batch: 384611

Client Sample ID: Lab Control Sample Dup
Prep Type: Total Recoverable
Prep Batch: 383821

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Lithium			0.500	0.486		mg/L		97	85 - 115	5	20

Lab Sample ID: 550-210427-1 MS
Matrix: Water
Analysis Batch: 384611

Client Sample ID: FC-CCR-MW66-1123
Prep Type: Total Recoverable
Prep Batch: 383821

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Lithium	0.27		0.500	0.798		mg/L		106	80 - 120		

Lab Sample ID: 550-210427-1 MSD
Matrix: Water
Analysis Batch: 384611

Client Sample ID: FC-CCR-MW66-1123
Prep Type: Total Recoverable
Prep Batch: 383821

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Lithium	0.27		0.500	0.776		mg/L		102	80 - 120	3	20

Method: 200.8 LL - Metals (ICP/MS)

Lab Sample ID: MB 550-311057/1-A
Matrix: Water
Analysis Batch: 311226

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 311057

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.0010		mg/L		11/14/23 08:56	11/16/23 00:22	1
Arsenic	ND		0.00050		mg/L		11/14/23 08:56	11/16/23 00:22	1
Barium	ND		0.00050		mg/L		11/14/23 08:56	11/16/23 00:22	1
Cadmium	ND		0.00010		mg/L		11/14/23 08:56	11/16/23 00:22	1

Method: 200.8 LL - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 550-311057/1-A
Matrix: Water
Analysis Batch: 311226

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 311057

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		0.0010		mg/L		11/14/23 08:56	11/16/23 00:22	1
Cobalt	ND		0.00050		mg/L		11/14/23 08:56	11/16/23 00:22	1
Lead	ND		0.00050		mg/L		11/14/23 08:56	11/16/23 00:22	1
Molybdenum	ND		0.00050		mg/L		11/14/23 08:56	11/16/23 00:22	1
Selenium	ND		0.00050		mg/L		11/14/23 08:56	11/16/23 00:22	1
Thallium	ND		0.00010		mg/L		11/14/23 08:56	11/16/23 00:22	1

Lab Sample ID: MB 550-311057/1-A
Matrix: Water
Analysis Batch: 311523

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 311057

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.0010		mg/L		11/14/23 08:56	11/20/23 15:03	1
Arsenic	ND		0.00050		mg/L		11/14/23 08:56	11/20/23 15:03	1
Barium	ND		0.00050		mg/L		11/14/23 08:56	11/20/23 15:03	1
Cadmium	ND		0.00010		mg/L		11/14/23 08:56	11/20/23 15:03	1
Chromium	ND		0.0010		mg/L		11/14/23 08:56	11/20/23 15:03	1
Cobalt	ND		0.00050		mg/L		11/14/23 08:56	11/20/23 15:03	1
Molybdenum	ND		0.00050		mg/L		11/14/23 08:56	11/20/23 15:03	1
Selenium	ND		0.00050		mg/L		11/14/23 08:56	11/20/23 15:03	1

Lab Sample ID: LCS 550-311057/2-A
Matrix: Water
Analysis Batch: 311226

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 311057

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Antimony			0.100	0.102		mg/L		102	85 - 115		
Arsenic			0.100	0.0979		mg/L		98	85 - 115		
Barium			0.100	0.145	L3	mg/L		145	85 - 115		
Cadmium			0.100	0.0995		mg/L		99	85 - 115		
Chromium			0.100	0.0965		mg/L		96	85 - 115		
Cobalt			0.100	0.0999		mg/L		100	85 - 115		
Lead			0.100	0.126	L3	mg/L		126	85 - 115		
Molybdenum			0.100	0.101		mg/L		101	85 - 115		
Selenium			0.100	0.0953		mg/L		95	85 - 115		
Thallium			0.100	0.113		mg/L		113	85 - 115		

Lab Sample ID: LCS 550-311057/2-A
Matrix: Water
Analysis Batch: 311523

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 311057

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Antimony			0.100	0.0889		mg/L		89	85 - 115		
Arsenic			0.100	0.0889		mg/L		89	85 - 115		
Barium			0.100	0.0934		mg/L		93	85 - 115		
Cadmium			0.100	0.0904		mg/L		90	85 - 115		
Chromium			0.100	0.0929		mg/L		93	85 - 115		
Cobalt			0.100	0.0946		mg/L		95	85 - 115		
Molybdenum			0.100	0.0942		mg/L		94	85 - 115		

Method: 200.8 LL - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 550-311057/2-A
Matrix: Water
Analysis Batch: 311523

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 311057

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Selenium			0.100	0.0873		mg/L		87	85 - 115		

Lab Sample ID: LCSD 550-311057/3-A
Matrix: Water
Analysis Batch: 311226

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 311057

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony			0.100	0.101		mg/L		101	85 - 115	1	20
Arsenic			0.100	0.0968		mg/L		97	85 - 115	1	20
Barium			0.100	0.115	R6	mg/L		115	85 - 115	23	20
Cadmium			0.100	0.0978		mg/L		98	85 - 115	2	20
Chromium			0.100	0.0961		mg/L		96	85 - 115	0	20
Cobalt			0.100	0.0982		mg/L		98	85 - 115	2	20
Lead			0.100	0.119	L3	mg/L		119	85 - 115	6	20
Molybdenum			0.100	0.0990		mg/L		99	85 - 115	2	20
Selenium			0.100	0.0946		mg/L		95	85 - 115	1	20
Thallium			0.100	0.114		mg/L		114	85 - 115	1	20

Lab Sample ID: LCSD 550-311057/3-A
Matrix: Water
Analysis Batch: 311523

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 311057

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony			0.100	0.0873		mg/L		87	85 - 115	2	20
Arsenic			0.100	0.0907		mg/L		91	85 - 115	2	20
Barium			0.100	0.0925		mg/L		93	85 - 115	1	20
Cadmium			0.100	0.0896		mg/L		90	85 - 115	1	20
Chromium			0.100	0.0915		mg/L		92	85 - 115	2	20
Cobalt			0.100	0.0972		mg/L		97	85 - 115	3	20
Molybdenum			0.100	0.0940		mg/L		94	85 - 115	0	20
Selenium			0.100	0.0885		mg/L		88	85 - 115	1	20

Lab Sample ID: 550-210429-C-1-A MS
Matrix: Water
Analysis Batch: 311226

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 311057

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Antimony	ND		0.100	0.107		mg/L		106	70 - 130		
Barium	0.014	L3 R6	0.100	0.138		mg/L		124	70 - 130		
Cadmium	0.00019		0.100	0.0941		mg/L		94	70 - 130		
Lead	0.00074	L3	0.100	0.110		mg/L		110	70 - 130		
Molybdenum	0.0022		0.100	0.108		mg/L		106	70 - 130		
Thallium	0.00050		0.100	0.103		mg/L		103	70 - 130		

Lab Sample ID: 550-210429-C-1-A MS ^4
Matrix: Water
Analysis Batch: 311523

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 311057

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Antimony			0.100	0.0963		mg/L					

Method: 200.8 LL - Metals (ICP/MS) (Continued)

Lab Sample ID: 550-210429-C-1-A MS ^4
Matrix: Water
Analysis Batch: 311523

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 311057

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic			0.100	0.0991		mg/L			
Barium			0.100	0.128		mg/L			
Cadmium			0.100	0.0915		mg/L			
Chromium			0.100	0.0943		mg/L			
Cobalt			0.100	0.193		mg/L			
Lead			0.100	0.0945		mg/L			
Molybdenum			0.100	0.103		mg/L			
Selenium			0.100	0.101		mg/L			
Thallium			0.100	0.0916		mg/L			

Lab Sample ID: 550-210429-C-1-B MSD
Matrix: Water
Analysis Batch: 311226

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 311057

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	ND		0.100	0.101		mg/L		101	70 - 130	5	20
Arsenic	0.0013		0.100	0.113		mg/L		111	70 - 130	0	20
Barium	0.014	L3 R6	0.100	0.120		mg/L		105	70 - 130	14	20
Cadmium	0.00019		0.100	0.0916		mg/L		91	70 - 130	3	20
Chromium	ND		0.100	0.0979		mg/L		97	70 - 130	1	20
Cobalt	0.10		0.100	0.194		mg/L		93	70 - 130	2	20
Lead	0.00074	L3	0.100	0.106		mg/L		105	70 - 130	4	20
Molybdenum	0.0022		0.100	0.107		mg/L		105	70 - 130	1	20
Selenium	0.0012	M1	0.100	0.137	M1	mg/L		136	70 - 130	0	20
Thallium	0.00050		0.100	0.105		mg/L		105	70 - 130	2	20

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 550-311086/1-A
Matrix: Water
Analysis Batch: 311105

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 311086

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		11/14/23 13:28	11/14/23 17:17	1

Lab Sample ID: LCS 550-311086/2-A
Matrix: Water
Analysis Batch: 311105

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 311086

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury			0.00500	0.00499		mg/L		100	85 - 115

Lab Sample ID: LCSD 550-311086/3-A
Matrix: Water
Analysis Batch: 311105

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 311086

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury			0.00500	0.00488		mg/L		98	85 - 115	2	20

Method: 245.1 - Mercury (CVAA) (Continued)

Lab Sample ID: 550-210432-I-2-D MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 311105 — **Prep Batch: 311086**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		0.00500	0.00504		mg/L		101	70 - 130	1	20

Lab Sample ID: 550-210449-H-2-C MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 311105 — **Prep Batch: 311086**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	ND		0.00500	0.00520		mg/L		104	70 - 130

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 550-310997/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 310997

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		20		mg/L			11/13/23 11:06	1

Lab Sample ID: LCS 550-310997/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 310997

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids			1000	1010		mg/L		101	90 - 110

Lab Sample ID: LCSD 550-310997/3 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 310997

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Dissolved Solids			1000	998		mg/L		100	90 - 110	1	10

Lab Sample ID: 550-210396-A-2 DU — **Client Sample ID: Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 310997

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	480			474		mg/L				2	10

Lab Sample ID: MB 550-311072/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 311072

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		20		mg/L			11/14/23 11:18	1

Method: SM 2540C - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: LCS 550-311072/2
Matrix: Water
Analysis Batch: 311072

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Dissolved Solids			1000	978		mg/L		98	90 - 110		

Lab Sample ID: LCSD 550-311072/3
Matrix: Water
Analysis Batch: 311072

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Dissolved Solids			1000	978		mg/L		98	90 - 110	0	10

Lab Sample ID: 550-210340-G-3 DU
Matrix: Water
Analysis Batch: 311072

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	1100			1130		mg/L				0.7	10

Lab Sample ID: MB 550-311252/1
Matrix: Water
Analysis Batch: 311252

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		20		mg/L			11/16/23 12:33	1

Lab Sample ID: LCS 550-311252/2
Matrix: Water
Analysis Batch: 311252

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Dissolved Solids			1000	984		mg/L		98	90 - 110		

Lab Sample ID: LCSD 550-311252/3
Matrix: Water
Analysis Batch: 311252

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Dissolved Solids			1000	984		mg/L		98	90 - 110	0	10

Lab Sample ID: 550-210430-H-1 DU
Matrix: Water
Analysis Batch: 311252

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	1100			1080		mg/L				0.2	10

Method: SM 4500 H+ B - pH

Lab Sample ID: LCSSRM 550-311239/1
Matrix: Water
Analysis Batch: 311239

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
pH	7.00	7.0		SU		100.6	98.5 - 101.5

Lab Sample ID: LCSSRM 550-311239/13
Matrix: Water
Analysis Batch: 311239

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
pH	7.00	7.1		SU		100.9	98.5 - 101.5

Lab Sample ID: LCSSRM 550-311239/25
Matrix: Water
Analysis Batch: 311239

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
pH	7.00	7.1		SU		100.7	98.5 - 101.5

Lab Sample ID: LCSSRM 550-311239/30
Matrix: Water
Analysis Batch: 311239

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
pH	7.00	7.1		SU		101.0	98.5 - 101.5

Lab Sample ID: 550-210429-D-2 DU
Matrix: Water
Analysis Batch: 311239

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH	8.5		8.5		SU		0	5
Temperature	12.2		12.2		Degrees C		0	

Lab Sample ID: 550-210468-H-1 DU
Matrix: Water
Analysis Batch: 311239

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH	8.2		8.2		SU		0.1	5
Temperature	9.1		9.0		Degrees C		1	

HPLC/IC

Analysis Batch: 311263

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210427-1	FC-CCR-MW66-1123	Total/NA	Water	300.0	
550-210427-1	FC-CCR-MW66-1123	Total/NA	Water	300.0	
550-210427-2	FC-CCR-MW70-1123	Total/NA	Water	300.0	
550-210427-2	FC-CCR-MW70-1123	Total/NA	Water	300.0	
550-210427-4	FC-CCR-MW72-1123	Total/NA	Water	300.0	
550-210427-4	FC-CCR-MW72-1123	Total/NA	Water	300.0	
550-210427-5	FC-CCR-MW73-1123	Total/NA	Water	300.0	
550-210427-5	FC-CCR-MW73-1123	Total/NA	Water	300.0	
550-210427-6	FC-CCR-MW86-1123	Total/NA	Water	300.0	
550-210427-6	FC-CCR-MW86-1123	Total/NA	Water	300.0	
MB 550-311263/2	Method Blank	Total/NA	Water	300.0	
550-210589-A-8 MS	Matrix Spike	Total/NA	Water	300.0	
550-210589-A-8 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Analysis Batch: 311264

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210427-3	FC-CCR-MW71-1123	Total/NA	Water	300.0	
550-210427-3	FC-CCR-MW71-1123	Total/NA	Water	300.0	
MB 550-311264/2	Method Blank	Total/NA	Water	300.0	
LCS 550-311264/43	Lab Control Sample	Total/NA	Water	300.0	
LCSD 550-311264/44	Lab Control Sample Dup	Total/NA	Water	300.0	
550-210673-B-14 MS	Matrix Spike	Total/NA	Water	300.0	
550-210673-B-14 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Metals

Prep Batch: 311057

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210427-1	FC-CCR-MW66-1123	Total/NA	Water	200.8	
550-210427-2	FC-CCR-MW70-1123	Total/NA	Water	200.8	
550-210427-3	FC-CCR-MW71-1123	Total/NA	Water	200.8	
550-210427-4	FC-CCR-MW72-1123	Total/NA	Water	200.8	
550-210427-5	FC-CCR-MW73-1123	Total/NA	Water	200.8	
550-210427-6	FC-CCR-MW86-1123	Total/NA	Water	200.8	
MB 550-311057/1-A	Method Blank	Total/NA	Water	200.8	
LCS 550-311057/2-A	Lab Control Sample	Total/NA	Water	200.8	
LCSD 550-311057/3-A	Lab Control Sample Dup	Total/NA	Water	200.8	
550-210429-C-1-A MS	Matrix Spike	Total/NA	Water	200.8	
550-210429-C-1-A MS ^4	Matrix Spike	Total/NA	Water	200.8	
550-210429-C-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	200.8	

Prep Batch: 311064

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210427-1	FC-CCR-MW66-1123	Total/NA	Water	200.7	
550-210427-2	FC-CCR-MW70-1123	Total/NA	Water	200.7	
550-210427-3	FC-CCR-MW71-1123	Total/NA	Water	200.7	
550-210427-4	FC-CCR-MW72-1123	Total/NA	Water	200.7	
550-210427-5	FC-CCR-MW73-1123	Total/NA	Water	200.7	
550-210427-6	FC-CCR-MW86-1123	Total/NA	Water	200.7	
MB 550-311064/1-A	Method Blank	Total/NA	Water	200.7	
LCS 550-311064/2-A	Lab Control Sample	Total/NA	Water	200.7	

Metals (Continued)

Prep Batch: 311064 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 550-311064/3-A	Lab Control Sample Dup	Total/NA	Water	200.7	
550-210429-A-1-A MS	Matrix Spike	Total/NA	Water	200.7	
550-210429-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	200.7	

Prep Batch: 311086

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210427-1	FC-CCR-MW66-1123	Total/NA	Water	245.1	
550-210427-2	FC-CCR-MW70-1123	Total/NA	Water	245.1	
550-210427-3	FC-CCR-MW71-1123	Total/NA	Water	245.1	
550-210427-4	FC-CCR-MW72-1123	Total/NA	Water	245.1	
550-210427-5	FC-CCR-MW73-1123	Total/NA	Water	245.1	
550-210427-6	FC-CCR-MW86-1123	Total/NA	Water	245.1	
MB 550-311086/1-A	Method Blank	Total/NA	Water	245.1	
LCS 550-311086/2-A	Lab Control Sample	Total/NA	Water	245.1	
LCSD 550-311086/3-A	Lab Control Sample Dup	Total/NA	Water	245.1	
550-210432-I-2-D MSD	Matrix Spike Duplicate	Total/NA	Water	245.1	
550-210449-H-2-C MS	Matrix Spike	Total/NA	Water	245.1	

Analysis Batch: 311105

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210427-1	FC-CCR-MW66-1123	Total/NA	Water	245.1	311086
550-210427-2	FC-CCR-MW70-1123	Total/NA	Water	245.1	311086
550-210427-3	FC-CCR-MW71-1123	Total/NA	Water	245.1	311086
550-210427-4	FC-CCR-MW72-1123	Total/NA	Water	245.1	311086
550-210427-5	FC-CCR-MW73-1123	Total/NA	Water	245.1	311086
550-210427-6	FC-CCR-MW86-1123	Total/NA	Water	245.1	311086
MB 550-311086/1-A	Method Blank	Total/NA	Water	245.1	311086
LCS 550-311086/2-A	Lab Control Sample	Total/NA	Water	245.1	311086
LCSD 550-311086/3-A	Lab Control Sample Dup	Total/NA	Water	245.1	311086
550-210432-I-2-D MSD	Matrix Spike Duplicate	Total/NA	Water	245.1	311086
550-210449-H-2-C MS	Matrix Spike	Total/NA	Water	245.1	311086

Analysis Batch: 311226

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210427-1	FC-CCR-MW66-1123	Total/NA	Water	200.8 LL	311057
550-210427-2	FC-CCR-MW70-1123	Total/NA	Water	200.8 LL	311057
550-210427-3	FC-CCR-MW71-1123	Total/NA	Water	200.8 LL	311057
550-210427-4	FC-CCR-MW72-1123	Total/NA	Water	200.8 LL	311057
550-210427-5	FC-CCR-MW73-1123	Total/NA	Water	200.8 LL	311057
550-210427-6	FC-CCR-MW86-1123	Total/NA	Water	200.8 LL	311057
MB 550-311057/1-A	Method Blank	Total/NA	Water	200.8 LL	311057
LCS 550-311057/2-A	Lab Control Sample	Total/NA	Water	200.8 LL	311057
LCSD 550-311057/3-A	Lab Control Sample Dup	Total/NA	Water	200.8 LL	311057
550-210429-C-1-A MS	Matrix Spike	Total/NA	Water	200.8 LL	311057
550-210429-C-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	200.8 LL	311057

Analysis Batch: 311482

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210427-1	FC-CCR-MW66-1123	Total/NA	Water	200.7 Rev 4.4	311064
550-210427-2	FC-CCR-MW70-1123	Total/NA	Water	200.7 Rev 4.4	311064
550-210427-3	FC-CCR-MW71-1123	Total/NA	Water	200.7 Rev 4.4	311064

Metals (Continued)

Analysis Batch: 311482 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210427-4	FC-CCR-MW72-1123	Total/NA	Water	200.7 Rev 4.4	311064
550-210427-5	FC-CCR-MW73-1123	Total/NA	Water	200.7 Rev 4.4	311064
550-210427-6	FC-CCR-MW86-1123	Total/NA	Water	200.7 Rev 4.4	311064
MB 550-311064/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	311064
LCS 550-311064/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	311064
LCSD 550-311064/3-A	Lab Control Sample Dup	Total/NA	Water	200.7 Rev 4.4	311064
550-210429-A-1-A MS	Matrix Spike	Total/NA	Water	200.7 Rev 4.4	311064
550-210429-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	200.7 Rev 4.4	311064

Analysis Batch: 311523

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210427-1	FC-CCR-MW66-1123	Total/NA	Water	200.8 LL	311057
550-210427-2	FC-CCR-MW70-1123	Total/NA	Water	200.8 LL	311057
550-210427-3	FC-CCR-MW71-1123	Total/NA	Water	200.8 LL	311057
550-210427-4	FC-CCR-MW72-1123	Total/NA	Water	200.8 LL	311057
550-210427-5	FC-CCR-MW73-1123	Total/NA	Water	200.8 LL	311057
550-210427-6	FC-CCR-MW86-1123	Total/NA	Water	200.8 LL	311057
MB 550-311057/1-A	Method Blank	Total/NA	Water	200.8 LL	311057
LCS 550-311057/2-A	Lab Control Sample	Total/NA	Water	200.8 LL	311057
LCSD 550-311057/3-A	Lab Control Sample Dup	Total/NA	Water	200.8 LL	311057
550-210429-C-1-A MS ^4	Matrix Spike	Total/NA	Water	200.8 LL	311057

Analysis Batch: 311591

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210427-1	FC-CCR-MW66-1123	Total/NA	Water	200.7 Rev 4.4	311064
550-210427-2	FC-CCR-MW70-1123	Total/NA	Water	200.7 Rev 4.4	311064

Prep Batch: 383821

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210427-1	FC-CCR-MW66-1123	Total Recoverable	Water	200.7	
550-210427-2	FC-CCR-MW70-1123	Total Recoverable	Water	200.7	
550-210427-3	FC-CCR-MW71-1123	Total Recoverable	Water	200.7	
550-210427-4	FC-CCR-MW72-1123	Total Recoverable	Water	200.7	
550-210427-5	FC-CCR-MW73-1123	Total Recoverable	Water	200.7	
550-210427-6	FC-CCR-MW86-1123	Total Recoverable	Water	200.7	
MB 570-383821/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 570-383821/2-A	Lab Control Sample	Total Recoverable	Water	200.7	
LCSD 570-383821/3-A	Lab Control Sample Dup	Total Recoverable	Water	200.7	
550-210427-1 MS	FC-CCR-MW66-1123	Total Recoverable	Water	200.7	
550-210427-1 MSD	FC-CCR-MW66-1123	Total Recoverable	Water	200.7	

Analysis Batch: 384611

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210427-1	FC-CCR-MW66-1123	Total Recoverable	Water	200.7 Rev 4.4	383821
550-210427-2	FC-CCR-MW70-1123	Total Recoverable	Water	200.7 Rev 4.4	383821
550-210427-3	FC-CCR-MW71-1123	Total Recoverable	Water	200.7 Rev 4.4	383821
550-210427-4	FC-CCR-MW72-1123	Total Recoverable	Water	200.7 Rev 4.4	383821
550-210427-5	FC-CCR-MW73-1123	Total Recoverable	Water	200.7 Rev 4.4	383821
550-210427-6	FC-CCR-MW86-1123	Total Recoverable	Water	200.7 Rev 4.4	383821
MB 570-383821/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	383821
LCS 570-383821/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	383821

Metals (Continued)

Analysis Batch: 384611 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 570-383821/3-A	Lab Control Sample Dup	Total Recoverable	Water	200.7 Rev 4.4	383821
550-210427-1 MS	FC-CCR-MW66-1123	Total Recoverable	Water	200.7 Rev 4.4	383821
550-210427-1 MSD	FC-CCR-MW66-1123	Total Recoverable	Water	200.7 Rev 4.4	383821

General Chemistry

Analysis Batch: 310997

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210427-1	FC-CCR-MW66-1123	Total/NA	Water	SM 2540C	
550-210427-2	FC-CCR-MW70-1123	Total/NA	Water	SM 2540C	
550-210427-6	FC-CCR-MW86-1123	Total/NA	Water	SM 2540C	
MB 550-310997/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 550-310997/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 550-310997/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	
550-210396-A-2 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 311072

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210427-4	FC-CCR-MW72-1123	Total/NA	Water	SM 2540C	
550-210427-5	FC-CCR-MW73-1123	Total/NA	Water	SM 2540C	
MB 550-311072/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 550-311072/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 550-311072/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	
550-210340-G-3 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 311239

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210427-1	FC-CCR-MW66-1123	Total/NA	Water	SM 4500 H+ B	
550-210427-2	FC-CCR-MW70-1123	Total/NA	Water	SM 4500 H+ B	
550-210427-3	FC-CCR-MW71-1123	Total/NA	Water	SM 4500 H+ B	
550-210427-4	FC-CCR-MW72-1123	Total/NA	Water	SM 4500 H+ B	
550-210427-5	FC-CCR-MW73-1123	Total/NA	Water	SM 4500 H+ B	
550-210427-6	FC-CCR-MW86-1123	Total/NA	Water	SM 4500 H+ B	
LCSSRM 550-311239/1	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	
LCSSRM 550-311239/13	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	
LCSSRM 550-311239/25	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	
LCSSRM 550-311239/30	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	
550-210429-D-2 DU	Duplicate	Total/NA	Water	SM 4500 H+ B	
550-210468-H-1 DU	Duplicate	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 311252

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210427-3	FC-CCR-MW71-1123	Total/NA	Water	SM 2540C	
MB 550-311252/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 550-311252/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 550-311252/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	
550-210430-H-1 DU	Duplicate	Total/NA	Water	SM 2540C	

Lab Chronicle

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-210427-1
SDG: APS Four Corners Power Plant

Client Sample ID: FC-CCR-MW66-1123

Date Collected: 11/06/23 16:10
Date Received: 11/10/23 14:28

Lab Sample ID: 550-210427-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		2	311263	MMH	EET PHX	11/16/23 18:25
Total/NA	Analysis	300.0		200	311263	MMH	EET PHX	11/16/23 18:43
Total Recoverable	Prep	200.7			383821	JP8N	EET CAL 4	11/15/23 08:57
Total Recoverable	Analysis	200.7 Rev 4.4		5	384611	P1R	EET CAL 4	11/16/23 17:59
Total/NA	Prep	200.7			311064	SGO	EET PHX	11/14/23 10:09
Total/NA	Analysis	200.7 Rev 4.4		1	311482	GLW	EET PHX	11/20/23 17:17
Total/NA	Prep	200.7			311064	SGO	EET PHX	11/14/23 10:09
Total/NA	Analysis	200.7 Rev 4.4		5	311591	GLW	EET PHX	11/21/23 12:15
Total/NA	Prep	200.8			311057	SGO	EET PHX	11/14/23 08:56
Total/NA	Analysis	200.8 LL		1	311226	DSJ	EET PHX	11/16/23 00:59
Total/NA	Prep	200.8			311057	SGO	EET PHX	11/14/23 08:56
Total/NA	Analysis	200.8 LL		4	311523	DSJ	EET PHX	11/20/23 15:17
Total/NA	Prep	245.1			311086	HHL	EET PHX	11/14/23 13:28
Total/NA	Analysis	245.1		1	311105	HHL	EET PHX	11/14/23 18:07
Total/NA	Analysis	SM 2540C		1	310997	KMG	EET PHX	11/13/23 11:06 - 11/17/23 17:12 [1]
Total/NA	Analysis	SM 4500 H+ B		1	311239	MAN	EET PHX	11/15/23 13:36

Client Sample ID: FC-CCR-MW70-1123

Date Collected: 11/06/23 17:08
Date Received: 11/10/23 14:28

Lab Sample ID: 550-210427-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		2	311263	MMH	EET PHX	11/16/23 19:04
Total/NA	Analysis	300.0		200	311263	MMH	EET PHX	11/16/23 19:22
Total Recoverable	Prep	200.7			383821	JP8N	EET CAL 4	11/15/23 08:57
Total Recoverable	Analysis	200.7 Rev 4.4		2	384611	P1R	EET CAL 4	11/16/23 18:06
Total/NA	Prep	200.7			311064	SGO	EET PHX	11/14/23 10:09
Total/NA	Analysis	200.7 Rev 4.4		1	311482	GLW	EET PHX	11/20/23 17:20
Total/NA	Prep	200.7			311064	SGO	EET PHX	11/14/23 10:09
Total/NA	Analysis	200.7 Rev 4.4		5	311591	GLW	EET PHX	11/21/23 12:18
Total/NA	Prep	200.8			311057	SGO	EET PHX	11/14/23 08:56
Total/NA	Analysis	200.8 LL		1	311226	DSJ	EET PHX	11/16/23 01:02
Total/NA	Prep	200.8			311057	SGO	EET PHX	11/14/23 08:56
Total/NA	Analysis	200.8 LL		4	311523	DSJ	EET PHX	11/20/23 15:19
Total/NA	Prep	245.1			311086	HHL	EET PHX	11/14/23 13:28
Total/NA	Analysis	245.1		1	311105	HHL	EET PHX	11/14/23 18:09
Total/NA	Analysis	SM 2540C		1	310997	KMG	EET PHX	11/13/23 11:06 - 11/17/23 17:12 [1]
Total/NA	Analysis	SM 4500 H+ B		1	311239	MAN	EET PHX	11/15/23 13:38

Lab Chronicle

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-210427-1
SDG: APS Four Corners Power Plant

Client Sample ID: FC-CCR-MW71-1123

Date Collected: 11/08/23 11:06
Date Received: 11/10/23 14:28

Lab Sample ID: 550-210427-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		2	311264	MMH	EET PHX	11/17/23 02:44
Total/NA	Analysis	300.0		200	311264	MMH	EET PHX	11/17/23 03:02
Total Recoverable	Prep	200.7			383821	JP8N	EET CAL 4	11/15/23 08:57
Total Recoverable	Analysis	200.7 Rev 4.4		5	384611	P1R	EET CAL 4	11/16/23 18:53
Total/NA	Prep	200.7			311064	SGO	EET PHX	11/14/23 10:09
Total/NA	Analysis	200.7 Rev 4.4		1	311482	GLW	EET PHX	11/20/23 17:23
Total/NA	Prep	200.8			311057	SGO	EET PHX	11/14/23 08:56
Total/NA	Analysis	200.8 LL		1	311226	DSJ	EET PHX	11/16/23 01:04
Total/NA	Prep	200.8			311057	SGO	EET PHX	11/14/23 08:56
Total/NA	Analysis	200.8 LL		4	311523	DSJ	EET PHX	11/20/23 15:21
Total/NA	Prep	245.1			311086	HHL	EET PHX	11/14/23 13:28
Total/NA	Analysis	245.1		1	311105	HHL	EET PHX	11/14/23 18:11
Total/NA	Analysis	SM 2540C		1	311252	KMG	EET PHX	11/16/23 12:33 - 11/30/23 17:42 [1]
Total/NA	Analysis	SM 4500 H+ B		1	311239	MAN	EET PHX	11/15/23 13:39

Client Sample ID: FC-CCR-MW72-1123

Date Collected: 11/08/23 12:13
Date Received: 11/10/23 14:28

Lab Sample ID: 550-210427-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		2	311263	MMH	EET PHX	11/16/23 19:40
Total/NA	Analysis	300.0		200	311263	MMH	EET PHX	11/16/23 19:59
Total Recoverable	Prep	200.7			383821	JP8N	EET CAL 4	11/15/23 08:57
Total Recoverable	Analysis	200.7 Rev 4.4		5	384611	P1R	EET CAL 4	11/16/23 18:11
Total/NA	Prep	200.7			311064	SGO	EET PHX	11/14/23 10:09
Total/NA	Analysis	200.7 Rev 4.4		1	311482	GLW	EET PHX	11/20/23 17:25
Total/NA	Prep	200.8			311057	SGO	EET PHX	11/14/23 08:56
Total/NA	Analysis	200.8 LL		1	311226	DSJ	EET PHX	11/16/23 01:06
Total/NA	Prep	200.8			311057	SGO	EET PHX	11/14/23 08:56
Total/NA	Analysis	200.8 LL		4	311523	DSJ	EET PHX	11/20/23 15:24
Total/NA	Prep	245.1			311086	HHL	EET PHX	11/14/23 13:28
Total/NA	Analysis	245.1		1	311105	HHL	EET PHX	11/14/23 18:13
Total/NA	Analysis	SM 2540C		1	311072	KMG	EET PHX	11/14/23 11:18 - 11/20/23 14:04 [1]
Total/NA	Analysis	SM 4500 H+ B		1	311239	MAN	EET PHX	11/15/23 13:40

Client Sample ID: FC-CCR-MW73-1123

Date Collected: 11/08/23 13:16
Date Received: 11/10/23 14:28

Lab Sample ID: 550-210427-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		2	311263	MMH	EET PHX	11/16/23 20:17
Total/NA	Analysis	300.0		200	311263	MMH	EET PHX	11/16/23 21:31
Total Recoverable	Prep	200.7			383821	JP8N	EET CAL 4	11/15/23 08:57
Total Recoverable	Analysis	200.7 Rev 4.4		2	384611	P1R	EET CAL 4	11/16/23 18:13

Lab Chronicle

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-210427-1
SDG: APS Four Corners Power Plant

Client Sample ID: FC-CCR-MW73-1123

Lab Sample ID: 550-210427-5

Date Collected: 11/08/23 13:16
Matrix: Water
Date Received: 11/10/23 14:28

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	200.7			311064	SGO	EET PHX	11/14/23 10:09
Total/NA	Analysis	200.7 Rev 4.4		1	311482	GLW	EET PHX	11/20/23 17:28
Total/NA	Prep	200.8			311057	SGO	EET PHX	11/14/23 08:56
Total/NA	Analysis	200.8 LL		1	311226	DSJ	EET PHX	11/16/23 01:08
Total/NA	Prep	200.8			311057	SGO	EET PHX	11/14/23 08:56
Total/NA	Analysis	200.8 LL		4	311523	DSJ	EET PHX	11/20/23 15:26
Total/NA	Prep	245.1			311086	HHL	EET PHX	11/14/23 13:28
Total/NA	Analysis	245.1		1	311105	HHL	EET PHX	11/14/23 18:15
Total/NA	Analysis	SM 2540C		1	311072	KMG	EET PHX	11/14/23 11:18 - 11/20/23 14:04 [1]
Total/NA	Analysis	SM 4500 H+ B		1	311239	MAN	EET PHX	11/15/23 13:42

Client Sample ID: FC-CCR-MW86-1123

Lab Sample ID: 550-210427-6

Date Collected: 11/06/23 15:25
Matrix: Water
Date Received: 11/10/23 14:28

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		2	311263	MMH	EET PHX	11/16/23 15:39
Total/NA	Analysis	300.0		200	311263	MMH	EET PHX	11/16/23 15:57
Total Recoverable	Prep	200.7			383821	JP8N	EET CAL 4	11/15/23 08:57
Total Recoverable	Analysis	200.7 Rev 4.4		5	384611	P1R	EET CAL 4	11/16/23 18:20
Total/NA	Prep	200.7			311064	SGO	EET PHX	11/14/23 10:09
Total/NA	Analysis	200.7 Rev 4.4		1	311482	GLW	EET PHX	11/20/23 17:31
Total/NA	Prep	200.8			311057	SGO	EET PHX	11/14/23 08:56
Total/NA	Analysis	200.8 LL		1	311226	DSJ	EET PHX	11/16/23 01:10
Total/NA	Prep	200.8			311057	SGO	EET PHX	11/14/23 08:56
Total/NA	Analysis	200.8 LL		4	311523	DSJ	EET PHX	11/20/23 15:28
Total/NA	Prep	245.1			311086	HHL	EET PHX	11/14/23 13:28
Total/NA	Analysis	245.1		1	311105	HHL	EET PHX	11/14/23 18:17
Total/NA	Analysis	SM 2540C		1	310997	KMG	EET PHX	11/13/23 11:06 - 11/17/23 17:12 [1]
Total/NA	Analysis	SM 4500 H+ B		1	311239	MAN	EET PHX	11/15/23 13:43

[1] This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:

EET CAL 4 = Eurofins Calscience Tustin, 2841 Dow Avenue, Tustin, CA 92780, TEL (714)895-5494

EET PHX = Eurofins Phoenix, 4625 East Cotton Center Boulevard, Suite #189, Phoenix, AZ 85040, TEL (602)437-3340

Accreditation/Certification Summary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-210427-1
SDG: APS Four Corners Power Plant

Laboratory: Eurofins Phoenix

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Arizona	State	AZ0728	06-10-24

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
200.8 LL	200.8	Water	Molybdenum
SM 4500 H+ B		Water	Temperature

Laboratory: Eurofins Calscience

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Arizona	State	AZ0830	11-16-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
200.7 Rev 4.4	200.7	Water	Lithium

Method Summary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-210427-1
SDG: APS Four Corners Power Plant

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	EPA	EET PHX
200.7 Rev 4.4	Metals (ICP)	EPA	EET CAL 4
200.7 Rev 4.4	Metals (ICP)	EPA	EET PHX
200.8 LL	Metals (ICP/MS)	EPA	EET PHX
245.1	Mercury (CVAA)	EPA	EET PHX
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET PHX
SM 4500 H+ B	pH	SM	EET PHX
200.7	Preparation, Total Recoverable Metals	EPA	EET CAL 4
200.7	Preparation, Total Metals	EPA	EET PHX
200.8	Preparation, Total Metals	EPA	EET PHX
245.1	Preparation, Mercury	EPA	EET PHX

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:

EET CAL 4 = Eurofins Calscience Tustin, 2841 Dow Avenue, Tustin, CA 92780, TEL (714)895-5494

EET PHX = Eurofins Phoenix, 4625 East Cotton Center Boulevard, Suite #189, Phoenix, AZ 85040, TEL (602)437-3340

TestAmerica Phoenix
4625 E Cotton Center Blvd
Suite 189
Phoenix, AZ 85040
phone 602.437.3340 fax 602.454.9303

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☑ Other: CCR

210427

TestAmerica Laboratories, Inc.

11/30/2023

Client Contact	Natalie Chrisman	Pam Norris (505-598-8781)	Date:	COC No:
Arizona Public Service	602-250-3608	Lab Contact: Rachel Sester	Carrier:	1 of 1 COCs
PO Box 355, MS 4915	**Analysis Turnaround Time**			Sampler:
Fruitland, NM 87416	☐ CALENDAR DAYS ☑ WORKING DAYS			**For Lab Use Only:**
	TAT if different from Below _____			Walk-in Client:
	☑ 2 weeks			Lab Sampling:
Project Name: CCR Groundwater Monitoring	☐ 1 week			
Site: APS Four Corners Power Plant (URS)	☐ 2 days			Job / SDG No.:
PO #: 100622298	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	EPA 300.0 (Cl, F, SO4)	EPA 200.7 - Totals (B, Ca, Be)	EPA 200.7 - Total Lithium	EPA 200.8 - Totals (Sb, As, Ba, Cd, Co, Cr, Pb, Mo, Se, Tl)	SM 4500-HB (pH)	SM 2540C (TDS)	EPA 245.1 - Totals (Hg)	Sample Specific Notes:
FC-CCR-MW66-1123 -1	11/6/2023	1610	G	W	3	N	N	X	X	X	X	X	X	X	Low Flow
FC-CCR-MW70-1123 -2	11/6/2023	1708	G	W	3	N	N	X	X	X	X	X	X	X	"
FC-CCR-MW71-1123 -3	~~11/6/2023~~ 11/8/2023	1106	G	W	3	N	N	X	X	X	X	X	X	X	"
FC-CCR-MW72-1123 -4	~~11/6/2023~~ 11/8/2023	1213	G	W	3	N	N	X	X	X	X	X	X	X	"
FC-CCR-MW73-1123 -5	~~11/6/2023~~ 11/8/2023	~~0:00~~ 13:10	G	W	3	N	N	X	X	X	X	X	X	X	"
FC-CCR-MW86-1123 -6	11/6/2023	1525	G	W	3	N	N	X	X	X	X	X	X	X	"
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____								1	4	4	4	1	1	4	



Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☑ Disposal by Lab ☐ Archive for_____ Months

Special Instructions/QC Requirements & Comments:

Method 200.8 with collision cell

4.7°C - ONICE - BC

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd:_____ Corr'd:_____ Therm ID No.:_____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
BSLC	WSP	11-10-23 0745			
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	AHS	11-10-23 7PM			
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:
	AHS	11-10-23 2:28		EETA PHX	11/10/23 1428

Eurofins Phoenix
4625 East Cotton Center Boulevard Suite #189
Phoenix, AZ 85040
Phone: 602-437-3340

Chain of Custody Record

eurofins | Envi

Loc: 550
210427

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Eshelman, Linda	Carrier Tracking No(s):	COC No: 550-38211.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: linda.eshelman@et.eurofinsus.com	State of Origin: Arizona	Page: Page 1 of 1
Company: Eurofins Environment Testing Southwest,		Accreditations Required (See note): State - Arizona; State Program - Arizona		Job #: 550-210427-1
Address: 2841 Dow Avenue, Suite 100, ,	Due Date Requested: 11/27/2023			
City: Tustin	TAT Requested (days):			
State, Zip: CA, 92780				
Phone: 714-895-5494(Tel)	PO #:			
Email:	WO #:			
Project Name: CCR Groundwater Monitoring	Project #: 55009706			
Site: Arizona Public Service	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	200.7/200.7_P_TR (MOD) Lithium	Total Number of containers	Special Instr
			Preservation Code:						
FC-CCR-MW66-1123 (550-210427-1)	11/6/23	16:10 Arizona		Water			X	1	
FC-CCR-MW70-1123 (550-210427-2)	11/6/23	17:08 Arizona		Water			X	1	
FC-CCR-MW71-1123 (550-210427-3)	11/8/23	11:06 Arizona		Water			X	1	
FC-CCR-MW72-1123 (550-210427-4)	11/8/23	12:13 Arizona		Water			X	1	
FC-CCR-MW73-1123 (550-210427-5)	11/8/23	13:16 Arizona		Water			X	1	
FC-CCR-MW86-1123 (550-210427-6)	11/6/23	15:25 Arizona		Water			X	1	

550-210427 Chain of Custody

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Southwest, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Southwest, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Southwest, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Southwest, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	[illegible] 11-13-23	15:15	ECSW	Fedex		
2				[illegible]	11/14/23 0940	ET
3						

Custody Seals Intact: ☐ Yes ☐ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks: 1.6/1.5 542

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Arizona Public Service Company

Job Number: 550-210427-1
SDG Number: APS Four Corners Power Plant

Login Number: 210427
List Number: 1
Creator: Maycock, Lisa

List Source: Eurofins Phoenix

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	False	Check done at department level as required.

Login Sample Receipt Checklist

Client: Arizona Public Service Company

Job Number: 550-210427-1
SDG Number: APS Four Corners Power Plant

Login Number: 210427
List Number: 2
Creator: Khana, Piyush

List Source: Eurofins Calscience
List Creation: 11/14/23 02:12 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	2264027
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.5
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

PREPARED FOR

Attn: Natalie Chrisman
Arizona Public Service Company
PO BOX 188, Ste. 4458
Joseph City, Arizona 86032

Generated 12/11/2023 10:58:34 AM

JOB DESCRIPTION

CCR Groundwater Monitoring

JOB NUMBER

550-210429-1

Eurofins Phoenix
4625 East Cotton Center Boulevard
Suite #189
Phoenix AZ 85040

See page two for job notes and contact information.

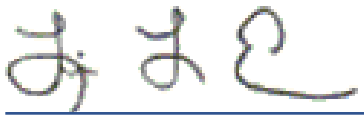
my EOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Southwest, LLC Project Manager.

Authorization



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Authorized for release by
Linda Eshelman, Project Manager II
linda.eshelman@et.eurofinsus.com
(602)659-7681

Table of Contents

Cover Page 1
Table of Contents 3
Definitions/Glossary 4
Case Narrative 5
Sample Summary 6
Detection Summary 7
Client Sample Results 9
QC Sample Results 12
QC Association Summary 21
Lab Chronicle 25
Certification Summary 27
Method Summary 28
Chain of Custody 29
Receipt Checklists 32

Definitions/Glossary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-210429-1

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
D2	Sample required dilution due to high concentration of analyte.
E2	Concentration estimated. Analyte exceeded calibration range. Reanalysis not performed due to sample matrix.
M2	Matrix spike recovery was low, the associated blank spike recovery was acceptable.
M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The associated blank spike was acceptable.
R4	MS/MSD RPD exceeded the method control limit. Recovery met acceptance criteria.

Metals

Qualifier	Qualifier Description
M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The associated blank spike was acceptable.
T5	Laboratory not licensed for this parameter

General Chemistry

Qualifier	Qualifier Description
H5	This test is specified to be performed in the field within 15 minutes of sampling; sample was received and analyzed past the regulatory holding time.
T5	Laboratory not licensed for this parameter

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 550-210429-1

Laboratory: Eurofins Phoenix

Narrative

Job Narrative
550-210429-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 11/10/2023 2:28 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 0.8°C and 2.4°C

HPLC/IC
Method 300_ORGFMS: Spike compounds were inadvertently omitted during the extraction process for the matrix spike (MS); therefore, matrix spike recoveries are unavailable for analytical batch 550-311323. The associated laboratory control sample (LCS) met acceptance criteria.

Method 300_ORGFMS: The matrix spike / matrix spike duplicate (MS/MSD) precision for analytical batch 550-311323 was outside control limits. Spike omitted from matrix spike (MS). Laboratory control sample duplicate (LCS/LCSD) precision was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals
Method 200.8_CWA_LL: The laboratory control sample (LCS) associated with preparation batch 550-311057 and analytical batch 550-311226 was outside acceptance criteria for the analytes Barium and Lead. Re-extraction and/or re-analysis could not be performed; therefore, the data have been reported. The batch matrix spike/matrix spike duplicate (MS/MSD) was within acceptance limits and may be used to evaluate matrix performance. FC-CCR-MW52-1123 (550-210429-1), FC-CCR-MW61-1123 (550-210429-2) and FC-CCR-MW75-1123 (550-210429-3)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Sample Summary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-210429-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
550-210429-1	FC-CCR-MW52-1123	Water	11/08/23 14:40	11/10/23 14:28
550-210429-2	FC-CCR-MW61-1123	Water	11/09/23 12:50	11/10/23 14:28
550-210429-3	FC-CCR-MW75-1123	Water	11/08/23 15:39	11/10/23 14:28
550-210429-4	FC-CCR-FD03-1123	Water	11/08/23 16:11	11/10/23 14:28

Detection Summary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-210429-1

Client Sample ID: FC-CCR-MW52-1123 — Lab Sample ID: 550-210429-1

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Boron	11	M3	0.050		mg/L	1		200.7 Rev 4.4	Total/NA
Cobalt	100		0.50		ug/L	1		200.8 LL	Total/NA
Molybdenum	2.2	T5	0.50		ug/L	1		200.8 LL	Total/NA

Client Sample ID: FC-CCR-MW61-1123 — Lab Sample ID: 550-210429-2

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	360	D2	40		mg/L	20		300.0	Total/NA
Fluoride	1.3	D2	0.80		mg/L	2		300.0	Total/NA
Sulfate	3700	D2	400		mg/L	200		300.0	Total/NA
Boron	49		0.050		mg/L	1		200.7 Rev 4.4	Total/NA
Calcium	620		2.0		mg/L	1		200.7 Rev 4.4	Total/NA
Magnesium	190		2.0		mg/L	1		200.7 Rev 4.4	Total/NA
Potassium	28		0.50		mg/L	1		200.7 Rev 4.4	Total/NA
Sodium	1200		2.5		mg/L	5		200.7 Rev 4.4	Total/NA
Lithium	0.50		0.050		mg/L	1		200.7 Rev 4.4	Total Recoverable
Arsenic	0.0016		0.00050		mg/L	1		200.8 LL	Total/NA
Barium	0.023		0.00050		mg/L	1		200.8 LL	Total/NA
Cadmium	0.0011		0.00010		mg/L	1		200.8 LL	Total/NA
Chromium	0.0018		0.0010		mg/L	1		200.8 LL	Total/NA
Cobalt	0.027		0.00050		mg/L	1		200.8 LL	Total/NA
Lead	0.0015		0.00050		mg/L	1		200.8 LL	Total/NA
Molybdenum	0.11	T5	0.00050		mg/L	1		200.8 LL	Total/NA
Selenium	0.0020		0.00050		mg/L	1		200.8 LL	Total/NA
Thallium	0.00028		0.00010		mg/L	1		200.8 LL	Total/NA
Alkalinity as CaCO3	99		6.0		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	99		6.0		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	6000		100		mg/L	1		SM 2540C	Total/NA
pH	8.5	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	12.2	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-MW75-1123 — Lab Sample ID: 550-210429-3

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Fluoride	1.2	D2	0.80		mg/L	2		300.0	Total/NA
Sulfate	4600		400		mg/L	200		300.0	Total/NA
Fluoride	0.60		0.40		mg/L	1		9056A	Total/NA
Boron	27		0.050		mg/L	1		200.7 Rev 4.4	Total/NA
Calcium	530		2.0		mg/L	1		200.7 Rev 4.4	Total/NA
Magnesium	290		2.0		mg/L	1		200.7 Rev 4.4	Total/NA
Potassium	29		0.50		mg/L	1		200.7 Rev 4.4	Total/NA
Sodium	1500		2.5		mg/L	5		200.7 Rev 4.4	Total/NA
Lithium	0.50		0.050		mg/L	1		200.7 Rev 4.4	Total Recoverable
Arsenic	0.0012		0.00050		mg/L	1		200.8 LL	Total/NA
Barium	0.020		0.00050		mg/L	1		200.8 LL	Total/NA
Cadmium	0.0018		0.00010		mg/L	1		200.8 LL	Total/NA
Cobalt	0.058		0.00050		mg/L	1		200.8 LL	Total/NA
Lead	0.0035		0.00050		mg/L	1		200.8 LL	Total/NA
Molybdenum	0.18	T5	0.00050		mg/L	1		200.8 LL	Total/NA
Selenium	0.0045		0.00050		mg/L	1		200.8 LL	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: FC-CCR-MW75-1123 (Continued)

Lab Sample ID: 550-210429-3

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Thallium	0.00025		0.00010		mg/L	1		200.8 LL	Total/NA
Alkalinity as CaCO3	100		6.0		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	100		6.0		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	7100		100		mg/L	1		SM 2540C	Total/NA
pH	8.3	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	12.2	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-FD03-1123

Lab Sample ID: 550-210429-4

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Boron	10		0.050		mg/L	1		200.7 Rev 4.4	Total/NA
Cobalt	99		2.0		ug/L	4		200.8 LL	Total/NA
Molybdenum	2.7	T5	0.50		ug/L	1		200.8 LL	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: FC-CCR-MW52-1123

Lab Sample ID: 550-210429-1

Date Collected: 11/08/23 14:40

Matrix: Water

Date Received: 11/10/23 14:28

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	**11**	**M3**	0.050		mg/L		11/14/23 10:09	11/20/23 16:49	1

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	**100**		0.50		ug/L		11/14/23 08:56	11/16/23 00:37	1
Molybdenum	**2.2**	**T5**	0.50		ug/L		11/14/23 08:56	11/16/23 00:37	1

Client Sample ID: FC-CCR-MW61-1123

Lab Sample ID: 550-210429-2

Date Collected: 11/09/23 12:50

Matrix: Water

Date Received: 11/10/23 14:28

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**360**	**D2**	40		mg/L			11/30/23 21:01	20
Fluoride	**1.3**	**D2**	0.80		mg/L			11/17/23 17:12	2
Sulfate	**3700**	**D2**	400		mg/L			11/17/23 18:26	200

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		0.0010		mg/L		11/14/23 10:09	11/20/23 16:51	1
Boron	**49**		0.050		mg/L		11/14/23 10:09	11/20/23 16:51	1
Calcium	**620**		2.0		mg/L		11/14/23 10:09	11/20/23 16:51	1
Magnesium	**190**		2.0		mg/L		11/14/23 10:09	11/20/23 16:51	1
Potassium	**28**		0.50		mg/L		11/14/23 10:09	11/20/23 16:51	1
Sodium	**1200**		2.5		mg/L		11/14/23 10:09	11/21/23 12:06	5

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**0.50**		0.050		mg/L		11/15/23 07:10	11/16/23 19:30	1

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.0010		mg/L		11/14/23 08:56	11/16/23 00:39	1
Arsenic	**0.0016**		0.00050		mg/L		11/14/23 08:56	11/16/23 00:39	1
Barium	**0.023**		0.00050		mg/L		11/14/23 08:56	11/16/23 00:39	1
Cadmium	**0.0011**		0.00010		mg/L		11/14/23 08:56	11/16/23 00:39	1
Chromium	**0.0018**		0.0010		mg/L		11/14/23 08:56	11/16/23 00:39	1
Cobalt	**0.027**		0.00050		mg/L		11/14/23 08:56	11/16/23 00:39	1
Lead	**0.0015**		0.00050		mg/L		11/14/23 08:56	11/16/23 00:39	1
Molybdenum	**0.11**	**T5**	0.00050		mg/L		11/14/23 08:56	11/16/23 00:39	1
Selenium	**0.0020**		0.00050		mg/L		11/14/23 08:56	11/16/23 00:39	1
Thallium	**0.00028**		0.00010		mg/L		11/14/23 08:56	11/16/23 00:39	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		11/14/23 13:28	11/14/23 17:35	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3 (SM 2320B)	**99**		6.0		mg/L			11/15/23 16:57	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**99**		6.0		mg/L			11/15/23 16:57	1

Client Sample ID: FC-CCR-MW61-1123

Lab Sample ID: 550-210429-2

Date Collected: 11/09/23 12:50

Matrix: Water

Date Received: 11/10/23 14:28

General Chemistry (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Carbonate Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			11/15/23 16:57	1
Alkalinity, Phenolphthalein (SM 2320B)	ND		6.0		mg/L			11/15/23 16:57	1
Hydroxide Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			11/15/23 16:57	1
Total Dissolved Solids (SM 2540C)	**6000**		100		mg/L			11/15/23 11:03	1
pH (SM 4500 H+ B)	**8.5**	**H5**	1.7		SU			11/15/23 13:46	1
Temperature (SM 4500 H+ B)	**12.2**	**H5 T5**	0.1		Degrees C			11/15/23 13:46	1

Client Sample ID: FC-CCR-MW75-1123

Lab Sample ID: 550-210429-3

Date Collected: 11/08/23 15:39

Matrix: Water

Date Received: 11/10/23 14:28

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		400		mg/L			11/17/23 19:03	200
Fluoride	**1.2**	**D2**	0.80		mg/L			11/17/23 18:44	2
Sulfate	**4600**		400		mg/L			11/17/23 19:03	200

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**0.60**		0.40		mg/L			12/01/23 10:12	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		0.0010		mg/L		11/14/23 10:09	11/20/23 16:54	1
Boron	**27**		0.050		mg/L		11/14/23 10:09	11/20/23 16:54	1
Calcium	**530**		2.0		mg/L		11/14/23 10:09	11/20/23 16:54	1
Magnesium	**290**		2.0		mg/L		11/14/23 10:09	11/20/23 16:54	1
Potassium	**29**		0.50		mg/L		11/14/23 10:09	11/20/23 16:54	1
Sodium	**1500**		2.5		mg/L		11/14/23 10:09	11/21/23 12:09	5

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**0.50**		0.050		mg/L		11/15/23 07:10	11/16/23 19:32	1

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.0010		mg/L		11/14/23 08:56	11/16/23 00:41	1
Arsenic	**0.0012**		0.00050		mg/L		11/14/23 08:56	11/16/23 00:41	1
Barium	**0.020**		0.00050		mg/L		11/14/23 08:56	11/16/23 00:41	1
Cadmium	**0.0018**		0.00010		mg/L		11/14/23 08:56	11/16/23 00:41	1
Chromium	ND		0.0010		mg/L		11/14/23 08:56	11/16/23 00:41	1
Cobalt	**0.058**		0.00050		mg/L		11/14/23 08:56	11/16/23 00:41	1
Lead	**0.0035**		0.00050		mg/L		11/14/23 08:56	11/16/23 00:41	1
Molybdenum	**0.18**	**T5**	0.00050		mg/L		11/14/23 08:56	11/16/23 00:41	1
Selenium	**0.0045**		0.00050		mg/L		11/14/23 08:56	11/16/23 00:41	1
Thallium	**0.00025**		0.00010		mg/L		11/14/23 08:56	11/16/23 00:41	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		11/14/23 13:28	11/14/23 17:37	1

Client Sample ID: FC-CCR-MW75-1123

Lab Sample ID: 550-210429-3

Date Collected: 11/08/23 15:39

Matrix: Water

Date Received: 11/10/23 14:28

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3 (SM 2320B)	**100**		6.0		mg/L			11/15/23 17:03	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**100**		6.0		mg/L			11/15/23 17:03	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			11/15/23 17:03	1
Alkalinity, Phenolphthalein (SM 2320B)	ND		6.0		mg/L			11/15/23 17:03	1
Hydroxide Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			11/15/23 17:03	1
Total Dissolved Solids (SM 2540C)	**7100**		100		mg/L			11/14/23 11:18	1
pH (SM 4500 H+ B)	**8.3**	**H5**	1.7		SU			11/15/23 13:48	1
Temperature (SM 4500 H+ B)	**12.2**	**H5 T5**	0.1		Degrees C			11/15/23 13:48	1

Client Sample ID: FC-CCR-FD03-1123

Lab Sample ID: 550-210429-4

Date Collected: 11/08/23 16:11

Matrix: Water

Date Received: 11/10/23 14:28

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	**10**		0.050		mg/L		11/14/23 10:09	11/20/23 16:57	1

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	**99**		2.0		ug/L		11/14/23 08:56	11/20/23 15:15	4
Molybdenum	**2.7**	**T5**	0.50		ug/L		11/14/23 08:56	11/16/23 00:43	1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 550-311323/2
Matrix: Water
Analysis Batch: 311323

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		2.0		mg/L			11/17/23 13:13	1
Fluoride	ND		0.40		mg/L			11/17/23 13:13	1
Sulfate	ND		2.0		mg/L			11/17/23 13:13	1

Lab Sample ID: LCS 550-311323/69
Matrix: Water
Analysis Batch: 311323

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			20.0	20.7		mg/L		103	90 - 110		
Fluoride			4.00	4.21		mg/L		105	90 - 110		
Sulfate			20.0	20.8		mg/L		104	90 - 110		

Lab Sample ID: LCSD 550-311323/70
Matrix: Water
Analysis Batch: 311323

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			20.0	20.7		mg/L		103	90 - 110	0	20
Fluoride			4.00	4.25		mg/L		106	90 - 110	1	20
Sulfate			20.0	20.9		mg/L		104	90 - 110	0	20

Lab Sample ID: 550-210428-A-19 MS ^200
Matrix: Water
Analysis Batch: 311323

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	1600	M2	4000	ND	M2	mg/L		0	80 - 120		
Fluoride	ND	M2	800	ND	M2	mg/L		0	80 - 120		
Sulfate	25000	E2 M3 R4	4000	805	M3	mg/L		-593	80 - 120		

Lab Sample ID: 550-210428-A-19 MSD ^200
Matrix: Water
Analysis Batch: 311323

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	1600	M2	4000	5830		mg/L		106	80 - 120	NC	20
Fluoride	ND	M2	800	817		mg/L		102	80 - 120	NC	20
Sulfate	25000	E2 M3 R4	4000	27900	E2 M3 R4	mg/L		84	80 - 120	189	20

Lab Sample ID: MB 550-312090/2
Matrix: Water
Analysis Batch: 312090

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		2.0		mg/L			11/30/23 16:06	1
Fluoride	ND		0.40		mg/L			11/30/23 16:06	1
Sulfate	ND		2.0		mg/L			11/30/23 16:06	1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 550-312090/5
Matrix: Water
Analysis Batch: 312090

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			20.0	21.2		mg/L		106	90 - 110		
Fluoride			4.00	4.26		mg/L		107	90 - 110		
Sulfate			20.0	21.4		mg/L		107	90 - 110		

Lab Sample ID: LCSD 550-312090/6
Matrix: Water
Analysis Batch: 312090

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			20.0	21.2		mg/L		106	90 - 110	0	20
Fluoride			4.00	4.29		mg/L		107	90 - 110	1	20
Sulfate			20.0	21.4		mg/L		107	90 - 110	0	20

Lab Sample ID: 550-211106-A-2 MS
Matrix: Water
Analysis Batch: 312090

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	670	E2 M3	20.0	663	E2 M3	mg/L		-60	80 - 120		
Fluoride	1.9		4.00	5.90		mg/L		99	80 - 120		
Sulfate	700	E2 M3	20.0	690	E2 M3	mg/L		-50	80 - 120		

Lab Sample ID: 550-211106-A-2 MSD
Matrix: Water
Analysis Batch: 312090

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	670	E2 M3	20.0	663	E2 M3	mg/L		-61	80 - 120	0	20
Fluoride	1.9		4.00	5.98		mg/L		101	80 - 120	1	20
Sulfate	700	E2 M3	20.0	689	E2 M3	mg/L		-54	80 - 120	0	20

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 550-312000/1-A
Matrix: Water
Analysis Batch: 312091

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		4.0		mg/L			12/01/23 03:09	1

Lab Sample ID: MB 550-312091/2
Matrix: Water
Analysis Batch: 312091

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.40		mg/L			11/30/23 16:06	1

Method: 9056A - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 550-312000/2-A
Matrix: Water
Analysis Batch: 312091

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	39.7	41.1		mg/L		103	80 - 120

Lab Sample ID: LCSD 550-312000/3-A
Matrix: Water
Analysis Batch: 312091

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Fluoride	39.8	42.2		mg/L		106	80 - 120	3	20

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 550-311064/1-A
Matrix: Water
Analysis Batch: 311482

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 311064

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		0.0010	mg/L		11/14/23 10:09	11/20/23 16:34	1
Boron	ND		0.050	mg/L		11/14/23 10:09	11/20/23 16:34	1
Calcium	ND		2.0	mg/L		11/14/23 10:09	11/20/23 16:34	1
Magnesium	ND		2.0	mg/L		11/14/23 10:09	11/20/23 16:34	1
Potassium	ND		0.50	mg/L		11/14/23 10:09	11/20/23 16:34	1
Sodium	ND		0.50	mg/L		11/14/23 10:09	11/20/23 16:34	1

Lab Sample ID: LCS 550-311064/2-A
Matrix: Water
Analysis Batch: 311482

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 311064

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Beryllium	1.00	1.17		mg/L		117	85 - 115
Boron	1.00	1.16		mg/L		116	85 - 115
Calcium	21.0	24.5		mg/L		117	85 - 115
Magnesium	21.0	23.9		mg/L		114	85 - 115
Potassium	20.0	23.0		mg/L		115	85 - 115
Sodium	20.0	22.8		mg/L		114	85 - 115

Lab Sample ID: LCSD 550-311064/3-A
Matrix: Water
Analysis Batch: 311482

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 311064

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Beryllium	1.00	1.17		mg/L		117	85 - 115	0	20
Boron	1.00	1.14		mg/L		114	85 - 115	2	20
Calcium	21.0	24.2		mg/L		115	85 - 115	1	20
Magnesium	21.0	23.7		mg/L		113	85 - 115	1	20
Potassium	20.0	22.6		mg/L		113	85 - 115	2	20
Sodium	20.0	22.4		mg/L		112	85 - 115	2	20

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: 550-210429-1 MS
Matrix: Water
Analysis Batch: 311482

Client Sample ID: FC-CCR-MW52-1123
Prep Type: Total/NA
Prep Batch: 311064

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	11	M3	1.00	11.3	M3	mg/L		56	70 - 130

Lab Sample ID: 550-210429-1 MSD
Matrix: Water
Analysis Batch: 311482

Client Sample ID: FC-CCR-MW52-1123
Prep Type: Total/NA
Prep Batch: 311064

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron	11	M3	1.00	11.3	M3	mg/L		52	70 - 130	0	20

Lab Sample ID: MB 570-383775/1-A
Matrix: Water
Analysis Batch: 384611

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 383775

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	ND		0.050		mg/L		11/15/23 07:10	11/16/23 18:55	1

Lab Sample ID: LCS 570-383775/2-A
Matrix: Water
Analysis Batch: 384611

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 383775

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Lithium	0.500	0.499		mg/L		100	85 - 115

Lab Sample ID: LCSD 570-383775/3-A
Matrix: Water
Analysis Batch: 384611

Client Sample ID: Lab Control Sample Dup
Prep Type: Total Recoverable
Prep Batch: 383775

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Lithium	0.500	0.497		mg/L		99	85 - 115	0	20

Lab Sample ID: 570-160842-L-8-B MS
Matrix: Water
Analysis Batch: 384611

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 383775

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Lithium	ND		0.500	0.531		mg/L		106	80 - 120

Lab Sample ID: 570-160842-L-8-C MSD
Matrix: Water
Analysis Batch: 384611

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 383775

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Lithium	ND		0.500	0.529		mg/L		106	80 - 120	0	20

Method: 200.8 LL - Metals (ICP/MS)

Lab Sample ID: MB 550-311057/1-A
Matrix: Water
Analysis Batch: 311226

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 311057

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.0010		mg/L		11/14/23 08:56	11/16/23 00:22	1
Arsenic	ND		0.00050		mg/L		11/14/23 08:56	11/16/23 00:22	1
Barium	ND		0.00050		mg/L		11/14/23 08:56	11/16/23 00:22	1
Cadmium	ND		0.00010		mg/L		11/14/23 08:56	11/16/23 00:22	1
Chromium	ND		0.0010		mg/L		11/14/23 08:56	11/16/23 00:22	1
Cobalt	ND		0.50		ug/L		11/14/23 08:56	11/16/23 00:22	1
Lead	ND		0.00050		mg/L		11/14/23 08:56	11/16/23 00:22	1
Molybdenum	ND		0.50		ug/L		11/14/23 08:56	11/16/23 00:22	1
Selenium	ND		0.00050		mg/L		11/14/23 08:56	11/16/23 00:22	1
Thallium	ND		0.00010		mg/L		11/14/23 08:56	11/16/23 00:22	1

Lab Sample ID: MB 550-311057/1-A
Matrix: Water
Analysis Batch: 311523

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 311057

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	ND		0.50		ug/L		11/14/23 08:56	11/20/23 15:03	1

Lab Sample ID: LCS 550-311057/2-A
Matrix: Water
Analysis Batch: 311226

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 311057

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Antimony			0.100	0.102		mg/L		102	85 - 115		
Arsenic			0.100	0.0979		mg/L		98	85 - 115		
Cadmium			0.100	0.0995		mg/L		99	85 - 115		
Chromium			0.100	0.0965		mg/L		96	85 - 115		
Cobalt			100	99.9		ug/L		100	85 - 115		
Molybdenum			100	101		ug/L		101	85 - 115		
Selenium			0.100	0.0953		mg/L		95	85 - 115		
Thallium			0.100	0.113		mg/L		113	85 - 115		

Lab Sample ID: LCS 550-311057/2-A
Matrix: Water
Analysis Batch: 311523

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 311057

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Cobalt			100	94.6		ug/L		95	85 - 115		

Lab Sample ID: LCSD 550-311057/3-A
Matrix: Water
Analysis Batch: 311226

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 311057

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony			0.100	0.101		mg/L		101	85 - 115	1	20
Arsenic			0.100	0.0968		mg/L		97	85 - 115	1	20
Cadmium			0.100	0.0978		mg/L		98	85 - 115	2	20
Chromium			0.100	0.0961		mg/L		96	85 - 115	0	20
Cobalt			100	98.2		ug/L		98	85 - 115	2	20

Method: 200.8 LL - Metals (ICP/MS) (Continued)

Lab Sample ID: LCSD 550-311057/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 311226 — **Prep Batch: 311057**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Molybdenum			100	99.0		ug/L		99	85 - 115	2	20
Selenium			0.100	0.0946		mg/L		95	85 - 115	1	20
Thallium			0.100	0.114		mg/L		114	85 - 115	1	20

Lab Sample ID: LCSD 550-311057/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 311523 — **Prep Batch: 311057**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cobalt			100	97.2		ug/L		97	85 - 115	3	20

Lab Sample ID: 550-210429-1 MS — **Client Sample ID: FC-CCR-MW52-1123**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 311226 — **Prep Batch: 311057**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Molybdenum	2.2	T5	100	108		ug/L		106	70 - 130		

Lab Sample ID: 550-210429-1 MS — **Client Sample ID: FC-CCR-MW52-1123**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 311523 — **Prep Batch: 311057**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Cobalt	100		100	193		ug/L					

Lab Sample ID: 550-210429-1 MSD — **Client Sample ID: FC-CCR-MW52-1123**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 311226 — **Prep Batch: 311057**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cobalt	100		100	194		ug/L		93	70 - 130	2	20
Molybdenum	2.2	T5	100	107		ug/L		105	70 - 130	1	20

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 550-311086/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 311105 — **Prep Batch: 311086**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		11/14/23 13:28	11/14/23 17:17	1

Lab Sample ID: LCS 550-311086/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 311105 — **Prep Batch: 311086**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury			0.00500	0.00499		mg/L		100	85 - 115		

Method: 245.1 - Mercury (CVAA) (Continued)

Lab Sample ID: LCSD 550-311086/3-A
Matrix: Water
Analysis Batch: 311105

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 311086

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury			0.00500	0.00488		mg/L		98	85 - 115	2	20

Lab Sample ID: 550-210432-I-2-C MS
Matrix: Water
Analysis Batch: 311105

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 311086

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	ND		0.00500	0.00501		mg/L		100	70 - 130

Lab Sample ID: 550-210432-I-2-D MSD
Matrix: Water
Analysis Batch: 311105

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 311086

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		0.00500	0.00504		mg/L		101	70 - 130	1	20

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 550-311195/5
Matrix: Water
Analysis Batch: 311195

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3	ND		6.0		mg/L			11/15/23 12:58	1
Bicarbonate Alkalinity as CaCO3	ND		6.0		mg/L			11/15/23 12:58	1
Carbonate Alkalinity as CaCO3	ND		6.0		mg/L			11/15/23 12:58	1
Alkalinity, Phenolphthalein	ND		6.0		mg/L			11/15/23 12:58	1
Hydroxide Alkalinity as CaCO3	ND		6.0		mg/L			11/15/23 12:58	1

Lab Sample ID: LCS 550-311195/4
Matrix: Water
Analysis Batch: 311195

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Alkalinity as CaCO3			250	244		mg/L		98	90 - 110

Lab Sample ID: LCSD 550-311195/8
Matrix: Water
Analysis Batch: 311195

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Alkalinity as CaCO3			250	245		mg/L		98	90 - 110	0	20

Lab Sample ID: 550-210347-L-1 DU
Matrix: Water
Analysis Batch: 311195

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Alkalinity as CaCO3	98			98.3		mg/L				0	20
Bicarbonate Alkalinity as CaCO3	98			98.3		mg/L				0	20

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: 550-210347-L-1 DU
Matrix: Water
Analysis Batch: 311195

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Carbonate Alkalinity as CaCO3	ND		ND		mg/L		NC	20
Alkalinity, Phenolphthalein	ND		ND		mg/L		NC	20
Hydroxide Alkalinity as CaCO3	ND		ND		mg/L		NC	20

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 550-311072/1
Matrix: Water
Analysis Batch: 311072

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		20	mg/L			11/14/23 11:18	1

Lab Sample ID: LCS 550-311072/2
Matrix: Water
Analysis Batch: 311072

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	1000	978		mg/L		98	90 - 110

Lab Sample ID: LCSD 550-311072/3
Matrix: Water
Analysis Batch: 311072

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Dissolved Solids	1000	978		mg/L		98	90 - 110	0	10

Lab Sample ID: 550-210340-G-3 DU
Matrix: Water
Analysis Batch: 311072

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	1100		1130		mg/L		0.7	10

Lab Sample ID: MB 550-311147/1
Matrix: Water
Analysis Batch: 311147

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		20	mg/L			11/15/23 11:03	1

Lab Sample ID: LCS 550-311147/2
Matrix: Water
Analysis Batch: 311147

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	1000	990		mg/L		99	90 - 110

Method: SM 2540C - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: LCSD 550-311147/3
Matrix: Water
Analysis Batch: 311147

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Dissolved Solids			1000	982		mg/L		98	90 - 110	1	10

Lab Sample ID: 550-210428-A-12 DU
Matrix: Water
Analysis Batch: 311147

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	8400			8610		mg/L				2	10

Method: SM 4500 H+ B - pH

Lab Sample ID: LCSSRM 550-311239/25
Matrix: Water
Analysis Batch: 311239

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits		
pH			7.00	7.1		SU		100.7	98.5 - 101.5		

Lab Sample ID: LCSSRM 550-311239/30
Matrix: Water
Analysis Batch: 311239

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits		
pH			7.00	7.1		SU		101.0	98.5 - 101.5		

Lab Sample ID: 550-210429-2 DU
Matrix: Water
Analysis Batch: 311239

Client Sample ID: FC-CCR-MW61-1123
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
pH	8.5	H5		8.5		SU				0	5
Temperature	12.2	H5 T5		12.2		Degrees C				0	

HPLC/IC

Analysis Batch: 311323

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210429-2	FC-CCR-MW61-1123	Total/NA	Water	300.0	
550-210429-2	FC-CCR-MW61-1123	Total/NA	Water	300.0	
550-210429-3	FC-CCR-MW75-1123	Total/NA	Water	300.0	
550-210429-3	FC-CCR-MW75-1123	Total/NA	Water	300.0	
MB 550-311323/2	Method Blank	Total/NA	Water	300.0	
LCS 550-311323/69	Lab Control Sample	Total/NA	Water	300.0	
LCSD 550-311323/70	Lab Control Sample Dup	Total/NA	Water	300.0	
550-210428-A-19 MS ^200	Matrix Spike	Total/NA	Water	300.0	
550-210428-A-19 MSD ^200	Matrix Spike Duplicate	Total/NA	Water	300.0	

Leach Batch: 312000

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 550-312000/1-A	Method Blank	Total/NA	Water	DI Leach	
LCS 550-312000/2-A	Lab Control Sample	Total/NA	Water	DI Leach	
LCSD 550-312000/3-A	Lab Control Sample Dup	Total/NA	Water	DI Leach	

Analysis Batch: 312090

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210429-2	FC-CCR-MW61-1123	Total/NA	Water	300.0	
MB 550-312090/2	Method Blank	Total/NA	Water	300.0	
LCS 550-312090/5	Lab Control Sample	Total/NA	Water	300.0	
LCSD 550-312090/6	Lab Control Sample Dup	Total/NA	Water	300.0	
550-211106-A-2 MS	Matrix Spike	Total/NA	Water	300.0	
550-211106-A-2 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Analysis Batch: 312091

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210429-3	FC-CCR-MW75-1123	Total/NA	Water	9056A	
MB 550-312000/1-A	Method Blank	Total/NA	Water	9056A	312000
MB 550-312091/2	Method Blank	Total/NA	Water	9056A	
LCS 550-312000/2-A	Lab Control Sample	Total/NA	Water	9056A	312000
LCSD 550-312000/3-A	Lab Control Sample Dup	Total/NA	Water	9056A	312000

Metals

Prep Batch: 311057

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210429-1	FC-CCR-MW52-1123	Total/NA	Water	200.8	
550-210429-2	FC-CCR-MW61-1123	Total/NA	Water	200.8	
550-210429-3	FC-CCR-MW75-1123	Total/NA	Water	200.8	
550-210429-4	FC-CCR-FD03-1123	Total/NA	Water	200.8	
MB 550-311057/1-A	Method Blank	Total/NA	Water	200.8	
LCS 550-311057/2-A	Lab Control Sample	Total/NA	Water	200.8	
LCSD 550-311057/3-A	Lab Control Sample Dup	Total/NA	Water	200.8	
550-210429-1 MS	FC-CCR-MW52-1123	Total/NA	Water	200.8	
550-210429-1 MSD	FC-CCR-MW52-1123	Total/NA	Water	200.8	

Prep Batch: 311064

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210429-1	FC-CCR-MW52-1123	Total/NA	Water	200.7	
550-210429-2	FC-CCR-MW61-1123	Total/NA	Water	200.7	

Metals (Continued)

Prep Batch: 311064 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210429-3	FC-CCR-MW75-1123	Total/NA	Water	200.7	
550-210429-4	FC-CCR-FD03-1123	Total/NA	Water	200.7	
MB 550-311064/1-A	Method Blank	Total/NA	Water	200.7	
LCS 550-311064/2-A	Lab Control Sample	Total/NA	Water	200.7	
LCSD 550-311064/3-A	Lab Control Sample Dup	Total/NA	Water	200.7	
550-210429-1 MS	FC-CCR-MW52-1123	Total/NA	Water	200.7	
550-210429-1 MSD	FC-CCR-MW52-1123	Total/NA	Water	200.7	

Prep Batch: 311086

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210429-2	FC-CCR-MW61-1123	Total/NA	Water	245.1	
550-210429-3	FC-CCR-MW75-1123	Total/NA	Water	245.1	
MB 550-311086/1-A	Method Blank	Total/NA	Water	245.1	
LCS 550-311086/2-A	Lab Control Sample	Total/NA	Water	245.1	
LCSD 550-311086/3-A	Lab Control Sample Dup	Total/NA	Water	245.1	
550-210432-I-2-C MS	Matrix Spike	Total/NA	Water	245.1	
550-210432-I-2-D MSD	Matrix Spike Duplicate	Total/NA	Water	245.1	

Analysis Batch: 311105

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210429-2	FC-CCR-MW61-1123	Total/NA	Water	245.1	311086
550-210429-3	FC-CCR-MW75-1123	Total/NA	Water	245.1	311086
MB 550-311086/1-A	Method Blank	Total/NA	Water	245.1	311086
LCS 550-311086/2-A	Lab Control Sample	Total/NA	Water	245.1	311086
LCSD 550-311086/3-A	Lab Control Sample Dup	Total/NA	Water	245.1	311086
550-210432-I-2-C MS	Matrix Spike	Total/NA	Water	245.1	311086
550-210432-I-2-D MSD	Matrix Spike Duplicate	Total/NA	Water	245.1	311086

Analysis Batch: 311226

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210429-1	FC-CCR-MW52-1123	Total/NA	Water	200.8 LL	311057
550-210429-2	FC-CCR-MW61-1123	Total/NA	Water	200.8 LL	311057
550-210429-3	FC-CCR-MW75-1123	Total/NA	Water	200.8 LL	311057
550-210429-4	FC-CCR-FD03-1123	Total/NA	Water	200.8 LL	311057
MB 550-311057/1-A	Method Blank	Total/NA	Water	200.8 LL	311057
LCS 550-311057/2-A	Lab Control Sample	Total/NA	Water	200.8 LL	311057
LCSD 550-311057/3-A	Lab Control Sample Dup	Total/NA	Water	200.8 LL	311057
550-210429-1 MS	FC-CCR-MW52-1123	Total/NA	Water	200.8 LL	311057
550-210429-1 MSD	FC-CCR-MW52-1123	Total/NA	Water	200.8 LL	311057

Analysis Batch: 311482

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210429-1	FC-CCR-MW52-1123	Total/NA	Water	200.7 Rev 4.4	311064
550-210429-2	FC-CCR-MW61-1123	Total/NA	Water	200.7 Rev 4.4	311064
550-210429-3	FC-CCR-MW75-1123	Total/NA	Water	200.7 Rev 4.4	311064
550-210429-4	FC-CCR-FD03-1123	Total/NA	Water	200.7 Rev 4.4	311064
MB 550-311064/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	311064
LCS 550-311064/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	311064
LCSD 550-311064/3-A	Lab Control Sample Dup	Total/NA	Water	200.7 Rev 4.4	311064
550-210429-1 MS	FC-CCR-MW52-1123	Total/NA	Water	200.7 Rev 4.4	311064
550-210429-1 MSD	FC-CCR-MW52-1123	Total/NA	Water	200.7 Rev 4.4	311064

Metals

Analysis Batch: 311523

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210429-4	FC-CCR-FD03-1123	Total/NA	Water	200.8 LL	311057
MB 550-311057/1-A	Method Blank	Total/NA	Water	200.8 LL	311057
LCS 550-311057/2-A	Lab Control Sample	Total/NA	Water	200.8 LL	311057
LCSD 550-311057/3-A	Lab Control Sample Dup	Total/NA	Water	200.8 LL	311057
550-210429-1 MS	FC-CCR-MW52-1123	Total/NA	Water	200.8 LL	311057

Analysis Batch: 311591

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210429-2	FC-CCR-MW61-1123	Total/NA	Water	200.7 Rev 4.4	311064
550-210429-3	FC-CCR-MW75-1123	Total/NA	Water	200.7 Rev 4.4	311064

Prep Batch: 383775

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210429-2	FC-CCR-MW61-1123	Total Recoverable	Water	200.7	
550-210429-3	FC-CCR-MW75-1123	Total Recoverable	Water	200.7	
MB 570-383775/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 570-383775/2-A	Lab Control Sample	Total Recoverable	Water	200.7	
LCSD 570-383775/3-A	Lab Control Sample Dup	Total Recoverable	Water	200.7	
570-160842-L-8-B MS	Matrix Spike	Total Recoverable	Water	200.7	
570-160842-L-8-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	200.7	

Analysis Batch: 384611

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210429-2	FC-CCR-MW61-1123	Total Recoverable	Water	200.7 Rev 4.4	383775
550-210429-3	FC-CCR-MW75-1123	Total Recoverable	Water	200.7 Rev 4.4	383775
MB 570-383775/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	383775
LCS 570-383775/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	383775
LCSD 570-383775/3-A	Lab Control Sample Dup	Total Recoverable	Water	200.7 Rev 4.4	383775
570-160842-L-8-B MS	Matrix Spike	Total Recoverable	Water	200.7 Rev 4.4	383775
570-160842-L-8-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	200.7 Rev 4.4	383775

General Chemistry

Analysis Batch: 311072

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210429-3	FC-CCR-MW75-1123	Total/NA	Water	SM 2540C	
MB 550-311072/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 550-311072/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 550-311072/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	
550-210340-G-3 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 311147

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210429-2	FC-CCR-MW61-1123	Total/NA	Water	SM 2540C	
MB 550-311147/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 550-311147/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 550-311147/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	
550-210428-A-12 DU	Duplicate	Total/NA	Water	SM 2540C	

QC Association Summary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-210429-1

General Chemistry

Analysis Batch: 311195

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210429-2	FC-CCR-MW61-1123	Total/NA	Water	SM 2320B	
550-210429-3	FC-CCR-MW75-1123	Total/NA	Water	SM 2320B	
MB 550-311195/5	Method Blank	Total/NA	Water	SM 2320B	
LCS 550-311195/4	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 550-311195/8	Lab Control Sample Dup	Total/NA	Water	SM 2320B	
550-210347-L-1 DU	Duplicate	Total/NA	Water	SM 2320B	

Analysis Batch: 311239

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210429-2	FC-CCR-MW61-1123	Total/NA	Water	SM 4500 H+ B	
550-210429-3	FC-CCR-MW75-1123	Total/NA	Water	SM 4500 H+ B	
LCSSRM 550-311239/25	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	
LCSSRM 550-311239/30	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	
550-210429-2 DU	FC-CCR-MW61-1123	Total/NA	Water	SM 4500 H+ B	

Lab Chronicle

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-210429-1

Client Sample ID: FC-CCR-MW52-1123

Lab Sample ID: 550-210429-1

Date Collected: 11/08/23 14:40

Matrix: Water

Date Received: 11/10/23 14:28

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	200.7			311064	SGO	EET PHX	11/14/23 10:09
Total/NA	Analysis	200.7 Rev 4.4		1	311482	GLW	EET PHX	11/20/23 16:49
Total/NA	Prep	200.8			311057	SGO	EET PHX	11/14/23 08:56
Total/NA	Analysis	200.8 LL		1	311226	DSJ	EET PHX	11/16/23 00:37

Client Sample ID: FC-CCR-MW61-1123

Lab Sample ID: 550-210429-2

Date Collected: 11/09/23 12:50

Matrix: Water

Date Received: 11/10/23 14:28

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		2	311323	MMH	EET PHX	11/17/23 17:12
Total/NA	Analysis	300.0		200	311323	MMH	EET PHX	11/17/23 18:26
Total/NA	Analysis	300.0		20	312090	MMH	EET PHX	11/30/23 21:01
Total Recoverable	Prep	200.7			383775	JP8N	EET CAL 4	11/15/23 07:10
Total Recoverable	Analysis	200.7 Rev 4.4		1	384611	P1R	EET CAL 4	11/16/23 19:30
Total/NA	Prep	200.7			311064	SGO	EET PHX	11/14/23 10:09
Total/NA	Analysis	200.7 Rev 4.4		1	311482	GLW	EET PHX	11/20/23 16:51
Total/NA	Prep	200.7			311064	SGO	EET PHX	11/14/23 10:09
Total/NA	Analysis	200.7 Rev 4.4		5	311591	GLW	EET PHX	11/21/23 12:06
Total/NA	Prep	200.8			311057	SGO	EET PHX	11/14/23 08:56
Total/NA	Analysis	200.8 LL		1	311226	DSJ	EET PHX	11/16/23 00:39
Total/NA	Prep	245.1			311086	HHL	EET PHX	11/14/23 13:28
Total/NA	Analysis	245.1		1	311105	HHL	EET PHX	11/14/23 17:35
Total/NA	Analysis	SM 2320B		1	311195	MAN	EET PHX	11/15/23 16:57
Total/NA	Analysis	SM 2540C		1	311147	KMG	EET PHX	11/15/23 11:03 - 11/21/23 15:28 [1]
Total/NA	Analysis	SM 4500 H+ B		1	311239	MAN	EET PHX	11/15/23 13:46

Client Sample ID: FC-CCR-MW75-1123

Lab Sample ID: 550-210429-3

Date Collected: 11/08/23 15:39

Matrix: Water

Date Received: 11/10/23 14:28

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		2	311323	MMH	EET PHX	11/17/23 18:44
Total/NA	Analysis	300.0		200	311323	MMH	EET PHX	11/17/23 19:03
Total/NA	Analysis	9056A		1	312091	MMH	EET PHX	12/01/23 10:12
Total Recoverable	Prep	200.7			383775	JP8N	EET CAL 4	11/15/23 07:10
Total Recoverable	Analysis	200.7 Rev 4.4		1	384611	P1R	EET CAL 4	11/16/23 19:32
Total/NA	Prep	200.7			311064	SGO	EET PHX	11/14/23 10:09
Total/NA	Analysis	200.7 Rev 4.4		1	311482	GLW	EET PHX	11/20/23 16:54
Total/NA	Prep	200.7			311064	SGO	EET PHX	11/14/23 10:09
Total/NA	Analysis	200.7 Rev 4.4		5	311591	GLW	EET PHX	11/21/23 12:09
Total/NA	Prep	200.8			311057	SGO	EET PHX	11/14/23 08:56
Total/NA	Analysis	200.8 LL		1	311226	DSJ	EET PHX	11/16/23 00:41

Lab Chronicle

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-210429-1

Client Sample ID: FC-CCR-MW75-1123

Lab Sample ID: 550-210429-3

Date Collected: 11/08/23 15:39

Matrix: Water

Date Received: 11/10/23 14:28

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	245.1			311086	HHL	EET PHX	11/14/23 13:28
Total/NA	Analysis	245.1		1	311105	HHL	EET PHX	11/14/23 17:37
Total/NA	Analysis	SM 2320B		1	311195	MAN	EET PHX	11/15/23 17:03
Total/NA	Analysis	SM 2540C		1	311072	KMG	EET PHX	11/14/23 11:18 - 11/20/23 14:04 [1]
Total/NA	Analysis	SM 4500 H+ B		1	311239	MAN	EET PHX	11/15/23 13:48

Client Sample ID: FC-CCR-FD03-1123

Lab Sample ID: 550-210429-4

Date Collected: 11/08/23 16:11

Matrix: Water

Date Received: 11/10/23 14:28

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	200.7			311064	SGO	EET PHX	11/14/23 10:09
Total/NA	Analysis	200.7 Rev 4.4		1	311482	GLW	EET PHX	11/20/23 16:57
Total/NA	Prep	200.8			311057	SGO	EET PHX	11/14/23 08:56
Total/NA	Analysis	200.8 LL		1	311226	DSJ	EET PHX	11/16/23 00:43
Total/NA	Prep	200.8			311057	SGO	EET PHX	11/14/23 08:56
Total/NA	Analysis	200.8 LL		4	311523	DSJ	EET PHX	11/20/23 15:15

[1] This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:

EET CAL 4 = Eurofins Calscience Tustin, 2841 Dow Avenue, Tustin, CA 92780, TEL (714)895-5494

EET PHX = Eurofins Phoenix, 4625 East Cotton Center Boulevard, Suite #189, Phoenix, AZ 85040, TEL (602)437-3340

Accreditation/Certification Summary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-210429-1

Laboratory: Eurofins Phoenix

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Arizona	State	AZ0728	06-10-24

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
200.8 LL	200.8	Water	Molybdenum
SM 4500 H+ B		Water	Temperature

Laboratory: Eurofins Calscience

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Arizona	State	AZ0830	11-16-24

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
200.7 Rev 4.4	200.7	Water	Lithium

Method Summary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-210429-1

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	EPA	EET PHX
9056A	Anions, Ion Chromatography	SW846	EET PHX
200.7 Rev 4.4	Metals (ICP)	EPA	EET CAL 4
200.7 Rev 4.4	Metals (ICP)	EPA	EET PHX
200.8 LL	Metals (ICP/MS)	EPA	EET PHX
245.1	Mercury (CVAA)	EPA	EET PHX
SM 2320B	Alkalinity	SM	EET PHX
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET PHX
SM 4500 H+ B	pH	SM	EET PHX
200.7	Preparation, Total Recoverable Metals	EPA	EET CAL 4
200.7	Preparation, Total Metals	EPA	EET PHX
200.8	Preparation, Total Metals	EPA	EET PHX
245.1	Preparation, Mercury	EPA	EET PHX

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET CAL 4 = Eurofins Calscience Tustin, 2841 Dow Avenue, Tustin, CA 92780, TEL (714)895-5494

EET PHX = Eurofins Phoenix, 4625 East Cotton Center Boulevard, Suite #189, Phoenix, AZ 85040, TEL (602)437-3340

TestAmerica Phoenix
4625 E Cotton Center Blvd
Suite 189
Phoenix, AZ 85040
phone 602.437.3340 fax 602.454.9303

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☑ Other: CCR

210429

TestAmerica Laboratories, Inc.

12/1/2023

Client Contact	Natalie Chrisman	Pam Norris (505-598-8781)	Date:	COC No:
Arizona Public Service	602-250-3608	Lab Contact: Rachel Sester	Carrier:	1 of 1 COCs
PO Box 355, MS 4915	Analysis Turnaround Time			Sampler:
Fruitland, NM 87416	☐ CALENDAR DAYS ☑ WORKING DAYS			For Lab Use Only:
Phone	TAT if different from Below ____			Walk-in Client:
FAX	☑ 2 weeks			Lab Sampling:
Project Name: CCR Groundwater Monitoring	☐ 1 week			
Site: APS Four Corners Power Plant (Multiunit)	☐ 2 days			Job / SDG No.:
PO #: 100622298	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	EPA 300.0 (Cl, F, SO4)	EPA 200.7 - Totals (B)	EPA 200.7 - Totals (B, Ca, Be)	EPA 200.7 - Totals (B, Ca, Be, K, Mg, Na)	EPA 200.7 - Totals (B, Ca, Be, K, Mg, Na, Mn, Fe)	EPA 200.7 - Total Lithium	EPA 200.8 - Totals (Sb, As, Ba, Cd, Co, Cr, Pb, Mo, Se, Tl)	EPA 200.8 - Totals (Co, Mo)	EPA 245.1 - Totals (Hg)	SM 4500-HB (pH)	SM 2540C (TDS)	SM 2320B (CO3 Alkalinity as CaCO3, HCO3 Alkalinity as CaCO3)	9056A - Fluoride	Sample Specific Notes:
FC-CCR-MW52-1123 -1	11/8/2023	1440	G	W	3	N	Y		X						X						Low Flow, MS/MSD included
FC-CCR-MW61-1123 -2	11/9/2023	1250	G	W	3	N		X			X		X	X		X	X	X	X		Low Flow
FC-CCR-MW75-1123 -3	11/8/2023	1539	G	W	4	N		X			X		X	X		X	X	X	X	X	"
FC-CCR-FD03-1123 -4	11/8/2023	1611	G	W	1	N	N		X						X						"
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other ____								1	4	4	4	4	4	4	4	4	1	1	1	1	

550-210429 Chain of Custody

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☑ Disposal by Lab ☐ Archive for ____ Months

Special Instructions/QC Requirements & Comments:

Method 200.8 with collision cell

0.8°C / 2-4°C - ONICE pc

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: ____ Corr'd: ____ Therm ID No.: ____

Relinquished by:	Company: WSP	Date/Time: 11-10-23 1745	Received by:	Company:	Date/Time:
Relinquished by:	Company: GHS	Date/Time: 11-10-23 2345	Received by:	Company:	Date/Time:
Relinquished by:	Company: AHS	Date/Time: 11-10-23 2:28	Received in Laboratory by:	Company: EETA PHX	Date/Time: 11/10/23 1428

550-210429 Waybill

Pkt # 159469-434 MTW EXP 04/24



TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ORIGIN ID:INWA (602) 437-3340
TESTAMERICA-PHOENIX
TESTAMERICA
4625 E COTTON CENTER BLVD
SUITE 189
PHOENIX, AZ 85040
UNITED STATES US

SHIP DATE: 13NOV23
ACTWGT: 53.20 LB
CAD: 0875926/CAFE3755
DIMS: 25x13x14 IN

BILL RECIPIENT

TO **SHIPPING/RECEIVING**
EUROFINS ENVIRONMENT TESTING SOUTHW
2841 DOW AVENUE, SUITE 100

TUSTIN CA 92780
(714) 895-5494 REF: S550-86981
PO: YES DEPT: SAMPLE RECEIVING

SBSCS/FOB34-E

FedEx Express

E

J233023051201

TUE - 14 NOV 10:30A
PRIORITY OVERNIGHT

6388 9413 5345

Z DTHA

92780
CA-US SNA

Seal

11-13-23

eurofins | Environment Testing TestAmerica

2264027

Eurofins Phoenix
4625 East Cotton Center Boulevard Suite #189
Phoenix, AZ 85040
Phone: 602-437-3340

Chain of Custody Record

eurofins | E

Loc: 550
210429

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Eshelman, Linda	Carrier Tracking No(s):	COC No: 550-38211.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: linda.eshelman@et.eurofinsus.com	State of Origin: Arizona	Page: Page 1 of 1
Company: Eurofins Environment Testing Southwest,		Accreditations Required (See note): State - Arizona; State Program - Arizona		Job #: 550-210429-1
Address: 2841 Dow Avenue, Suite 100, ,	Due Date Requested: 11/27/2023			
City: Tustin	TAT Requested (days):			
State, Zip: CA, 92780				
Phone: 714-895-5494(Tel)	PO #:			
Email:	WO #:			
Project Name: CCR Groundwater Monitoring	Project #: 55009706			
Site: Arizona Public Service	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA
M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	200.7/200.7_P_TR (MOD) Lithium	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
FC-CCR-MW61-1123 (550-210429-2)	11/9/23	12:50 Arizona		Water			X	1	
FC-CCR-MW75-1123 (550-210429-3)	11/8/23	15:39 Arizona		Water			X	1	

550-210429 Chain of Custody

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Southwest, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Southwest, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Southwest, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Southwest, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	Ernest 11-13-23	15:15	EGSW	Fedex		
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 11/14/23 0910	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 1.6/1.5 542

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Arizona Public Service Company

Job Number: 550-210429-1

Login Number: 210429

List Source: Eurofins Phoenix

List Number: 1

Creator: Maycock, Lisa

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	False	Check done at department level as required.

Login Sample Receipt Checklist

Client: Arizona Public Service Company

Job Number: 550-210429-1

Login Number: 210429
List Number: 2
Creator: Khana, Piyush

List Source: Eurofins Calscience
List Creation: 11/14/23 02:12 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	2264027
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.5
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

PREPARED FOR

Attn: Natalie Chrisman
Arizona Public Service Company
PO BOX 188, Ste. 4458
Joseph City, Arizona 86032

Generated 11/30/2023 2:18:08 PM

JOB DESCRIPTION

CCR Groundwater Monitoring
APS Four Corners Power Plant (CWTP)

JOB NUMBER

550-210591-1

Eurofins Phoenix
4625 East Cotton Center Boulevard
Suite #189
Phoenix AZ 85040

See page two for job notes and contact information.

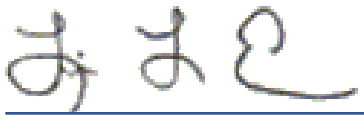
my EOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Southwest, LLC Project Manager.

Authorization



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Authorized for release by
Linda Eshelman, Project Manager II
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Table of Contents

Cover Page 1
Table of Contents 3
Definitions/Glossary 4
Case Narrative 5
Sample Summary 6
Detection Summary 7
Client Sample Results 9
QC Sample Results 13
QC Association Summary 21
Lab Chronicle 25
Certification Summary 27
Method Summary 28
Chain of Custody 29
Receipt Checklists 31

Definitions/Glossary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-210591-1
SDG: APS Four Corners Power Plant (CWTP)

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
D2	Sample required dilution due to high concentration of analyte.

Metals

Qualifier	Qualifier Description
E2	Concentration estimated. Analyte exceeded calibration range. Reanalysis not performed due to sample matrix.
L5	The associated blank spike recovery was above laboratory/method acceptance limits. This analyte was not detected in the sample.
M1	Matrix spike recovery was high, the associated blank spike recovery was acceptable.
M2	Matrix spike recovery was low, the associated blank spike recovery was acceptable.
M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The associated blank spike was acceptable.
T5	Laboratory not licensed for this parameter
V1	CCV recovery was above method acceptance limits. This target analyte was not detected in the sample.

General Chemistry

Qualifier	Qualifier Description
H5	This test is specified to be performed in the field within 15 minutes of sampling; sample was received and analyzed past the regulatory holding time.
T5	Laboratory not licensed for this parameter

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 550-210591-1

Laboratory: Eurofins Phoenix

Narrative

Job Narrative
550-210591-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 11/15/2023 2:43 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.6°C

HPLC/IC
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals
Method 200.8_CWA_LL: Samples were diluted 10x due to matrix

FC-CCR-SW1-1123 (550-210591-1), FC-CCR-SW2-1123 (550-210591-2), FC-CCR-SW3-1123 (550-210591-3), FC-CCR-FD08-1123 (550-210591-4), (550-210594-B-12-C), (550-210594-B-12-A MS) and (550-210594-B-12-B MSD)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Sample Summary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-210591-1
SDG: APS Four Corners Power Plant (CWTP)

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
550-210591-1	FC-CCR-SW1-1123	Water	11/13/23 11:13	11/15/23 14:43
550-210591-2	FC-CCR-SW2-1123	Water	11/13/23 10:45	11/15/23 14:43
550-210591-3	FC-CCR-SW3-1123	Water	11/13/23 10:20	11/15/23 14:43
550-210591-4	FC-CCR-FD08-1123	Water	11/13/23 16:20	11/15/23 14:43

Detection Summary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-210591-1
SDG: APS Four Corners Power Plant (CWTP)

Client Sample ID: FC-CCR-SW1-1123 — Lab Sample ID: 550-210591-1

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	50	D2	4.0		mg/L	2		300.0	Total/NA
Fluoride	0.97	D2	0.80		mg/L	2		300.0	Total/NA
Sulfate	430	D2	400		mg/L	200		300.0	Total/NA
Boron	0.55		0.25		mg/L	5		200.7 Rev 4.4	Total/NA
Calcium	90		10		mg/L	5		200.7 Rev 4.4	Total/NA
Magnesium	36		10		mg/L	5		200.7 Rev 4.4	Total/NA
Potassium	8.5		2.5		mg/L	5		200.7 Rev 4.4	Total/NA
Sodium	130		2.5		mg/L	5		200.7 Rev 4.4	Total/NA
Lithium	0.10		0.050		mg/L	1		200.7 Rev 4.4	Total Recoverable
Arsenic	0.0095		0.0050		mg/L	10		200.8 LL	Total/NA
Barium	0.17		0.0050		mg/L	10		200.8 LL	Total/NA
Molybdenum	0.0062	T5	0.0050		mg/L	10		200.8 LL	Total/NA
Alkalinity as CaCO3	110		6.0		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	110		6.0		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	780		20		mg/L	1		SM 2540C	Total/NA
pH	8.6	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	8.9	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-SW2-1123 — Lab Sample ID: 550-210591-2

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	50	D2	4.0		mg/L	2		300.0	Total/NA
Fluoride	0.93	D2	0.80		mg/L	2		300.0	Total/NA
Sulfate	440		400		mg/L	200		300.0	Total/NA
Boron	0.62		0.50		mg/L	10		200.7 Rev 4.4	Total/NA
Calcium	98		10		mg/L	5		200.7 Rev 4.4	Total/NA
Iron	3.7	L5 V1	0.50		mg/L	5		200.7 Rev 4.4	Total/NA
Magnesium	39		20		mg/L	10		200.7 Rev 4.4	Total/NA
Manganese	0.14		0.050		mg/L	5		200.7 Rev 4.4	Total/NA
Potassium	9.3		5.0		mg/L	10		200.7 Rev 4.4	Total/NA
Sodium	140		5.0		mg/L	10		200.7 Rev 4.4	Total/NA
Lithium	0.10		0.050		mg/L	1		200.7 Rev 4.4	Total Recoverable
Arsenic	0.010		0.0050		mg/L	10		200.8 LL	Total/NA
Barium	0.47		0.0050		mg/L	10		200.8 LL	Total/NA
Molybdenum	0.0066	T5	0.0050		mg/L	10		200.8 LL	Total/NA
Alkalinity as CaCO3	110		6.0		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	110		6.0		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	820		20		mg/L	1		SM 2540C	Total/NA
pH	8.5	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	9.7	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-SW3-1123 — Lab Sample ID: 550-210591-3

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	50	D2	4.0		mg/L	2		300.0	Total/NA
Fluoride	0.92	D2	0.80		mg/L	2		300.0	Total/NA
Sulfate	440	D2	400		mg/L	200		300.0	Total/NA
Boron	0.33		0.25		mg/L	5		200.7 Rev 4.4	Total/NA
Calcium	91		10		mg/L	5		200.7 Rev 4.4	Total/NA
Magnesium	35		10		mg/L	5		200.7 Rev 4.4	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Phoenix

Client Sample ID: FC-CCR-SW3-1123 (Continued) — Lab Sample ID: 550-210591-3

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Potassium	8.7		2.5		mg/L	5		200.7 Rev 4.4	Total/NA
Sodium	130		2.5		mg/L	5		200.7 Rev 4.4	Total/NA
Lithium	0.11		0.050		mg/L	1		200.7 Rev 4.4	Total Recoverable
Arsenic	0.0091		0.0050		mg/L	10		200.8 LL	Total/NA
Barium	0.18		0.0050		mg/L	10		200.8 LL	Total/NA
Molybdenum	0.0064	T5	0.0050		mg/L	10		200.8 LL	Total/NA
Alkalinity as CaCO3	110		6.0		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	110		6.0		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	810		20		mg/L	1		SM 2540C	Total/NA
pH	8.3	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	10.7	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-FD08-1123 — Lab Sample ID: 550-210591-4

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	50	D2	4.0		mg/L	2		300.0	Total/NA
Fluoride	0.94	D2	0.80		mg/L	2		300.0	Total/NA
Sulfate	440	D2	400		mg/L	200		300.0	Total/NA
Boron	0.31		0.25		mg/L	5		200.7 Rev 4.4	Total/NA
Calcium	88		10		mg/L	5		200.7 Rev 4.4	Total/NA
Magnesium	33		10		mg/L	5		200.7 Rev 4.4	Total/NA
Potassium	8.1		2.5		mg/L	5		200.7 Rev 4.4	Total/NA
Sodium	120		2.5		mg/L	5		200.7 Rev 4.4	Total/NA
Lithium	0.10		0.050		mg/L	1		200.7 Rev 4.4	Total Recoverable
Arsenic	0.0089		0.0050		mg/L	10		200.8 LL	Total/NA
Barium	0.18		0.0050		mg/L	10		200.8 LL	Total/NA
Molybdenum	0.0064	T5	0.0050		mg/L	10		200.8 LL	Total/NA
Alkalinity as CaCO3	110		6.0		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	110		6.0		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	800		20		mg/L	1		SM 2540C	Total/NA
pH	8.5	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	10.1	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-210591-1
SDG: APS Four Corners Power Plant (CWTP)

Client Sample ID: FC-CCR-SW1-1123

Date Collected: 11/13/23 11:13
Date Received: 11/15/23 14:43

Lab Sample ID: 550-210591-1

Matrix: Water

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**50**	**D2**	4.0		mg/L			11/20/23 11:48	2
Fluoride	**0.97**	**D2**	0.80		mg/L			11/20/23 11:48	2
Sulfate	**430**	**D2**	400		mg/L			11/20/23 12:06	200

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND	L5 V1	0.0050		mg/L		11/21/23 04:37	11/28/23 18:13	5
Boron	**0.55**		0.25		mg/L		11/21/23 04:37	11/29/23 15:12	5
Calcium	**90**		10		mg/L		11/21/23 04:37	11/28/23 18:13	5
Iron	ND	L5 V1	0.50		mg/L		11/21/23 04:37	11/28/23 18:13	5
Magnesium	**36**		10		mg/L		11/21/23 04:37	11/29/23 15:12	5
Manganese	ND		0.050		mg/L		11/21/23 04:37	11/28/23 18:13	5
Potassium	**8.5**		2.5		mg/L		11/21/23 04:37	11/29/23 15:12	5
Sodium	**130**		2.5		mg/L		11/21/23 04:37	11/29/23 15:12	5

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**0.10**		0.050		mg/L		11/22/23 07:45	11/22/23 22:12	1

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.010		mg/L		11/21/23 06:58	11/27/23 17:29	10
Arsenic	**0.0095**		0.0050		mg/L		11/21/23 06:58	11/27/23 17:29	10
Barium	**0.17**		0.0050		mg/L		11/21/23 06:58	11/27/23 17:29	10
Cadmium	ND		0.0010		mg/L		11/21/23 06:58	11/27/23 17:29	10
Chromium	ND		0.010		mg/L		11/21/23 06:58	11/27/23 17:29	10
Cobalt	ND		0.0050		mg/L		11/21/23 06:58	11/27/23 17:29	10
Lead	ND		0.0050		mg/L		11/21/23 06:58	11/27/23 17:29	10
Molybdenum	**0.0062**	**T5**	0.0050		mg/L		11/21/23 06:58	11/27/23 17:29	10
Selenium	ND		0.0050		mg/L		11/21/23 06:58	11/27/23 17:29	10
Thallium	ND		0.0010		mg/L		11/21/23 06:58	11/27/23 17:29	10

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		11/20/23 11:20	11/20/23 15:15	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3 (SM 2320B)	**110**		6.0		mg/L			11/21/23 10:24	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**110**		6.0		mg/L			11/21/23 10:24	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			11/21/23 10:24	1
Alkalinity, Phenolphthalein (SM 2320B)	ND		6.0		mg/L			11/21/23 10:24	1
Hydroxide Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			11/21/23 10:24	1
Total Dissolved Solids (SM 2540C)	**780**		20		mg/L			11/20/23 12:18	1
pH (SM 4500 H+ B)	**8.6**	**H5**	1.7		SU			11/16/23 14:06	1
Temperature (SM 4500 H+ B)	**8.9**	**H5 T5**	0.1		Degrees C			11/16/23 14:06	1

Client Sample ID: FC-CCR-SW2-1123

Date Collected: 11/13/23 10:45
Date Received: 11/15/23 14:43

Lab Sample ID: 550-210591-2

Matrix: Water

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**50**	**D2**	4.0		mg/L			11/20/23 12:24	2
Fluoride	**0.93**	**D2**	0.80		mg/L			11/20/23 12:24	2
Sulfate	**440**		400		mg/L			11/20/23 12:43	200

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND	L5 V1	0.0050		mg/L		11/21/23 04:37	11/28/23 18:16	5
Boron	**0.62**		0.50		mg/L		11/21/23 04:37	11/30/23 11:56	10
Calcium	**98**		10		mg/L		11/21/23 04:37	11/28/23 18:16	5
Iron	**3.7**	**L5 V1**	0.50		mg/L		11/21/23 04:37	11/28/23 18:16	5
Magnesium	**39**		20		mg/L		11/21/23 04:37	11/30/23 11:56	10
Manganese	**0.14**		0.050		mg/L		11/21/23 04:37	11/28/23 18:16	5
Potassium	**9.3**		5.0		mg/L		11/21/23 04:37	11/30/23 11:56	10
Sodium	**140**		5.0		mg/L		11/21/23 04:37	11/30/23 11:56	10

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**0.10**		0.050		mg/L		11/22/23 07:45	11/22/23 22:20	1

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.010		mg/L		11/21/23 06:58	11/27/23 17:31	10
Arsenic	**0.010**		0.0050		mg/L		11/21/23 06:58	11/27/23 17:31	10
Barium	**0.47**		0.0050		mg/L		11/21/23 06:58	11/27/23 17:31	10
Cadmium	ND		0.0010		mg/L		11/21/23 06:58	11/27/23 17:31	10
Chromium	ND		0.010		mg/L		11/21/23 06:58	11/27/23 17:31	10
Cobalt	ND		0.0050		mg/L		11/21/23 06:58	11/27/23 17:31	10
Lead	ND		0.0050		mg/L		11/21/23 06:58	11/27/23 17:31	10
Molybdenum	**0.0066**	**T5**	0.0050		mg/L		11/21/23 06:58	11/27/23 17:31	10
Selenium	ND		0.0050		mg/L		11/21/23 06:58	11/27/23 17:31	10
Thallium	ND		0.0010		mg/L		11/21/23 06:58	11/27/23 17:31	10

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		11/20/23 11:20	11/20/23 15:17	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3 (SM 2320B)	**110**		6.0		mg/L			11/21/23 10:31	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**110**		6.0		mg/L			11/21/23 10:31	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			11/21/23 10:31	1
Alkalinity, Phenolphthalein (SM 2320B)	ND		6.0		mg/L			11/21/23 10:31	1
Hydroxide Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			11/21/23 10:31	1
Total Dissolved Solids (SM 2540C)	**820**		20		mg/L			11/20/23 12:18	1
pH (SM 4500 H+ B)	**8.5**	**H5**	1.7		SU			11/16/23 14:07	1
Temperature (SM 4500 H+ B)	**9.7**	**H5 T5**	0.1		Degrees C			11/16/23 14:07	1

Client Sample ID: FC-CCR-SW3-1123

Date Collected: 11/13/23 10:20
Date Received: 11/15/23 14:43

Lab Sample ID: 550-210591-3

Matrix: Water

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**50**	**D2**	4.0		mg/L			11/20/23 13:01	2
Fluoride	**0.92**	**D2**	0.80		mg/L			11/20/23 13:01	2
Sulfate	**440**	**D2**	400		mg/L			11/20/23 13:20	200

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND	L5 V1	0.0050		mg/L		11/21/23 04:37	11/28/23 18:19	5
Boron	**0.33**		0.25		mg/L		11/21/23 04:37	11/29/23 15:18	5
Calcium	**91**		10		mg/L		11/21/23 04:37	11/28/23 18:19	5
Iron	ND	L5 V1	0.50		mg/L		11/21/23 04:37	11/28/23 18:19	5
Magnesium	**35**		10		mg/L		11/21/23 04:37	11/29/23 15:18	5
Manganese	ND		0.050		mg/L		11/21/23 04:37	11/28/23 18:19	5
Potassium	**8.7**		2.5		mg/L		11/21/23 04:37	11/29/23 15:18	5
Sodium	**130**		2.5		mg/L		11/21/23 04:37	11/29/23 15:18	5

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**0.11**		0.050		mg/L		11/22/23 07:45	11/22/23 22:22	1

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.010		mg/L		11/21/23 06:58	11/27/23 17:33	10
Arsenic	**0.0091**		0.0050		mg/L		11/21/23 06:58	11/27/23 17:33	10
Barium	**0.18**		0.0050		mg/L		11/21/23 06:58	11/27/23 17:33	10
Cadmium	ND		0.0010		mg/L		11/21/23 06:58	11/27/23 17:33	10
Chromium	ND		0.010		mg/L		11/21/23 06:58	11/27/23 17:33	10
Cobalt	ND		0.0050		mg/L		11/21/23 06:58	11/27/23 17:33	10
Lead	ND		0.0050		mg/L		11/21/23 06:58	11/27/23 17:33	10
Molybdenum	**0.0064**	**T5**	0.0050		mg/L		11/21/23 06:58	11/27/23 17:33	10
Selenium	ND		0.0050		mg/L		11/21/23 06:58	11/27/23 17:33	10
Thallium	ND		0.0010		mg/L		11/21/23 06:58	11/27/23 17:33	10

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		11/20/23 11:20	11/20/23 15:19	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3 (SM 2320B)	**110**		6.0		mg/L			11/21/23 10:37	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**110**		6.0		mg/L			11/21/23 10:37	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			11/21/23 10:37	1
Alkalinity, Phenolphthalein (SM 2320B)	ND		6.0		mg/L			11/21/23 10:37	1
Hydroxide Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			11/21/23 10:37	1
Total Dissolved Solids (SM 2540C)	**810**		20		mg/L			11/20/23 12:18	1
pH (SM 4500 H+ B)	**8.3**	**H5**	1.7		SU			11/16/23 14:13	1
Temperature (SM 4500 H+ B)	**10.7**	**H5 T5**	0.1		Degrees C			11/16/23 14:13	1

Client Sample ID: FC-CCR-FD08-1123

Date Collected: 11/13/23 16:20
Date Received: 11/15/23 14:43

Lab Sample ID: 550-210591-4

Matrix: Water

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**50**	**D2**	4.0		mg/L			11/20/23 14:33	2
Fluoride	**0.94**	**D2**	0.80		mg/L			11/20/23 14:33	2
Sulfate	**440**	**D2**	400		mg/L			11/20/23 14:52	200

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND	L5 V1	0.0050		mg/L		11/21/23 04:37	11/28/23 18:22	5
Boron	**0.31**		0.25		mg/L		11/21/23 04:37	11/29/23 15:21	5
Calcium	**88**		10		mg/L		11/21/23 04:37	11/28/23 18:22	5
Iron	ND	L5 V1	0.50		mg/L		11/21/23 04:37	11/28/23 18:22	5
Magnesium	**33**		10		mg/L		11/21/23 04:37	11/29/23 15:21	5
Manganese	ND		0.050		mg/L		11/21/23 04:37	11/28/23 18:22	5
Potassium	**8.1**		2.5		mg/L		11/21/23 04:37	11/29/23 15:21	5
Sodium	**120**		2.5		mg/L		11/21/23 04:37	11/29/23 15:21	5

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**0.10**		0.050		mg/L		11/22/23 07:45	11/22/23 22:24	1

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.010		mg/L		11/21/23 06:58	11/27/23 17:35	10
Arsenic	**0.0089**		0.0050		mg/L		11/21/23 06:58	11/27/23 17:35	10
Barium	**0.18**		0.0050		mg/L		11/21/23 06:58	11/27/23 17:35	10
Cadmium	ND		0.0010		mg/L		11/21/23 06:58	11/27/23 17:35	10
Chromium	ND		0.010		mg/L		11/21/23 06:58	11/27/23 17:35	10
Cobalt	ND		0.0050		mg/L		11/21/23 06:58	11/27/23 17:35	10
Lead	ND		0.0050		mg/L		11/21/23 06:58	11/27/23 17:35	10
Molybdenum	**0.0064**	**T5**	0.0050		mg/L		11/21/23 06:58	11/27/23 17:35	10
Selenium	ND		0.0050		mg/L		11/21/23 06:58	11/27/23 17:35	10
Thallium	ND		0.0010		mg/L		11/21/23 06:58	11/27/23 17:35	10

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		11/20/23 11:20	11/20/23 15:21	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3 (SM 2320B)	**110**		6.0		mg/L			11/21/23 10:44	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**110**		6.0		mg/L			11/21/23 10:44	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			11/21/23 10:44	1
Alkalinity, Phenolphthalein (SM 2320B)	ND		6.0		mg/L			11/21/23 10:44	1
Hydroxide Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			11/21/23 10:44	1
Total Dissolved Solids (SM 2540C)	**800**		20		mg/L			11/20/23 12:18	1
pH (SM 4500 H+ B)	**8.5**	**H5**	1.7		SU			11/16/23 14:18	1
Temperature (SM 4500 H+ B)	**10.1**	**H5 T5**	0.1		Degrees C			11/16/23 14:18	1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 550-311427/2
Matrix: Water
Analysis Batch: 311427

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		2.0		mg/L			11/20/23 09:20	1
Fluoride	ND		0.40		mg/L			11/20/23 09:20	1
Sulfate	ND		2.0		mg/L			11/20/23 09:20	1

Lab Sample ID: LCS 550-311427/5
Matrix: Water
Analysis Batch: 311427

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			20.0	21.1		mg/L		105	90 - 110		
Fluoride			4.00	4.24		mg/L		106	90 - 110		
Sulfate			20.0	21.2		mg/L		106	90 - 110		

Lab Sample ID: LCSD 550-311427/6
Matrix: Water
Analysis Batch: 311427

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			20.0	21.0		mg/L		105	90 - 110	0	20
Fluoride			4.00	4.24		mg/L		106	90 - 110	0	20
Sulfate			20.0	21.2		mg/L		106	90 - 110	0	20

Lab Sample ID: 550-210532-B-4 MS ^50
Matrix: Water
Analysis Batch: 311427

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	ND		1000	1040		mg/L		104	80 - 120		
Fluoride	ND		200	215		mg/L		102	80 - 120		
Sulfate	1300		1000	2300		mg/L		101	80 - 120		

Lab Sample ID: 550-210532-B-4 MSD ^50
Matrix: Water
Analysis Batch: 311427

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	ND		1000	1040		mg/L		104	80 - 120	0	20
Fluoride	ND		200	217		mg/L		103	80 - 120	1	20
Sulfate	1300		1000	2300		mg/L		101	80 - 120	0	20

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 550-311484/1-A
Matrix: Water
Analysis Batch: 311842

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 311484

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		0.0010		mg/L		11/21/23 04:37	11/28/23 17:56	1
Calcium	ND		2.0		mg/L		11/21/23 04:37	11/28/23 17:56	1
Iron	ND		0.10		mg/L		11/21/23 04:37	11/28/23 17:56	1

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: MB 550-311484/1-A
Matrix: Water
Analysis Batch: 311842

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 311484

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Manganese	ND		0.010		mg/L		11/21/23 04:37	11/28/23 17:56	1

Lab Sample ID: MB 550-311484/1-A
Matrix: Water
Analysis Batch: 311929

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 311484

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.050		mg/L		11/21/23 04:37	11/29/23 14:55	1
Magnesium	ND		2.0		mg/L		11/21/23 04:37	11/29/23 14:55	1
Potassium	ND		0.50		mg/L		11/21/23 04:37	11/29/23 14:55	1
Sodium	ND		0.50		mg/L		11/21/23 04:37	11/29/23 14:55	1

Lab Sample ID: LCS 550-311484/2-A
Matrix: Water
Analysis Batch: 311842

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 311484

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Beryllium			1.00	1.22		mg/L		122	85 - 115		
Calcium			21.0	23.2		mg/L		111	85 - 115		
Iron			1.00	1.20		mg/L		120	85 - 115		
Manganese			1.00	1.14		mg/L		114	85 - 115		

Lab Sample ID: LCS 550-311484/2-A
Matrix: Water
Analysis Batch: 311929

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 311484

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Boron			1.00	0.944		mg/L		94	85 - 115		
Magnesium			21.0	19.7		mg/L		94	85 - 115		
Potassium			20.0	18.5		mg/L		92	85 - 115		
Sodium			20.0	18.4		mg/L		92	85 - 115		

Lab Sample ID: LCSD 550-311484/3-A
Matrix: Water
Analysis Batch: 311842

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 311484

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Beryllium			1.00	1.16		mg/L		116	85 - 115	5	20
Calcium			21.0	22.2		mg/L		106	85 - 115	5	20
Iron			1.00	1.15		mg/L		115	85 - 115	5	20
Manganese			1.00	1.11		mg/L		111	85 - 115	3	20

Lab Sample ID: LCSD 550-311484/3-A
Matrix: Water
Analysis Batch: 311929

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 311484

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron			1.00	0.977		mg/L		98	85 - 115	3	20
Magnesium			21.0	20.3		mg/L		96	85 - 115	3	20
Potassium			20.0	18.9		mg/L		94	85 - 115	2	20

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: LCSD 550-311484/3-A
Matrix: Water
Analysis Batch: 311929

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 311484

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sodium			20.0	18.8		mg/L		94	85 - 115	2	20

Lab Sample ID: 550-210594-B-1-A MS
Matrix: Water
Analysis Batch: 311842

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 311484

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Beryllium	ND	V1 L5	1.00	1.18		mg/L		118	70 - 130
Calcium	520	M3	21.0	497	M3	mg/L		1869	70 - 130
Iron	ND	V1 L5	1.00	0.828		mg/L		83	70 - 130
Manganese	0.44	M1	1.00	1.47	M1	mg/L		138	70 - 130

Lab Sample ID: 550-210594-B-1-A MS ^5
Matrix: Water
Analysis Batch: 311929

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 311484

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	90	M3	1.00	82.4	M3	mg/L		-801	70 - 130
Magnesium	2400	M3	21.0	2040	M3	mg/L		-1480	70 - 130
Potassium	47	M2	20.0	60.1	M2	mg/L		67	70 - 130
Sodium	4800	E2 M3	20.0	4100	E2 M3	mg/L		-3553	70 - 130

Lab Sample ID: 550-210594-B-1-B MSD
Matrix: Water
Analysis Batch: 311842

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 311484

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Beryllium	ND	V1 L5	1.00	1.23		mg/L		123	70 - 130	4	20
Calcium	520	M3	21.0	524	M3	mg/L		1998	70 - 130	5	20
Iron	ND	V1 L5	1.00	0.873		mg/L		87	70 - 130	5	20
Manganese	0.44	M1	1.00	1.55	M1	mg/L		146	70 - 130	5	20

Lab Sample ID: 550-210594-B-1-B MSD ^5
Matrix: Water
Analysis Batch: 311929

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 311484

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron	90	M3	1.00	88.5	M3	mg/L		-187	70 - 130	7	20
Magnesium	2400	M3	21.0	2340	M3	mg/L		-57	70 - 130	14	20
Potassium	47	M2	20.0	68.4		mg/L		108	70 - 130	13	20
Sodium	4800	E2 M3	20.0	4710	E2 M3	mg/L		-530	70 - 130	14	20

Lab Sample ID: MB 570-386253/1-A
Matrix: Water
Analysis Batch: 386782

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 386253

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	ND		0.050		mg/L		11/22/23 07:45	11/22/23 22:00	1

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: LCS 570-386253/2-A
Matrix: Water
Analysis Batch: 386782

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 386253

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Lithium			0.500	0.512		mg/L		102	85 - 115		

Lab Sample ID: LCSD 570-386253/3-A
Matrix: Water
Analysis Batch: 386782

Client Sample ID: Lab Control Sample Dup
Prep Type: Total Recoverable
Prep Batch: 386253

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Lithium			0.500	0.526		mg/L		105	85 - 115	3	20

Lab Sample ID: 550-210591-1 MS
Matrix: Water
Analysis Batch: 386782

Client Sample ID: FC-CCR-SW1-1123
Prep Type: Total Recoverable
Prep Batch: 386253

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Lithium	0.10		0.500	0.608		mg/L		101	80 - 120		

Lab Sample ID: 550-210591-1 MSD
Matrix: Water
Analysis Batch: 386782

Client Sample ID: FC-CCR-SW1-1123
Prep Type: Total Recoverable
Prep Batch: 386253

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Lithium	0.10		0.500	0.605		mg/L		100	80 - 120	0	20

Method: 200.8 LL - Metals (ICP/MS)

Lab Sample ID: MB 550-311487/1-A
Matrix: Water
Analysis Batch: 311751

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 311487

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.0010		mg/L		11/21/23 06:58	11/27/23 17:13	1
Arsenic	ND		0.00050		mg/L		11/21/23 06:58	11/27/23 17:13	1
Barium	ND		0.00050		mg/L		11/21/23 06:58	11/27/23 17:13	1
Cadmium	ND		0.00010		mg/L		11/21/23 06:58	11/27/23 17:13	1
Chromium	ND		0.0010		mg/L		11/21/23 06:58	11/27/23 17:13	1
Cobalt	ND		0.00050		mg/L		11/21/23 06:58	11/27/23 17:13	1
Lead	ND		0.00050		mg/L		11/21/23 06:58	11/27/23 17:13	1
Molybdenum	ND		0.00050		mg/L		11/21/23 06:58	11/27/23 17:13	1
Selenium	ND		0.00050		mg/L		11/21/23 06:58	11/27/23 17:13	1
Thallium	ND		0.00010		mg/L		11/21/23 06:58	11/27/23 17:13	1

Lab Sample ID: LCS 550-311487/2-A
Matrix: Water
Analysis Batch: 311751

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 311487

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Antimony			0.100	0.100		mg/L		100	85 - 115		
Arsenic			0.100	0.101		mg/L		101	85 - 115		
Barium			0.100	0.110		mg/L		110	85 - 115		
Cadmium			0.100	0.104		mg/L		104	85 - 115		

Method: 200.8 LL - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 550-311487/2-A
Matrix: Water
Analysis Batch: 311751

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 311487

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chromium			0.100	0.101		mg/L		101	85 - 115		
Cobalt			0.100	0.107		mg/L		107	85 - 115		
Lead			0.100	0.102		mg/L		102	85 - 115		
Molybdenum			0.100	0.108		mg/L		108	85 - 115		
Selenium			0.100	0.0951		mg/L		95	85 - 115		
Thallium			0.100	0.104		mg/L		104	85 - 115		

Lab Sample ID: LCSD 550-311487/3-A
Matrix: Water
Analysis Batch: 311751

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 311487

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony			0.100	0.105		mg/L		105	85 - 115	4	20
Arsenic			0.100	0.102		mg/L		102	85 - 115	1	20
Barium			0.100	0.113		mg/L		113	85 - 115	3	20
Cadmium			0.100	0.105		mg/L		105	85 - 115	1	20
Chromium			0.100	0.103		mg/L		103	85 - 115	1	20
Cobalt			0.100	0.104		mg/L		104	85 - 115	2	20
Lead			0.100	0.106		mg/L		106	85 - 115	5	20
Molybdenum			0.100	0.110		mg/L		110	85 - 115	2	20
Selenium			0.100	0.0962		mg/L		96	85 - 115	1	20
Thallium			0.100	0.107		mg/L		107	85 - 115	3	20

Lab Sample ID: 550-210594-B-12-A MS
Matrix: Water
Analysis Batch: 311751

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 311487

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Antimony	ND		0.100	0.107		mg/L		107	70 - 130		
Arsenic	0.0063		0.100	0.116		mg/L		109	70 - 130		
Barium	0.017		0.100	0.123		mg/L		106	70 - 130		
Cadmium	ND		0.100	0.102		mg/L		102	70 - 130		
Chromium	ND		0.100	0.104		mg/L		104	70 - 130		
Cobalt	ND		0.100	0.108		mg/L		107	70 - 130		
Lead	ND		0.100	0.0980		mg/L		98	70 - 130		
Molybdenum	ND		0.100	0.115		mg/L		111	70 - 130		
Selenium	0.040		0.100	0.152		mg/L		112	70 - 130		
Thallium	0.0010		0.100	0.101		mg/L		100	70 - 130		

Lab Sample ID: 550-210594-B-12-B MSD
Matrix: Water
Analysis Batch: 311751

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 311487

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	ND		0.100	0.107		mg/L		106	70 - 130	0	20
Arsenic	0.0063		0.100	0.113		mg/L		107	70 - 130	2	20
Barium	0.017		0.100	0.125		mg/L		109	70 - 130	2	20
Cadmium	ND		0.100	0.102		mg/L		102	70 - 130	0	20
Chromium	ND		0.100	0.103		mg/L		103	70 - 130	1	20

Method: 200.8 LL - Metals (ICP/MS) (Continued)

Lab Sample ID: 550-210594-B-12-B MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 311751 — **Prep Batch: 311487**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cobalt	ND		0.100	0.105		mg/L		104	70 - 130	3	20
Lead	ND		0.100	0.0947		mg/L		95	70 - 130	3	20
Molybdenum	ND		0.100	0.116		mg/L		111	70 - 130	0	20
Selenium	0.040		0.100	0.147		mg/L		107	70 - 130	3	20
Thallium	0.0010		0.100	0.0980		mg/L		97	70 - 130	3	20

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 550-311424/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 311470 — **Prep Batch: 311424**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		11/20/23 11:20	11/20/23 14:47	1

Lab Sample ID: LCS 550-311424/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 311470 — **Prep Batch: 311424**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury			0.00500	0.00452		mg/L		90	85 - 115		

Lab Sample ID: LCSD 550-311424/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 311470 — **Prep Batch: 311424**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury			0.00500	0.00451		mg/L		90	85 - 115	0	20

Lab Sample ID: 550-210591-1 MS — **Client Sample ID: FC-CCR-SW1-1123**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 311470 — **Prep Batch: 311424**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury	ND		0.00500	0.00474		mg/L		95	70 - 130		

Lab Sample ID: 550-210591-1 MSD — **Client Sample ID: FC-CCR-SW1-1123**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 311470 — **Prep Batch: 311424**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		0.00500	0.00465		mg/L		93	70 - 130	2	20

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 550-311562/4 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 311562

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3	ND		6.0		mg/L			11/21/23 09:02	1

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: MB 550-311562/4
Matrix: Water
Analysis Batch: 311562

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	ND		6.0		mg/L			11/21/23 09:02	1
Carbonate Alkalinity as CaCO3	ND		6.0		mg/L			11/21/23 09:02	1
Alkalinity, Phenolphthalein	ND		6.0		mg/L			11/21/23 09:02	1
Hydroxide Alkalinity as CaCO3	ND		6.0		mg/L			11/21/23 09:02	1

Lab Sample ID: LCS 550-311562/3
Matrix: Water
Analysis Batch: 311562

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Alkalinity as CaCO3			250	244		mg/L		98	90 - 110		

Lab Sample ID: LCSD 550-311562/10
Matrix: Water
Analysis Batch: 311562

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Alkalinity as CaCO3			250	242		mg/L		97	90 - 110	1	20

Lab Sample ID: 550-210576-D-1 DU
Matrix: Water
Analysis Batch: 311562

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Alkalinity as CaCO3	200			199		mg/L				0.5	20
Bicarbonate Alkalinity as CaCO3	200			199		mg/L				0.5	20
Carbonate Alkalinity as CaCO3	ND			ND		mg/L				NC	20
Alkalinity, Phenolphthalein	ND			ND		mg/L				NC	20
Hydroxide Alkalinity as CaCO3	ND			ND		mg/L				NC	20

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 550-311443/1
Matrix: Water
Analysis Batch: 311443

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		20		mg/L			11/20/23 12:18	1

Lab Sample ID: LCS 550-311443/2
Matrix: Water
Analysis Batch: 311443

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Dissolved Solids			1000	994		mg/L		99	90 - 110		

Method: SM 2540C - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: LCSD 550-311443/3
Matrix: Water
Analysis Batch: 311443

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Dissolved Solids			1000	982		mg/L		98	90 - 110	1	10

Lab Sample ID: 550-210523-B-3 DU
Matrix: Water
Analysis Batch: 311443

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	300			302		mg/L				0.7	10

Method: SM 4500 H+ B - pH

Lab Sample ID: LCSSRM 550-311288/13
Matrix: Water
Analysis Batch: 311288

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits		
pH			7.00	7.0		SU		100.6	98.5 - 101.5		

Lab Sample ID: LCSSRM 550-311288/25
Matrix: Water
Analysis Batch: 311288

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits		
pH			7.00	7.0		SU		100.4	98.5 - 101.5		

Lab Sample ID: LCSSRM 550-311288/37
Matrix: Water
Analysis Batch: 311288

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits		
pH			7.00	7.0		SU		100.6	98.5 - 101.5		

Lab Sample ID: 550-210591-3 DU
Matrix: Water
Analysis Batch: 311288

Client Sample ID: FC-CCR-SW3-1123
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
pH	8.3	H5		8.3		SU				0.2	5
Temperature	10.7	H5 T5		10.7		Degrees C				0	

HPLC/IC

Analysis Batch: 311427

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210591-1	FC-CCR-SW1-1123	Total/NA	Water	300.0	
550-210591-1	FC-CCR-SW1-1123	Total/NA	Water	300.0	
550-210591-2	FC-CCR-SW2-1123	Total/NA	Water	300.0	
550-210591-2	FC-CCR-SW2-1123	Total/NA	Water	300.0	
550-210591-3	FC-CCR-SW3-1123	Total/NA	Water	300.0	
550-210591-3	FC-CCR-SW3-1123	Total/NA	Water	300.0	
550-210591-4	FC-CCR-FD08-1123	Total/NA	Water	300.0	
550-210591-4	FC-CCR-FD08-1123	Total/NA	Water	300.0	
MB 550-311427/2	Method Blank	Total/NA	Water	300.0	
LCS 550-311427/5	Lab Control Sample	Total/NA	Water	300.0	
LCSD 550-311427/6	Lab Control Sample Dup	Total/NA	Water	300.0	
550-210532-B-4 MS ^50	Matrix Spike	Total/NA	Water	300.0	
550-210532-B-4 MSD ^50	Matrix Spike Duplicate	Total/NA	Water	300.0	

Metals

Prep Batch: 311424

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210591-1	FC-CCR-SW1-1123	Total/NA	Water	245.1	
550-210591-2	FC-CCR-SW2-1123	Total/NA	Water	245.1	
550-210591-3	FC-CCR-SW3-1123	Total/NA	Water	245.1	
550-210591-4	FC-CCR-FD08-1123	Total/NA	Water	245.1	
MB 550-311424/1-A	Method Blank	Total/NA	Water	245.1	
LCS 550-311424/2-A	Lab Control Sample	Total/NA	Water	245.1	
LCSD 550-311424/3-A	Lab Control Sample Dup	Total/NA	Water	245.1	
550-210591-1 MS	FC-CCR-SW1-1123	Total/NA	Water	245.1	
550-210591-1 MSD	FC-CCR-SW1-1123	Total/NA	Water	245.1	

Analysis Batch: 311470

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210591-1	FC-CCR-SW1-1123	Total/NA	Water	245.1	311424
550-210591-2	FC-CCR-SW2-1123	Total/NA	Water	245.1	311424
550-210591-3	FC-CCR-SW3-1123	Total/NA	Water	245.1	311424
550-210591-4	FC-CCR-FD08-1123	Total/NA	Water	245.1	311424
MB 550-311424/1-A	Method Blank	Total/NA	Water	245.1	311424
LCS 550-311424/2-A	Lab Control Sample	Total/NA	Water	245.1	311424
LCSD 550-311424/3-A	Lab Control Sample Dup	Total/NA	Water	245.1	311424
550-210591-1 MS	FC-CCR-SW1-1123	Total/NA	Water	245.1	311424
550-210591-1 MSD	FC-CCR-SW1-1123	Total/NA	Water	245.1	311424

Prep Batch: 311484

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210591-1	FC-CCR-SW1-1123	Total/NA	Water	200.7	
550-210591-2	FC-CCR-SW2-1123	Total/NA	Water	200.7	
550-210591-3	FC-CCR-SW3-1123	Total/NA	Water	200.7	
550-210591-4	FC-CCR-FD08-1123	Total/NA	Water	200.7	
MB 550-311484/1-A	Method Blank	Total/NA	Water	200.7	
LCS 550-311484/2-A	Lab Control Sample	Total/NA	Water	200.7	
LCSD 550-311484/3-A	Lab Control Sample Dup	Total/NA	Water	200.7	
550-210594-B-1-A MS	Matrix Spike	Total/NA	Water	200.7	
550-210594-B-1-A MS ^5	Matrix Spike	Total/NA	Water	200.7	

Metals (Continued)

Prep Batch: 311484 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210594-B-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	200.7	
550-210594-B-1-B MSD ^5	Matrix Spike Duplicate	Total/NA	Water	200.7	

Prep Batch: 311487

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210591-1	FC-CCR-SW1-1123	Total/NA	Water	200.8	
550-210591-2	FC-CCR-SW2-1123	Total/NA	Water	200.8	
550-210591-3	FC-CCR-SW3-1123	Total/NA	Water	200.8	
550-210591-4	FC-CCR-FD08-1123	Total/NA	Water	200.8	
MB 550-311487/1-A	Method Blank	Total/NA	Water	200.8	
LCS 550-311487/2-A	Lab Control Sample	Total/NA	Water	200.8	
LCSD 550-311487/3-A	Lab Control Sample Dup	Total/NA	Water	200.8	
550-210594-B-12-A MS	Matrix Spike	Total/NA	Water	200.8	
550-210594-B-12-B MSD	Matrix Spike Duplicate	Total/NA	Water	200.8	

Analysis Batch: 311751

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210591-1	FC-CCR-SW1-1123	Total/NA	Water	200.8 LL	311487
550-210591-2	FC-CCR-SW2-1123	Total/NA	Water	200.8 LL	311487
550-210591-3	FC-CCR-SW3-1123	Total/NA	Water	200.8 LL	311487
550-210591-4	FC-CCR-FD08-1123	Total/NA	Water	200.8 LL	311487
MB 550-311487/1-A	Method Blank	Total/NA	Water	200.8 LL	311487
LCS 550-311487/2-A	Lab Control Sample	Total/NA	Water	200.8 LL	311487
LCSD 550-311487/3-A	Lab Control Sample Dup	Total/NA	Water	200.8 LL	311487
550-210594-B-12-A MS	Matrix Spike	Total/NA	Water	200.8 LL	311487
550-210594-B-12-B MSD	Matrix Spike Duplicate	Total/NA	Water	200.8 LL	311487

Analysis Batch: 311842

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210591-1	FC-CCR-SW1-1123	Total/NA	Water	200.7 Rev 4.4	311484
550-210591-2	FC-CCR-SW2-1123	Total/NA	Water	200.7 Rev 4.4	311484
550-210591-3	FC-CCR-SW3-1123	Total/NA	Water	200.7 Rev 4.4	311484
550-210591-4	FC-CCR-FD08-1123	Total/NA	Water	200.7 Rev 4.4	311484
MB 550-311484/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	311484
LCS 550-311484/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	311484
LCSD 550-311484/3-A	Lab Control Sample Dup	Total/NA	Water	200.7 Rev 4.4	311484
550-210594-B-1-A MS	Matrix Spike	Total/NA	Water	200.7 Rev 4.4	311484
550-210594-B-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	200.7 Rev 4.4	311484

Analysis Batch: 311929

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210591-1	FC-CCR-SW1-1123	Total/NA	Water	200.7 Rev 4.4	311484
550-210591-3	FC-CCR-SW3-1123	Total/NA	Water	200.7 Rev 4.4	311484
550-210591-4	FC-CCR-FD08-1123	Total/NA	Water	200.7 Rev 4.4	311484
MB 550-311484/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	311484
LCS 550-311484/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	311484
LCSD 550-311484/3-A	Lab Control Sample Dup	Total/NA	Water	200.7 Rev 4.4	311484
550-210594-B-1-A MS ^5	Matrix Spike	Total/NA	Water	200.7 Rev 4.4	311484
550-210594-B-1-B MSD ^5	Matrix Spike Duplicate	Total/NA	Water	200.7 Rev 4.4	311484

QC Association Summary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-210591-1
SDG: APS Four Corners Power Plant (CWTP)

Metals

Analysis Batch: 311980

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210591-2	FC-CCR-SW2-1123	Total/NA	Water	200.7 Rev 4.4	311484

Prep Batch: 386253

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210591-1	FC-CCR-SW1-1123	Total Recoverable	Water	200.7	
550-210591-2	FC-CCR-SW2-1123	Total Recoverable	Water	200.7	
550-210591-3	FC-CCR-SW3-1123	Total Recoverable	Water	200.7	
550-210591-4	FC-CCR-FD08-1123	Total Recoverable	Water	200.7	
MB 570-386253/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 570-386253/2-A	Lab Control Sample	Total Recoverable	Water	200.7	
LCSD 570-386253/3-A	Lab Control Sample Dup	Total Recoverable	Water	200.7	
550-210591-1 MS	FC-CCR-SW1-1123	Total Recoverable	Water	200.7	
550-210591-1 MSD	FC-CCR-SW1-1123	Total Recoverable	Water	200.7	

Analysis Batch: 386782

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210591-1	FC-CCR-SW1-1123	Total Recoverable	Water	200.7 Rev 4.4	386253
550-210591-2	FC-CCR-SW2-1123	Total Recoverable	Water	200.7 Rev 4.4	386253
550-210591-3	FC-CCR-SW3-1123	Total Recoverable	Water	200.7 Rev 4.4	386253
550-210591-4	FC-CCR-FD08-1123	Total Recoverable	Water	200.7 Rev 4.4	386253
MB 570-386253/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	386253
LCS 570-386253/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	386253
LCSD 570-386253/3-A	Lab Control Sample Dup	Total Recoverable	Water	200.7 Rev 4.4	386253
550-210591-1 MS	FC-CCR-SW1-1123	Total Recoverable	Water	200.7 Rev 4.4	386253
550-210591-1 MSD	FC-CCR-SW1-1123	Total Recoverable	Water	200.7 Rev 4.4	386253

General Chemistry

Analysis Batch: 311288

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210591-1	FC-CCR-SW1-1123	Total/NA	Water	SM 4500 H+ B	
550-210591-2	FC-CCR-SW2-1123	Total/NA	Water	SM 4500 H+ B	
550-210591-3	FC-CCR-SW3-1123	Total/NA	Water	SM 4500 H+ B	
550-210591-4	FC-CCR-FD08-1123	Total/NA	Water	SM 4500 H+ B	
LCSSRM 550-311288/13	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	
LCSSRM 550-311288/25	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	
LCSSRM 550-311288/37	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	
550-210591-3 DU	FC-CCR-SW3-1123	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 311443

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210591-1	FC-CCR-SW1-1123	Total/NA	Water	SM 2540C	
550-210591-2	FC-CCR-SW2-1123	Total/NA	Water	SM 2540C	
550-210591-3	FC-CCR-SW3-1123	Total/NA	Water	SM 2540C	
550-210591-4	FC-CCR-FD08-1123	Total/NA	Water	SM 2540C	
MB 550-311443/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 550-311443/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 550-311443/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	
550-210523-B-3 DU	Duplicate	Total/NA	Water	SM 2540C	

QC Association Summary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-210591-1
SDG: APS Four Corners Power Plant (CWTP)

General Chemistry

Analysis Batch: 311562

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210591-1	FC-CCR-SW1-1123	Total/NA	Water	SM 2320B	
550-210591-2	FC-CCR-SW2-1123	Total/NA	Water	SM 2320B	
550-210591-3	FC-CCR-SW3-1123	Total/NA	Water	SM 2320B	
550-210591-4	FC-CCR-FD08-1123	Total/NA	Water	SM 2320B	
MB 550-311562/4	Method Blank	Total/NA	Water	SM 2320B	
LCS 550-311562/3	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 550-311562/10	Lab Control Sample Dup	Total/NA	Water	SM 2320B	
550-210576-D-1 DU	Duplicate	Total/NA	Water	SM 2320B	

Lab Chronicle

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-210591-1
SDG: APS Four Corners Power Plant (CWTP)

Client Sample ID: FC-CCR-SW1-1123

Date Collected: 11/13/23 11:13
Date Received: 11/15/23 14:43

Lab Sample ID: 550-210591-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		2	311427	MMH	EET PHX	11/20/23 11:48
Total/NA	Analysis	300.0		200	311427	MMH	EET PHX	11/20/23 12:06
Total Recoverable	Prep	200.7			386253	JP8N	EET CAL 4	11/22/23 07:45
Total Recoverable	Analysis	200.7 Rev 4.4		1	386782	VZ0K	EET CAL 4	11/22/23 22:12
Total/NA	Prep	200.7			311484	SGO	EET PHX	11/21/23 04:37
Total/NA	Analysis	200.7 Rev 4.4		5	311842	GLW	EET PHX	11/28/23 18:13
Total/NA	Prep	200.7			311484	SGO	EET PHX	11/21/23 04:37
Total/NA	Analysis	200.7 Rev 4.4		5	311929	GLW	EET PHX	11/29/23 15:12
Total/NA	Prep	200.8			311487	SGO	EET PHX	11/21/23 06:58
Total/NA	Analysis	200.8 LL		10	311751	DSJ	EET PHX	11/27/23 17:29
Total/NA	Prep	245.1			311424	HHL	EET PHX	11/20/23 11:20
Total/NA	Analysis	245.1		1	311470	HHL	EET PHX	11/20/23 15:15
Total/NA	Analysis	SM 2320B		1	311562	MAN	EET PHX	11/21/23 10:24
Total/NA	Analysis	SM 2540C		1	311443	KMG	EET PHX	11/20/23 12:18 - 11/22/23 18:10 [1]
Total/NA	Analysis	SM 4500 H+ B		1	311288	MAN	EET PHX	11/16/23 14:06

Client Sample ID: FC-CCR-SW2-1123

Date Collected: 11/13/23 10:45
Date Received: 11/15/23 14:43

Lab Sample ID: 550-210591-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		2	311427	MMH	EET PHX	11/20/23 12:24
Total/NA	Analysis	300.0		200	311427	MMH	EET PHX	11/20/23 12:43
Total Recoverable	Prep	200.7			386253	JP8N	EET CAL 4	11/22/23 07:45
Total Recoverable	Analysis	200.7 Rev 4.4		1	386782	VZ0K	EET CAL 4	11/22/23 22:20
Total/NA	Prep	200.7			311484	SGO	EET PHX	11/21/23 04:37
Total/NA	Analysis	200.7 Rev 4.4		5	311842	GLW	EET PHX	11/28/23 18:16
Total/NA	Prep	200.7			311484	SGO	EET PHX	11/21/23 04:37
Total/NA	Analysis	200.7 Rev 4.4		10	311980	GLW	EET PHX	11/30/23 11:56
Total/NA	Prep	200.8			311487	SGO	EET PHX	11/21/23 06:58
Total/NA	Analysis	200.8 LL		10	311751	DSJ	EET PHX	11/27/23 17:31
Total/NA	Prep	245.1			311424	HHL	EET PHX	11/20/23 11:20
Total/NA	Analysis	245.1		1	311470	HHL	EET PHX	11/20/23 15:17
Total/NA	Analysis	SM 2320B		1	311562	MAN	EET PHX	11/21/23 10:31
Total/NA	Analysis	SM 2540C		1	311443	KMG	EET PHX	11/20/23 12:18 - 11/22/23 18:10 [1]
Total/NA	Analysis	SM 4500 H+ B		1	311288	MAN	EET PHX	11/16/23 14:07

Client Sample ID: FC-CCR-SW3-1123

Date Collected: 11/13/23 10:20
Date Received: 11/15/23 14:43

Lab Sample ID: 550-210591-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		2	311427	MMH	EET PHX	11/20/23 13:01
Total/NA	Analysis	300.0		200	311427	MMH	EET PHX	11/20/23 13:20

Lab Chronicle

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-210591-1
SDG: APS Four Corners Power Plant (CWTP)

Client Sample ID: FC-CCR-SW3-1123

Date Collected: 11/13/23 10:20
Date Received: 11/15/23 14:43

Lab Sample ID: 550-210591-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			386253	JP8N	EET CAL 4	11/22/23 07:45
Total Recoverable	Analysis	200.7 Rev 4.4		1	386782	VZ0K	EET CAL 4	11/22/23 22:22
Total/NA	Prep	200.7			311484	SGO	EET PHX	11/21/23 04:37
Total/NA	Analysis	200.7 Rev 4.4		5	311842	GLW	EET PHX	11/28/23 18:19
Total/NA	Prep	200.7			311484	SGO	EET PHX	11/21/23 04:37
Total/NA	Analysis	200.7 Rev 4.4		5	311929	GLW	EET PHX	11/29/23 15:18
Total/NA	Prep	200.8			311487	SGO	EET PHX	11/21/23 06:58
Total/NA	Analysis	200.8 LL		10	311751	DSJ	EET PHX	11/27/23 17:33
Total/NA	Prep	245.1			311424	HHL	EET PHX	11/20/23 11:20
Total/NA	Analysis	245.1		1	311470	HHL	EET PHX	11/20/23 15:19
Total/NA	Analysis	SM 2320B		1	311562	MAN	EET PHX	11/21/23 10:37
Total/NA	Analysis	SM 2540C		1	311443	KMG	EET PHX	11/20/23 12:18 - 11/22/23 18:10 [1]
Total/NA	Analysis	SM 4500 H+ B		1	311288	MAN	EET PHX	11/16/23 14:13

Client Sample ID: FC-CCR-FD08-1123

Date Collected: 11/13/23 16:20
Date Received: 11/15/23 14:43

Lab Sample ID: 550-210591-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		2	311427	MMH	EET PHX	11/20/23 14:33
Total/NA	Analysis	300.0		200	311427	MMH	EET PHX	11/20/23 14:52
Total Recoverable	Prep	200.7			386253	JP8N	EET CAL 4	11/22/23 07:45
Total Recoverable	Analysis	200.7 Rev 4.4		1	386782	VZ0K	EET CAL 4	11/22/23 22:24
Total/NA	Prep	200.7			311484	SGO	EET PHX	11/21/23 04:37
Total/NA	Analysis	200.7 Rev 4.4		5	311842	GLW	EET PHX	11/28/23 18:22
Total/NA	Prep	200.7			311484	SGO	EET PHX	11/21/23 04:37
Total/NA	Analysis	200.7 Rev 4.4		5	311929	GLW	EET PHX	11/29/23 15:21
Total/NA	Prep	200.8			311487	SGO	EET PHX	11/21/23 06:58
Total/NA	Analysis	200.8 LL		10	311751	DSJ	EET PHX	11/27/23 17:35
Total/NA	Prep	245.1			311424	HHL	EET PHX	11/20/23 11:20
Total/NA	Analysis	245.1		1	311470	HHL	EET PHX	11/20/23 15:21
Total/NA	Analysis	SM 2320B		1	311562	MAN	EET PHX	11/21/23 10:44
Total/NA	Analysis	SM 2540C		1	311443	KMG	EET PHX	11/20/23 12:18 - 11/22/23 18:10 [1]
Total/NA	Analysis	SM 4500 H+ B		1	311288	MAN	EET PHX	11/16/23 14:18

[1] This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:

EET CAL 4 = Eurofins Calscience Tustin, 2841 Dow Avenue, Tustin, CA 92780, TEL (714)895-5494

EET PHX = Eurofins Phoenix, 4625 East Cotton Center Boulevard, Suite #189, Phoenix, AZ 85040, TEL (602)437-3340

Accreditation/Certification Summary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-210591-1
SDG: APS Four Corners Power Plant (CWTP)

Laboratory: Eurofins Phoenix

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Arizona	State	AZ0728	06-10-24

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
200.8 LL	200.8	Water	Molybdenum
SM 4500 H+ B		Water	Temperature

Laboratory: Eurofins Calscience

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	SCAQMD LAP	17LA0919	11-30-23
California	State	3082	07-31-24
Nevada	State	CA00111	07-31-24
Oregon	NELAP	4175	02-02-24
USDA	US Federal Programs	P330-22-00059	06-08-26
Washington	State	C916-18	10-11-23 *

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-210591-1
SDG: APS Four Corners Power Plant (CWTP)

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	EPA	EET PHX
200.7 Rev 4.4	Metals (ICP)	EPA	EET CAL 4
200.7 Rev 4.4	Metals (ICP)	EPA	EET PHX
200.8 LL	Metals (ICP/MS)	EPA	EET PHX
245.1	Mercury (CVAA)	EPA	EET PHX
SM 2320B	Alkalinity	SM	EET PHX
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET PHX
SM 4500 H+ B	pH	SM	EET PHX
200.7	Preparation, Total Recoverable Metals	EPA	EET CAL 4
200.7	Preparation, Total Metals	EPA	EET PHX
200.8	Preparation, Total Metals	EPA	EET PHX
245.1	Preparation, Mercury	EPA	EET PHX

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:

EET CAL 4 = Eurofins Calscience Tustin, 2841 Dow Avenue, Tustin, CA 92780, TEL (714)895-5494

EET PHX = Eurofins Phoenix, 4625 East Cotton Center Boulevard, Suite #189, Phoenix, AZ 85040, TEL (602)437-3340

1 2 3 4 5 6 7 8 9 10 11 12 13 14

TestAmerica Phoenix
4625 E Cotton Center Blvd
Suite 189
Phoenix, AZ 85040
phone 602.437.3340 fax 602.454.9303

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☑ Other: **CCR**

210591

TestAmerica Laboratories, Inc.

11/30/2023

Client Contact	Natalie Chrisman	Pam Norris (505-598-8781)	Date:	COC No:
Arizona Public Service	602-250-3608	Lab Contact: Rachel Sester	Carrier:	1 of 1 COCs
PO Box 355, MS 4915	Analysis Turnaround Time			Sampler:
Fruitland, NM 87416	☐ CALENDAR DAYS ☑ WORKING DAYS			For Lab Use Only:
	TAT if different from Below _____			Walk-in Client:
	☑ 2 weeks			Lab Sampling:
Project Name: CCR Groundwater Monitoring	☐ 1 week			
Site: APS Four Corners Power Plant (CWTP)	☐ 2 days			Job / SDG No.:
PO #: 100622298	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	EPA 300.0 (Cl, F, SO4)	SM 4500-HB (pH)	SM 2540C (TDS)	EPA 200.7 - Totals (B, Ca, Be,K, Mg, Na, Mn, Fe)	EPA 200.7 - Total Lithium	EPA 200.8 - Totals (Sb, As, Ba, Cd, Co, Cr, Pb, Mo, Se, Tl)	EPA 245.1 - Totals (Hg)	SM 2320B (CO3 Alkalinity as CaCO3, HCO3 Alkalinity as CaCO3)	Sample Specific Notes:
FC-CCR-SW1-1123 -1	11/13/2023	1113	G	W	3	N		X	X	X	X	X	X	X	X	Morgan Lake grab sample
FC-CCR-SW2-1123 -2	11/13/2023	1045	G	W	3	N		X	X	X	X	X	X	X	X	CWTP surface grab sample
FC-CCR-SW3-1123 -3	11/13/2023	1020	G	W	3	N	N	X	X	X	X	X	X	X	X	Cooling canal grab sample
FC-CCR-FD08-1123 -4	11/13/2023	1620	G	W	3	N	N	X	X	X	X	X	X	X	X	Surface water sample duplicate
								1	1	1	4	4	4	4	1	

550-210591 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☑ Disposal by Lab ☐ Archive for_____ Months

Special Instructions/QC Requirements & Comments:

Method 200.8 with collision cell

3.6°C - ON ICE - ~~CI~~ PC 11/15/23

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.:

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	VISP	11-15-23 0820			
[signature]	A-H-S	11-15 -8:20 AM			
[signature]	AHS	11-15 2:43 PM	Received in Laboratory by: [signature]	EETA-PHX	11/15/23 1443

Form No. CA-C-WI-002, Rev. 4.2, dated 04/02/2013

Eurofins Phoenix
4625 East Cotton Center Boulevard Suite #189
Phoenix, AZ 85040
Phone: 602-437-3340

Chain of Custody Record

eurofins | Environ

Loc: 550
210591

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Eshelman, Linda	Carrier Tracking No(s):	COC No: 550-38245.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: linda.eshelman@et.eurofinsus.com	State of Origin: Arizona	Page: Page 1 of 1
Company: Eurofins Environment Testing Southwest,		Accreditations Required (See note): State - Arizona; State Program - Arizona		Job #: 550-210591-1
Address: 2841 Dow Avenue, Suite 100, ,	Due Date Requested: 11/30/2023			
City: Tustin	TAT Requested (days):			
State, Zip: CA, 92780				
Phone: 714-895-5494(Tel)	PO #:			
Email:	WO #:			
Project Name: CCR Groundwater Monitoring	Project #: 55009706			
Site: Arizona Public Service	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	200.7/200.7_P_TR (MOD) Lithium	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
FC-CCR-SW1-1123 (550-210591-1)	11/13/23	11:13 Arizona		Water			X	1	
FC-CCR-SW2-1123 (550-210591-2)	11/13/23	10:45 Arizona		Water			X	1	
FC-CCR-SW3-1123 (550-210591-3)	11/13/23	10:20 Arizona		Water			X	1	
FC-CCR-FD08-1123 (550-210591-4)	11/13/23	16:20 Arizona		Water			X	1	

550-210591 Chain of Custody

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Southwest, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Southwest, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Southwest, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Southwest, LLC.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
11-16-23	14:40	ECTSW	FedEx		
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by: FedEx	Date/Time:	Company	Received by:	Date/Time: 11/17/23 0930	Company RC

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 2.3/2.2 SR12

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Arizona Public Service Company

Job Number: 550-210591-1
SDG Number: APS Four Corners Power Plant (CWTP)

Login Number: 210591
List Number: 1
Creator: Maycock, Lisa

List Source: Eurofins Phoenix

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	False	Check done at department level as required.

Login Sample Receipt Checklist

Client: Arizona Public Service Company

Job Number: 550-210591-1
SDG Number: APS Four Corners Power Plant (CWTP)

Login Number: 210591
List Number: 2
Creator: Khana, Piyush

List Source: Eurofins Calscience
List Creation: 11/17/23 12:36 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	2264067
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.2
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

PREPARED FOR

Attn: Natalie Chrisman
Arizona Public Service Company
PO BOX 188, Ste. 4458
Joseph City, Arizona 86032

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JOB DESCRIPTION

CCR Groundwater Monitoring
APS Four Corners Power Plant (URS)

JOB NUMBER

550-210593-1

Eurofins Phoenix
4625 East Cotton Center Boulevard
Suite #189
Phoenix AZ 85040

See page two for job notes and contact information.

my EOL

Job Notes

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The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Southwest, LLC Project Manager.

Authorization

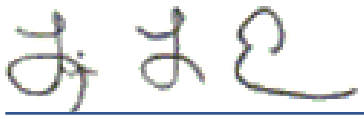

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Table of Contents

Cover Page 1
Table of Contents 3
Definitions/Glossary 4
Case Narrative 6
Sample Summary 7
Detection Summary 8
Client Sample Results 12
QC Sample Results 20
QC Association Summary 29
Lab Chronicle 34
Certification Summary 39
Method Summary 40
Chain of Custody 41
Receipt Checklists 43

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
D2	Sample required dilution due to high concentration of analyte.
M2	Matrix spike recovery was low, the associated blank spike recovery was acceptable.

Metals

Qualifier	Qualifier Description
L3	The associated blank spike recovery was above method acceptance limits.
L4	The associated blank spike recovery was below method acceptance limits.
L5	The associated blank spike recovery was above laboratory/method acceptance limits. This analyte was not detected in the sample.
M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The associated blank spike was acceptable.
T5	Laboratory not licensed for this parameter
V1	CCV recovery was above method acceptance limits. This target analyte was not detected in the sample.

General Chemistry

Qualifier	Qualifier Description
D1	Sample required dilution due to matrix.
H1	Sample analysis performed past holding time.
H2	Initial analysis within holding time. Reanalysis for the required dilution was past holding time.
H5	This test is specified to be performed in the field within 15 minutes of sampling; sample was received and analyzed past the regulatory holding time.
T5	Laboratory not licensed for this parameter

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 550-210593-1

Laboratory: Eurofins Phoenix

Narrative

Job Narrative
550-210593-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 11/15/2023 2:43 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.1°C

HPLC/IC
Method 300_ORGFMS: Spike compounds were inadvertently omitted during the extraction process for the matrix spike/matrix spike duplicate (MS/MSD); therefore, matrix spike recoveries are unavailable for analytical batch 550-311405. The associated laboratory control sample (LCS) met acceptance criteria.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals
Method 200.8_CWA_LL: Samples were diluted 10x due to matrix

FC-CCR-MW67-1123 (550-210593-1), FC-CCR-MW68-1123 (550-210593-2), FC-CCR-MW69-1123 (550-210593-3), FC-CCR-MW83-1123 (550-210593-4), FC-CCR-MW84-1123 (550-210593-5), FC-CCR-MW85-1123 (550-210593-6), FC-CCR-FD01-1123 (550-210593-7), FC-CCR-CM01-1123 (550-210593-8), FC-CCR-CM02-1123 (550-210593-9), (550-210594-B-12-C), (550-210594-B-12-A MS) and (550-210594-B-12-B MSD)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
Method 2540C_Calcd: The following sample was analyzed outside of analytical holding time due to residue being >0.2000 g at 10 mL: FC-CCR-MW67-1123 (550-210593-1).

Method 2540C_Calcd: Reanalysis of the following sample was performed outside of the analytical holding time due to noticeable errors in the bag weights from batch 311341 : FC-CCR-MW84-1123 (550-210593-5).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Sample Summary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-210593-1
SDG: APS Four Corners Power Plant (URS)

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
550-210593-1	FC-CCR-MW67-1123	Water	11/13/23 09:18	11/15/23 14:43
550-210593-2	FC-CCR-MW68-1123	Water	11/11/23 11:28	11/15/23 14:43
550-210593-3	FC-CCR-MW69-1123	Water	11/11/23 10:33	11/15/23 14:43
550-210593-4	FC-CCR-MW83-1123	Water	11/11/23 14:10	11/15/23 14:43
550-210593-5	FC-CCR-MW84-1123	Water	11/11/23 15:53	11/15/23 14:43
550-210593-6	FC-CCR-MW85-1123	Water	11/11/23 15:03	11/15/23 14:43
550-210593-7	FC-CCR-FD01-1123	Water	11/11/23 08:53	11/15/23 14:43
550-210593-8	FC-CCR-CM01-1123	Water	11/13/23 09:41	11/15/23 14:43
550-210593-9	FC-CCR-CM02-1123	Water	11/13/23 09:52	11/15/23 14:43

Detection Summary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-210593-1
SDG: APS Four Corners Power Plant (URS)

Client Sample ID: FC-CCR-MW67-1123 — Lab Sample ID: 550-210593-1

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	1800	D2	400		mg/L	200		300.0	Total/NA
Fluoride	13	D2	0.80		mg/L	2		300.0	Total/NA
Sulfate	13000	D2	400		mg/L	200		300.0	Total/NA
Fluoride	6.6		0.40		mg/L	1		9056A	Total/NA
Boron	170		0.25		mg/L	5		200.7 Rev 4.4	Total/NA
Calcium	500		10		mg/L	5		200.7 Rev 4.4	Total/NA
Lithium	0.91		0.50		mg/L	10		200.7 Rev 4.4	Total Recoverable
Arsenic	0.0075		0.0050		mg/L	10		200.8 LL	Total/NA
Barium	0.014		0.0050		mg/L	10		200.8 LL	Total/NA
Cobalt	0.0082		0.0050		mg/L	10		200.8 LL	Total/NA
Molybdenum	0.040	T5	0.0050		mg/L	10		200.8 LL	Total/NA
Thallium	0.0012		0.0010		mg/L	10		200.8 LL	Total/NA
Total Dissolved Solids	20000	D1 H1	200		mg/L	1		SM 2540C	Total/NA
pH	7.4	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	10.4	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-MW68-1123 — Lab Sample ID: 550-210593-2

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	1500	D2	400		mg/L	200		300.0	Total/NA
Fluoride	13	D2	0.80		mg/L	2		300.0	Total/NA
Sulfate	15000	D2	400		mg/L	200		300.0	Total/NA
Fluoride	6.2		0.40		mg/L	1		9056A	Total/NA
Boron	170		0.25		mg/L	5		200.7 Rev 4.4	Total/NA
Calcium	490		10		mg/L	5		200.7 Rev 4.4	Total/NA
Lithium	0.93		0.50		mg/L	10		200.7 Rev 4.4	Total Recoverable
Arsenic	0.0099		0.0050		mg/L	10		200.8 LL	Total/NA
Barium	0.14		0.0050		mg/L	10		200.8 LL	Total/NA
Cobalt	0.020		0.0050		mg/L	10		200.8 LL	Total/NA
Molybdenum	0.0069	T5	0.0050		mg/L	10		200.8 LL	Total/NA
Selenium	0.0078		0.0050		mg/L	10		200.8 LL	Total/NA
Thallium	0.0018		0.0010		mg/L	10		200.8 LL	Total/NA
Total Dissolved Solids	24000		200		mg/L	1		SM 2540C	Total/NA
pH	7.2	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	12.2	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-MW69-1123 — Lab Sample ID: 550-210593-3

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	920	D2	400		mg/L	200		300.0	Total/NA
Fluoride	4.7	D2	0.80		mg/L	2		300.0	Total/NA
Sulfate	5000	D2	400		mg/L	200		300.0	Total/NA
Fluoride	2.3		0.40		mg/L	1		9056A	Total/NA
Boron	57		0.25		mg/L	5		200.7 Rev 4.4	Total/NA
Calcium	560		10		mg/L	5		200.7 Rev 4.4	Total/NA
Lithium	0.33		0.10		mg/L	2		200.7 Rev 4.4	Total Recoverable
Arsenic	0.0086		0.0050		mg/L	10		200.8 LL	Total/NA
Barium	0.0061		0.0050		mg/L	10		200.8 LL	Total/NA
Molybdenum	0.0057	T5	0.0050		mg/L	10		200.8 LL	Total/NA
Selenium	0.20		0.0050		mg/L	10		200.8 LL	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Phoenix

Client Sample ID: FC-CCR-MW69-1123 (Continued) — Lab Sample ID: 550-210593-3

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Total Dissolved Solids	8900		100		mg/L	1		SM 2540C	Total/NA
pH	7.4	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	11.5	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-MW83-1123 — Lab Sample ID: 550-210593-4

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	120	D2	4.0		mg/L	2		300.0	Total/NA
Fluoride	2.1	D2	0.80		mg/L	2		300.0	Total/NA
Sulfate	3500	D2	400		mg/L	200		300.0	Total/NA
Boron	2.8		0.25		mg/L	5		200.7 Rev 4.4	Total/NA
Calcium	520		10		mg/L	5		200.7 Rev 4.4	Total/NA
Lithium	0.24		0.050		mg/L	1		200.7 Rev 4.4	Total Recoverable
Arsenic	0.0077		0.0050		mg/L	10		200.8 LL	Total/NA
Barium	0.011		0.0050		mg/L	10		200.8 LL	Total/NA
Molybdenum	0.0076	T5	0.0050		mg/L	10		200.8 LL	Total/NA
Total Dissolved Solids	620		100		mg/L	1		SM 2540C	Total/NA
pH	7.4	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	11.3	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-MW84-1123 — Lab Sample ID: 550-210593-5

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	890	D2	400		mg/L	200		300.0	Total/NA
Sulfate	8700	D2	400		mg/L	200		300.0	Total/NA
Boron	66		0.25		mg/L	5		200.7 Rev 4.4	Total/NA
Calcium	530		10		mg/L	5		200.7 Rev 4.4	Total/NA
Lithium	0.47		0.25		mg/L	5		200.7 Rev 4.4	Total Recoverable
Arsenic	0.0077		0.0050		mg/L	10		200.8 LL	Total/NA
Barium	0.017		0.0050		mg/L	10		200.8 LL	Total/NA
Cobalt	0.0077		0.0050		mg/L	10		200.8 LL	Total/NA
Selenium	0.067		0.0050		mg/L	10		200.8 LL	Total/NA
Total Dissolved Solids	15000	H2	100		mg/L	1		SM 2540C	Total/NA
pH	7.2	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	11.1	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-MW85-1123 — Lab Sample ID: 550-210593-6

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	630	D2	400		mg/L	200		300.0	Total/NA
Fluoride	1.9	D2	0.80		mg/L	2		300.0	Total/NA
Sulfate	5900	D2	400		mg/L	200		300.0	Total/NA
Boron	75		0.25		mg/L	5		200.7 Rev 4.4	Total/NA
Calcium	580		10		mg/L	5		200.7 Rev 4.4	Total/NA
Lithium	0.50		0.10		mg/L	2		200.7 Rev 4.4	Total Recoverable
Arsenic	0.0084		0.0050		mg/L	10		200.8 LL	Total/NA
Barium	0.017		0.0050		mg/L	10		200.8 LL	Total/NA
Molybdenum	0.0057	T5	0.0050		mg/L	10		200.8 LL	Total/NA
Selenium	0.37		0.0050		mg/L	10		200.8 LL	Total/NA
Total Dissolved Solids	10000		100		mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: FC-CCR-MW85-1123 (Continued) — Lab Sample ID: 550-210593-6

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
pH	7.2	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	10.6	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-FD01-1123 — Lab Sample ID: 550-210593-7

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	890	D2	400		mg/L	200		300.0	Total/NA
Sulfate	8800	D2	400		mg/L	200		300.0	Total/NA
Boron	71		0.25		mg/L	5		200.7 Rev 4.4	Total/NA
Calcium	550		10		mg/L	5		200.7 Rev 4.4	Total/NA
Lithium	0.67		0.25		mg/L	5		200.7 Rev 4.4	Total Recoverable
Arsenic	0.0075		0.0050		mg/L	10		200.8 LL	Total/NA
Barium	0.018		0.0050		mg/L	10		200.8 LL	Total/NA
Cobalt	0.0076		0.0050		mg/L	10		200.8 LL	Total/NA
Selenium	0.067		0.0050		mg/L	10		200.8 LL	Total/NA
Total Dissolved Solids	15000		100		mg/L	1		SM 2540C	Total/NA
pH	7.2	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	10.7	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-CM01-1123 — Lab Sample ID: 550-210593-8

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	1400	D2	400		mg/L	200		300.0	Total/NA
Fluoride	3.3	D2	0.80		mg/L	2		300.0	Total/NA
Sulfate	9100	D2	400		mg/L	200		300.0	Total/NA
Boron	120		0.25		mg/L	5		200.7 Rev 4.4	Total/NA
Calcium	540		10		mg/L	5		200.7 Rev 4.4	Total/NA
Lithium	0.75		0.25		mg/L	5		200.7 Rev 4.4	Total Recoverable
Arsenic	0.0081		0.0050		mg/L	10		200.8 LL	Total/NA
Barium	0.028		0.0050		mg/L	10		200.8 LL	Total/NA
Cobalt	0.0097		0.0050		mg/L	10		200.8 LL	Total/NA
Molybdenum	0.0053	T5	0.0050		mg/L	10		200.8 LL	Total/NA
Selenium	0.071		0.0050		mg/L	10		200.8 LL	Total/NA
Total Dissolved Solids	16000		100		mg/L	1		SM 2540C	Total/NA
pH	7.3	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	11.5	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-CM02-1123 — Lab Sample ID: 550-210593-9

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	1100	D2	400		mg/L	200		300.0	Total/NA
Fluoride	4.2	D2	0.80		mg/L	2		300.0	Total/NA
Sulfate	9200	D2	400		mg/L	200		300.0	Total/NA
Boron	110		0.25		mg/L	5		200.7 Rev 4.4	Total/NA
Calcium	510		10		mg/L	5		200.7 Rev 4.4	Total/NA
Lithium	0.61		0.25		mg/L	5		200.7 Rev 4.4	Total Recoverable
Arsenic	0.0081		0.0050		mg/L	10		200.8 LL	Total/NA
Barium	0.016		0.0050		mg/L	10		200.8 LL	Total/NA
Cobalt	0.0084		0.0050		mg/L	10		200.8 LL	Total/NA
Selenium	0.013		0.0050		mg/L	10		200.8 LL	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: FC-CCR-CM02-1123 (Continued)

Lab Sample ID: 550-210593-9

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Thallium	0.0012		0.0010		mg/L	10		200.8 LL	Total/NA
Total Dissolved Solids	15000		100		mg/L	1		SM 2540C	Total/NA
pH	7.0	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	13.0	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: FC-CCR-MW67-1123

Lab Sample ID: 550-210593-1

Date Collected: 11/13/23 09:18
Matrix: Water
Date Received: 11/15/23 14:43

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1800**	**D2**	400		mg/L			11/18/23 21:19	200
Fluoride	**13**	**D2**	0.80		mg/L			11/18/23 21:00	2
Sulfate	**13000**	**D2**	400		mg/L			11/18/23 21:19	200

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**6.6**		0.40		mg/L			12/01/23 09:54	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND	L5 V1	0.0050		mg/L		11/21/23 04:37	11/28/23 18:25	5
Boron	**170**		0.25		mg/L		11/21/23 04:37	11/29/23 15:24	5
Calcium	**500**		10		mg/L		11/21/23 04:37	11/28/23 18:25	5

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**0.91**		0.50		mg/L		11/21/23 09:32	11/28/23 15:54	10

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.010		mg/L		11/21/23 06:58	11/27/23 17:37	10
Arsenic	**0.0075**		0.0050		mg/L		11/21/23 06:58	11/27/23 17:37	10
Barium	**0.014**		0.0050		mg/L		11/21/23 06:58	11/27/23 17:37	10
Cadmium	ND		0.0010		mg/L		11/21/23 06:58	11/27/23 17:37	10
Chromium	ND		0.010		mg/L		11/21/23 06:58	11/27/23 17:37	10
Cobalt	**0.0082**		0.0050		mg/L		11/21/23 06:58	11/27/23 17:37	10
Lead	ND		0.0050		mg/L		11/21/23 06:58	11/27/23 17:37	10
Molybdenum	**0.040**	**T5**	0.0050		mg/L		11/21/23 06:58	11/27/23 17:37	10
Selenium	ND		0.0050		mg/L		11/21/23 06:58	11/27/23 17:37	10
Thallium	**0.0012**		0.0010		mg/L		11/21/23 06:58	11/27/23 17:37	10

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		11/20/23 11:20	11/20/23 15:23	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**20000**	**D1 H1**	200		mg/L			11/22/23 18:27	1
pH (SM 4500 H+ B)	**7.4**	**H5**	1.7		SU			11/16/23 14:20	1
Temperature (SM 4500 H+ B)	**10.4**	**H5 T5**	0.1		Degrees C			11/16/23 14:20	1

Client Sample ID: FC-CCR-MW68-1123

Lab Sample ID: 550-210593-2

Date Collected: 11/11/23 11:28
Matrix: Water
Date Received: 11/15/23 14:43

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1500**	**D2**	400		mg/L			11/18/23 21:56	200
Fluoride	**13**	**D2**	0.80		mg/L			11/18/23 21:37	2
Sulfate	**15000**	**D2**	400		mg/L			11/18/23 21:56	200

Client Sample ID: FC-CCR-MW68-1123

Lab Sample ID: 550-210593-2

Date Collected: 11/11/23 11:28
Matrix: Water
Date Received: 11/15/23 14:43

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	6.2		0.40		mg/L			12/01/23 05:54	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND	L5 V1	0.0050		mg/L		11/21/23 04:37	11/28/23 18:27	5
Boron	170		0.25		mg/L		11/21/23 04:37	11/29/23 15:27	5
Calcium	490		10		mg/L		11/21/23 04:37	11/28/23 18:27	5

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	0.93		0.50		mg/L		11/21/23 09:32	11/28/23 15:56	10

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.010		mg/L		11/21/23 06:58	11/27/23 17:39	10
Arsenic	0.0099		0.0050		mg/L		11/21/23 06:58	11/27/23 17:39	10
Barium	0.14		0.0050		mg/L		11/21/23 06:58	11/27/23 17:39	10
Cadmium	ND		0.0010		mg/L		11/21/23 06:58	11/27/23 17:39	10
Chromium	ND		0.010		mg/L		11/21/23 06:58	11/27/23 17:39	10
Cobalt	0.020		0.0050		mg/L		11/21/23 06:58	11/27/23 17:39	10
Lead	ND		0.0050		mg/L		11/21/23 06:58	11/27/23 17:39	10
Molybdenum	0.0069	T5	0.0050		mg/L		11/21/23 06:58	11/27/23 17:39	10
Selenium	0.0078		0.0050		mg/L		11/21/23 06:58	11/27/23 17:39	10
Thallium	0.0018		0.0010		mg/L		11/21/23 06:58	11/27/23 17:39	10

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		11/20/23 11:20	11/20/23 15:25	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	24000		200		mg/L			11/17/23 11:54	1
pH (SM 4500 H+ B)	7.2	H5	1.7		SU			11/16/23 14:23	1
Temperature (SM 4500 H+ B)	12.2	H5 T5	0.1		Degrees C			11/16/23 14:23	1

Client Sample ID: FC-CCR-MW69-1123

Lab Sample ID: 550-210593-3

Date Collected: 11/11/23 10:33
Matrix: Water
Date Received: 11/15/23 14:43

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	920	D2	400		mg/L			11/18/23 23:28	200
Fluoride	4.7	D2	0.80		mg/L			11/18/23 22:14	2
Sulfate	5000	D2	400		mg/L			11/18/23 23:28	200

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	2.3		0.40		mg/L			12/01/23 10:30	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND	L5 V1	0.0050		mg/L		11/21/23 04:37	11/28/23 18:30	5

Client Sample ID: FC-CCR-MW69-1123

Lab Sample ID: 550-210593-3

Date Collected: 11/11/23 10:33
Matrix: Water
Date Received: 11/15/23 14:43

Method: EPA 200.7 Rev 4.4 - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	**57**		0.25		mg/L		11/21/23 04:37	11/29/23 15:30	5
Calcium	**560**		10		mg/L		11/21/23 04:37	11/28/23 18:30	5

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**0.33**		0.10		mg/L		11/21/23 09:32	11/28/23 15:59	2

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.010		mg/L		11/21/23 06:58	11/27/23 17:41	10
Arsenic	**0.0086**		0.0050		mg/L		11/21/23 06:58	11/27/23 17:41	10
Barium	**0.0061**		0.0050		mg/L		11/21/23 06:58	11/27/23 17:41	10
Cadmium	ND		0.0010		mg/L		11/21/23 06:58	11/27/23 17:41	10
Chromium	ND		0.010		mg/L		11/21/23 06:58	11/27/23 17:41	10
Cobalt	ND		0.0050		mg/L		11/21/23 06:58	11/27/23 17:41	10
Lead	ND		0.0050		mg/L		11/21/23 06:58	11/27/23 17:41	10
Molybdenum	**0.0057**	**T5**	0.0050		mg/L		11/21/23 06:58	11/27/23 17:41	10
Selenium	**0.20**		0.0050		mg/L		11/21/23 06:58	11/27/23 17:41	10
Thallium	ND		0.0010		mg/L		11/21/23 06:58	11/27/23 17:41	10

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		11/20/23 11:20	11/20/23 15:27	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**8900**		100		mg/L			11/17/23 11:54	1
pH (SM 4500 H+ B)	**7.4**	**H5**	1.7		SU			11/16/23 14:26	1
Temperature (SM 4500 H+ B)	**11.5**	**H5 T5**	0.1		Degrees C			11/16/23 14:26	1

Client Sample ID: FC-CCR-MW83-1123

Lab Sample ID: 550-210593-4

Date Collected: 11/11/23 14:10
Matrix: Water
Date Received: 11/15/23 14:43

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**120**	**D2**	4.0		mg/L			11/18/23 23:46	2
Fluoride	**2.1**	**D2**	0.80		mg/L			11/18/23 23:46	2
Sulfate	**3500**	**D2**	400		mg/L			11/19/23 00:05	200

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND	L5 V1	0.0050		mg/L		11/21/23 04:37	11/28/23 18:33	5
Boron	**2.8**		0.25		mg/L		11/21/23 04:37	11/29/23 15:32	5
Calcium	**520**		10		mg/L		11/21/23 04:37	11/28/23 18:33	5

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**0.24**		0.050		mg/L		11/21/23 09:32	11/28/23 16:01	1

Client Sample ID: FC-CCR-MW83-1123

Lab Sample ID: 550-210593-4

Date Collected: 11/11/23 14:10
Matrix: Water
Date Received: 11/15/23 14:43

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.010		mg/L		11/21/23 06:58	11/27/23 17:44	10
Arsenic	**0.0077**		0.0050		mg/L		11/21/23 06:58	11/27/23 17:44	10
Barium	**0.011**		0.0050		mg/L		11/21/23 06:58	11/27/23 17:44	10
Cadmium	ND		0.0010		mg/L		11/21/23 06:58	11/27/23 17:44	10
Chromium	ND		0.010		mg/L		11/21/23 06:58	11/27/23 17:44	10
Cobalt	ND		0.0050		mg/L		11/21/23 06:58	11/27/23 17:44	10
Lead	ND		0.0050		mg/L		11/21/23 06:58	11/27/23 17:44	10
Molybdenum	**0.0076**	**T5**	0.0050		mg/L		11/21/23 06:58	11/27/23 17:44	10
Selenium	ND		0.0050		mg/L		11/21/23 06:58	11/27/23 17:44	10
Thallium	ND		0.0010		mg/L		11/21/23 06:58	11/27/23 17:44	10

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		11/20/23 11:20	11/20/23 15:29	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**620**		100		mg/L			11/17/23 11:54	1
pH (SM 4500 H+ B)	**7.4**	**H5**	1.7		SU			11/16/23 14:28	1
Temperature (SM 4500 H+ B)	**11.3**	**H5 T5**	0.1		Degrees C			11/16/23 14:28	1

Client Sample ID: FC-CCR-MW84-1123

Lab Sample ID: 550-210593-5

Date Collected: 11/11/23 15:53
Matrix: Water
Date Received: 11/15/23 14:43

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**890**	**D2**	400		mg/L			11/19/23 00:41	200
Fluoride	ND	D2	0.80		mg/L			11/19/23 00:23	2
Sulfate	**8700**	**D2**	400		mg/L			11/19/23 00:41	200

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND	L5 V1	0.0050		mg/L		11/21/23 04:37	11/28/23 18:36	5
Boron	**66**		0.25		mg/L		11/21/23 04:37	11/29/23 15:35	5
Calcium	**530**		10		mg/L		11/21/23 04:37	11/28/23 18:36	5

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**0.47**		0.25		mg/L		11/21/23 09:32	11/28/23 16:03	5

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.010		mg/L		11/21/23 06:58	11/27/23 17:46	10
Arsenic	**0.0077**		0.0050		mg/L		11/21/23 06:58	11/27/23 17:46	10
Barium	**0.017**		0.0050		mg/L		11/21/23 06:58	11/27/23 17:46	10
Cadmium	ND		0.0010		mg/L		11/21/23 06:58	11/27/23 17:46	10
Chromium	ND		0.010		mg/L		11/21/23 06:58	11/27/23 17:46	10
Cobalt	**0.0077**		0.0050		mg/L		11/21/23 06:58	11/27/23 17:46	10
Lead	ND		0.0050		mg/L		11/21/23 06:58	11/27/23 17:46	10
Molybdenum	ND	T5	0.0050		mg/L		11/21/23 06:58	11/27/23 17:46	10

Client Sample ID: FC-CCR-MW84-1123

Lab Sample ID: 550-210593-5

Date Collected: 11/11/23 15:53
Matrix: Water
Date Received: 11/15/23 14:43

Method: EPA 200.8 LL - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Selenium	**0.067**		0.0050		mg/L		11/21/23 06:58	11/27/23 17:46	10
Thallium	ND		0.0010		mg/L		11/21/23 06:58	11/27/23 17:46	10

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		11/20/23 11:20	11/20/23 15:31	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**15000**	**H2**	100		mg/L			12/04/23 11:23	1
pH (SM 4500 H+ B)	**7.2**	**H5**	1.7		SU			11/16/23 14:31	1
Temperature (SM 4500 H+ B)	**11.1**	**H5 T5**	0.1		Degrees C			11/16/23 14:31	1

Client Sample ID: FC-CCR-MW85-1123

Lab Sample ID: 550-210593-6

Date Collected: 11/11/23 15:03
Matrix: Water
Date Received: 11/15/23 14:43

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**630**	**D2**	400		mg/L			11/19/23 01:18	200
Fluoride	**1.9**	**D2**	0.80		mg/L			11/19/23 01:00	2
Sulfate	**5900**	**D2**	400		mg/L			11/19/23 01:18	200

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND	L4 V1	0.0050		mg/L		11/21/23 04:37	11/28/23 18:44	5
Boron	**75**		0.25		mg/L		11/21/23 04:37	11/29/23 15:44	5
Calcium	**580**		10		mg/L		11/21/23 04:37	11/28/23 18:44	5

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**0.50**		0.10		mg/L		11/21/23 09:32	11/28/23 16:06	2

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.010		mg/L		11/21/23 06:58	11/27/23 17:54	10
Arsenic	**0.0084**		0.0050		mg/L		11/21/23 06:58	11/27/23 17:54	10
Barium	**0.017**		0.0050		mg/L		11/21/23 06:58	11/27/23 17:54	10
Cadmium	ND		0.0010		mg/L		11/21/23 06:58	11/27/23 17:54	10
Chromium	ND		0.010		mg/L		11/21/23 06:58	11/27/23 17:54	10
Cobalt	ND		0.0050		mg/L		11/21/23 06:58	11/27/23 17:54	10
Lead	ND		0.0050		mg/L		11/21/23 06:58	11/27/23 17:54	10
Molybdenum	**0.0057**	**T5**	0.0050		mg/L		11/21/23 06:58	11/27/23 17:54	10
Selenium	**0.37**		0.0050		mg/L		11/21/23 06:58	11/27/23 17:54	10
Thallium	ND		0.0010		mg/L		11/21/23 06:58	11/27/23 17:54	10

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		11/20/23 11:20	11/20/23 15:33	1

Client Sample ID: FC-CCR-MW85-1123

Lab Sample ID: 550-210593-6

Date Collected: 11/11/23 15:03
Matrix: Water
Date Received: 11/15/23 14:43

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**10000**		100		mg/L			11/17/23 11:54	1
pH (SM 4500 H+ B)	**7.2**	**H5**	1.7		SU			11/16/23 14:33	1
Temperature (SM 4500 H+ B)	**10.6**	**H5 T5**	0.1		Degrees C			11/16/23 14:33	1

Client Sample ID: FC-CCR-FD01-1123

Lab Sample ID: 550-210593-7

Date Collected: 11/11/23 08:53
Matrix: Water
Date Received: 11/15/23 14:43

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**890**	**D2**	400		mg/L			11/19/23 01:55	200
Fluoride	ND	D2	0.80		mg/L			11/19/23 01:37	2
Sulfate	**8800**	**D2**	400		mg/L			11/19/23 01:55	200

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND	L5 V1	0.0050		mg/L		11/21/23 04:37	11/28/23 18:47	5
Boron	**71**		0.25		mg/L		11/21/23 04:37	11/29/23 15:47	5
Calcium	**550**		10		mg/L		11/21/23 04:37	11/28/23 18:47	5

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**0.67**		0.25		mg/L		11/21/23 09:32	11/28/23 16:08	5

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.010		mg/L		11/21/23 06:58	11/27/23 17:56	10
Arsenic	**0.0075**		0.0050		mg/L		11/21/23 06:58	11/27/23 17:56	10
Barium	**0.018**		0.0050		mg/L		11/21/23 06:58	11/27/23 17:56	10
Cadmium	ND		0.0010		mg/L		11/21/23 06:58	11/27/23 17:56	10
Chromium	ND		0.010		mg/L		11/21/23 06:58	11/27/23 17:56	10
Cobalt	**0.0076**		0.0050		mg/L		11/21/23 06:58	11/27/23 17:56	10
Lead	ND		0.0050		mg/L		11/21/23 06:58	11/27/23 17:56	10
Molybdenum	ND	T5	0.0050		mg/L		11/21/23 06:58	11/27/23 17:56	10
Selenium	**0.067**		0.0050		mg/L		11/21/23 06:58	11/27/23 17:56	10
Thallium	ND		0.0010		mg/L		11/21/23 06:58	11/27/23 17:56	10

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		11/20/23 11:20	11/20/23 15:41	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**15000**		100		mg/L			11/17/23 11:54	1
pH (SM 4500 H+ B)	**7.2**	**H5**	1.7		SU			11/16/23 14:35	1
Temperature (SM 4500 H+ B)	**10.7**	**H5 T5**	0.1		Degrees C			11/16/23 14:35	1

Client Sample ID: FC-CCR-CM01-1123

Lab Sample ID: 550-210593-8

Date Collected: 11/13/23 09:41
Matrix: Water
Date Received: 11/15/23 14:43

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1400**	**D2**	400		mg/L			11/19/23 03:27	200
Fluoride	**3.3**	**D2**	0.80		mg/L			11/19/23 03:09	2
Sulfate	**9100**	**D2**	400		mg/L			11/19/23 03:27	200

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND	L5 V1	0.0050		mg/L		11/21/23 04:37	11/28/23 18:50	5
Boron	**120**		0.25		mg/L		11/21/23 04:37	11/29/23 15:49	5
Calcium	**540**		10		mg/L		11/21/23 04:37	11/28/23 18:50	5

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**0.75**		0.25		mg/L		11/21/23 09:32	11/28/23 16:11	5

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.010		mg/L		11/21/23 06:58	11/27/23 17:58	10
Arsenic	**0.0081**		0.0050		mg/L		11/21/23 06:58	11/27/23 17:58	10
Barium	**0.028**		0.0050		mg/L		11/21/23 06:58	11/27/23 17:58	10
Cadmium	ND		0.0010		mg/L		11/21/23 06:58	11/27/23 17:58	10
Chromium	ND		0.010		mg/L		11/21/23 06:58	11/27/23 17:58	10
Cobalt	**0.0097**		0.0050		mg/L		11/21/23 06:58	11/27/23 17:58	10
Lead	ND		0.0050		mg/L		11/21/23 06:58	11/27/23 17:58	10
Molybdenum	**0.0053**	**T5**	0.0050		mg/L		11/21/23 06:58	11/27/23 17:58	10
Selenium	**0.071**		0.0050		mg/L		11/21/23 06:58	11/27/23 17:58	10
Thallium	ND		0.0010		mg/L		11/21/23 06:58	11/27/23 17:58	10

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		11/20/23 11:20	11/20/23 15:43	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**16000**		100		mg/L			11/20/23 12:18	1
pH (SM 4500 H+ B)	**7.3**	**H5**	1.7		SU			11/16/23 14:36	1
Temperature (SM 4500 H+ B)	**11.5**	**H5 T5**	0.1		Degrees C			11/16/23 14:36	1

Client Sample ID: FC-CCR-CM02-1123

Lab Sample ID: 550-210593-9

Date Collected: 11/13/23 09:52
Matrix: Water
Date Received: 11/15/23 14:43

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1100**	**D2**	400		mg/L			11/19/23 04:04	200
Fluoride	**4.2**	**D2**	0.80		mg/L			11/19/23 03:45	2
Sulfate	**9200**	**D2**	400		mg/L			11/19/23 04:04	200

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND	L5 V1	0.0050		mg/L		11/21/23 04:37	11/28/23 18:53	5
Boron	**110**		0.25		mg/L		11/21/23 04:37	11/29/23 15:52	5

Client Sample ID: FC-CCR-CM02-1123
Date Collected: 11/13/23 09:52
Date Received: 11/15/23 14:43

Lab Sample ID: 550-210593-9
Matrix: Water

Method: EPA 200.7 Rev 4.4 - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**510**		10		mg/L		11/21/23 04:37	11/28/23 18:53	5

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**0.61**		0.25		mg/L		11/21/23 09:32	11/28/23 16:13	5

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.010		mg/L		11/21/23 06:58	11/27/23 18:00	10
Arsenic	**0.0081**		0.0050		mg/L		11/21/23 06:58	11/27/23 18:00	10
Barium	**0.016**		0.0050		mg/L		11/21/23 06:58	11/27/23 18:00	10
Cadmium	ND		0.0010		mg/L		11/21/23 06:58	11/27/23 18:00	10
Chromium	ND		0.010		mg/L		11/21/23 06:58	11/27/23 18:00	10
Cobalt	**0.0084**		0.0050		mg/L		11/21/23 06:58	11/27/23 18:00	10
Lead	ND		0.0050		mg/L		11/21/23 06:58	11/27/23 18:00	10
Molybdenum	ND	T5	0.0050		mg/L		11/21/23 06:58	11/27/23 18:00	10
Selenium	**0.013**		0.0050		mg/L		11/21/23 06:58	11/27/23 18:00	10
Thallium	**0.0012**		0.0010		mg/L		11/21/23 06:58	11/27/23 18:00	10

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		11/20/23 11:20	11/20/23 15:45	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**15000**		100		mg/L			11/20/23 12:18	1
pH (SM 4500 H+ B)	**7.0**	**H5**	1.7		SU			11/16/23 14:41	1
Temperature (SM 4500 H+ B)	**13.0**	**H5 T5**	0.1		Degrees C			11/16/23 14:41	1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 550-311405/2
Matrix: Water
Analysis Batch: 311405

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		2.0		mg/L			11/18/23 18:15	1
Fluoride	ND		0.40		mg/L			11/18/23 18:15	1
Sulfate	ND		2.0		mg/L			11/18/23 18:15	1

Lab Sample ID: LCS 550-311405/5
Matrix: Water
Analysis Batch: 311405

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			20.0	21.0		mg/L		105	90 - 110		
Fluoride			4.00	4.32		mg/L		108	90 - 110		
Sulfate			20.0	21.2		mg/L		106	90 - 110		

Lab Sample ID: LCSD 550-311405/6
Matrix: Water
Analysis Batch: 311405

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			20.0	21.1		mg/L		105	90 - 110	0	20
Fluoride			4.00	4.34		mg/L		109	90 - 110	0	20
Sulfate			20.0	21.3		mg/L		106	90 - 110	0	20

Lab Sample ID: 550-210592-I-4 MS ^10
Matrix: Water
Analysis Batch: 311405

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	140	M2	200	140	M2	mg/L		1	80 - 120		
Fluoride	ND	M2	40.0	ND	M2	mg/L		-0.2	80 - 120		
Sulfate	170	M2	200	176	M2	mg/L		1	80 - 120		

Lab Sample ID: 550-210592-I-4 MSD ^10
Matrix: Water
Analysis Batch: 311405

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	140	M2	200	140	M2	mg/L		1	80 - 120	0	20
Fluoride	ND	M2	40.0	ND	M2	mg/L		-0.1	80 - 120	2	20
Sulfate	170	M2	200	177	M2	mg/L		2	80 - 120	1	20

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 550-312000/1-A
Matrix: Water
Analysis Batch: 312091

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		4.0		mg/L			12/01/23 03:09	1

Method: 9056A - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 550-312091/2
Matrix: Water
Analysis Batch: 312091

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.40		mg/L			11/30/23 16:06	1

Lab Sample ID: LCS 550-312000/2-A
Matrix: Water
Analysis Batch: 312091

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Fluoride			39.7	41.1		mg/L		103	80 - 120		

Lab Sample ID: LCSD 550-312000/3-A
Matrix: Water
Analysis Batch: 312091

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Fluoride			39.8	42.2		mg/L		106	80 - 120	3	20

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 550-311484/1-A
Matrix: Water
Analysis Batch: 311842

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 311484

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND	V1	0.0010		mg/L		11/21/23 04:37	11/28/23 17:56	1
Calcium	ND		2.0		mg/L		11/21/23 04:37	11/28/23 17:56	1

Lab Sample ID: MB 550-311484/1-A
Matrix: Water
Analysis Batch: 311929

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 311484

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.050		mg/L		11/21/23 04:37	11/29/23 14:55	1

Lab Sample ID: LCS 550-311484/2-A
Matrix: Water
Analysis Batch: 311842

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 311484

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Beryllium			1.00	1.22	L3 V1	mg/L		122	85 - 115		
Calcium			21.0	23.2		mg/L		111	85 - 115		

Lab Sample ID: LCS 550-311484/2-A
Matrix: Water
Analysis Batch: 311929

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 311484

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Boron			1.00	0.944		mg/L		94	85 - 115		

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: LCSD 550-311484/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 311842 — **Prep Batch: 311484**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Beryllium			1.00	1.16	L3 V1	mg/L		116	85 - 115	5	20
Calcium			21.0	22.2		mg/L		106	85 - 115	5	20

Lab Sample ID: LCSD 550-311484/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 311929 — **Prep Batch: 311484**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron			1.00	0.977		mg/L		98	85 - 115	3	20

Lab Sample ID: 550-210594-B-1-A MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 311842 — **Prep Batch: 311484**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Beryllium	ND	V1 L3	1.00	1.18	V1	mg/L		118	70 - 130		
Calcium	520	M3	21.0	497	M3	mg/L		1869	70 - 130		

Lab Sample ID: 550-210594-B-1-A MS ^5 — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 311929 — **Prep Batch: 311484**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Boron	90	M3	1.00	82.4	M3	mg/L		-801	70 - 130		

Lab Sample ID: 550-210594-B-1-B MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 311842 — **Prep Batch: 311484**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Beryllium	ND	V1 L3	1.00	1.23	V1	mg/L		123	70 - 130	4	20
Calcium	520	M3	21.0	524	M3	mg/L		1998	70 - 130	5	20

Lab Sample ID: 550-210594-B-1-B MSD ^5 — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 311929 — **Prep Batch: 311484**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron	90	M3	1.00	88.5	M3	mg/L		-187	70 - 130	7	20

Lab Sample ID: MB 570-385879/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 387424 — **Prep Batch: 385879**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	ND		0.050		mg/L		11/21/23 09:32	11/28/23 15:21	1

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: LCS 570-385879/27-A
Matrix: Water
Analysis Batch: 387424

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 385879

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Lithium			0.500	0.551		mg/L		110	85 - 115		

Lab Sample ID: LCSD 570-385879/28-A
Matrix: Water
Analysis Batch: 387424

Client Sample ID: Lab Control Sample Dup
Prep Type: Total Recoverable
Prep Batch: 385879

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Lithium			0.500	0.546		mg/L		109	85 - 115	1	20

Lab Sample ID: 570-161517-A-1-D MS
Matrix: Water
Analysis Batch: 387424

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 385879

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Lithium	ND		0.500	0.568		mg/L		105	80 - 120		

Lab Sample ID: 570-161517-A-1-E MSD
Matrix: Water
Analysis Batch: 387424

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 385879

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Lithium	ND		0.500	0.579		mg/L		107	80 - 120	2	20

Method: 200.8 LL - Metals (ICP/MS)

Lab Sample ID: MB 550-311487/1-A
Matrix: Water
Analysis Batch: 311751

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 311487

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.0010		mg/L		11/21/23 06:58	11/27/23 17:13	1
Arsenic	ND		0.00050		mg/L		11/21/23 06:58	11/27/23 17:13	1
Barium	ND		0.00050		mg/L		11/21/23 06:58	11/27/23 17:13	1
Cadmium	ND		0.00010		mg/L		11/21/23 06:58	11/27/23 17:13	1
Chromium	ND		0.0010		mg/L		11/21/23 06:58	11/27/23 17:13	1
Cobalt	ND		0.00050		mg/L		11/21/23 06:58	11/27/23 17:13	1
Lead	ND		0.00050		mg/L		11/21/23 06:58	11/27/23 17:13	1
Molybdenum	ND		0.00050		mg/L		11/21/23 06:58	11/27/23 17:13	1
Selenium	ND		0.00050		mg/L		11/21/23 06:58	11/27/23 17:13	1
Thallium	ND		0.00010		mg/L		11/21/23 06:58	11/27/23 17:13	1

Lab Sample ID: LCS 550-311487/2-A
Matrix: Water
Analysis Batch: 311751

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 311487

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Antimony			0.100	0.100		mg/L		100	85 - 115		
Arsenic			0.100	0.101		mg/L		101	85 - 115		
Barium			0.100	0.110		mg/L		110	85 - 115		
Cadmium			0.100	0.104		mg/L		104	85 - 115		

Method: 200.8 LL - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 550-311487/2-A
Matrix: Water
Analysis Batch: 311751

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 311487

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chromium			0.100	0.101		mg/L		101	85 - 115		
Cobalt			0.100	0.107		mg/L		107	85 - 115		
Lead			0.100	0.102		mg/L		102	85 - 115		
Molybdenum			0.100	0.108		mg/L		108	85 - 115		
Selenium			0.100	0.0951		mg/L		95	85 - 115		
Thallium			0.100	0.104		mg/L		104	85 - 115		

Lab Sample ID: LCSD 550-311487/3-A
Matrix: Water
Analysis Batch: 311751

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 311487

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony			0.100	0.105		mg/L		105	85 - 115	4	20
Arsenic			0.100	0.102		mg/L		102	85 - 115	1	20
Barium			0.100	0.113		mg/L		113	85 - 115	3	20
Cadmium			0.100	0.105		mg/L		105	85 - 115	1	20
Chromium			0.100	0.103		mg/L		103	85 - 115	1	20
Cobalt			0.100	0.104		mg/L		104	85 - 115	2	20
Lead			0.100	0.106		mg/L		106	85 - 115	5	20
Molybdenum			0.100	0.110		mg/L		110	85 - 115	2	20
Selenium			0.100	0.0962		mg/L		96	85 - 115	1	20
Thallium			0.100	0.107		mg/L		107	85 - 115	3	20

Lab Sample ID: 550-210594-B-12-A MS
Matrix: Water
Analysis Batch: 311751

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 311487

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Antimony	ND		0.100	0.107		mg/L		107	70 - 130		
Arsenic	0.0063		0.100	0.116		mg/L		109	70 - 130		
Barium	0.017		0.100	0.123		mg/L		106	70 - 130		
Cadmium	ND		0.100	0.102		mg/L		102	70 - 130		
Chromium	ND		0.100	0.104		mg/L		104	70 - 130		
Cobalt	ND		0.100	0.108		mg/L		107	70 - 130		
Lead	ND		0.100	0.0980		mg/L		98	70 - 130		
Molybdenum	ND		0.100	0.115		mg/L		111	70 - 130		
Selenium	0.040		0.100	0.152		mg/L		112	70 - 130		
Thallium	0.0010		0.100	0.101		mg/L		100	70 - 130		

Lab Sample ID: 550-210594-B-12-B MSD
Matrix: Water
Analysis Batch: 311751

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 311487

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	ND		0.100	0.107		mg/L		106	70 - 130	0	20
Arsenic	0.0063		0.100	0.113		mg/L		107	70 - 130	2	20
Barium	0.017		0.100	0.125		mg/L		109	70 - 130	2	20
Cadmium	ND		0.100	0.102		mg/L		102	70 - 130	0	20
Chromium	ND		0.100	0.103		mg/L		103	70 - 130	1	20

Method: 200.8 LL - Metals (ICP/MS) (Continued)

Lab Sample ID: 550-210594-B-12-B MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 311751 — **Prep Batch: 311487**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cobalt	ND		0.100	0.105		mg/L		104	70 - 130	3	20
Lead	ND		0.100	0.0947		mg/L		95	70 - 130	3	20
Molybdenum	ND		0.100	0.116		mg/L		111	70 - 130	0	20
Selenium	0.040		0.100	0.147		mg/L		107	70 - 130	3	20
Thallium	0.0010		0.100	0.0980		mg/L		97	70 - 130	3	20

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 550-311424/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 311470 — **Prep Batch: 311424**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		11/20/23 11:20	11/20/23 14:47	1

Lab Sample ID: LCS 550-311424/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 311470 — **Prep Batch: 311424**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury			0.00500	0.00452		mg/L		90	85 - 115		

Lab Sample ID: LCSD 550-311424/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 311470 — **Prep Batch: 311424**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury			0.00500	0.00451		mg/L		90	85 - 115	0	20

Lab Sample ID: 550-210591-B-1-B MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 311470 — **Prep Batch: 311424**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		0.00500	0.00465		mg/L		93	70 - 130	2	20

Lab Sample ID: 550-210593-6 MS — **Client Sample ID: FC-CCR-MW85-1123**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 311470 — **Prep Batch: 311424**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury	ND		0.00500	0.00557		mg/L		111	70 - 130		

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 550-311341/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 311341

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		20		mg/L			11/17/23 11:54	1

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: LCS 550-311341/2
Matrix: Water
Analysis Batch: 311341

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Dissolved Solids			1000	990		mg/L		99	90 - 110		

Lab Sample ID: LCSD 550-311341/3
Matrix: Water
Analysis Batch: 311341

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Dissolved Solids			1000	994		mg/L		99	90 - 110	0	10

Lab Sample ID: 550-210497-A-1 DU
Matrix: Water
Analysis Batch: 311341

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	1400			1370		mg/L				0.9	10

Lab Sample ID: MB 550-311443/1
Matrix: Water
Analysis Batch: 311443

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		20		mg/L			11/20/23 12:18	1

Lab Sample ID: LCS 550-311443/2
Matrix: Water
Analysis Batch: 311443

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Dissolved Solids			1000	994		mg/L		99	90 - 110		

Lab Sample ID: LCSD 550-311443/3
Matrix: Water
Analysis Batch: 311443

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Dissolved Solids			1000	982		mg/L		98	90 - 110	1	10

Lab Sample ID: 550-210523-B-3 DU
Matrix: Water
Analysis Batch: 311443

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	300			302		mg/L				0.7	10

Lab Sample ID: MB 550-311666/1
Matrix: Water
Analysis Batch: 311666

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		20		mg/L			11/22/23 18:27	1

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: LCS 550-311666/2
Matrix: Water
Analysis Batch: 311666

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Dissolved Solids			1000	920		mg/L		92	90 - 110		

Lab Sample ID: LCSD 550-311666/3
Matrix: Water
Analysis Batch: 311666

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Dissolved Solids			1000	924		mg/L		92	90 - 110	0	10

Lab Sample ID: 550-210673-F-2 DU
Matrix: Water
Analysis Batch: 311666

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	160			154		mg/L				NC	10

Lab Sample ID: MB 550-312162/1
Matrix: Water
Analysis Batch: 312162

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		20		mg/L			12/04/23 11:23	1

Lab Sample ID: LCS 550-312162/2
Matrix: Water
Analysis Batch: 312162

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Dissolved Solids			1000	992		mg/L		99	90 - 110		

Lab Sample ID: LCSD 550-312162/3
Matrix: Water
Analysis Batch: 312162

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Dissolved Solids			1000	1010		mg/L		101	90 - 110	2	10

Lab Sample ID: 550-210593-5 DU
Matrix: Water
Analysis Batch: 312162

Client Sample ID: FC-CCR-MW84-1123
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	15000	H2		15000		mg/L				0.07	10

Method: SM 4500 H+ B - pH

Lab Sample ID: LCSSRM 550-311288/25
Matrix: Water
Analysis Batch: 311288

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits		
pH			7.00	7.0		SU		100.4	98.5 - 101.5		

Lab Sample ID: LCSSRM 550-311288/37
Matrix: Water
Analysis Batch: 311288

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits		
pH			7.00	7.0		SU		100.6	98.5 - 101.5		

Lab Sample ID: LCSSRM 550-311288/49
Matrix: Water
Analysis Batch: 311288

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits		
pH			7.00	7.1		SU		100.7	98.5 - 101.5		

Lab Sample ID: 550-210593-9 DU
Matrix: Water
Analysis Batch: 311288

Client Sample ID: FC-CCR-CM02-1123
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
pH	7.0	H5		7.0		SU				0	5
Temperature	13.0	H5 T5		12.9		Degrees C				0.8	

HPLC/IC

Analysis Batch: 311405

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210593-1	FC-CCR-MW67-1123	Total/NA	Water	300.0	
550-210593-1	FC-CCR-MW67-1123	Total/NA	Water	300.0	
550-210593-2	FC-CCR-MW68-1123	Total/NA	Water	300.0	
550-210593-2	FC-CCR-MW68-1123	Total/NA	Water	300.0	
550-210593-3	FC-CCR-MW69-1123	Total/NA	Water	300.0	
550-210593-3	FC-CCR-MW69-1123	Total/NA	Water	300.0	
550-210593-4	FC-CCR-MW83-1123	Total/NA	Water	300.0	
550-210593-4	FC-CCR-MW83-1123	Total/NA	Water	300.0	
550-210593-5	FC-CCR-MW84-1123	Total/NA	Water	300.0	
550-210593-5	FC-CCR-MW84-1123	Total/NA	Water	300.0	
550-210593-6	FC-CCR-MW85-1123	Total/NA	Water	300.0	
550-210593-6	FC-CCR-MW85-1123	Total/NA	Water	300.0	
550-210593-7	FC-CCR-FD01-1123	Total/NA	Water	300.0	
550-210593-7	FC-CCR-FD01-1123	Total/NA	Water	300.0	
550-210593-8	FC-CCR-CM01-1123	Total/NA	Water	300.0	
550-210593-8	FC-CCR-CM01-1123	Total/NA	Water	300.0	
550-210593-9	FC-CCR-CM02-1123	Total/NA	Water	300.0	
550-210593-9	FC-CCR-CM02-1123	Total/NA	Water	300.0	
MB 550-311405/2	Method Blank	Total/NA	Water	300.0	
LCS 550-311405/5	Lab Control Sample	Total/NA	Water	300.0	
LCSD 550-311405/6	Lab Control Sample Dup	Total/NA	Water	300.0	
550-210592-I-4 MS ^10	Matrix Spike	Total/NA	Water	300.0	
550-210592-I-4 MSD ^10	Matrix Spike Duplicate	Total/NA	Water	300.0	

Leach Batch: 312000

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 550-312000/1-A	Method Blank	Total/NA	Water	DI Leach	
LCS 550-312000/2-A	Lab Control Sample	Total/NA	Water	DI Leach	
LCSD 550-312000/3-A	Lab Control Sample Dup	Total/NA	Water	DI Leach	

Analysis Batch: 312091

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210593-1	FC-CCR-MW67-1123	Total/NA	Water	9056A	
550-210593-2	FC-CCR-MW68-1123	Total/NA	Water	9056A	
550-210593-3	FC-CCR-MW69-1123	Total/NA	Water	9056A	
MB 550-312000/1-A	Method Blank	Total/NA	Water	9056A	312000
MB 550-312091/2	Method Blank	Total/NA	Water	9056A	
LCS 550-312000/2-A	Lab Control Sample	Total/NA	Water	9056A	312000
LCSD 550-312000/3-A	Lab Control Sample Dup	Total/NA	Water	9056A	312000

Metals

Prep Batch: 311424

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210593-1	FC-CCR-MW67-1123	Total/NA	Water	245.1	
550-210593-2	FC-CCR-MW68-1123	Total/NA	Water	245.1	
550-210593-3	FC-CCR-MW69-1123	Total/NA	Water	245.1	
550-210593-4	FC-CCR-MW83-1123	Total/NA	Water	245.1	
550-210593-5	FC-CCR-MW84-1123	Total/NA	Water	245.1	
550-210593-6	FC-CCR-MW85-1123	Total/NA	Water	245.1	
550-210593-7	FC-CCR-FD01-1123	Total/NA	Water	245.1	

Metals (Continued)

Prep Batch: 311424 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210593-8	FC-CCR-CM01-1123	Total/NA	Water	245.1	
550-210593-9	FC-CCR-CM02-1123	Total/NA	Water	245.1	
MB 550-311424/1-A	Method Blank	Total/NA	Water	245.1	
LCS 550-311424/2-A	Lab Control Sample	Total/NA	Water	245.1	
LCSD 550-311424/3-A	Lab Control Sample Dup	Total/NA	Water	245.1	
550-210591-B-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	245.1	
550-210593-6 MS	FC-CCR-MW85-1123	Total/NA	Water	245.1	

Analysis Batch: 311470

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210593-1	FC-CCR-MW67-1123	Total/NA	Water	245.1	311424
550-210593-2	FC-CCR-MW68-1123	Total/NA	Water	245.1	311424
550-210593-3	FC-CCR-MW69-1123	Total/NA	Water	245.1	311424
550-210593-4	FC-CCR-MW83-1123	Total/NA	Water	245.1	311424
550-210593-5	FC-CCR-MW84-1123	Total/NA	Water	245.1	311424
550-210593-6	FC-CCR-MW85-1123	Total/NA	Water	245.1	311424
550-210593-7	FC-CCR-FD01-1123	Total/NA	Water	245.1	311424
550-210593-8	FC-CCR-CM01-1123	Total/NA	Water	245.1	311424
550-210593-9	FC-CCR-CM02-1123	Total/NA	Water	245.1	311424
MB 550-311424/1-A	Method Blank	Total/NA	Water	245.1	311424
LCS 550-311424/2-A	Lab Control Sample	Total/NA	Water	245.1	311424
LCSD 550-311424/3-A	Lab Control Sample Dup	Total/NA	Water	245.1	311424
550-210591-B-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	245.1	311424
550-210593-6 MS	FC-CCR-MW85-1123	Total/NA	Water	245.1	311424

Prep Batch: 311484

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210593-1	FC-CCR-MW67-1123	Total/NA	Water	200.7	
550-210593-2	FC-CCR-MW68-1123	Total/NA	Water	200.7	
550-210593-3	FC-CCR-MW69-1123	Total/NA	Water	200.7	
550-210593-4	FC-CCR-MW83-1123	Total/NA	Water	200.7	
550-210593-5	FC-CCR-MW84-1123	Total/NA	Water	200.7	
550-210593-6	FC-CCR-MW85-1123	Total/NA	Water	200.7	
550-210593-7	FC-CCR-FD01-1123	Total/NA	Water	200.7	
550-210593-8	FC-CCR-CM01-1123	Total/NA	Water	200.7	
550-210593-9	FC-CCR-CM02-1123	Total/NA	Water	200.7	
MB 550-311484/1-A	Method Blank	Total/NA	Water	200.7	
LCS 550-311484/2-A	Lab Control Sample	Total/NA	Water	200.7	
LCSD 550-311484/3-A	Lab Control Sample Dup	Total/NA	Water	200.7	
550-210594-B-1-A MS	Matrix Spike	Total/NA	Water	200.7	
550-210594-B-1-A MS ^5	Matrix Spike	Total/NA	Water	200.7	
550-210594-B-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	200.7	
550-210594-B-1-B MSD ^5	Matrix Spike Duplicate	Total/NA	Water	200.7	

Prep Batch: 311487

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210593-1	FC-CCR-MW67-1123	Total/NA	Water	200.8	
550-210593-2	FC-CCR-MW68-1123	Total/NA	Water	200.8	
550-210593-3	FC-CCR-MW69-1123	Total/NA	Water	200.8	
550-210593-4	FC-CCR-MW83-1123	Total/NA	Water	200.8	
550-210593-5	FC-CCR-MW84-1123	Total/NA	Water	200.8	

Metals (Continued)

Prep Batch: 311487 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210593-6	FC-CCR-MW85-1123	Total/NA	Water	200.8	
550-210593-7	FC-CCR-FD01-1123	Total/NA	Water	200.8	
550-210593-8	FC-CCR-CM01-1123	Total/NA	Water	200.8	
550-210593-9	FC-CCR-CM02-1123	Total/NA	Water	200.8	
MB 550-311487/1-A	Method Blank	Total/NA	Water	200.8	
LCS 550-311487/2-A	Lab Control Sample	Total/NA	Water	200.8	
LCSD 550-311487/3-A	Lab Control Sample Dup	Total/NA	Water	200.8	
550-210594-B-12-A MS	Matrix Spike	Total/NA	Water	200.8	
550-210594-B-12-B MSD	Matrix Spike Duplicate	Total/NA	Water	200.8	

Analysis Batch: 311751

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210593-1	FC-CCR-MW67-1123	Total/NA	Water	200.8 LL	311487
550-210593-2	FC-CCR-MW68-1123	Total/NA	Water	200.8 LL	311487
550-210593-3	FC-CCR-MW69-1123	Total/NA	Water	200.8 LL	311487
550-210593-4	FC-CCR-MW83-1123	Total/NA	Water	200.8 LL	311487
550-210593-5	FC-CCR-MW84-1123	Total/NA	Water	200.8 LL	311487
550-210593-6	FC-CCR-MW85-1123	Total/NA	Water	200.8 LL	311487
550-210593-7	FC-CCR-FD01-1123	Total/NA	Water	200.8 LL	311487
550-210593-8	FC-CCR-CM01-1123	Total/NA	Water	200.8 LL	311487
550-210593-9	FC-CCR-CM02-1123	Total/NA	Water	200.8 LL	311487
MB 550-311487/1-A	Method Blank	Total/NA	Water	200.8 LL	311487
LCS 550-311487/2-A	Lab Control Sample	Total/NA	Water	200.8 LL	311487
LCSD 550-311487/3-A	Lab Control Sample Dup	Total/NA	Water	200.8 LL	311487
550-210594-B-12-A MS	Matrix Spike	Total/NA	Water	200.8 LL	311487
550-210594-B-12-B MSD	Matrix Spike Duplicate	Total/NA	Water	200.8 LL	311487

Analysis Batch: 311842

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210593-1	FC-CCR-MW67-1123	Total/NA	Water	200.7 Rev 4.4	311484
550-210593-2	FC-CCR-MW68-1123	Total/NA	Water	200.7 Rev 4.4	311484
550-210593-3	FC-CCR-MW69-1123	Total/NA	Water	200.7 Rev 4.4	311484
550-210593-4	FC-CCR-MW83-1123	Total/NA	Water	200.7 Rev 4.4	311484
550-210593-5	FC-CCR-MW84-1123	Total/NA	Water	200.7 Rev 4.4	311484
550-210593-6	FC-CCR-MW85-1123	Total/NA	Water	200.7 Rev 4.4	311484
550-210593-7	FC-CCR-FD01-1123	Total/NA	Water	200.7 Rev 4.4	311484
550-210593-8	FC-CCR-CM01-1123	Total/NA	Water	200.7 Rev 4.4	311484
550-210593-9	FC-CCR-CM02-1123	Total/NA	Water	200.7 Rev 4.4	311484
MB 550-311484/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	311484
LCS 550-311484/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	311484
LCSD 550-311484/3-A	Lab Control Sample Dup	Total/NA	Water	200.7 Rev 4.4	311484
550-210594-B-1-A MS	Matrix Spike	Total/NA	Water	200.7 Rev 4.4	311484
550-210594-B-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	200.7 Rev 4.4	311484

Analysis Batch: 311929

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210593-1	FC-CCR-MW67-1123	Total/NA	Water	200.7 Rev 4.4	311484
550-210593-2	FC-CCR-MW68-1123	Total/NA	Water	200.7 Rev 4.4	311484
550-210593-3	FC-CCR-MW69-1123	Total/NA	Water	200.7 Rev 4.4	311484
550-210593-4	FC-CCR-MW83-1123	Total/NA	Water	200.7 Rev 4.4	311484
550-210593-5	FC-CCR-MW84-1123	Total/NA	Water	200.7 Rev 4.4	311484

Metals (Continued)

Analysis Batch: 311929 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210593-6	FC-CCR-MW85-1123	Total/NA	Water	200.7 Rev 4.4	311484
550-210593-7	FC-CCR-FD01-1123	Total/NA	Water	200.7 Rev 4.4	311484
550-210593-8	FC-CCR-CM01-1123	Total/NA	Water	200.7 Rev 4.4	311484
550-210593-9	FC-CCR-CM02-1123	Total/NA	Water	200.7 Rev 4.4	311484
MB 550-311484/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	311484
LCS 550-311484/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	311484
LCSD 550-311484/3-A	Lab Control Sample Dup	Total/NA	Water	200.7 Rev 4.4	311484
550-210594-B-1-A MS ^5	Matrix Spike	Total/NA	Water	200.7 Rev 4.4	311484
550-210594-B-1-B MSD ^5	Matrix Spike Duplicate	Total/NA	Water	200.7 Rev 4.4	311484

Prep Batch: 385879

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210593-1	FC-CCR-MW67-1123	Total Recoverable	Water	200.7	
550-210593-2	FC-CCR-MW68-1123	Total Recoverable	Water	200.7	
550-210593-3	FC-CCR-MW69-1123	Total Recoverable	Water	200.7	
550-210593-4	FC-CCR-MW83-1123	Total Recoverable	Water	200.7	
550-210593-5	FC-CCR-MW84-1123	Total Recoverable	Water	200.7	
550-210593-6	FC-CCR-MW85-1123	Total Recoverable	Water	200.7	
550-210593-7	FC-CCR-FD01-1123	Total Recoverable	Water	200.7	
550-210593-8	FC-CCR-CM01-1123	Total Recoverable	Water	200.7	
550-210593-9	FC-CCR-CM02-1123	Total Recoverable	Water	200.7	
MB 570-385879/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 570-385879/27-A	Lab Control Sample	Total Recoverable	Water	200.7	
LCSD 570-385879/28-A	Lab Control Sample Dup	Total Recoverable	Water	200.7	
570-161517-A-1-D MS	Matrix Spike	Total Recoverable	Water	200.7	
570-161517-A-1-E MSD	Matrix Spike Duplicate	Total Recoverable	Water	200.7	

Analysis Batch: 387424

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210593-1	FC-CCR-MW67-1123	Total Recoverable	Water	200.7 Rev 4.4	385879
550-210593-2	FC-CCR-MW68-1123	Total Recoverable	Water	200.7 Rev 4.4	385879
550-210593-3	FC-CCR-MW69-1123	Total Recoverable	Water	200.7 Rev 4.4	385879
550-210593-4	FC-CCR-MW83-1123	Total Recoverable	Water	200.7 Rev 4.4	385879
550-210593-5	FC-CCR-MW84-1123	Total Recoverable	Water	200.7 Rev 4.4	385879
550-210593-6	FC-CCR-MW85-1123	Total Recoverable	Water	200.7 Rev 4.4	385879
550-210593-7	FC-CCR-FD01-1123	Total Recoverable	Water	200.7 Rev 4.4	385879
550-210593-8	FC-CCR-CM01-1123	Total Recoverable	Water	200.7 Rev 4.4	385879
550-210593-9	FC-CCR-CM02-1123	Total Recoverable	Water	200.7 Rev 4.4	385879
MB 570-385879/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	385879
LCS 570-385879/27-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	385879
LCSD 570-385879/28-A	Lab Control Sample Dup	Total Recoverable	Water	200.7 Rev 4.4	385879
570-161517-A-1-D MS	Matrix Spike	Total Recoverable	Water	200.7 Rev 4.4	385879
570-161517-A-1-E MSD	Matrix Spike Duplicate	Total Recoverable	Water	200.7 Rev 4.4	385879

General Chemistry

Analysis Batch: 311288

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210593-1	FC-CCR-MW67-1123	Total/NA	Water	SM 4500 H+ B	
550-210593-2	FC-CCR-MW68-1123	Total/NA	Water	SM 4500 H+ B	
550-210593-3	FC-CCR-MW69-1123	Total/NA	Water	SM 4500 H+ B	

General Chemistry (Continued)

Analysis Batch: 311288 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210593-4	FC-CCR-MW83-1123	Total/NA	Water	SM 4500 H+ B	
550-210593-5	FC-CCR-MW84-1123	Total/NA	Water	SM 4500 H+ B	
550-210593-6	FC-CCR-MW85-1123	Total/NA	Water	SM 4500 H+ B	
550-210593-7	FC-CCR-FD01-1123	Total/NA	Water	SM 4500 H+ B	
550-210593-8	FC-CCR-CM01-1123	Total/NA	Water	SM 4500 H+ B	
550-210593-9	FC-CCR-CM02-1123	Total/NA	Water	SM 4500 H+ B	
LCSSRM 550-311288/25	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	
LCSSRM 550-311288/37	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	
LCSSRM 550-311288/49	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	
550-210593-9 DU	FC-CCR-CM02-1123	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 311341

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210593-2	FC-CCR-MW68-1123	Total/NA	Water	SM 2540C	
550-210593-3	FC-CCR-MW69-1123	Total/NA	Water	SM 2540C	
550-210593-4	FC-CCR-MW83-1123	Total/NA	Water	SM 2540C	
550-210593-6	FC-CCR-MW85-1123	Total/NA	Water	SM 2540C	
550-210593-7	FC-CCR-FD01-1123	Total/NA	Water	SM 2540C	
MB 550-311341/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 550-311341/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 550-311341/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	
550-210497-A-1 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 311443

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210593-8	FC-CCR-CM01-1123	Total/NA	Water	SM 2540C	
550-210593-9	FC-CCR-CM02-1123	Total/NA	Water	SM 2540C	
MB 550-311443/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 550-311443/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 550-311443/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	
550-210523-B-3 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 311666

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210593-1	FC-CCR-MW67-1123	Total/NA	Water	SM 2540C	
MB 550-311666/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 550-311666/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 550-311666/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	
550-210673-F-2 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 312162

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210593-5	FC-CCR-MW84-1123	Total/NA	Water	SM 2540C	
MB 550-312162/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 550-312162/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 550-312162/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	
550-210593-5 DU	FC-CCR-MW84-1123	Total/NA	Water	SM 2540C	

Client Sample ID: FC-CCR-MW67-1123

Lab Sample ID: 550-210593-1

Date Collected: 11/13/23 09:18

Matrix: Water

Date Received: 11/15/23 14:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		2	311405	MMH	EET PHX	11/18/23 21:00
Total/NA	Analysis	300.0		200	311405	MMH	EET PHX	11/18/23 21:19
Total/NA	Analysis	9056A		1	312091	MMH	EET PHX	12/01/23 09:54
Total Recoverable	Prep	200.7			385879	JP8N	EET CAL 4	11/21/23 09:32
Total Recoverable	Analysis	200.7 Rev 4.4		10	387424	P1R	EET CAL 4	11/28/23 15:54
Total/NA	Prep	200.7			311484	SGO	EET PHX	11/21/23 04:37
Total/NA	Analysis	200.7 Rev 4.4		5	311842	GLW	EET PHX	11/28/23 18:25
Total/NA	Prep	200.7			311484	SGO	EET PHX	11/21/23 04:37
Total/NA	Analysis	200.7 Rev 4.4		5	311929	GLW	EET PHX	11/29/23 15:24
Total/NA	Prep	200.8			311487	SGO	EET PHX	11/21/23 06:58
Total/NA	Analysis	200.8 LL		10	311751	DSJ	EET PHX	11/27/23 17:37
Total/NA	Prep	245.1			311424	HHL	EET PHX	11/20/23 11:20
Total/NA	Analysis	245.1		1	311470	HHL	EET PHX	11/20/23 15:23
Total/NA	Analysis	SM 2540C		1	311666	KMG	EET PHX	11/22/23 18:27 - 12/01/23 15:24 [1]
Total/NA	Analysis	SM 4500 H+ B		1	311288	MAN	EET PHX	11/16/23 14:20

Client Sample ID: FC-CCR-MW68-1123

Lab Sample ID: 550-210593-2

Date Collected: 11/11/23 11:28

Matrix: Water

Date Received: 11/15/23 14:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		2	311405	MMH	EET PHX	11/18/23 21:37
Total/NA	Analysis	300.0		200	311405	MMH	EET PHX	11/18/23 21:56
Total/NA	Analysis	9056A		1	312091	MMH	EET PHX	12/01/23 05:54
Total Recoverable	Prep	200.7			385879	JP8N	EET CAL 4	11/21/23 09:32
Total Recoverable	Analysis	200.7 Rev 4.4		10	387424	P1R	EET CAL 4	11/28/23 15:56
Total/NA	Prep	200.7			311484	SGO	EET PHX	11/21/23 04:37
Total/NA	Analysis	200.7 Rev 4.4		5	311842	GLW	EET PHX	11/28/23 18:27
Total/NA	Prep	200.7			311484	SGO	EET PHX	11/21/23 04:37
Total/NA	Analysis	200.7 Rev 4.4		5	311929	GLW	EET PHX	11/29/23 15:27
Total/NA	Prep	200.8			311487	SGO	EET PHX	11/21/23 06:58
Total/NA	Analysis	200.8 LL		10	311751	DSJ	EET PHX	11/27/23 17:39
Total/NA	Prep	245.1			311424	HHL	EET PHX	11/20/23 11:20
Total/NA	Analysis	245.1		1	311470	HHL	EET PHX	11/20/23 15:25
Total/NA	Analysis	SM 2540C		1	311341	KMG	EET PHX	11/17/23 11:54 - 12/01/23 16:42 [1]
Total/NA	Analysis	SM 4500 H+ B		1	311288	MAN	EET PHX	11/16/23 14:23

Client Sample ID: FC-CCR-MW69-1123

Lab Sample ID: 550-210593-3

Date Collected: 11/11/23 10:33

Matrix: Water

Date Received: 11/15/23 14:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		2	311405	MMH	EET PHX	11/18/23 22:14
Total/NA	Analysis	300.0		200	311405	MMH	EET PHX	11/18/23 23:28

Client Sample ID: FC-CCR-MW69-1123

Lab Sample ID: 550-210593-3

Date Collected: 11/11/23 10:33

Matrix: Water

Date Received: 11/15/23 14:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		1	312091	MMH	EET PHX	12/01/23 10:30
Total Recoverable	Prep	200.7			385879	JP8N	EET CAL 4	11/21/23 09:32
Total Recoverable	Analysis	200.7 Rev 4.4		2	387424	P1R	EET CAL 4	11/28/23 15:59
Total/NA	Prep	200.7			311484	SGO	EET PHX	11/21/23 04:37
Total/NA	Analysis	200.7 Rev 4.4		5	311842	GLW	EET PHX	11/28/23 18:30
Total/NA	Prep	200.7			311484	SGO	EET PHX	11/21/23 04:37
Total/NA	Analysis	200.7 Rev 4.4		5	311929	GLW	EET PHX	11/29/23 15:30
Total/NA	Prep	200.8			311487	SGO	EET PHX	11/21/23 06:58
Total/NA	Analysis	200.8 LL		10	311751	DSJ	EET PHX	11/27/23 17:41
Total/NA	Prep	245.1			311424	HHL	EET PHX	11/20/23 11:20
Total/NA	Analysis	245.1		1	311470	HHL	EET PHX	11/20/23 15:27
Total/NA	Analysis	SM 2540C		1	311341	KMG	EET PHX	11/17/23 11:54 - 12/01/23 16:42 [1]
Total/NA	Analysis	SM 4500 H+ B		1	311288	MAN	EET PHX	11/16/23 14:26

Client Sample ID: FC-CCR-MW83-1123

Lab Sample ID: 550-210593-4

Date Collected: 11/11/23 14:10

Matrix: Water

Date Received: 11/15/23 14:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		2	311405	MMH	EET PHX	11/18/23 23:46
Total/NA	Analysis	300.0		200	311405	MMH	EET PHX	11/19/23 00:05
Total Recoverable	Prep	200.7			385879	JP8N	EET CAL 4	11/21/23 09:32
Total Recoverable	Analysis	200.7 Rev 4.4		1	387424	P1R	EET CAL 4	11/28/23 16:01
Total/NA	Prep	200.7			311484	SGO	EET PHX	11/21/23 04:37
Total/NA	Analysis	200.7 Rev 4.4		5	311842	GLW	EET PHX	11/28/23 18:33
Total/NA	Prep	200.7			311484	SGO	EET PHX	11/21/23 04:37
Total/NA	Analysis	200.7 Rev 4.4		5	311929	GLW	EET PHX	11/29/23 15:32
Total/NA	Prep	200.8			311487	SGO	EET PHX	11/21/23 06:58
Total/NA	Analysis	200.8 LL		10	311751	DSJ	EET PHX	11/27/23 17:44
Total/NA	Prep	245.1			311424	HHL	EET PHX	11/20/23 11:20
Total/NA	Analysis	245.1		1	311470	HHL	EET PHX	11/20/23 15:29
Total/NA	Analysis	SM 2540C		1	311341	KMG	EET PHX	11/17/23 11:54 - 12/01/23 16:42 [1]
Total/NA	Analysis	SM 4500 H+ B		1	311288	MAN	EET PHX	11/16/23 14:28

Client Sample ID: FC-CCR-MW84-1123

Lab Sample ID: 550-210593-5

Date Collected: 11/11/23 15:53

Matrix: Water

Date Received: 11/15/23 14:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		2	311405	MMH	EET PHX	11/19/23 00:23
Total/NA	Analysis	300.0		200	311405	MMH	EET PHX	11/19/23 00:41
Total Recoverable	Prep	200.7			385879	JP8N	EET CAL 4	11/21/23 09:32
Total Recoverable	Analysis	200.7 Rev 4.4		5	387424	P1R	EET CAL 4	11/28/23 16:03

Client Sample ID: FC-CCR-MW84-1123

Lab Sample ID: 550-210593-5

Date Collected: 11/11/23 15:53
Matrix: Water
Date Received: 11/15/23 14:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	200.7			311484	SGO	EET PHX	11/21/23 04:37
Total/NA	Analysis	200.7 Rev 4.4		5	311842	GLW	EET PHX	11/28/23 18:36
Total/NA	Prep	200.7			311484	SGO	EET PHX	11/21/23 04:37
Total/NA	Analysis	200.7 Rev 4.4		5	311929	GLW	EET PHX	11/29/23 15:35
Total/NA	Prep	200.8			311487	SGO	EET PHX	11/21/23 06:58
Total/NA	Analysis	200.8 LL		10	311751	DSJ	EET PHX	11/27/23 17:46
Total/NA	Prep	245.1			311424	HHL	EET PHX	11/20/23 11:20
Total/NA	Analysis	245.1		1	311470	HHL	EET PHX	11/20/23 15:31
Total/NA	Analysis	SM 2540C		1	312162	KMG	EET PHX	12/04/23 11:23 - 12/06/23 13:15 [1]
Total/NA	Analysis	SM 4500 H+ B		1	311288	MAN	EET PHX	11/16/23 14:31

Client Sample ID: FC-CCR-MW85-1123

Lab Sample ID: 550-210593-6

Date Collected: 11/11/23 15:03
Matrix: Water
Date Received: 11/15/23 14:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		2	311405	MMH	EET PHX	11/19/23 01:00
Total/NA	Analysis	300.0		200	311405	MMH	EET PHX	11/19/23 01:18
Total Recoverable	Prep	200.7			385879	JP8N	EET CAL 4	11/21/23 09:32
Total Recoverable	Analysis	200.7 Rev 4.4		2	387424	P1R	EET CAL 4	11/28/23 16:06
Total/NA	Prep	200.7			311484	SGO	EET PHX	11/21/23 04:37
Total/NA	Analysis	200.7 Rev 4.4		5	311842	GLW	EET PHX	11/28/23 18:44
Total/NA	Prep	200.7			311484	SGO	EET PHX	11/21/23 04:37
Total/NA	Analysis	200.7 Rev 4.4		5	311929	GLW	EET PHX	11/29/23 15:44
Total/NA	Prep	200.8			311487	SGO	EET PHX	11/21/23 06:58
Total/NA	Analysis	200.8 LL		10	311751	DSJ	EET PHX	11/27/23 17:54
Total/NA	Prep	245.1			311424	HHL	EET PHX	11/20/23 11:20
Total/NA	Analysis	245.1		1	311470	HHL	EET PHX	11/20/23 15:33
Total/NA	Analysis	SM 2540C		1	311341	KMG	EET PHX	11/17/23 11:54 - 12/01/23 16:42 [1]
Total/NA	Analysis	SM 4500 H+ B		1	311288	MAN	EET PHX	11/16/23 14:33

Client Sample ID: FC-CCR-FD01-1123

Lab Sample ID: 550-210593-7

Date Collected: 11/11/23 08:53
Matrix: Water
Date Received: 11/15/23 14:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		2	311405	MMH	EET PHX	11/19/23 01:37
Total/NA	Analysis	300.0		200	311405	MMH	EET PHX	11/19/23 01:55
Total Recoverable	Prep	200.7			385879	JP8N	EET CAL 4	11/21/23 09:32
Total Recoverable	Analysis	200.7 Rev 4.4		5	387424	P1R	EET CAL 4	11/28/23 16:08
Total/NA	Prep	200.7			311484	SGO	EET PHX	11/21/23 04:37
Total/NA	Analysis	200.7 Rev 4.4		5	311842	GLW	EET PHX	11/28/23 18:47
Total/NA	Prep	200.7			311484	SGO	EET PHX	11/21/23 04:37
Total/NA	Analysis	200.7 Rev 4.4		5	311929	GLW	EET PHX	11/29/23 15:47

Client Sample ID: FC-CCR-FD01-1123

Lab Sample ID: 550-210593-7

Date Collected: 11/11/23 08:53
Matrix: Water
Date Received: 11/15/23 14:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	200.8			311487	SGO	EET PHX	11/21/23 06:58
Total/NA	Analysis	200.8 LL		10	311751	DSJ	EET PHX	11/27/23 17:56
Total/NA	Prep	245.1			311424	HHL	EET PHX	11/20/23 11:20
Total/NA	Analysis	245.1		1	311470	HHL	EET PHX	11/20/23 15:41
Total/NA	Analysis	SM 2540C		1	311341	KMG	EET PHX	11/17/23 11:54 - 12/01/23 16:42 [1]
Total/NA	Analysis	SM 4500 H+ B		1	311288	MAN	EET PHX	11/16/23 14:35

Client Sample ID: FC-CCR-CM01-1123

Lab Sample ID: 550-210593-8

Date Collected: 11/13/23 09:41
Matrix: Water
Date Received: 11/15/23 14:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		2	311405	MMH	EET PHX	11/19/23 03:09
Total/NA	Analysis	300.0		200	311405	MMH	EET PHX	11/19/23 03:27
Total Recoverable	Prep	200.7			385879	JP8N	EET CAL 4	11/21/23 09:32
Total Recoverable	Analysis	200.7 Rev 4.4		5	387424	P1R	EET CAL 4	11/28/23 16:11
Total/NA	Prep	200.7			311484	SGO	EET PHX	11/21/23 04:37
Total/NA	Analysis	200.7 Rev 4.4		5	311842	GLW	EET PHX	11/28/23 18:50
Total/NA	Prep	200.7			311484	SGO	EET PHX	11/21/23 04:37
Total/NA	Analysis	200.7 Rev 4.4		5	311929	GLW	EET PHX	11/29/23 15:49
Total/NA	Prep	200.8			311487	SGO	EET PHX	11/21/23 06:58
Total/NA	Analysis	200.8 LL		10	311751	DSJ	EET PHX	11/27/23 17:58
Total/NA	Prep	245.1			311424	HHL	EET PHX	11/20/23 11:20
Total/NA	Analysis	245.1		1	311470	HHL	EET PHX	11/20/23 15:43
Total/NA	Analysis	SM 2540C		1	311443	KMG	EET PHX	11/20/23 12:18 - 11/22/23 18:10 [1]
Total/NA	Analysis	SM 4500 H+ B		1	311288	MAN	EET PHX	11/16/23 14:36

Client Sample ID: FC-CCR-CM02-1123

Lab Sample ID: 550-210593-9

Date Collected: 11/13/23 09:52
Matrix: Water
Date Received: 11/15/23 14:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		2	311405	MMH	EET PHX	11/19/23 03:45
Total/NA	Analysis	300.0		200	311405	MMH	EET PHX	11/19/23 04:04
Total Recoverable	Prep	200.7			385879	JP8N	EET CAL 4	11/21/23 09:32
Total Recoverable	Analysis	200.7 Rev 4.4		5	387424	P1R	EET CAL 4	11/28/23 16:13
Total/NA	Prep	200.7			311484	SGO	EET PHX	11/21/23 04:37
Total/NA	Analysis	200.7 Rev 4.4		5	311842	GLW	EET PHX	11/28/23 18:53
Total/NA	Prep	200.7			311484	SGO	EET PHX	11/21/23 04:37
Total/NA	Analysis	200.7 Rev 4.4		5	311929	GLW	EET PHX	11/29/23 15:52
Total/NA	Prep	200.8			311487	SGO	EET PHX	11/21/23 06:58
Total/NA	Analysis	200.8 LL		10	311751	DSJ	EET PHX	11/27/23 18:00
Total/NA	Prep	245.1			311424	HHL	EET PHX	11/20/23 11:20
Total/NA	Analysis	245.1		1	311470	HHL	EET PHX	11/20/23 15:45

Lab Chronicle

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-210593-1
SDG: APS Four Corners Power Plant (URS)

Client Sample ID: FC-CCR-CM02-1123

Date Collected: 11/13/23 09:52
Date Received: 11/15/23 14:43

Lab Sample ID: 550-210593-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	SM 2540C		1	311443	KMG	EET PHX	11/20/23 12:18 - 11/22/23 18:10 [1]
Total/NA	Analysis	SM 4500 H+ B		1	311288	MAN	EET PHX	11/16/23 14:41

[1] This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:

EET CAL 4 = Eurofins Calscience Tustin, 2841 Dow Avenue, Tustin, CA 92780, TEL (714)895-5494

EET PHX = Eurofins Phoenix, 4625 East Cotton Center Boulevard, Suite #189, Phoenix, AZ 85040, TEL (602)437-3340

Accreditation/Certification Summary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-210593-1
SDG: APS Four Corners Power Plant (URS)

Laboratory: Eurofins Phoenix

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Arizona	State	AZ0728	06-10-24

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
200.8 LL	200.8	Water	Molybdenum
SM 4500 H+ B		Water	Temperature

Laboratory: Eurofins Calscience

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Arizona	State	AZ0830	11-16-24

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
200.7 Rev 4.4	200.7	Water	Lithium

Method Summary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-210593-1
SDG: APS Four Corners Power Plant (URS)

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	EPA	EET PHX
9056A	Anions, Ion Chromatography	SW846	EET PHX
200.7 Rev 4.4	Metals (ICP)	EPA	EET CAL 4
200.7 Rev 4.4	Metals (ICP)	EPA	EET PHX
200.8 LL	Metals (ICP/MS)	EPA	EET PHX
245.1	Mercury (CVAA)	EPA	EET PHX
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET PHX
SM 4500 H+ B	pH	SM	EET PHX
200.7	Preparation, Total Recoverable Metals	EPA	EET CAL 4
200.7	Preparation, Total Metals	EPA	EET PHX
200.8	Preparation, Total Metals	EPA	EET PHX
245.1	Preparation, Mercury	EPA	EET PHX

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET CAL 4 = Eurofins Calscience Tustin, 2841 Dow Avenue, Tustin, CA 92780, TEL (714)895-5494

EET PHX = Eurofins Phoenix, 4625 East Cotton Center Boulevard, Suite #189, Phoenix, AZ 85040, TEL (602)437-3340

TestAmerica Phoenix
4625 E Cotton Center Blvd
Suite 189
Phoenix, AZ 85040
phone 602.437.3340 fax 602.454.9303

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☑ Other: CCR

210593

TestAmerica Laboratories, Inc.

12/6/2023

Client Contact	Natalie Chrisman	Pam Norris (505-598-8781)	Date:	COC No:
Arizona Public Service	602-250-3608	Lab Contact: Rachel Sester	Carrier:	1 of 1 COCs
PO Box 355, MS 4915	Analysis Turnaround Time			Sampler:
Fruitland, NM 87416	☐ CALENDAR DAYS ☑ WORKING DAYS			For Lab Use Only:
	TAT if different from Below _____			Walk-in Client:
	☑ 2 weeks			Lab Sampling:
Project Name: CCR Groundwater Monitoring	☐ 1 week			
Site: APS Four Corners Power Plant (URS)	☐ 2 days			Job / SDG No.:
PO #: 100622298	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	EPA 300.0 (Cl, F, SO4)	EPA 200.7 - Totals (B, Ca, Be)	EPA 200.7 - Total Lithium	EPA 200.8 - Totals (Sb, As, Ba, Cd, Co, Cr, Pb, Mo, Se, Tl)	SM 4500-HB (pH)	SM 2540C (TDS)	EPA 245.1 - Totals (Hg)	9056A - Fluoride	Sample Specific Notes:
FC-CCR-MW67-1123 -1	11/13/2023	918	G	W	3	N	N	X	X	X	X	X	X	X	X	Low Flow
FC-CCR-MW68-1123 -2	11/11/2023	1128	G	W	3	N	N	X	X	X	X	X	X	X	X	"
FC-CCR-MW69-1123 -3	11/11/2023	1033	G	W	3	N	N	X	X	X	X	X	X	X	X	"
FC-CCR-MW83-1123 -4	11/11/2023	1410	G	W	3	N	N	X	X	X	X	X	X	X		"
FC-CCR-MW84-1123 -5	11/11/2023	1553	G	W	3	N	N	X	X	X	X	X	X	X		"
FC-CCR-MW85-1123 -6	11/11/2023	1503	G	W	3	N	N	X	X	X	X	X	X	X		"
FC-CCR-FD01-1123 -7	11/11/2023	853	G	W	3	N	N	X	X	X	X	X	X	X		"
FC-CCR-CM01-1123 -8	11/13/2023	941	G	W	3	N	N	X	X	X	X	X	X	X		Grab Sample
FC-CCR-CM02-1123 -9	11/13/2023	952	G	W	3	N	N	X	X	X	X	X	X	X		"
								1	4	4	4	1	1	4		

550-210593 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☑ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

Method 200.8 with collision cell

4.1°C - ONICE - ~~CDO~~ PC 2r 11/15/23

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd:_____ Corr'd:_____ Therm ID No.:_____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	WSP	11-15-23 0820			
[signature]	A.H.S. 11.15	8:20AM			
[signature]	AH.S 1H5	2:43 PM	Received in Laboratory by: [signature]	EETA-PHX	11/15/23 1443

Form No. CA-C-WI-002, Rev. 4.2, dated 04/02/2013

Eurofins Phoenix
4625 East Cotton Center Boulevard Suite #189
Phoenix, AZ 85040
Phone: 602-437-3340

Chain of Custody Record

eurofins | Env

Loc: 550
210593

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Eshelman, Linda	Carrier Tracking No(s):	COC No: 550-38245.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: linda.eshelman@et.eurofinsus.com	State of Origin: Arizona	Page: Page 1 of 1
Company: Eurofins Environment Testing Southwest,		Accreditations Required (See note): State - Arizona; State Program - Arizona		Job #: 550-210593-1
Address: 2841 Dow Avenue, Suite 100, ,	Due Date Requested: 11/30/2023			
City: Tustin	TAT Requested (days):			
State, Zip: CA, 92780				
Phone: 714-895-5494(Tel)	PO #:			
Email:	WO #:			
Project Name: CCR Groundwater Monitoring	Project #: 55009706			
Site: Arizona Public Service	SSOW#:			

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)

Other:

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	200.7/200.7_P_TR (MOD) Lithium	Total Number of containers	Special Instru
			Preservation Code:						
FC-CCR-MW67-1123 (550-210593-1)	11/13/23	09:18 Arizona		Water			X	1	
FC-CCR-MW68-1123 (550-210593-2)	11/11/23	11:28 Arizona		Water			X	1	
FC-CCR-MW69-1123 (550-210593-3)	11/11/23	10:33 Arizona		Water			X	1	
FC-CCR-MW83-1123 (550-210593-4)	11/11/23	14:10 Arizona		Water			X	1	
FC-CCR-MW84-1123 (550-210593-5)	11/11/23	15:53 Arizona		Water			X	1	
FC-CCR-MW85-1123 (550-210593-6)	11/11/23	15:03 Arizona		Water			X	1	
FC-CCR-FD01-1123 (550-210593-7)	11/11/23	08:53 Arizona		Water			X	1	
FC-CCR-CM01-1123 (550-210593-8)	11/13/23	09:41 Arizona		Water			X	1	
FC-CCR-CM02-1123 (550-210593-9)	11/13/23	09:52 Arizona		Water			X	1	

550-210593 Chain of Custody

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Southwest, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Southwest, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Southwest, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Southwest, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	11-16-23	14:40	ETSW	FedEx		
2						
3					11/17/23 0930	EC

Custody Seals Intact: ∆ Yes ∆ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 2-3/2-2 SCR

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Arizona Public Service Company

Job Number: 550-210593-1
SDG Number: APS Four Corners Power Plant (URS)

Login Number: 210593
List Number: 1
Creator: Maycock, Lisa

List Source: Eurofins Phoenix

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	False	Check done at department level as required.

Login Sample Receipt Checklist

Client: Arizona Public Service Company

Job Number: 550-210593-1
SDG Number: APS Four Corners Power Plant (URS)

Login Number: 210593
List Number: 2
Creator: Khana, Piyush

List Source: Eurofins Calscience
List Creation: 11/17/23 12:36 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	2264067
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.2
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

PREPARED FOR

Attn: Natalie Chrisman
Arizona Public Service Company
PO BOX 188, Ste. 4458
Joseph City, Arizona 86032

Generated 12/5/2023 9:01:43 AM

JOB DESCRIPTION

CCR Groundwater Monitoring
APS Four Corners Power Plant (Other)

JOB NUMBER

550-210594-1

Eurofins Phoenix
4625 East Cotton Center Boulevard
Suite #189
Phoenix AZ 85040

See page two for job notes and contact information.

my EOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Southwest, LLC Project Manager.

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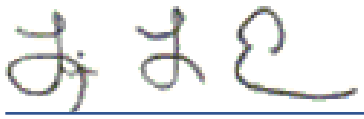

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Authorized for release by
Linda Eshelman, Project Manager II
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(602)659-7681

Table of Contents

Cover Page 1
Table of Contents 3
Definitions/Glossary 4
Case Narrative 6
Sample Summary 8
Detection Summary 9
Client Sample Results 16
QC Sample Results 31
QC Association Summary 46
Lab Chronicle 55
Certification Summary 63
Method Summary 64
Chain of Custody 65
Receipt Checklists 70

Definitions/Glossary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-210594-1
SDG: APS Four Corners Power Plant (Other)

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
D2	Sample required dilution due to high concentration of analyte.
E2	Concentration estimated. Analyte exceeded calibration range. Reanalysis not performed due to sample matrix.
M2	Matrix spike recovery was low, the associated blank spike recovery was acceptable.
M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The associated blank spike was acceptable.

Metals

Qualifier	Qualifier Description
L5	The associated blank spike recovery was above laboratory/method acceptance limits. This analyte was not detected in the sample.
M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The associated blank spike was acceptable.
R4	MS/MSD RPD exceeded the method control limit. Recovery met acceptance criteria.
T5	Laboratory not licensed for this parameter
V1	CCV recovery was above method acceptance limits. This target analyte was not detected in the sample.

General Chemistry

Qualifier	Qualifier Description
D1	Sample required dilution due to matrix.
H1	Sample analysis performed past holding time.
H5	This test is specified to be performed in the field within 15 minutes of sampling; sample was received and analyzed past the regulatory holding time.
T5	Laboratory not licensed for this parameter

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 550-210594-1

Laboratory: Eurofins Phoenix

Narrative

Job Narrative
550-210594-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 11/15/2023 2:43 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 4.1°C, 4.8°C and 5.1°C

HPLC/IC
Method 300_ORGFMS: Spike compounds were inadvertently omitted during the extraction process for the matrix spike/matrix spike duplicate (MS/MSD); therefore, matrix spike recoveries are unavailable for analytical batch 550-311405. The associated laboratory control sample (LCS) met acceptance criteria.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals
Method 200.7_CWA: The following samples were diluted due to the nature of the sample matrix: FC-CCR-DMX03-1123 (550-210594-2), FC-CCR-MW18-1123 (550-210594-8), FC-CCR-MW19-1123 (550-210594-9), FC-CCR-MW23R-1123 (550-210594-10), FC-CCR-MW24-1123 (550-210594-11), FC-CCR-MW30-1123 (550-210594-12), FC-CCR-MW30-1123 (550-210594-12[MS]), FC-CCR-MW30-1123 (550-210594-12[MSD]), FC-CCR-MW36R-1123 (550-210594-13), FC-CCR-MW38R-1123 (550-210594-14), FC-CCR-MW56-1123 (550-210594-15), FC-CCR-FD05-1123 (550-210594-16), FC-CCR-MW57-1123 (550-210594-17), FC-CCR-MW77S-1123 (550-210594-18), FC-CCR-MW78S-1123 (550-210594-19), FC-CCR-MW79S-1123 (550-210594-20), FC-CCR-MW82S-1123 (550-210594-22), FC-CCR-FD06-1123 (550-210594-23), FC-CCR-FD07-1123 (550-210594-24) and FC-CCR-FD02-1123 (550-210594-25). Elevated reporting limits (RLs) are provided.

Method 200.8_CWA_LL: Samples were diluted 10x due to matrix

FC-CCR-DMX04-1123 (550-210594-3), FC-CCR-MW05-1123 (550-210594-4), FC-CCR-MW06R-1123 (550-210594-5), FC-CCR-FD04-1123 (550-210594-6), FC-CCR-MW17R-1123 (550-210594-7), FC-CCR-MW30-1123 (550-210594-12), FC-CCR-MW30-1123 (550-210594-12[MS]) and FC-CCR-MW30-1123 (550-210594-12[MSD])

Method 200.8_CWA_LL: Samples diluted 10x for sample matrix.

FC-CCR-DMX01-1123 (550-210594-1), FC-CCR-DMX01-1123 (550-210594-1[MS]) and FC-CCR-DMX01-1123 (550-210594-1[MSD])

Method 200.8_CWA_LL: Samples diluted 10x for sample matrix

FC-CCR-DMX03-1123 (550-210594-2), FC-CCR-MW18-1123 (550-210594-8), FC-CCR-MW19-1123 (550-210594-9), FC-CCR-MW23R-1123 (550-210594-10), FC-CCR-MW24-1123 (550-210594-11), FC-CCR-MW36R-1123 (550-210594-13), FC-CCR-MW38R-1123 (550-210594-14), FC-CCR-MW56-1123 (550-210594-15), FC-CCR-FD05-1123 (550-210594-16), FC-CCR-MW57-1123 (550-210594-17), FC-CCR-MW77S-1123 (550-210594-18), FC-CCR-MW78S-1123 (550-210594-19), FC-CCR-MW79S-1123 (550-210594-20), FC-CCR-MW81-1123 (550-210594-21), FC-CCR-MW81-1123 (550-210594-21[MS]), FC-CCR-MW81-1123 (550-210594-21[MSD]), FC-CCR-MW82S-1123 (550-210594-22), FC-CCR-FD06-1123 (550-210594-23), FC-CCR-FD07-1123 (550-210594-24) and FC-CCR-FD02-1123 (550-210594-25)

Job ID: 550-210594-1 (Continued)

Laboratory: Eurofins Phoenix (Continued)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
Method 2540C_Calcd: The following sample was analyzed outside of analytical holding time due to residue being >0.2000 g at 10 mL: FC-CCR-MW24-1123 (550-210594-11).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Sample Summary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-210594-1
SDG: APS Four Corners Power Plant (Other)

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
550-210594-1	FC-CCR-DMX01-1123	Water	11/10/23 14:45	11/15/23 14:43
550-210594-2	FC-CCR-DMX03-1123	Water	11/13/23 14:51	11/15/23 14:43
550-210594-3	FC-CCR-DMX04-1123	Water	11/14/23 17:30	11/15/23 14:43
550-210594-4	FC-CCR-MW05-1123	Water	11/13/23 16:15	11/15/23 14:43
550-210594-5	FC-CCR-MW06R-1123	Water	11/14/23 18:21	11/15/23 14:43
550-210594-6	FC-CCR-FD04-1123	Water	11/10/23 07:30	11/15/23 14:43
550-210594-7	FC-CCR-MW17R-1123	Water	11/14/23 14:07	11/15/23 14:43
550-210594-8	FC-CCR-MW18-1123	Water	11/14/23 09:50	11/15/23 14:43
550-210594-9	FC-CCR-MW19-1123	Water	11/13/23 14:04	11/15/23 14:43
550-210594-10	FC-CCR-MW23R-1123	Water	11/14/23 11:05	11/15/23 14:43
550-210594-11	FC-CCR-MW24-1123	Water	11/14/23 19:43	11/15/23 14:43
550-210594-12	FC-CCR-MW30-1123	Water	11/10/23 10:04	11/15/23 14:43
550-210594-13	FC-CCR-MW36R-1123	Water	11/14/23 11:59	11/15/23 14:43
550-210594-14	FC-CCR-MW38R-1123	Water	11/14/23 14:54	11/15/23 14:43
550-210594-15	FC-CCR-MW56-1123	Water	11/14/23 12:52	11/15/23 14:43
550-210594-16	FC-CCR-FD05-1123	Water	11/13/23 13:11	11/15/23 14:43
550-210594-17	FC-CCR-MW57-1123	Water	11/14/23 16:03	11/15/23 14:43
550-210594-18	FC-CCR-MW77S-1123	Water	11/10/23 11:00	11/15/23 14:43
550-210594-19	FC-CCR-MW78S-1123	Water	11/10/23 11:45	11/15/23 14:43
550-210594-20	FC-CCR-MW79S-1123	Water	11/10/23 13:41	11/15/23 14:43
550-210594-21	FC-CCR-MW81-1123	Water	11/10/23 12:28	11/15/23 14:43
550-210594-22	FC-CCR-MW82S-1123	Water	11/10/23 15:57	11/15/23 14:43
550-210594-23	FC-CCR-FD06-1123	Water	11/10/23 16:20	11/15/23 14:43
550-210594-24	FC-CCR-FD07-1123	Water	11/10/23 13:59	11/15/23 14:43
550-210594-25	FC-CCR-FD02-1123	Water	11/10/23 18:18	11/15/23 14:43

Detection Summary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-210594-1
SDG: APS Four Corners Power Plant (Other)

Client Sample ID: FC-CCR-DMX01-1123 — Lab Sample ID: 550-210594-1

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Boron	90	M3	0.25		mg/L	5		200.7 Rev 4.4	Total/NA
Molybdenum	23	T5	5.0		ug/L	10		200.8 LL	Total/NA

Client Sample ID: FC-CCR-DMX03-1123 — Lab Sample ID: 550-210594-2

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	1100	D2	400		mg/L	200		300.0	Total/NA
Sulfate	13000	D2	400		mg/L	200		300.0	Total/NA
Boron	1.2		0.25		mg/L	5		200.7 Rev 4.4	Total/NA
Calcium	470		10		mg/L	5		200.7 Rev 4.4	Total/NA
Magnesium	2300		10		mg/L	5		200.7 Rev 4.4	Total/NA
Manganese	0.44		0.050		mg/L	5		200.7 Rev 4.4	Total/NA
Potassium	62		2.5		mg/L	5		200.7 Rev 4.4	Total/NA
Sodium	3600		2.5		mg/L	5		200.7 Rev 4.4	Total/NA
Lithium	0.97		0.25		mg/L	5		200.7 Rev 4.4	Total Recoverable
Arsenic	0.0088		0.0050		mg/L	10		200.8 LL	Total/NA
Barium	0.016		0.0050		mg/L	10		200.8 LL	Total/NA
Selenium	0.0072		0.0050		mg/L	10		200.8 LL	Total/NA
Alkalinity as CaCO3	850		6.0		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	850		6.0		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	19000		200		mg/L	1		SM 2540C	Total/NA
pH	7.2	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	14.9	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-DMX04-1123 — Lab Sample ID: 550-210594-3

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	440	D2	400		mg/L	200		300.0	Total/NA
Fluoride	0.95	D2	0.80		mg/L	2		300.0	Total/NA
Sulfate	6500	D2	400		mg/L	200		300.0	Total/NA
Boron	1.6		0.25		mg/L	5		200.7 Rev 4.4	Total/NA
Calcium	450		10		mg/L	5		200.7 Rev 4.4	Total/NA
Magnesium	750		10		mg/L	5		200.7 Rev 4.4	Total/NA
Manganese	0.53		0.050		mg/L	5		200.7 Rev 4.4	Total/NA
Manganese	0.56		0.050		mg/L	5		200.7 Rev 4.4	Total/NA
Potassium	33		2.5		mg/L	5		200.7 Rev 4.4	Total/NA
Sodium	1800		2.5		mg/L	5		200.7 Rev 4.4	Total/NA
Lithium	0.73		0.10		mg/L	2		200.7 Rev 4.4	Total Recoverable
Arsenic	0.0078		0.0050		mg/L	10		200.8 LL	Total/NA
Barium	0.011		0.0050		mg/L	10		200.8 LL	Total/NA
Molybdenum	0.0072	T5	0.0050		mg/L	10		200.8 LL	Total/NA
Alkalinity as CaCO3	350		6.0		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	350		6.0		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	10000		100		mg/L	1		SM 2540C	Total/NA
pH	7.6	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	14.7	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-MW05-1123 — Lab Sample ID: 550-210594-4

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	4200	D2	400		mg/L	200		300.0	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Phoenix

Client Sample ID: FC-CCR-MW05-1123 (Continued) — Lab Sample ID: 550-210594-4

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Sulfate	14000	D2	400		mg/L	200		300.0	Total/NA
Boron	1.3		0.25		mg/L	5		200.7 Rev 4.4	Total/NA
Calcium	520		10		mg/L	5		200.7 Rev 4.4	Total/NA
Magnesium	1400		10		mg/L	5		200.7 Rev 4.4	Total/NA
Manganese	0.73		0.050		mg/L	5		200.7 Rev 4.4	Total/NA
Potassium	65		2.5		mg/L	5		200.7 Rev 4.4	Total/NA
Sodium	8400		10		mg/L	20		200.7 Rev 4.4	Total/NA
Lithium	2.3		0.25		mg/L	5		200.7 Rev 4.4	Total Recoverable
Alkalinity as CaCO3	780		6.0		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	780		6.0		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	27000		200		mg/L	1		SM 2540C	Total/NA
pH	7.1	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	14.1	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-MW06R-1123 — Lab Sample ID: 550-210594-5

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	1200	D2	400		mg/L	200		300.0	Total/NA
Sulfate	8000	D2	400		mg/L	200		300.0	Total/NA
Boron	1.2		0.25		mg/L	5		200.7 Rev 4.4	Total/NA
Calcium	290		10		mg/L	5		200.7 Rev 4.4	Total/NA
Iron	1.1	V1	0.50		mg/L	5		200.7 Rev 4.4	Total/NA
Magnesium	360		10		mg/L	5		200.7 Rev 4.4	Total/NA
Manganese	0.42		0.050		mg/L	5		200.7 Rev 4.4	Total/NA
Potassium	43		2.5		mg/L	5		200.7 Rev 4.4	Total/NA
Sodium	4300		5.0		mg/L	10		200.7 Rev 4.4	Total/NA
Lithium	0.90		0.050		mg/L	1		200.7 Rev 4.4	Total Recoverable
Arsenic	0.0080		0.0050		mg/L	10		200.8 LL	Total/NA
Barium	0.026		0.0050		mg/L	10		200.8 LL	Total/NA
Molybdenum	0.025	T5	0.0050		mg/L	10		200.8 LL	Total/NA
Alkalinity as CaCO3	470		6.0		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	470		6.0		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	13000		100		mg/L	1		SM 2540C	Total/NA
pH	7.4	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	13.7	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-FD04-1123 — Lab Sample ID: 550-210594-6

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Boron	92		0.25		mg/L	5		200.7 Rev 4.4	Total/NA
Molybdenum	22	T5	5.0		ug/L	10		200.8 LL	Total/NA

Client Sample ID: FC-CCR-MW17R-1123 — Lab Sample ID: 550-210594-7

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	410	D2	400		mg/L	200		300.0	Total/NA
Sulfate	4100	D2	400		mg/L	200		300.0	Total/NA
Boron	39		0.25		mg/L	5		200.7 Rev 4.4	Total/NA
Calcium	490		10		mg/L	5		200.7 Rev 4.4	Total/NA
Magnesium	290		10		mg/L	5		200.7 Rev 4.4	Total/NA
Manganese	1.1		0.050		mg/L	5		200.7 Rev 4.4	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: FC-CCR-MW17R-1123 (Continued) — Lab Sample ID: 550-210594-7

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Potassium	19		2.5		mg/L	5		200.7 Rev 4.4	Total/NA
Sodium	1200		2.5		mg/L	5		200.7 Rev 4.4	Total/NA
Lithium	0.49		0.050		mg/L	1		200.7 Rev 4.4	Total Recoverable
Arsenic	0.0080		0.0050		mg/L	10		200.8 LL	Total/NA
Barium	0.019		0.0050		mg/L	10		200.8 LL	Total/NA
Cadmium	0.0014		0.0010		mg/L	10		200.8 LL	Total/NA
Cobalt	0.068		0.0050		mg/L	10		200.8 LL	Total/NA
Alkalinity as CaCO3	130		6.0		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	130		6.0		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	6300		100		mg/L	1		SM 2540C	Total/NA
pH	7.5	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	13.8	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-MW18-1123 — Lab Sample ID: 550-210594-8

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	4700	D2	400		mg/L	200		300.0	Total/NA
Sulfate	15000	D2	400		mg/L	200		300.0	Total/NA
Boron	1.4		0.25		mg/L	5		200.7 Rev 4.4	Total/NA
Calcium	490		10		mg/L	5		200.7 Rev 4.4	Total/NA
Magnesium	1200		10		mg/L	5		200.7 Rev 4.4	Total/NA
Manganese	2.9		0.050		mg/L	5		200.7 Rev 4.4	Total/NA
Potassium	78		2.5		mg/L	5		200.7 Rev 4.4	Total/NA
Sodium	9000		25		mg/L	50		200.7 Rev 4.4	Total/NA
Lithium	2.5		0.25		mg/L	5		200.7 Rev 4.4	Total Recoverable
Cobalt	9.8		5.0		ug/L	10		200.8 LL	Total/NA
Alkalinity as CaCO3	930		6.0		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	930		6.0		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	29000		200		mg/L	1		SM 2540C	Total/NA
pH	7.0	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	14.1	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-MW19-1123 — Lab Sample ID: 550-210594-9

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Boron	2.1		0.25		mg/L	5		200.7 Rev 4.4	Total/NA

Client Sample ID: FC-CCR-MW23R-1123 — Lab Sample ID: 550-210594-10

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	900	D2	400		mg/L	200		300.0	Total/NA
Sulfate	11000	D2	400		mg/L	200		300.0	Total/NA
Boron	11		0.25		mg/L	5		200.7 Rev 4.4	Total/NA
Calcium	480		10		mg/L	5		200.7 Rev 4.4	Total/NA
Magnesium	1700		10		mg/L	5		200.7 Rev 4.4	Total/NA
Manganese	0.23		0.050		mg/L	5		200.7 Rev 4.4	Total/NA
Potassium	46		2.5		mg/L	5		200.7 Rev 4.4	Total/NA
Sodium	2800		2.5		mg/L	5		200.7 Rev 4.4	Total/NA
Lithium	1.3		0.25		mg/L	5		200.7 Rev 4.4	Total Recoverable
Alkalinity as CaCO3	570		6.0		mg/L	1		SM 2320B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: FC-CCR-MW23R-1123 (Continued) — Lab Sample ID: 550-210594-10

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Bicarbonate Alkalinity as CaCO3	570		6.0		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	17000		100		mg/L	1		SM 2540C	Total/NA
pH	7.2	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	14.4	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-MW24-1123 — Lab Sample ID: 550-210594-11

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	4600	D2	400		mg/L	200		300.0	Total/NA
Sulfate	11000	D2	400		mg/L	200		300.0	Total/NA
Boron	1.1		0.25		mg/L	5		200.7 Rev 4.4	Total/NA
Calcium	470		10		mg/L	5		200.7 Rev 4.4	Total/NA
Magnesium	210		10		mg/L	5		200.7 Rev 4.4	Total/NA
Manganese	1.9		0.050		mg/L	5		200.7 Rev 4.4	Total/NA
Potassium	36		2.5		mg/L	5		200.7 Rev 4.4	Total/NA
Sodium	7800		25		mg/L	50		200.7 Rev 4.4	Total/NA
Lithium	1.6		0.050		mg/L	1		200.7 Rev 4.4	Total Recoverable
Molybdenum	29	T5	5.0		ug/L	10		200.8 LL	Total/NA
Alkalinity as CaCO3	280		6.0		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	280		6.0		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	22000	D1 H1	200		mg/L	1		SM 2540C	Total/NA
pH	7.5	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	15.0	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-MW30-1123 — Lab Sample ID: 550-210594-12

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Boron	25	M3	0.25		mg/L	5		200.7 Rev 4.4	Total/NA

Client Sample ID: FC-CCR-MW36R-1123 — Lab Sample ID: 550-210594-13

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	480	D2	400		mg/L	200		300.0	Total/NA
Sulfate	4100	D2	400		mg/L	200		300.0	Total/NA
Boron	59		0.25		mg/L	5		200.7 Rev 4.4	Total/NA
Calcium	480		10		mg/L	5		200.7 Rev 4.4	Total/NA
Magnesium	420		10		mg/L	5		200.7 Rev 4.4	Total/NA
Manganese	0.28		0.050		mg/L	5		200.7 Rev 4.4	Total/NA
Potassium	25		2.5		mg/L	5		200.7 Rev 4.4	Total/NA
Sodium	1100		2.5		mg/L	5		200.7 Rev 4.4	Total/NA
Lithium	0.70		0.050		mg/L	1		200.7 Rev 4.4	Total Recoverable
Cobalt	220		5.0		ug/L	10		200.8 LL	Total/NA
Alkalinity as CaCO3	210		6.0		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	210		6.0		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	6500		100		mg/L	1		SM 2540C	Total/NA
pH	7.4	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	15.8	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-210594-1
SDG: APS Four Corners Power Plant (Other)

Client Sample ID: FC-CCR-MW38R-1123 — Lab Sample ID: 550-210594-14

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	530	D2	400		mg/L	200		300.0	Total/NA
Sulfate	12000	D2	400		mg/L	200		300.0	Total/NA
Boron	14		0.25		mg/L	5		200.7 Rev 4.4	Total/NA
Calcium	440		10		mg/L	5		200.7 Rev 4.4	Total/NA
Magnesium	1500		10		mg/L	5		200.7 Rev 4.4	Total/NA
Potassium	43		2.5		mg/L	5		200.7 Rev 4.4	Total/NA
Sodium	3700		2.5		mg/L	5		200.7 Rev 4.4	Total/NA
Lithium	1.3		0.25		mg/L	5		200.7 Rev 4.4	Total Recoverable
Arsenic	0.0078		0.0050		mg/L	10		200.8 LL	Total/NA
Barium	0.018		0.0050		mg/L	10		200.8 LL	Total/NA
Cobalt	0.062		0.0050		mg/L	10		200.8 LL	Total/NA
Selenium	0.058		0.0050		mg/L	10		200.8 LL	Total/NA
Alkalinity as CaCO3	380		6.0		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	380		6.0		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	18000		100		mg/L	1		SM 2540C	Total/NA
pH	7.3	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	15.8	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-MW56-1123 — Lab Sample ID: 550-210594-15

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	2300	D2	400		mg/L	200		300.0	Total/NA
Sulfate	19000	D2	400		mg/L	200		300.0	Total/NA
Boron	1.6		0.25		mg/L	5		200.7 Rev 4.4	Total/NA
Calcium	470		10		mg/L	5		200.7 Rev 4.4	Total/NA
Magnesium	3100		10		mg/L	5		200.7 Rev 4.4	Total/NA
Potassium	81		2.5		mg/L	5		200.7 Rev 4.4	Total/NA
Sodium	5700		25		mg/L	50		200.7 Rev 4.4	Total/NA
Lithium	2.0		0.25		mg/L	5		200.7 Rev 4.4	Total Recoverable
Arsenic	0.0074		0.0050		mg/L	10		200.8 LL	Total/NA
Barium	0.017		0.0050		mg/L	10		200.8 LL	Total/NA
Selenium	0.24		0.0050		mg/L	10		200.8 LL	Total/NA
Thallium	0.0011		0.0010		mg/L	10		200.8 LL	Total/NA
Alkalinity as CaCO3	890		6.0		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	890		6.0		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	30000		200		mg/L	1		SM 2540C	Total/NA
pH	7.3	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	15.3	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-FD05-1123 — Lab Sample ID: 550-210594-16

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Boron	2.1		0.25		mg/L	5		200.7 Rev 4.4	Total/NA

Client Sample ID: FC-CCR-MW57-1123 — Lab Sample ID: 550-210594-17

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	1600	D2	400		mg/L	200		300.0	Total/NA
Sulfate	20000	D2	1000		mg/L	500		300.0	Total/NA
Boron	2.4		0.25		mg/L	5		200.7 Rev 4.4	Total/NA
Calcium	480		10		mg/L	5		200.7 Rev 4.4	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: FC-CCR-MW57-1123 (Continued) — Lab Sample ID: 550-210594-17

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Iron	6.0	V1	0.50		mg/L	5		200.7 Rev 4.4	Total/NA
Magnesium	2700		10		mg/L	5		200.7 Rev 4.4	Total/NA
Manganese	2.0		0.050		mg/L	5		200.7 Rev 4.4	Total/NA
Potassium	95		2.5		mg/L	5		200.7 Rev 4.4	Total/NA
Sodium	7000		25		mg/L	50		200.7 Rev 4.4	Total/NA
Lithium	2.8		0.25		mg/L	5		200.7 Rev 4.4	Total Recoverable
Arsenic	0.0093		0.0050		mg/L	10		200.8 LL	Total/NA
Barium	0.032		0.0050		mg/L	10		200.8 LL	Total/NA
Cobalt	0.019		0.0050		mg/L	10		200.8 LL	Total/NA
Molybdenum	0.0064	T5	0.0050		mg/L	10		200.8 LL	Total/NA
Selenium	0.0060		0.0050		mg/L	10		200.8 LL	Total/NA
Alkalinity as CaCO3	1000		6.0		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	1000		6.0		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	34000		200		mg/L	1		SM 2540C	Total/NA
pH	7.3	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	15.3	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-MW77S-1123 — Lab Sample ID: 550-210594-18

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Boron	10		0.25		mg/L	5		200.7 Rev 4.4	Total/NA
Cobalt	6.9		5.0		ug/L	10		200.8 LL	Total/NA
Molybdenum	17	T5	5.0		ug/L	10		200.8 LL	Total/NA

Client Sample ID: FC-CCR-MW78S-1123 — Lab Sample ID: 550-210594-19

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Boron	1.6		0.25		mg/L	5		200.7 Rev 4.4	Total/NA
Molybdenum	7.4	T5	5.0		ug/L	10		200.8 LL	Total/NA

Client Sample ID: FC-CCR-MW79S-1123 — Lab Sample ID: 550-210594-20

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Boron	8.3		0.25		mg/L	5		200.7 Rev 4.4	Total/NA

Client Sample ID: FC-CCR-MW81-1123 — Lab Sample ID: 550-210594-21

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Boron	50	M3 R4	0.050		mg/L	1		200.7 Rev 4.4	Total/NA
Cobalt	22		5.0		ug/L	10		200.8 LL	Total/NA

Client Sample ID: FC-CCR-MW82S-1123 — Lab Sample ID: 550-210594-22

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	610	D2	400		mg/L	200		300.0	Total/NA
Sulfate	5700	D2	400		mg/L	200		300.0	Total/NA
Boron	68		0.25		mg/L	5		200.7 Rev 4.4	Total/NA
Calcium	480		10		mg/L	5		200.7 Rev 4.4	Total/NA
Magnesium	790		10		mg/L	5		200.7 Rev 4.4	Total/NA
Manganese	2.0		0.050		mg/L	5		200.7 Rev 4.4	Total/NA
Potassium	25		2.5		mg/L	5		200.7 Rev 4.4	Total/NA
Sodium	1600		2.5		mg/L	5		200.7 Rev 4.4	Total/NA
Cobalt	100		5.0		ug/L	10		200.8 LL	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: FC-CCR-MW82S-1123 (Continued) — Lab Sample ID: 550-210594-22

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Alkalinity as CaCO3	260		6.0		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	260		6.0		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	9800		100		mg/L	1		SM 2540C	Total/NA
pH	7.3	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	15.5	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-FD06-1123 — Lab Sample ID: 550-210594-23

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Boron	26		0.25		mg/L	5		200.7 Rev 4.4	Total/NA

Client Sample ID: FC-CCR-FD07-1123 — Lab Sample ID: 550-210594-24

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Boron	47		0.25		mg/L	5		200.7 Rev 4.4	Total/NA
Cobalt	21		5.0		ug/L	10		200.8 LL	Total/NA

Client Sample ID: FC-CCR-FD02-1123 — Lab Sample ID: 550-210594-25

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	620	D2	400		mg/L	200		300.0	Total/NA
Sulfate	5700	D2	400		mg/L	200		300.0	Total/NA
Boron	65		0.25		mg/L	5		200.7 Rev 4.4	Total/NA
Calcium	460		10		mg/L	5		200.7 Rev 4.4	Total/NA
Magnesium	750		10		mg/L	5		200.7 Rev 4.4	Total/NA
Manganese	1.9		0.050		mg/L	5		200.7 Rev 4.4	Total/NA
Potassium	24		2.5		mg/L	5		200.7 Rev 4.4	Total/NA
Sodium	1500		2.5		mg/L	5		200.7 Rev 4.4	Total/NA
Cobalt	110		5.0		ug/L	10		200.8 LL	Total/NA
Alkalinity as CaCO3	260		6.0		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	260		6.0		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	9900		100		mg/L	1		SM 2540C	Total/NA
pH	7.2	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	15.5	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: FC-CCR-DMX01-1123

Lab Sample ID: 550-210594-1

Date Collected: 11/10/23 14:45
Matrix: Water
Date Received: 11/15/23 14:43

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	**90**	**M3**	0.25		mg/L		11/21/23 04:37	11/29/23 15:10	5

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	ND		5.0		ug/L		11/21/23 10:30	11/27/23 17:03	10
Molybdenum	**23**	**T5**	5.0		ug/L		11/21/23 10:30	11/27/23 17:03	10

Client Sample ID: FC-CCR-DMX03-1123

Lab Sample ID: 550-210594-2

Date Collected: 11/13/23 14:51
Matrix: Water
Date Received: 11/15/23 14:43

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1100**	**D2**	400		mg/L			11/20/23 15:29	200
Fluoride	ND	D2	0.80		mg/L			11/20/23 15:10	2
Sulfate	**13000**	**D2**	400		mg/L			11/20/23 15:29	200

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND	V1	0.0050		mg/L		11/21/23 04:29	11/28/23 20:23	5
Boron	**1.2**		0.25		mg/L		11/21/23 04:29	11/28/23 20:23	5
Calcium	**470**		10		mg/L		11/21/23 04:29	11/28/23 20:23	5
Iron	ND	V1	0.50		mg/L		11/21/23 04:29	11/28/23 20:23	5
Magnesium	**2300**		10		mg/L		11/21/23 04:29	11/28/23 20:23	5
Manganese	**0.44**		0.050		mg/L		11/21/23 04:29	11/28/23 20:23	5
Potassium	**62**		2.5		mg/L		11/21/23 04:29	11/28/23 20:23	5
Sodium	**3600**		2.5		mg/L		11/21/23 04:29	11/28/23 20:23	5

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**0.97**		0.25		mg/L		11/22/23 07:45	11/27/23 13:54	5

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.010		mg/L		11/21/23 06:52	11/27/23 19:15	10
Arsenic	**0.0088**		0.0050		mg/L		11/21/23 06:52	11/27/23 19:15	10
Barium	**0.016**		0.0050		mg/L		11/21/23 06:52	11/27/23 19:15	10
Cadmium	ND		0.0010		mg/L		11/21/23 06:52	11/27/23 19:15	10
Chromium	ND		0.010		mg/L		11/21/23 06:52	11/27/23 19:15	10
Cobalt	ND		0.0050		mg/L		11/21/23 06:52	11/27/23 19:15	10
Lead	ND		0.0050		mg/L		11/21/23 06:52	11/27/23 19:15	10
Molybdenum	ND	T5	0.0050		mg/L		11/21/23 06:52	11/27/23 19:15	10
Selenium	**0.0072**		0.0050		mg/L		11/21/23 06:52	11/27/23 19:15	10
Thallium	ND		0.0010		mg/L		11/21/23 06:52	11/27/23 19:15	10

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3 (SM 2320B)	**850**		6.0		mg/L			11/21/23 10:50	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**850**		6.0		mg/L			11/21/23 10:50	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			11/21/23 10:50	1

Client Sample ID: FC-CCR-DMX03-1123

Lab Sample ID: 550-210594-2

Date Collected: 11/13/23 14:51
Matrix: Water
Date Received: 11/15/23 14:43

General Chemistry (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Phenolphthalein (SM 2320B)	ND		6.0		mg/L			11/21/23 10:50	1
Hydroxide Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			11/21/23 10:50	1
Total Dissolved Solids (SM 2540C)	**19000**		200		mg/L			11/20/23 12:18	1
pH (SM 4500 H+ B)	**7.2**	**H5**	1.7		SU			11/16/23 14:43	1
Temperature (SM 4500 H+ B)	**14.9**	**H5 T5**	0.1		Degrees C			11/16/23 14:43	1

Client Sample ID: FC-CCR-DMX04-1123

Lab Sample ID: 550-210594-3

Date Collected: 11/14/23 17:30
Matrix: Water
Date Received: 11/15/23 14:43

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**440**	**D2**	400		mg/L			11/19/23 04:41	200
Fluoride	**0.95**	**D2**	0.80		mg/L			11/19/23 04:22	2
Sulfate	**6500**	**D2**	400		mg/L			11/19/23 04:41	200

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND	L5 V1	0.0050		mg/L		11/21/23 04:37	11/28/23 18:56	5
Boron	**1.6**		0.25		mg/L		11/21/23 04:37	11/29/23 15:55	5
Calcium	**450**		10		mg/L		11/21/23 04:37	11/28/23 18:56	5
Iron	ND	L5 V1	0.50		mg/L		11/21/23 04:37	11/28/23 18:56	5
Magnesium	**750**		10		mg/L		11/21/23 04:37	11/29/23 15:55	5
Manganese	**0.53**		0.050		mg/L		11/21/23 04:37	11/28/23 18:56	5
Manganese	**0.56**		0.050		mg/L		11/21/23 04:37	11/29/23 15:55	5
Potassium	**33**		2.5		mg/L		11/21/23 04:37	11/29/23 15:55	5
Sodium	**1800**		2.5		mg/L		11/21/23 04:37	11/29/23 15:55	5

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**0.73**		0.10		mg/L		11/22/23 07:45	11/27/23 13:56	2

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.010		mg/L		11/21/23 06:58	11/27/23 18:02	10
Arsenic	**0.0078**		0.0050		mg/L		11/21/23 06:58	11/27/23 18:02	10
Barium	**0.011**		0.0050		mg/L		11/21/23 06:58	11/27/23 18:02	10
Cadmium	ND		0.0010		mg/L		11/21/23 06:58	11/27/23 18:02	10
Chromium	ND		0.010		mg/L		11/21/23 06:58	11/27/23 18:02	10
Cobalt	ND		0.0050		mg/L		11/21/23 06:58	11/27/23 18:02	10
Lead	ND		0.0050		mg/L		11/21/23 06:58	11/27/23 18:02	10
Molybdenum	**0.0072**	**T5**	0.0050		mg/L		11/21/23 06:58	11/27/23 18:02	10
Selenium	ND		0.0050		mg/L		11/21/23 06:58	11/27/23 18:02	10
Thallium	ND		0.0010		mg/L		11/21/23 06:58	11/27/23 18:02	10

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3 (SM 2320B)	**350**		6.0		mg/L			11/21/23 11:05	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**350**		6.0		mg/L			11/21/23 11:05	1

Client Sample ID: FC-CCR-DMX04-1123

Lab Sample ID: 550-210594-3

Date Collected: 11/14/23 17:30
Matrix: Water
Date Received: 11/15/23 14:43

General Chemistry (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Carbonate Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			11/21/23 11:05	1
Alkalinity, Phenolphthalein (SM 2320B)	ND		6.0		mg/L			11/21/23 11:05	1
Hydroxide Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			11/21/23 11:05	1
Total Dissolved Solids (SM 2540C)	**10000**		100		mg/L			11/21/23 12:25	1
pH (SM 4500 H+ B)	**7.6**	**H5**	1.7		SU			11/16/23 14:44	1
Temperature (SM 4500 H+ B)	**14.7**	**H5 T5**	0.1		Degrees C			11/16/23 14:44	1

Client Sample ID: FC-CCR-MW05-1123

Lab Sample ID: 550-210594-4

Date Collected: 11/13/23 16:15
Matrix: Water
Date Received: 11/15/23 14:43

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**4200**	**D2**	400		mg/L			11/20/23 16:05	200
Fluoride	ND	D2	0.80		mg/L			11/20/23 15:47	2
Sulfate	**14000**	**D2**	400		mg/L			11/20/23 16:05	200

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND	L5 V1	0.0050		mg/L		11/21/23 04:37	11/28/23 18:59	5
Boron	**1.3**		0.25		mg/L		11/21/23 04:37	11/29/23 15:58	5
Calcium	**520**		10		mg/L		11/21/23 04:37	11/28/23 18:59	5
Iron	ND	L5 V1	0.50		mg/L		11/21/23 04:37	11/28/23 18:59	5
Magnesium	**1400**		10		mg/L		11/21/23 04:37	11/29/23 15:58	5
Manganese	**0.73**		0.050		mg/L		11/21/23 04:37	11/28/23 18:59	5
Potassium	**65**		2.5		mg/L		11/21/23 04:37	11/29/23 15:58	5
Sodium	**8400**		10		mg/L		11/21/23 04:37	11/30/23 12:30	20

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**2.3**		0.25		mg/L		11/22/23 07:45	11/27/23 13:59	5

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	ND		5.0		ug/L		11/21/23 06:58	11/27/23 18:04	10
Molybdenum	ND	T5	5.0		ug/L		11/21/23 06:58	11/27/23 18:04	10

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3 (SM 2320B)	**780**		6.0		mg/L			11/21/23 11:14	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**780**		6.0		mg/L			11/21/23 11:14	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			11/21/23 11:14	1
Alkalinity, Phenolphthalein (SM 2320B)	ND		6.0		mg/L			11/21/23 11:14	1
Hydroxide Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			11/21/23 11:14	1
Total Dissolved Solids (SM 2540C)	**27000**		200		mg/L			11/20/23 12:18	1
pH (SM 4500 H+ B)	**7.1**	**H5**	1.7		SU			11/16/23 14:45	1
Temperature (SM 4500 H+ B)	**14.1**	**H5 T5**	0.1		Degrees C			11/16/23 14:45	1

Client Sample ID: FC-CCR-MW06R-1123

Date Collected: 11/14/23 18:21
Date Received: 11/15/23 14:43

Lab Sample ID: 550-210594-5

Matrix: Water

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1200**	**D2**	400		mg/L			11/20/23 16:42	200
Fluoride	ND	D2	0.80		mg/L			11/20/23 16:24	2
Sulfate	**8000**	**D2**	400		mg/L			11/20/23 16:42	200

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND	L5 V1	0.0050		mg/L		11/21/23 04:37	11/28/23 19:01	5
Boron	**1.2**		0.25		mg/L		11/21/23 04:37	11/29/23 16:01	5
Calcium	**290**		10		mg/L		11/21/23 04:37	11/28/23 19:01	5
Iron	**1.1**	**V1**	0.50		mg/L		11/21/23 04:37	11/28/23 19:01	5
Magnesium	**360**		10		mg/L		11/21/23 04:37	11/29/23 16:01	5
Manganese	**0.42**		0.050		mg/L		11/21/23 04:37	11/28/23 19:01	5
Potassium	**43**		2.5		mg/L		11/21/23 04:37	11/29/23 16:01	5
Sodium	**4300**		5.0		mg/L		11/21/23 04:37	11/30/23 12:02	10

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**0.90**		0.050		mg/L		11/22/23 07:45	11/22/23 22:34	1

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.010		mg/L		11/21/23 06:58	11/27/23 18:06	10
Arsenic	**0.0080**		0.0050		mg/L		11/21/23 06:58	11/27/23 18:06	10
Barium	**0.026**		0.0050		mg/L		11/21/23 06:58	11/27/23 18:06	10
Cadmium	ND		0.0010		mg/L		11/21/23 06:58	11/27/23 18:06	10
Chromium	ND		0.010		mg/L		11/21/23 06:58	11/27/23 18:06	10
Cobalt	ND		0.0050		mg/L		11/21/23 06:58	11/27/23 18:06	10
Lead	ND		0.0050		mg/L		11/21/23 06:58	11/27/23 18:06	10
Molybdenum	**0.025**	**T5**	0.0050		mg/L		11/21/23 06:58	11/27/23 18:06	10
Selenium	ND		0.0050		mg/L		11/21/23 06:58	11/27/23 18:06	10
Thallium	ND		0.0010		mg/L		11/21/23 06:58	11/27/23 18:06	10

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3 (SM 2320B)	**470**		6.0		mg/L			11/21/23 11:41	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**470**		6.0		mg/L			11/21/23 11:41	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			11/21/23 11:41	1
Alkalinity, Phenolphthalein (SM 2320B)	ND		6.0		mg/L			11/21/23 11:41	1
Hydroxide Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			11/21/23 11:41	1
Total Dissolved Solids (SM 2540C)	**13000**		100		mg/L			11/21/23 12:25	1
pH (SM 4500 H+ B)	**7.4**	**H5**	1.7		SU			11/16/23 14:46	1
Temperature (SM 4500 H+ B)	**13.7**	**H5 T5**	0.1		Degrees C			11/16/23 14:46	1

Client Sample ID: FC-CCR-FD04-1123

Lab Sample ID: 550-210594-6

Date Collected: 11/10/23 07:30
Matrix: Water
Date Received: 11/15/23 14:43

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	**92**		0.25		mg/L		11/21/23 04:37	11/29/23 16:04	5

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	ND		5.0		ug/L		11/21/23 06:58	11/27/23 18:08	10
Molybdenum	**22**	**T5**	5.0		ug/L		11/21/23 06:58	11/27/23 18:08	10

Client Sample ID: FC-CCR-MW17R-1123

Lab Sample ID: 550-210594-7

Date Collected: 11/14/23 14:07
Matrix: Water
Date Received: 11/15/23 14:43

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**410**	**D2**	400		mg/L			11/20/23 18:14	200
Fluoride	ND	D2	0.80		mg/L			11/20/23 17:01	2
Sulfate	**4100**	**D2**	400		mg/L			11/20/23 18:14	200

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND	L5 V1	0.0050		mg/L		11/21/23 04:37	11/28/23 19:07	5
Boron	**39**		0.25		mg/L		11/21/23 04:37	11/29/23 16:06	5
Calcium	**490**		10		mg/L		11/21/23 04:37	11/28/23 19:07	5
Iron	ND	L5 V1	0.50		mg/L		11/21/23 04:37	11/28/23 19:07	5
Magnesium	**290**		10		mg/L		11/21/23 04:37	11/29/23 16:06	5
Manganese	**1.1**		0.050		mg/L		11/21/23 04:37	11/28/23 19:07	5
Potassium	**19**		2.5		mg/L		11/21/23 04:37	11/29/23 16:06	5
Sodium	**1200**		2.5		mg/L		11/21/23 04:37	11/29/23 16:06	5

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**0.49**		0.050		mg/L		11/22/23 07:45	11/22/23 22:41	1

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.010		mg/L		11/21/23 06:58	11/27/23 18:10	10
Arsenic	**0.0080**		0.0050		mg/L		11/21/23 06:58	11/27/23 18:10	10
Barium	**0.019**		0.0050		mg/L		11/21/23 06:58	11/27/23 18:10	10
Cadmium	**0.0014**		0.0010		mg/L		11/21/23 06:58	11/27/23 18:10	10
Chromium	ND		0.010		mg/L		11/21/23 06:58	11/27/23 18:10	10
Cobalt	**0.068**		0.0050		mg/L		11/21/23 06:58	11/27/23 18:10	10
Lead	ND		0.0050		mg/L		11/21/23 06:58	11/27/23 18:10	10
Molybdenum	ND	T5	0.0050		mg/L		11/21/23 06:58	11/27/23 18:10	10
Selenium	ND		0.0050		mg/L		11/21/23 06:58	11/27/23 18:10	10
Thallium	ND		0.0010		mg/L		11/21/23 06:58	11/27/23 18:10	10

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3 (SM 2320B)	**130**		6.0		mg/L			11/21/23 12:02	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**130**		6.0		mg/L			11/21/23 12:02	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			11/21/23 12:02	1

Client Sample ID: FC-CCR-MW17R-1123

Lab Sample ID: 550-210594-7

Date Collected: 11/14/23 14:07
Matrix: Water
Date Received: 11/15/23 14:43

General Chemistry (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Phenolphthalein (SM 2320B)	ND		6.0		mg/L			11/21/23 12:02	1
Hydroxide Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			11/21/23 12:02	1
Total Dissolved Solids (SM 2540C)	**6300**		100		mg/L			11/21/23 12:25	1
pH (SM 4500 H+ B)	**7.5**	**H5**	1.7		SU			11/16/23 14:47	1
Temperature (SM 4500 H+ B)	**13.8**	**H5 T5**	0.1		Degrees C			11/16/23 14:47	1

Client Sample ID: FC-CCR-MW18-1123

Lab Sample ID: 550-210594-8

Date Collected: 11/14/23 09:50
Matrix: Water
Date Received: 11/15/23 14:43

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**4700**	**D2**	400		mg/L			11/19/23 05:17	200
Fluoride	ND	D2	0.80		mg/L			11/19/23 04:59	2
Sulfate	**15000**	**D2**	400		mg/L			11/19/23 05:17	200

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND	V1	0.0050		mg/L		11/21/23 04:29	11/28/23 19:33	5
Boron	**1.4**		0.25		mg/L		11/21/23 04:29	11/28/23 19:33	5
Calcium	**490**		10		mg/L		11/21/23 04:29	11/28/23 19:33	5
Iron	ND	V1	0.50		mg/L		11/21/23 04:29	11/28/23 19:33	5
Magnesium	**1200**		10		mg/L		11/21/23 04:29	11/28/23 19:33	5
Manganese	**2.9**		0.050		mg/L		11/21/23 04:29	11/28/23 19:33	5
Potassium	**78**		2.5		mg/L		11/21/23 04:29	11/28/23 19:33	5
Sodium	**9000**		25		mg/L		11/21/23 04:29	11/30/23 12:15	50

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**2.5**		0.25		mg/L		11/22/23 07:45	11/27/23 14:01	5

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	**9.8**		5.0		ug/L		11/21/23 06:52	11/27/23 18:36	10
Molybdenum	ND	T5	5.0		ug/L		11/21/23 06:52	11/27/23 18:36	10

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3 (SM 2320B)	**930**		6.0		mg/L			11/21/23 12:08	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**930**		6.0		mg/L			11/21/23 12:08	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			11/21/23 12:08	1
Alkalinity, Phenolphthalein (SM 2320B)	ND		6.0		mg/L			11/21/23 12:08	1
Hydroxide Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			11/21/23 12:08	1
Total Dissolved Solids (SM 2540C)	**29000**		200		mg/L			11/21/23 12:25	1
pH (SM 4500 H+ B)	**7.0**	**H5**	1.7		SU			11/16/23 14:48	1
Temperature (SM 4500 H+ B)	**14.1**	**H5 T5**	0.1		Degrees C			11/16/23 14:48	1

Client Sample ID: FC-CCR-MW19-1123

Lab Sample ID: 550-210594-9

Date Collected: 11/13/23 14:04
Matrix: Water
Date Received: 11/15/23 14:43

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	**2.1**		0.25		mg/L		11/21/23 04:29	11/28/23 19:35	5

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	ND		5.0		ug/L		11/21/23 06:52	11/27/23 18:38	10
Molybdenum	ND	T5	5.0		ug/L		11/21/23 06:52	11/27/23 18:38	10

Client Sample ID: FC-CCR-MW23R-1123

Lab Sample ID: 550-210594-10

Date Collected: 11/14/23 11:05
Matrix: Water
Date Received: 11/15/23 14:43

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**900**	**D2**	400		mg/L			11/20/23 18:51	200
Fluoride	ND	D2	0.80		mg/L			11/20/23 18:33	2
Sulfate	**11000**	**D2**	400		mg/L			11/20/23 18:51	200

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND	V1	0.0050		mg/L		11/21/23 04:29	11/28/23 19:38	5
Boron	**11**		0.25		mg/L		11/21/23 04:29	11/28/23 19:38	5
Calcium	**480**		10		mg/L		11/21/23 04:29	11/28/23 19:38	5
Iron	ND	V1	0.50		mg/L		11/21/23 04:29	11/28/23 19:38	5
Magnesium	**1700**		10		mg/L		11/21/23 04:29	11/28/23 19:38	5
Manganese	**0.23**		0.050		mg/L		11/21/23 04:29	11/28/23 19:38	5
Potassium	**46**		2.5		mg/L		11/21/23 04:29	11/28/23 19:38	5
Sodium	**2800**		2.5		mg/L		11/21/23 04:29	11/28/23 19:38	5

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**1.3**		0.25		mg/L		11/22/23 07:45	11/27/23 14:08	5

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	ND		5.0		ug/L		11/21/23 06:52	11/27/23 18:40	10
Molybdenum	ND	T5	5.0		ug/L		11/21/23 06:52	11/27/23 18:40	10

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3 (SM 2320B)	**570**		6.0		mg/L			11/21/23 12:24	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**570**		6.0		mg/L			11/21/23 12:24	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			11/21/23 12:24	1
Alkalinity, Phenolphthalein (SM 2320B)	ND		6.0		mg/L			11/21/23 12:24	1
Hydroxide Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			11/21/23 12:24	1
Total Dissolved Solids (SM 2540C)	**17000**		100		mg/L			11/21/23 12:25	1
pH (SM 4500 H+ B)	**7.2**	**H5**	1.7		SU			11/16/23 14:49	1
Temperature (SM 4500 H+ B)	**14.4**	**H5 T5**	0.1		Degrees C			11/16/23 14:49	1

Client Sample ID: FC-CCR-MW24-1123

Lab Sample ID: 550-210594-11

Date Collected: 11/14/23 19:43
Matrix: Water
Date Received: 11/15/23 14:43

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**4600**	**D2**	400		mg/L			11/20/23 19:28	200
Fluoride	ND	D2	0.80		mg/L			11/20/23 19:09	2
Sulfate	**11000**	**D2**	400		mg/L			11/20/23 19:28	200

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND	V1	0.0050		mg/L		11/21/23 04:29	11/28/23 19:41	5
Boron	**1.1**		0.25		mg/L		11/21/23 04:29	11/28/23 19:41	5
Calcium	**470**		10		mg/L		11/21/23 04:29	11/28/23 19:41	5
Iron	ND	V1	0.50		mg/L		11/21/23 04:29	11/28/23 19:41	5
Magnesium	**210**		10		mg/L		11/21/23 04:29	11/28/23 19:41	5
Manganese	**1.9**		0.050		mg/L		11/21/23 04:29	11/28/23 19:41	5
Potassium	**36**		2.5		mg/L		11/21/23 04:29	11/28/23 19:41	5
Sodium	**7800**		25		mg/L		11/21/23 04:29	11/30/23 12:18	50

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**1.6**		0.050		mg/L		11/22/23 07:45	11/22/23 22:53	1

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	ND		5.0		ug/L		11/21/23 06:52	11/27/23 18:42	10
Molybdenum	**29**	**T5**	5.0		ug/L		11/21/23 06:52	11/27/23 18:42	10

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3 (SM 2320B)	**280**		6.0		mg/L			11/21/23 12:36	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**280**		6.0		mg/L			11/21/23 12:36	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			11/21/23 12:36	1
Alkalinity, Phenolphthalein (SM 2320B)	ND		6.0		mg/L			11/21/23 12:36	1
Hydroxide Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			11/21/23 12:36	1
Total Dissolved Solids (SM 2540C)	**22000**	**D1 H1**	200		mg/L			11/22/23 18:27	1
pH (SM 4500 H+ B)	**7.5**	**H5**	1.7		SU			11/16/23 14:50	1
Temperature (SM 4500 H+ B)	**15.0**	**H5 T5**	0.1		Degrees C			11/16/23 14:50	1

Client Sample ID: FC-CCR-MW30-1123

Lab Sample ID: 550-210594-12

Date Collected: 11/10/23 10:04
Matrix: Water
Date Received: 11/15/23 14:43

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	**25**	**M3**	0.25		mg/L		11/21/23 04:29	11/28/23 19:30	5

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	ND		5.0		ug/L		11/21/23 06:58	11/27/23 17:27	10
Molybdenum	ND	T5	5.0		ug/L		11/21/23 06:58	11/27/23 17:27	10

Client Sample ID: FC-CCR-MW36R-1123

Lab Sample ID: 550-210594-13

Date Collected: 11/14/23 11:59
Matrix: Water
Date Received: 11/15/23 14:43

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**480**	**D2**	400		mg/L			11/20/23 20:05	200
Fluoride	ND	D2	0.80		mg/L			11/20/23 19:46	2
Sulfate	**4100**	**D2**	400		mg/L			11/20/23 20:05	200

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND	V1	0.0050		mg/L		11/21/23 04:29	11/28/23 19:44	5
Boron	**59**		0.25		mg/L		11/21/23 04:29	11/28/23 19:44	5
Calcium	**480**		10		mg/L		11/21/23 04:29	11/28/23 19:44	5
Iron	ND	V1	0.50		mg/L		11/21/23 04:29	11/28/23 19:44	5
Magnesium	**420**		10		mg/L		11/21/23 04:29	11/28/23 19:44	5
Manganese	**0.28**		0.050		mg/L		11/21/23 04:29	11/28/23 19:44	5
Potassium	**25**		2.5		mg/L		11/21/23 04:29	11/28/23 19:44	5
Sodium	**1100**		2.5		mg/L		11/21/23 04:29	11/28/23 19:44	5

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**0.70**		0.050		mg/L		11/22/23 07:45	11/22/23 22:56	1

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	**220**		5.0		ug/L		11/21/23 06:52	11/27/23 18:44	10
Molybdenum	ND	T5	5.0		ug/L		11/21/23 06:52	11/27/23 18:44	10

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3 (SM 2320B)	**210**		6.0		mg/L			11/21/23 12:45	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**210**		6.0		mg/L			11/21/23 12:45	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			11/21/23 12:45	1
Alkalinity, Phenolphthalein (SM 2320B)	ND		6.0		mg/L			11/21/23 12:45	1
Hydroxide Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			11/21/23 12:45	1
Total Dissolved Solids (SM 2540C)	**6500**		100		mg/L			11/21/23 15:16	1
pH (SM 4500 H+ B)	**7.4**	**H5**	1.7		SU			11/16/23 14:51	1
Temperature (SM 4500 H+ B)	**15.8**	**H5 T5**	0.1		Degrees C			11/16/23 14:51	1

Client Sample ID: FC-CCR-MW38R-1123

Lab Sample ID: 550-210594-14

Date Collected: 11/14/23 14:54
Matrix: Water
Date Received: 11/15/23 14:43

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**530**	**D2**	400		mg/L			11/20/23 20:41	200
Fluoride	ND	D2	0.80		mg/L			11/20/23 20:23	2
Sulfate	**12000**	**D2**	400		mg/L			11/20/23 20:41	200

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND	V1	0.0050		mg/L		11/21/23 04:29	11/28/23 19:47	5
Boron	**14**		0.25		mg/L		11/21/23 04:29	11/28/23 19:47	5

Client Sample ID: FC-CCR-MW38R-1123

Lab Sample ID: 550-210594-14

Date Collected: 11/14/23 14:54
Matrix: Water
Date Received: 11/15/23 14:43

Method: EPA 200.7 Rev 4.4 - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**440**		10		mg/L		11/21/23 04:29	11/28/23 19:47	5
Iron	ND	V1	0.50		mg/L		11/21/23 04:29	11/28/23 19:47	5
Magnesium	**1500**		10		mg/L		11/21/23 04:29	11/28/23 19:47	5
Manganese	ND		0.050		mg/L		11/21/23 04:29	11/28/23 19:47	5
Potassium	**43**		2.5		mg/L		11/21/23 04:29	11/28/23 19:47	5
Sodium	**3700**		2.5		mg/L		11/21/23 04:29	11/28/23 19:47	5

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**1.3**		0.25		mg/L		11/22/23 07:45	11/27/23 14:11	5

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.010		mg/L		11/21/23 06:52	11/27/23 18:46	10
Arsenic	**0.0078**		0.0050		mg/L		11/21/23 06:52	11/27/23 18:46	10
Barium	**0.018**		0.0050		mg/L		11/21/23 06:52	11/27/23 18:46	10
Cadmium	ND		0.0010		mg/L		11/21/23 06:52	11/27/23 18:46	10
Chromium	ND		0.010		mg/L		11/21/23 06:52	11/27/23 18:46	10
Cobalt	**0.062**		0.0050		mg/L		11/21/23 06:52	11/27/23 18:46	10
Lead	ND		0.0050		mg/L		11/21/23 06:52	11/27/23 18:46	10
Molybdenum	ND	T5	0.0050		mg/L		11/21/23 06:52	11/27/23 18:46	10
Selenium	**0.058**		0.0050		mg/L		11/21/23 06:52	11/27/23 18:46	10
Thallium	ND		0.0010		mg/L		11/21/23 06:52	11/27/23 18:46	10

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3 (SM 2320B)	**380**		6.0		mg/L			11/21/23 12:53	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**380**		6.0		mg/L			11/21/23 12:53	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			11/21/23 12:53	1
Alkalinity, Phenolphthalein (SM 2320B)	ND		6.0		mg/L			11/21/23 12:53	1
Hydroxide Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			11/21/23 12:53	1
Total Dissolved Solids (SM 2540C)	**18000**		100		mg/L			11/21/23 15:16	1
pH (SM 4500 H+ B)	**7.3**	**H5**	1.7		SU			11/16/23 14:54	1
Temperature (SM 4500 H+ B)	**15.8**	**H5 T5**	0.1		Degrees C			11/16/23 14:54	1

Client Sample ID: FC-CCR-MW56-1123

Lab Sample ID: 550-210594-15

Date Collected: 11/14/23 12:52
Matrix: Water
Date Received: 11/15/23 14:43

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2300**	**D2**	400		mg/L			11/20/23 22:13	200
Fluoride	ND	D2	0.80		mg/L			11/20/23 21:55	2
Sulfate	**19000**	**D2**	400		mg/L			11/20/23 22:13	200

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND	V1	0.0050		mg/L		11/21/23 04:29	11/28/23 19:50	5
Boron	**1.6**		0.25		mg/L		11/21/23 04:29	11/28/23 19:50	5

Client Sample ID: FC-CCR-MW56-1123

Lab Sample ID: 550-210594-15

Date Collected: 11/14/23 12:52
Date Received: 11/15/23 14:43

Matrix: Water

Method: EPA 200.7 Rev 4.4 - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**470**		10		mg/L		11/21/23 04:29	11/28/23 19:50	5
Iron	ND	V1	0.50		mg/L		11/21/23 04:29	11/28/23 19:50	5
Magnesium	**3100**		10		mg/L		11/21/23 04:29	11/28/23 19:50	5
Manganese	ND		0.050		mg/L		11/21/23 04:29	11/28/23 19:50	5
Potassium	**81**		2.5		mg/L		11/21/23 04:29	11/28/23 19:50	5
Sodium	**5700**		25		mg/L		11/21/23 04:29	11/30/23 12:21	50

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**2.0**		0.25		mg/L		11/22/23 07:45	11/27/23 14:13	5

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.010		mg/L		11/21/23 06:52	11/27/23 18:48	10
Arsenic	**0.0074**		0.0050		mg/L		11/21/23 06:52	11/27/23 18:48	10
Barium	**0.017**		0.0050		mg/L		11/21/23 06:52	11/27/23 18:48	10
Cadmium	ND		0.0010		mg/L		11/21/23 06:52	11/27/23 18:48	10
Chromium	ND		0.010		mg/L		11/21/23 06:52	11/27/23 18:48	10
Cobalt	ND		0.0050		mg/L		11/21/23 06:52	11/27/23 18:48	10
Lead	ND		0.0050		mg/L		11/21/23 06:52	11/27/23 18:48	10
Molybdenum	ND	T5	0.0050		mg/L		11/21/23 06:52	11/27/23 18:48	10
Selenium	**0.24**		0.0050		mg/L		11/21/23 06:52	11/27/23 18:48	10
Thallium	**0.0011**		0.0010		mg/L		11/21/23 06:52	11/27/23 18:48	10

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3 (SM 2320B)	**890**		6.0		mg/L			11/21/23 13:02	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**890**		6.0		mg/L			11/21/23 13:02	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			11/21/23 13:02	1
Alkalinity, Phenolphthalein (SM 2320B)	ND		6.0		mg/L			11/21/23 13:02	1
Hydroxide Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			11/21/23 13:02	1
Total Dissolved Solids (SM 2540C)	**30000**		200		mg/L			11/21/23 15:16	1
pH (SM 4500 H+ B)	**7.3**	**H5**	1.7		SU			11/16/23 14:56	1
Temperature (SM 4500 H+ B)	**15.3**	**H5 T5**	0.1		Degrees C			11/16/23 14:56	1

Client Sample ID: FC-CCR-FD05-1123

Lab Sample ID: 550-210594-16

Date Collected: 11/13/23 13:11
Date Received: 11/15/23 14:43

Matrix: Water

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	**2.1**		0.25		mg/L		11/21/23 04:29	11/28/23 19:52	5

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	ND		5.0		ug/L		11/21/23 06:52	11/27/23 18:50	10
Molybdenum	ND	T5	5.0		ug/L		11/21/23 06:52	11/27/23 18:50	10

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-210594-1
SDG: APS Four Corners Power Plant (Other)

Client Sample ID: FC-CCR-MW57-1123

Date Collected: 11/14/23 16:03
Date Received: 11/15/23 14:43

Lab Sample ID: 550-210594-17

Matrix: Water

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1600**	**D2**	400		mg/L			11/20/23 22:50	200
Fluoride	ND	D2	0.80		mg/L			11/20/23 22:32	2
Sulfate	**20000**	**D2**	1000		mg/L			11/30/23 01:36	500

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND	V1	0.0050		mg/L		11/21/23 04:29	11/28/23 19:55	5
Boron	**2.4**		0.25		mg/L		11/21/23 04:29	11/28/23 19:55	5
Calcium	**480**		10		mg/L		11/21/23 04:29	11/28/23 19:55	5
Iron	**6.0**	**V1**	0.50		mg/L		11/21/23 04:29	11/28/23 19:55	5
Magnesium	**2700**		10		mg/L		11/21/23 04:29	11/28/23 19:55	5
Manganese	**2.0**		0.050		mg/L		11/21/23 04:29	11/28/23 19:55	5
Potassium	**95**		2.5		mg/L		11/21/23 04:29	11/28/23 19:55	5
Sodium	**7000**		25		mg/L		11/21/23 04:29	11/30/23 12:24	50

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**2.8**		0.25		mg/L		11/22/23 07:45	11/27/23 14:16	5

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.010		mg/L		11/21/23 06:52	11/27/23 18:53	10
Arsenic	**0.0093**		0.0050		mg/L		11/21/23 06:52	11/27/23 18:53	10
Barium	**0.032**		0.0050		mg/L		11/21/23 06:52	11/27/23 18:53	10
Cadmium	ND		0.0010		mg/L		11/21/23 06:52	11/27/23 18:53	10
Chromium	ND		0.010		mg/L		11/21/23 06:52	11/27/23 18:53	10
Cobalt	**0.019**		0.0050		mg/L		11/21/23 06:52	11/27/23 18:53	10
Lead	ND		0.0050		mg/L		11/21/23 06:52	11/27/23 18:53	10
Molybdenum	**0.0064**	**T5**	0.0050		mg/L		11/21/23 06:52	11/27/23 18:53	10
Selenium	**0.0060**		0.0050		mg/L		11/21/23 06:52	11/27/23 18:53	10
Thallium	ND		0.0010		mg/L		11/21/23 06:52	11/27/23 18:53	10

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3 (SM 2320B)	**1000**		6.0		mg/L			11/21/23 13:17	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**1000**		6.0		mg/L			11/21/23 13:17	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			11/21/23 13:17	1
Alkalinity, Phenolphthalein (SM 2320B)	ND		6.0		mg/L			11/21/23 13:17	1
Hydroxide Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			11/21/23 13:17	1
Total Dissolved Solids (SM 2540C)	**34000**		200		mg/L			11/21/23 15:16	1
pH (SM 4500 H+ B)	**7.3**	**H5**	1.7		SU			11/16/23 14:57	1
Temperature (SM 4500 H+ B)	**15.3**	**H5 T5**	0.1		Degrees C			11/16/23 14:57	1

Client Sample ID: FC-CCR-MW77S-1123

Lab Sample ID: 550-210594-18

Date Collected: 11/10/23 11:00
Matrix: Water
Date Received: 11/15/23 14:43

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	**10**		0.25		mg/L		11/21/23 04:29	11/28/23 20:04	5

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	**6.9**		5.0		ug/L		11/21/23 06:52	11/27/23 19:01	10
Molybdenum	**17**	**T5**	5.0		ug/L		11/21/23 06:52	11/27/23 19:01	10

Client Sample ID: FC-CCR-MW78S-1123

Lab Sample ID: 550-210594-19

Date Collected: 11/10/23 11:45
Matrix: Water
Date Received: 11/15/23 14:43

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	**1.6**		0.25		mg/L		11/21/23 04:29	11/28/23 20:07	5

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	ND		5.0		ug/L		11/21/23 06:52	11/27/23 19:03	10
Molybdenum	**7.4**	**T5**	5.0		ug/L		11/21/23 06:52	11/27/23 19:03	10

Client Sample ID: FC-CCR-MW79S-1123

Lab Sample ID: 550-210594-20

Date Collected: 11/10/23 13:41
Matrix: Water
Date Received: 11/15/23 14:43

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	**8.3**		0.25		mg/L		11/21/23 04:29	11/28/23 20:09	5

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	ND		5.0		ug/L		11/21/23 06:52	11/27/23 19:05	10
Molybdenum	ND	T5	5.0		ug/L		11/21/23 06:52	11/27/23 19:05	10

Client Sample ID: FC-CCR-MW81-1123

Lab Sample ID: 550-210594-21

Date Collected: 11/10/23 12:28
Matrix: Water
Date Received: 11/15/23 14:43

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	**50**	**M3 R4**	0.050		mg/L		11/21/23 04:55	11/29/23 13:51	1

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	**22**		5.0		ug/L		11/21/23 06:52	11/27/23 18:34	10
Molybdenum	ND	T5	5.0		ug/L		11/21/23 06:52	11/27/23 18:34	10

Client Sample ID: FC-CCR-MW82S-1123

Lab Sample ID: 550-210594-22

Date Collected: 11/10/23 15:57
Matrix: Water
Date Received: 11/15/23 14:43

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**610**	**D2**	400		mg/L			11/20/23 23:27	200
Fluoride	ND	D2	0.80		mg/L			11/20/23 23:09	2
Sulfate	**5700**	**D2**	400		mg/L			11/20/23 23:27	200

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND	V1	0.0050		mg/L		11/21/23 04:29	11/28/23 20:12	5
Boron	**68**		0.25		mg/L		11/21/23 04:29	11/28/23 20:12	5
Calcium	**480**		10		mg/L		11/21/23 04:29	11/28/23 20:12	5
Iron	ND	V1	0.50		mg/L		11/21/23 04:29	11/28/23 20:12	5
Magnesium	**790**		10		mg/L		11/21/23 04:29	11/28/23 20:12	5
Manganese	**2.0**		0.050		mg/L		11/21/23 04:29	11/28/23 20:12	5
Potassium	**25**		2.5		mg/L		11/21/23 04:29	11/28/23 20:12	5
Sodium	**1600**		2.5		mg/L		11/21/23 04:29	11/28/23 20:12	5

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	**100**		5.0		ug/L		11/21/23 06:52	11/27/23 19:07	10
Molybdenum	ND	T5	5.0		ug/L		11/21/23 06:52	11/27/23 19:07	10

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3 (SM 2320B)	**260**		6.0		mg/L			11/16/23 10:31	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**260**		6.0		mg/L			11/16/23 10:31	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			11/16/23 10:31	1
Alkalinity, Phenolphthalein (SM 2320B)	ND		6.0		mg/L			11/16/23 10:31	1
Hydroxide Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			11/16/23 10:31	1
Total Dissolved Solids (SM 2540C)	**9800**		100		mg/L			11/17/23 11:54	1
pH (SM 4500 H+ B)	**7.3**	**H5**	1.7		SU			11/16/23 14:58	1
Temperature (SM 4500 H+ B)	**15.5**	**H5 T5**	0.1		Degrees C			11/16/23 14:58	1

Client Sample ID: FC-CCR-FD06-1123

Lab Sample ID: 550-210594-23

Date Collected: 11/10/23 16:20
Matrix: Water
Date Received: 11/15/23 14:43

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	**26**		0.25		mg/L		11/21/23 04:29	11/28/23 20:15	5

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	ND		5.0		ug/L		11/21/23 06:52	11/27/23 19:09	10
Molybdenum	ND	T5	5.0		ug/L		11/21/23 06:52	11/27/23 19:09	10

Client Sample ID: FC-CCR-FD07-1123

Lab Sample ID: 550-210594-24

Date Collected: 11/10/23 13:59
Matrix: Water
Date Received: 11/15/23 14:43

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	**47**		0.25		mg/L		11/21/23 04:29	11/28/23 20:18	5

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	**21**		5.0		ug/L		11/21/23 06:52	11/27/23 19:11	10
Molybdenum	ND	T5	5.0		ug/L		11/21/23 06:52	11/27/23 19:11	10

Client Sample ID: FC-CCR-FD02-1123

Lab Sample ID: 550-210594-25

Date Collected: 11/10/23 18:18
Matrix: Water
Date Received: 11/15/23 14:43

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**620**	**D2**	400		mg/L			11/21/23 00:04	200
Fluoride	ND	D2	0.80		mg/L			11/20/23 23:45	2
Sulfate	**5700**	**D2**	400		mg/L			11/21/23 00:04	200

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND	V1	0.0050		mg/L		11/21/23 04:29	11/28/23 20:21	5
Boron	**65**		0.25		mg/L		11/21/23 04:29	11/28/23 20:21	5
Calcium	**460**		10		mg/L		11/21/23 04:29	11/28/23 20:21	5
Iron	ND	V1	0.50		mg/L		11/21/23 04:29	11/28/23 20:21	5
Magnesium	**750**		10		mg/L		11/21/23 04:29	11/28/23 20:21	5
Manganese	**1.9**		0.050		mg/L		11/21/23 04:29	11/28/23 20:21	5
Potassium	**24**		2.5		mg/L		11/21/23 04:29	11/28/23 20:21	5
Sodium	**1500**		2.5		mg/L		11/21/23 04:29	11/28/23 20:21	5

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	**110**		5.0		ug/L		11/21/23 06:52	11/27/23 19:13	10
Molybdenum	ND	T5	5.0		ug/L		11/21/23 06:52	11/27/23 19:13	10

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3 (SM 2320B)	**260**		6.0		mg/L			11/16/23 10:39	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**260**		6.0		mg/L			11/16/23 10:39	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			11/16/23 10:39	1
Alkalinity, Phenolphthalein (SM 2320B)	ND		6.0		mg/L			11/16/23 10:39	1
Hydroxide Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			11/16/23 10:39	1
Total Dissolved Solids (SM 2540C)	**9900**		100		mg/L			11/17/23 11:54	1
pH (SM 4500 H+ B)	**7.2**	**H5**	1.7		SU			11/16/23 14:59	1
Temperature (SM 4500 H+ B)	**15.5**	**H5 T5**	0.1		Degrees C			11/16/23 14:59	1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 550-311405/2
Matrix: Water
Analysis Batch: 311405

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		2.0		mg/L			11/18/23 18:15	1
Fluoride	ND		0.40		mg/L			11/18/23 18:15	1
Sulfate	ND		2.0		mg/L			11/18/23 18:15	1

Lab Sample ID: LCS 550-311405/5
Matrix: Water
Analysis Batch: 311405

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			20.0	21.0		mg/L		105	90 - 110		
Fluoride			4.00	4.32		mg/L		108	90 - 110		
Sulfate			20.0	21.2		mg/L		106	90 - 110		

Lab Sample ID: LCSD 550-311405/6
Matrix: Water
Analysis Batch: 311405

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			20.0	21.1		mg/L		105	90 - 110	0	20
Fluoride			4.00	4.34		mg/L		109	90 - 110	0	20
Sulfate			20.0	21.3		mg/L		106	90 - 110	0	20

Lab Sample ID: 550-210592-I-4 MS ^10
Matrix: Water
Analysis Batch: 311405

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	140	M2	200	140	M2	mg/L		1	80 - 120		
Fluoride	ND	M2	40.0	ND	M2	mg/L		-0.2	80 - 120		
Sulfate	170	M2	200	176	M2	mg/L		1	80 - 120		

Lab Sample ID: 550-210592-I-4 MSD ^10
Matrix: Water
Analysis Batch: 311405

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	140	M2	200	140	M2	mg/L		1	80 - 120	0	20
Fluoride	ND	M2	40.0	ND	M2	mg/L		-0.1	80 - 120	2	20
Sulfate	170	M2	200	177	M2	mg/L		2	80 - 120	1	20

Lab Sample ID: MB 550-311427/2
Matrix: Water
Analysis Batch: 311427

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		2.0		mg/L			11/20/23 09:20	1
Fluoride	ND		0.40		mg/L			11/20/23 09:20	1
Sulfate	ND		2.0		mg/L			11/20/23 09:20	1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 550-311427/5
Matrix: Water
Analysis Batch: 311427

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			20.0	21.1		mg/L		105	90 - 110		
Fluoride			4.00	4.24		mg/L		106	90 - 110		
Sulfate			20.0	21.2		mg/L		106	90 - 110		

Lab Sample ID: LCSD 550-311427/6
Matrix: Water
Analysis Batch: 311427

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			20.0	21.0		mg/L		105	90 - 110	0	20
Fluoride			4.00	4.24		mg/L		106	90 - 110	0	20
Sulfate			20.0	21.2		mg/L		106	90 - 110	0	20

Lab Sample ID: 550-210532-B-4 MS ^50
Matrix: Water
Analysis Batch: 311427

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	ND		1000	1040		mg/L		104	80 - 120		
Fluoride	ND		200	215		mg/L		102	80 - 120		
Sulfate	1300		1000	2300		mg/L		101	80 - 120		

Lab Sample ID: 550-210532-B-4 MSD ^50
Matrix: Water
Analysis Batch: 311427

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	ND		1000	1040		mg/L		104	80 - 120	0	20
Fluoride	ND		200	217		mg/L		103	80 - 120	1	20
Sulfate	1300		1000	2300		mg/L		101	80 - 120	0	20

Lab Sample ID: MB 550-311928/2
Matrix: Water
Analysis Batch: 311928

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		2.0		mg/L			11/29/23 13:57	1
Fluoride	ND		0.40		mg/L			11/29/23 13:57	1
Sulfate	ND		2.0		mg/L			11/29/23 13:57	1

Lab Sample ID: LCS 550-311928/5
Matrix: Water
Analysis Batch: 311928

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			20.0	19.6		mg/L		98	90 - 110		
Fluoride			4.00	4.16		mg/L		104	90 - 110		
Sulfate			20.0	20.7		mg/L		104	90 - 110		

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 550-311928/6
Matrix: Water
Analysis Batch: 311928

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			20.0	19.5		mg/L		98	90 - 110	0	20
Fluoride			4.00	4.17		mg/L		104	90 - 110	0	20
Sulfate			20.0	20.7		mg/L		103	90 - 110	0	20

Lab Sample ID: 550-211048-A-1 MS
Matrix: Water
Analysis Batch: 311928

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	470	E2 M3	20.0	469	E2 M3	mg/L		-19	80 - 120		
Fluoride	ND		4.00	4.45		mg/L		102	80 - 120		
Sulfate	200	M3	20.0	207	E2 M3	mg/L		57	80 - 120		

Lab Sample ID: 550-211048-A-1 MSD
Matrix: Water
Analysis Batch: 311928

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	470	E2 M3	20.0	468	E2 M3	mg/L		-22	80 - 120	0	20
Fluoride	ND		4.00	4.51		mg/L		103	80 - 120	1	20
Sulfate	200	M3	20.0	208	E2 M3	mg/L		58	80 - 120	0	20

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 550-311483/1-A
Matrix: Water
Analysis Batch: 311843

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 311483

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND	V1	0.0010		mg/L		11/21/23 04:29	11/28/23 19:16	1
Calcium	ND		2.0		mg/L		11/21/23 04:29	11/28/23 19:16	1
Iron	ND	V1	0.10		mg/L		11/21/23 04:29	11/28/23 19:16	1
Magnesium	ND		2.0		mg/L		11/21/23 04:29	11/28/23 19:16	1
Manganese	ND		0.010		mg/L		11/21/23 04:29	11/28/23 19:16	1
Potassium	ND		0.50		mg/L		11/21/23 04:29	11/28/23 19:16	1
Sodium	ND		0.50		mg/L		11/21/23 04:29	11/28/23 19:16	1
Boron	ND		0.050		mg/L		11/21/23 04:29	11/28/23 19:16	1

Lab Sample ID: LCS 550-311483/2-A
Matrix: Water
Analysis Batch: 311843

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 311483

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Beryllium			1.00	1.18	V1	mg/L		118	85 - 115		
Calcium			21.0	22.6		mg/L		108	85 - 115		
Iron			1.00	1.23	V1	mg/L		123	85 - 115		
Magnesium			21.0	23.9		mg/L		114	85 - 115		
Manganese			1.00	1.08		mg/L		108	85 - 115		
Potassium			20.0	22.7		mg/L		113	85 - 115		
Sodium			20.0	23.4		mg/L		117	85 - 115		

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: LCS 550-311483/2-A
Matrix: Water
Analysis Batch: 311843

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 311483

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Boron			1.00	1.11		mg/L		111	85 - 115		

Lab Sample ID: LCSD 550-311483/3-A
Matrix: Water
Analysis Batch: 311843

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 311483

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Beryllium			1.00	1.16	V1	mg/L		116	85 - 115	2	20
Calcium			21.0	22.2		mg/L		106	85 - 115	2	20
Iron			1.00	1.13	V1	mg/L		113	85 - 115	8	20
Magnesium			21.0	23.5		mg/L		112	85 - 115	2	20
Manganese			1.00	1.08		mg/L		108	85 - 115	0	20
Potassium			20.0	22.3		mg/L		111	85 - 115	2	20
Sodium			20.0	23.0		mg/L		115	85 - 115	2	20
Boron			1.00	1.11		mg/L		111	85 - 115	0	20

Lab Sample ID: 550-210594-12 MS
Matrix: Water
Analysis Batch: 311843

Client Sample ID: FC-CCR-MW30-1123
Prep Type: Total/NA
Prep Batch: 311483

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Boron	25	M3	1.00	5.35	M3	mg/L		-2012	70 - 130		

Lab Sample ID: 550-210594-12 MSD
Matrix: Water
Analysis Batch: 311843

Client Sample ID: FC-CCR-MW30-1123
Prep Type: Total/NA
Prep Batch: 311483

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron	25	M3	1.00	5.39	M3	mg/L		-2008	70 - 130	1	20

Lab Sample ID: MB 550-311484/1-A
Matrix: Water
Analysis Batch: 311842

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 311484

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		0.0010		mg/L		11/21/23 04:37	11/28/23 17:56	1
Calcium	ND		2.0		mg/L		11/21/23 04:37	11/28/23 17:56	1
Iron	ND		0.10		mg/L		11/21/23 04:37	11/28/23 17:56	1
Manganese	ND		0.010		mg/L		11/21/23 04:37	11/28/23 17:56	1

Lab Sample ID: MB 550-311484/1-A
Matrix: Water
Analysis Batch: 311929

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 311484

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Magnesium	ND		2.0		mg/L		11/21/23 04:37	11/29/23 14:55	1
Potassium	ND		0.50		mg/L		11/21/23 04:37	11/29/23 14:55	1
Sodium	ND		0.50		mg/L		11/21/23 04:37	11/29/23 14:55	1
Boron	ND		0.050		mg/L		11/21/23 04:37	11/29/23 14:55	1

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: LCS 550-311484/2-A
Matrix: Water
Analysis Batch: 311842

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 311484

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Beryllium	1.00	1.22		mg/L		122	85 - 115
Calcium	21.0	23.2		mg/L		111	85 - 115
Iron	1.00	1.20		mg/L		120	85 - 115
Manganese	1.00	1.14		mg/L		114	85 - 115

Lab Sample ID: LCS 550-311484/2-A
Matrix: Water
Analysis Batch: 311929

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 311484

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Magnesium	21.0	19.7		mg/L		94	85 - 115
Potassium	20.0	18.5		mg/L		92	85 - 115
Sodium	20.0	18.4		mg/L		92	85 - 115
Boron	1.00	0.944		mg/L		94	85 - 115

Lab Sample ID: LCSD 550-311484/3-A
Matrix: Water
Analysis Batch: 311842

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 311484

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Beryllium	1.00	1.16		mg/L		116	85 - 115	5	20
Calcium	21.0	22.2		mg/L		106	85 - 115	5	20
Iron	1.00	1.15		mg/L		115	85 - 115	5	20
Manganese	1.00	1.11		mg/L		111	85 - 115	3	20

Lab Sample ID: LCSD 550-311484/3-A
Matrix: Water
Analysis Batch: 311929

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 311484

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Magnesium	21.0	20.3		mg/L		96	85 - 115	3	20
Potassium	20.0	18.9		mg/L		94	85 - 115	2	20
Sodium	20.0	18.8		mg/L		94	85 - 115	2	20
Boron	1.00	0.977		mg/L		98	85 - 115	3	20

Lab Sample ID: 550-210594-1 MS
Matrix: Water
Analysis Batch: 311929

Client Sample ID: FC-CCR-DMX01-1123
Prep Type: Total/NA
Prep Batch: 311484

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	90	M3	1.00	82.4	M3	mg/L		-801	70 - 130

Lab Sample ID: 550-210594-1 MSD
Matrix: Water
Analysis Batch: 311929

Client Sample ID: FC-CCR-DMX01-1123
Prep Type: Total/NA
Prep Batch: 311484

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron	90	M3	1.00	88.5	M3	mg/L		-187	70 - 130	7	20

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: MB 550-311485/1-A
Matrix: Water
Analysis Batch: 311904

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 311485

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.050		mg/L		11/21/23 04:55	11/29/23 13:37	1

Lab Sample ID: LCS 550-311485/2-A
Matrix: Water
Analysis Batch: 311904

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 311485

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Boron			1.00	1.09		mg/L		109	85 - 115		

Lab Sample ID: LCSD 550-311485/3-A
Matrix: Water
Analysis Batch: 311904

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 311485

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron			1.00	1.07		mg/L		107	85 - 115	2	20

Lab Sample ID: 550-210594-21 MS
Matrix: Water
Analysis Batch: 311904

Client Sample ID: FC-CCR-MW81-1123
Prep Type: Total/NA
Prep Batch: 311485

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Boron	50	M3 R4	1.00	0.488	M3	mg/L		-4972	70 - 130		

Lab Sample ID: 550-210594-21 MSD
Matrix: Water
Analysis Batch: 311904

Client Sample ID: FC-CCR-MW81-1123
Prep Type: Total/NA
Prep Batch: 311485

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron	50	M3 R4	1.00	48.9	M3 R4	mg/L		-136	70 - 130	196	20

Lab Sample ID: MB 570-386253/1-A
Matrix: Water
Analysis Batch: 386782

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 386253

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	ND		0.050		mg/L		11/22/23 07:45	11/22/23 22:00	1

Lab Sample ID: LCS 570-386253/2-A
Matrix: Water
Analysis Batch: 386782

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 386253

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Lithium			0.500	0.512		mg/L		102	85 - 115		

Lab Sample ID: LCSD 570-386253/3-A
Matrix: Water
Analysis Batch: 386782

Client Sample ID: Lab Control Sample Dup
Prep Type: Total Recoverable
Prep Batch: 386253

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Lithium			0.500	0.526		mg/L		105	85 - 115	3	20

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: 550-210594-8 MS
Matrix: Water
Analysis Batch: 386978

Client Sample ID: FC-CCR-MW18-1123
Prep Type: Total Recoverable
Prep Batch: 386253

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Lithium	2.5		0.500	3.01	M3	mg/L		96	80 - 120

Lab Sample ID: 550-210594-8 MSD
Matrix: Water
Analysis Batch: 386978

Client Sample ID: FC-CCR-MW18-1123
Prep Type: Total Recoverable
Prep Batch: 386253

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Lithium	2.5		0.500	2.96	M3	mg/L		86	80 - 120	2	20

Method: 200.8 LL - Metals (ICP/MS)

Lab Sample ID: MB 550-311486/1-A
Matrix: Water
Analysis Batch: 311752

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 311486

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.0010		mg/L		11/21/23 06:52	11/27/23 18:20	1
Arsenic	ND		0.00050		mg/L		11/21/23 06:52	11/27/23 18:20	1
Barium	ND		0.00050		mg/L		11/21/23 06:52	11/27/23 18:20	1
Cadmium	ND		0.00010		mg/L		11/21/23 06:52	11/27/23 18:20	1
Chromium	ND		0.0010		mg/L		11/21/23 06:52	11/27/23 18:20	1
Cobalt	ND		0.50		ug/L		11/21/23 06:52	11/27/23 18:20	1
Lead	ND		0.00050		mg/L		11/21/23 06:52	11/27/23 18:20	1
Molybdenum	ND		0.50		ug/L		11/21/23 06:52	11/27/23 18:20	1
Selenium	ND		0.00050		mg/L		11/21/23 06:52	11/27/23 18:20	1
Thallium	ND		0.00010		mg/L		11/21/23 06:52	11/27/23 18:20	1

Lab Sample ID: LCS 550-311486/2-A
Matrix: Water
Analysis Batch: 311752

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 311486

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony			0.100	0.106		mg/L		106	85 - 115
Arsenic			0.100	0.104		mg/L		104	85 - 115
Barium			0.100	0.107		mg/L		107	85 - 115
Cadmium			0.100	0.107		mg/L		107	85 - 115
Chromium			0.100	0.0999		mg/L		100	85 - 115
Cobalt			100	106		ug/L		106	85 - 115
Lead			0.100	0.106		mg/L		106	85 - 115
Molybdenum			100	108		ug/L		108	85 - 115
Selenium			0.100	0.0959		mg/L		96	85 - 115
Thallium			0.100	0.107		mg/L		107	85 - 115

Lab Sample ID: LCSD 550-311486/3-A
Matrix: Water
Analysis Batch: 311752

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 311486

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony			0.100	0.105		mg/L		105	85 - 115	1	20
Arsenic			0.100	0.104		mg/L		104	85 - 115	0	20

Method: 200.8 LL - Metals (ICP/MS) (Continued)

Lab Sample ID: LCSD 550-311486/3-A
Matrix: Water
Analysis Batch: 311752

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 311486

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Barium			0.100	0.108		mg/L		108	85 - 115	0	20
Cadmium			0.100	0.104		mg/L		104	85 - 115	2	20
Chromium			0.100	0.110		mg/L		110	85 - 115	10	20
Cobalt			100	107		ug/L		107	85 - 115	1	20
Lead			0.100	0.106		mg/L		106	85 - 115	0	20
Molybdenum			100	105		ug/L		105	85 - 115	3	20
Selenium			0.100	0.0957		mg/L		96	85 - 115	0	20
Thallium			0.100	0.106		mg/L		106	85 - 115	1	20

Lab Sample ID: 550-210594-21 MS
Matrix: Water
Analysis Batch: 311752

Client Sample ID: FC-CCR-MW81-1123
Prep Type: Total/NA
Prep Batch: 311486

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Cobalt	22		100	122		ug/L		100	70 - 130
Molybdenum	ND	T5	100	111		ug/L		108	70 - 130

Lab Sample ID: 550-210594-21 MSD
Matrix: Water
Analysis Batch: 311752

Client Sample ID: FC-CCR-MW81-1123
Prep Type: Total/NA
Prep Batch: 311486

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cobalt	22		100	119		ug/L		97	70 - 130	2	20
Molybdenum	ND	T5	100	108		ug/L		106	70 - 130	2	20

Lab Sample ID: MB 550-311487/1-A
Matrix: Water
Analysis Batch: 311751

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 311487

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.0010		mg/L		11/21/23 06:58	11/27/23 17:13	1
Arsenic	ND		0.00050		mg/L		11/21/23 06:58	11/27/23 17:13	1
Barium	ND		0.00050		mg/L		11/21/23 06:58	11/27/23 17:13	1
Cadmium	ND		0.00010		mg/L		11/21/23 06:58	11/27/23 17:13	1
Chromium	ND		0.0010		mg/L		11/21/23 06:58	11/27/23 17:13	1
Cobalt	ND		0.50		ug/L		11/21/23 06:58	11/27/23 17:13	1
Lead	ND		0.00050		mg/L		11/21/23 06:58	11/27/23 17:13	1
Molybdenum	ND		0.50		ug/L		11/21/23 06:58	11/27/23 17:13	1
Selenium	ND		0.00050		mg/L		11/21/23 06:58	11/27/23 17:13	1
Thallium	ND		0.00010		mg/L		11/21/23 06:58	11/27/23 17:13	1

Lab Sample ID: LCS 550-311487/2-A
Matrix: Water
Analysis Batch: 311751

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 311487

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony			0.100	0.100		mg/L		100	85 - 115
Arsenic			0.100	0.101		mg/L		101	85 - 115
Barium			0.100	0.110		mg/L		110	85 - 115
Cadmium			0.100	0.104		mg/L		104	85 - 115

Method: 200.8 LL - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 550-311487/2-A
Matrix: Water
Analysis Batch: 311751

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 311487

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chromium			0.100	0.101		mg/L		101	85 - 115		
Cobalt			100	107		ug/L		107	85 - 115		
Lead			0.100	0.102		mg/L		102	85 - 115		
Molybdenum			100	108		ug/L		108	85 - 115		
Selenium			0.100	0.0951		mg/L		95	85 - 115		
Thallium			0.100	0.104		mg/L		104	85 - 115		

Lab Sample ID: LCSD 550-311487/3-A
Matrix: Water
Analysis Batch: 311751

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 311487

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony			0.100	0.105		mg/L		105	85 - 115	4	20
Arsenic			0.100	0.102		mg/L		102	85 - 115	1	20
Barium			0.100	0.113		mg/L		113	85 - 115	3	20
Cadmium			0.100	0.105		mg/L		105	85 - 115	1	20
Chromium			0.100	0.103		mg/L		103	85 - 115	1	20
Cobalt			100	104		ug/L		104	85 - 115	2	20
Lead			0.100	0.106		mg/L		106	85 - 115	5	20
Molybdenum			100	110		ug/L		110	85 - 115	2	20
Selenium			0.100	0.0962		mg/L		96	85 - 115	1	20
Thallium			0.100	0.107		mg/L		107	85 - 115	3	20

Lab Sample ID: 550-210594-12 MS
Matrix: Water
Analysis Batch: 311751

Client Sample ID: FC-CCR-MW30-1123
Prep Type: Total/NA
Prep Batch: 311487

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Cobalt	ND		100	108		ug/L		107	70 - 130		
Molybdenum	ND	T5	100	115		ug/L		111	70 - 130		

Lab Sample ID: 550-210594-12 MSD
Matrix: Water
Analysis Batch: 311751

Client Sample ID: FC-CCR-MW30-1123
Prep Type: Total/NA
Prep Batch: 311487

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cobalt	ND		100	105		ug/L		104	70 - 130	3	20
Molybdenum	ND	T5	100	116		ug/L		111	70 - 130	0	20

Lab Sample ID: MB 550-311488/1-A
Matrix: Water
Analysis Batch: 311753

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 311488

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	ND		0.50		ug/L		11/21/23 07:04	11/27/23 19:25	1
Molybdenum	ND		0.50		ug/L		11/21/23 07:04	11/27/23 19:25	1

Method: 200.8 LL - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 550-311488/2-A
Matrix: Water
Analysis Batch: 311753

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 311488

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Cobalt			100	108		ug/L		108	85 - 115		
Molybdenum			100	111		ug/L		111	85 - 115		

Lab Sample ID: LCSD 550-311488/3-A
Matrix: Water
Analysis Batch: 311753

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 311488

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cobalt			100	111		ug/L		111	85 - 115	2	20
Molybdenum			100	111		ug/L		111	85 - 115	0	20

Lab Sample ID: MB 550-311515/1-A
Matrix: Water
Analysis Batch: 311750

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 311515

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	ND		0.50		ug/L		11/21/23 10:30	11/27/23 16:49	1
Molybdenum	ND		0.50		ug/L		11/21/23 10:30	11/27/23 16:49	1

Lab Sample ID: LCS 550-311515/2-A
Matrix: Water
Analysis Batch: 311750

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 311515

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Cobalt			100	104		ug/L		104	85 - 115		
Molybdenum			100	105		ug/L		105	85 - 115		

Lab Sample ID: LCSD 550-311515/3-A
Matrix: Water
Analysis Batch: 311750

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 311515

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cobalt			100	105		ug/L		105	85 - 115	1	20
Molybdenum			100	101		ug/L		101	85 - 115	3	20

Lab Sample ID: 550-210594-1 MS
Matrix: Water
Analysis Batch: 311750

Client Sample ID: FC-CCR-DMX01-1123
Prep Type: Total/NA
Prep Batch: 311515

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Cobalt	ND		100	106		ug/L		106	70 - 130		
Molybdenum	23	T5	100	131		ug/L		108	70 - 130		

Lab Sample ID: 550-210594-1 MSD
Matrix: Water
Analysis Batch: 311750

Client Sample ID: FC-CCR-DMX01-1123
Prep Type: Total/NA
Prep Batch: 311515

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cobalt	ND		100	104		ug/L		104	70 - 130	3	20
Molybdenum	23	T5	100	128		ug/L		105	70 - 130	2	20

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 550-311394/4
Matrix: Water
Analysis Batch: 311394

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3	ND		6.0		mg/L			11/16/23 09:16	1
Bicarbonate Alkalinity as CaCO3	ND		6.0		mg/L			11/16/23 09:16	1
Carbonate Alkalinity as CaCO3	ND		6.0		mg/L			11/16/23 09:16	1
Alkalinity, Phenolphthalein	ND		6.0		mg/L			11/16/23 09:16	1
Hydroxide Alkalinity as CaCO3	ND		6.0		mg/L			11/16/23 09:16	1

Lab Sample ID: LCS 550-311394/3
Matrix: Water
Analysis Batch: 311394

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Alkalinity as CaCO3			250	242		mg/L		97	90 - 110		

Lab Sample ID: LCSD 550-311394/16
Matrix: Water
Analysis Batch: 311394

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Alkalinity as CaCO3			250	241		mg/L		97	90 - 110	0	20

Lab Sample ID: 550-210545-F-1 DU
Matrix: Water
Analysis Batch: 311394

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Alkalinity as CaCO3	91			91.0		mg/L				0.1	20
Bicarbonate Alkalinity as CaCO3	91			91.0		mg/L				0.1	20
Carbonate Alkalinity as CaCO3	ND			ND		mg/L				NC	20
Alkalinity, Phenolphthalein	ND			ND		mg/L				NC	20
Hydroxide Alkalinity as CaCO3	ND			ND		mg/L				NC	20

Lab Sample ID: MB 550-311562/4
Matrix: Water
Analysis Batch: 311562

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3	ND		6.0		mg/L			11/21/23 09:02	1
Bicarbonate Alkalinity as CaCO3	ND		6.0		mg/L			11/21/23 09:02	1
Carbonate Alkalinity as CaCO3	ND		6.0		mg/L			11/21/23 09:02	1
Alkalinity, Phenolphthalein	ND		6.0		mg/L			11/21/23 09:02	1
Hydroxide Alkalinity as CaCO3	ND		6.0		mg/L			11/21/23 09:02	1

Lab Sample ID: LCS 550-311562/3
Matrix: Water
Analysis Batch: 311562

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Alkalinity as CaCO3			250	244		mg/L		98	90 - 110		

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: LCSD 550-311562/10
Matrix: Water
Analysis Batch: 311562

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Alkalinity as CaCO3			250	242		mg/L		97	90 - 110	1	20

Lab Sample ID: 550-210594-5 DU
Matrix: Water
Analysis Batch: 311562

Client Sample ID: FC-CCR-MW06R-1123
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Alkalinity as CaCO3	470			468		mg/L				0.1	20
Bicarbonate Alkalinity as CaCO3	470			468		mg/L				0.1	20
Carbonate Alkalinity as CaCO3	ND			ND		mg/L				NC	20
Alkalinity, Phenolphthalein	ND			ND		mg/L				NC	20
Hydroxide Alkalinity as CaCO3	ND			ND		mg/L				NC	20

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 550-311341/1
Matrix: Water
Analysis Batch: 311341

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		20		mg/L			11/17/23 11:54	1

Lab Sample ID: LCS 550-311341/2
Matrix: Water
Analysis Batch: 311341

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Dissolved Solids			1000	990		mg/L		99	90 - 110		

Lab Sample ID: LCSD 550-311341/3
Matrix: Water
Analysis Batch: 311341

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Dissolved Solids			1000	994		mg/L		99	90 - 110	0	10

Lab Sample ID: 550-210497-A-1 DU
Matrix: Water
Analysis Batch: 311341

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	1400			1370		mg/L				0.9	10

Lab Sample ID: MB 550-311443/1
Matrix: Water
Analysis Batch: 311443

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		20		mg/L			11/20/23 12:18	1

Method: SM 2540C - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: LCS 550-311443/2
Matrix: Water
Analysis Batch: 311443

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Dissolved Solids			1000	994		mg/L		99	90 - 110		

Lab Sample ID: LCSD 550-311443/3
Matrix: Water
Analysis Batch: 311443

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Dissolved Solids			1000	982		mg/L		98	90 - 110	1	10

Lab Sample ID: 550-210523-B-3 DU
Matrix: Water
Analysis Batch: 311443

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	300			302		mg/L				0.7	10

Lab Sample ID: MB 550-311540/1
Matrix: Water
Analysis Batch: 311540

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		20		mg/L			11/21/23 12:25	1

Lab Sample ID: LCS 550-311540/2
Matrix: Water
Analysis Batch: 311540

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Dissolved Solids			1000	1010		mg/L		101	90 - 110		

Lab Sample ID: LCSD 550-311540/3
Matrix: Water
Analysis Batch: 311540

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Dissolved Solids			1000	996		mg/L		100	90 - 110	1	10

Lab Sample ID: 550-210554-B-9 DU
Matrix: Water
Analysis Batch: 311540

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	2400			2400		mg/L				1	10

Lab Sample ID: MB 550-311555/1
Matrix: Water
Analysis Batch: 311555

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		20		mg/L			11/21/23 15:16	1

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: LCS 550-311555/2
Matrix: Water
Analysis Batch: 311555

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Dissolved Solids			1000	968		mg/L		97	90 - 110		

Lab Sample ID: LCSD 550-311555/3
Matrix: Water
Analysis Batch: 311555

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Dissolved Solids			1000	1010		mg/L		101	90 - 110	5	10

Lab Sample ID: 550-210594-13 DU
Matrix: Water
Analysis Batch: 311555

Client Sample ID: FC-CCR-MW36R-1123
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	6500			6470		mg/L				0.5	10

Lab Sample ID: MB 550-311666/1
Matrix: Water
Analysis Batch: 311666

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		20		mg/L			11/22/23 18:27	1

Lab Sample ID: LCS 550-311666/2
Matrix: Water
Analysis Batch: 311666

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Dissolved Solids			1000	920		mg/L		92	90 - 110		

Lab Sample ID: LCSD 550-311666/3
Matrix: Water
Analysis Batch: 311666

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Dissolved Solids			1000	924		mg/L		92	90 - 110	0	10

Lab Sample ID: 550-210673-F-2 DU
Matrix: Water
Analysis Batch: 311666

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	160			154		mg/L				NC	10

Method: SM 4500 H+ B - pH

Lab Sample ID: LCSSRM 550-311288/37
Matrix: Water
Analysis Batch: 311288

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
pH	7.00	7.0		SU		100.6	98.5 - 101.5

Lab Sample ID: LCSSRM 550-311288/49
Matrix: Water
Analysis Batch: 311288

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
pH	7.00	7.1		SU		100.7	98.5 - 101.5

Lab Sample ID: LCSSRM 550-311288/50
Matrix: Water
Analysis Batch: 311288

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
pH	7.00	7.0		SU		100.6	98.5 - 101.5

Lab Sample ID: LCSSRM 550-311288/58
Matrix: Water
Analysis Batch: 311288

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
pH	7.00	7.1		SU		100.7	98.5 - 101.5

Lab Sample ID: 550-210594-14 DU
Matrix: Water
Analysis Batch: 311288

Client Sample ID: FC-CCR-MW38R-1123
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH	7.3	H5	7.3		SU		0	5
Temperature	15.8	H5 T5	15.7		Degrees C		0.6	

HPLC/IC

Analysis Batch: 311405

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210594-3	FC-CCR-DMX04-1123	Total/NA	Water	300.0	
550-210594-3	FC-CCR-DMX04-1123	Total/NA	Water	300.0	
550-210594-8	FC-CCR-MW18-1123	Total/NA	Water	300.0	
550-210594-8	FC-CCR-MW18-1123	Total/NA	Water	300.0	
MB 550-311405/2	Method Blank	Total/NA	Water	300.0	
LCS 550-311405/5	Lab Control Sample	Total/NA	Water	300.0	
LCSD 550-311405/6	Lab Control Sample Dup	Total/NA	Water	300.0	
550-210592-I-4 MS ^10	Matrix Spike	Total/NA	Water	300.0	
550-210592-I-4 MSD ^10	Matrix Spike Duplicate	Total/NA	Water	300.0	

Analysis Batch: 311427

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210594-2	FC-CCR-DMX03-1123	Total/NA	Water	300.0	
550-210594-2	FC-CCR-DMX03-1123	Total/NA	Water	300.0	
550-210594-4	FC-CCR-MW05-1123	Total/NA	Water	300.0	
550-210594-4	FC-CCR-MW05-1123	Total/NA	Water	300.0	
550-210594-5	FC-CCR-MW06R-1123	Total/NA	Water	300.0	
550-210594-5	FC-CCR-MW06R-1123	Total/NA	Water	300.0	
550-210594-7	FC-CCR-MW17R-1123	Total/NA	Water	300.0	
550-210594-7	FC-CCR-MW17R-1123	Total/NA	Water	300.0	
550-210594-10	FC-CCR-MW23R-1123	Total/NA	Water	300.0	
550-210594-10	FC-CCR-MW23R-1123	Total/NA	Water	300.0	
550-210594-11	FC-CCR-MW24-1123	Total/NA	Water	300.0	
550-210594-11	FC-CCR-MW24-1123	Total/NA	Water	300.0	
550-210594-13	FC-CCR-MW36R-1123	Total/NA	Water	300.0	
550-210594-13	FC-CCR-MW36R-1123	Total/NA	Water	300.0	
550-210594-14	FC-CCR-MW38R-1123	Total/NA	Water	300.0	
550-210594-14	FC-CCR-MW38R-1123	Total/NA	Water	300.0	
550-210594-15	FC-CCR-MW56-1123	Total/NA	Water	300.0	
550-210594-15	FC-CCR-MW56-1123	Total/NA	Water	300.0	
550-210594-17	FC-CCR-MW57-1123	Total/NA	Water	300.0	
550-210594-17	FC-CCR-MW57-1123	Total/NA	Water	300.0	
550-210594-22	FC-CCR-MW82S-1123	Total/NA	Water	300.0	
550-210594-22	FC-CCR-MW82S-1123	Total/NA	Water	300.0	
550-210594-25	FC-CCR-FD02-1123	Total/NA	Water	300.0	
550-210594-25	FC-CCR-FD02-1123	Total/NA	Water	300.0	
MB 550-311427/2	Method Blank	Total/NA	Water	300.0	
LCS 550-311427/5	Lab Control Sample	Total/NA	Water	300.0	
LCSD 550-311427/6	Lab Control Sample Dup	Total/NA	Water	300.0	
550-210532-B-4 MS ^50	Matrix Spike	Total/NA	Water	300.0	
550-210532-B-4 MSD ^50	Matrix Spike Duplicate	Total/NA	Water	300.0	

Analysis Batch: 311928

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210594-17	FC-CCR-MW57-1123	Total/NA	Water	300.0	
MB 550-311928/2	Method Blank	Total/NA	Water	300.0	
LCS 550-311928/5	Lab Control Sample	Total/NA	Water	300.0	
LCSD 550-311928/6	Lab Control Sample Dup	Total/NA	Water	300.0	
550-211048-A-1 MS	Matrix Spike	Total/NA	Water	300.0	
550-211048-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Metals

Prep Batch: 311483

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210594-2	FC-CCR-DMX03-1123	Total/NA	Water	200.7	
550-210594-8	FC-CCR-MW18-1123	Total/NA	Water	200.7	
550-210594-9	FC-CCR-MW19-1123	Total/NA	Water	200.7	
550-210594-10	FC-CCR-MW23R-1123	Total/NA	Water	200.7	
550-210594-11	FC-CCR-MW24-1123	Total/NA	Water	200.7	
550-210594-12	FC-CCR-MW30-1123	Total/NA	Water	200.7	
550-210594-13	FC-CCR-MW36R-1123	Total/NA	Water	200.7	
550-210594-14	FC-CCR-MW38R-1123	Total/NA	Water	200.7	
550-210594-15	FC-CCR-MW56-1123	Total/NA	Water	200.7	
550-210594-16	FC-CCR-FD05-1123	Total/NA	Water	200.7	
550-210594-17	FC-CCR-MW57-1123	Total/NA	Water	200.7	
550-210594-18	FC-CCR-MW77S-1123	Total/NA	Water	200.7	
550-210594-19	FC-CCR-MW78S-1123	Total/NA	Water	200.7	
550-210594-20	FC-CCR-MW79S-1123	Total/NA	Water	200.7	
550-210594-22	FC-CCR-MW82S-1123	Total/NA	Water	200.7	
550-210594-23	FC-CCR-FD06-1123	Total/NA	Water	200.7	
550-210594-24	FC-CCR-FD07-1123	Total/NA	Water	200.7	
550-210594-25	FC-CCR-FD02-1123	Total/NA	Water	200.7	
MB 550-311483/1-A	Method Blank	Total/NA	Water	200.7	
LCS 550-311483/2-A	Lab Control Sample	Total/NA	Water	200.7	
LCSD 550-311483/3-A	Lab Control Sample Dup	Total/NA	Water	200.7	
550-210594-12 MS	FC-CCR-MW30-1123	Total/NA	Water	200.7	
550-210594-12 MSD	FC-CCR-MW30-1123	Total/NA	Water	200.7	

Prep Batch: 311484

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210594-1	FC-CCR-DMX01-1123	Total/NA	Water	200.7	
550-210594-3	FC-CCR-DMX04-1123	Total/NA	Water	200.7	
550-210594-4	FC-CCR-MW05-1123	Total/NA	Water	200.7	
550-210594-5	FC-CCR-MW06R-1123	Total/NA	Water	200.7	
550-210594-6	FC-CCR-FD04-1123	Total/NA	Water	200.7	
550-210594-7	FC-CCR-MW17R-1123	Total/NA	Water	200.7	
MB 550-311484/1-A	Method Blank	Total/NA	Water	200.7	
LCS 550-311484/2-A	Lab Control Sample	Total/NA	Water	200.7	
LCSD 550-311484/3-A	Lab Control Sample Dup	Total/NA	Water	200.7	
550-210594-1 MS	FC-CCR-DMX01-1123	Total/NA	Water	200.7	
550-210594-1 MSD	FC-CCR-DMX01-1123	Total/NA	Water	200.7	

Prep Batch: 311485

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210594-21	FC-CCR-MW81-1123	Total/NA	Water	200.7	
MB 550-311485/1-A	Method Blank	Total/NA	Water	200.7	
LCS 550-311485/2-A	Lab Control Sample	Total/NA	Water	200.7	
LCSD 550-311485/3-A	Lab Control Sample Dup	Total/NA	Water	200.7	
550-210594-21 MS	FC-CCR-MW81-1123	Total/NA	Water	200.7	
550-210594-21 MSD	FC-CCR-MW81-1123	Total/NA	Water	200.7	

Prep Batch: 311486

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210594-2	FC-CCR-DMX03-1123	Total/NA	Water	200.8	
550-210594-8	FC-CCR-MW18-1123	Total/NA	Water	200.8	

Metals (Continued)

Prep Batch: 311486 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210594-9	FC-CCR-MW19-1123	Total/NA	Water	200.8	
550-210594-10	FC-CCR-MW23R-1123	Total/NA	Water	200.8	
550-210594-11	FC-CCR-MW24-1123	Total/NA	Water	200.8	
550-210594-13	FC-CCR-MW36R-1123	Total/NA	Water	200.8	
550-210594-14	FC-CCR-MW38R-1123	Total/NA	Water	200.8	
550-210594-15	FC-CCR-MW56-1123	Total/NA	Water	200.8	
550-210594-16	FC-CCR-FD05-1123	Total/NA	Water	200.8	
550-210594-17	FC-CCR-MW57-1123	Total/NA	Water	200.8	
550-210594-18	FC-CCR-MW77S-1123	Total/NA	Water	200.8	
550-210594-19	FC-CCR-MW78S-1123	Total/NA	Water	200.8	
550-210594-20	FC-CCR-MW79S-1123	Total/NA	Water	200.8	
550-210594-21	FC-CCR-MW81-1123	Total/NA	Water	200.8	
550-210594-22	FC-CCR-MW82S-1123	Total/NA	Water	200.8	
550-210594-23	FC-CCR-FD06-1123	Total/NA	Water	200.8	
550-210594-24	FC-CCR-FD07-1123	Total/NA	Water	200.8	
550-210594-25	FC-CCR-FD02-1123	Total/NA	Water	200.8	
MB 550-311486/1-A	Method Blank	Total/NA	Water	200.8	
LCS 550-311486/2-A	Lab Control Sample	Total/NA	Water	200.8	
LCSD 550-311486/3-A	Lab Control Sample Dup	Total/NA	Water	200.8	
550-210594-21 MS	FC-CCR-MW81-1123	Total/NA	Water	200.8	
550-210594-21 MSD	FC-CCR-MW81-1123	Total/NA	Water	200.8	

Prep Batch: 311487

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210594-3	FC-CCR-DMX04-1123	Total/NA	Water	200.8	
550-210594-4	FC-CCR-MW05-1123	Total/NA	Water	200.8	
550-210594-5	FC-CCR-MW06R-1123	Total/NA	Water	200.8	
550-210594-6	FC-CCR-FD04-1123	Total/NA	Water	200.8	
550-210594-7	FC-CCR-MW17R-1123	Total/NA	Water	200.8	
550-210594-12	FC-CCR-MW30-1123	Total/NA	Water	200.8	
MB 550-311487/1-A	Method Blank	Total/NA	Water	200.8	
LCS 550-311487/2-A	Lab Control Sample	Total/NA	Water	200.8	
LCSD 550-311487/3-A	Lab Control Sample Dup	Total/NA	Water	200.8	
550-210594-12 MS	FC-CCR-MW30-1123	Total/NA	Water	200.8	
550-210594-12 MSD	FC-CCR-MW30-1123	Total/NA	Water	200.8	

Prep Batch: 311488

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 550-311488/1-A	Method Blank	Total/NA	Water	200.8	
LCS 550-311488/2-A	Lab Control Sample	Total/NA	Water	200.8	
LCSD 550-311488/3-A	Lab Control Sample Dup	Total/NA	Water	200.8	

Prep Batch: 311515

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210594-1	FC-CCR-DMX01-1123	Total/NA	Water	200.8	
MB 550-311515/1-A	Method Blank	Total/NA	Water	200.8	
LCS 550-311515/2-A	Lab Control Sample	Total/NA	Water	200.8	
LCSD 550-311515/3-A	Lab Control Sample Dup	Total/NA	Water	200.8	
550-210594-1 MS	FC-CCR-DMX01-1123	Total/NA	Water	200.8	
550-210594-1 MSD	FC-CCR-DMX01-1123	Total/NA	Water	200.8	

Metals

Analysis Batch: 311750

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210594-1	FC-CCR-DMX01-1123	Total/NA	Water	200.8 LL	311515
MB 550-311515/1-A	Method Blank	Total/NA	Water	200.8 LL	311515
LCS 550-311515/2-A	Lab Control Sample	Total/NA	Water	200.8 LL	311515
LCSD 550-311515/3-A	Lab Control Sample Dup	Total/NA	Water	200.8 LL	311515
550-210594-1 MS	FC-CCR-DMX01-1123	Total/NA	Water	200.8 LL	311515
550-210594-1 MSD	FC-CCR-DMX01-1123	Total/NA	Water	200.8 LL	311515

Analysis Batch: 311751

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210594-3	FC-CCR-DMX04-1123	Total/NA	Water	200.8 LL	311487
550-210594-4	FC-CCR-MW05-1123	Total/NA	Water	200.8 LL	311487
550-210594-5	FC-CCR-MW06R-1123	Total/NA	Water	200.8 LL	311487
550-210594-6	FC-CCR-FD04-1123	Total/NA	Water	200.8 LL	311487
550-210594-7	FC-CCR-MW17R-1123	Total/NA	Water	200.8 LL	311487
550-210594-12	FC-CCR-MW30-1123	Total/NA	Water	200.8 LL	311487
MB 550-311487/1-A	Method Blank	Total/NA	Water	200.8 LL	311487
LCS 550-311487/2-A	Lab Control Sample	Total/NA	Water	200.8 LL	311487
LCSD 550-311487/3-A	Lab Control Sample Dup	Total/NA	Water	200.8 LL	311487
550-210594-12 MS	FC-CCR-MW30-1123	Total/NA	Water	200.8 LL	311487
550-210594-12 MSD	FC-CCR-MW30-1123	Total/NA	Water	200.8 LL	311487

Analysis Batch: 311752

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210594-2	FC-CCR-DMX03-1123	Total/NA	Water	200.8 LL	311486
550-210594-8	FC-CCR-MW18-1123	Total/NA	Water	200.8 LL	311486
550-210594-9	FC-CCR-MW19-1123	Total/NA	Water	200.8 LL	311486
550-210594-10	FC-CCR-MW23R-1123	Total/NA	Water	200.8 LL	311486
550-210594-11	FC-CCR-MW24-1123	Total/NA	Water	200.8 LL	311486
550-210594-13	FC-CCR-MW36R-1123	Total/NA	Water	200.8 LL	311486
550-210594-14	FC-CCR-MW38R-1123	Total/NA	Water	200.8 LL	311486
550-210594-15	FC-CCR-MW56-1123	Total/NA	Water	200.8 LL	311486
550-210594-16	FC-CCR-FD05-1123	Total/NA	Water	200.8 LL	311486
550-210594-17	FC-CCR-MW57-1123	Total/NA	Water	200.8 LL	311486
550-210594-18	FC-CCR-MW77S-1123	Total/NA	Water	200.8 LL	311486
550-210594-19	FC-CCR-MW78S-1123	Total/NA	Water	200.8 LL	311486
550-210594-20	FC-CCR-MW79S-1123	Total/NA	Water	200.8 LL	311486
550-210594-21	FC-CCR-MW81-1123	Total/NA	Water	200.8 LL	311486
550-210594-22	FC-CCR-MW82S-1123	Total/NA	Water	200.8 LL	311486
550-210594-23	FC-CCR-FD06-1123	Total/NA	Water	200.8 LL	311486
550-210594-24	FC-CCR-FD07-1123	Total/NA	Water	200.8 LL	311486
550-210594-25	FC-CCR-FD02-1123	Total/NA	Water	200.8 LL	311486
MB 550-311486/1-A	Method Blank	Total/NA	Water	200.8 LL	311486
LCS 550-311486/2-A	Lab Control Sample	Total/NA	Water	200.8 LL	311486
LCSD 550-311486/3-A	Lab Control Sample Dup	Total/NA	Water	200.8 LL	311486
550-210594-21 MS	FC-CCR-MW81-1123	Total/NA	Water	200.8 LL	311486
550-210594-21 MSD	FC-CCR-MW81-1123	Total/NA	Water	200.8 LL	311486

Analysis Batch: 311753

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 550-311488/1-A	Method Blank	Total/NA	Water	200.8 LL	311488
LCS 550-311488/2-A	Lab Control Sample	Total/NA	Water	200.8 LL	311488

Metals (Continued)

Analysis Batch: 311753 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 550-311488/3-A	Lab Control Sample Dup	Total/NA	Water	200.8 LL	311488

Analysis Batch: 311842

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210594-3	FC-CCR-DMX04-1123	Total/NA	Water	200.7 Rev 4.4	311484
550-210594-4	FC-CCR-MW05-1123	Total/NA	Water	200.7 Rev 4.4	311484
550-210594-5	FC-CCR-MW06R-1123	Total/NA	Water	200.7 Rev 4.4	311484
550-210594-7	FC-CCR-MW17R-1123	Total/NA	Water	200.7 Rev 4.4	311484
MB 550-311484/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	311484
LCS 550-311484/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	311484
LCSD 550-311484/3-A	Lab Control Sample Dup	Total/NA	Water	200.7 Rev 4.4	311484

Analysis Batch: 311843

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210594-2	FC-CCR-DMX03-1123	Total/NA	Water	200.7 Rev 4.4	311483
550-210594-8	FC-CCR-MW18-1123	Total/NA	Water	200.7 Rev 4.4	311483
550-210594-9	FC-CCR-MW19-1123	Total/NA	Water	200.7 Rev 4.4	311483
550-210594-10	FC-CCR-MW23R-1123	Total/NA	Water	200.7 Rev 4.4	311483
550-210594-11	FC-CCR-MW24-1123	Total/NA	Water	200.7 Rev 4.4	311483
550-210594-12	FC-CCR-MW30-1123	Total/NA	Water	200.7 Rev 4.4	311483
550-210594-13	FC-CCR-MW36R-1123	Total/NA	Water	200.7 Rev 4.4	311483
550-210594-14	FC-CCR-MW38R-1123	Total/NA	Water	200.7 Rev 4.4	311483
550-210594-15	FC-CCR-MW56-1123	Total/NA	Water	200.7 Rev 4.4	311483
550-210594-16	FC-CCR-FD05-1123	Total/NA	Water	200.7 Rev 4.4	311483
550-210594-17	FC-CCR-MW57-1123	Total/NA	Water	200.7 Rev 4.4	311483
550-210594-18	FC-CCR-MW77S-1123	Total/NA	Water	200.7 Rev 4.4	311483
550-210594-19	FC-CCR-MW78S-1123	Total/NA	Water	200.7 Rev 4.4	311483
550-210594-20	FC-CCR-MW79S-1123	Total/NA	Water	200.7 Rev 4.4	311483
550-210594-22	FC-CCR-MW82S-1123	Total/NA	Water	200.7 Rev 4.4	311483
550-210594-23	FC-CCR-FD06-1123	Total/NA	Water	200.7 Rev 4.4	311483
550-210594-24	FC-CCR-FD07-1123	Total/NA	Water	200.7 Rev 4.4	311483
550-210594-25	FC-CCR-FD02-1123	Total/NA	Water	200.7 Rev 4.4	311483
MB 550-311483/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	311483
LCS 550-311483/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	311483
LCSD 550-311483/3-A	Lab Control Sample Dup	Total/NA	Water	200.7 Rev 4.4	311483
550-210594-12 MS	FC-CCR-MW30-1123	Total/NA	Water	200.7 Rev 4.4	311483
550-210594-12 MSD	FC-CCR-MW30-1123	Total/NA	Water	200.7 Rev 4.4	311483

Analysis Batch: 311904

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210594-21	FC-CCR-MW81-1123	Total/NA	Water	200.7 Rev 4.4	311485
MB 550-311485/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	311485
LCS 550-311485/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	311485
LCSD 550-311485/3-A	Lab Control Sample Dup	Total/NA	Water	200.7 Rev 4.4	311485
550-210594-21 MS	FC-CCR-MW81-1123	Total/NA	Water	200.7 Rev 4.4	311485
550-210594-21 MSD	FC-CCR-MW81-1123	Total/NA	Water	200.7 Rev 4.4	311485

Analysis Batch: 311929

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210594-1	FC-CCR-DMX01-1123	Total/NA	Water	200.7 Rev 4.4	311484
550-210594-3	FC-CCR-DMX04-1123	Total/NA	Water	200.7 Rev 4.4	311484

Metals (Continued)

Analysis Batch: 311929 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210594-4	FC-CCR-MW05-1123	Total/NA	Water	200.7 Rev 4.4	311484
550-210594-5	FC-CCR-MW06R-1123	Total/NA	Water	200.7 Rev 4.4	311484
550-210594-6	FC-CCR-FD04-1123	Total/NA	Water	200.7 Rev 4.4	311484
550-210594-7	FC-CCR-MW17R-1123	Total/NA	Water	200.7 Rev 4.4	311484
MB 550-311484/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	311484
LCS 550-311484/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	311484
LCSD 550-311484/3-A	Lab Control Sample Dup	Total/NA	Water	200.7 Rev 4.4	311484
550-210594-1 MS	FC-CCR-DMX01-1123	Total/NA	Water	200.7 Rev 4.4	311484
550-210594-1 MSD	FC-CCR-DMX01-1123	Total/NA	Water	200.7 Rev 4.4	311484

Analysis Batch: 311980

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210594-5	FC-CCR-MW06R-1123	Total/NA	Water	200.7 Rev 4.4	311484

Analysis Batch: 311984

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210594-4	FC-CCR-MW05-1123	Total/NA	Water	200.7 Rev 4.4	311484
550-210594-8	FC-CCR-MW18-1123	Total/NA	Water	200.7 Rev 4.4	311483
550-210594-11	FC-CCR-MW24-1123	Total/NA	Water	200.7 Rev 4.4	311483
550-210594-15	FC-CCR-MW56-1123	Total/NA	Water	200.7 Rev 4.4	311483
550-210594-17	FC-CCR-MW57-1123	Total/NA	Water	200.7 Rev 4.4	311483

Prep Batch: 386253

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210594-2	FC-CCR-DMX03-1123	Total Recoverable	Water	200.7	
550-210594-3	FC-CCR-DMX04-1123	Total Recoverable	Water	200.7	
550-210594-4	FC-CCR-MW05-1123	Total Recoverable	Water	200.7	
550-210594-5	FC-CCR-MW06R-1123	Total Recoverable	Water	200.7	
550-210594-7	FC-CCR-MW17R-1123	Total Recoverable	Water	200.7	
550-210594-8	FC-CCR-MW18-1123	Total Recoverable	Water	200.7	
550-210594-10	FC-CCR-MW23R-1123	Total Recoverable	Water	200.7	
550-210594-11	FC-CCR-MW24-1123	Total Recoverable	Water	200.7	
550-210594-13	FC-CCR-MW36R-1123	Total Recoverable	Water	200.7	
550-210594-14	FC-CCR-MW38R-1123	Total Recoverable	Water	200.7	
550-210594-15	FC-CCR-MW56-1123	Total Recoverable	Water	200.7	
550-210594-17	FC-CCR-MW57-1123	Total Recoverable	Water	200.7	
MB 570-386253/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 570-386253/2-A	Lab Control Sample	Total Recoverable	Water	200.7	
LCSD 570-386253/3-A	Lab Control Sample Dup	Total Recoverable	Water	200.7	
550-210594-8 MS	FC-CCR-MW18-1123	Total Recoverable	Water	200.7	
550-210594-8 MSD	FC-CCR-MW18-1123	Total Recoverable	Water	200.7	

Analysis Batch: 386782

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210594-5	FC-CCR-MW06R-1123	Total Recoverable	Water	200.7 Rev 4.4	386253
550-210594-7	FC-CCR-MW17R-1123	Total Recoverable	Water	200.7 Rev 4.4	386253
550-210594-11	FC-CCR-MW24-1123	Total Recoverable	Water	200.7 Rev 4.4	386253
550-210594-13	FC-CCR-MW36R-1123	Total Recoverable	Water	200.7 Rev 4.4	386253
MB 570-386253/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	386253
LCS 570-386253/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	386253
LCSD 570-386253/3-A	Lab Control Sample Dup	Total Recoverable	Water	200.7 Rev 4.4	386253

Metals

Analysis Batch: 386978

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210594-2	FC-CCR-DMX03-1123	Total Recoverable	Water	200.7 Rev 4.4	386253
550-210594-3	FC-CCR-DMX04-1123	Total Recoverable	Water	200.7 Rev 4.4	386253
550-210594-4	FC-CCR-MW05-1123	Total Recoverable	Water	200.7 Rev 4.4	386253
550-210594-8	FC-CCR-MW18-1123	Total Recoverable	Water	200.7 Rev 4.4	386253
550-210594-10	FC-CCR-MW23R-1123	Total Recoverable	Water	200.7 Rev 4.4	386253
550-210594-14	FC-CCR-MW38R-1123	Total Recoverable	Water	200.7 Rev 4.4	386253
550-210594-15	FC-CCR-MW56-1123	Total Recoverable	Water	200.7 Rev 4.4	386253
550-210594-17	FC-CCR-MW57-1123	Total Recoverable	Water	200.7 Rev 4.4	386253
550-210594-8 MS	FC-CCR-MW18-1123	Total Recoverable	Water	200.7 Rev 4.4	386253
550-210594-8 MSD	FC-CCR-MW18-1123	Total Recoverable	Water	200.7 Rev 4.4	386253

General Chemistry

Analysis Batch: 311288

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210594-2	FC-CCR-DMX03-1123	Total/NA	Water	SM 4500 H+ B	
550-210594-3	FC-CCR-DMX04-1123	Total/NA	Water	SM 4500 H+ B	
550-210594-4	FC-CCR-MW05-1123	Total/NA	Water	SM 4500 H+ B	
550-210594-5	FC-CCR-MW06R-1123	Total/NA	Water	SM 4500 H+ B	
550-210594-7	FC-CCR-MW17R-1123	Total/NA	Water	SM 4500 H+ B	
550-210594-8	FC-CCR-MW18-1123	Total/NA	Water	SM 4500 H+ B	
550-210594-10	FC-CCR-MW23R-1123	Total/NA	Water	SM 4500 H+ B	
550-210594-11	FC-CCR-MW24-1123	Total/NA	Water	SM 4500 H+ B	
550-210594-13	FC-CCR-MW36R-1123	Total/NA	Water	SM 4500 H+ B	
550-210594-14	FC-CCR-MW38R-1123	Total/NA	Water	SM 4500 H+ B	
550-210594-15	FC-CCR-MW56-1123	Total/NA	Water	SM 4500 H+ B	
550-210594-17	FC-CCR-MW57-1123	Total/NA	Water	SM 4500 H+ B	
550-210594-22	FC-CCR-MW82S-1123	Total/NA	Water	SM 4500 H+ B	
550-210594-25	FC-CCR-FD02-1123	Total/NA	Water	SM 4500 H+ B	
LCSSRM 550-311288/37	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	
LCSSRM 550-311288/49	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	
LCSSRM 550-311288/50	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	
LCSSRM 550-311288/58	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	
550-210594-14 DU	FC-CCR-MW38R-1123	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 311341

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210594-22	FC-CCR-MW82S-1123	Total/NA	Water	SM 2540C	
550-210594-25	FC-CCR-FD02-1123	Total/NA	Water	SM 2540C	
MB 550-311341/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 550-311341/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 550-311341/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	
550-210497-A-1 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 311394

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210594-22	FC-CCR-MW82S-1123	Total/NA	Water	SM 2320B	
550-210594-25	FC-CCR-FD02-1123	Total/NA	Water	SM 2320B	
MB 550-311394/4	Method Blank	Total/NA	Water	SM 2320B	
LCS 550-311394/3	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 550-311394/16	Lab Control Sample Dup	Total/NA	Water	SM 2320B	

General Chemistry (Continued)

Analysis Batch: 311394 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210545-F-1 DU	Duplicate	Total/NA	Water	SM 2320B	

Analysis Batch: 311443

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210594-2	FC-CCR-DMX03-1123	Total/NA	Water	SM 2540C	
550-210594-4	FC-CCR-MW05-1123	Total/NA	Water	SM 2540C	
MB 550-311443/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 550-311443/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 550-311443/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	
550-210523-B-3 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 311540

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210594-3	FC-CCR-DMX04-1123	Total/NA	Water	SM 2540C	
550-210594-5	FC-CCR-MW06R-1123	Total/NA	Water	SM 2540C	
550-210594-7	FC-CCR-MW17R-1123	Total/NA	Water	SM 2540C	
550-210594-8	FC-CCR-MW18-1123	Total/NA	Water	SM 2540C	
550-210594-10	FC-CCR-MW23R-1123	Total/NA	Water	SM 2540C	
MB 550-311540/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 550-311540/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 550-311540/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	
550-210554-B-9 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 311555

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210594-13	FC-CCR-MW36R-1123	Total/NA	Water	SM 2540C	
550-210594-14	FC-CCR-MW38R-1123	Total/NA	Water	SM 2540C	
550-210594-15	FC-CCR-MW56-1123	Total/NA	Water	SM 2540C	
550-210594-17	FC-CCR-MW57-1123	Total/NA	Water	SM 2540C	
MB 550-311555/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 550-311555/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 550-311555/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	
550-210594-13 DU	FC-CCR-MW36R-1123	Total/NA	Water	SM 2540C	

Analysis Batch: 311562

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210594-2	FC-CCR-DMX03-1123	Total/NA	Water	SM 2320B	
550-210594-3	FC-CCR-DMX04-1123	Total/NA	Water	SM 2320B	
550-210594-4	FC-CCR-MW05-1123	Total/NA	Water	SM 2320B	
550-210594-5	FC-CCR-MW06R-1123	Total/NA	Water	SM 2320B	
550-210594-7	FC-CCR-MW17R-1123	Total/NA	Water	SM 2320B	
550-210594-8	FC-CCR-MW18-1123	Total/NA	Water	SM 2320B	
550-210594-10	FC-CCR-MW23R-1123	Total/NA	Water	SM 2320B	
550-210594-11	FC-CCR-MW24-1123	Total/NA	Water	SM 2320B	
550-210594-13	FC-CCR-MW36R-1123	Total/NA	Water	SM 2320B	
550-210594-14	FC-CCR-MW38R-1123	Total/NA	Water	SM 2320B	
550-210594-15	FC-CCR-MW56-1123	Total/NA	Water	SM 2320B	
550-210594-17	FC-CCR-MW57-1123	Total/NA	Water	SM 2320B	
MB 550-311562/4	Method Blank	Total/NA	Water	SM 2320B	
LCS 550-311562/3	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 550-311562/10	Lab Control Sample Dup	Total/NA	Water	SM 2320B	

General Chemistry (Continued)

Analysis Batch: 311562 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210594-5 DU	FC-CCR-MW06R-1123	Total/NA	Water	SM 2320B	

Analysis Batch: 311666

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210594-11	FC-CCR-MW24-1123	Total/NA	Water	SM 2540C	
MB 550-311666/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 550-311666/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 550-311666/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	
550-210673-F-2 DU	Duplicate	Total/NA	Water	SM 2540C	

Lab Chronicle

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-210594-1
SDG: APS Four Corners Power Plant (Other)

Client Sample ID: FC-CCR-DMX01-1123

Lab Sample ID: 550-210594-1

Date Collected: 11/10/23 14:45
Matrix: Water
Date Received: 11/15/23 14:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	200.7			311484	SGO	EET PHX	11/21/23 04:37
Total/NA	Analysis	200.7 Rev 4.4		5	311929	GLW	EET PHX	11/29/23 15:10
Total/NA	Prep	200.8			311515	SGO	EET PHX	11/21/23 10:30
Total/NA	Analysis	200.8 LL		10	311750	DSJ	EET PHX	11/27/23 17:03

Client Sample ID: FC-CCR-DMX03-1123

Lab Sample ID: 550-210594-2

Date Collected: 11/13/23 14:51
Matrix: Water
Date Received: 11/15/23 14:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		2	311427	MMH	EET PHX	11/20/23 15:10
Total/NA	Analysis	300.0		200	311427	MMH	EET PHX	11/20/23 15:29
Total Recoverable	Prep	200.7			386253	JP8N	EET CAL 4	11/22/23 07:45
Total Recoverable	Analysis	200.7 Rev 4.4		5	386978	K1UV	EET CAL 4	11/27/23 13:54
Total/NA	Prep	200.7			311483	SGO	EET PHX	11/21/23 04:29
Total/NA	Analysis	200.7 Rev 4.4		5	311843	GLW	EET PHX	11/28/23 20:23
Total/NA	Prep	200.8			311486	SGO	EET PHX	11/21/23 06:52
Total/NA	Analysis	200.8 LL		10	311752	DSJ	EET PHX	11/27/23 19:15
Total/NA	Analysis	SM 2320B		1	311562	MAN	EET PHX	11/21/23 10:50
Total/NA	Analysis	SM 2540C		1	311443	KMG	EET PHX	11/20/23 12:18 - 11/22/23 18:10 [1]
Total/NA	Analysis	SM 4500 H+ B		1	311288	MAN	EET PHX	11/16/23 14:43

Client Sample ID: FC-CCR-DMX04-1123

Lab Sample ID: 550-210594-3

Date Collected: 11/14/23 17:30
Matrix: Water
Date Received: 11/15/23 14:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		2	311405	MMH	EET PHX	11/19/23 04:22
Total/NA	Analysis	300.0		200	311405	MMH	EET PHX	11/19/23 04:41
Total Recoverable	Prep	200.7			386253	JP8N	EET CAL 4	11/22/23 07:45
Total Recoverable	Analysis	200.7 Rev 4.4		2	386978	K1UV	EET CAL 4	11/27/23 13:56
Total/NA	Prep	200.7			311484	SGO	EET PHX	11/21/23 04:37
Total/NA	Analysis	200.7 Rev 4.4		5	311842	GLW	EET PHX	11/28/23 18:56
Total/NA	Prep	200.7			311484	SGO	EET PHX	11/21/23 04:37
Total/NA	Analysis	200.7 Rev 4.4		5	311929	GLW	EET PHX	11/29/23 15:55
Total/NA	Prep	200.8			311487	SGO	EET PHX	11/21/23 06:58
Total/NA	Analysis	200.8 LL		10	311751	DSJ	EET PHX	11/27/23 18:02
Total/NA	Analysis	SM 2320B		1	311562	MAN	EET PHX	11/21/23 11:05
Total/NA	Analysis	SM 2540C		1	311540	KMG	EET PHX	11/21/23 12:25 - 11/28/23 15:56 [1]
Total/NA	Analysis	SM 4500 H+ B		1	311288	MAN	EET PHX	11/16/23 14:44

Lab Chronicle

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-210594-1
SDG: APS Four Corners Power Plant (Other)

Client Sample ID: FC-CCR-MW05-1123

Lab Sample ID: 550-210594-4

Date Collected: 11/13/23 16:15
Matrix: Water
Date Received: 11/15/23 14:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		2	311427	MMH	EET PHX	11/20/23 15:47
Total/NA	Analysis	300.0		200	311427	MMH	EET PHX	11/20/23 16:05
Total Recoverable	Prep	200.7			386253	JP8N	EET CAL 4	11/22/23 07:45
Total Recoverable	Analysis	200.7 Rev 4.4		5	386978	K1UV	EET CAL 4	11/27/23 13:59
Total/NA	Prep	200.7			311484	SGO	EET PHX	11/21/23 04:37
Total/NA	Analysis	200.7 Rev 4.4		5	311842	GLW	EET PHX	11/28/23 18:59
Total/NA	Prep	200.7			311484	SGO	EET PHX	11/21/23 04:37
Total/NA	Analysis	200.7 Rev 4.4		5	311929	GLW	EET PHX	11/29/23 15:58
Total/NA	Prep	200.7			311484	SGO	EET PHX	11/21/23 04:37
Total/NA	Analysis	200.7 Rev 4.4		20	311984	GLW	EET PHX	11/30/23 12:30
Total/NA	Prep	200.8			311487	SGO	EET PHX	11/21/23 06:58
Total/NA	Analysis	200.8 LL		10	311751	DSJ	EET PHX	11/27/23 18:04
Total/NA	Analysis	SM 2320B		1	311562	MAN	EET PHX	11/21/23 11:14
Total/NA	Analysis	SM 2540C		1	311443	KMG	EET PHX	11/20/23 12:18 - 11/22/23 18:10 [1]
Total/NA	Analysis	SM 4500 H+ B		1	311288	MAN	EET PHX	11/16/23 14:45

Client Sample ID: FC-CCR-MW06R-1123

Lab Sample ID: 550-210594-5

Date Collected: 11/14/23 18:21
Matrix: Water
Date Received: 11/15/23 14:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		2	311427	MMH	EET PHX	11/20/23 16:24
Total/NA	Analysis	300.0		200	311427	MMH	EET PHX	11/20/23 16:42
Total Recoverable	Prep	200.7			386253	JP8N	EET CAL 4	11/22/23 07:45
Total Recoverable	Analysis	200.7 Rev 4.4		1	386782	VZ0K	EET CAL 4	11/22/23 22:34
Total/NA	Prep	200.7			311484	SGO	EET PHX	11/21/23 04:37
Total/NA	Analysis	200.7 Rev 4.4		5	311842	GLW	EET PHX	11/28/23 19:01
Total/NA	Prep	200.7			311484	SGO	EET PHX	11/21/23 04:37
Total/NA	Analysis	200.7 Rev 4.4		5	311929	GLW	EET PHX	11/29/23 16:01
Total/NA	Prep	200.7			311484	SGO	EET PHX	11/21/23 04:37
Total/NA	Analysis	200.7 Rev 4.4		10	311980	GLW	EET PHX	11/30/23 12:02
Total/NA	Prep	200.8			311487	SGO	EET PHX	11/21/23 06:58
Total/NA	Analysis	200.8 LL		10	311751	DSJ	EET PHX	11/27/23 18:06
Total/NA	Analysis	SM 2320B		1	311562	MAN	EET PHX	11/21/23 11:41
Total/NA	Analysis	SM 2540C		1	311540	KMG	EET PHX	11/21/23 12:25 - 11/28/23 15:56 [1]
Total/NA	Analysis	SM 4500 H+ B		1	311288	MAN	EET PHX	11/16/23 14:46

Client Sample ID: FC-CCR-FD04-1123

Lab Sample ID: 550-210594-6

Date Collected: 11/10/23 07:30
Matrix: Water
Date Received: 11/15/23 14:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	200.7			311484	SGO	EET PHX	11/21/23 04:37
Total/NA	Analysis	200.7 Rev 4.4		5	311929	GLW	EET PHX	11/29/23 16:04

Lab Chronicle

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-210594-1
SDG: APS Four Corners Power Plant (Other)

Client Sample ID: FC-CCR-FD04-1123

Date Collected: 11/10/23 07:30
Date Received: 11/15/23 14:43

Lab Sample ID: 550-210594-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	200.8			311487	SGO	EET PHX	11/21/23 06:58
Total/NA	Analysis	200.8 LL		10	311751	DSJ	EET PHX	11/27/23 18:08

Client Sample ID: FC-CCR-MW17R-1123

Date Collected: 11/14/23 14:07
Date Received: 11/15/23 14:43

Lab Sample ID: 550-210594-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		2	311427	MMH	EET PHX	11/20/23 17:01
Total/NA	Analysis	300.0		200	311427	MMH	EET PHX	11/20/23 18:14
Total Recoverable	Prep	200.7			386253	JP8N	EET CAL 4	11/22/23 07:45
Total Recoverable	Analysis	200.7 Rev 4.4		1	386782	VZ0K	EET CAL 4	11/22/23 22:41
Total/NA	Prep	200.7			311484	SGO	EET PHX	11/21/23 04:37
Total/NA	Analysis	200.7 Rev 4.4		5	311842	GLW	EET PHX	11/28/23 19:07
Total/NA	Prep	200.7			311484	SGO	EET PHX	11/21/23 04:37
Total/NA	Analysis	200.7 Rev 4.4		5	311929	GLW	EET PHX	11/29/23 16:06
Total/NA	Prep	200.8			311487	SGO	EET PHX	11/21/23 06:58
Total/NA	Analysis	200.8 LL		10	311751	DSJ	EET PHX	11/27/23 18:10
Total/NA	Analysis	SM 2320B		1	311562	MAN	EET PHX	11/21/23 12:02
Total/NA	Analysis	SM 2540C		1	311540	KMG	EET PHX	11/21/23 12:25 - 11/28/23 15:56 [1]
Total/NA	Analysis	SM 4500 H+ B		1	311288	MAN	EET PHX	11/16/23 14:47

Client Sample ID: FC-CCR-MW18-1123

Date Collected: 11/14/23 09:50
Date Received: 11/15/23 14:43

Lab Sample ID: 550-210594-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		2	311405	MMH	EET PHX	11/19/23 04:59
Total/NA	Analysis	300.0		200	311405	MMH	EET PHX	11/19/23 05:17
Total Recoverable	Prep	200.7			386253	JP8N	EET CAL 4	11/22/23 07:45
Total Recoverable	Analysis	200.7 Rev 4.4		5	386978	K1UV	EET CAL 4	11/27/23 14:01
Total/NA	Prep	200.7			311483	SGO	EET PHX	11/21/23 04:29
Total/NA	Analysis	200.7 Rev 4.4		5	311843	GLW	EET PHX	11/28/23 19:33
Total/NA	Prep	200.7			311483	SGO	EET PHX	11/21/23 04:29
Total/NA	Analysis	200.7 Rev 4.4		50	311984	GLW	EET PHX	11/30/23 12:15
Total/NA	Prep	200.8			311486	SGO	EET PHX	11/21/23 06:52
Total/NA	Analysis	200.8 LL		10	311752	DSJ	EET PHX	11/27/23 18:36
Total/NA	Analysis	SM 2320B		1	311562	MAN	EET PHX	11/21/23 12:08
Total/NA	Analysis	SM 2540C		1	311540	KMG	EET PHX	11/21/23 12:25 - 11/28/23 15:56 [1]
Total/NA	Analysis	SM 4500 H+ B		1	311288	MAN	EET PHX	11/16/23 14:48

Lab Chronicle

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-210594-1
SDG: APS Four Corners Power Plant (Other)

Client Sample ID: FC-CCR-MW19-1123

Lab Sample ID: 550-210594-9

Date Collected: 11/13/23 14:04
Matrix: Water
Date Received: 11/15/23 14:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	200.7			311483	SGO	EET PHX	11/21/23 04:29
Total/NA	Analysis	200.7 Rev 4.4		5	311843	GLW	EET PHX	11/28/23 19:35
Total/NA	Prep	200.8			311486	SGO	EET PHX	11/21/23 06:52
Total/NA	Analysis	200.8 LL		10	311752	DSJ	EET PHX	11/27/23 18:38

Client Sample ID: FC-CCR-MW23R-1123

Lab Sample ID: 550-210594-10

Date Collected: 11/14/23 11:05
Matrix: Water
Date Received: 11/15/23 14:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		2	311427	MMH	EET PHX	11/20/23 18:33
Total/NA	Analysis	300.0		200	311427	MMH	EET PHX	11/20/23 18:51
Total Recoverable	Prep	200.7			386253	JP8N	EET CAL 4	11/22/23 07:45
Total Recoverable	Analysis	200.7 Rev 4.4		5	386978	K1UV	EET CAL 4	11/27/23 14:08
Total/NA	Prep	200.7			311483	SGO	EET PHX	11/21/23 04:29
Total/NA	Analysis	200.7 Rev 4.4		5	311843	GLW	EET PHX	11/28/23 19:38
Total/NA	Prep	200.8			311486	SGO	EET PHX	11/21/23 06:52
Total/NA	Analysis	200.8 LL		10	311752	DSJ	EET PHX	11/27/23 18:40
Total/NA	Analysis	SM 2320B		1	311562	MAN	EET PHX	11/21/23 12:24
Total/NA	Analysis	SM 2540C		1	311540	KMG	EET PHX	11/21/23 12:25 - 11/28/23 15:56 [1]
Total/NA	Analysis	SM 4500 H+ B		1	311288	MAN	EET PHX	11/16/23 14:49

Client Sample ID: FC-CCR-MW24-1123

Lab Sample ID: 550-210594-11

Date Collected: 11/14/23 19:43
Matrix: Water
Date Received: 11/15/23 14:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		2	311427	MMH	EET PHX	11/20/23 19:09
Total/NA	Analysis	300.0		200	311427	MMH	EET PHX	11/20/23 19:28
Total Recoverable	Prep	200.7			386253	JP8N	EET CAL 4	11/22/23 07:45
Total Recoverable	Analysis	200.7 Rev 4.4		1	386782	VZ0K	EET CAL 4	11/22/23 22:53
Total/NA	Prep	200.7			311483	SGO	EET PHX	11/21/23 04:29
Total/NA	Analysis	200.7 Rev 4.4		5	311843	GLW	EET PHX	11/28/23 19:41
Total/NA	Prep	200.7			311483	SGO	EET PHX	11/21/23 04:29
Total/NA	Analysis	200.7 Rev 4.4		50	311984	GLW	EET PHX	11/30/23 12:18
Total/NA	Prep	200.8			311486	SGO	EET PHX	11/21/23 06:52
Total/NA	Analysis	200.8 LL		10	311752	DSJ	EET PHX	11/27/23 18:42
Total/NA	Analysis	SM 2320B		1	311562	MAN	EET PHX	11/21/23 12:36
Total/NA	Analysis	SM 2540C		1	311666	KMG	EET PHX	11/22/23 18:27 - 12/01/23 15:24 [1]
Total/NA	Analysis	SM 4500 H+ B		1	311288	MAN	EET PHX	11/16/23 14:50

Client Sample ID: FC-CCR-MW30-1123

Lab Sample ID: 550-210594-12

Date Collected: 11/10/23 10:04

Matrix: Water

Date Received: 11/15/23 14:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	200.7			311483	SGO	EET PHX	11/21/23 04:29
Total/NA	Analysis	200.7 Rev 4.4		5	311843	GLW	EET PHX	11/28/23 19:30
Total/NA	Prep	200.8			311487	SGO	EET PHX	11/21/23 06:58
Total/NA	Analysis	200.8 LL		10	311751	DSJ	EET PHX	11/27/23 17:27

Client Sample ID: FC-CCR-MW36R-1123

Lab Sample ID: 550-210594-13

Date Collected: 11/14/23 11:59

Matrix: Water

Date Received: 11/15/23 14:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		2	311427	MMH	EET PHX	11/20/23 19:46
Total/NA	Analysis	300.0		200	311427	MMH	EET PHX	11/20/23 20:05
Total Recoverable	Prep	200.7			386253	JP8N	EET CAL 4	11/22/23 07:45
Total Recoverable	Analysis	200.7 Rev 4.4		1	386782	VZ0K	EET CAL 4	11/22/23 22:56
Total/NA	Prep	200.7			311483	SGO	EET PHX	11/21/23 04:29
Total/NA	Analysis	200.7 Rev 4.4		5	311843	GLW	EET PHX	11/28/23 19:44
Total/NA	Prep	200.8			311486	SGO	EET PHX	11/21/23 06:52
Total/NA	Analysis	200.8 LL		10	311752	DSJ	EET PHX	11/27/23 18:44
Total/NA	Analysis	SM 2320B		1	311562	MAN	EET PHX	11/21/23 12:45
Total/NA	Analysis	SM 2540C		1	311555	KMG	EET PHX	11/21/23 15:16 - 12/01/23 17:06 [1]
Total/NA	Analysis	SM 4500 H+ B		1	311288	MAN	EET PHX	11/16/23 14:51

Client Sample ID: FC-CCR-MW38R-1123

Lab Sample ID: 550-210594-14

Date Collected: 11/14/23 14:54

Matrix: Water

Date Received: 11/15/23 14:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		2	311427	MMH	EET PHX	11/20/23 20:23
Total/NA	Analysis	300.0		200	311427	MMH	EET PHX	11/20/23 20:41
Total Recoverable	Prep	200.7			386253	JP8N	EET CAL 4	11/22/23 07:45
Total Recoverable	Analysis	200.7 Rev 4.4		5	386978	K1UV	EET CAL 4	11/27/23 14:11
Total/NA	Prep	200.7			311483	SGO	EET PHX	11/21/23 04:29
Total/NA	Analysis	200.7 Rev 4.4		5	311843	GLW	EET PHX	11/28/23 19:47
Total/NA	Prep	200.8			311486	SGO	EET PHX	11/21/23 06:52
Total/NA	Analysis	200.8 LL		10	311752	DSJ	EET PHX	11/27/23 18:46
Total/NA	Analysis	SM 2320B		1	311562	MAN	EET PHX	11/21/23 12:53
Total/NA	Analysis	SM 2540C		1	311555	KMG	EET PHX	11/21/23 15:16 - 12/01/23 17:06 [1]
Total/NA	Analysis	SM 4500 H+ B		1	311288	MAN	EET PHX	11/16/23 14:54

Client Sample ID: FC-CCR-MW56-1123

Lab Sample ID: 550-210594-15

Date Collected: 11/14/23 12:52

Matrix: Water

Date Received: 11/15/23 14:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		2	311427	MMH	EET PHX	11/20/23 21:55
Total/NA	Analysis	300.0		200	311427	MMH	EET PHX	11/20/23 22:13
Total Recoverable	Prep	200.7			386253	JP8N	EET CAL 4	11/22/23 07:45
Total Recoverable	Analysis	200.7 Rev 4.4		5	386978	K1UV	EET CAL 4	11/27/23 14:13
Total/NA	Prep	200.7			311483	SGO	EET PHX	11/21/23 04:29
Total/NA	Analysis	200.7 Rev 4.4		5	311843	GLW	EET PHX	11/28/23 19:50
Total/NA	Prep	200.7			311483	SGO	EET PHX	11/21/23 04:29
Total/NA	Analysis	200.7 Rev 4.4		50	311984	GLW	EET PHX	11/30/23 12:21
Total/NA	Prep	200.8			311486	SGO	EET PHX	11/21/23 06:52
Total/NA	Analysis	200.8 LL		10	311752	DSJ	EET PHX	11/27/23 18:48
Total/NA	Analysis	SM 2320B		1	311562	MAN	EET PHX	11/21/23 13:02
Total/NA	Analysis	SM 2540C		1	311555	KMG	EET PHX	11/21/23 15:16 - 12/01/23 17:06 [1]
Total/NA	Analysis	SM 4500 H+ B		1	311288	MAN	EET PHX	11/16/23 14:56

Client Sample ID: FC-CCR-FD05-1123

Lab Sample ID: 550-210594-16

Date Collected: 11/13/23 13:11

Matrix: Water

Date Received: 11/15/23 14:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	200.7			311483	SGO	EET PHX	11/21/23 04:29
Total/NA	Analysis	200.7 Rev 4.4		5	311843	GLW	EET PHX	11/28/23 19:52
Total/NA	Prep	200.8			311486	SGO	EET PHX	11/21/23 06:52
Total/NA	Analysis	200.8 LL		10	311752	DSJ	EET PHX	11/27/23 18:50

Client Sample ID: FC-CCR-MW57-1123

Lab Sample ID: 550-210594-17

Date Collected: 11/14/23 16:03

Matrix: Water

Date Received: 11/15/23 14:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		2	311427	MMH	EET PHX	11/20/23 22:32
Total/NA	Analysis	300.0		200	311427	MMH	EET PHX	11/20/23 22:50
Total/NA	Analysis	300.0		500	311928	MMH	EET PHX	11/30/23 01:36
Total Recoverable	Prep	200.7			386253	JP8N	EET CAL 4	11/22/23 07:45
Total Recoverable	Analysis	200.7 Rev 4.4		5	386978	K1UV	EET CAL 4	11/27/23 14:16
Total/NA	Prep	200.7			311483	SGO	EET PHX	11/21/23 04:29
Total/NA	Analysis	200.7 Rev 4.4		5	311843	GLW	EET PHX	11/28/23 19:55
Total/NA	Prep	200.7			311483	SGO	EET PHX	11/21/23 04:29
Total/NA	Analysis	200.7 Rev 4.4		50	311984	GLW	EET PHX	11/30/23 12:24
Total/NA	Prep	200.8			311486	SGO	EET PHX	11/21/23 06:52
Total/NA	Analysis	200.8 LL		10	311752	DSJ	EET PHX	11/27/23 18:53
Total/NA	Analysis	SM 2320B		1	311562	MAN	EET PHX	11/21/23 13:17
Total/NA	Analysis	SM 2540C		1	311555	KMG	EET PHX	11/21/23 15:16 - 12/01/23 17:06 [1]
Total/NA	Analysis	SM 4500 H+ B		1	311288	MAN	EET PHX	11/16/23 14:57

Client Sample ID: FC-CCR-MW77S-1123
Lab Sample ID: 550-210594-18
Date Collected: 11/10/23 11:00
Matrix: Water
Date Received: 11/15/23 14:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	200.7			311483	SGO	EET PHX	11/21/23 04:29
Total/NA	Analysis	200.7 Rev 4.4		5	311843	GLW	EET PHX	11/28/23 20:04
Total/NA	Prep	200.8			311486	SGO	EET PHX	11/21/23 06:52
Total/NA	Analysis	200.8 LL		10	311752	DSJ	EET PHX	11/27/23 19:01

Client Sample ID: FC-CCR-MW78S-1123
Lab Sample ID: 550-210594-19
Date Collected: 11/10/23 11:45
Matrix: Water
Date Received: 11/15/23 14:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	200.7			311483	SGO	EET PHX	11/21/23 04:29
Total/NA	Analysis	200.7 Rev 4.4		5	311843	GLW	EET PHX	11/28/23 20:07
Total/NA	Prep	200.8			311486	SGO	EET PHX	11/21/23 06:52
Total/NA	Analysis	200.8 LL		10	311752	DSJ	EET PHX	11/27/23 19:03

Client Sample ID: FC-CCR-MW79S-1123
Lab Sample ID: 550-210594-20
Date Collected: 11/10/23 13:41
Matrix: Water
Date Received: 11/15/23 14:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	200.7			311483	SGO	EET PHX	11/21/23 04:29
Total/NA	Analysis	200.7 Rev 4.4		5	311843	GLW	EET PHX	11/28/23 20:09
Total/NA	Prep	200.8			311486	SGO	EET PHX	11/21/23 06:52
Total/NA	Analysis	200.8 LL		10	311752	DSJ	EET PHX	11/27/23 19:05

Client Sample ID: FC-CCR-MW81-1123
Lab Sample ID: 550-210594-21
Date Collected: 11/10/23 12:28
Matrix: Water
Date Received: 11/15/23 14:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	200.7			311485	SGO	EET PHX	11/21/23 04:55
Total/NA	Analysis	200.7 Rev 4.4		1	311904	GLW	EET PHX	11/29/23 13:51
Total/NA	Prep	200.8			311486	SGO	EET PHX	11/21/23 06:52
Total/NA	Analysis	200.8 LL		10	311752	DSJ	EET PHX	11/27/23 18:34

Client Sample ID: FC-CCR-MW82S-1123
Lab Sample ID: 550-210594-22
Date Collected: 11/10/23 15:57
Matrix: Water
Date Received: 11/15/23 14:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		2	311427	MMH	EET PHX	11/20/23 23:09
Total/NA	Analysis	300.0		200	311427	MMH	EET PHX	11/20/23 23:27
Total/NA	Prep	200.7			311483	SGO	EET PHX	11/21/23 04:29
Total/NA	Analysis	200.7 Rev 4.4		5	311843	GLW	EET PHX	11/28/23 20:12
Total/NA	Prep	200.8			311486	SGO	EET PHX	11/21/23 06:52
Total/NA	Analysis	200.8 LL		10	311752	DSJ	EET PHX	11/27/23 19:07

Lab Chronicle

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-210594-1
SDG: APS Four Corners Power Plant (Other)

Client Sample ID: FC-CCR-MW82S-1123

Lab Sample ID: 550-210594-22
Date Collected: 11/10/23 15:57
Matrix: Water
Date Received: 11/15/23 14:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	SM 2320B		1	311394	MAN	EET PHX	11/16/23 10:31
Total/NA	Analysis	SM 2540C		1	311341	KMG	EET PHX	11/17/23 11:54 - 12/01/23 16:42 [1]
Total/NA	Analysis	SM 4500 H+ B		1	311288	MAN	EET PHX	11/16/23 14:58

Client Sample ID: FC-CCR-FD06-1123

Lab Sample ID: 550-210594-23
Date Collected: 11/10/23 16:20
Matrix: Water
Date Received: 11/15/23 14:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	200.7			311483	SGO	EET PHX	11/21/23 04:29
Total/NA	Analysis	200.7 Rev 4.4		5	311843	GLW	EET PHX	11/28/23 20:15
Total/NA	Prep	200.8			311486	SGO	EET PHX	11/21/23 06:52
Total/NA	Analysis	200.8 LL		10	311752	DSJ	EET PHX	11/27/23 19:09

Client Sample ID: FC-CCR-FD07-1123

Lab Sample ID: 550-210594-24
Date Collected: 11/10/23 13:59
Matrix: Water
Date Received: 11/15/23 14:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	200.7			311483	SGO	EET PHX	11/21/23 04:29
Total/NA	Analysis	200.7 Rev 4.4		5	311843	GLW	EET PHX	11/28/23 20:18
Total/NA	Prep	200.8			311486	SGO	EET PHX	11/21/23 06:52
Total/NA	Analysis	200.8 LL		10	311752	DSJ	EET PHX	11/27/23 19:11

Client Sample ID: FC-CCR-FD02-1123

Lab Sample ID: 550-210594-25
Date Collected: 11/10/23 18:18
Matrix: Water
Date Received: 11/15/23 14:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		2	311427	MMH	EET PHX	11/20/23 23:45
Total/NA	Analysis	300.0		200	311427	MMH	EET PHX	11/21/23 00:04
Total/NA	Prep	200.7			311483	SGO	EET PHX	11/21/23 04:29
Total/NA	Analysis	200.7 Rev 4.4		5	311843	GLW	EET PHX	11/28/23 20:21
Total/NA	Prep	200.8			311486	SGO	EET PHX	11/21/23 06:52
Total/NA	Analysis	200.8 LL		10	311752	DSJ	EET PHX	11/27/23 19:13
Total/NA	Analysis	SM 2320B		1	311394	MAN	EET PHX	11/16/23 10:39
Total/NA	Analysis	SM 2540C		1	311341	KMG	EET PHX	11/17/23 11:54 - 12/01/23 16:42 [1]
Total/NA	Analysis	SM 4500 H+ B		1	311288	MAN	EET PHX	11/16/23 14:59

[1] This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:

EET CAL 4 = Eurofins Calscience Tustin, 2841 Dow Avenue, Tustin, CA 92780, TEL (714)895-5494

EET PHX = Eurofins Phoenix, 4625 East Cotton Center Boulevard, Suite #189, Phoenix, AZ 85040, TEL (602)437-3340

Accreditation/Certification Summary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-210594-1
SDG: APS Four Corners Power Plant (Other)

Laboratory: Eurofins Phoenix

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Arizona	State	AZ0728	06-10-24

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
200.8 LL	200.8	Water	Molybdenum
SM 4500 H+ B		Water	Temperature

Laboratory: Eurofins Calscience

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	SCAQMD LAP	17LA0919	11-30-23
California	State	3082	07-31-24
Nevada	State	CA00111	07-31-24
Oregon	NELAP	4175	02-02-24
USDA	US Federal Programs	P330-22-00059	06-08-26
Washington	State	C916-18	10-11-23 *

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-210594-1
SDG: APS Four Corners Power Plant (Other)

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	EPA	EET PHX
200.7 Rev 4.4	Metals (ICP)	EPA	EET CAL 4
200.7 Rev 4.4	Metals (ICP)	EPA	EET PHX
200.8 LL	Metals (ICP/MS)	EPA	EET PHX
SM 2320B	Alkalinity	SM	EET PHX
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET PHX
SM 4500 H+ B	pH	SM	EET PHX
200.7	Preparation, Total Recoverable Metals	EPA	EET CAL 4
200.7	Preparation, Total Metals	EPA	EET PHX
200.8	Preparation, Total Metals	EPA	EET PHX

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:

EET CAL 4 = Eurofins Calscience Tustin, 2841 Dow Avenue, Tustin, CA 92780, TEL (714)895-5494

EET PHX = Eurofins Phoenix, 4625 East Cotton Center Boulevard, Suite #189, Phoenix, AZ 85040, TEL (602)437-3340

TestAmerica Phoenix
4625 E Cotton Center Blvd
Suite 189
Phoenix, AZ 85040
phone 602.437.3340 fax 602.454.9303

Chain of Custody Record

210594

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

12/5/2023

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☑ Other: CCR

TestAmerica Laboratories, Inc.

Client Contact	Natalie Chrisman	Pam Norris (505-598-8781)	Date:	COC No:
Arizona Public Service	602-250-3608	Lab Contact: Rachel Sester	Carrier:	1 of 3 COCs
PO Box 355, MS 4915	Analysis Turnaround Time			Sampler:
Fruitland, NM 87416	☐ CALENDAR DAYS ☑ WORKING DAYS			For Lab Use Only:
Phone	TAT if different from Below _____			Walk-in Client:
FAX	☑ 2 weeks			Lab Sampling:
Project Name: CCR Groundwater Monitoring	☐ 1 week			
Site: APS Four Corners Power Plant (Other)	☐ 2 days			Job / SDG No.:
PO #: 100622298	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	EPA 300.0 (Cl, F, SO4)	EPA 200.7 - Totals (B)	EPA 200.7 - Totals (B, Ca, Be)	EPA 200.7 - Totals (B, Ca, Be, K, Mg, Na, Fe)	EPA 200.7 - Totals (B, Ca, K, Mg, Na)	EPA 200.7 - Totals (B, Ca, K, Mg, Na, Mn, Fe)	EPA 200.7 - Totals (B, Ca, Be, K, Mg, Na, Mn, Fe)	EPA 200.7 - Total Lithium	EPA 200.8 - Totals (Sb, As, Ba, Cd, Co, Cr, Pb, Mo, Se, Tl)	EPA 200.8 - Totals (Co, Mo)	EPA 245.1 - Totals (Hg)	SM 4500-HB (pH)	SM 2540C (TDS)	SM 2320B (CO3 Alkalinity as CaCO3, HCO3 Alkalinity as	Sample Specific Notes:
FC-CCR-DMX01-1123 -1	11/10/2023	1445	G	W	3	N	Y		X								X					Low Flow, MS/MSD included
FC-CCR-DMX03-1123 -2	11/13/2023	1451	G	W	3	N		X						X	X	X			X	X	X	Low Flow
FC-CCR-DMX04-1123 -3	11/14/2023	1730	G	W	3	N		X						X	X	X			X	X	X	"
FC-CCR-MW05-1123 -4	11/13/2023	1615	G	W	3	N		X						X	X		X		X	X	X	"
FC-CCR-MW06R-1123 -5	11/14/2023	1821	G	W	3	N		X						X	X	X			X	X	X	"
FC-CCR-FD04-1123 -6	11/10/2023	730	G	W	1	N			X								X					"
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____								1	4	4	4	4	4	4		4	4	4	1	1	1	

550-210594 Chain of Custody

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☑ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

Method 200.8 with collision cell

4.1°C-4.5°C-5.1°C- ONICE PC

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd:_____ Corr'd:_____ Therm ID No.:_____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	WSP	11-15 2305			
[signature]	A.H.S	11-15 8:20 AM			
[signature]	A.H.S	11-15 2:43pm	Received in Laboratory by: [signature]	EETA-PHX	11/15/23 1443

TestAmerica Phoenix
4625 E Cotton Center Blvd
Suite 189
Phoenix, AZ 85040
phone 602.437.3340 fax 602.454.9303

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

210594

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☑ Other: CCR

TestAmerica Laboratories, Inc.

12/5/2023

Client Contact	Natalie Chrisman	Pam Norris (505-598-8781)	Date:	COC No:
Arizona Public Service	602-250-3608	Lab Contact: Rachel Sester	Carrier:	2 of 3 COCs
PO Box 355, MS 4915	Analysis Turnaround Time			Sampler:
Fruitland, NM 87416	☐ CALENDAR DAYS ☑ WORKING DAYS			For Lab Use Only:
Phone	TAT if different from Below _____			Walk-in Client:
FAX	☑ 2 weeks			Lab Sampling:
Project Name: CCR Groundwater Monitoring	☐ 1 week			Job / SDG No.:
Site: APS Four Corners Power Plant (Other)	☐ 2 days			
PO #: 100622298	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	EPA 300.0 (Cl, F, SO4)	EPA 200.7 - Totals (B)	EPA 200.7 - Totals (B, Ca, Be)	EPA 200.7 - Totals (B, Ca, Be, K, Mg, Na)	EPA 200.7 - Totals (B, Ca, K, Mg, Na)	EPA 200.7 - Totals (B, Ca, K, Mg, Na, Mn, Fe)	EPA 200.7 - Totals (B, Ca, Be, K, Mg, Na, Mn, Fe)	EPA 200.7 - Total Lithium	EPA 200.8 - Totals (Sb, As, Ba, Cd, Co, Cr, Pb, Mo, Se, Tl)	EPA 200.8 - Totals (Co, Mo)	EPA 245.1 - Totals (Hg)	SM 4500-HB (pH)	SM 2540C (TDS)	SM 2320B (CO3 Alkalinity as CaCO3, HCO3 Alkalinity as CaCO3)	Sample Specific Notes:
FC-CCR-MW17R-1123 -7	11/14/2023	1407	G	W	3	N		X						X	X	X			X	X	X	Low Flow
FC-CCR-MW18-1123 -8	11/14/2023	950	G	W	3	N		X						X	X		X		X	X	X	"
FC-CCR-MW19-1123 -9	11/13/2023	1404	G	W	1	N			X								X					"
FC-CCR-MW23R-1123 -10	11/14/2023	1105	G	W	3	N		X						X	X		X		X	X	X	"
FC-CCR-MW24-1123 -11	11/14/2023	1943	G	W	3	N		X						X	X		X		X	X	X	"
FC-CCR-MW30-1123 -12	11/10/2023	1004	G	W	3	N	Y		X								X					Low Flow, MS + MSD included
FC-CCR-MW36R-1123 -13	11/14/2023	1159	G	W	3	N		X						X	X		X		X	X	X	Low Flow
FC-CCR-MW38R-1123 -14	11/14/2023	1454	G	W	3	N		X						X	X	X			X	X	X	"
FC-CCR-MW56-1123 -15	11/14/2023	1252	G	W	3	N		X						X	X	X			X	X	X	"
FC-CCR-FD05-1123 -16	11/13/2023	1311	G	W	1	N			X								X					"
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____								1	4	4	4	4	4	4	4	4	4	4	1	1	1	

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☑ Return to Client ☑ Disposal by Lab ☐ Archive for_____ Months

Special Instructions/QC Requirements & Comments:

Method 200.8 with collision cell

4.1°C | 4.6°C | 5.1°C - ON ICE PC

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:	Cooler Temp. (°C): Obs'd:_____ Corr'd:_____ Therm ID No.:_____			
Relinquished by:	Company: WSP	Date/Time: 11-15-23 0800	Received by:	Company:	Date/Time:
Relinquished by:	Company: A.H.S	Date/Time: 11-15 820 AM	Received by:	Company:	Date/Time:
Relinquished by:	Company: A.H.S	Date/Time: 11-15 243 PM	Received in Laboratory by:	Company: EETA-PHX	Date/Time: 11/15/23 1443

Form No. CA-C-WI-002, Rev. 4.2, dated 04/02/2013

TestAmerica Phoenix
4625 E Cotton Center Blvd
Suite 189
Phoenix, AZ 85040
phone 602.437.3340 fax 602.454.9303

Chain of Custody Record

210594

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

12/5/2023

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☑ Other: CCR

TestAmerica Laboratories, Inc.

Client Contact	Natalie Chrisman	Pam Norris (505-598-8781)	Date:
Arizona Public Service	602-250-3608	Lab Contact: Rachel Sester	Carrier:
PO Box 355, MS 4915	**Analysis Turnaround Time**		
Fruitland, NM 87416	☐ CALENDAR DAYS ☑ WORKING DAYS		
Phone	TAT if different from Below _____		
FAX	☑ 2 weeks		
Project Name: CCR Groundwater Monitoring	☐ 1 week		
Site: APS Four Corners Power Plant (Other)	☐ 2 days		
PO #: 100622298	☐ 1 day		

COC No: 3 of 3 COCs

Sampler:

For Lab Use Only:
Walk-in Client:
Lab Sampling:

Job / SDG No.:

Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	EPA 300.0 (Cl, F, SO4)	EPA 200.7 - Totals (B)	EPA 200.7 - Totals (B, Ca, Be)	EPA 200.7 - Totals (B, Mn, Fe)	EPA 200.7 - Totals (B, Ca, K, Mg, Na)	EPA 200.7 - Totals (B, Ca, K, Mg, Na, Mn, Fe)	EPA 200.7 - Totals (B, Ca, Be, K, Mg, Na, Mn, Fe)	EPA 200.7 - Total Lithium	EPA 200.8 - Totals (Sb, As, Ba, Cd, Co, Cr, Pb, Mo, Se, Tl)	EPA 200.8 - Totals (Co, Mo)	EPA 245.1 - Totals (Hg)	SM 4500-HB (pH)	SM 2540C (TDS)	SM 2320B (CO3 Alkalinity as CaCO3, HCO3 Alkalinity as				Sample Specific Notes:
FC-CCR-MW57-1123	-17	11/14/2023	1603	G	W	2	N		X						X	X	X			X	X	X				Low Flow
FC-CCR-MW77S-1123	-18	11/10/2023	1100	G	W	1	N			X								X								"
FC-CCR-MW78S-1123	-19	11/10/2023	1145	G	W	1	N			X								X								"
FC-CCR-MW79S-1123	-20	11/10/2023	1341	G	W	3	N			X								X								"
FC-CCR-MW81-1123	-21	11/10/2023	1228	G	W	3	N	Y		X								X								Low Flow, MS + MSD *included*
FC-CCR-MW82S-1123	-22	11/10/2023	1557	G	W	2	N		X				X					X		X	X	X				Low Flow
FC-CCR-FD06-1123	-23	11/10/2023	1620	G	W	1	N	N		X								X								"
FC-CCR-FD07-1123	-24	11/10/2023	1359	G	W	1	N	N		X								X								"
FC-CCR-FD02-1123	-25	11/10/2023	1818	G	W	2	N		X				X					X		X	X	X				"
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____									1	4	4	4	4	4	4	4	4	4	4	1	1	1				

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☑ Return to Client ☑ Disposal by Lab ☑ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

Method 200.8 with collision cell

4.1°C/4.8°C/5.1°C-ON ICE-PC

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:		Cooler Temp. (°C): Obs'd: _____ Corr'd: _____ Therm ID No.: _____		
Relinquished by: BSL	Company: WSP	Date/Time: 11-15-2305:20	Received by:	Company:	Date/Time:
Relinquished by:	Company: AHS	Date/Time: 11-15-8:20	Received by:	Company:	Date/Time:
Relinquished by:	Company: AHS	Date/Time: 11-15 2:43 PM	Received in Laboratory by:	Company: EETA-PHX	Date/Time: 11/15/23 1443

Eurofins Phoenix
4625 East Cotton Center Boulevard Suite #189
Phoenix, AZ 85040
Phone: 602-437-3340

Chain of Custody Record

eurofins | Envi

Loc: 550
210594

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Eshelman, Linda	Carrier Tracking No(s):	COC No: 550-38245.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: linda.eshelman@et.eurofinsus.com	State of Origin: Arizona	Page: Page 1 of 2
Company: Eurofins Environment Testing Southwest,		Accreditations Required (See note): State - Arizona; State Program - Arizona		Job #: 550-210594-1
Address: 2841 Dow Avenue, Suite 100, ,	Due Date Requested: 11/30/2023			
City: Tustin	TAT Requested (days):			
State, Zip: CA, 92780				
Phone: 714-895-5494(Tel)	PO #:			
Email:	WO #:			
Project Name: CCR Groundwater Monitoring	Project #: 55009706			
Site: Arizona Public Service	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
E - NaHSO4
F - MeOH
G - Amchlor
H - Ascorbic Acid
I - Ice
J - DI Water
K - EDTA
L - EDA
M - Hexane
N - None
O - AsNaO2
P - Na2O4S
Q - Na2SO3
R - Na2S2O3
S - H2SO4
T - TSP Dodecahydrate
U - Acetone
V - MCAA
W - pH 4-5
Y - Trizma
Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	200.7/200.7_P_TR (MOD) Lithium	Total Number of containers	Special Instructi
			Preservation Code:						
FC-CCR-DMX03-1123 (550-210594-2)	11/13/23	14:51 Arizona		Water			X	1	
FC-CCR-DMX04-1123 (550-210594-3)	11/14/23	17:30 Arizona		Water			X	1	
FC-CCR-MW05-1123 (550-210594-4)	11/13/23	16:15 Arizona		Water			X	1	
FC-CCR-MW06R-1123 (550-210594-5)	11/14/23	18:21 Arizona		Water			X	1	
FC-CCR-MW17R-1123 (550-210594-7)	11/14/23	14:07 Arizona		Water			X	1	
FC-CCR-MW18-1123 (550-210594-8)	11/14/23	09:50 Arizona		Water			X	1	
FC-CCR-MW23R-1123 (550-210594-10)	11/14/23	11:05 Arizona		Water			X	1	
FC-CCR-MW24-1123 (550-210594-11)	11/14/23	19:43 Arizona		Water			X	1	
FC-CCR-MW36R-1123 (550-210594-13)	11/14/23	11:59 Arizona		Water			X	1	

550-210594 Chain of Custody

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Southwest, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Southwest, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Southwest, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Southwest, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[illegible] 11-16-23	14:45	EESAT	Fedex		
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by: FEDEX	Date/Time:	Company	Received by:	Date/Time: 11/17/23 09:30	Company EC

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 2.3 / 2.2 SEAL

Ver: 06/08/2021

12/5/2023

Eurofins Phoenix
4625 East Cotton Center Boulevard Suite #189
Phoenix, AZ 85040
Phone: 602-437-3340

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler:	Lab PM: Eshelman, Linda	Carrier Tracking No(s):	COC No: 550-38245.2
Client Contact: Shipping/Receiving	Phone:	E-Mail: linda.eshelman@et.eurofinsus.com	State of Origin: Arizona	Page: Page 2 of 2
Company: Eurofins Environment Testing Southwest,		Accreditations Required (See note): State - Arizona; State Program - Arizona		Job #: 550-210594-1
Address: 2841 Dow Avenue, Suite 100, ,	Due Date Requested: 11/30/2023			
City: Tustin	TAT Requested (days):			
State, Zip: CA, 92780				
Phone: 714-895-5494(Tel)	PO #:			
Email:	WO #:			
Project Name: CCR Groundwater Monitoring	Project #: 55009706			
Site: Arizona Public Service	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
E - NaHSO4
F - MeOH
G - Amchlor
H - Ascorbic Acid
I - Ice
J - DI Water
K - EDTA
L - EDA
M - Hexane
N - None
O - AsNaO2
P - Na2O4S
Q - Na2SO3
R - Na2S2O3
S - H2SO4
T - TSP Dodecahydrate
U - Acetone
V - MCAA
W - pH 4-5
Y - Trizma
Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	200.7/200.7_P_TR (MOD) Lithium	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X		X	
FC-CCR-MW38R-1123 (550-210594-14)	11/14/23	14:54 Arizona		Water			X	1	
FC-CCR-MW56-1123 (550-210594-15)	11/14/23	12:52 Arizona		Water			X	1	
FC-CCR-MW57-1123 (550-210594-17)	11/14/23	16:03 Arizona		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Southwest, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Southwest, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Southwest, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Southwest, LLC.

Possible Hazard Identification
Unconfirmed

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature] 11-16-23	14:40	EET SW	Fedex		
Fedex			[signature]	11/17/23 09:30	EC

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 2-3 / 2-2 SC12

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Arizona Public Service Company

Job Number: 550-210594-1
SDG Number: APS Four Corners Power Plant (Other)

Login Number: 210594
List Number: 1
Creator: Maycock, Lisa

List Source: Eurofins Phoenix

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	False	Check done at department level as required.

Login Sample Receipt Checklist

Client: Arizona Public Service Company

Job Number: 550-210594-1
SDG Number: APS Four Corners Power Plant (Other)

Login Number: 210594
List Number: 2
Creator: Khana, Piyush

List Source: Eurofins Calscience
List Creation: 11/17/23 12:36 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	2264067
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.2
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

PREPARED FOR

Attn: Natalie Chrisman
Arizona Public Service Company
PO BOX 188, Ste. 4458
Joseph City, Arizona 86032

Generated 12/7/2023 7:01:50 PM

JOB DESCRIPTION

CCR Groundwater Monitoring
APS Four Corners Power Plant (Other)

JOB NUMBER

550-210744-1

Eurofins Phoenix
4625 East Cotton Center Boulevard
Suite #189
Phoenix AZ 85040

See page two for job notes and contact information.

my EOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Southwest, LLC Project Manager.

Authorization



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12/7/2023 7:01:50 PM

Authorized for release by
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Rachel.Sester@et.eurofinsus.com
Designee for
Linda Eshelman, Project Manager II
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Table of Contents

Cover Page 1
Table of Contents 3
Definitions/Glossary 4
Case Narrative 6
Sample Summary 7
Detection Summary 8
Client Sample Results 12
QC Sample Results 21
QC Association Summary 32
Lab Chronicle 38
Certification Summary 43
Method Summary 44
Chain of Custody 45
Receipt Checklists 48

Definitions/Glossary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-210744-1
SDG: APS Four Corners Power Plant (Other)

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
D1	Sample required dilution due to matrix.
D2	Sample required dilution due to high concentration of analyte.
E2	Concentration estimated. Analyte exceeded calibration range. Reanalysis not performed due to sample matrix.
M1	Matrix spike recovery was high, the associated blank spike recovery was acceptable.
M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The associated blank spike was acceptable.

Metals

Qualifier	Qualifier Description
M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The associated blank spike was acceptable.
R4	MS/MSD RPD exceeded the method control limit. Recovery met acceptance criteria.
T5	Laboratory not licensed for this parameter
V1	CCV recovery was above method acceptance limits. This target analyte was not detected in the sample.

General Chemistry

Qualifier	Qualifier Description
H1	Sample analysis performed past holding time.
H5	This test is specified to be performed in the field within 15 minutes of sampling; sample was received and analyzed past the regulatory holding time.
T5	Laboratory not licensed for this parameter

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 550-210744-1

Laboratory: Eurofins Phoenix

Narrative

Job Narrative
550-210744-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 11/17/2023 4:15 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 3.0°C and 3.1°C

HPLC/IC
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals
Method 200.8_CWA_LL: Samples diluted 10x for sample matrix

FC-CCR-MW11-1123 (550-210744-2), FC-CCR-EW17-1123 (550-210744-6), FC-CCR-EW12R-1123 (550-210744-7), FC-CCR-EW11R-1123 (550-210744-8), FC-CCR-EW14-1123 (550-210744-9), FC-CCR-EW15-1123 (550-210744-10), FC-CCR-MW34-1123 (550-210744-11), (550-210594-A-21-C), (550-210594-A-21-A MS) and (550-210594-A-21-B MSD)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
Method 2540C_Calcd: The following samples were analyzed outside of analytical holding time due to Analyst scheduling error: FC-CCR-DMX05R-1123 (550-210744-5), FC-CCR-EW12R-1123 (550-210744-7), FC-CCR-EW11R-1123 (550-210744-8), FC-CCR-EW14-1123 (550-210744-9), FC-CCR-EW15-1123 (550-210744-10), FC-CCR-MW34-1123 (550-210744-11) and FC-CCR-EB01-1123 (550-210744-12).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Sample Summary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-210744-1
SDG: APS Four Corners Power Plant (Other)

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
550-210744-1	FC-CCR-DMX06-1123	Water	11/15/23 09:15	11/17/23 16:15
550-210744-2	FC-CCR-MW11-1123	Water	11/15/23 15:27	11/17/23 16:15
550-210744-3	FC-CCR-MW15-1123	Water	11/15/23 10:33	11/17/23 16:15
550-210744-4	FC-CCR-MW16-1123	Water	11/15/23 11:47	11/17/23 16:15
550-210744-5	FC-CCR-DMX05R-1123	Water	11/16/23 11:38	11/17/23 16:15
550-210744-6	FC-CCR-EW17-1123	Water	11/15/23 16:09	11/17/23 16:15
550-210744-7	FC-CCR-EW12R-1123	Water	11/16/23 09:53	11/17/23 16:15
550-210744-8	FC-CCR-EW11R-1123	Water	11/16/23 10:41	11/17/23 16:15
550-210744-9	FC-CCR-EW14-1123	Water	11/16/23 17:23	11/17/23 16:15
550-210744-10	FC-CCR-EW15-1123	Water	11/16/23 15:36	11/17/23 16:15
550-210744-11	FC-CCR-MW34-1123	Water	11/16/23 16:35	11/17/23 16:15
550-210744-12	FC-CCR-EB01-1123	Water	11/16/23 17:37	11/17/23 16:15

Detection Summary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-210744-1
SDG: APS Four Corners Power Plant (Other)

Client Sample ID: FC-CCR-DMX06-1123 — Lab Sample ID: 550-210744-1

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	950	D2	400		mg/L	200		300.0	Total/NA
Sulfate	7000	D2	400		mg/L	200		300.0	Total/NA
Boron	6.3		0.050		mg/L	1		200.7 Rev 4.4	Total/NA
Calcium	430		2.0		mg/L	1		200.7 Rev 4.4	Total/NA
Magnesium	660		2.0		mg/L	1		200.7 Rev 4.4	Total/NA
Potassium	55		0.50		mg/L	1		200.7 Rev 4.4	Total/NA
Sodium	3900		5.0		mg/L	10		200.7 Rev 4.4	Total/NA
Manganese	1.2		0.10		mg/L	10		200.7 Rev 4.4	Total/NA
Lithium	1.1		0.050		mg/L	1		200.7 Rev 4.4	Total Recoverable
Barium	0.014		0.0050		mg/L	10		200.8	Total/NA
Manganese	1.2		0.020		mg/L	10		200.8	Total/NA
Alkalinity as CaCO3	520		6.0		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	520		6.0		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	14000		100		mg/L	1		SM 2540C	Total/NA
pH	7.3	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	14.4	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-MW11-1123 — Lab Sample ID: 550-210744-2

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	5500	D2	400		mg/L	200		300.0	Total/NA
Sulfate	7900	D2	2000		mg/L	1000		300.0	Total/NA
Calcium	530		20		mg/L	10		200.7 Rev 4.4	Total/NA
Magnesium	10000		40		mg/L	20		200.7 Rev 4.4	Total/NA
Potassium	180		5.0		mg/L	10		200.7 Rev 4.4	Total/NA
Sodium	15000		25		mg/L	50		200.7 Rev 4.4	Total/NA
Cobalt	25		5.0		ug/L	10		200.8 LL	Total/NA
Alkalinity as CaCO3	850		6.0		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	850		6.0		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	76000		1000		mg/L	1		SM 2540C	Total/NA
pH	7.0	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	13.8	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-MW15-1123 — Lab Sample ID: 550-210744-3

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	1100	D2	400		mg/L	200		300.0	Total/NA
Sulfate	6600	D2	400		mg/L	200		300.0	Total/NA
Boron	8.9		0.050		mg/L	1		200.7 Rev 4.4	Total/NA
Calcium	520		2.0		mg/L	1		200.7 Rev 4.4	Total/NA
Iron	0.26		0.10		mg/L	1		200.7 Rev 4.4	Total/NA
Magnesium	780		2.0		mg/L	1		200.7 Rev 4.4	Total/NA
Potassium	48		0.50		mg/L	1		200.7 Rev 4.4	Total/NA
Sodium	2600		5.0		mg/L	10		200.7 Rev 4.4	Total/NA
Manganese	1.1		0.10		mg/L	10		200.7 Rev 4.4	Total/NA
Lithium	1.0		0.10		mg/L	2		200.7 Rev 4.4	Total Recoverable
Barium	0.020		0.0050		mg/L	10		200.8	Total/NA
Manganese	1.1		0.020		mg/L	10		200.8	Total/NA
Alkalinity as CaCO3	660		6.0		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	660		6.0		mg/L	1		SM 2320B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: FC-CCR-MW15-1123 (Continued) — Lab Sample ID: 550-210744-3

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Total Dissolved Solids	13000		100		mg/L	1		SM 2540C	Total/NA
pH	7.1	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	13.5	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-MW16-1123 — Lab Sample ID: 550-210744-4

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	840	D2	400		mg/L	200		300.0	Total/NA
Sulfate	12000	D2	400		mg/L	200		300.0	Total/NA
Boron	11		0.050		mg/L	1		200.7 Rev 4.4	Total/NA
Calcium	490		2.0		mg/L	1		200.7 Rev 4.4	Total/NA
Iron	0.16		0.10		mg/L	1		200.7 Rev 4.4	Total/NA
Magnesium	1700		20		mg/L	10		200.7 Rev 4.4	Total/NA
Potassium	74		0.50		mg/L	1		200.7 Rev 4.4	Total/NA
Sodium	4100		5.0		mg/L	10		200.7 Rev 4.4	Total/NA
Lithium	1.6		0.25		mg/L	5		200.7 Rev 4.4	Total Recoverable
Barium	0.021		0.0050		mg/L	10		200.8	Total/NA
Manganese	1.6		0.020		mg/L	10		200.8	Total/NA
Selenium	0.030		0.0050		mg/L	10		200.8	Total/NA
Alkalinity as CaCO3	590		6.0		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	590		6.0		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	19000		200		mg/L	1		SM 2540C	Total/NA
pH	7.3	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	14.2	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-DMX05R-1123 — Lab Sample ID: 550-210744-5

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	1300	D2	400		mg/L	200		300.0	Total/NA
Sulfate	9700	D2	400		mg/L	200		300.0	Total/NA
Boron	15		0.050		mg/L	1		200.7 Rev 4.4	Total/NA
Calcium	470		2.0		mg/L	1		200.7 Rev 4.4	Total/NA
Iron	3.9		0.10		mg/L	1		200.7 Rev 4.4	Total/NA
Magnesium	630		2.0		mg/L	1		200.7 Rev 4.4	Total/NA
Potassium	54		0.50		mg/L	1		200.7 Rev 4.4	Total/NA
Sodium	4400		5.0		mg/L	10		200.7 Rev 4.4	Total/NA
Manganese	0.87		0.10		mg/L	10		200.7 Rev 4.4	Total/NA
Lithium	0.80		0.050		mg/L	1		200.7 Rev 4.4	Total Recoverable
Barium	0.021		0.0050		mg/L	10		200.8	Total/NA
Manganese	0.86		0.020		mg/L	10		200.8	Total/NA
Alkalinity as CaCO3	450		6.0		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	450		6.0		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	15000	H1	200		mg/L	1		SM 2540C	Total/NA
pH	7.5	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	14.7	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-EW17-1123 — Lab Sample ID: 550-210744-6

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	970	D2	400		mg/L	200		300.0	Total/NA
Sulfate	9400	D2	400		mg/L	200		300.0	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: FC-CCR-EW17-1123 (Continued) — Lab Sample ID: 550-210744-6

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Boron	36		0.050		mg/L	1		200.7 Rev 4.4	Total/NA
Iron	0.17		0.10		mg/L	1		200.7 Rev 4.4	Total/NA
Magnesium	1100		20		mg/L	10		200.7 Rev 4.4	Total/NA
Manganese	0.72		0.10		mg/L	10		200.7 Rev 4.4	Total/NA
Cobalt	11		5.0		ug/L	10		200.8 LL	Total/NA
Total Dissolved Solids	16000		100		mg/L	1		SM 2540C	Total/NA

Client Sample ID: FC-CCR-EW12R-1123 — Lab Sample ID: 550-210744-7

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	860	D2	400		mg/L	200		300.0	Total/NA
Sulfate	7100	D2	400		mg/L	200		300.0	Total/NA
Boron	49		0.050		mg/L	1		200.7 Rev 4.4	Total/NA
Iron	14		0.10		mg/L	1		200.7 Rev 4.4	Total/NA
Magnesium	830		2.0		mg/L	1		200.7 Rev 4.4	Total/NA
Manganese	1.8		0.050		mg/L	5		200.7 Rev 4.4	Total/NA
Molybdenum	69	T5	5.0		ug/L	10		200.8 LL	Total/NA
Total Dissolved Solids	12000	H1	100		mg/L	1		SM 2540C	Total/NA

Client Sample ID: FC-CCR-EW11R-1123 — Lab Sample ID: 550-210744-8

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	600	D2	400		mg/L	200		300.0	Total/NA
Sulfate	5200	D2	400		mg/L	200		300.0	Total/NA
Boron	29		0.050		mg/L	1		200.7 Rev 4.4	Total/NA
Iron	7.4		0.10		mg/L	1		200.7 Rev 4.4	Total/NA
Magnesium	790		2.0		mg/L	1		200.7 Rev 4.4	Total/NA
Manganese	2.0		0.050		mg/L	5		200.7 Rev 4.4	Total/NA
Cobalt	6.1		5.0		ug/L	10		200.8 LL	Total/NA
Molybdenum	19	T5	5.0		ug/L	10		200.8 LL	Total/NA
Total Dissolved Solids	8200	H1	100		mg/L	1		SM 2540C	Total/NA

Client Sample ID: FC-CCR-EW14-1123 — Lab Sample ID: 550-210744-9

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	260	D2	40		mg/L	20		300.0	Total/NA
Sulfate	4300	D2	400		mg/L	200		300.0	Total/NA
Boron	15		0.050		mg/L	1		200.7 Rev 4.4	Total/NA
Iron	0.13		0.10		mg/L	1		200.7 Rev 4.4	Total/NA
Magnesium	380		2.0		mg/L	1		200.7 Rev 4.4	Total/NA
Manganese	3.8		0.050		mg/L	5		200.7 Rev 4.4	Total/NA
Cobalt	7.0		5.0		ug/L	10		200.8 LL	Total/NA
Molybdenum	57	T5	5.0		ug/L	10		200.8 LL	Total/NA
Total Dissolved Solids	6600	H1	100		mg/L	1		SM 2540C	Total/NA

Client Sample ID: FC-CCR-EW15-1123 — Lab Sample ID: 550-210744-10

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	420	D2	400		mg/L	200		300.0	Total/NA
Sulfate	4800	D2	400		mg/L	200		300.0	Total/NA
Boron	13		0.050		mg/L	1		200.7 Rev 4.4	Total/NA
Iron	0.12		0.10		mg/L	1		200.7 Rev 4.4	Total/NA
Magnesium	590		2.0		mg/L	1		200.7 Rev 4.4	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: FC-CCR-EW15-1123 (Continued) — Lab Sample ID: 550-210744-10

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Manganese	2.7		0.050		mg/L	5		200.7 Rev 4.4	Total/NA
Molybdenum	40	T5	5.0		ug/L	10		200.8 LL	Total/NA
Total Dissolved Solids	7700	H1	100		mg/L	1		SM 2540C	Total/NA

Client Sample ID: FC-CCR-MW34-1123 — Lab Sample ID: 550-210744-11

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	18		2.0		mg/L	1		300.0	Total/NA
Sulfate	5100	D2	400		mg/L	200		300.0	Total/NA
Boron	11		0.050		mg/L	1		200.7 Rev 4.4	Total/NA
Iron	0.12		0.10		mg/L	1		200.7 Rev 4.4	Total/NA
Magnesium	590		2.0		mg/L	1		200.7 Rev 4.4	Total/NA
Manganese	2.6		0.010		mg/L	1		200.7 Rev 4.4	Total/NA
Molybdenum	64	T5	5.0		ug/L	10		200.8 LL	Total/NA
Total Dissolved Solids	7600	H1	100		mg/L	1		SM 2540C	Total/NA

Client Sample ID: FC-CCR-EB01-1123 — Lab Sample ID: 550-210744-12

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Total Dissolved Solids	34	H1	20		mg/L	1		SM 2540C	Total/NA
pH	6.0	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	12.8	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: FC-CCR-DMX06-1123

Lab Sample ID: 550-210744-1

Date Collected: 11/15/23 09:15
Matrix: Water
Date Received: 11/17/23 16:15

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**950**	**D2**	400		mg/L			12/02/23 19:31	200
Fluoride	ND	D1	0.80		mg/L			12/02/23 19:13	2
Sulfate	**7000**	**D2**	400		mg/L			12/02/23 19:31	200

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		0.0010		mg/L		11/21/23 04:55	11/29/23 13:54	1
Boron	**6.3**		0.050		mg/L		11/21/23 04:55	11/29/23 13:54	1
Calcium	**430**		2.0		mg/L		11/21/23 04:55	11/29/23 13:54	1
Iron	ND		0.10		mg/L		11/21/23 04:55	11/29/23 13:54	1
Magnesium	**660**		2.0		mg/L		11/21/23 04:55	11/29/23 13:54	1
Potassium	**55**		0.50		mg/L		11/21/23 04:55	11/29/23 13:54	1
Sodium	**3900**		5.0		mg/L		11/21/23 04:55	12/01/23 13:18	10
Manganese	**1.2**		0.10		mg/L		11/21/23 04:55	12/01/23 13:18	10

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**1.1**		0.050		mg/L		11/27/23 07:07	11/29/23 11:54	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.010		mg/L		11/21/23 09:13	11/28/23 09:37	10
Arsenic	ND		0.010		mg/L		11/21/23 09:13	11/28/23 09:37	10
Barium	**0.014**		0.0050		mg/L		11/21/23 09:13	11/28/23 09:37	10
Cadmium	ND		0.0010		mg/L		11/21/23 09:13	11/28/23 09:37	10
Chromium	ND		0.010		mg/L		11/21/23 09:13	11/28/23 09:37	10
Manganese	**1.2**		0.020		mg/L		11/21/23 09:13	11/28/23 09:37	10
Selenium	ND		0.0050		mg/L		11/21/23 09:13	11/28/23 09:37	10
Thallium	ND		0.0010		mg/L		11/21/23 09:13	11/28/23 09:37	10
Zinc	ND		0.13		mg/L		11/21/23 09:13	11/28/23 09:37	10

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3 (SM 2320B)	**520**		6.0		mg/L			11/21/23 14:31	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**520**		6.0		mg/L			11/21/23 14:31	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			11/21/23 14:31	1
Alkalinity, Phenolphthalein (SM 2320B)	ND		6.0		mg/L			11/21/23 14:31	1
Hydroxide Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			11/21/23 14:31	1
Total Dissolved Solids (SM 2540C)	**14000**		100		mg/L			11/22/23 18:11	1
pH (SM 4500 H+ B)	**7.3**	**H5**	1.7		SU			11/29/23 12:40	1
Temperature (SM 4500 H+ B)	**14.4**	**H5 T5**	0.1		Degrees C			11/29/23 12:40	1

Client Sample ID: FC-CCR-MW11-1123

Lab Sample ID: 550-210744-2

Date Collected: 11/15/23 15:27
Matrix: Water
Date Received: 11/17/23 16:15

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5500**	**D2**	400		mg/L			12/05/23 22:45	200

Client Sample ID: FC-CCR-MW11-1123

Lab Sample ID: 550-210744-2

Date Collected: 11/15/23 15:27
Matrix: Water
Date Received: 11/17/23 16:15

Method: EPA 300.0 - Anions, Ion Chromatography (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND	D2	0.80		mg/L			12/05/23 05:15	2
Sulfate	**7900**	**D2**	2000		mg/L			12/06/23 16:54	1000

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.50		mg/L		11/21/23 04:55	12/01/23 13:21	10
Calcium	**530**		20		mg/L		11/21/23 04:55	12/01/23 13:21	10
Magnesium	**10000**		40		mg/L		11/21/23 04:55	12/04/23 11:43	20
Potassium	**180**		5.0		mg/L		11/21/23 04:55	12/01/23 13:21	10
Sodium	**15000**		25		mg/L		11/21/23 04:55	12/05/23 05:50	50

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	**25**		5.0		ug/L		11/21/23 07:04	11/27/23 19:41	10
Molybdenum	ND	T5	5.0		ug/L		11/21/23 07:04	11/27/23 19:41	10

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3 (SM 2320B)	**850**		6.0		mg/L			11/21/23 14:43	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**850**		6.0		mg/L			11/21/23 14:43	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			11/21/23 14:43	1
Alkalinity, Phenolphthalein (SM 2320B)	ND		6.0		mg/L			11/21/23 14:43	1
Hydroxide Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			11/21/23 14:43	1
Total Dissolved Solids (SM 2540C)	**76000**		1000		mg/L			11/22/23 18:11	1
pH (SM 4500 H+ B)	**7.0**	**H5**	1.7		SU			11/29/23 12:41	1
Temperature (SM 4500 H+ B)	**13.8**	**H5 T5**	0.1		Degrees C			11/29/23 12:41	1

Client Sample ID: FC-CCR-MW15-1123

Lab Sample ID: 550-210744-3

Date Collected: 11/15/23 10:33
Matrix: Water
Date Received: 11/17/23 16:15

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1100**	**D2**	400		mg/L			12/02/23 20:45	200
Fluoride	ND	D1	0.80		mg/L			12/02/23 20:26	2
Sulfate	**6600**	**D2**	400		mg/L			12/02/23 20:45	200

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		0.0010		mg/L		11/21/23 04:55	11/29/23 14:00	1
Boron	**8.9**		0.050		mg/L		11/21/23 04:55	11/29/23 14:00	1
Calcium	**520**		2.0		mg/L		11/21/23 04:55	11/29/23 14:00	1
Iron	**0.26**		0.10		mg/L		11/21/23 04:55	11/29/23 14:00	1
Magnesium	**780**		2.0		mg/L		11/21/23 04:55	11/29/23 14:00	1
Potassium	**48**		0.50		mg/L		11/21/23 04:55	11/29/23 14:00	1
Sodium	**2600**		5.0		mg/L		11/21/23 04:55	12/01/23 13:24	10
Manganese	**1.1**		0.10		mg/L		11/21/23 04:55	12/01/23 13:24	10

Client Sample ID: FC-CCR-MW15-1123

Lab Sample ID: 550-210744-3

Date Collected: 11/15/23 10:33
Matrix: Water
Date Received: 11/17/23 16:15

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**1.0**		0.10		mg/L		11/27/23 07:07	11/29/23 15:00	2

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.010		mg/L		11/21/23 09:13	11/28/23 09:39	10
Arsenic	ND		0.010		mg/L		11/21/23 09:13	11/28/23 09:39	10
Barium	**0.020**		0.0050		mg/L		11/21/23 09:13	11/28/23 09:39	10
Cadmium	ND		0.0010		mg/L		11/21/23 09:13	11/28/23 09:39	10
Chromium	ND		0.010		mg/L		11/21/23 09:13	11/28/23 09:39	10
Manganese	**1.1**		0.020		mg/L		11/21/23 09:13	11/28/23 09:39	10
Selenium	ND		0.0050		mg/L		11/21/23 09:13	11/28/23 09:39	10
Thallium	ND		0.0010		mg/L		11/21/23 09:13	11/28/23 09:39	10
Zinc	ND		0.13		mg/L		11/21/23 09:13	11/28/23 09:39	10

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3 (SM 2320B)	**660**		6.0		mg/L			11/21/23 14:58	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**660**		6.0		mg/L			11/21/23 14:58	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			11/21/23 14:58	1
Alkalinity, Phenolphthalein (SM 2320B)	ND		6.0		mg/L			11/21/23 14:58	1
Hydroxide Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			11/21/23 14:58	1
Total Dissolved Solids (SM 2540C)	**13000**		100		mg/L			11/22/23 18:11	1
pH (SM 4500 H+ B)	**7.1**	**H5**	1.7		SU			11/29/23 12:43	1
Temperature (SM 4500 H+ B)	**13.5**	**H5 T5**	0.1		Degrees C			11/29/23 12:43	1

Client Sample ID: FC-CCR-MW16-1123

Lab Sample ID: 550-210744-4

Date Collected: 11/15/23 11:47
Matrix: Water
Date Received: 11/17/23 16:15

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**840**	**D2**	400		mg/L			12/02/23 22:17	200
Fluoride	ND	D1	0.80		mg/L			12/02/23 21:58	2
Sulfate	**12000**	**D2**	400		mg/L			12/02/23 22:17	200

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		0.0010		mg/L		11/21/23 04:55	11/29/23 14:02	1
Boron	**11**		0.050		mg/L		11/21/23 04:55	11/29/23 14:02	1
Calcium	**490**		2.0		mg/L		11/21/23 04:55	11/29/23 14:02	1
Iron	**0.16**		0.10		mg/L		11/21/23 04:55	11/29/23 14:02	1
Magnesium	**1700**		20		mg/L		11/21/23 04:55	12/01/23 13:26	10
Potassium	**74**		0.50		mg/L		11/21/23 04:55	11/29/23 14:02	1
Sodium	**4100**		5.0		mg/L		11/21/23 04:55	12/01/23 13:26	10

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**1.6**		0.25		mg/L		11/27/23 07:07	11/29/23 15:02	5

Client Sample ID: FC-CCR-MW16-1123

Lab Sample ID: 550-210744-4

Date Collected: 11/15/23 11:47
Matrix: Water
Date Received: 11/17/23 16:15

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.010		mg/L		11/21/23 09:13	11/28/23 09:41	10
Arsenic	ND		0.010		mg/L		11/21/23 09:13	11/28/23 09:41	10
Barium	**0.021**		0.0050		mg/L		11/21/23 09:13	11/28/23 09:41	10
Cadmium	ND		0.0010		mg/L		11/21/23 09:13	11/28/23 09:41	10
Chromium	ND		0.010		mg/L		11/21/23 09:13	11/28/23 09:41	10
Manganese	**1.6**		0.020		mg/L		11/21/23 09:13	11/28/23 09:41	10
Selenium	**0.030**		0.0050		mg/L		11/21/23 09:13	11/28/23 09:41	10
Thallium	ND		0.0010		mg/L		11/21/23 09:13	11/28/23 09:41	10
Zinc	ND		0.13		mg/L		11/21/23 09:13	11/28/23 09:41	10

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3 (SM 2320B)	**590**		6.0		mg/L			11/21/23 15:10	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**590**		6.0		mg/L			11/21/23 15:10	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			11/21/23 15:10	1
Alkalinity, Phenolphthalein (SM 2320B)	ND		6.0		mg/L			11/21/23 15:10	1
Hydroxide Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			11/21/23 15:10	1
Total Dissolved Solids (SM 2540C)	**19000**		200		mg/L			11/22/23 18:11	1
pH (SM 4500 H+ B)	**7.3**	**H5**	1.7		SU			11/29/23 12:44	1
Temperature (SM 4500 H+ B)	**14.2**	**H5 T5**	0.1		Degrees C			11/29/23 12:44	1

Client Sample ID: FC-CCR-DMX05R-1123

Lab Sample ID: 550-210744-5

Date Collected: 11/16/23 11:38
Matrix: Water
Date Received: 11/17/23 16:15

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1300**	**D2**	400		mg/L			12/02/23 22:54	200
Fluoride	ND	D1	0.80		mg/L			12/02/23 22:35	2
Sulfate	**9700**	**D2**	400		mg/L			12/02/23 22:54	200

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		0.0010		mg/L		11/21/23 04:55	11/29/23 14:05	1
Boron	**15**		0.050		mg/L		11/21/23 04:55	11/29/23 14:05	1
Calcium	**470**		2.0		mg/L		11/21/23 04:55	11/29/23 14:05	1
Iron	**3.9**		0.10		mg/L		11/21/23 04:55	11/29/23 14:05	1
Magnesium	**630**		2.0		mg/L		11/21/23 04:55	11/29/23 14:05	1
Potassium	**54**		0.50		mg/L		11/21/23 04:55	11/29/23 14:05	1
Sodium	**4400**		5.0		mg/L		11/21/23 04:55	12/01/23 13:29	10
Manganese	**0.87**		0.10		mg/L		11/21/23 04:55	12/01/23 13:29	10

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**0.80**		0.050		mg/L		11/27/23 07:07	11/29/23 12:06	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.010		mg/L		11/21/23 09:13	11/28/23 09:43	10

Client Sample ID: FC-CCR-DMX05R-1123

Lab Sample ID: 550-210744-5
Date Collected: 11/16/23 11:38
Matrix: Water
Date Received: 11/17/23 16:15

Method: EPA 200.8 - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.010		mg/L		11/21/23 09:13	11/28/23 09:43	10
Barium	**0.021**		0.0050		mg/L		11/21/23 09:13	11/28/23 09:43	10
Cadmium	ND		0.0010		mg/L		11/21/23 09:13	11/28/23 09:43	10
Chromium	ND		0.010		mg/L		11/21/23 09:13	11/28/23 09:43	10
Manganese	**0.86**		0.020		mg/L		11/21/23 09:13	11/28/23 09:43	10
Selenium	ND		0.0050		mg/L		11/21/23 09:13	11/28/23 09:43	10
Thallium	ND		0.0010		mg/L		11/21/23 09:13	11/28/23 09:43	10
Zinc	ND		0.13		mg/L		11/21/23 09:13	11/28/23 09:43	10

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3 (SM 2320B)	**450**		6.0		mg/L			11/21/23 15:23	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**450**		6.0		mg/L			11/21/23 15:23	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			11/21/23 15:23	1
Alkalinity, Phenolphthalein (SM 2320B)	ND		6.0		mg/L			11/21/23 15:23	1
Hydroxide Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			11/21/23 15:23	1
Total Dissolved Solids (SM 2540C)	**15000**	**H1**	200		mg/L			11/27/23 15:54	1
pH (SM 4500 H+ B)	**7.5**	**H5**	1.7		SU			11/29/23 12:46	1
Temperature (SM 4500 H+ B)	**14.7**	**H5 T5**	0.1		Degrees C			11/29/23 12:46	1

Client Sample ID: FC-CCR-EW17-1123

Lab Sample ID: 550-210744-6
Date Collected: 11/15/23 16:09
Matrix: Water
Date Received: 11/17/23 16:15

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**970**	**D2**	400		mg/L			12/02/23 23:30	200
Fluoride	ND	D1	0.80		mg/L			12/02/23 23:12	2
Sulfate	**9400**	**D2**	400		mg/L			12/02/23 23:30	200

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	**36**		0.050		mg/L		11/21/23 04:55	11/29/23 14:08	1
Iron	**0.17**		0.10		mg/L		11/21/23 04:55	11/29/23 14:08	1
Magnesium	**1100**		20		mg/L		11/21/23 04:55	12/01/23 13:32	10
Manganese	**0.72**		0.10		mg/L		11/21/23 04:55	12/01/23 13:32	10

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	**11**		5.0		ug/L		11/21/23 07:04	11/27/23 19:43	10
Molybdenum	ND	T5	5.0		ug/L		11/21/23 07:04	11/27/23 19:43	10

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**16000**		100		mg/L			11/22/23 18:11	1

Client Sample ID: FC-CCR-EW12R-1123

Lab Sample ID: 550-210744-7

Date Collected: 11/16/23 09:53
Matrix: Water
Date Received: 11/17/23 16:15

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	860	D2	400		mg/L			12/03/23 00:07	200
Fluoride	ND	D1	0.80		mg/L			12/02/23 23:49	2
Sulfate	7100	D2	400		mg/L			12/03/23 00:07	200

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	49		0.050		mg/L		11/21/23 04:55	11/29/23 14:11	1
Iron	14		0.10		mg/L		11/21/23 04:55	11/29/23 14:11	1
Magnesium	830		2.0		mg/L		11/21/23 04:55	11/29/23 14:11	1
Manganese	1.8		0.050		mg/L		11/21/23 04:55	12/05/23 05:53	5

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	ND		5.0		ug/L		11/21/23 07:04	11/27/23 19:45	10
Molybdenum	69	T5	5.0		ug/L		11/21/23 07:04	11/27/23 19:45	10

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	12000	H1	100		mg/L			11/27/23 15:54	1

Client Sample ID: FC-CCR-EW11R-1123

Lab Sample ID: 550-210744-8

Date Collected: 11/16/23 10:41
Matrix: Water
Date Received: 11/17/23 16:15

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	600	D2	400		mg/L			12/03/23 01:39	200
Fluoride	ND	D1	0.80		mg/L			12/03/23 00:26	2
Sulfate	5200	D2	400		mg/L			12/03/23 01:39	200

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	29		0.050		mg/L		11/21/23 04:55	11/29/23 14:19	1
Iron	7.4		0.10		mg/L		11/21/23 04:55	11/29/23 14:19	1
Magnesium	790		2.0		mg/L		11/21/23 04:55	11/29/23 14:19	1
Manganese	2.0		0.050		mg/L		11/21/23 04:55	12/05/23 05:56	5

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	6.1		5.0		ug/L		11/21/23 07:04	11/27/23 19:47	10
Molybdenum	19	T5	5.0		ug/L		11/21/23 07:04	11/27/23 19:47	10

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	8200	H1	100		mg/L			11/27/23 15:54	1

Client Sample ID: FC-CCR-EW14-1123

Lab Sample ID: 550-210744-9

Date Collected: 11/16/23 17:23
Matrix: Water
Date Received: 11/17/23 16:15

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	260	D2	40		mg/L			12/05/23 23:22	20
Fluoride	ND	D1	0.80		mg/L			12/03/23 01:58	2
Sulfate	4300	D2	400		mg/L			12/03/23 02:16	200

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	15		0.050		mg/L		11/21/23 04:55	11/29/23 14:22	1
Iron	0.13		0.10		mg/L		11/21/23 04:55	11/29/23 14:22	1
Magnesium	380		2.0		mg/L		11/21/23 04:55	11/29/23 14:22	1
Manganese	3.8		0.050		mg/L		11/21/23 04:55	12/05/23 05:58	5

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	7.0		5.0		ug/L		11/21/23 07:04	11/27/23 19:49	10
Molybdenum	57	T5	5.0		ug/L		11/21/23 07:04	11/27/23 19:49	10

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	6600	H1	100		mg/L			11/27/23 15:54	1

Client Sample ID: FC-CCR-EW15-1123

Lab Sample ID: 550-210744-10

Date Collected: 11/16/23 15:36
Matrix: Water
Date Received: 11/17/23 16:15

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	420	D2	400		mg/L			12/03/23 02:53	200
Fluoride	ND	D1	0.80		mg/L			12/03/23 02:34	2
Sulfate	4800	D2	400		mg/L			12/03/23 02:53	200

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	13		0.050		mg/L		11/21/23 04:55	11/29/23 14:25	1
Iron	0.12		0.10		mg/L		11/21/23 04:55	11/29/23 14:25	1
Magnesium	590		2.0		mg/L		11/21/23 04:55	11/29/23 14:25	1
Manganese	2.7		0.050		mg/L		11/21/23 04:55	12/05/23 06:01	5

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	ND		5.0		ug/L		11/21/23 07:04	11/27/23 19:51	10
Molybdenum	40	T5	5.0		ug/L		11/21/23 07:04	11/27/23 19:51	10

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	7700	H1	100		mg/L			11/27/23 15:54	1

Client Sample ID: FC-CCR-MW34-1123

Lab Sample ID: 550-210744-11

Date Collected: 11/16/23 16:35
Matrix: Water
Date Received: 11/17/23 16:15

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**18**		2.0		mg/L			12/05/23 23:41	1
Fluoride	ND	D1	0.80		mg/L			12/03/23 03:11	2
Sulfate	**5100**	**D2**	400		mg/L			12/03/23 03:30	200

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	**11**		0.050		mg/L		11/21/23 04:55	11/29/23 14:28	1
Iron	**0.12**		0.10		mg/L		11/21/23 04:55	11/29/23 14:28	1
Magnesium	**590**		2.0		mg/L		11/21/23 04:55	11/29/23 14:28	1
Manganese	**2.6**		0.010		mg/L		11/21/23 04:55	12/04/23 11:57	1

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	ND		5.0		ug/L		11/21/23 07:04	11/27/23 19:53	10
Molybdenum	**64**	**T5**	5.0		ug/L		11/21/23 07:04	11/27/23 19:53	10

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**7600**	**H1**	100		mg/L			11/27/23 15:54	1

Client Sample ID: FC-CCR-EB01-1123

Lab Sample ID: 550-210744-12

Date Collected: 11/16/23 17:37
Matrix: Water
Date Received: 11/17/23 16:15

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		2.0		mg/L			12/05/23 23:59	1
Fluoride	ND		0.40		mg/L			12/05/23 23:59	1
Sulfate	ND		2.0		mg/L			12/05/23 23:59	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		0.0010		mg/L		11/21/23 04:55	11/29/23 14:31	1
Boron	ND		0.050		mg/L		11/21/23 04:55	11/29/23 14:31	1
Calcium	ND		2.0		mg/L		11/21/23 04:55	11/29/23 14:31	1
Iron	ND		0.10		mg/L		11/21/23 04:55	11/29/23 14:31	1
Magnesium	ND		2.0		mg/L		11/21/23 04:55	11/29/23 14:31	1
Potassium	ND		0.50		mg/L		11/21/23 04:55	11/29/23 14:31	1
Sodium	ND		0.50		mg/L		11/21/23 04:55	12/04/23 12:00	1
Manganese	ND	V1	0.010		mg/L		11/21/23 04:55	11/29/23 14:31	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	ND		0.050		mg/L		11/27/23 07:07	11/29/23 12:08	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.010		mg/L		11/21/23 09:13	11/28/23 09:35	10
Arsenic	ND		0.010		mg/L		11/21/23 09:13	11/28/23 09:35	10
Barium	ND		0.0050		mg/L		11/21/23 09:13	11/28/23 09:35	10
Cadmium	ND		0.0010		mg/L		11/21/23 09:13	11/28/23 09:35	10

Client Sample ID: FC-CCR-EB01-1123
Date Collected: 11/16/23 17:37
Date Received: 11/17/23 16:15

Lab Sample ID: 550-210744-12
Matrix: Water

Method: EPA 200.8 - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		0.010		mg/L		11/21/23 09:13	11/28/23 09:35	10
Manganese	ND		0.020		mg/L		11/21/23 09:13	11/28/23 09:35	10
Selenium	ND		0.0050		mg/L		11/21/23 09:13	11/28/23 09:35	10
Thallium	ND		0.0010		mg/L		11/21/23 09:13	11/28/23 09:35	10
Zinc	ND		0.13		mg/L		11/21/23 09:13	11/28/23 09:35	10

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		11/21/23 12:35	11/21/23 16:03	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			11/21/23 15:33	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			11/21/23 15:33	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			11/21/23 15:33	1
Alkalinity, Phenolphthalein (SM 2320B)	ND		6.0		mg/L			11/21/23 15:33	1
Hydroxide Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			11/21/23 15:33	1
Total Dissolved Solids (SM 2540C)	**34**	**H1**	20		mg/L			11/27/23 15:54	1
pH (SM 4500 H+ B)	**6.0**	**H5**	1.7		SU			11/29/23 12:49	1
Temperature (SM 4500 H+ B)	**12.8**	**H5 T5**	0.1		Degrees C			11/29/23 12:49	1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 550-312157/3
Matrix: Water
Analysis Batch: 312157

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		2.0		mg/L			12/02/23 16:06	1
Fluoride	ND		0.40		mg/L			12/02/23 16:06	1
Sulfate	ND		2.0		mg/L			12/02/23 16:06	1

Lab Sample ID: LCS 550-312157/6
Matrix: Water
Analysis Batch: 312157

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			20.0	20.9		mg/L		105	90 - 110		
Fluoride			4.00	4.35		mg/L		109	90 - 110		
Sulfate			20.0	21.1		mg/L		105	90 - 110		

Lab Sample ID: LCSD 550-312157/7
Matrix: Water
Analysis Batch: 312157

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			20.0	20.9		mg/L		105	90 - 110	0	20
Fluoride			4.00	4.35		mg/L		109	90 - 110	0	20
Sulfate			20.0	21.0		mg/L		105	90 - 110	0	20

Lab Sample ID: 550-210600-A-1 MS
Matrix: Water
Analysis Batch: 312157

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	49		20.0	71.3		mg/L		111	80 - 120		
Fluoride	0.78	M1	4.00	5.96	M1	mg/L		129	80 - 120		
Sulfate	54		20.0	76.8		mg/L		113	80 - 120		

Lab Sample ID: 550-210600-A-1 MSD
Matrix: Water
Analysis Batch: 312157

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	49		20.0	67.7		mg/L		93	80 - 120	5	20
Fluoride	0.78	M1	4.00	5.08		mg/L		108	80 - 120	16	20
Sulfate	54		20.0	72.5		mg/L		92	80 - 120	6	20

Lab Sample ID: MB 550-312215/2
Matrix: Water
Analysis Batch: 312215

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		2.0		mg/L			12/04/23 19:00	1
Fluoride	ND		0.40		mg/L			12/04/23 19:00	1
Sulfate	ND		2.0		mg/L			12/04/23 19:00	1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 550-312215/5
Matrix: Water
Analysis Batch: 312215

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			20.0	18.5		mg/L		93	90 - 110		
Fluoride			4.00	4.02		mg/L		101	90 - 110		
Sulfate			20.0	20.0		mg/L		100	90 - 110		

Lab Sample ID: LCSD 550-312215/6
Matrix: Water
Analysis Batch: 312215

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			20.0	18.4		mg/L		92	90 - 110	1	20
Fluoride			4.00	4.00		mg/L		100	90 - 110	1	20
Sulfate			20.0	20.0		mg/L		100	90 - 110	0	20

Lab Sample ID: 550-209146-A-22 MS
Matrix: Water
Analysis Batch: 312215

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	ND	M1	40.0	1690	E2 M1	mg/L		4218	80 - 120		
Fluoride	ND		8.00	7.94		mg/L		99	80 - 120		
Sulfate	ND	M1	40.0	1040	E2 M1	mg/L		2612	80 - 120		

Lab Sample ID: 550-209146-A-22 MSD
Matrix: Water
Analysis Batch: 312215

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	ND	M1	40.0	1690	E2 M1	mg/L		4215	80 - 120	0	20
Fluoride	ND		8.00	8.06		mg/L		101	80 - 120	1	20
Sulfate	ND	M1	40.0	1040	E2 M1	mg/L		2612	80 - 120	0	20

Lab Sample ID: MB 550-312271/2
Matrix: Water
Analysis Batch: 312271

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		2.0		mg/L			12/05/23 14:29	1
Fluoride	ND		0.40		mg/L			12/05/23 14:29	1
Sulfate	ND		2.0		mg/L			12/05/23 14:29	1

Lab Sample ID: LCS 550-312271/5
Matrix: Water
Analysis Batch: 312271

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			20.0	20.9		mg/L		104	90 - 110		
Fluoride			4.00	4.09		mg/L		102	90 - 110		
Sulfate			20.0	21.9		mg/L		109	90 - 110		

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 550-312271/6
Matrix: Water
Analysis Batch: 312271

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			20.0	20.8		mg/L		104	90 - 110	0	20
Fluoride			4.00	4.29		mg/L		107	90 - 110	5	20
Sulfate			20.0	21.0		mg/L		105	90 - 110	4	20

Lab Sample ID: 550-211300-A-3 MS
Matrix: Water
Analysis Batch: 312271

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	260	E2 M3	20.0	262	E2 M3	mg/L		24	80 - 120		
Fluoride	3.2		4.00	7.10		mg/L		97	80 - 120		
Sulfate	140	E2 M3	20.0	150	E2 M3	mg/L		59	80 - 120		

Lab Sample ID: 550-211300-A-3 MSD
Matrix: Water
Analysis Batch: 312271

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	260	E2 M3	20.0	263	E2 M3	mg/L		29	80 - 120	0	20
Fluoride	3.2		4.00	7.30		mg/L		102	80 - 120	3	20
Sulfate	140	E2 M3	20.0	151	E2 M3	mg/L		62	80 - 120	0	20

Lab Sample ID: MB 550-312351/2
Matrix: Water
Analysis Batch: 312351

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		2.0		mg/L			12/06/23 14:27	1
Fluoride	ND		0.40		mg/L			12/06/23 14:27	1
Sulfate	ND		2.0		mg/L			12/06/23 14:27	1

Lab Sample ID: LCS 550-312351/5
Matrix: Water
Analysis Batch: 312351

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			20.0	20.8		mg/L		104	90 - 110		
Fluoride			4.00	3.86		mg/L		97	90 - 110		
Sulfate			20.0	20.8		mg/L		104	90 - 110		

Lab Sample ID: LCSD 550-312351/6
Matrix: Water
Analysis Batch: 312351

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			20.0	20.7		mg/L		104	90 - 110	0	20
Fluoride			4.00	4.32		mg/L		108	90 - 110	11	20
Sulfate			20.0	20.8		mg/L		104	90 - 110	0	20

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 550-210836-A-3 MS ^20
Matrix: Water
Analysis Batch: 312351

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	640		400	1060		mg/L		106	80 - 120
Fluoride	ND		80.0	83.9		mg/L		101	80 - 120
Sulfate	1000		400	1430		mg/L		103	80 - 120

Lab Sample ID: 550-210836-A-3 MSD ^20
Matrix: Water
Analysis Batch: 312351

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	640		400	1060		mg/L		106	80 - 120	0	20
Fluoride	ND		80.0	86.8		mg/L		104	80 - 120	3	20
Sulfate	1000		400	1420		mg/L		101	80 - 120	1	20

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 550-311485/1-A
Matrix: Water
Analysis Batch: 311904

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 311485

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		0.0010	mg/L		11/21/23 04:55	11/29/23 13:37	1
Boron	ND		0.050	mg/L		11/21/23 04:55	11/29/23 13:37	1
Calcium	ND		2.0	mg/L		11/21/23 04:55	11/29/23 13:37	1
Iron	ND		0.10	mg/L		11/21/23 04:55	11/29/23 13:37	1
Magnesium	ND		2.0	mg/L		11/21/23 04:55	11/29/23 13:37	1
Potassium	ND		0.50	mg/L		11/21/23 04:55	11/29/23 13:37	1

Lab Sample ID: MB 550-311485/1-A
Matrix: Water
Analysis Batch: 312101

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 311485

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	ND		0.50	mg/L		11/21/23 04:55	12/01/23 13:10	1
Manganese	ND		0.010	mg/L		11/21/23 04:55	12/01/23 13:10	1

Lab Sample ID: LCS 550-311485/2-A
Matrix: Water
Analysis Batch: 311904

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 311485

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Beryllium	1.00	1.06		mg/L		106	85 - 115
Boron	1.00	1.09		mg/L		109	85 - 115
Calcium	21.0	22.9		mg/L		109	85 - 115
Iron	1.00	1.03		mg/L		103	85 - 115
Magnesium	21.0	22.4		mg/L		107	85 - 115
Potassium	20.0	21.0		mg/L		105	85 - 115

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: LCS 550-311485/2-A
Matrix: Water
Analysis Batch: 312101

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 311485

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Sodium			20.0	18.8		mg/L		94	85 - 115		
Manganese			1.00	0.928		mg/L		93	85 - 115		

Lab Sample ID: LCSD 550-311485/3-A
Matrix: Water
Analysis Batch: 311904

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 311485

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Beryllium			1.00	1.05		mg/L		105	85 - 115	1	20
Boron			1.00	1.07		mg/L		107	85 - 115	2	20
Calcium			21.0	22.6		mg/L		108	85 - 115	1	20
Iron			1.00	1.04		mg/L		104	85 - 115	1	20
Magnesium			21.0	22.2		mg/L		106	85 - 115	1	20
Potassium			20.0	20.8		mg/L		104	85 - 115	1	20

Lab Sample ID: LCSD 550-311485/3-A
Matrix: Water
Analysis Batch: 312101

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 311485

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sodium			20.0	18.7		mg/L		94	85 - 115	1	20
Manganese			1.00	0.931		mg/L		93	85 - 115	0	20

Lab Sample ID: 550-210594-B-21-B MSD
Matrix: Water
Analysis Batch: 311904

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 311485

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Beryllium	ND	M2 R4	1.00	1.18	R4	mg/L		118	70 - 130	183	20
Boron	50	M3 R4	1.00	48.9	M3 R4	mg/L		-136	70 - 130	196	20
Calcium	490	M3 R4	21.0	499	M3 R4	mg/L		48	70 - 130	180	20
Iron	0.52	M2 R4	1.00	1.66	R4	mg/L		115	70 - 130	185	20
Potassium	41	M2 R4	20.0	65.8	R4	mg/L		126	70 - 130	181	20

Lab Sample ID: MB 570-386719/1-A
Matrix: Water
Analysis Batch: 387765

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 386719

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	ND		0.050		mg/L		11/27/23 07:07	11/29/23 11:33	1

Lab Sample ID: LCS 570-386719/2-A
Matrix: Water
Analysis Batch: 387765

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 386719

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Lithium			0.500	0.515		mg/L		103	85 - 115		

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: LCSD 570-386719/3-A
Matrix: Water
Analysis Batch: 387765

Client Sample ID: Lab Control Sample Dup
Prep Type: Total Recoverable
Prep Batch: 386719

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Lithium			0.500	0.528		mg/L		106	85 - 115	2	20

Lab Sample ID: 550-210744-1 MS
Matrix: Water
Analysis Batch: 387765

Client Sample ID: FC-CCR-DMX06-1123
Prep Type: Total Recoverable
Prep Batch: 386719

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Lithium	1.1		0.500	1.66		mg/L		109	80 - 120		

Lab Sample ID: 550-210744-1 MSD
Matrix: Water
Analysis Batch: 387765

Client Sample ID: FC-CCR-DMX06-1123
Prep Type: Total Recoverable
Prep Batch: 386719

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Lithium	1.1		0.500	1.61		mg/L		100	80 - 120	3	20

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 550-311497/1-A
Matrix: Water
Analysis Batch: 311771

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 311497

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.0010		mg/L		11/21/23 09:13	11/28/23 09:17	1
Arsenic	ND		0.0010		mg/L		11/21/23 09:13	11/28/23 09:17	1
Barium	ND		0.00050		mg/L		11/21/23 09:13	11/28/23 09:17	1
Cadmium	ND		0.00010		mg/L		11/21/23 09:13	11/28/23 09:17	1
Chromium	ND		0.0010		mg/L		11/21/23 09:13	11/28/23 09:17	1
Manganese	ND		0.0020		mg/L		11/21/23 09:13	11/28/23 09:17	1
Selenium	ND		0.00050		mg/L		11/21/23 09:13	11/28/23 09:17	1
Thallium	ND		0.00010		mg/L		11/21/23 09:13	11/28/23 09:17	1
Zinc	ND		0.013		mg/L		11/21/23 09:13	11/28/23 09:17	1

Lab Sample ID: LCS 550-311497/3-A
Matrix: Water
Analysis Batch: 311771

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 311497

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Antimony			0.100	0.0942		mg/L		94	85 - 115		
Arsenic			0.100	0.0960		mg/L		96	85 - 115		
Barium			0.100	0.105		mg/L		105	85 - 115		
Cadmium			0.100	0.0995		mg/L		99	85 - 115		
Chromium			0.100	0.0997		mg/L		100	85 - 115		
Manganese			0.100	0.0952		mg/L		95	85 - 115		
Selenium			0.100	0.0962		mg/L		96	85 - 115		
Thallium			0.100	0.0943		mg/L		94	85 - 115		
Zinc			0.100	0.0976		mg/L		98	85 - 115		

Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCSD 550-311497/4-A
Matrix: Water
Analysis Batch: 311771

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 311497

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony			0.100	0.0967		mg/L		97	85 - 115	3	20
Arsenic			0.100	0.0966		mg/L		97	85 - 115	1	20
Barium			0.100	0.112		mg/L		112	85 - 115	6	20
Cadmium			0.100	0.102		mg/L		102	85 - 115	3	20
Chromium			0.100	0.0987		mg/L		99	85 - 115	1	20
Manganese			0.100	0.0976		mg/L		98	85 - 115	2	20
Selenium			0.100	0.0965		mg/L		97	85 - 115	0	20
Thallium			0.100	0.0999		mg/L		100	85 - 115	6	20
Zinc			0.100	0.0983		mg/L		98	85 - 115	1	20

Lab Sample ID: 550-210744-12 MS
Matrix: Water
Analysis Batch: 311771

Client Sample ID: FC-CCR-EB01-1123
Prep Type: Total/NA
Prep Batch: 311497

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	ND		0.100	0.0991		mg/L		99	70 - 130
Arsenic	ND		0.100	0.103		mg/L		103	70 - 130
Barium	ND		0.100	0.108		mg/L		108	70 - 130
Cadmium	ND		0.100	0.105		mg/L		105	70 - 130
Chromium	ND		0.100	0.105		mg/L		105	70 - 130
Manganese	ND		0.100	0.105		mg/L		105	70 - 130
Selenium	ND		0.100	0.102		mg/L		102	70 - 130
Thallium	ND		0.100	0.105		mg/L		105	70 - 130
Zinc	ND		0.100	ND		mg/L		108	70 - 130

Lab Sample ID: 550-210744-12 MSD
Matrix: Water
Analysis Batch: 311771

Client Sample ID: FC-CCR-EB01-1123
Prep Type: Total/NA
Prep Batch: 311497

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	ND		0.100	0.112		mg/L		112	70 - 130	12	20
Arsenic	ND		0.100	0.113		mg/L		113	70 - 130	9	20
Barium	ND		0.100	0.125		mg/L		125	70 - 130	15	20
Cadmium	ND		0.100	0.118		mg/L		118	70 - 130	11	20
Chromium	ND		0.100	0.116		mg/L		116	70 - 130	10	20
Manganese	ND		0.100	0.116		mg/L		116	70 - 130	10	20
Selenium	ND		0.100	0.110		mg/L		110	70 - 130	8	20
Thallium	ND		0.100	0.118		mg/L		118	70 - 130	12	20
Zinc	ND		0.100	ND		mg/L		120	70 - 130	10	20

Method: 200.8 LL - Metals (ICP/MS)

Lab Sample ID: MB 550-311488/1-A
Matrix: Water
Analysis Batch: 311753

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 311488

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	ND		0.50		ug/L		11/21/23 07:04	11/27/23 19:25	1
Molybdenum	ND		0.50		ug/L		11/21/23 07:04	11/27/23 19:25	1

Method: 200.8 LL - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 550-311488/2-A
Matrix: Water
Analysis Batch: 311753

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 311488

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Cobalt			100	108		ug/L		108	85 - 115		
Molybdenum			100	111		ug/L		111	85 - 115		

Lab Sample ID: LCSD 550-311488/3-A
Matrix: Water
Analysis Batch: 311753

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 311488

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cobalt			100	111		ug/L		111	85 - 115	2	20
Molybdenum			100	111		ug/L		111	85 - 115	0	20

Lab Sample ID: 550-210594-A-21-A MS
Matrix: Water
Analysis Batch: 311753

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 311488

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Cobalt	21		100	123		ug/L		102	70 - 130		
Molybdenum	ND		100	111		ug/L		108	70 - 130		

Lab Sample ID: 550-210594-A-21-B MSD
Matrix: Water
Analysis Batch: 311753

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 311488

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cobalt	21		100	121		ug/L		99	70 - 130	2	20
Molybdenum	ND		100	109		ug/L		107	70 - 130	1	20

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 550-311538/1-A
Matrix: Water
Analysis Batch: 311566

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 311538

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		11/21/23 12:35	11/21/23 15:37	1

Lab Sample ID: LCS 550-311538/2-A
Matrix: Water
Analysis Batch: 311566

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 311538

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury			0.00500	0.00454		mg/L		91	85 - 115		

Lab Sample ID: LCSD 550-311538/3-A
Matrix: Water
Analysis Batch: 311566

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 311538

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury			0.00500	0.00475		mg/L		95	85 - 115	5	20

Method: 245.1 - Mercury (CVAA) (Continued)

Lab Sample ID: 550-210739-I-2-B MS
Matrix: Water
Analysis Batch: 311566

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 311538

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	ND		0.00500	0.00481		mg/L		96	70 - 130

Lab Sample ID: 550-210739-I-2-C MSD
Matrix: Water
Analysis Batch: 311566

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 311538

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		0.00500	0.00475		mg/L		95	70 - 130	1	20

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 550-311562/4
Matrix: Water
Analysis Batch: 311562

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3	ND		6.0		mg/L			11/21/23 09:02	1
Bicarbonate Alkalinity as CaCO3	ND		6.0		mg/L			11/21/23 09:02	1
Carbonate Alkalinity as CaCO3	ND		6.0		mg/L			11/21/23 09:02	1
Alkalinity, Phenolphthalein	ND		6.0		mg/L			11/21/23 09:02	1
Hydroxide Alkalinity as CaCO3	ND		6.0		mg/L			11/21/23 09:02	1

Lab Sample ID: LCS 550-311562/3
Matrix: Water
Analysis Batch: 311562

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Alkalinity as CaCO3			250	244		mg/L		98	90 - 110

Lab Sample ID: LCSD 550-311562/10
Matrix: Water
Analysis Batch: 311562

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Alkalinity as CaCO3			250	242		mg/L		97	90 - 110	1	20

Lab Sample ID: 550-210670-I-3 DU
Matrix: Water
Analysis Batch: 311562

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Alkalinity as CaCO3	330			332		mg/L				0	20
Bicarbonate Alkalinity as CaCO3	330			332		mg/L				0	20
Carbonate Alkalinity as CaCO3	ND			ND		mg/L				NC	20
Alkalinity, Phenolphthalein	ND			ND		mg/L				NC	20
Hydroxide Alkalinity as CaCO3	ND			ND		mg/L				NC	20

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 550-311663/1
Matrix: Water
Analysis Batch: 311663

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		20		mg/L			11/22/23 18:11	1

Lab Sample ID: LCS 550-311663/2
Matrix: Water
Analysis Batch: 311663

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Dissolved Solids			1000	954		mg/L		95	90 - 110		

Lab Sample ID: LCSD 550-311663/3
Matrix: Water
Analysis Batch: 311663

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Dissolved Solids			1000	988		mg/L		99	90 - 110	4	10

Lab Sample ID: 550-210696-A-1 DU
Matrix: Water
Analysis Batch: 311663

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	1300			1310		mg/L				0.2	10

Lab Sample ID: MB 550-311736/1
Matrix: Water
Analysis Batch: 311736

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		20		mg/L			11/27/23 15:54	1

Lab Sample ID: LCS 550-311736/2
Matrix: Water
Analysis Batch: 311736

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Dissolved Solids			1000	982		mg/L		98	90 - 110		

Lab Sample ID: LCSD 550-311736/3
Matrix: Water
Analysis Batch: 311736

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Dissolved Solids			1000	1000		mg/L		100	90 - 110	2	10

Lab Sample ID: 550-210611-G-1 DU
Matrix: Water
Analysis Batch: 311736

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	3800			3880		mg/L				2	10

Method: SM 4500 H+ B - pH

Lab Sample ID: LCSSRM 550-311913/1
Matrix: Water
Analysis Batch: 311913

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits		
pH			7.00	7.0		SU		99.4	98.5 - 101.5		

Lab Sample ID: LCSSRM 550-311913/13
Matrix: Water
Analysis Batch: 311913

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits		
pH			7.00	7.0		SU		99.6	98.5 - 101.5		

Lab Sample ID: LCSSRM 550-311913/25
Matrix: Water
Analysis Batch: 311913

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits		
pH			7.00	7.0		SU		99.6	98.5 - 101.5		

Lab Sample ID: 550-210744-5 DU
Matrix: Water
Analysis Batch: 311913

Client Sample ID: FC-CCR-DMX05R-1123
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
pH	7.5	H5		7.5		SU				0	5
Temperature	14.7	H5 T5		14.6		Degrees C				0.7	

HPLC/IC

Analysis Batch: 312157

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210744-1	FC-CCR-DMX06-1123	Total/NA	Water	300.0	
550-210744-1	FC-CCR-DMX06-1123	Total/NA	Water	300.0	
550-210744-3	FC-CCR-MW15-1123	Total/NA	Water	300.0	
550-210744-3	FC-CCR-MW15-1123	Total/NA	Water	300.0	
550-210744-4	FC-CCR-MW16-1123	Total/NA	Water	300.0	
550-210744-4	FC-CCR-MW16-1123	Total/NA	Water	300.0	
550-210744-5	FC-CCR-DMX05R-1123	Total/NA	Water	300.0	
550-210744-5	FC-CCR-DMX05R-1123	Total/NA	Water	300.0	
550-210744-6	FC-CCR-EW17-1123	Total/NA	Water	300.0	
550-210744-6	FC-CCR-EW17-1123	Total/NA	Water	300.0	
550-210744-7	FC-CCR-EW12R-1123	Total/NA	Water	300.0	
550-210744-7	FC-CCR-EW12R-1123	Total/NA	Water	300.0	
550-210744-8	FC-CCR-EW11R-1123	Total/NA	Water	300.0	
550-210744-8	FC-CCR-EW11R-1123	Total/NA	Water	300.0	
550-210744-9	FC-CCR-EW14-1123	Total/NA	Water	300.0	
550-210744-9	FC-CCR-EW14-1123	Total/NA	Water	300.0	
550-210744-10	FC-CCR-EW15-1123	Total/NA	Water	300.0	
550-210744-10	FC-CCR-EW15-1123	Total/NA	Water	300.0	
550-210744-11	FC-CCR-MW34-1123	Total/NA	Water	300.0	
550-210744-11	FC-CCR-MW34-1123	Total/NA	Water	300.0	
MB 550-312157/3	Method Blank	Total/NA	Water	300.0	
LCS 550-312157/6	Lab Control Sample	Total/NA	Water	300.0	
LCSD 550-312157/7	Lab Control Sample Dup	Total/NA	Water	300.0	
550-210600-A-1 MS	Matrix Spike	Total/NA	Water	300.0	
550-210600-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Analysis Batch: 312215

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210744-2	FC-CCR-MW11-1123	Total/NA	Water	300.0	
MB 550-312215/2	Method Blank	Total/NA	Water	300.0	
LCS 550-312215/5	Lab Control Sample	Total/NA	Water	300.0	
LCSD 550-312215/6	Lab Control Sample Dup	Total/NA	Water	300.0	
550-209146-A-22 MS	Matrix Spike	Total/NA	Water	300.0	
550-209146-A-22 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Analysis Batch: 312271

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210744-2	FC-CCR-MW11-1123	Total/NA	Water	300.0	
550-210744-9	FC-CCR-EW14-1123	Total/NA	Water	300.0	
550-210744-11	FC-CCR-MW34-1123	Total/NA	Water	300.0	
550-210744-12	FC-CCR-EB01-1123	Total/NA	Water	300.0	
MB 550-312271/2	Method Blank	Total/NA	Water	300.0	
LCS 550-312271/5	Lab Control Sample	Total/NA	Water	300.0	
LCSD 550-312271/6	Lab Control Sample Dup	Total/NA	Water	300.0	
550-211300-A-3 MS	Matrix Spike	Total/NA	Water	300.0	
550-211300-A-3 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Analysis Batch: 312351

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210744-2	FC-CCR-MW11-1123	Total/NA	Water	300.0	
MB 550-312351/2	Method Blank	Total/NA	Water	300.0	

HPLC/IC (Continued)

Analysis Batch: 312351 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 550-312351/5	Lab Control Sample	Total/NA	Water	300.0	
LCSD 550-312351/6	Lab Control Sample Dup	Total/NA	Water	300.0	
550-210836-A-3 MS ^20	Matrix Spike	Total/NA	Water	300.0	
550-210836-A-3 MSD ^20	Matrix Spike Duplicate	Total/NA	Water	300.0	

Metals

Prep Batch: 311485

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210744-1	FC-CCR-DMX06-1123	Total/NA	Water	200.7	
550-210744-2	FC-CCR-MW11-1123	Total/NA	Water	200.7	
550-210744-3	FC-CCR-MW15-1123	Total/NA	Water	200.7	
550-210744-4	FC-CCR-MW16-1123	Total/NA	Water	200.7	
550-210744-5	FC-CCR-DMX05R-1123	Total/NA	Water	200.7	
550-210744-6	FC-CCR-EW17-1123	Total/NA	Water	200.7	
550-210744-7	FC-CCR-EW12R-1123	Total/NA	Water	200.7	
550-210744-8	FC-CCR-EW11R-1123	Total/NA	Water	200.7	
550-210744-9	FC-CCR-EW14-1123	Total/NA	Water	200.7	
550-210744-10	FC-CCR-EW15-1123	Total/NA	Water	200.7	
550-210744-11	FC-CCR-MW34-1123	Total/NA	Water	200.7	
550-210744-12	FC-CCR-EB01-1123	Total/NA	Water	200.7	
MB 550-311485/1-A	Method Blank	Total/NA	Water	200.7	
LCS 550-311485/2-A	Lab Control Sample	Total/NA	Water	200.7	
LCSD 550-311485/3-A	Lab Control Sample Dup	Total/NA	Water	200.7	
550-210594-B-21-B MSD	Matrix Spike Duplicate	Total/NA	Water	200.7	

Prep Batch: 311488

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210744-2	FC-CCR-MW11-1123	Total/NA	Water	200.8	
550-210744-6	FC-CCR-EW17-1123	Total/NA	Water	200.8	
550-210744-7	FC-CCR-EW12R-1123	Total/NA	Water	200.8	
550-210744-8	FC-CCR-EW11R-1123	Total/NA	Water	200.8	
550-210744-9	FC-CCR-EW14-1123	Total/NA	Water	200.8	
550-210744-10	FC-CCR-EW15-1123	Total/NA	Water	200.8	
550-210744-11	FC-CCR-MW34-1123	Total/NA	Water	200.8	
MB 550-311488/1-A	Method Blank	Total/NA	Water	200.8	
LCS 550-311488/2-A	Lab Control Sample	Total/NA	Water	200.8	
LCSD 550-311488/3-A	Lab Control Sample Dup	Total/NA	Water	200.8	
550-210594-A-21-A MS	Matrix Spike	Total/NA	Water	200.8	
550-210594-A-21-B MSD	Matrix Spike Duplicate	Total/NA	Water	200.8	

Prep Batch: 311497

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210744-1	FC-CCR-DMX06-1123	Total/NA	Water	200.8	
550-210744-3	FC-CCR-MW15-1123	Total/NA	Water	200.8	
550-210744-4	FC-CCR-MW16-1123	Total/NA	Water	200.8	
550-210744-5	FC-CCR-DMX05R-1123	Total/NA	Water	200.8	
550-210744-12	FC-CCR-EB01-1123	Total/NA	Water	200.8	
MB 550-311497/1-A	Method Blank	Total/NA	Water	200.8	
LCS 550-311497/3-A	Lab Control Sample	Total/NA	Water	200.8	
LCSD 550-311497/4-A	Lab Control Sample Dup	Total/NA	Water	200.8	

Metals (Continued)

Prep Batch: 311497 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210744-12 MS	FC-CCR-EB01-1123	Total/NA	Water	200.8	
550-210744-12 MSD	FC-CCR-EB01-1123	Total/NA	Water	200.8	

Prep Batch: 311538

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210744-12	FC-CCR-EB01-1123	Total/NA	Water	245.1	
MB 550-311538/1-A	Method Blank	Total/NA	Water	245.1	
LCS 550-311538/2-A	Lab Control Sample	Total/NA	Water	245.1	
LCSD 550-311538/3-A	Lab Control Sample Dup	Total/NA	Water	245.1	
550-210739-I-2-B MS	Matrix Spike	Total/NA	Water	245.1	
550-210739-I-2-C MSD	Matrix Spike Duplicate	Total/NA	Water	245.1	

Analysis Batch: 311566

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210744-12	FC-CCR-EB01-1123	Total/NA	Water	245.1	311538
MB 550-311538/1-A	Method Blank	Total/NA	Water	245.1	311538
LCS 550-311538/2-A	Lab Control Sample	Total/NA	Water	245.1	311538
LCSD 550-311538/3-A	Lab Control Sample Dup	Total/NA	Water	245.1	311538
550-210739-I-2-B MS	Matrix Spike	Total/NA	Water	245.1	311538
550-210739-I-2-C MSD	Matrix Spike Duplicate	Total/NA	Water	245.1	311538

Analysis Batch: 311753

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210744-2	FC-CCR-MW11-1123	Total/NA	Water	200.8 LL	311488
550-210744-6	FC-CCR-EW17-1123	Total/NA	Water	200.8 LL	311488
550-210744-7	FC-CCR-EW12R-1123	Total/NA	Water	200.8 LL	311488
550-210744-8	FC-CCR-EW11R-1123	Total/NA	Water	200.8 LL	311488
550-210744-9	FC-CCR-EW14-1123	Total/NA	Water	200.8 LL	311488
550-210744-10	FC-CCR-EW15-1123	Total/NA	Water	200.8 LL	311488
550-210744-11	FC-CCR-MW34-1123	Total/NA	Water	200.8 LL	311488
MB 550-311488/1-A	Method Blank	Total/NA	Water	200.8 LL	311488
LCS 550-311488/2-A	Lab Control Sample	Total/NA	Water	200.8 LL	311488
LCSD 550-311488/3-A	Lab Control Sample Dup	Total/NA	Water	200.8 LL	311488
550-210594-A-21-A MS	Matrix Spike	Total/NA	Water	200.8 LL	311488
550-210594-A-21-B MSD	Matrix Spike Duplicate	Total/NA	Water	200.8 LL	311488

Analysis Batch: 311771

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210744-1	FC-CCR-DMX06-1123	Total/NA	Water	200.8	311497
550-210744-3	FC-CCR-MW15-1123	Total/NA	Water	200.8	311497
550-210744-4	FC-CCR-MW16-1123	Total/NA	Water	200.8	311497
550-210744-5	FC-CCR-DMX05R-1123	Total/NA	Water	200.8	311497
550-210744-12	FC-CCR-EB01-1123	Total/NA	Water	200.8	311497
MB 550-311497/1-A	Method Blank	Total/NA	Water	200.8	311497
LCS 550-311497/3-A	Lab Control Sample	Total/NA	Water	200.8	311497
LCSD 550-311497/4-A	Lab Control Sample Dup	Total/NA	Water	200.8	311497
550-210744-12 MS	FC-CCR-EB01-1123	Total/NA	Water	200.8	311497
550-210744-12 MSD	FC-CCR-EB01-1123	Total/NA	Water	200.8	311497

Metals

Analysis Batch: 311904

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210744-1	FC-CCR-DMX06-1123	Total/NA	Water	200.7 Rev 4.4	311485
550-210744-3	FC-CCR-MW15-1123	Total/NA	Water	200.7 Rev 4.4	311485
550-210744-4	FC-CCR-MW16-1123	Total/NA	Water	200.7 Rev 4.4	311485
550-210744-5	FC-CCR-DMX05R-1123	Total/NA	Water	200.7 Rev 4.4	311485
550-210744-6	FC-CCR-EW17-1123	Total/NA	Water	200.7 Rev 4.4	311485
550-210744-7	FC-CCR-EW12R-1123	Total/NA	Water	200.7 Rev 4.4	311485
550-210744-8	FC-CCR-EW11R-1123	Total/NA	Water	200.7 Rev 4.4	311485
550-210744-9	FC-CCR-EW14-1123	Total/NA	Water	200.7 Rev 4.4	311485
550-210744-10	FC-CCR-EW15-1123	Total/NA	Water	200.7 Rev 4.4	311485
550-210744-11	FC-CCR-MW34-1123	Total/NA	Water	200.7 Rev 4.4	311485
550-210744-12	FC-CCR-EB01-1123	Total/NA	Water	200.7 Rev 4.4	311485
MB 550-311485/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	311485
LCS 550-311485/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	311485
LCSD 550-311485/3-A	Lab Control Sample Dup	Total/NA	Water	200.7 Rev 4.4	311485
550-210594-B-21-B MSD	Matrix Spike Duplicate	Total/NA	Water	200.7 Rev 4.4	311485

Analysis Batch: 312101

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210744-1	FC-CCR-DMX06-1123	Total/NA	Water	200.7 Rev 4.4	311485
550-210744-2	FC-CCR-MW11-1123	Total/NA	Water	200.7 Rev 4.4	311485
550-210744-3	FC-CCR-MW15-1123	Total/NA	Water	200.7 Rev 4.4	311485
550-210744-4	FC-CCR-MW16-1123	Total/NA	Water	200.7 Rev 4.4	311485
550-210744-5	FC-CCR-DMX05R-1123	Total/NA	Water	200.7 Rev 4.4	311485
550-210744-6	FC-CCR-EW17-1123	Total/NA	Water	200.7 Rev 4.4	311485
MB 550-311485/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	311485
LCS 550-311485/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	311485
LCSD 550-311485/3-A	Lab Control Sample Dup	Total/NA	Water	200.7 Rev 4.4	311485

Analysis Batch: 312174

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210744-2	FC-CCR-MW11-1123	Total/NA	Water	200.7 Rev 4.4	311485
550-210744-11	FC-CCR-MW34-1123	Total/NA	Water	200.7 Rev 4.4	311485
550-210744-12	FC-CCR-EB01-1123	Total/NA	Water	200.7 Rev 4.4	311485

Analysis Batch: 312196

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210744-2	FC-CCR-MW11-1123	Total/NA	Water	200.7 Rev 4.4	311485
550-210744-7	FC-CCR-EW12R-1123	Total/NA	Water	200.7 Rev 4.4	311485
550-210744-8	FC-CCR-EW11R-1123	Total/NA	Water	200.7 Rev 4.4	311485
550-210744-9	FC-CCR-EW14-1123	Total/NA	Water	200.7 Rev 4.4	311485
550-210744-10	FC-CCR-EW15-1123	Total/NA	Water	200.7 Rev 4.4	311485

Prep Batch: 386719

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210744-1	FC-CCR-DMX06-1123	Total Recoverable	Water	200.7	
550-210744-3	FC-CCR-MW15-1123	Total Recoverable	Water	200.7	
550-210744-4	FC-CCR-MW16-1123	Total Recoverable	Water	200.7	
550-210744-5	FC-CCR-DMX05R-1123	Total Recoverable	Water	200.7	
550-210744-12	FC-CCR-EB01-1123	Total Recoverable	Water	200.7	
MB 570-386719/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 570-386719/2-A	Lab Control Sample	Total Recoverable	Water	200.7	

Metals (Continued)

Prep Batch: 386719 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 570-386719/3-A	Lab Control Sample Dup	Total Recoverable	Water	200.7	
550-210744-1 MS	FC-CCR-DMX06-1123	Total Recoverable	Water	200.7	
550-210744-1 MSD	FC-CCR-DMX06-1123	Total Recoverable	Water	200.7	

Analysis Batch: 387765

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210744-1	FC-CCR-DMX06-1123	Total Recoverable	Water	200.7 Rev 4.4	386719
550-210744-5	FC-CCR-DMX05R-1123	Total Recoverable	Water	200.7 Rev 4.4	386719
550-210744-12	FC-CCR-EB01-1123	Total Recoverable	Water	200.7 Rev 4.4	386719
MB 570-386719/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	386719
LCS 570-386719/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	386719
LCSD 570-386719/3-A	Lab Control Sample Dup	Total Recoverable	Water	200.7 Rev 4.4	386719
550-210744-1 MS	FC-CCR-DMX06-1123	Total Recoverable	Water	200.7 Rev 4.4	386719
550-210744-1 MSD	FC-CCR-DMX06-1123	Total Recoverable	Water	200.7 Rev 4.4	386719

Analysis Batch: 387804

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210744-3	FC-CCR-MW15-1123	Total Recoverable	Water	200.7 Rev 4.4	386719
550-210744-4	FC-CCR-MW16-1123	Total Recoverable	Water	200.7 Rev 4.4	386719

General Chemistry

Analysis Batch: 311562

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210744-1	FC-CCR-DMX06-1123	Total/NA	Water	SM 2320B	
550-210744-2	FC-CCR-MW11-1123	Total/NA	Water	SM 2320B	
550-210744-3	FC-CCR-MW15-1123	Total/NA	Water	SM 2320B	
550-210744-4	FC-CCR-MW16-1123	Total/NA	Water	SM 2320B	
550-210744-5	FC-CCR-DMX05R-1123	Total/NA	Water	SM 2320B	
550-210744-12	FC-CCR-EB01-1123	Total/NA	Water	SM 2320B	
MB 550-311562/4	Method Blank	Total/NA	Water	SM 2320B	
LCS 550-311562/3	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 550-311562/10	Lab Control Sample Dup	Total/NA	Water	SM 2320B	
550-210670-I-3 DU	Duplicate	Total/NA	Water	SM 2320B	

Analysis Batch: 311663

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210744-1	FC-CCR-DMX06-1123	Total/NA	Water	SM 2540C	
550-210744-2	FC-CCR-MW11-1123	Total/NA	Water	SM 2540C	
550-210744-3	FC-CCR-MW15-1123	Total/NA	Water	SM 2540C	
550-210744-4	FC-CCR-MW16-1123	Total/NA	Water	SM 2540C	
550-210744-6	FC-CCR-EW17-1123	Total/NA	Water	SM 2540C	
MB 550-311663/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 550-311663/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 550-311663/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	
550-210696-A-1 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 311736

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210744-5	FC-CCR-DMX05R-1123	Total/NA	Water	SM 2540C	
550-210744-7	FC-CCR-EW12R-1123	Total/NA	Water	SM 2540C	

General Chemistry (Continued)

Analysis Batch: 311736 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210744-8	FC-CCR-EW11R-1123	Total/NA	Water	SM 2540C	
550-210744-9	FC-CCR-EW14-1123	Total/NA	Water	SM 2540C	
550-210744-10	FC-CCR-EW15-1123	Total/NA	Water	SM 2540C	
550-210744-11	FC-CCR-MW34-1123	Total/NA	Water	SM 2540C	
550-210744-12	FC-CCR-EB01-1123	Total/NA	Water	SM 2540C	
MB 550-311736/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 550-311736/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 550-311736/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	
550-210611-G-1 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 311913

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210744-1	FC-CCR-DMX06-1123	Total/NA	Water	SM 4500 H+ B	
550-210744-2	FC-CCR-MW11-1123	Total/NA	Water	SM 4500 H+ B	
550-210744-3	FC-CCR-MW15-1123	Total/NA	Water	SM 4500 H+ B	
550-210744-4	FC-CCR-MW16-1123	Total/NA	Water	SM 4500 H+ B	
550-210744-5	FC-CCR-DMX05R-1123	Total/NA	Water	SM 4500 H+ B	
550-210744-12	FC-CCR-EB01-1123	Total/NA	Water	SM 4500 H+ B	
LCSSRM 550-311913/1	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	
LCSSRM 550-311913/13	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	
LCSSRM 550-311913/25	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	
550-210744-5 DU	FC-CCR-DMX05R-1123	Total/NA	Water	SM 4500 H+ B	

Client Sample ID: FC-CCR-DMX06-1123

Lab Sample ID: 550-210744-1
Matrix: Water
Date Collected: 11/15/23 09:15
Date Received: 11/17/23 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		2	312157	RDC	EET PHX	12/02/23 19:13
Total/NA	Analysis	300.0		200	312157	RDC	EET PHX	12/02/23 19:31
Total Recoverable	Prep	200.7			386719	JP8N	EET CAL 4	11/27/23 07:07
Total Recoverable	Analysis	200.7 Rev 4.4		1	387765	K1UV	EET CAL 4	11/29/23 11:54
Total/NA	Prep	200.7			311485	SGO	EET PHX	11/21/23 04:55
Total/NA	Analysis	200.7 Rev 4.4		1	311904	GLW	EET PHX	11/29/23 13:54
Total/NA	Prep	200.7			311485	SGO	EET PHX	11/21/23 04:55
Total/NA	Analysis	200.7 Rev 4.4		10	312101	GLW	EET PHX	12/01/23 13:18
Total/NA	Prep	200.8			311497	SGO	EET PHX	11/21/23 09:13
Total/NA	Analysis	200.8		10	311771	DSJ	EET PHX	11/28/23 09:37
Total/NA	Analysis	SM 2320B		1	311562	MAN	EET PHX	11/21/23 14:31
Total/NA	Analysis	SM 2540C		1	311663	KMG	EET PHX	11/22/23 18:11 - 12/01/23 15:16 [1]
Total/NA	Analysis	SM 4500 H+ B		1	311913	MAN	EET PHX	11/29/23 12:40

Client Sample ID: FC-CCR-MW11-1123

Lab Sample ID: 550-210744-2
Matrix: Water
Date Collected: 11/15/23 15:27
Date Received: 11/17/23 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		200	312271	MMH	EET PHX	12/05/23 22:45
Total/NA	Analysis	300.0		1000	312351	MMH	EET PHX	12/06/23 16:54
Total/NA	Analysis	300.0		2	312215	MMH	EET PHX	12/05/23 05:15
Total/NA	Prep	200.7			311485	SGO	EET PHX	11/21/23 04:55
Total/NA	Analysis	200.7 Rev 4.4		10	312101	GLW	EET PHX	12/01/23 13:21
Total/NA	Prep	200.7			311485	SGO	EET PHX	11/21/23 04:55
Total/NA	Analysis	200.7 Rev 4.4		20	312174	GLW	EET PHX	12/04/23 11:43
Total/NA	Prep	200.7			311485	SGO	EET PHX	11/21/23 04:55
Total/NA	Analysis	200.7 Rev 4.4		50	312196	GLW	EET PHX	12/05/23 05:50
Total/NA	Prep	200.8			311488	SGO	EET PHX	11/21/23 07:04
Total/NA	Analysis	200.8 LL		10	311753	DSJ	EET PHX	11/27/23 19:41
Total/NA	Analysis	SM 2320B		1	311562	MAN	EET PHX	11/21/23 14:43
Total/NA	Analysis	SM 2540C		1	311663	KMG	EET PHX	11/22/23 18:11 - 12/01/23 15:16 [1]
Total/NA	Analysis	SM 4500 H+ B		1	311913	MAN	EET PHX	11/29/23 12:41

Client Sample ID: FC-CCR-MW15-1123

Lab Sample ID: 550-210744-3
Matrix: Water
Date Collected: 11/15/23 10:33
Date Received: 11/17/23 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		2	312157	RDC	EET PHX	12/02/23 20:26
Total/NA	Analysis	300.0		200	312157	RDC	EET PHX	12/02/23 20:45
Total Recoverable	Prep	200.7			386719	JP8N	EET CAL 4	11/27/23 07:07
Total Recoverable	Analysis	200.7 Rev 4.4		2	387804	K1UV	EET CAL 4	11/29/23 15:00

Lab Chronicle

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-210744-1
SDG: APS Four Corners Power Plant (Other)

Client Sample ID: FC-CCR-MW15-1123

Lab Sample ID: 550-210744-3

Date Collected: 11/15/23 10:33
Matrix: Water
Date Received: 11/17/23 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	200.7			311485	SGO	EET PHX	11/21/23 04:55
Total/NA	Analysis	200.7 Rev 4.4		1	311904	GLW	EET PHX	11/29/23 14:00
Total/NA	Prep	200.7			311485	SGO	EET PHX	11/21/23 04:55
Total/NA	Analysis	200.7 Rev 4.4		10	312101	GLW	EET PHX	12/01/23 13:24
Total/NA	Prep	200.8			311497	SGO	EET PHX	11/21/23 09:13
Total/NA	Analysis	200.8		10	311771	DSJ	EET PHX	11/28/23 09:39
Total/NA	Analysis	SM 2320B		1	311562	MAN	EET PHX	11/21/23 14:58
Total/NA	Analysis	SM 2540C		1	311663	KMG	EET PHX	11/22/23 18:11 - 12/01/23 15:16 [1]
Total/NA	Analysis	SM 4500 H+ B		1	311913	MAN	EET PHX	11/29/23 12:43

Client Sample ID: FC-CCR-MW16-1123

Lab Sample ID: 550-210744-4

Date Collected: 11/15/23 11:47
Matrix: Water
Date Received: 11/17/23 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		2	312157	RDC	EET PHX	12/02/23 21:58
Total/NA	Analysis	300.0		200	312157	RDC	EET PHX	12/02/23 22:17
Total Recoverable	Prep	200.7			386719	JP8N	EET CAL 4	11/27/23 07:07
Total Recoverable	Analysis	200.7 Rev 4.4		5	387804	K1UV	EET CAL 4	11/29/23 15:02
Total/NA	Prep	200.7			311485	SGO	EET PHX	11/21/23 04:55
Total/NA	Analysis	200.7 Rev 4.4		1	311904	GLW	EET PHX	11/29/23 14:02
Total/NA	Prep	200.7			311485	SGO	EET PHX	11/21/23 04:55
Total/NA	Analysis	200.7 Rev 4.4		10	312101	GLW	EET PHX	12/01/23 13:26
Total/NA	Prep	200.8			311497	SGO	EET PHX	11/21/23 09:13
Total/NA	Analysis	200.8		10	311771	DSJ	EET PHX	11/28/23 09:41
Total/NA	Analysis	SM 2320B		1	311562	MAN	EET PHX	11/21/23 15:10
Total/NA	Analysis	SM 2540C		1	311663	KMG	EET PHX	11/22/23 18:11 - 12/01/23 15:16 [1]
Total/NA	Analysis	SM 4500 H+ B		1	311913	MAN	EET PHX	11/29/23 12:44

Client Sample ID: FC-CCR-DMX05R-1123

Lab Sample ID: 550-210744-5

Date Collected: 11/16/23 11:38
Matrix: Water
Date Received: 11/17/23 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		2	312157	RDC	EET PHX	12/02/23 22:35
Total/NA	Analysis	300.0		200	312157	RDC	EET PHX	12/02/23 22:54
Total Recoverable	Prep	200.7			386719	JP8N	EET CAL 4	11/27/23 07:07
Total Recoverable	Analysis	200.7 Rev 4.4		1	387765	K1UV	EET CAL 4	11/29/23 12:06
Total/NA	Prep	200.7			311485	SGO	EET PHX	11/21/23 04:55
Total/NA	Analysis	200.7 Rev 4.4		1	311904	GLW	EET PHX	11/29/23 14:05
Total/NA	Prep	200.7			311485	SGO	EET PHX	11/21/23 04:55
Total/NA	Analysis	200.7 Rev 4.4		10	312101	GLW	EET PHX	12/01/23 13:29
Total/NA	Prep	200.8			311497	SGO	EET PHX	11/21/23 09:13
Total/NA	Analysis	200.8		10	311771	DSJ	EET PHX	11/28/23 09:43

Client Sample ID: FC-CCR-DMX05R-1123

Lab Sample ID: 550-210744-5
Date Collected: 11/16/23 11:38
Matrix: Water
Date Received: 11/17/23 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	SM 2320B		1	311562	MAN	EET PHX	11/21/23 15:23
Total/NA	Analysis	SM 2540C		1	311736	KMG	EET PHX	11/27/23 15:54 - 12/06/23 16:32 [1]
Total/NA	Analysis	SM 4500 H+ B		1	311913	MAN	EET PHX	11/29/23 12:46

Client Sample ID: FC-CCR-EW17-1123

Lab Sample ID: 550-210744-6
Date Collected: 11/15/23 16:09
Matrix: Water
Date Received: 11/17/23 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		2	312157	RDC	EET PHX	12/02/23 23:12
Total/NA	Analysis	300.0		200	312157	RDC	EET PHX	12/02/23 23:30
Total/NA	Prep	200.7			311485	SGO	EET PHX	11/21/23 04:55
Total/NA	Analysis	200.7 Rev 4.4		1	311904	GLW	EET PHX	11/29/23 14:08
Total/NA	Prep	200.7			311485	SGO	EET PHX	11/21/23 04:55
Total/NA	Analysis	200.7 Rev 4.4		10	312101	GLW	EET PHX	12/01/23 13:32
Total/NA	Prep	200.8			311488	SGO	EET PHX	11/21/23 07:04
Total/NA	Analysis	200.8 LL		10	311753	DSJ	EET PHX	11/27/23 19:43
Total/NA	Analysis	SM 2540C		1	311663	KMG	EET PHX	11/22/23 18:11 - 12/01/23 15:16 [1]

Client Sample ID: FC-CCR-EW12R-1123

Lab Sample ID: 550-210744-7
Date Collected: 11/16/23 09:53
Matrix: Water
Date Received: 11/17/23 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		2	312157	RDC	EET PHX	12/02/23 23:49
Total/NA	Analysis	300.0		200	312157	RDC	EET PHX	12/03/23 00:07
Total/NA	Prep	200.7			311485	SGO	EET PHX	11/21/23 04:55
Total/NA	Analysis	200.7 Rev 4.4		1	311904	GLW	EET PHX	11/29/23 14:11
Total/NA	Prep	200.7			311485	SGO	EET PHX	11/21/23 04:55
Total/NA	Analysis	200.7 Rev 4.4		5	312196	GLW	EET PHX	12/05/23 05:53
Total/NA	Prep	200.8			311488	SGO	EET PHX	11/21/23 07:04
Total/NA	Analysis	200.8 LL		10	311753	DSJ	EET PHX	11/27/23 19:45
Total/NA	Analysis	SM 2540C		1	311736	KMG	EET PHX	11/27/23 15:54 - 12/06/23 16:32 [1]

Client Sample ID: FC-CCR-EW11R-1123

Lab Sample ID: 550-210744-8
Date Collected: 11/16/23 10:41
Matrix: Water
Date Received: 11/17/23 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		2	312157	RDC	EET PHX	12/03/23 00:26
Total/NA	Analysis	300.0		200	312157	RDC	EET PHX	12/03/23 01:39
Total/NA	Prep	200.7			311485	SGO	EET PHX	11/21/23 04:55
Total/NA	Analysis	200.7 Rev 4.4		1	311904	GLW	EET PHX	11/29/23 14:19

Lab Chronicle

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-210744-1
SDG: APS Four Corners Power Plant (Other)

Client Sample ID: FC-CCR-EW11R-1123

Lab Sample ID: 550-210744-8
Date Collected: 11/16/23 10:41
Matrix: Water
Date Received: 11/17/23 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	200.7			311485	SGO	EET PHX	11/21/23 04:55
Total/NA	Analysis	200.7 Rev 4.4		5	312196	GLW	EET PHX	12/05/23 05:56
Total/NA	Prep	200.8			311488	SGO	EET PHX	11/21/23 07:04
Total/NA	Analysis	200.8 LL		10	311753	DSJ	EET PHX	11/27/23 19:47
Total/NA	Analysis	SM 2540C		1	311736	KMG	EET PHX	11/27/23 15:54 - 12/06/23 16:32 [1]

Client Sample ID: FC-CCR-EW14-1123

Lab Sample ID: 550-210744-9
Date Collected: 11/16/23 17:23
Matrix: Water
Date Received: 11/17/23 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		2	312157	RDC	EET PHX	12/03/23 01:58
Total/NA	Analysis	300.0		200	312157	RDC	EET PHX	12/03/23 02:16
Total/NA	Analysis	300.0		20	312271	MMH	EET PHX	12/05/23 23:22
Total/NA	Prep	200.7			311485	SGO	EET PHX	11/21/23 04:55
Total/NA	Analysis	200.7 Rev 4.4		1	311904	GLW	EET PHX	11/29/23 14:22
Total/NA	Prep	200.7			311485	SGO	EET PHX	11/21/23 04:55
Total/NA	Analysis	200.7 Rev 4.4		5	312196	GLW	EET PHX	12/05/23 05:58
Total/NA	Prep	200.8			311488	SGO	EET PHX	11/21/23 07:04
Total/NA	Analysis	200.8 LL		10	311753	DSJ	EET PHX	11/27/23 19:49
Total/NA	Analysis	SM 2540C		1	311736	KMG	EET PHX	11/27/23 15:54 - 12/06/23 16:32 [1]

Client Sample ID: FC-CCR-EW15-1123

Lab Sample ID: 550-210744-10
Date Collected: 11/16/23 15:36
Matrix: Water
Date Received: 11/17/23 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		2	312157	RDC	EET PHX	12/03/23 02:34
Total/NA	Analysis	300.0		200	312157	RDC	EET PHX	12/03/23 02:53
Total/NA	Prep	200.7			311485	SGO	EET PHX	11/21/23 04:55
Total/NA	Analysis	200.7 Rev 4.4		1	311904	GLW	EET PHX	11/29/23 14:25
Total/NA	Prep	200.7			311485	SGO	EET PHX	11/21/23 04:55
Total/NA	Analysis	200.7 Rev 4.4		5	312196	GLW	EET PHX	12/05/23 06:01
Total/NA	Prep	200.8			311488	SGO	EET PHX	11/21/23 07:04
Total/NA	Analysis	200.8 LL		10	311753	DSJ	EET PHX	11/27/23 19:51
Total/NA	Analysis	SM 2540C		1	311736	KMG	EET PHX	11/27/23 15:54 - 12/06/23 16:32 [1]

Client Sample ID: FC-CCR-MW34-1123

Lab Sample ID: 550-210744-11
Date Collected: 11/16/23 16:35
Matrix: Water
Date Received: 11/17/23 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		2	312157	RDC	EET PHX	12/03/23 03:11
Total/NA	Analysis	300.0		200	312157	RDC	EET PHX	12/03/23 03:30

Client Sample ID: FC-CCR-MW34-1123

Lab Sample ID: 550-210744-11

Date Collected: 11/16/23 16:35
Matrix: Water
Date Received: 11/17/23 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	312271	MMH	EET PHX	12/05/23 23:41
Total/NA	Prep	200.7			311485	SGO	EET PHX	11/21/23 04:55
Total/NA	Analysis	200.7 Rev 4.4		1	311904	GLW	EET PHX	11/29/23 14:28
Total/NA	Prep	200.7			311485	SGO	EET PHX	11/21/23 04:55
Total/NA	Analysis	200.7 Rev 4.4		1	312174	GLW	EET PHX	12/04/23 11:57
Total/NA	Prep	200.8			311488	SGO	EET PHX	11/21/23 07:04
Total/NA	Analysis	200.8 LL		10	311753	DSJ	EET PHX	11/27/23 19:53
Total/NA	Analysis	SM 2540C		1	311736	KMG	EET PHX	11/27/23 15:54 - 12/06/23 16:32 [1]

Client Sample ID: FC-CCR-EB01-1123

Lab Sample ID: 550-210744-12

Date Collected: 11/16/23 17:37
Matrix: Water
Date Received: 11/17/23 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	312271	MMH	EET PHX	12/05/23 23:59
Total Recoverable	Prep	200.7			386719	JP8N	EET CAL 4	11/27/23 07:07
Total Recoverable	Analysis	200.7 Rev 4.4		1	387765	K1UV	EET CAL 4	11/29/23 12:08
Total/NA	Prep	200.7			311485	SGO	EET PHX	11/21/23 04:55
Total/NA	Analysis	200.7 Rev 4.4		1	311904	GLW	EET PHX	11/29/23 14:31
Total/NA	Prep	200.7			311485	SGO	EET PHX	11/21/23 04:55
Total/NA	Analysis	200.7 Rev 4.4		1	312174	GLW	EET PHX	12/04/23 12:00
Total/NA	Prep	200.8			311497	SGO	EET PHX	11/21/23 09:13
Total/NA	Analysis	200.8		10	311771	DSJ	EET PHX	11/28/23 09:35
Total/NA	Prep	245.1			311538	HHL	EET PHX	11/21/23 12:35
Total/NA	Analysis	245.1		1	311566	HHL	EET PHX	11/21/23 16:03
Total/NA	Analysis	SM 2320B		1	311562	MAN	EET PHX	11/21/23 15:33
Total/NA	Analysis	SM 2540C		1	311736	KMG	EET PHX	11/27/23 15:54 - 12/06/23 16:32 [1]
Total/NA	Analysis	SM 4500 H+ B		1	311913	MAN	EET PHX	11/29/23 12:49

[1] This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:

EET CAL 4 = Eurofins Calscience Tustin, 2841 Dow Avenue, Tustin, CA 92780, TEL (714)895-5494

EET PHX = Eurofins Phoenix, 4625 East Cotton Center Boulevard, Suite #189, Phoenix, AZ 85040, TEL (602)437-3340

Accreditation/Certification Summary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-210744-1
SDG: APS Four Corners Power Plant (Other)

Laboratory: Eurofins Phoenix

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Arizona	State	AZ0728	06-10-24

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
200.8 LL	200.8	Water	Molybdenum
SM 4500 H+ B		Water	Temperature

Laboratory: Eurofins Calscience

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Arizona	State	AZ0830	11-16-24

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
200.7 Rev 4.4	200.7	Water	Lithium

Method Summary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-210744-1
SDG: APS Four Corners Power Plant (Other)

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	EPA	EET PHX
200.7 Rev 4.4	Metals (ICP)	EPA	EET CAL 4
200.7 Rev 4.4	Metals (ICP)	EPA	EET PHX
200.8	Metals (ICP/MS)	EPA	EET PHX
200.8 LL	Metals (ICP/MS)	EPA	EET PHX
245.1	Mercury (CVAA)	EPA	EET PHX
SM 2320B	Alkalinity	SM	EET PHX
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET PHX
SM 4500 H+ B	pH	SM	EET PHX
200.7	Preparation, Total Recoverable Metals	EPA	EET CAL 4
200.7	Preparation, Total Metals	EPA	EET PHX
200.8	Preparation, Total Metals	EPA	EET PHX
245.1	Preparation, Mercury	EPA	EET PHX

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:

EET CAL 4 = Eurofins Calscience Tustin, 2841 Dow Avenue, Tustin, CA 92780, TEL (714)895-5494

EET PHX = Eurofins Phoenix, 4625 East Cotton Center Boulevard, Suite #189, Phoenix, AZ 85040, TEL (602)437-3340

TestAmerica Phoenix
4625 E Cotton Center Blvd
Suite 189
Phoenix, AZ 85040
phone 602.437.3340 fax 602.454.9303

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

12/7/2023

210744

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☑ Other: CCR

TestAmerica Laboratories, Inc.

Client Contact	Natalie Chrisman	Pam Norris (505-598-8781)	Date:	COC No:
Arizona Public Service	602-250-3608	Lab Contact: Rachel Sester	Carrier:	1 of 2 COCs
PO Box 355, MS 4915	Analysis Turnaround Time			Sampler:
Fruitland, NM 87416	☐ CALENDAR DAYS ☑ WORKING DAYS			For Lab Use Only:
Phone	TAT if different from Below ____			Walk-in Client:
FAX	☑ 2 weeks			Lab Sampling:
Project Name: CCR Groundwater Monitoring	☐ 1 week			Job / SDG No.:
Site: APS Four Corners Power Plant (Other)	☐ 2 days			
PO #: 100622298	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	EPA 300.0 (Cl, F, SO4)	EPA 200.7 - Totals (B)	EPA 200.7 - Totals (B, Ca, Be)	EPA 200.7 - Totals (B, Ca, Be, K, Mg, Na, Fe)	EPA 200.7 - Totals (B, Ca, K, Mg, Na)	EPA 200.7 - Totals (B, Ca, K, Mg, Na, Mn, Fe)	EPA 200.7 - Totals (B, Ca, Be, K, Mg, Na, Mn, Fe)	EPA 200.7 - Total Lithium	EPA 200.8 - Totals (Sb, As, Ba, Cd, Co, Cr, Pb, Mo, Se, Tl)	EPA 200.8 - Totals (Co, Mo)	EPA 245.1 - Totals (Hg)	SM 4500-HB (pH)	SM 2540C (TDS)	SM 2320B (CO3 Alkalinity as CaCO3, HCO3 Alkalinity as)	Sample Specific Notes:
FC-CCR-DMX06-1123 -1	11/15/2023	915	G	W	3	N		X						X	X	X			X	X	X	Low Flow
FC-CCR-MW11-1123 -2	11/15/2023	1527	G	W	2	N		X				X					X		X	X	X	"
FC-CCR-MW15-1123 -3	11/15/2023	1033	G	W	3	N		X						X	X	X			X	X	X	"
FC-CCR-MW16-1123 -4	11/15/2023	1147	G	W	2	N		X			X				X	X			X	X	X	"
								1	4	4	4	4	4	4		4	4	4	1	1	1	

550-210744 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other ____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☑ Disposal by Lab ☐ Archive for ____ Months

Special Instructions/QC Requirements & Comments:

Method 200.8 with collision cell

3.0°C / 3-14C-ICE-IDC

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:		Cooler Temp. (°C): Obs'd: ____ Corr'd: ____ Therm ID No.: ____		
Relinquished by:	Company: WSP	Date/Time: 11-17-23 1645	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company: EETA-PHX	Date/Time: 11/17/23 1615

TestAmerica Phoenix
4625 E Cotton Center Blvd
Suite 189
Phoenix, AZ 85040
phone 602.437.3340 fax 602.454.9303

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

210744

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☑ Other: CCR

TestAmerica Laboratories, Inc.

12/7/2023

Client Contact	Natalie Chrisman	Pam Norris (505-598-8781)	Date:	COC No:
Arizona Public Service	602-250-3608	Lab Contact: Rachel Sester	Carrier:	2 of 2 COCs
PO Box 355, MS 4915	Analysis Turnaround Time			Sampler:
Fruitland, NM 87416	☐ CALENDAR DAYS ☑ WORKING DAYS			For Lab Use Only:
Phone	TAT if different from Below			Walk-in Client:
FAX	☑ 2 weeks			Lab Sampling:
Project Name: CCR Groundwater Monitoring	☐ 1 week			
Site: APS Four Corners Power Plant (Other)	☐ 2 days			Job / SDG No.:
PO #: 100622298	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	EPA 300.0 (Cl)	EPA 200.7 - Totals (B, Mg, Mn, Fe)	EPA 200.8 - Totals (Co, Mo)	SM 2540C (TDS)	EPA 300.0 (Cl, F, SO4)	SM 4500-HB (pH)	EPA 200.7 - Totals (B, Ca, Be,K, Mg, Na, Mn, Fe)	EPA 200.7 - Total Lithium	EPA 200.8 - Totals (Sb, As, Ba, Cd, Co, Cr, Pb, Mo, Se, Tl)	EPA 245.1 - Totals (Hg)	SM 2320B (CO3 Alkalinity as CaCO3, HCO3 Alkalinity as CaCO3)	Sample Specific Notes:
FC-CCR-DMX05R-1123 -5	11/16/2023	1138	G	W	3	N	N				X	X	X	X	X	X		X	Low Flow
FC-CCR-EW17-1123 -6	11/15/2023	1609	G	W	2	N	N	X	X	X	X								Grab Sample
FC-CCR-EW12R-1123 -7	11/16/2023	953	G	W	2	N	N	X	X	X	X								Low Flow
FC-CCR-EW11R-1123 -8	11/16/2023	1041	G	W	2	N	N	X	X	X	X								"
FC-CCR-EW14-1123 -9	11/16/2023	1723	G	W	2	N	N	X	X	X	X								"
FC-CCR-EW15-1123 -10	11/16/2023	1536	G	W	2	N	N	X	X	X	X								"
FC-CCR-MW34-1123 -11	11/16/2023	1635	G	W	2	N	N	X	X	X	X								"
FC-CCR-EB01-1123 -12	11/16/2023	1737	G	W	3						X	X	X	X	X	X	X	X	Equipment Blank
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other								1	4	4	1								

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☑ Return to Client ☑ Disposal by Lab ☑ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

Method 200.8 with collision cell

3.0°C | 3.1°C - ICE - CDC

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:		Cooler Temp. (°C): Obs'd: _____ Corr'd: _____ Therm ID No.: _____		
Relinquished by:	Company: WSP	Date/Time: 11-17-23 1645	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company: EETA-PHX	Date/Time: 11/17/23 1615

Eurofins Phoenix
4625 East Cotton Center Boulevard Suite #189
Phoenix, AZ 85040
Phone: 602-437-3340

Chain of Custody Record

eurofins | Loc: 550 210744

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Eshelman, Linda	Carrier Tracking No(s):	COC No: 550-38263.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: linda.eshelman@et.eurofinsus.com	State of Origin: Arizona	Page: Page 1 of 1
Company: Eurofins Environment Testing Southwest,		Accreditations Required (See note): State - Arizona; State Program - Arizona		Job #: 550-210744-1
Address: 2841 Dow Avenue, Suite 100,	Due Date Requested: 12/4/2023			
City: Tustin	TAT Requested (days):			
State, Zip: CA, 92780				
Phone: 714-895-5494(Tel)	PO #:			
Email:	WO #:			
Project Name: CCR Groundwater Monitoring	Project #: 55009706			
Site: Arizona Public Service	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	200.7/200.7_P_TR (MOD) Lithium	Total Number of containers	Special Instruc
			Preservation Code:						
FC-CCR-DMX06-1123 (550-210744-1)	11/15/23	09:15 Arizona		Water			X	1	
FC-CCR-MW15-1123 (550-210744-3)	11/15/23	10:33 Arizona		Water			X	1	
FC-CCR-MW16-1123 (550-210744-4)	11/15/23	11:47 Arizona		Water			X	1	
FC-CCR-DMX05R-1123 (550-210744-5)	11/16/23	11:38 Arizona		Water			X	1	
FC-CCR-EB01-1123 (550-210744-12)	11/16/23	17:37 Arizona		Water			X	1	

550-210744 Chain of Custody

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Southwest, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Southwest, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Southwest, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Southwest, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	[signature]	11-20-23 14:40	ETSW	FedEx		
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 11/21/23 0930	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: 1.2/1.1 SW

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Arizona Public Service Company

Job Number: 550-210744-1
SDG Number: APS Four Corners Power Plant (Other)

Login Number: 210744
List Number: 1
Creator: Maycock, Lisa

List Source: Eurofins Phoenix

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	False	Check done at department level as required.

Login Sample Receipt Checklist

Client: Arizona Public Service Company

Job Number: 550-210744-1
SDG Number: APS Four Corners Power Plant (Other)

Login Number: 210744
List Number: 2
Creator: Khana, Piyush

List Source: Eurofins Calscience
List Creation: 11/21/23 01:13 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	2264078
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.1
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	False	

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Natalie Chrisman
Arizona Public Service Company
PO BOX 188, Ste. 4458
Joseph City, Arizona 86032

Generated 12/27/2023 1:04:24 PM Revision 2

JOB DESCRIPTION

CCR Groundwater Monitoring
APS Four Corners Power Plant (Other)

JOB NUMBER

550-210744-1

Eurofins Phoenix
4625 East Cotton Center Boulevard
Suite #189
Phoenix AZ 85040

See page two for job notes and contact information.

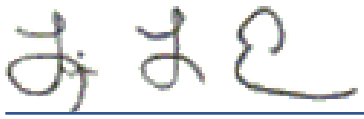
my EOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Southwest, LLC Project Manager.

Authorization



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Revision 2

Authorized for release by
Linda Eshelman, Project Manager II
linda.eshelman@et.eurofinsus.com
(602)659-7681

Table of Contents

Cover Page 1
Table of Contents 3
Definitions/Glossary 4
Case Narrative 6
Sample Summary 7
Detection Summary 8
Client Sample Results 12
QC Sample Results 20
QC Association Summary 31
Lab Chronicle 37
Certification Summary 42
Method Summary 43
Chain of Custody 44
Receipt Checklists 48

Definitions/Glossary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-210744-1
SDG: APS Four Corners Power Plant (Other)

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
D1	Sample required dilution due to matrix.
D2	Sample required dilution due to high concentration of analyte.
E2	Concentration estimated. Analyte exceeded calibration range. Reanalysis not performed due to sample matrix.
M1	Matrix spike recovery was high, the associated blank spike recovery was acceptable.
M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The associated blank spike was acceptable.

Metals

Qualifier	Qualifier Description
M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The associated blank spike was acceptable.
R4	MS/MSD RPD exceeded the method control limit. Recovery met acceptance criteria.
T5	Laboratory not licensed for this parameter
V1	CCV recovery was above method acceptance limits. This target analyte was not detected in the sample.

General Chemistry

Qualifier	Qualifier Description
H1	Sample analysis performed past holding time.
H5	This test is specified to be performed in the field within 15 minutes of sampling; sample was received and analyzed past the regulatory holding time.
T5	Laboratory not licensed for this parameter

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job Narrative
550-210744-1

REVISION

The report being provided is a revision of the original report sent on 12/7/2023. The report (revision 2) is being revised due to The client is requesting Co, Pb, and Mo by method 200.8 for samples -1,-3,-4,-5,12.

Report revision history
Revision 1 - 12/19/2023 - Reason - Client only needed Cl reported for samples -6 thru -11. Samples were logged in for Cl, F, SO4. The report was not sent to client..

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 11/17/2023 4:15 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 3.0°C and 3.1°C

HPLC/IC
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals
Method 200.8_CWA_LL: Samples diluted 10x for sample matrix

FC-CCR-MW11-1123 (550-210744-2), FC-CCR-EW17-1123 (550-210744-6), FC-CCR-EW12R-1123 (550-210744-7), FC-CCR-EW11R-1123 (550-210744-8), FC-CCR-EW14-1123 (550-210744-9), FC-CCR-EW15-1123 (550-210744-10), FC-CCR-MW34-1123 (550-210744-11), (550-210594-A-21-C), (550-210594-A-21-A MS) and (550-210594-A-21-B MSD)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
Method 2540C_Calcd: The following samples were analyzed outside of analytical holding time due to Analyst scheduling error: FC-CCR-DMX05R-1123 (550-210744-5), FC-CCR-EW12R-1123 (550-210744-7), FC-CCR-EW11R-1123 (550-210744-8), FC-CCR-EW14-1123 (550-210744-9), FC-CCR-EW15-1123 (550-210744-10), FC-CCR-MW34-1123 (550-210744-11) and FC-CCR-EB01-1123 (550-210744-12).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Sample Summary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-210744-1
SDG: APS Four Corners Power Plant (Other)

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
550-210744-1	FC-CCR-DMX06-1123	Water	11/15/23 09:15	11/17/23 16:15
550-210744-2	FC-CCR-MW11-1123	Water	11/15/23 15:27	11/17/23 16:15
550-210744-3	FC-CCR-MW15-1123	Water	11/15/23 10:33	11/17/23 16:15
550-210744-4	FC-CCR-MW16-1123	Water	11/15/23 11:47	11/17/23 16:15
550-210744-5	FC-CCR-DMX05R-1123	Water	11/16/23 11:38	11/17/23 16:15
550-210744-6	FC-CCR-EW17-1123	Water	11/15/23 16:09	11/17/23 16:15
550-210744-7	FC-CCR-EW12R-1123	Water	11/16/23 09:53	11/17/23 16:15
550-210744-8	FC-CCR-EW11R-1123	Water	11/16/23 10:41	11/17/23 16:15
550-210744-9	FC-CCR-EW14-1123	Water	11/16/23 17:23	11/17/23 16:15
550-210744-10	FC-CCR-EW15-1123	Water	11/16/23 15:36	11/17/23 16:15
550-210744-11	FC-CCR-MW34-1123	Water	11/16/23 16:35	11/17/23 16:15
550-210744-12	FC-CCR-EB01-1123	Water	11/16/23 17:37	11/17/23 16:15

Detection Summary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-210744-1
SDG: APS Four Corners Power Plant (Other)

Client Sample ID: FC-CCR-DMX06-1123 — Lab Sample ID: 550-210744-1

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	950	D2	400		mg/L	200		300.0	Total/NA
Sulfate	7000	D2	400		mg/L	200		300.0	Total/NA
Boron	6.3		0.050		mg/L	1		200.7 Rev 4.4	Total/NA
Calcium	430		2.0		mg/L	1		200.7 Rev 4.4	Total/NA
Magnesium	660		2.0		mg/L	1		200.7 Rev 4.4	Total/NA
Potassium	55		0.50		mg/L	1		200.7 Rev 4.4	Total/NA
Sodium	3900		5.0		mg/L	10		200.7 Rev 4.4	Total/NA
Manganese	1.2		0.10		mg/L	10		200.7 Rev 4.4	Total/NA
Lithium	1.1		0.050		mg/L	1		200.7 Rev 4.4	Total Recoverable
Barium	0.014		0.0050		mg/L	10		200.8	Total/NA
Manganese	1.2		0.020		mg/L	10		200.8	Total/NA
Alkalinity as CaCO3	520		6.0		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	520		6.0		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	14000		100		mg/L	1		SM 2540C	Total/NA
pH	7.3	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	14.4	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-MW11-1123 — Lab Sample ID: 550-210744-2

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	5500	D2	400		mg/L	200		300.0	Total/NA
Sulfate	7900	D2	2000		mg/L	1000		300.0	Total/NA
Calcium	530		20		mg/L	10		200.7 Rev 4.4	Total/NA
Magnesium	10000		40		mg/L	20		200.7 Rev 4.4	Total/NA
Potassium	180		5.0		mg/L	10		200.7 Rev 4.4	Total/NA
Sodium	15000		25		mg/L	50		200.7 Rev 4.4	Total/NA
Cobalt	25		5.0		ug/L	10		200.8 LL	Total/NA
Alkalinity as CaCO3	850		6.0		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	850		6.0		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	76000		1000		mg/L	1		SM 2540C	Total/NA
pH	7.0	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	13.8	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-MW15-1123 — Lab Sample ID: 550-210744-3

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	1100	D2	400		mg/L	200		300.0	Total/NA
Sulfate	6600	D2	400		mg/L	200		300.0	Total/NA
Boron	8.9		0.050		mg/L	1		200.7 Rev 4.4	Total/NA
Calcium	520		2.0		mg/L	1		200.7 Rev 4.4	Total/NA
Iron	0.26		0.10		mg/L	1		200.7 Rev 4.4	Total/NA
Magnesium	780		2.0		mg/L	1		200.7 Rev 4.4	Total/NA
Potassium	48		0.50		mg/L	1		200.7 Rev 4.4	Total/NA
Sodium	2600		5.0		mg/L	10		200.7 Rev 4.4	Total/NA
Manganese	1.1		0.10		mg/L	10		200.7 Rev 4.4	Total/NA
Lithium	1.0		0.10		mg/L	2		200.7 Rev 4.4	Total Recoverable
Barium	0.020		0.0050		mg/L	10		200.8	Total/NA
Manganese	1.1		0.020		mg/L	10		200.8	Total/NA
Alkalinity as CaCO3	660		6.0		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	660		6.0		mg/L	1		SM 2320B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: FC-CCR-MW15-1123 (Continued) — Lab Sample ID: 550-210744-3

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Total Dissolved Solids	13000		100		mg/L	1		SM 2540C	Total/NA
pH	7.1	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	13.5	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-MW16-1123 — Lab Sample ID: 550-210744-4

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	840	D2	400		mg/L	200		300.0	Total/NA
Sulfate	12000	D2	400		mg/L	200		300.0	Total/NA
Boron	11		0.050		mg/L	1		200.7 Rev 4.4	Total/NA
Calcium	490		2.0		mg/L	1		200.7 Rev 4.4	Total/NA
Iron	0.16		0.10		mg/L	1		200.7 Rev 4.4	Total/NA
Magnesium	1700		20		mg/L	10		200.7 Rev 4.4	Total/NA
Potassium	74		0.50		mg/L	1		200.7 Rev 4.4	Total/NA
Sodium	4100		5.0		mg/L	10		200.7 Rev 4.4	Total/NA
Lithium	1.6		0.25		mg/L	5		200.7 Rev 4.4	Total Recoverable
Barium	0.021		0.0050		mg/L	10		200.8	Total/NA
Manganese	1.6		0.020		mg/L	10		200.8	Total/NA
Selenium	0.030		0.0050		mg/L	10		200.8	Total/NA
Cobalt	0.010		0.0050		mg/L	10		200.8	Total/NA
Alkalinity as CaCO3	590		6.0		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	590		6.0		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	19000		200		mg/L	1		SM 2540C	Total/NA
pH	7.3	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	14.2	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-DMX05R-1123 — Lab Sample ID: 550-210744-5

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	1300	D2	400		mg/L	200		300.0	Total/NA
Sulfate	9700	D2	400		mg/L	200		300.0	Total/NA
Boron	15		0.050		mg/L	1		200.7 Rev 4.4	Total/NA
Calcium	470		2.0		mg/L	1		200.7 Rev 4.4	Total/NA
Iron	3.9		0.10		mg/L	1		200.7 Rev 4.4	Total/NA
Magnesium	630		2.0		mg/L	1		200.7 Rev 4.4	Total/NA
Potassium	54		0.50		mg/L	1		200.7 Rev 4.4	Total/NA
Sodium	4400		5.0		mg/L	10		200.7 Rev 4.4	Total/NA
Manganese	0.87		0.10		mg/L	10		200.7 Rev 4.4	Total/NA
Lithium	0.80		0.050		mg/L	1		200.7 Rev 4.4	Total Recoverable
Barium	0.021		0.0050		mg/L	10		200.8	Total/NA
Manganese	0.86		0.020		mg/L	10		200.8	Total/NA
Molybdenum	0.045	T5	0.0050		mg/L	10		200.8	Total/NA
Alkalinity as CaCO3	450		6.0		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	450		6.0		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	15000	H1	200		mg/L	1		SM 2540C	Total/NA
pH	7.5	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	14.7	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-210744-1
SDG: APS Four Corners Power Plant (Other)

Client Sample ID: FC-CCR-EW17-1123 — Lab Sample ID: 550-210744-6

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Boron	36		0.050		mg/L	1		200.7 Rev 4.4	Total/NA
Iron	0.17		0.10		mg/L	1		200.7 Rev 4.4	Total/NA
Magnesium	1100		20		mg/L	10		200.7 Rev 4.4	Total/NA
Manganese	0.72		0.10		mg/L	10		200.7 Rev 4.4	Total/NA
Cobalt	11		5.0		ug/L	10		200.8 LL	Total/NA
Total Dissolved Solids	16000		100		mg/L	1		SM 2540C	Total/NA

Client Sample ID: FC-CCR-EW12R-1123 — Lab Sample ID: 550-210744-7

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Boron	49		0.050		mg/L	1		200.7 Rev 4.4	Total/NA
Iron	14		0.10		mg/L	1		200.7 Rev 4.4	Total/NA
Magnesium	830		2.0		mg/L	1		200.7 Rev 4.4	Total/NA
Manganese	1.8		0.050		mg/L	5		200.7 Rev 4.4	Total/NA
Molybdenum	69	T5	5.0		ug/L	10		200.8 LL	Total/NA
Total Dissolved Solids	12000	H1	100		mg/L	1		SM 2540C	Total/NA

Client Sample ID: FC-CCR-EW11R-1123 — Lab Sample ID: 550-210744-8

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Boron	29		0.050		mg/L	1		200.7 Rev 4.4	Total/NA
Iron	7.4		0.10		mg/L	1		200.7 Rev 4.4	Total/NA
Magnesium	790		2.0		mg/L	1		200.7 Rev 4.4	Total/NA
Manganese	2.0		0.050		mg/L	5		200.7 Rev 4.4	Total/NA
Cobalt	6.1		5.0		ug/L	10		200.8 LL	Total/NA
Molybdenum	19	T5	5.0		ug/L	10		200.8 LL	Total/NA
Total Dissolved Solids	8200	H1	100		mg/L	1		SM 2540C	Total/NA

Client Sample ID: FC-CCR-EW14-1123 — Lab Sample ID: 550-210744-9

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Boron	15		0.050		mg/L	1		200.7 Rev 4.4	Total/NA
Iron	0.13		0.10		mg/L	1		200.7 Rev 4.4	Total/NA
Magnesium	380		2.0		mg/L	1		200.7 Rev 4.4	Total/NA
Manganese	3.8		0.050		mg/L	5		200.7 Rev 4.4	Total/NA
Cobalt	7.0		5.0		ug/L	10		200.8 LL	Total/NA
Molybdenum	57	T5	5.0		ug/L	10		200.8 LL	Total/NA
Total Dissolved Solids	6600	H1	100		mg/L	1		SM 2540C	Total/NA

Client Sample ID: FC-CCR-EW15-1123 — Lab Sample ID: 550-210744-10

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Boron	13		0.050		mg/L	1		200.7 Rev 4.4	Total/NA
Iron	0.12		0.10		mg/L	1		200.7 Rev 4.4	Total/NA
Magnesium	590		2.0		mg/L	1		200.7 Rev 4.4	Total/NA
Manganese	2.7		0.050		mg/L	5		200.7 Rev 4.4	Total/NA
Molybdenum	40	T5	5.0		ug/L	10		200.8 LL	Total/NA
Total Dissolved Solids	7700	H1	100		mg/L	1		SM 2540C	Total/NA

Client Sample ID: FC-CCR-MW34-1123 — Lab Sample ID: 550-210744-11

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Boron	11		0.050		mg/L	1		200.7 Rev 4.4	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: FC-CCR-MW34-1123 (Continued) — Lab Sample ID: 550-210744-11

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Iron	0.12		0.10		mg/L	1		200.7 Rev 4.4	Total/NA
Magnesium	590		2.0		mg/L	1		200.7 Rev 4.4	Total/NA
Manganese	2.6		0.010		mg/L	1		200.7 Rev 4.4	Total/NA
Molybdenum	64	T5	5.0		ug/L	10		200.8 LL	Total/NA
Total Dissolved Solids	7600	H1	100		mg/L	1		SM 2540C	Total/NA

Client Sample ID: FC-CCR-EB01-1123 — Lab Sample ID: 550-210744-12

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Total Dissolved Solids	34	H1	20		mg/L	1		SM 2540C	Total/NA
pH	6.0	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	12.8	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-210744-1
SDG: APS Four Corners Power Plant (Other)

Client Sample ID: FC-CCR-DMX06-1123
Date Collected: 11/15/23 09:15
Date Received: 11/17/23 16:15

Lab Sample ID: 550-210744-1
Matrix: Water

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**950**	**D2**	400		mg/L			12/02/23 19:31	200
Fluoride	ND	D1	0.80		mg/L			12/02/23 19:13	2
Sulfate	**7000**	**D2**	400		mg/L			12/02/23 19:31	200

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		0.0010		mg/L		11/21/23 04:55	11/29/23 13:54	1
Boron	**6.3**		0.050		mg/L		11/21/23 04:55	11/29/23 13:54	1
Calcium	**430**		2.0		mg/L		11/21/23 04:55	11/29/23 13:54	1
Iron	ND		0.10		mg/L		11/21/23 04:55	11/29/23 13:54	1
Magnesium	**660**		2.0		mg/L		11/21/23 04:55	11/29/23 13:54	1
Potassium	**55**		0.50		mg/L		11/21/23 04:55	11/29/23 13:54	1
Sodium	**3900**		5.0		mg/L		11/21/23 04:55	12/01/23 13:18	10
Manganese	**1.2**		0.10		mg/L		11/21/23 04:55	12/01/23 13:18	10

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**1.1**		0.050		mg/L		11/27/23 07:07	11/29/23 11:54	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.010		mg/L		11/21/23 09:13	11/28/23 09:37	10
Arsenic	ND		0.010		mg/L		11/21/23 09:13	11/28/23 09:37	10
Barium	**0.014**		0.0050		mg/L		11/21/23 09:13	11/28/23 09:37	10
Cadmium	ND		0.0010		mg/L		11/21/23 09:13	11/28/23 09:37	10
Chromium	ND		0.010		mg/L		11/21/23 09:13	11/28/23 09:37	10
Manganese	**1.2**		0.020		mg/L		11/21/23 09:13	11/28/23 09:37	10
Selenium	ND		0.0050		mg/L		11/21/23 09:13	11/28/23 09:37	10
Thallium	ND		0.0010		mg/L		11/21/23 09:13	11/28/23 09:37	10
Zinc	ND		0.13		mg/L		11/21/23 09:13	11/28/23 09:37	10
Lead	ND		0.0050		mg/L		11/21/23 09:13	11/28/23 09:37	10
Molybdenum	ND	T5	0.0050		mg/L		11/21/23 09:13	11/28/23 09:37	10
Cobalt	ND		0.0050		mg/L		11/21/23 09:13	11/28/23 09:37	10

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3 (SM 2320B)	**520**		6.0		mg/L			11/21/23 14:31	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**520**		6.0		mg/L			11/21/23 14:31	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			11/21/23 14:31	1
Alkalinity, Phenolphthalein (SM 2320B)	ND		6.0		mg/L			11/21/23 14:31	1
Hydroxide Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			11/21/23 14:31	1
Total Dissolved Solids (SM 2540C)	**14000**		100		mg/L			11/22/23 18:11	1
pH (SM 4500 H+ B)	**7.3**	**H5**	1.7		SU			11/29/23 12:40	1
Temperature (SM 4500 H+ B)	**14.4**	**H5 T5**	0.1		Degrees C			11/29/23 12:40	1

Client Sample ID: FC-CCR-MW11-1123

Lab Sample ID: 550-210744-2

Date Collected: 11/15/23 15:27
Matrix: Water
Date Received: 11/17/23 16:15

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5500**	**D2**	400		mg/L			12/05/23 22:45	200
Fluoride	ND	D2	0.80		mg/L			12/05/23 05:15	2
Sulfate	**7900**	**D2**	2000		mg/L			12/06/23 16:54	1000

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.50		mg/L		11/21/23 04:55	12/01/23 13:21	10
Calcium	**530**		20		mg/L		11/21/23 04:55	12/01/23 13:21	10
Magnesium	**10000**		40		mg/L		11/21/23 04:55	12/04/23 11:43	20
Potassium	**180**		5.0		mg/L		11/21/23 04:55	12/01/23 13:21	10
Sodium	**15000**		25		mg/L		11/21/23 04:55	12/05/23 05:50	50

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	**25**		5.0		ug/L		11/21/23 07:04	11/27/23 19:41	10
Molybdenum	ND	T5	5.0		ug/L		11/21/23 07:04	11/27/23 19:41	10

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3 (SM 2320B)	**850**		6.0		mg/L			11/21/23 14:43	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**850**		6.0		mg/L			11/21/23 14:43	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			11/21/23 14:43	1
Alkalinity, Phenolphthalein (SM 2320B)	ND		6.0		mg/L			11/21/23 14:43	1
Hydroxide Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			11/21/23 14:43	1
Total Dissolved Solids (SM 2540C)	**76000**		1000		mg/L			11/22/23 18:11	1
pH (SM 4500 H+ B)	**7.0**	**H5**	1.7		SU			11/29/23 12:41	1
Temperature (SM 4500 H+ B)	**13.8**	**H5 T5**	0.1		Degrees C			11/29/23 12:41	1

Client Sample ID: FC-CCR-MW15-1123

Lab Sample ID: 550-210744-3

Date Collected: 11/15/23 10:33
Matrix: Water
Date Received: 11/17/23 16:15

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1100**	**D2**	400		mg/L			12/02/23 20:45	200
Fluoride	ND	D1	0.80		mg/L			12/02/23 20:26	2
Sulfate	**6600**	**D2**	400		mg/L			12/02/23 20:45	200

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		0.0010		mg/L		11/21/23 04:55	11/29/23 14:00	1
Boron	**8.9**		0.050		mg/L		11/21/23 04:55	11/29/23 14:00	1
Calcium	**520**		2.0		mg/L		11/21/23 04:55	11/29/23 14:00	1
Iron	**0.26**		0.10		mg/L		11/21/23 04:55	11/29/23 14:00	1
Magnesium	**780**		2.0		mg/L		11/21/23 04:55	11/29/23 14:00	1
Potassium	**48**		0.50		mg/L		11/21/23 04:55	11/29/23 14:00	1
Sodium	**2600**		5.0		mg/L		11/21/23 04:55	12/01/23 13:24	10
Manganese	**1.1**		0.10		mg/L		11/21/23 04:55	12/01/23 13:24	10

Client Sample ID: FC-CCR-MW15-1123

Lab Sample ID: 550-210744-3

Date Collected: 11/15/23 10:33
Matrix: Water
Date Received: 11/17/23 16:15

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**1.0**		0.10		mg/L		11/27/23 07:07	11/29/23 15:00	2

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.010		mg/L		11/21/23 09:13	11/28/23 09:39	10
Arsenic	ND		0.010		mg/L		11/21/23 09:13	11/28/23 09:39	10
Barium	**0.020**		0.0050		mg/L		11/21/23 09:13	11/28/23 09:39	10
Cadmium	ND		0.0010		mg/L		11/21/23 09:13	11/28/23 09:39	10
Chromium	ND		0.010		mg/L		11/21/23 09:13	11/28/23 09:39	10
Manganese	**1.1**		0.020		mg/L		11/21/23 09:13	11/28/23 09:39	10
Selenium	ND		0.0050		mg/L		11/21/23 09:13	11/28/23 09:39	10
Thallium	ND		0.0010		mg/L		11/21/23 09:13	11/28/23 09:39	10
Zinc	ND		0.13		mg/L		11/21/23 09:13	11/28/23 09:39	10
Lead	ND		0.0050		mg/L		11/21/23 09:13	11/28/23 09:39	10
Molybdenum	ND	T5	0.0050		mg/L		11/21/23 09:13	11/28/23 09:39	10
Cobalt	ND		0.0050		mg/L		11/21/23 09:13	11/28/23 09:39	10

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3 (SM 2320B)	**660**		6.0		mg/L			11/21/23 14:58	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**660**		6.0		mg/L			11/21/23 14:58	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			11/21/23 14:58	1
Alkalinity, Phenolphthalein (SM 2320B)	ND		6.0		mg/L			11/21/23 14:58	1
Hydroxide Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			11/21/23 14:58	1
Total Dissolved Solids (SM 2540C)	**13000**		100		mg/L			11/22/23 18:11	1
pH (SM 4500 H+ B)	**7.1**	**H5**	1.7		SU			11/29/23 12:43	1
Temperature (SM 4500 H+ B)	**13.5**	**H5 T5**	0.1		Degrees C			11/29/23 12:43	1

Client Sample ID: FC-CCR-MW16-1123

Lab Sample ID: 550-210744-4

Date Collected: 11/15/23 11:47
Matrix: Water
Date Received: 11/17/23 16:15

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**840**	**D2**	400		mg/L			12/02/23 22:17	200
Fluoride	ND	D1	0.80		mg/L			12/02/23 21:58	2
Sulfate	**12000**	**D2**	400		mg/L			12/02/23 22:17	200

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		0.0010		mg/L		11/21/23 04:55	11/29/23 14:02	1
Boron	**11**		0.050		mg/L		11/21/23 04:55	11/29/23 14:02	1
Calcium	**490**		2.0		mg/L		11/21/23 04:55	11/29/23 14:02	1
Iron	**0.16**		0.10		mg/L		11/21/23 04:55	11/29/23 14:02	1
Magnesium	**1700**		20		mg/L		11/21/23 04:55	12/01/23 13:26	10
Potassium	**74**		0.50		mg/L		11/21/23 04:55	11/29/23 14:02	1
Sodium	**4100**		5.0		mg/L		11/21/23 04:55	12/01/23 13:26	10

Client Sample ID: FC-CCR-MW16-1123

Lab Sample ID: 550-210744-4
Matrix: Water
Date Collected: 11/15/23 11:47
Date Received: 11/17/23 16:15

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**1.6**		0.25		mg/L		11/27/23 07:07	11/29/23 15:02	5

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.010		mg/L		11/21/23 09:13	11/28/23 09:41	10
Arsenic	ND		0.010		mg/L		11/21/23 09:13	11/28/23 09:41	10
Barium	**0.021**		0.0050		mg/L		11/21/23 09:13	11/28/23 09:41	10
Cadmium	ND		0.0010		mg/L		11/21/23 09:13	11/28/23 09:41	10
Chromium	ND		0.010		mg/L		11/21/23 09:13	11/28/23 09:41	10
Manganese	**1.6**		0.020		mg/L		11/21/23 09:13	11/28/23 09:41	10
Selenium	**0.030**		0.0050		mg/L		11/21/23 09:13	11/28/23 09:41	10
Thallium	ND		0.0010		mg/L		11/21/23 09:13	11/28/23 09:41	10
Zinc	ND		0.13		mg/L		11/21/23 09:13	11/28/23 09:41	10
Lead	ND		0.0050		mg/L		11/21/23 09:13	11/28/23 09:41	10
Molybdenum	ND	T5	0.0050		mg/L		11/21/23 09:13	11/28/23 09:41	10
Cobalt	**0.010**		0.0050		mg/L		11/21/23 09:13	11/28/23 09:41	10

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3 (SM 2320B)	**590**		6.0		mg/L			11/21/23 15:10	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**590**		6.0		mg/L			11/21/23 15:10	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			11/21/23 15:10	1
Alkalinity, Phenolphthalein (SM 2320B)	ND		6.0		mg/L			11/21/23 15:10	1
Hydroxide Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			11/21/23 15:10	1
Total Dissolved Solids (SM 2540C)	**19000**		200		mg/L			11/22/23 18:11	1
pH (SM 4500 H+ B)	**7.3**	**H5**	1.7		SU			11/29/23 12:44	1
Temperature (SM 4500 H+ B)	**14.2**	**H5 T5**	0.1		Degrees C			11/29/23 12:44	1

Client Sample ID: FC-CCR-DMX05R-1123

Lab Sample ID: 550-210744-5
Matrix: Water
Date Collected: 11/16/23 11:38
Date Received: 11/17/23 16:15

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1300**	**D2**	400		mg/L			12/02/23 22:54	200
Fluoride	ND	D1	0.80		mg/L			12/02/23 22:35	2
Sulfate	**9700**	**D2**	400		mg/L			12/02/23 22:54	200

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		0.0010		mg/L		11/21/23 04:55	11/29/23 14:05	1
Boron	**15**		0.050		mg/L		11/21/23 04:55	11/29/23 14:05	1
Calcium	**470**		2.0		mg/L		11/21/23 04:55	11/29/23 14:05	1
Iron	**3.9**		0.10		mg/L		11/21/23 04:55	11/29/23 14:05	1
Magnesium	**630**		2.0		mg/L		11/21/23 04:55	11/29/23 14:05	1
Potassium	**54**		0.50		mg/L		11/21/23 04:55	11/29/23 14:05	1
Sodium	**4400**		5.0		mg/L		11/21/23 04:55	12/01/23 13:29	10
Manganese	**0.87**		0.10		mg/L		11/21/23 04:55	12/01/23 13:29	10

Client Sample ID: FC-CCR-DMX05R-1123

Lab Sample ID: 550-210744-5

Date Collected: 11/16/23 11:38
Matrix: Water
Date Received: 11/17/23 16:15

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**0.80**		0.050		mg/L		11/27/23 07:07	11/29/23 12:06	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.010		mg/L		11/21/23 09:13	11/28/23 09:43	10
Arsenic	ND		0.010		mg/L		11/21/23 09:13	11/28/23 09:43	10
Barium	**0.021**		0.0050		mg/L		11/21/23 09:13	11/28/23 09:43	10
Cadmium	ND		0.0010		mg/L		11/21/23 09:13	11/28/23 09:43	10
Chromium	ND		0.010		mg/L		11/21/23 09:13	11/28/23 09:43	10
Manganese	**0.86**		0.020		mg/L		11/21/23 09:13	11/28/23 09:43	10
Selenium	ND		0.0050		mg/L		11/21/23 09:13	11/28/23 09:43	10
Thallium	ND		0.0010		mg/L		11/21/23 09:13	11/28/23 09:43	10
Zinc	ND		0.13		mg/L		11/21/23 09:13	11/28/23 09:43	10
Lead	ND		0.0050		mg/L		11/21/23 09:13	11/28/23 09:43	10
Molybdenum	**0.045**	**T5**	0.0050		mg/L		11/21/23 09:13	11/28/23 09:43	10
Cobalt	ND		0.0050		mg/L		11/21/23 09:13	11/28/23 09:43	10

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3 (SM 2320B)	**450**		6.0		mg/L			11/21/23 15:23	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**450**		6.0		mg/L			11/21/23 15:23	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			11/21/23 15:23	1
Alkalinity, Phenolphthalein (SM 2320B)	ND		6.0		mg/L			11/21/23 15:23	1
Hydroxide Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			11/21/23 15:23	1
Total Dissolved Solids (SM 2540C)	**15000**	**H1**	200		mg/L			11/27/23 15:54	1
pH (SM 4500 H+ B)	**7.5**	**H5**	1.7		SU			11/29/23 12:46	1
Temperature (SM 4500 H+ B)	**14.7**	**H5 T5**	0.1		Degrees C			11/29/23 12:46	1

Client Sample ID: FC-CCR-EW17-1123

Lab Sample ID: 550-210744-6

Date Collected: 11/15/23 16:09
Matrix: Water
Date Received: 11/17/23 16:15

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	**36**		0.050		mg/L		11/21/23 04:55	11/29/23 14:08	1
Iron	**0.17**		0.10		mg/L		11/21/23 04:55	11/29/23 14:08	1
Magnesium	**1100**		20		mg/L		11/21/23 04:55	12/01/23 13:32	10
Manganese	**0.72**		0.10		mg/L		11/21/23 04:55	12/01/23 13:32	10

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	**11**		5.0		ug/L		11/21/23 07:04	11/27/23 19:43	10
Molybdenum	ND	T5	5.0		ug/L		11/21/23 07:04	11/27/23 19:43	10

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**16000**		100		mg/L			11/22/23 18:11	1

Client Sample ID: FC-CCR-EW12R-1123

Lab Sample ID: 550-210744-7

Date Collected: 11/16/23 09:53
Matrix: Water
Date Received: 11/17/23 16:15

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	49		0.050		mg/L		11/21/23 04:55	11/29/23 14:11	1
Iron	14		0.10		mg/L		11/21/23 04:55	11/29/23 14:11	1
Magnesium	830		2.0		mg/L		11/21/23 04:55	11/29/23 14:11	1
Manganese	1.8		0.050		mg/L		11/21/23 04:55	12/05/23 05:53	5

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	ND		5.0		ug/L		11/21/23 07:04	11/27/23 19:45	10
Molybdenum	69	T5	5.0		ug/L		11/21/23 07:04	11/27/23 19:45	10

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	12000	H1	100		mg/L			11/27/23 15:54	1

Client Sample ID: FC-CCR-EW11R-1123

Lab Sample ID: 550-210744-8

Date Collected: 11/16/23 10:41
Matrix: Water
Date Received: 11/17/23 16:15

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	29		0.050		mg/L		11/21/23 04:55	11/29/23 14:19	1
Iron	7.4		0.10		mg/L		11/21/23 04:55	11/29/23 14:19	1
Magnesium	790		2.0		mg/L		11/21/23 04:55	11/29/23 14:19	1
Manganese	2.0		0.050		mg/L		11/21/23 04:55	12/05/23 05:56	5

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	6.1		5.0		ug/L		11/21/23 07:04	11/27/23 19:47	10
Molybdenum	19	T5	5.0		ug/L		11/21/23 07:04	11/27/23 19:47	10

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	8200	H1	100		mg/L			11/27/23 15:54	1

Client Sample ID: FC-CCR-EW14-1123

Lab Sample ID: 550-210744-9

Date Collected: 11/16/23 17:23
Matrix: Water
Date Received: 11/17/23 16:15

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	15		0.050		mg/L		11/21/23 04:55	11/29/23 14:22	1
Iron	0.13		0.10		mg/L		11/21/23 04:55	11/29/23 14:22	1
Magnesium	380		2.0		mg/L		11/21/23 04:55	11/29/23 14:22	1
Manganese	3.8		0.050		mg/L		11/21/23 04:55	12/05/23 05:58	5

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	7.0		5.0		ug/L		11/21/23 07:04	11/27/23 19:49	10
Molybdenum	57	T5	5.0		ug/L		11/21/23 07:04	11/27/23 19:49	10

Client Sample ID: FC-CCR-EW14-1123

Lab Sample ID: 550-210744-9
Matrix: Water
Date Collected: 11/16/23 17:23
Date Received: 11/17/23 16:15

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	6600	H1	100		mg/L			11/27/23 15:54	1

Client Sample ID: FC-CCR-EW15-1123

Lab Sample ID: 550-210744-10
Matrix: Water
Date Collected: 11/16/23 15:36
Date Received: 11/17/23 16:15

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	13		0.050		mg/L		11/21/23 04:55	11/29/23 14:25	1
Iron	0.12		0.10		mg/L		11/21/23 04:55	11/29/23 14:25	1
Magnesium	590		2.0		mg/L		11/21/23 04:55	11/29/23 14:25	1
Manganese	2.7		0.050		mg/L		11/21/23 04:55	12/05/23 06:01	5

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	ND		5.0		ug/L		11/21/23 07:04	11/27/23 19:51	10
Molybdenum	40	T5	5.0		ug/L		11/21/23 07:04	11/27/23 19:51	10

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	7700	H1	100		mg/L			11/27/23 15:54	1

Client Sample ID: FC-CCR-MW34-1123

Lab Sample ID: 550-210744-11
Matrix: Water
Date Collected: 11/16/23 16:35
Date Received: 11/17/23 16:15

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	11		0.050		mg/L		11/21/23 04:55	11/29/23 14:28	1
Iron	0.12		0.10		mg/L		11/21/23 04:55	11/29/23 14:28	1
Magnesium	590		2.0		mg/L		11/21/23 04:55	11/29/23 14:28	1
Manganese	2.6		0.010		mg/L		11/21/23 04:55	12/04/23 11:57	1

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	ND		5.0		ug/L		11/21/23 07:04	11/27/23 19:53	10
Molybdenum	64	T5	5.0		ug/L		11/21/23 07:04	11/27/23 19:53	10

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	7600	H1	100		mg/L			11/27/23 15:54	1

Client Sample ID: FC-CCR-EB01-1123

Lab Sample ID: 550-210744-12
Matrix: Water
Date Collected: 11/16/23 17:37
Date Received: 11/17/23 16:15

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		2.0		mg/L			12/05/23 23:59	1
Fluoride	ND		0.40		mg/L			12/05/23 23:59	1
Sulfate	ND		2.0		mg/L			12/05/23 23:59	1

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-210744-1
SDG: APS Four Corners Power Plant (Other)

Client Sample ID: FC-CCR-EB01-1123
Date Collected: 11/16/23 17:37
Date Received: 11/17/23 16:15

Lab Sample ID: 550-210744-12
Matrix: Water

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		0.0010		mg/L		11/21/23 04:55	11/29/23 14:31	1
Boron	ND		0.050		mg/L		11/21/23 04:55	11/29/23 14:31	1
Calcium	ND		2.0		mg/L		11/21/23 04:55	11/29/23 14:31	1
Iron	ND		0.10		mg/L		11/21/23 04:55	11/29/23 14:31	1
Magnesium	ND		2.0		mg/L		11/21/23 04:55	11/29/23 14:31	1
Potassium	ND		0.50		mg/L		11/21/23 04:55	11/29/23 14:31	1
Sodium	ND		0.50		mg/L		11/21/23 04:55	12/04/23 12:00	1
Manganese	ND	V1	0.010		mg/L		11/21/23 04:55	11/29/23 14:31	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	ND		0.050		mg/L		11/27/23 07:07	11/29/23 12:08	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.010		mg/L		11/21/23 09:13	11/28/23 09:35	10
Arsenic	ND		0.010		mg/L		11/21/23 09:13	11/28/23 09:35	10
Barium	ND		0.0050		mg/L		11/21/23 09:13	11/28/23 09:35	10
Cadmium	ND		0.0010		mg/L		11/21/23 09:13	11/28/23 09:35	10
Chromium	ND		0.010		mg/L		11/21/23 09:13	11/28/23 09:35	10
Manganese	ND		0.020		mg/L		11/21/23 09:13	11/28/23 09:35	10
Selenium	ND		0.0050		mg/L		11/21/23 09:13	11/28/23 09:35	10
Thallium	ND		0.0010		mg/L		11/21/23 09:13	11/28/23 09:35	10
Zinc	ND		0.13		mg/L		11/21/23 09:13	11/28/23 09:35	10
Lead	ND		0.0050		mg/L		11/21/23 09:13	11/28/23 09:35	10
Molybdenum	ND	T5	0.0050		mg/L		11/21/23 09:13	11/28/23 09:35	10
Cobalt	ND		0.0050		mg/L		11/21/23 09:13	11/28/23 09:35	10

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		11/21/23 12:35	11/21/23 16:03	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			11/21/23 15:33	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			11/21/23 15:33	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			11/21/23 15:33	1
Alkalinity, Phenolphthalein (SM 2320B)	ND		6.0		mg/L			11/21/23 15:33	1
Hydroxide Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			11/21/23 15:33	1
Total Dissolved Solids (SM 2540C)	**34**	**H1**	20		mg/L			11/27/23 15:54	1
pH (SM 4500 H+ B)	**6.0**	**H5**	1.7		SU			11/29/23 12:49	1
Temperature (SM 4500 H+ B)	**12.8**	**H5 T5**	0.1		Degrees C			11/29/23 12:49	1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 550-312157/3
Matrix: Water
Analysis Batch: 312157

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		2.0		mg/L			12/02/23 16:06	1
Fluoride	ND		0.40		mg/L			12/02/23 16:06	1
Sulfate	ND		2.0		mg/L			12/02/23 16:06	1

Lab Sample ID: LCS 550-312157/6
Matrix: Water
Analysis Batch: 312157

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			20.0	20.9		mg/L		105	90 - 110		
Fluoride			4.00	4.35		mg/L		109	90 - 110		
Sulfate			20.0	21.1		mg/L		105	90 - 110		

Lab Sample ID: LCSD 550-312157/7
Matrix: Water
Analysis Batch: 312157

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			20.0	20.9		mg/L		105	90 - 110	0	20
Fluoride			4.00	4.35		mg/L		109	90 - 110	0	20
Sulfate			20.0	21.0		mg/L		105	90 - 110	0	20

Lab Sample ID: 550-210600-A-1 MS
Matrix: Water
Analysis Batch: 312157

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	49		20.0	71.3		mg/L		111	80 - 120		
Fluoride	0.78	M1	4.00	5.96	M1	mg/L		129	80 - 120		
Sulfate	54		20.0	76.8		mg/L		113	80 - 120		

Lab Sample ID: 550-210600-A-1 MSD
Matrix: Water
Analysis Batch: 312157

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	49		20.0	67.7		mg/L		93	80 - 120	5	20
Fluoride	0.78	M1	4.00	5.08		mg/L		108	80 - 120	16	20
Sulfate	54		20.0	72.5		mg/L		92	80 - 120	6	20

Lab Sample ID: MB 550-312215/2
Matrix: Water
Analysis Batch: 312215

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		2.0		mg/L			12/04/23 19:00	1
Fluoride	ND		0.40		mg/L			12/04/23 19:00	1
Sulfate	ND		2.0		mg/L			12/04/23 19:00	1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 550-312215/5
Matrix: Water
Analysis Batch: 312215

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			20.0	18.5		mg/L		93	90 - 110		
Fluoride			4.00	4.02		mg/L		101	90 - 110		
Sulfate			20.0	20.0		mg/L		100	90 - 110		

Lab Sample ID: LCSD 550-312215/6
Matrix: Water
Analysis Batch: 312215

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			20.0	18.4		mg/L		92	90 - 110	1	20
Fluoride			4.00	4.00		mg/L		100	90 - 110	1	20
Sulfate			20.0	20.0		mg/L		100	90 - 110	0	20

Lab Sample ID: 550-209146-A-22 MS
Matrix: Water
Analysis Batch: 312215

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	ND	M1	40.0	1690	E2 M1	mg/L		4218	80 - 120		
Fluoride	ND		8.00	7.94		mg/L		99	80 - 120		
Sulfate	ND	M1	40.0	1040	E2 M1	mg/L		2612	80 - 120		

Lab Sample ID: 550-209146-A-22 MSD
Matrix: Water
Analysis Batch: 312215

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	ND	M1	40.0	1690	E2 M1	mg/L		4215	80 - 120	0	20
Fluoride	ND		8.00	8.06		mg/L		101	80 - 120	1	20
Sulfate	ND	M1	40.0	1040	E2 M1	mg/L		2612	80 - 120	0	20

Lab Sample ID: MB 550-312271/2
Matrix: Water
Analysis Batch: 312271

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		2.0		mg/L			12/05/23 14:29	1
Fluoride	ND		0.40		mg/L			12/05/23 14:29	1
Sulfate	ND		2.0		mg/L			12/05/23 14:29	1

Lab Sample ID: LCS 550-312271/5
Matrix: Water
Analysis Batch: 312271

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			20.0	20.9		mg/L		104	90 - 110		
Fluoride			4.00	4.09		mg/L		102	90 - 110		
Sulfate			20.0	21.9		mg/L		109	90 - 110		

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 550-312271/6
Matrix: Water
Analysis Batch: 312271

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			20.0	20.8		mg/L		104	90 - 110	0	20
Fluoride			4.00	4.29		mg/L		107	90 - 110	5	20
Sulfate			20.0	21.0		mg/L		105	90 - 110	4	20

Lab Sample ID: 550-211300-A-3 MS
Matrix: Water
Analysis Batch: 312271

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	260	E2 M3	20.0	262	E2 M3	mg/L		24	80 - 120		
Fluoride	3.2		4.00	7.10		mg/L		97	80 - 120		
Sulfate	140	E2 M3	20.0	150	E2 M3	mg/L		59	80 - 120		

Lab Sample ID: 550-211300-A-3 MSD
Matrix: Water
Analysis Batch: 312271

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	260	E2 M3	20.0	263	E2 M3	mg/L		29	80 - 120	0	20
Fluoride	3.2		4.00	7.30		mg/L		102	80 - 120	3	20
Sulfate	140	E2 M3	20.0	151	E2 M3	mg/L		62	80 - 120	0	20

Lab Sample ID: MB 550-312351/2
Matrix: Water
Analysis Batch: 312351

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		2.0		mg/L			12/06/23 14:27	1
Fluoride	ND		0.40		mg/L			12/06/23 14:27	1
Sulfate	ND		2.0		mg/L			12/06/23 14:27	1

Lab Sample ID: LCS 550-312351/5
Matrix: Water
Analysis Batch: 312351

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			20.0	20.8		mg/L		104	90 - 110		
Fluoride			4.00	3.86		mg/L		97	90 - 110		
Sulfate			20.0	20.8		mg/L		104	90 - 110		

Lab Sample ID: LCSD 550-312351/6
Matrix: Water
Analysis Batch: 312351

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			20.0	20.7		mg/L		104	90 - 110	0	20
Fluoride			4.00	4.32		mg/L		108	90 - 110	11	20
Sulfate			20.0	20.8		mg/L		104	90 - 110	0	20

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 550-210836-A-3 MS ^20
Matrix: Water
Analysis Batch: 312351

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	640		400	1060		mg/L		106	80 - 120
Fluoride	ND		80.0	83.9		mg/L		101	80 - 120
Sulfate	1000		400	1430		mg/L		103	80 - 120

Lab Sample ID: 550-210836-A-3 MSD ^20
Matrix: Water
Analysis Batch: 312351

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	640		400	1060		mg/L		106	80 - 120	0	20
Fluoride	ND		80.0	86.8		mg/L		104	80 - 120	3	20
Sulfate	1000		400	1420		mg/L		101	80 - 120	1	20

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 550-311485/1-A
Matrix: Water
Analysis Batch: 311904

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 311485

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		0.0010		mg/L		11/21/23 04:55	11/29/23 13:37	1
Boron	ND		0.050		mg/L		11/21/23 04:55	11/29/23 13:37	1
Calcium	ND		2.0		mg/L		11/21/23 04:55	11/29/23 13:37	1
Iron	ND		0.10		mg/L		11/21/23 04:55	11/29/23 13:37	1
Magnesium	ND		2.0		mg/L		11/21/23 04:55	11/29/23 13:37	1
Potassium	ND		0.50		mg/L		11/21/23 04:55	11/29/23 13:37	1

Lab Sample ID: MB 550-311485/1-A
Matrix: Water
Analysis Batch: 312101

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 311485

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Sodium	ND		0.50		mg/L		11/21/23 04:55	12/01/23 13:10	1
Manganese	ND		0.010		mg/L		11/21/23 04:55	12/01/23 13:10	1

Lab Sample ID: LCS 550-311485/2-A
Matrix: Water
Analysis Batch: 311904

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 311485

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Beryllium	1.00	1.06		mg/L		106	85 - 115
Boron	1.00	1.09		mg/L		109	85 - 115
Calcium	21.0	22.9		mg/L		109	85 - 115
Iron	1.00	1.03		mg/L		103	85 - 115
Magnesium	21.0	22.4		mg/L		107	85 - 115
Potassium	20.0	21.0		mg/L		105	85 - 115

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: LCS 550-311485/2-A
Matrix: Water
Analysis Batch: 312101

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 311485

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Sodium			20.0	18.8		mg/L		94	85 - 115		
Manganese			1.00	0.928		mg/L		93	85 - 115		

Lab Sample ID: LCSD 550-311485/3-A
Matrix: Water
Analysis Batch: 311904

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 311485

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Beryllium			1.00	1.05		mg/L		105	85 - 115	1	20
Boron			1.00	1.07		mg/L		107	85 - 115	2	20
Calcium			21.0	22.6		mg/L		108	85 - 115	1	20
Iron			1.00	1.04		mg/L		104	85 - 115	1	20
Magnesium			21.0	22.2		mg/L		106	85 - 115	1	20
Potassium			20.0	20.8		mg/L		104	85 - 115	1	20

Lab Sample ID: LCSD 550-311485/3-A
Matrix: Water
Analysis Batch: 312101

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 311485

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sodium			20.0	18.7		mg/L		94	85 - 115	1	20
Manganese			1.00	0.931		mg/L		93	85 - 115	0	20

Lab Sample ID: 550-210594-B-21-B MSD
Matrix: Water
Analysis Batch: 311904

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 311485

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Beryllium	ND	M2 R4	1.00	1.18	R4	mg/L		118	70 - 130	183	20
Boron	50	M3 R4	1.00	48.9	M3 R4	mg/L		-136	70 - 130	196	20
Calcium	490	M3 R4	21.0	499	M3 R4	mg/L		48	70 - 130	180	20
Iron	0.52	M2 R4	1.00	1.66	R4	mg/L		115	70 - 130	185	20
Potassium	41	M2 R4	20.0	65.8	R4	mg/L		126	70 - 130	181	20

Lab Sample ID: MB 570-386719/1-A
Matrix: Water
Analysis Batch: 387765

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 386719

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	ND		0.050		mg/L		11/27/23 07:07	11/29/23 11:33	1

Lab Sample ID: LCS 570-386719/2-A
Matrix: Water
Analysis Batch: 387765

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 386719

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Lithium			0.500	0.515		mg/L		103	85 - 115		

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: LCSD 570-386719/3-A
Matrix: Water
Analysis Batch: 387765

Client Sample ID: Lab Control Sample Dup
Prep Type: Total Recoverable
Prep Batch: 386719

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Lithium			0.500	0.528		mg/L		106	85 - 115	2	20

Lab Sample ID: 550-210744-1 MS
Matrix: Water
Analysis Batch: 387765

Client Sample ID: FC-CCR-DMX06-1123
Prep Type: Total Recoverable
Prep Batch: 386719

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Lithium	1.1		0.500	1.66		mg/L		109	80 - 120		

Lab Sample ID: 550-210744-1 MSD
Matrix: Water
Analysis Batch: 387765

Client Sample ID: FC-CCR-DMX06-1123
Prep Type: Total Recoverable
Prep Batch: 386719

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Lithium	1.1		0.500	1.61		mg/L		100	80 - 120	3	20

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 550-311497/1-A
Matrix: Water
Analysis Batch: 311771

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 311497

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.0010		mg/L		11/21/23 09:13	11/28/23 09:17	1
Arsenic	ND		0.0010		mg/L		11/21/23 09:13	11/28/23 09:17	1
Barium	ND		0.00050		mg/L		11/21/23 09:13	11/28/23 09:17	1
Cadmium	ND		0.00010		mg/L		11/21/23 09:13	11/28/23 09:17	1
Chromium	ND		0.0010		mg/L		11/21/23 09:13	11/28/23 09:17	1
Manganese	ND		0.0020		mg/L		11/21/23 09:13	11/28/23 09:17	1
Selenium	ND		0.00050		mg/L		11/21/23 09:13	11/28/23 09:17	1
Thallium	ND		0.00010		mg/L		11/21/23 09:13	11/28/23 09:17	1
Zinc	ND		0.013		mg/L		11/21/23 09:13	11/28/23 09:17	1
Lead	ND		0.00050		mg/L		11/21/23 09:13	11/28/23 09:17	1
Molybdenum	ND		0.00050		mg/L		11/21/23 09:13	11/28/23 09:17	1
Cobalt	ND		0.00050		mg/L		11/21/23 09:13	11/28/23 09:17	1

Lab Sample ID: LCS 550-311497/3-A
Matrix: Water
Analysis Batch: 311771

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 311497

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Antimony			0.100	0.0942		mg/L		94	85 - 115		
Arsenic			0.100	0.0960		mg/L		96	85 - 115		
Barium			0.100	0.105		mg/L		105	85 - 115		
Cadmium			0.100	0.0995		mg/L		99	85 - 115		
Chromium			0.100	0.0997		mg/L		100	85 - 115		
Manganese			0.100	0.0952		mg/L		95	85 - 115		
Selenium			0.100	0.0962		mg/L		96	85 - 115		
Thallium			0.100	0.0943		mg/L		94	85 - 115		
Zinc			0.100	0.0976		mg/L		98	85 - 115		

Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 550-311497/3-A
Matrix: Water
Analysis Batch: 311771

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 311497

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Lead	0.100	0.0947		mg/L		95	85 - 115
Molybdenum	0.100	0.0980		mg/L		98	85 - 115
Cobalt	0.100	0.0991		mg/L		99	85 - 115

Lab Sample ID: LCSD 550-311497/4-A
Matrix: Water
Analysis Batch: 311771

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 311497

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	0.100	0.0967		mg/L		97	85 - 115	3	20
Arsenic	0.100	0.0966		mg/L		97	85 - 115	1	20
Barium	0.100	0.112		mg/L		112	85 - 115	6	20
Cadmium	0.100	0.102		mg/L		102	85 - 115	3	20
Chromium	0.100	0.0987		mg/L		99	85 - 115	1	20
Manganese	0.100	0.0976		mg/L		98	85 - 115	2	20
Selenium	0.100	0.0965		mg/L		97	85 - 115	0	20
Thallium	0.100	0.0999		mg/L		100	85 - 115	6	20
Zinc	0.100	0.0983		mg/L		98	85 - 115	1	20
Lead	0.100	0.102		mg/L		102	85 - 115	7	20
Molybdenum	0.100	0.104		mg/L		104	85 - 115	6	20
Cobalt	0.100	0.0986		mg/L		99	85 - 115	1	20

Lab Sample ID: 550-210744-12 MS
Matrix: Water
Analysis Batch: 311771

Client Sample ID: FC-CCR-EB01-1123
Prep Type: Total/NA
Prep Batch: 311497

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	ND		0.100	0.0991		mg/L		99	70 - 130
Arsenic	ND		0.100	0.103		mg/L		103	70 - 130
Barium	ND		0.100	0.108		mg/L		108	70 - 130
Cadmium	ND		0.100	0.105		mg/L		105	70 - 130
Chromium	ND		0.100	0.105		mg/L		105	70 - 130
Manganese	ND		0.100	0.105		mg/L		105	70 - 130
Selenium	ND		0.100	0.102		mg/L		102	70 - 130
Thallium	ND		0.100	0.105		mg/L		105	70 - 130
Zinc	ND		0.100	ND		mg/L		108	70 - 130
Lead	ND		0.100	0.106		mg/L		106	70 - 130
Molybdenum	ND	T5	0.100	0.106		mg/L		106	70 - 130
Cobalt	ND		0.100	0.108		mg/L		108	70 - 130

Lab Sample ID: 550-210744-12 MSD
Matrix: Water
Analysis Batch: 311771

Client Sample ID: FC-CCR-EB01-1123
Prep Type: Total/NA
Prep Batch: 311497

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	ND		0.100	0.112		mg/L		112	70 - 130	12	20
Arsenic	ND		0.100	0.113		mg/L		113	70 - 130	9	20
Barium	ND		0.100	0.125		mg/L		125	70 - 130	15	20
Cadmium	ND		0.100	0.118		mg/L		118	70 - 130	11	20

Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: 550-210744-12 MSD — **Client Sample ID: FC-CCR-EB01-1123**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 311771 — **Prep Batch: 311497**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chromium	ND		0.100	0.116		mg/L		116	70 - 130	10	20
Manganese	ND		0.100	0.116		mg/L		116	70 - 130	10	20
Selenium	ND		0.100	0.110		mg/L		110	70 - 130	8	20
Thallium	ND		0.100	0.118		mg/L		118	70 - 130	12	20
Zinc	ND		0.100	ND		mg/L		120	70 - 130	10	20
Lead	ND		0.100	0.119		mg/L		119	70 - 130	12	20
Molybdenum	ND	T5	0.100	0.120		mg/L		120	70 - 130	12	20
Cobalt	ND		0.100	0.118		mg/L		118	70 - 130	9	20

Method: 200.8 LL - Metals (ICP/MS)

Lab Sample ID: MB 550-311488/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 311753 — **Prep Batch: 311488**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	ND		0.50		ug/L		11/21/23 07:04	11/27/23 19:25	1
Molybdenum	ND		0.50		ug/L		11/21/23 07:04	11/27/23 19:25	1

Lab Sample ID: LCS 550-311488/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 311753 — **Prep Batch: 311488**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Cobalt			100	108		ug/L		108	85 - 115		
Molybdenum			100	111		ug/L		111	85 - 115		

Lab Sample ID: LCSD 550-311488/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 311753 — **Prep Batch: 311488**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cobalt			100	111		ug/L		111	85 - 115	2	20
Molybdenum			100	111		ug/L		111	85 - 115	0	20

Lab Sample ID: 550-210594-A-21-A MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 311753 — **Prep Batch: 311488**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Cobalt	21		100	123		ug/L		102	70 - 130		
Molybdenum	ND		100	111		ug/L		108	70 - 130		

Lab Sample ID: 550-210594-A-21-B MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 311753 — **Prep Batch: 311488**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cobalt	21		100	121		ug/L		99	70 - 130	2	20
Molybdenum	ND		100	109		ug/L		107	70 - 130	1	20

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 550-311538/1-A
Matrix: Water
Analysis Batch: 311566

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 311538

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		11/21/23 12:35	11/21/23 15:37	1

Lab Sample ID: LCS 550-311538/2-A
Matrix: Water
Analysis Batch: 311566

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 311538

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury			0.00500	0.00454		mg/L		91	85 - 115		

Lab Sample ID: LCSD 550-311538/3-A
Matrix: Water
Analysis Batch: 311566

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 311538

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury			0.00500	0.00475		mg/L		95	85 - 115	5	20

Lab Sample ID: 550-210739-I-2-B MS
Matrix: Water
Analysis Batch: 311566

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 311538

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury	ND		0.00500	0.00481		mg/L		96	70 - 130		

Lab Sample ID: 550-210739-I-2-C MSD
Matrix: Water
Analysis Batch: 311566

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 311538

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		0.00500	0.00475		mg/L		95	70 - 130	1	20

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 550-311562/4
Matrix: Water
Analysis Batch: 311562

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3	ND		6.0		mg/L			11/21/23 09:02	1
Bicarbonate Alkalinity as CaCO3	ND		6.0		mg/L			11/21/23 09:02	1
Carbonate Alkalinity as CaCO3	ND		6.0		mg/L			11/21/23 09:02	1
Alkalinity, Phenolphthalein	ND		6.0		mg/L			11/21/23 09:02	1
Hydroxide Alkalinity as CaCO3	ND		6.0		mg/L			11/21/23 09:02	1

Lab Sample ID: LCS 550-311562/3
Matrix: Water
Analysis Batch: 311562

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Alkalinity as CaCO3			250	244		mg/L		98	90 - 110		

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: LCSD 550-311562/10
Matrix: Water
Analysis Batch: 311562

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Alkalinity as CaCO3			250	242		mg/L		97	90 - 110	1	20

Lab Sample ID: 550-210670-I-3 DU
Matrix: Water
Analysis Batch: 311562

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Alkalinity as CaCO3	330			332		mg/L				0	20
Bicarbonate Alkalinity as CaCO3	330			332		mg/L				0	20
Carbonate Alkalinity as CaCO3	ND			ND		mg/L				NC	20
Alkalinity, Phenolphthalein	ND			ND		mg/L				NC	20
Hydroxide Alkalinity as CaCO3	ND			ND		mg/L				NC	20

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 550-311663/1
Matrix: Water
Analysis Batch: 311663

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		20		mg/L			11/22/23 18:11	1

Lab Sample ID: LCS 550-311663/2
Matrix: Water
Analysis Batch: 311663

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Dissolved Solids			1000	954		mg/L		95	90 - 110		

Lab Sample ID: LCSD 550-311663/3
Matrix: Water
Analysis Batch: 311663

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Dissolved Solids			1000	988		mg/L		99	90 - 110	4	10

Lab Sample ID: 550-210696-A-1 DU
Matrix: Water
Analysis Batch: 311663

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	1300			1310		mg/L				0.2	10

Lab Sample ID: MB 550-311736/1
Matrix: Water
Analysis Batch: 311736

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		20		mg/L			11/27/23 15:54	1

Method: SM 2540C - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: LCS 550-311736/2
Matrix: Water
Analysis Batch: 311736

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Dissolved Solids			1000	982		mg/L		98	90 - 110		

Lab Sample ID: LCSD 550-311736/3
Matrix: Water
Analysis Batch: 311736

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Dissolved Solids			1000	1000		mg/L		100	90 - 110	2	10

Lab Sample ID: 550-210611-G-1 DU
Matrix: Water
Analysis Batch: 311736

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	3800			3880		mg/L				2	10

Method: SM 4500 H+ B - pH

Lab Sample ID: LCSSRM 550-311913/1
Matrix: Water
Analysis Batch: 311913

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits		
pH			7.00	7.0		SU		99.4	98.5 - 101.5		

Lab Sample ID: LCSSRM 550-311913/13
Matrix: Water
Analysis Batch: 311913

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits		
pH			7.00	7.0		SU		99.6	98.5 - 101.5		

Lab Sample ID: LCSSRM 550-311913/25
Matrix: Water
Analysis Batch: 311913

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits		
pH			7.00	7.0		SU		99.6	98.5 - 101.5		

Lab Sample ID: 550-210744-5 DU
Matrix: Water
Analysis Batch: 311913

Client Sample ID: FC-CCR-DMX05R-1123
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
pH	7.5	H5		7.5		SU				0	5
Temperature	14.7	H5 T5		14.6		Degrees C				0.7	

HPLC/IC

Analysis Batch: 312157

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210744-1	FC-CCR-DMX06-1123	Total/NA	Water	300.0	
550-210744-1	FC-CCR-DMX06-1123	Total/NA	Water	300.0	
550-210744-3	FC-CCR-MW15-1123	Total/NA	Water	300.0	
550-210744-3	FC-CCR-MW15-1123	Total/NA	Water	300.0	
550-210744-4	FC-CCR-MW16-1123	Total/NA	Water	300.0	
550-210744-4	FC-CCR-MW16-1123	Total/NA	Water	300.0	
550-210744-5	FC-CCR-DMX05R-1123	Total/NA	Water	300.0	
550-210744-5	FC-CCR-DMX05R-1123	Total/NA	Water	300.0	
MB 550-312157/3	Method Blank	Total/NA	Water	300.0	
LCS 550-312157/6	Lab Control Sample	Total/NA	Water	300.0	
LCSD 550-312157/7	Lab Control Sample Dup	Total/NA	Water	300.0	
550-210600-A-1 MS	Matrix Spike	Total/NA	Water	300.0	
550-210600-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Analysis Batch: 312215

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210744-2	FC-CCR-MW11-1123	Total/NA	Water	300.0	
MB 550-312215/2	Method Blank	Total/NA	Water	300.0	
LCS 550-312215/5	Lab Control Sample	Total/NA	Water	300.0	
LCSD 550-312215/6	Lab Control Sample Dup	Total/NA	Water	300.0	
550-209146-A-22 MS	Matrix Spike	Total/NA	Water	300.0	
550-209146-A-22 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Analysis Batch: 312271

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210744-2	FC-CCR-MW11-1123	Total/NA	Water	300.0	
550-210744-12	FC-CCR-EB01-1123	Total/NA	Water	300.0	
MB 550-312271/2	Method Blank	Total/NA	Water	300.0	
LCS 550-312271/5	Lab Control Sample	Total/NA	Water	300.0	
LCSD 550-312271/6	Lab Control Sample Dup	Total/NA	Water	300.0	
550-211300-A-3 MS	Matrix Spike	Total/NA	Water	300.0	
550-211300-A-3 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Analysis Batch: 312351

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210744-2	FC-CCR-MW11-1123	Total/NA	Water	300.0	
MB 550-312351/2	Method Blank	Total/NA	Water	300.0	
LCS 550-312351/5	Lab Control Sample	Total/NA	Water	300.0	
LCSD 550-312351/6	Lab Control Sample Dup	Total/NA	Water	300.0	
550-210836-A-3 MS ^20	Matrix Spike	Total/NA	Water	300.0	
550-210836-A-3 MSD ^20	Matrix Spike Duplicate	Total/NA	Water	300.0	

Metals

Prep Batch: 311485

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210744-1	FC-CCR-DMX06-1123	Total/NA	Water	200.7	
550-210744-2	FC-CCR-MW11-1123	Total/NA	Water	200.7	
550-210744-3	FC-CCR-MW15-1123	Total/NA	Water	200.7	
550-210744-4	FC-CCR-MW16-1123	Total/NA	Water	200.7	
550-210744-5	FC-CCR-DMX05R-1123	Total/NA	Water	200.7	

Metals (Continued)

Prep Batch: 311485 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210744-6	FC-CCR-EW17-1123	Total/NA	Water	200.7	
550-210744-7	FC-CCR-EW12R-1123	Total/NA	Water	200.7	
550-210744-8	FC-CCR-EW11R-1123	Total/NA	Water	200.7	
550-210744-9	FC-CCR-EW14-1123	Total/NA	Water	200.7	
550-210744-10	FC-CCR-EW15-1123	Total/NA	Water	200.7	
550-210744-11	FC-CCR-MW34-1123	Total/NA	Water	200.7	
550-210744-12	FC-CCR-EB01-1123	Total/NA	Water	200.7	
MB 550-311485/1-A	Method Blank	Total/NA	Water	200.7	
LCS 550-311485/2-A	Lab Control Sample	Total/NA	Water	200.7	
LCSD 550-311485/3-A	Lab Control Sample Dup	Total/NA	Water	200.7	
550-210594-B-21-B MSD	Matrix Spike Duplicate	Total/NA	Water	200.7	

Prep Batch: 311488

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210744-2	FC-CCR-MW11-1123	Total/NA	Water	200.8	
550-210744-6	FC-CCR-EW17-1123	Total/NA	Water	200.8	
550-210744-7	FC-CCR-EW12R-1123	Total/NA	Water	200.8	
550-210744-8	FC-CCR-EW11R-1123	Total/NA	Water	200.8	
550-210744-9	FC-CCR-EW14-1123	Total/NA	Water	200.8	
550-210744-10	FC-CCR-EW15-1123	Total/NA	Water	200.8	
550-210744-11	FC-CCR-MW34-1123	Total/NA	Water	200.8	
MB 550-311488/1-A	Method Blank	Total/NA	Water	200.8	
LCS 550-311488/2-A	Lab Control Sample	Total/NA	Water	200.8	
LCSD 550-311488/3-A	Lab Control Sample Dup	Total/NA	Water	200.8	
550-210594-A-21-A MS	Matrix Spike	Total/NA	Water	200.8	
550-210594-A-21-B MSD	Matrix Spike Duplicate	Total/NA	Water	200.8	

Prep Batch: 311497

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210744-1	FC-CCR-DMX06-1123	Total/NA	Water	200.8	
550-210744-3	FC-CCR-MW15-1123	Total/NA	Water	200.8	
550-210744-4	FC-CCR-MW16-1123	Total/NA	Water	200.8	
550-210744-5	FC-CCR-DMX05R-1123	Total/NA	Water	200.8	
550-210744-12	FC-CCR-EB01-1123	Total/NA	Water	200.8	
MB 550-311497/1-A	Method Blank	Total/NA	Water	200.8	
LCS 550-311497/3-A	Lab Control Sample	Total/NA	Water	200.8	
LCSD 550-311497/4-A	Lab Control Sample Dup	Total/NA	Water	200.8	
550-210744-12 MS	FC-CCR-EB01-1123	Total/NA	Water	200.8	
550-210744-12 MSD	FC-CCR-EB01-1123	Total/NA	Water	200.8	

Prep Batch: 311538

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210744-12	FC-CCR-EB01-1123	Total/NA	Water	245.1	
MB 550-311538/1-A	Method Blank	Total/NA	Water	245.1	
LCS 550-311538/2-A	Lab Control Sample	Total/NA	Water	245.1	
LCSD 550-311538/3-A	Lab Control Sample Dup	Total/NA	Water	245.1	
550-210739-I-2-B MS	Matrix Spike	Total/NA	Water	245.1	
550-210739-I-2-C MSD	Matrix Spike Duplicate	Total/NA	Water	245.1	

Metals

Analysis Batch: 311566

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210744-12	FC-CCR-EB01-1123	Total/NA	Water	245.1	311538
MB 550-311538/1-A	Method Blank	Total/NA	Water	245.1	311538
LCS 550-311538/2-A	Lab Control Sample	Total/NA	Water	245.1	311538
LCSD 550-311538/3-A	Lab Control Sample Dup	Total/NA	Water	245.1	311538
550-210739-I-2-B MS	Matrix Spike	Total/NA	Water	245.1	311538
550-210739-I-2-C MSD	Matrix Spike Duplicate	Total/NA	Water	245.1	311538

Analysis Batch: 311753

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210744-2	FC-CCR-MW11-1123	Total/NA	Water	200.8 LL	311488
550-210744-6	FC-CCR-EW17-1123	Total/NA	Water	200.8 LL	311488
550-210744-7	FC-CCR-EW12R-1123	Total/NA	Water	200.8 LL	311488
550-210744-8	FC-CCR-EW11R-1123	Total/NA	Water	200.8 LL	311488
550-210744-9	FC-CCR-EW14-1123	Total/NA	Water	200.8 LL	311488
550-210744-10	FC-CCR-EW15-1123	Total/NA	Water	200.8 LL	311488
550-210744-11	FC-CCR-MW34-1123	Total/NA	Water	200.8 LL	311488
MB 550-311488/1-A	Method Blank	Total/NA	Water	200.8 LL	311488
LCS 550-311488/2-A	Lab Control Sample	Total/NA	Water	200.8 LL	311488
LCSD 550-311488/3-A	Lab Control Sample Dup	Total/NA	Water	200.8 LL	311488
550-210594-A-21-A MS	Matrix Spike	Total/NA	Water	200.8 LL	311488
550-210594-A-21-B MSD	Matrix Spike Duplicate	Total/NA	Water	200.8 LL	311488

Analysis Batch: 311771

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210744-1	FC-CCR-DMX06-1123	Total/NA	Water	200.8	311497
550-210744-3	FC-CCR-MW15-1123	Total/NA	Water	200.8	311497
550-210744-4	FC-CCR-MW16-1123	Total/NA	Water	200.8	311497
550-210744-5	FC-CCR-DMX05R-1123	Total/NA	Water	200.8	311497
550-210744-12	FC-CCR-EB01-1123	Total/NA	Water	200.8	311497
MB 550-311497/1-A	Method Blank	Total/NA	Water	200.8	311497
LCS 550-311497/3-A	Lab Control Sample	Total/NA	Water	200.8	311497
LCSD 550-311497/4-A	Lab Control Sample Dup	Total/NA	Water	200.8	311497
550-210744-12 MS	FC-CCR-EB01-1123	Total/NA	Water	200.8	311497
550-210744-12 MSD	FC-CCR-EB01-1123	Total/NA	Water	200.8	311497

Analysis Batch: 311904

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210744-1	FC-CCR-DMX06-1123	Total/NA	Water	200.7 Rev 4.4	311485
550-210744-3	FC-CCR-MW15-1123	Total/NA	Water	200.7 Rev 4.4	311485
550-210744-4	FC-CCR-MW16-1123	Total/NA	Water	200.7 Rev 4.4	311485
550-210744-5	FC-CCR-DMX05R-1123	Total/NA	Water	200.7 Rev 4.4	311485
550-210744-6	FC-CCR-EW17-1123	Total/NA	Water	200.7 Rev 4.4	311485
550-210744-7	FC-CCR-EW12R-1123	Total/NA	Water	200.7 Rev 4.4	311485
550-210744-8	FC-CCR-EW11R-1123	Total/NA	Water	200.7 Rev 4.4	311485
550-210744-9	FC-CCR-EW14-1123	Total/NA	Water	200.7 Rev 4.4	311485
550-210744-10	FC-CCR-EW15-1123	Total/NA	Water	200.7 Rev 4.4	311485
550-210744-11	FC-CCR-MW34-1123	Total/NA	Water	200.7 Rev 4.4	311485
550-210744-12	FC-CCR-EB01-1123	Total/NA	Water	200.7 Rev 4.4	311485
MB 550-311485/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	311485
LCS 550-311485/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	311485
LCSD 550-311485/3-A	Lab Control Sample Dup	Total/NA	Water	200.7 Rev 4.4	311485

Metals (Continued)

Analysis Batch: 311904 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210594-B-21-B MSD	Matrix Spike Duplicate	Total/NA	Water	200.7 Rev 4.4	311485

Analysis Batch: 312101

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210744-1	FC-CCR-DMX06-1123	Total/NA	Water	200.7 Rev 4.4	311485
550-210744-2	FC-CCR-MW11-1123	Total/NA	Water	200.7 Rev 4.4	311485
550-210744-3	FC-CCR-MW15-1123	Total/NA	Water	200.7 Rev 4.4	311485
550-210744-4	FC-CCR-MW16-1123	Total/NA	Water	200.7 Rev 4.4	311485
550-210744-5	FC-CCR-DMX05R-1123	Total/NA	Water	200.7 Rev 4.4	311485
550-210744-6	FC-CCR-EW17-1123	Total/NA	Water	200.7 Rev 4.4	311485
MB 550-311485/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	311485
LCS 550-311485/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	311485
LCSD 550-311485/3-A	Lab Control Sample Dup	Total/NA	Water	200.7 Rev 4.4	311485

Analysis Batch: 312174

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210744-2	FC-CCR-MW11-1123	Total/NA	Water	200.7 Rev 4.4	311485
550-210744-11	FC-CCR-MW34-1123	Total/NA	Water	200.7 Rev 4.4	311485
550-210744-12	FC-CCR-EB01-1123	Total/NA	Water	200.7 Rev 4.4	311485

Analysis Batch: 312196

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210744-2	FC-CCR-MW11-1123	Total/NA	Water	200.7 Rev 4.4	311485
550-210744-7	FC-CCR-EW12R-1123	Total/NA	Water	200.7 Rev 4.4	311485
550-210744-8	FC-CCR-EW11R-1123	Total/NA	Water	200.7 Rev 4.4	311485
550-210744-9	FC-CCR-EW14-1123	Total/NA	Water	200.7 Rev 4.4	311485
550-210744-10	FC-CCR-EW15-1123	Total/NA	Water	200.7 Rev 4.4	311485

Prep Batch: 386719

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210744-1	FC-CCR-DMX06-1123	Total Recoverable	Water	200.7	
550-210744-3	FC-CCR-MW15-1123	Total Recoverable	Water	200.7	
550-210744-4	FC-CCR-MW16-1123	Total Recoverable	Water	200.7	
550-210744-5	FC-CCR-DMX05R-1123	Total Recoverable	Water	200.7	
550-210744-12	FC-CCR-EB01-1123	Total Recoverable	Water	200.7	
MB 570-386719/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 570-386719/2-A	Lab Control Sample	Total Recoverable	Water	200.7	
LCSD 570-386719/3-A	Lab Control Sample Dup	Total Recoverable	Water	200.7	
550-210744-1 MS	FC-CCR-DMX06-1123	Total Recoverable	Water	200.7	
550-210744-1 MSD	FC-CCR-DMX06-1123	Total Recoverable	Water	200.7	

Analysis Batch: 387765

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210744-1	FC-CCR-DMX06-1123	Total Recoverable	Water	200.7 Rev 4.4	386719
550-210744-5	FC-CCR-DMX05R-1123	Total Recoverable	Water	200.7 Rev 4.4	386719
550-210744-12	FC-CCR-EB01-1123	Total Recoverable	Water	200.7 Rev 4.4	386719
MB 570-386719/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	386719
LCS 570-386719/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	386719
LCSD 570-386719/3-A	Lab Control Sample Dup	Total Recoverable	Water	200.7 Rev 4.4	386719
550-210744-1 MS	FC-CCR-DMX06-1123	Total Recoverable	Water	200.7 Rev 4.4	386719
550-210744-1 MSD	FC-CCR-DMX06-1123	Total Recoverable	Water	200.7 Rev 4.4	386719

Metals

Analysis Batch: 387804

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210744-3	FC-CCR-MW15-1123	Total Recoverable	Water	200.7 Rev 4.4	386719
550-210744-4	FC-CCR-MW16-1123	Total Recoverable	Water	200.7 Rev 4.4	386719

General Chemistry

Analysis Batch: 311562

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210744-1	FC-CCR-DMX06-1123	Total/NA	Water	SM 2320B	
550-210744-2	FC-CCR-MW11-1123	Total/NA	Water	SM 2320B	
550-210744-3	FC-CCR-MW15-1123	Total/NA	Water	SM 2320B	
550-210744-4	FC-CCR-MW16-1123	Total/NA	Water	SM 2320B	
550-210744-5	FC-CCR-DMX05R-1123	Total/NA	Water	SM 2320B	
550-210744-12	FC-CCR-EB01-1123	Total/NA	Water	SM 2320B	
MB 550-311562/4	Method Blank	Total/NA	Water	SM 2320B	
LCS 550-311562/3	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 550-311562/10	Lab Control Sample Dup	Total/NA	Water	SM 2320B	
550-210670-I-3 DU	Duplicate	Total/NA	Water	SM 2320B	

Analysis Batch: 311663

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210744-1	FC-CCR-DMX06-1123	Total/NA	Water	SM 2540C	
550-210744-2	FC-CCR-MW11-1123	Total/NA	Water	SM 2540C	
550-210744-3	FC-CCR-MW15-1123	Total/NA	Water	SM 2540C	
550-210744-4	FC-CCR-MW16-1123	Total/NA	Water	SM 2540C	
550-210744-6	FC-CCR-EW17-1123	Total/NA	Water	SM 2540C	
MB 550-311663/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 550-311663/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 550-311663/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	
550-210696-A-1 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 311736

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210744-5	FC-CCR-DMX05R-1123	Total/NA	Water	SM 2540C	
550-210744-7	FC-CCR-EW12R-1123	Total/NA	Water	SM 2540C	
550-210744-8	FC-CCR-EW11R-1123	Total/NA	Water	SM 2540C	
550-210744-9	FC-CCR-EW14-1123	Total/NA	Water	SM 2540C	
550-210744-10	FC-CCR-EW15-1123	Total/NA	Water	SM 2540C	
550-210744-11	FC-CCR-MW34-1123	Total/NA	Water	SM 2540C	
550-210744-12	FC-CCR-EB01-1123	Total/NA	Water	SM 2540C	
MB 550-311736/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 550-311736/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 550-311736/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	
550-210611-G-1 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 311913

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210744-1	FC-CCR-DMX06-1123	Total/NA	Water	SM 4500 H+ B	
550-210744-2	FC-CCR-MW11-1123	Total/NA	Water	SM 4500 H+ B	
550-210744-3	FC-CCR-MW15-1123	Total/NA	Water	SM 4500 H+ B	
550-210744-4	FC-CCR-MW16-1123	Total/NA	Water	SM 4500 H+ B	
550-210744-5	FC-CCR-DMX05R-1123	Total/NA	Water	SM 4500 H+ B	

General Chemistry (Continued)

Analysis Batch: 311913 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210744-12	FC-CCR-EB01-1123	Total/NA	Water	SM 4500 H+ B	
LCSSRM 550-311913/1	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	
LCSSRM 550-311913/13	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	
LCSSRM 550-311913/25	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	
550-210744-5 DU	FC-CCR-DMX05R-1123	Total/NA	Water	SM 4500 H+ B	

Lab Chronicle

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-210744-1
SDG: APS Four Corners Power Plant (Other)

Client Sample ID: FC-CCR-DMX06-1123

Lab Sample ID: 550-210744-1
Matrix: Water
Date Collected: 11/15/23 09:15
Date Received: 11/17/23 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		2	312157	RDC	EET PHX	12/02/23 19:13
Total/NA	Analysis	300.0		200	312157	RDC	EET PHX	12/02/23 19:31
Total Recoverable	Prep	200.7			386719	JP8N	EET CAL 4	11/27/23 07:07
Total Recoverable	Analysis	200.7 Rev 4.4		1	387765	K1UV	EET CAL 4	11/29/23 11:54
Total/NA	Prep	200.7			311485	SGO	EET PHX	11/21/23 04:55
Total/NA	Analysis	200.7 Rev 4.4		1	311904	GLW	EET PHX	11/29/23 13:54
Total/NA	Prep	200.7			311485	SGO	EET PHX	11/21/23 04:55
Total/NA	Analysis	200.7 Rev 4.4		10	312101	GLW	EET PHX	12/01/23 13:18
Total/NA	Prep	200.8			311497	SGO	EET PHX	11/21/23 09:13
Total/NA	Analysis	200.8		10	311771	DSJ	EET PHX	11/28/23 09:37
Total/NA	Analysis	SM 2320B		1	311562	MAN	EET PHX	11/21/23 14:31
Total/NA	Analysis	SM 2540C		1	311663	KMG	EET PHX	11/22/23 18:11 - 12/01/23 15:16 [1]
Total/NA	Analysis	SM 4500 H+ B		1	311913	MAN	EET PHX	11/29/23 12:40

Client Sample ID: FC-CCR-MW11-1123

Lab Sample ID: 550-210744-2
Matrix: Water
Date Collected: 11/15/23 15:27
Date Received: 11/17/23 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		200	312271	MMH	EET PHX	12/05/23 22:45
Total/NA	Analysis	300.0		1000	312351	MMH	EET PHX	12/06/23 16:54
Total/NA	Analysis	300.0		2	312215	MMH	EET PHX	12/05/23 05:15
Total/NA	Prep	200.7			311485	SGO	EET PHX	11/21/23 04:55
Total/NA	Analysis	200.7 Rev 4.4		10	312101	GLW	EET PHX	12/01/23 13:21
Total/NA	Prep	200.7			311485	SGO	EET PHX	11/21/23 04:55
Total/NA	Analysis	200.7 Rev 4.4		20	312174	GLW	EET PHX	12/04/23 11:43
Total/NA	Prep	200.7			311485	SGO	EET PHX	11/21/23 04:55
Total/NA	Analysis	200.7 Rev 4.4		50	312196	GLW	EET PHX	12/05/23 05:50
Total/NA	Prep	200.8			311488	SGO	EET PHX	11/21/23 07:04
Total/NA	Analysis	200.8 LL		10	311753	DSJ	EET PHX	11/27/23 19:41
Total/NA	Analysis	SM 2320B		1	311562	MAN	EET PHX	11/21/23 14:43
Total/NA	Analysis	SM 2540C		1	311663	KMG	EET PHX	11/22/23 18:11 - 12/01/23 15:16 [1]
Total/NA	Analysis	SM 4500 H+ B		1	311913	MAN	EET PHX	11/29/23 12:41

Client Sample ID: FC-CCR-MW15-1123

Lab Sample ID: 550-210744-3
Matrix: Water
Date Collected: 11/15/23 10:33
Date Received: 11/17/23 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		2	312157	RDC	EET PHX	12/02/23 20:26
Total/NA	Analysis	300.0		200	312157	RDC	EET PHX	12/02/23 20:45
Total Recoverable	Prep	200.7			386719	JP8N	EET CAL 4	11/27/23 07:07
Total Recoverable	Analysis	200.7 Rev 4.4		2	387804	K1UV	EET CAL 4	11/29/23 15:00

Lab Chronicle

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-210744-1
SDG: APS Four Corners Power Plant (Other)

Client Sample ID: FC-CCR-MW15-1123

Lab Sample ID: 550-210744-3

Date Collected: 11/15/23 10:33
Matrix: Water
Date Received: 11/17/23 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	200.7			311485	SGO	EET PHX	11/21/23 04:55
Total/NA	Analysis	200.7 Rev 4.4		1	311904	GLW	EET PHX	11/29/23 14:00
Total/NA	Prep	200.7			311485	SGO	EET PHX	11/21/23 04:55
Total/NA	Analysis	200.7 Rev 4.4		10	312101	GLW	EET PHX	12/01/23 13:24
Total/NA	Prep	200.8			311497	SGO	EET PHX	11/21/23 09:13
Total/NA	Analysis	200.8		10	311771	DSJ	EET PHX	11/28/23 09:39
Total/NA	Analysis	SM 2320B		1	311562	MAN	EET PHX	11/21/23 14:58
Total/NA	Analysis	SM 2540C		1	311663	KMG	EET PHX	11/22/23 18:11 - 12/01/23 15:16 [1]
Total/NA	Analysis	SM 4500 H+ B		1	311913	MAN	EET PHX	11/29/23 12:43

Client Sample ID: FC-CCR-MW16-1123

Lab Sample ID: 550-210744-4

Date Collected: 11/15/23 11:47
Matrix: Water
Date Received: 11/17/23 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		2	312157	RDC	EET PHX	12/02/23 21:58
Total/NA	Analysis	300.0		200	312157	RDC	EET PHX	12/02/23 22:17
Total Recoverable	Prep	200.7			386719	JP8N	EET CAL 4	11/27/23 07:07
Total Recoverable	Analysis	200.7 Rev 4.4		5	387804	K1UV	EET CAL 4	11/29/23 15:02
Total/NA	Prep	200.7			311485	SGO	EET PHX	11/21/23 04:55
Total/NA	Analysis	200.7 Rev 4.4		1	311904	GLW	EET PHX	11/29/23 14:02
Total/NA	Prep	200.7			311485	SGO	EET PHX	11/21/23 04:55
Total/NA	Analysis	200.7 Rev 4.4		10	312101	GLW	EET PHX	12/01/23 13:26
Total/NA	Prep	200.8			311497	SGO	EET PHX	11/21/23 09:13
Total/NA	Analysis	200.8		10	311771	DSJ	EET PHX	11/28/23 09:41
Total/NA	Analysis	SM 2320B		1	311562	MAN	EET PHX	11/21/23 15:10
Total/NA	Analysis	SM 2540C		1	311663	KMG	EET PHX	11/22/23 18:11 - 12/01/23 15:16 [1]
Total/NA	Analysis	SM 4500 H+ B		1	311913	MAN	EET PHX	11/29/23 12:44

Client Sample ID: FC-CCR-DMX05R-1123

Lab Sample ID: 550-210744-5

Date Collected: 11/16/23 11:38
Matrix: Water
Date Received: 11/17/23 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		2	312157	RDC	EET PHX	12/02/23 22:35
Total/NA	Analysis	300.0		200	312157	RDC	EET PHX	12/02/23 22:54
Total Recoverable	Prep	200.7			386719	JP8N	EET CAL 4	11/27/23 07:07
Total Recoverable	Analysis	200.7 Rev 4.4		1	387765	K1UV	EET CAL 4	11/29/23 12:06
Total/NA	Prep	200.7			311485	SGO	EET PHX	11/21/23 04:55
Total/NA	Analysis	200.7 Rev 4.4		1	311904	GLW	EET PHX	11/29/23 14:05
Total/NA	Prep	200.7			311485	SGO	EET PHX	11/21/23 04:55
Total/NA	Analysis	200.7 Rev 4.4		10	312101	GLW	EET PHX	12/01/23 13:29
Total/NA	Prep	200.8			311497	SGO	EET PHX	11/21/23 09:13
Total/NA	Analysis	200.8		10	311771	DSJ	EET PHX	11/28/23 09:43

Lab Chronicle

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-210744-1
SDG: APS Four Corners Power Plant (Other)

Client Sample ID: FC-CCR-DMX05R-1123

Lab Sample ID: 550-210744-5
Date Collected: 11/16/23 11:38
Matrix: Water
Date Received: 11/17/23 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	SM 2320B		1	311562	MAN	EET PHX	11/21/23 15:23
Total/NA	Analysis	SM 2540C		1	311736	KMG	EET PHX	11/27/23 15:54 - 12/06/23 16:32 [1]
Total/NA	Analysis	SM 4500 H+ B		1	311913	MAN	EET PHX	11/29/23 12:46

Client Sample ID: FC-CCR-EW17-1123

Lab Sample ID: 550-210744-6
Date Collected: 11/15/23 16:09
Matrix: Water
Date Received: 11/17/23 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	200.7			311485	SGO	EET PHX	11/21/23 04:55
Total/NA	Analysis	200.7 Rev 4.4		1	311904	GLW	EET PHX	11/29/23 14:08
Total/NA	Prep	200.7			311485	SGO	EET PHX	11/21/23 04:55
Total/NA	Analysis	200.7 Rev 4.4		10	312101	GLW	EET PHX	12/01/23 13:32
Total/NA	Prep	200.8			311488	SGO	EET PHX	11/21/23 07:04
Total/NA	Analysis	200.8 LL		10	311753	DSJ	EET PHX	11/27/23 19:43
Total/NA	Analysis	SM 2540C		1	311663	KMG	EET PHX	11/22/23 18:11 - 12/01/23 15:16 [1]

Client Sample ID: FC-CCR-EW12R-1123

Lab Sample ID: 550-210744-7
Date Collected: 11/16/23 09:53
Matrix: Water
Date Received: 11/17/23 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	200.7			311485	SGO	EET PHX	11/21/23 04:55
Total/NA	Analysis	200.7 Rev 4.4		1	311904	GLW	EET PHX	11/29/23 14:11
Total/NA	Prep	200.7			311485	SGO	EET PHX	11/21/23 04:55
Total/NA	Analysis	200.7 Rev 4.4		5	312196	GLW	EET PHX	12/05/23 05:53
Total/NA	Prep	200.8			311488	SGO	EET PHX	11/21/23 07:04
Total/NA	Analysis	200.8 LL		10	311753	DSJ	EET PHX	11/27/23 19:45
Total/NA	Analysis	SM 2540C		1	311736	KMG	EET PHX	11/27/23 15:54 - 12/06/23 16:32 [1]

Client Sample ID: FC-CCR-EW11R-1123

Lab Sample ID: 550-210744-8
Date Collected: 11/16/23 10:41
Matrix: Water
Date Received: 11/17/23 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	200.7			311485	SGO	EET PHX	11/21/23 04:55
Total/NA	Analysis	200.7 Rev 4.4		1	311904	GLW	EET PHX	11/29/23 14:19
Total/NA	Prep	200.7			311485	SGO	EET PHX	11/21/23 04:55
Total/NA	Analysis	200.7 Rev 4.4		5	312196	GLW	EET PHX	12/05/23 05:56
Total/NA	Prep	200.8			311488	SGO	EET PHX	11/21/23 07:04
Total/NA	Analysis	200.8 LL		10	311753	DSJ	EET PHX	11/27/23 19:47
Total/NA	Analysis	SM 2540C		1	311736	KMG	EET PHX	11/27/23 15:54 - 12/06/23 16:32 [1]

Lab Chronicle

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-210744-1
SDG: APS Four Corners Power Plant (Other)

Client Sample ID: FC-CCR-EW14-1123

Lab Sample ID: 550-210744-9
Date Collected: 11/16/23 17:23
Matrix: Water
Date Received: 11/17/23 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	200.7			311485	SGO	EET PHX	11/21/23 04:55
Total/NA	Analysis	200.7 Rev 4.4		1	311904	GLW	EET PHX	11/29/23 14:22
Total/NA	Prep	200.7			311485	SGO	EET PHX	11/21/23 04:55
Total/NA	Analysis	200.7 Rev 4.4		5	312196	GLW	EET PHX	12/05/23 05:58
Total/NA	Prep	200.8			311488	SGO	EET PHX	11/21/23 07:04
Total/NA	Analysis	200.8 LL		10	311753	DSJ	EET PHX	11/27/23 19:49
Total/NA	Analysis	SM 2540C		1	311736	KMG	EET PHX	11/27/23 15:54 - 12/06/23 16:32 [1]

Client Sample ID: FC-CCR-EW15-1123

Lab Sample ID: 550-210744-10
Date Collected: 11/16/23 15:36
Matrix: Water
Date Received: 11/17/23 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	200.7			311485	SGO	EET PHX	11/21/23 04:55
Total/NA	Analysis	200.7 Rev 4.4		1	311904	GLW	EET PHX	11/29/23 14:25
Total/NA	Prep	200.7			311485	SGO	EET PHX	11/21/23 04:55
Total/NA	Analysis	200.7 Rev 4.4		5	312196	GLW	EET PHX	12/05/23 06:01
Total/NA	Prep	200.8			311488	SGO	EET PHX	11/21/23 07:04
Total/NA	Analysis	200.8 LL		10	311753	DSJ	EET PHX	11/27/23 19:51
Total/NA	Analysis	SM 2540C		1	311736	KMG	EET PHX	11/27/23 15:54 - 12/06/23 16:32 [1]

Client Sample ID: FC-CCR-MW34-1123

Lab Sample ID: 550-210744-11
Date Collected: 11/16/23 16:35
Matrix: Water
Date Received: 11/17/23 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	200.7			311485	SGO	EET PHX	11/21/23 04:55
Total/NA	Analysis	200.7 Rev 4.4		1	311904	GLW	EET PHX	11/29/23 14:28
Total/NA	Prep	200.7			311485	SGO	EET PHX	11/21/23 04:55
Total/NA	Analysis	200.7 Rev 4.4		1	312174	GLW	EET PHX	12/04/23 11:57
Total/NA	Prep	200.8			311488	SGO	EET PHX	11/21/23 07:04
Total/NA	Analysis	200.8 LL		10	311753	DSJ	EET PHX	11/27/23 19:53
Total/NA	Analysis	SM 2540C		1	311736	KMG	EET PHX	11/27/23 15:54 - 12/06/23 16:32 [1]

Client Sample ID: FC-CCR-EB01-1123

Lab Sample ID: 550-210744-12
Date Collected: 11/16/23 17:37
Matrix: Water
Date Received: 11/17/23 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	312271	MMH	EET PHX	12/05/23 23:59
Total Recoverable	Prep	200.7			386719	JP8N	EET CAL 4	11/27/23 07:07
Total Recoverable	Analysis	200.7 Rev 4.4		1	387765	K1UV	EET CAL 4	11/29/23 12:08
Total/NA	Prep	200.7			311485	SGO	EET PHX	11/21/23 04:55
Total/NA	Analysis	200.7 Rev 4.4		1	311904	GLW	EET PHX	11/29/23 14:31

Lab Chronicle

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-210744-1
SDG: APS Four Corners Power Plant (Other)

Client Sample ID: FC-CCR-EB01-1123

Date Collected: 11/16/23 17:37
Date Received: 11/17/23 16:15

Lab Sample ID: 550-210744-12

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	200.7			311485	SGO	EET PHX	11/21/23 04:55
Total/NA	Analysis	200.7 Rev 4.4		1	312174	GLW	EET PHX	12/04/23 12:00
Total/NA	Prep	200.8			311497	SGO	EET PHX	11/21/23 09:13
Total/NA	Analysis	200.8		10	311771	DSJ	EET PHX	11/28/23 09:35
Total/NA	Prep	245.1			311538	HHL	EET PHX	11/21/23 12:35
Total/NA	Analysis	245.1		1	311566	HHL	EET PHX	11/21/23 16:03
Total/NA	Analysis	SM 2320B		1	311562	MAN	EET PHX	11/21/23 15:33
Total/NA	Analysis	SM 2540C		1	311736	KMG	EET PHX	11/27/23 15:54 - 12/06/23 16:32 [1]
Total/NA	Analysis	SM 4500 H+ B		1	311913	MAN	EET PHX	11/29/23 12:49

[1] This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:

EET CAL 4 = Eurofins Calscience Tustin, 2841 Dow Avenue, Tustin, CA 92780, TEL (714)895-5494

EET PHX = Eurofins Phoenix, 4625 East Cotton Center Boulevard, Suite #189, Phoenix, AZ 85040, TEL (602)437-3340

Accreditation/Certification Summary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-210744-1
SDG: APS Four Corners Power Plant (Other)

Laboratory: Eurofins Phoenix

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Arizona	State	AZ0728	06-10-24

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
200.8	200.8	Water	Molybdenum
200.8 LL	200.8	Water	Molybdenum
SM 4500 H+ B		Water	Temperature

Laboratory: Eurofins Calscience

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Arizona	State	AZ0830	11-16-24

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
200.7 Rev 4.4	200.7	Water	Lithium

Method Summary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-210744-1
SDG: APS Four Corners Power Plant (Other)

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	EPA	EET PHX
200.7 Rev 4.4	Metals (ICP)	EPA	EET CAL 4
200.7 Rev 4.4	Metals (ICP)	EPA	EET PHX
200.8	Metals (ICP/MS)	EPA	EET PHX
200.8 LL	Metals (ICP/MS)	EPA	EET PHX
245.1	Mercury (CVAA)	EPA	EET PHX
SM 2320B	Alkalinity	SM	EET PHX
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET PHX
SM 4500 H+ B	pH	SM	EET PHX
200.7	Preparation, Total Recoverable Metals	EPA	EET CAL 4
200.7	Preparation, Total Metals	EPA	EET PHX
200.8	Preparation, Total Metals	EPA	EET PHX
245.1	Preparation, Mercury	EPA	EET PHX

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:

EET CAL 4 = Eurofins Calscience Tustin, 2841 Dow Avenue, Tustin, CA 92780, TEL (714)895-5494

EET PHX = Eurofins Phoenix, 4625 East Cotton Center Boulevard, Suite #189, Phoenix, AZ 85040, TEL (602)437-3340

TestAmerica Phoenix
4625 E Cotton Center Blvd
Suite 189
Phoenix, AZ 85040
phone 602.437.3340 fax 602.454.9303

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

210744

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☑ Other: CCR

TestAmerica Laboratories, Inc.

Client Contact	Natalie Chrisman	Pam Norris (505-598-8781)	Date:	COC No:
Arizona Public Service	602-250-3608	Lab Contact: Rachel Sester	Carrier:	1 of 2 COCs
PO Box 355, MS 4915	**Analysis Turnaround Time**			Sampler:
Fruitland, NM 87416	☐ CALENDAR DAYS ☑ WORKING DAYS			**For Lab Use Only:**
Phone	TAT if different from Below _____			Walk-in Client:
FAX	☑ 2 weeks			Lab Sampling:
Project Name: CCR Groundwater Monitoring	☐ 1 week			
Site: APS Four Corners Power Plant (Other)	☐ 2 days			Job / SDG No.:
PO #: 100622298	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	EPA 300.0 (Cl, F, SO4)	EPA 200.7 - Totals (B)	EPA 200.7 - Totals (B, Ca, Be)	EPA 200.7 - Totals (B, Ca, Be, K, Mg, Na, Fe)	EPA 200.7 - Totals (B, Ca, K, Mg, Na)	EPA 200.7 - Totals (B, Ca, K, Mg, Na, Mn, Fe)	EPA 200.7 - Totals (B, Ca, Be, K, Mg, Na, Mn, Fe)	EPA 200.7 - Total Lithium	EPA 200.8 - Totals (Sb, As, Ba, Cd, Co, Cr, Pb, Mo, Se, Tl)	EPA 200.8 - Totals (Co, Mo)	EPA 245.1 - Totals (Hg)	SM 4500-HB (pH)	SM 2540C (TDS)	SM 2320B (CO3 Alkalinity as CaCO3, HCO3 Alkalinity as)	Sample Specific Notes:
FC-CCR-DMX06-1123 -1	11/15/2023	915	G	W	3	N		X						X	X	X			X	X	X	Low Flow
FC-CCR-MW11-1123 -2	11/15/2023	1527	G	W	2	N		X				X					X		X	X	X	"
FC-CCR-MW15-1123 -3	11/15/2023	1033	G	W	3	N		X						X	X	X			X	X	X	"
FC-CCR-MW16-1123 -4	11/15/2023	1147	G	W	2	N		X			X				X	X			X	X	X	"

550-210744 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____																						
		1	4	4	4	4	4	4		4	4	4	1	1	1							

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☑ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

Method 200.8 with collision cell

3.0°C / 3-14C-ICE-IDC

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:		Cooler Temp. (°C): Obs'd:_____ Corr'd:_____ Therm ID No.:_____		
Relinquished by:	Company: WSP	Date/Time: 11-17-23 1645	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company: EETA-PHX	Date/Time: 11/17/23 1615

Form No. CA-C-WI-002, Rev. 4.2, dated 04/02/2013

12/27/2023 (Rev. 2)

TestAmerica Phoenix
4625 E Cotton Center Blvd
Suite 189
Phoenix, AZ 85040
phone 602.437.3340 fax 602.454.9303

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

210744

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☑ Other: CCR

TestAmerica Laboratories, Inc.

Client Contact	Natalie Chrisman	Pam Norris (505-598-8781)	Date:	COC No:
Arizona Public Service	602-250-3608	Lab Contact: Rachel Sester	Carrier:	2 of 2 COCs
PO Box 355, MS 4915	Analysis Turnaround Time			Sampler:
Fruitland, NM 87416	☐ CALENDAR DAYS ☑ WORKING DAYS			For Lab Use Only:
Phone	TAT if different from Below ____			Walk-in Client:
FAX	☑ 2 weeks			Lab Sampling:
Project Name: CCR Groundwater Monitoring	☐ 1 week			
Site: APS Four Corners Power Plant (Other)	☐ 2 days			Job / SDG No.:
PO #: 100622298	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	EPA 300.0 (Cl)	EPA 200.7 - Totals (B, Mg, Mn, Fe)	EPA 200.8 - Totals (Co, Mo)	SM 2540C (TDS)	EPA 300.0 (Cl, F, SO4)	SM 4500-HB (pH)	EPA 200.7 - Totals (B, Ca, Be, K, Mg, Na, Mn, Fe)	EPA 200.7 - Total Lithium	EPA 200.8 - Totals (Sb, As, Ba, Cd, Co, Cr, Pb, Mo, Se, Tl)	EPA 245.1 - Totals (Hg)	SM 2320B (CO3 Alkalinity as CaCO3, HCO3 Alkalinity as CaCO3)	Sample Specific Notes:
FC-CCR-DMX05R-1123 -5	11/16/2023	1138	G	W	3	N	N				X	X	X	X	X	X		X	Low Flow
FC-CCR-EW17-1123 -6	11/15/2023	1609	G	W	2	N	N	X	X	X	X								Grab Sample
FC-CCR-EW12R-1123 -7	11/16/2023	953	G	W	2	N	N	X	X	X	X								Low Flow
FC-CCR-EW11R-1123 -8	11/16/2023	1041	G	W	2	N	N	X	X	X	X								"
FC-CCR-EW14-1123 -9	11/16/2023	1723	G	W	2	N	N	X	X	X	X								"
FC-CCR-EW15-1123 -10	11/16/2023	1536	G	W	2	N	N	X	X	X	X								"
FC-CCR-MW34-1123 -11	11/16/2023	1635	G	W	2	N	N	X	X	X	X								"
FC-CCR-EB01-1123 -12	11/16/2023	1737	G	W	3						X	X	X	X	X	X	X	X	Equipment Blank
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other ____								1	4	4	1								

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☑ Return to Client ☑ Disposal by Lab ☑ Archive for ____ Months

Special Instructions/QC Requirements & Comments:

Method 200.8 with collision cell

3.0°C | 3.1°C - ICE - CDC

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:		Cooler Temp. (°C): Obs'd: ____ Corr'd: ____ Therm ID No.: ____		
Relinquished by:	Company: WSP	Date/Time: 11-17-23 1645	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company: EETA-PHX	Date/Time: 11/17/23 1615


TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
550-210744 Waybill
ORIGIN ID:INWA (602) 437-3340
TESTAMERICA-PHOENIX
TESTAMERICA
4625 E COTTON CENTER BLVD
SUITE 189
PHOENIX, AZ 85040
UNITED STATES US
SHIP DATE:
ACTWGT: 31.
CAD: 0875926
DIMS: 19x10x
BILL RECIPIE
TO SHIPPING/RECEIVING
EUROFINS ENVIRONMENT TESTING
2841 DOW AVENUE, SUITE 100
TUSTIN CA 92780
(714) 895-5494
REF: 6550-87068
PO: YES
DEPT: SAMPLE RECEIVIN
eurofins
Environment Te
TestAmerica
2264078
Custody Seal
SIGNATURE
DATE
TRK# 0201 6388 9413 6168
TUE - 21
PRIORITY
QZ DTHA

Eurofins Phoenix
4625 East Cotton Center Boulevard Suite #189
Phoenix, AZ 85040
Phone: 602-437-3340

Chain of Custody Record

eurofins | Loc: 550 **210744**

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Eshelman, Linda	Carrier Tracking No(s):	COC No: 550-38263.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: linda.eshelman@et.eurofinsus.com	State of Origin: Arizona	Page: Page 1 of 1
Company: Eurofins Environment Testing Southwest,		Accreditations Required (See note): State - Arizona; State Program - Arizona		Job #: 550-210744-1
Address: 2841 Dow Avenue, Suite 100,	Due Date Requested: 12/4/2023			
City: Tustin	TAT Requested (days):			
State, Zip: CA, 92780				
Phone: 714-895-5494(Tel)	PO #:			
Email:	WO #:			
Project Name: CCR Groundwater Monitoring	Project #: 55009706			
Site: Arizona Public Service	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	200.7/200.7_P_TR (MOD) Lithium	Total Number of containers	Special Instruc
			Preservation Code:						
FC-CCR-DMX06-1123 (550-210744-1)	11/15/23	09:15 Arizona		Water			X	1	
FC-CCR-MW15-1123 (550-210744-3)	11/15/23	10:33 Arizona		Water			X	1	
FC-CCR-MW16-1123 (550-210744-4)	11/15/23	11:47 Arizona		Water			X	1	
FC-CCR-DMX05R-1123 (550-210744-5)	11/16/23	11:38 Arizona		Water			X	1	
FC-CCR-EB01-1123 (550-210744-12)	11/16/23	17:37 Arizona		Water			X	1	

550-210744 Chain of Custody

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Southwest, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Southwest, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Southwest, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Southwest, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	[signature]	11-20-23 14:40	EETSW	FedEx		
2	Relinquished by:	Date/Time:	Company	Received by: [signature]	Date/Time: 11/21/23 0930	Company EA
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 1.2/1.1 SW

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Arizona Public Service Company

Job Number: 550-210744-1
SDG Number: APS Four Corners Power Plant (Other)

Login Number: 210744
List Number: 1
Creator: Maycock, Lisa

List Source: Eurofins Phoenix

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	False	Check done at department level as required.

Login Sample Receipt Checklist

Client: Arizona Public Service Company

Job Number: 550-210744-1
SDG Number: APS Four Corners Power Plant (Other)

Login Number: 210744
List Number: 2
Creator: Khana, Piyush

List Source: Eurofins Calscience
List Creation: 11/21/23 01:13 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	2264078
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.1
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	False	

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Natalie Chrisman
Arizona Public Service Company
PO BOX 188, Ste. 4458
Joseph City, Arizona 86032

Generated 12/6/2023 3:08:52 PM

JOB DESCRIPTION

CCR Groundwater Monitoring
APS Four Corners Power Plant (Multiunit)

JOB NUMBER

550-210745-1

Eurofins Phoenix
4625 East Cotton Center Boulevard
Suite #189
Phoenix AZ 85040

See page two for job notes and contact information.

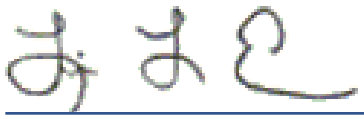
my EOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Southwest, LLC Project Manager.

Authorization



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Authorized for release by
Linda Eshelman, Project Manager II
linda.eshelman@et.eurofinsus.com
(602)659-7681

Table of Contents

Cover Page 1
Table of Contents 3
Definitions/Glossary 4
Case Narrative 6
Sample Summary 7
Detection Summary 8
Client Sample Results 9
QC Sample Results 12
QC Association Summary 20
Lab Chronicle 23
Certification Summary 25
Method Summary 26
Chain of Custody 27
Receipt Checklists 29

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
D1	Sample required dilution due to matrix.
D2	Sample required dilution due to high concentration of analyte.
D5	Minimum Reporting Limit (MRL) adjusted due to sample dilution; analyte was non-detect in the sample.
E2	Concentration estimated. Analyte exceeded calibration range. Reanalysis not performed due to sample matrix.
M1	Matrix spike recovery was high, the associated blank spike recovery was acceptable.
M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The associated blank spike was acceptable.

Metals

Qualifier	Qualifier Description
L3	The associated blank spike recovery was above method acceptance limits.
M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The associated blank spike was acceptable.
R4	MS/MSD RPD exceeded the method control limit. Recovery met acceptance criteria.
T5	Laboratory not licensed for this parameter

General Chemistry

Qualifier	Qualifier Description
H5	This test is specified to be performed in the field within 15 minutes of sampling; sample was received and analyzed past the regulatory holding time.
T5	Laboratory not licensed for this parameter

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 550-210745-1

Laboratory: Eurofins Phoenix

Narrative

Job Narrative
550-210745-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 11/17/2023 4:45 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.0°C

HPLC/IC
Method 300_ORGFMS: The following sample was diluted due to high salt concentrations in the sample matrix: FC-CCR-MW07-1123 (550-210745-1). Elevated reporting limits (RL) are provided. To preserve the instrumentation, samples containing high levels of salts are required to be diluted by a factor of two.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals
Method 200.8_CWA_LL: The laboratory control sample (LCS) associated with preparation batch 550-311488 and analytical batch 550-311753 was outside acceptance criteria for the analyte Barium. Re-extraction and/or re-analysis could not be performed; therefore, the data have been reported. The batch matrix spike/matrix spike duplicate (MS/MSD) was within acceptance limits and may be used to evaluate matrix performance. FC-CCR-MW07-1123 (550-210745-1), FC-CCR-MW08-1123 (550-210745-2) and FC-CCR-MW49A-1123 (550-210745-3)

Method 200.8_CWA_LL: Samples diluted 10x for sample matrix

FC-CCR-MW07-1123 (550-210745-1), FC-CCR-MW08-1123 (550-210745-2), FC-CCR-MW49A-1123 (550-210745-3), (550-210594-A-21-C), (550-210594-A-21-A MS) and (550-210594-A-21-B MSD)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Sample Summary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-210745-1
SDG: APS Four Corners Power Plant (Multiunit)

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
550-210745-1	FC-CCR-MW07-1123	Water	11/15/23 14:31	11/17/23 16:45
550-210745-2	FC-CCR-MW08-1123	Water	11/15/23 13:33	11/17/23 16:45
550-210745-3	FC-CCR-MW49A-1123	Water	11/15/23 16:59	11/17/23 16:45

Detection Summary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-210745-1
SDG: APS Four Corners Power Plant (Multiunit)

Client Sample ID: FC-CCR-MW07-1123 — Lab Sample ID: 550-210745-1

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	480	D2	400		mg/L	200		300.0	Total/NA
Sulfate	5600	D2	400		mg/L	200		300.0	Total/NA
Boron	9.6		0.050		mg/L	1		200.7 Rev 4.4	Total/NA
Calcium	490		2.0		mg/L	1		200.7 Rev 4.4	Total/NA
Lithium	1.0		0.050		mg/L	1		200.7 Rev 4.4	Total Recoverable
Arsenic	0.0092		0.0050		mg/L	10		200.8 LL	Total/NA
Barium	0.016	L3	0.0050		mg/L	10		200.8 LL	Total/NA
Selenium	0.019		0.0050		mg/L	10		200.8 LL	Total/NA
Total Dissolved Solids	9600		100		mg/L	1		SM 2540C	Total/NA
pH	7.5	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	12.9	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-MW08-1123 — Lab Sample ID: 550-210745-2

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	1000	D2	400		mg/L	200		300.0	Total/NA
Sulfate	8800	D2	400		mg/L	200		300.0	Total/NA
Boron	19		0.050		mg/L	1		200.7 Rev 4.4	Total/NA
Calcium	520		2.0		mg/L	1		200.7 Rev 4.4	Total/NA
Magnesium	1100		20		mg/L	10		200.7 Rev 4.4	Total/NA
Potassium	46		0.50		mg/L	1		200.7 Rev 4.4	Total/NA
Sodium	3900		5.0		mg/L	10		200.7 Rev 4.4	Total/NA
Lithium	1.2		0.10		mg/L	2		200.7 Rev 4.4	Total Recoverable
Arsenic	0.0083		0.0050		mg/L	10		200.8 LL	Total/NA
Barium	0.010	L3	0.0050		mg/L	10		200.8 LL	Total/NA
Molybdenum	0.014	T5	0.0050		mg/L	10		200.8 LL	Total/NA
Alkalinity as CaCO3	500		6.0		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	500		6.0		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	17000		100		mg/L	1		SM 2540C	Total/NA
pH	7.3	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	12.4	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: FC-CCR-MW49A-1123 — Lab Sample ID: 550-210745-3

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	480	D2	400		mg/L	200		300.0	Total/NA
Sulfate	5600	D2	400		mg/L	200		300.0	Total/NA
Boron	5.8		0.050		mg/L	1		200.7 Rev 4.4	Total/NA
Calcium	490		2.0		mg/L	1		200.7 Rev 4.4	Total/NA
Lithium	0.96		0.10		mg/L	2		200.7 Rev 4.4	Total Recoverable
Arsenic	0.0076		0.0050		mg/L	10		200.8 LL	Total/NA
Barium	0.028	L3	0.0050		mg/L	10		200.8 LL	Total/NA
Molybdenum	0.045	T5	0.0050		mg/L	10		200.8 LL	Total/NA
Thallium	0.0021		0.0010		mg/L	10		200.8 LL	Total/NA
Total Dissolved Solids	19000		200		mg/L	1		SM 2540C	Total/NA
pH	7.3	H5	1.7		SU	1		SM 4500 H+ B	Total/NA
Temperature	13.7	H5 T5	0.1		Degrees C	1		SM 4500 H+ B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: FC-CCR-MW07-1123

Lab Sample ID: 550-210745-1

Date Collected: 11/15/23 14:31
Matrix: Water
Date Received: 11/17/23 16:45

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**480**	**D2**	400		mg/L			12/06/23 01:31	200
Fluoride	ND	D1 D5	0.80		mg/L			12/06/23 00:17	2
Sulfate	**5600**	**D2**	400		mg/L			12/06/23 01:31	200

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		0.0010		mg/L		11/21/23 04:55	11/29/23 14:34	1
Boron	**9.6**		0.050		mg/L		11/21/23 04:55	11/29/23 14:34	1
Calcium	**490**		2.0		mg/L		11/21/23 04:55	11/29/23 14:34	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**1.0**		0.050		mg/L		11/27/23 07:45	11/29/23 17:07	1

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.010		mg/L		11/21/23 07:04	11/27/23 19:55	10
Arsenic	**0.0092**		0.0050		mg/L		11/21/23 07:04	11/27/23 19:55	10
Barium	**0.016**	**L3**	0.0050		mg/L		11/21/23 07:04	11/27/23 19:55	10
Cadmium	ND		0.0010		mg/L		11/21/23 07:04	11/27/23 19:55	10
Chromium	ND		0.010		mg/L		11/21/23 07:04	11/27/23 19:55	10
Cobalt	ND		0.0050		mg/L		11/21/23 07:04	11/27/23 19:55	10
Lead	ND		0.0050		mg/L		11/21/23 07:04	11/27/23 19:55	10
Molybdenum	ND	T5	0.0050		mg/L		11/21/23 07:04	11/27/23 19:55	10
Selenium	**0.019**		0.0050		mg/L		11/21/23 07:04	11/27/23 19:55	10
Thallium	ND		0.0010		mg/L		11/21/23 07:04	11/27/23 19:55	10

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		11/29/23 14:20	11/29/23 17:07	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**9600**		100		mg/L			11/22/23 18:11	1
pH (SM 4500 H+ B)	**7.5**	**H5**	1.7		SU			11/29/23 12:50	1
Temperature (SM 4500 H+ B)	**12.9**	**H5 T5**	0.1		Degrees C			11/29/23 12:50	1

Client Sample ID: FC-CCR-MW08-1123

Lab Sample ID: 550-210745-2

Date Collected: 11/15/23 13:33
Matrix: Water
Date Received: 11/17/23 16:45

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1000**	**D2**	400		mg/L			12/02/23 20:08	200
Fluoride	ND	D1	0.80		mg/L			12/02/23 19:50	2
Sulfate	**8800**	**D2**	400		mg/L			12/02/23 20:08	200

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		0.0010		mg/L		11/21/23 04:55	11/29/23 14:36	1
Boron	**19**		0.050		mg/L		11/21/23 04:55	11/29/23 14:36	1

Client Sample ID: FC-CCR-MW08-1123

Lab Sample ID: 550-210745-2

Date Collected: 11/15/23 13:33
Matrix: Water
Date Received: 11/17/23 16:45

Method: EPA 200.7 Rev 4.4 - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**520**		2.0		mg/L		11/21/23 04:55	11/29/23 14:36	1
Magnesium	**1100**		20		mg/L		11/21/23 04:55	12/04/23 12:03	10
Potassium	**46**		0.50		mg/L		11/21/23 04:55	11/29/23 14:36	1
Sodium	**3900**		5.0		mg/L		11/21/23 04:55	12/04/23 12:03	10

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**1.2**		0.10		mg/L		11/27/23 07:45	11/29/23 18:08	2

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.010		mg/L		11/21/23 07:04	11/27/23 19:57	10
Arsenic	**0.0083**		0.0050		mg/L		11/21/23 07:04	11/27/23 19:57	10
Barium	**0.010**	**L3**	0.0050		mg/L		11/21/23 07:04	11/27/23 19:57	10
Cadmium	ND		0.0010		mg/L		11/21/23 07:04	11/27/23 19:57	10
Chromium	ND		0.010		mg/L		11/21/23 07:04	11/27/23 19:57	10
Cobalt	ND		0.0050		mg/L		11/21/23 07:04	11/27/23 19:57	10
Lead	ND		0.0050		mg/L		11/21/23 07:04	11/27/23 19:57	10
Molybdenum	**0.014**	**T5**	0.0050		mg/L		11/21/23 07:04	11/27/23 19:57	10
Selenium	ND		0.0050		mg/L		11/21/23 07:04	11/27/23 19:57	10
Thallium	ND		0.0010		mg/L		11/21/23 07:04	11/27/23 19:57	10

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		11/29/23 14:20	11/29/23 17:09	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3 (SM 2320B)	**500**		6.0		mg/L			11/21/23 15:38	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**500**		6.0		mg/L			11/21/23 15:38	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			11/21/23 15:38	1
Alkalinity, Phenolphthalein (SM 2320B)	ND		6.0		mg/L			11/21/23 15:38	1
Hydroxide Alkalinity as CaCO3 (SM 2320B)	ND		6.0		mg/L			11/21/23 15:38	1
Total Dissolved Solids (SM 2540C)	**17000**		100		mg/L			11/22/23 18:11	1
pH (SM 4500 H+ B)	**7.3**	**H5**	1.7		SU			11/29/23 12:52	1
Temperature (SM 4500 H+ B)	**12.4**	**H5 T5**	0.1		Degrees C			11/29/23 12:52	1

Client Sample ID: FC-CCR-MW49A-1123

Lab Sample ID: 550-210745-3

Date Collected: 11/15/23 16:59
Matrix: Water
Date Received: 11/17/23 16:45

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**480**	**D2**	400		mg/L			12/06/23 02:08	200
Fluoride	ND	D2	0.80		mg/L			12/06/23 01:50	2
Sulfate	**5600**	**D2**	400		mg/L			12/06/23 02:08	200

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-210745-1
SDG: APS Four Corners Power Plant (Multiunit)

Client Sample ID: FC-CCR-MW49A-1123
Date Collected: 11/15/23 16:59
Date Received: 11/17/23 16:45

Lab Sample ID: 550-210745-3
Matrix: Water

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		0.0010		mg/L		11/21/23 04:55	11/29/23 14:39	1
Boron	**5.8**		0.050		mg/L		11/21/23 04:55	11/29/23 14:39	1
Calcium	**490**		2.0		mg/L		11/21/23 04:55	11/29/23 14:39	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**0.96**		0.10		mg/L		11/27/23 07:45	11/29/23 18:16	2

Method: EPA 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.010		mg/L		11/21/23 07:04	11/27/23 20:06	10
Arsenic	**0.0076**		0.0050		mg/L		11/21/23 07:04	11/27/23 20:06	10
Barium	**0.028**	**L3**	0.0050		mg/L		11/21/23 07:04	11/27/23 20:06	10
Cadmium	ND		0.0010		mg/L		11/21/23 07:04	11/27/23 20:06	10
Chromium	ND		0.010		mg/L		11/21/23 07:04	11/27/23 20:06	10
Cobalt	ND		0.0050		mg/L		11/21/23 07:04	11/27/23 20:06	10
Lead	ND		0.0050		mg/L		11/21/23 07:04	11/27/23 20:06	10
Molybdenum	**0.045**	**T5**	0.0050		mg/L		11/21/23 07:04	11/27/23 20:06	10
Selenium	ND		0.0050		mg/L		11/21/23 07:04	11/27/23 20:06	10
Thallium	**0.0021**		0.0010		mg/L		11/21/23 07:04	11/27/23 20:06	10

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		11/29/23 14:20	11/29/23 17:11	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**19000**		200		mg/L			11/22/23 18:11	1
pH (SM 4500 H+ B)	**7.3**	**H5**	1.7		SU			11/29/23 12:54	1
Temperature (SM 4500 H+ B)	**13.7**	**H5 T5**	0.1		Degrees C			11/29/23 12:54	1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 550-312157/3
Matrix: Water
Analysis Batch: 312157

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		2.0		mg/L			12/02/23 16:06	1
Fluoride	ND		0.40		mg/L			12/02/23 16:06	1
Sulfate	ND		2.0		mg/L			12/02/23 16:06	1

Lab Sample ID: LCS 550-312157/6
Matrix: Water
Analysis Batch: 312157

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			20.0	20.9		mg/L		105	90 - 110		
Fluoride			4.00	4.35		mg/L		109	90 - 110		
Sulfate			20.0	21.1		mg/L		105	90 - 110		

Lab Sample ID: LCSD 550-312157/7
Matrix: Water
Analysis Batch: 312157

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			20.0	20.9		mg/L		105	90 - 110	0	20
Fluoride			4.00	4.35		mg/L		109	90 - 110	0	20
Sulfate			20.0	21.0		mg/L		105	90 - 110	0	20

Lab Sample ID: 550-210600-A-1 MS
Matrix: Water
Analysis Batch: 312157

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	49		20.0	71.3		mg/L		111	80 - 120		
Fluoride	0.78	M1	4.00	5.96	M1	mg/L		129	80 - 120		
Sulfate	54		20.0	76.8		mg/L		113	80 - 120		

Lab Sample ID: 550-210600-A-1 MSD
Matrix: Water
Analysis Batch: 312157

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	49		20.0	67.7		mg/L		93	80 - 120	5	20
Fluoride	0.78	M1	4.00	5.08		mg/L		108	80 - 120	16	20
Sulfate	54		20.0	72.5		mg/L		92	80 - 120	6	20

Lab Sample ID: MB 550-312271/2
Matrix: Water
Analysis Batch: 312271

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		2.0		mg/L			12/05/23 14:29	1
Fluoride	ND		0.40		mg/L			12/05/23 14:29	1
Sulfate	ND		2.0		mg/L			12/05/23 14:29	1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 550-312271/5
Matrix: Water
Analysis Batch: 312271

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			20.0	20.9		mg/L		104	90 - 110		
Fluoride			4.00	4.09		mg/L		102	90 - 110		
Sulfate			20.0	21.9		mg/L		109	90 - 110		

Lab Sample ID: LCSD 550-312271/6
Matrix: Water
Analysis Batch: 312271

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			20.0	20.8		mg/L		104	90 - 110	0	20
Fluoride			4.00	4.29		mg/L		107	90 - 110	5	20
Sulfate			20.0	21.0		mg/L		105	90 - 110	4	20

Lab Sample ID: 550-211300-A-3 MS
Matrix: Water
Analysis Batch: 312271

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	260	E2 M3	20.0	262	E2 M3	mg/L		24	80 - 120		
Fluoride	3.2		4.00	7.10		mg/L		97	80 - 120		
Sulfate	140	E2 M3	20.0	150	E2 M3	mg/L		59	80 - 120		

Lab Sample ID: 550-211300-A-3 MSD
Matrix: Water
Analysis Batch: 312271

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	260	E2 M3	20.0	263	E2 M3	mg/L		29	80 - 120	0	20
Fluoride	3.2		4.00	7.30		mg/L		102	80 - 120	3	20
Sulfate	140	E2 M3	20.0	151	E2 M3	mg/L		62	80 - 120	0	20

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 550-311485/1-A
Matrix: Water
Analysis Batch: 311904

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 311485

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		0.0010		mg/L		11/21/23 04:55	11/29/23 13:37	1
Boron	ND		0.050		mg/L		11/21/23 04:55	11/29/23 13:37	1
Calcium	ND		2.0		mg/L		11/21/23 04:55	11/29/23 13:37	1
Magnesium	ND		2.0		mg/L		11/21/23 04:55	11/29/23 13:37	1
Potassium	ND		0.50		mg/L		11/21/23 04:55	11/29/23 13:37	1

Lab Sample ID: LCS 550-311485/2-A
Matrix: Water
Analysis Batch: 311904

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 311485

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Beryllium			1.00	1.06		mg/L		106	85 - 115		

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: LCS 550-311485/2-A
Matrix: Water
Analysis Batch: 311904

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 311485

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Boron			1.00	1.09		mg/L		109	85 - 115		
Calcium			21.0	22.9		mg/L		109	85 - 115		
Magnesium			21.0	22.4		mg/L		107	85 - 115		
Potassium			20.0	21.0		mg/L		105	85 - 115		

Lab Sample ID: LCSD 550-311485/3-A
Matrix: Water
Analysis Batch: 311904

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 311485

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Beryllium			1.00	1.05		mg/L		105	85 - 115	1	20
Boron			1.00	1.07		mg/L		107	85 - 115	2	20
Calcium			21.0	22.6		mg/L		108	85 - 115	1	20
Magnesium			21.0	22.2		mg/L		106	85 - 115	1	20
Potassium			20.0	20.8		mg/L		104	85 - 115	1	20

Lab Sample ID: 550-210594-B-21-B MSD
Matrix: Water
Analysis Batch: 311904

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 311485

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Beryllium	ND	M2 R4	1.00	1.18	R4	mg/L		118	70 - 130	183	20
Boron	50	M3 R4	1.00	48.9	M3 R4	mg/L		-136	70 - 130	196	20
Calcium	490	M3 R4	21.0	499	M3 R4	mg/L		48	70 - 130	180	20
Potassium	41	M2 R4	20.0	65.8	R4	mg/L		126	70 - 130	181	20

Lab Sample ID: MB 570-386729/1-A
Matrix: Water
Analysis Batch: 387902

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 386729

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	ND		0.050		mg/L		11/27/23 07:45	11/29/23 16:58	1

Lab Sample ID: LCS 570-386729/2-A
Matrix: Water
Analysis Batch: 387902

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 386729

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Lithium			0.500	0.472		mg/L		94	85 - 115		

Lab Sample ID: LCSD 570-386729/3-A
Matrix: Water
Analysis Batch: 387902

Client Sample ID: Lab Control Sample Dup
Prep Type: Total Recoverable
Prep Batch: 386729

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Lithium			0.500	0.480		mg/L		96	85 - 115	2	20

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: 550-210745-1 MS
Matrix: Water
Analysis Batch: 387902

Client Sample ID: FC-CCR-MW07-1123
Prep Type: Total Recoverable
Prep Batch: 386729

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Lithium	1.0		0.500	1.52		mg/L		104	80 - 120

Lab Sample ID: 550-210745-1 MSD
Matrix: Water
Analysis Batch: 387902

Client Sample ID: FC-CCR-MW07-1123
Prep Type: Total Recoverable
Prep Batch: 386729

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Lithium	1.0		0.500	1.53		mg/L		107	80 - 120	1	20

Method: 200.8 LL - Metals (ICP/MS)

Lab Sample ID: MB 550-311488/1-A
Matrix: Water
Analysis Batch: 311753

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 311488

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.0010		mg/L		11/21/23 07:04	11/27/23 19:25	1
Arsenic	ND		0.00050		mg/L		11/21/23 07:04	11/27/23 19:25	1
Barium	ND		0.00050		mg/L		11/21/23 07:04	11/27/23 19:25	1
Cadmium	ND		0.00010		mg/L		11/21/23 07:04	11/27/23 19:25	1
Chromium	ND		0.0010		mg/L		11/21/23 07:04	11/27/23 19:25	1
Cobalt	ND		0.00050		mg/L		11/21/23 07:04	11/27/23 19:25	1
Lead	ND		0.00050		mg/L		11/21/23 07:04	11/27/23 19:25	1
Molybdenum	ND		0.00050		mg/L		11/21/23 07:04	11/27/23 19:25	1
Selenium	ND		0.00050		mg/L		11/21/23 07:04	11/27/23 19:25	1
Thallium	ND		0.00010		mg/L		11/21/23 07:04	11/27/23 19:25	1

Lab Sample ID: LCS 550-311488/2-A
Matrix: Water
Analysis Batch: 311753

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 311488

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	0.100	0.106		mg/L		106	85 - 115
Arsenic	0.100	0.106		mg/L		106	85 - 115
Barium	0.100	0.117	L3	mg/L		117	85 - 115
Cadmium	0.100	0.108		mg/L		108	85 - 115
Chromium	0.100	0.103		mg/L		103	85 - 115
Cobalt	0.100	0.108		mg/L		108	85 - 115
Lead	0.100	0.109		mg/L		109	85 - 115
Molybdenum	0.100	0.111		mg/L		111	85 - 115
Selenium	0.100	0.0982		mg/L		98	85 - 115
Thallium	0.100	0.109		mg/L		109	85 - 115

Lab Sample ID: LCSD 550-311488/3-A
Matrix: Water
Analysis Batch: 311753

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 311488

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	0.100	0.109		mg/L		109	85 - 115	3	20
Arsenic	0.100	0.105		mg/L		105	85 - 115	0	20

Method: 200.8 LL - Metals (ICP/MS) (Continued)

Lab Sample ID: LCSD 550-311488/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 311753 — **Prep Batch: 311488**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Barium			0.100	0.119	L3	mg/L		119	85 - 115	2	20
Cadmium			0.100	0.110		mg/L		110	85 - 115	2	20
Chromium			0.100	0.102		mg/L		102	85 - 115	0	20
Cobalt			0.100	0.111		mg/L		111	85 - 115	2	20
Lead			0.100	0.109		mg/L		109	85 - 115	1	20
Molybdenum			0.100	0.111		mg/L		111	85 - 115	0	20
Selenium			0.100	0.0967		mg/L		97	85 - 115	2	20
Thallium			0.100	0.109		mg/L		109	85 - 115	0	20

Lab Sample ID: 550-210594-A-21-A MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 311753 — **Prep Batch: 311488**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	ND		0.100	0.104		mg/L		104	70 - 130
Arsenic	0.0087		0.100	0.112		mg/L		103	70 - 130
Barium	0.015	L3	0.100	0.129		mg/L		114	70 - 130
Cadmium	ND		0.100	0.101		mg/L		101	70 - 130
Chromium	ND		0.100	0.0989		mg/L		99	70 - 130
Cobalt	0.021		0.100	0.123		mg/L		102	70 - 130
Lead	ND		0.100	0.101		mg/L		98	70 - 130
Molybdenum	ND		0.100	0.111		mg/L		108	70 - 130
Selenium	ND		0.100	0.104		mg/L		100	70 - 130
Thallium	ND		0.100	0.0978		mg/L		98	70 - 130

Lab Sample ID: 550-210594-A-21-B MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 311753 — **Prep Batch: 311488**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	ND		0.100	0.102		mg/L		102	70 - 130	2	20
Arsenic	0.0087		0.100	0.111		mg/L		102	70 - 130	1	20
Barium	0.015	L3	0.100	0.122		mg/L		107	70 - 130	5	20
Cadmium	ND		0.100	0.0995		mg/L		99	70 - 130	2	20
Chromium	ND		0.100	0.0968		mg/L		97	70 - 130	2	20
Cobalt	0.021		0.100	0.121		mg/L		99	70 - 130	2	20
Lead	ND		0.100	0.0979		mg/L		94	70 - 130	3	20
Molybdenum	ND		0.100	0.109		mg/L		107	70 - 130	1	20
Selenium	ND		0.100	0.101		mg/L		97	70 - 130	2	20
Thallium	ND		0.100	0.0951		mg/L		95	70 - 130	3	20

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 550-311896/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 311922 — **Prep Batch: 311896**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		11/29/23 14:20	11/29/23 16:47	1

Method: 245.1 - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 550-311896/2-A
Matrix: Water
Analysis Batch: 311922

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 311896

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury			0.00500	0.00470		mg/L		94	85 - 115		

Lab Sample ID: LCSD 550-311896/3-A
Matrix: Water
Analysis Batch: 311922

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 311896

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury			0.00500	0.00454		mg/L		91	85 - 115	4	20

Lab Sample ID: 550-210767-I-2-C MS
Matrix: Water
Analysis Batch: 311922

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 311896

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury	ND		0.00500	0.00472		mg/L		94	70 - 130		

Lab Sample ID: 550-210767-I-2-D MSD
Matrix: Water
Analysis Batch: 311922

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 311896

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		0.00500	0.00496		mg/L		99	70 - 130	5	20

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 550-311562/4
Matrix: Water
Analysis Batch: 311562

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3	ND		6.0		mg/L			11/21/23 09:02	1
Bicarbonate Alkalinity as CaCO3	ND		6.0		mg/L			11/21/23 09:02	1
Carbonate Alkalinity as CaCO3	ND		6.0		mg/L			11/21/23 09:02	1
Alkalinity, Phenolphthalein	ND		6.0		mg/L			11/21/23 09:02	1
Hydroxide Alkalinity as CaCO3	ND		6.0		mg/L			11/21/23 09:02	1

Lab Sample ID: LCS 550-311562/3
Matrix: Water
Analysis Batch: 311562

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Alkalinity as CaCO3			250	244		mg/L		98	90 - 110		

Lab Sample ID: LCSD 550-311562/10
Matrix: Water
Analysis Batch: 311562

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Alkalinity as CaCO3			250	242		mg/L		97	90 - 110	1	20

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: 550-210670-I-3 DU
Matrix: Water
Analysis Batch: 311562

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Alkalinity as CaCO3	330			332		mg/L				0	20
Bicarbonate Alkalinity as CaCO3	330			332		mg/L				0	20
Carbonate Alkalinity as CaCO3	ND			ND		mg/L				NC	20
Alkalinity, Phenolphthalein	ND			ND		mg/L				NC	20
Hydroxide Alkalinity as CaCO3	ND			ND		mg/L				NC	20

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 550-311663/1
Matrix: Water
Analysis Batch: 311663

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		20		mg/L			11/22/23 18:11	1

Lab Sample ID: LCS 550-311663/2
Matrix: Water
Analysis Batch: 311663

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Dissolved Solids			1000	954		mg/L		95	90 - 110		

Lab Sample ID: LCSD 550-311663/3
Matrix: Water
Analysis Batch: 311663

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Dissolved Solids			1000	988		mg/L		99	90 - 110	4	10

Lab Sample ID: 550-210696-A-1 DU
Matrix: Water
Analysis Batch: 311663

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	1300			1310		mg/L				0.2	10

Method: SM 4500 H+ B - pH

Lab Sample ID: LCSSRM 550-311913/13
Matrix: Water
Analysis Batch: 311913

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits		
pH			7.00	7.0		SU		99.6	98.5 - 101.5		

Method: SM 4500 H+ B - pH (Continued)

Lab Sample ID: LCSSRM 550-311913/25
Matrix: Water
Analysis Batch: 311913

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits		
pH			7.00	7.0		SU		99.6	98.5 - 101.5		

Lab Sample ID: 550-210744-A-5 DU
Matrix: Water
Analysis Batch: 311913

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
pH	7.5			7.5		SU				0	5
Temperature	14.7			14.6		Degrees C				0.7	

HPLC/IC

Analysis Batch: 312157

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210745-2	FC-CCR-MW08-1123	Total/NA	Water	300.0	
550-210745-2	FC-CCR-MW08-1123	Total/NA	Water	300.0	
MB 550-312157/3	Method Blank	Total/NA	Water	300.0	
LCS 550-312157/6	Lab Control Sample	Total/NA	Water	300.0	
LCSD 550-312157/7	Lab Control Sample Dup	Total/NA	Water	300.0	
550-210600-A-1 MS	Matrix Spike	Total/NA	Water	300.0	
550-210600-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Analysis Batch: 312271

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210745-1	FC-CCR-MW07-1123	Total/NA	Water	300.0	
550-210745-1	FC-CCR-MW07-1123	Total/NA	Water	300.0	
550-210745-3	FC-CCR-MW49A-1123	Total/NA	Water	300.0	
550-210745-3	FC-CCR-MW49A-1123	Total/NA	Water	300.0	
MB 550-312271/2	Method Blank	Total/NA	Water	300.0	
LCS 550-312271/5	Lab Control Sample	Total/NA	Water	300.0	
LCSD 550-312271/6	Lab Control Sample Dup	Total/NA	Water	300.0	
550-211300-A-3 MS	Matrix Spike	Total/NA	Water	300.0	
550-211300-A-3 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Metals

Prep Batch: 311485

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210745-1	FC-CCR-MW07-1123	Total/NA	Water	200.7	
550-210745-2	FC-CCR-MW08-1123	Total/NA	Water	200.7	
550-210745-3	FC-CCR-MW49A-1123	Total/NA	Water	200.7	
MB 550-311485/1-A	Method Blank	Total/NA	Water	200.7	
LCS 550-311485/2-A	Lab Control Sample	Total/NA	Water	200.7	
LCSD 550-311485/3-A	Lab Control Sample Dup	Total/NA	Water	200.7	
550-210594-B-21-B MSD	Matrix Spike Duplicate	Total/NA	Water	200.7	

Prep Batch: 311488

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210745-1	FC-CCR-MW07-1123	Total/NA	Water	200.8	
550-210745-2	FC-CCR-MW08-1123	Total/NA	Water	200.8	
550-210745-3	FC-CCR-MW49A-1123	Total/NA	Water	200.8	
MB 550-311488/1-A	Method Blank	Total/NA	Water	200.8	
LCS 550-311488/2-A	Lab Control Sample	Total/NA	Water	200.8	
LCSD 550-311488/3-A	Lab Control Sample Dup	Total/NA	Water	200.8	
550-210594-A-21-A MS	Matrix Spike	Total/NA	Water	200.8	
550-210594-A-21-B MSD	Matrix Spike Duplicate	Total/NA	Water	200.8	

Analysis Batch: 311753

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210745-1	FC-CCR-MW07-1123	Total/NA	Water	200.8 LL	311488
550-210745-2	FC-CCR-MW08-1123	Total/NA	Water	200.8 LL	311488
550-210745-3	FC-CCR-MW49A-1123	Total/NA	Water	200.8 LL	311488
MB 550-311488/1-A	Method Blank	Total/NA	Water	200.8 LL	311488
LCS 550-311488/2-A	Lab Control Sample	Total/NA	Water	200.8 LL	311488
LCSD 550-311488/3-A	Lab Control Sample Dup	Total/NA	Water	200.8 LL	311488

Metals (Continued)

Analysis Batch: 311753 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210594-A-21-A MS	Matrix Spike	Total/NA	Water	200.8 LL	311488
550-210594-A-21-B MSD	Matrix Spike Duplicate	Total/NA	Water	200.8 LL	311488

Prep Batch: 311896

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210745-1	FC-CCR-MW07-1123	Total/NA	Water	245.1	
550-210745-2	FC-CCR-MW08-1123	Total/NA	Water	245.1	
550-210745-3	FC-CCR-MW49A-1123	Total/NA	Water	245.1	
MB 550-311896/1-A	Method Blank	Total/NA	Water	245.1	
LCS 550-311896/2-A	Lab Control Sample	Total/NA	Water	245.1	
LCSD 550-311896/3-A	Lab Control Sample Dup	Total/NA	Water	245.1	
550-210767-I-2-C MS	Matrix Spike	Total/NA	Water	245.1	
550-210767-I-2-D MSD	Matrix Spike Duplicate	Total/NA	Water	245.1	

Analysis Batch: 311904

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210745-1	FC-CCR-MW07-1123	Total/NA	Water	200.7 Rev 4.4	311485
550-210745-2	FC-CCR-MW08-1123	Total/NA	Water	200.7 Rev 4.4	311485
550-210745-3	FC-CCR-MW49A-1123	Total/NA	Water	200.7 Rev 4.4	311485
MB 550-311485/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	311485
LCS 550-311485/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	311485
LCSD 550-311485/3-A	Lab Control Sample Dup	Total/NA	Water	200.7 Rev 4.4	311485
550-210594-B-21-B MSD	Matrix Spike Duplicate	Total/NA	Water	200.7 Rev 4.4	311485

Analysis Batch: 311922

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210745-1	FC-CCR-MW07-1123	Total/NA	Water	245.1	311896
550-210745-2	FC-CCR-MW08-1123	Total/NA	Water	245.1	311896
550-210745-3	FC-CCR-MW49A-1123	Total/NA	Water	245.1	311896
MB 550-311896/1-A	Method Blank	Total/NA	Water	245.1	311896
LCS 550-311896/2-A	Lab Control Sample	Total/NA	Water	245.1	311896
LCSD 550-311896/3-A	Lab Control Sample Dup	Total/NA	Water	245.1	311896
550-210767-I-2-C MS	Matrix Spike	Total/NA	Water	245.1	311896
550-210767-I-2-D MSD	Matrix Spike Duplicate	Total/NA	Water	245.1	311896

Analysis Batch: 312174

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210745-2	FC-CCR-MW08-1123	Total/NA	Water	200.7 Rev 4.4	311485

Prep Batch: 386729

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210745-1	FC-CCR-MW07-1123	Total Recoverable	Water	200.7	
550-210745-2	FC-CCR-MW08-1123	Total Recoverable	Water	200.7	
550-210745-3	FC-CCR-MW49A-1123	Total Recoverable	Water	200.7	
MB 570-386729/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 570-386729/2-A	Lab Control Sample	Total Recoverable	Water	200.7	
LCSD 570-386729/3-A	Lab Control Sample Dup	Total Recoverable	Water	200.7	
550-210745-1 MS	FC-CCR-MW07-1123	Total Recoverable	Water	200.7	
550-210745-1 MSD	FC-CCR-MW07-1123	Total Recoverable	Water	200.7	

Metals

Analysis Batch: 387902

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210745-1	FC-CCR-MW07-1123	Total Recoverable	Water	200.7 Rev 4.4	386729
550-210745-2	FC-CCR-MW08-1123	Total Recoverable	Water	200.7 Rev 4.4	386729
550-210745-3	FC-CCR-MW49A-1123	Total Recoverable	Water	200.7 Rev 4.4	386729
MB 570-386729/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	386729
LCS 570-386729/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	386729
LCSD 570-386729/3-A	Lab Control Sample Dup	Total Recoverable	Water	200.7 Rev 4.4	386729
550-210745-1 MS	FC-CCR-MW07-1123	Total Recoverable	Water	200.7 Rev 4.4	386729
550-210745-1 MSD	FC-CCR-MW07-1123	Total Recoverable	Water	200.7 Rev 4.4	386729

General Chemistry

Analysis Batch: 311562

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210745-2	FC-CCR-MW08-1123	Total/NA	Water	SM 2320B	
MB 550-311562/4	Method Blank	Total/NA	Water	SM 2320B	
LCS 550-311562/3	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 550-311562/10	Lab Control Sample Dup	Total/NA	Water	SM 2320B	
550-210670-I-3 DU	Duplicate	Total/NA	Water	SM 2320B	

Analysis Batch: 311663

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210745-1	FC-CCR-MW07-1123	Total/NA	Water	SM 2540C	
550-210745-2	FC-CCR-MW08-1123	Total/NA	Water	SM 2540C	
550-210745-3	FC-CCR-MW49A-1123	Total/NA	Water	SM 2540C	
MB 550-311663/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 550-311663/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 550-311663/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	
550-210696-A-1 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 311913

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210745-1	FC-CCR-MW07-1123	Total/NA	Water	SM 4500 H+ B	
550-210745-2	FC-CCR-MW08-1123	Total/NA	Water	SM 4500 H+ B	
550-210745-3	FC-CCR-MW49A-1123	Total/NA	Water	SM 4500 H+ B	
LCSSRM 550-311913/13	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	
LCSSRM 550-311913/25	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	
550-210744-A-5 DU	Duplicate	Total/NA	Water	SM 4500 H+ B	

Lab Chronicle

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-210745-1
SDG: APS Four Corners Power Plant (Multiunit)

Client Sample ID: FC-CCR-MW07-1123

Lab Sample ID: 550-210745-1

Date Collected: 11/15/23 14:31
Matrix: Water
Date Received: 11/17/23 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		2	312271	MMH	EET PHX	12/06/23 00:17
Total/NA	Analysis	300.0		200	312271	MMH	EET PHX	12/06/23 01:31
Total Recoverable	Prep	200.7			386729	JP8N	EET CAL 4	11/27/23 07:45
Total Recoverable	Analysis	200.7 Rev 4.4		1	387902	P1R	EET CAL 4	11/29/23 17:07
Total/NA	Prep	200.7			311485	SGO	EET PHX	11/21/23 04:55
Total/NA	Analysis	200.7 Rev 4.4		1	311904	GLW	EET PHX	11/29/23 14:34
Total/NA	Prep	200.8			311488	SGO	EET PHX	11/21/23 07:04
Total/NA	Analysis	200.8 LL		10	311753	DSJ	EET PHX	11/27/23 19:55
Total/NA	Prep	245.1			311896	HHL	EET PHX	11/29/23 14:20
Total/NA	Analysis	245.1		1	311922	HHL	EET PHX	11/29/23 17:07
Total/NA	Analysis	SM 2540C		1	311663	KMG	EET PHX	11/22/23 18:11 - 12/01/23 15:16 [1]
Total/NA	Analysis	SM 4500 H+ B		1	311913	MAN	EET PHX	11/29/23 12:50

Client Sample ID: FC-CCR-MW08-1123

Lab Sample ID: 550-210745-2

Date Collected: 11/15/23 13:33
Matrix: Water
Date Received: 11/17/23 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		2	312157	RDC	EET PHX	12/02/23 19:50
Total/NA	Analysis	300.0		200	312157	RDC	EET PHX	12/02/23 20:08
Total Recoverable	Prep	200.7			386729	JP8N	EET CAL 4	11/27/23 07:45
Total Recoverable	Analysis	200.7 Rev 4.4		2	387902	P1R	EET CAL 4	11/29/23 18:08
Total/NA	Prep	200.7			311485	SGO	EET PHX	11/21/23 04:55
Total/NA	Analysis	200.7 Rev 4.4		1	311904	GLW	EET PHX	11/29/23 14:36
Total/NA	Prep	200.7			311485	SGO	EET PHX	11/21/23 04:55
Total/NA	Analysis	200.7 Rev 4.4		10	312174	GLW	EET PHX	12/04/23 12:03
Total/NA	Prep	200.8			311488	SGO	EET PHX	11/21/23 07:04
Total/NA	Analysis	200.8 LL		10	311753	DSJ	EET PHX	11/27/23 19:57
Total/NA	Prep	245.1			311896	HHL	EET PHX	11/29/23 14:20
Total/NA	Analysis	245.1		1	311922	HHL	EET PHX	11/29/23 17:09
Total/NA	Analysis	SM 2320B		1	311562	MAN	EET PHX	11/21/23 15:38
Total/NA	Analysis	SM 2540C		1	311663	KMG	EET PHX	11/22/23 18:11 - 12/01/23 15:16 [1]
Total/NA	Analysis	SM 4500 H+ B		1	311913	MAN	EET PHX	11/29/23 12:52

Client Sample ID: FC-CCR-MW49A-1123

Lab Sample ID: 550-210745-3

Date Collected: 11/15/23 16:59
Matrix: Water
Date Received: 11/17/23 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		2	312271	MMH	EET PHX	12/06/23 01:50
Total/NA	Analysis	300.0		200	312271	MMH	EET PHX	12/06/23 02:08
Total Recoverable	Prep	200.7			386729	JP8N	EET CAL 4	11/27/23 07:45
Total Recoverable	Analysis	200.7 Rev 4.4		2	387902	P1R	EET CAL 4	11/29/23 18:16

Lab Chronicle

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-210745-1
SDG: APS Four Corners Power Plant (Multiunit)

Client Sample ID: FC-CCR-MW49A-1123

Date Collected: 11/15/23 16:59
Date Received: 11/17/23 16:45

Lab Sample ID: 550-210745-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	200.7			311485	SGO	EET PHX	11/21/23 04:55
Total/NA	Analysis	200.7 Rev 4.4		1	311904	GLW	EET PHX	11/29/23 14:39
Total/NA	Prep	200.8			311488	SGO	EET PHX	11/21/23 07:04
Total/NA	Analysis	200.8 LL		10	311753	DSJ	EET PHX	11/27/23 20:06
Total/NA	Prep	245.1			311896	HHL	EET PHX	11/29/23 14:20
Total/NA	Analysis	245.1		1	311922	HHL	EET PHX	11/29/23 17:11
Total/NA	Analysis	SM 2540C		1	311663	KMG	EET PHX	11/22/23 18:11 - 12/01/23 15:16 [1]
Total/NA	Analysis	SM 4500 H+ B		1	311913	MAN	EET PHX	11/29/23 12:54

[1] This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:

EET CAL 4 = Eurofins Calscience Tustin, 2841 Dow Avenue, Tustin, CA 92780, TEL (714)895-5494

EET PHX = Eurofins Phoenix, 4625 East Cotton Center Boulevard, Suite #189, Phoenix, AZ 85040, TEL (602)437-3340

Accreditation/Certification Summary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-210745-1
SDG: APS Four Corners Power Plant (Multiunit)

Laboratory: Eurofins Phoenix

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Arizona	State	AZ0728	06-10-24

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
200.8 LL	200.8	Water	Molybdenum
SM 4500 H+ B		Water	Temperature

Laboratory: Eurofins Calscience

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Arizona	State	AZ0830	11-16-24

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
200.7 Rev 4.4	200.7	Water	Lithium

Method Summary

Client: Arizona Public Service Company
Project/Site: CCR Groundwater Monitoring

Job ID: 550-210745-1
SDG: APS Four Corners Power Plant (Multiunit)

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	EPA	EET PHX
200.7 Rev 4.4	Metals (ICP)	EPA	EET CAL 4
200.7 Rev 4.4	Metals (ICP)	EPA	EET PHX
200.8 LL	Metals (ICP/MS)	EPA	EET PHX
245.1	Mercury (CVAA)	EPA	EET PHX
SM 2320B	Alkalinity	SM	EET PHX
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET PHX
SM 4500 H+ B	pH	SM	EET PHX
200.7	Preparation, Total Recoverable Metals	EPA	EET CAL 4
200.7	Preparation, Total Metals	EPA	EET PHX
200.8	Preparation, Total Metals	EPA	EET PHX
245.1	Preparation, Mercury	EPA	EET PHX

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:

EET CAL 4 = Eurofins Calscience Tustin, 2841 Dow Avenue, Tustin, CA 92780, TEL (714)895-5494

EET PHX = Eurofins Phoenix, 4625 East Cotton Center Boulevard, Suite #189, Phoenix, AZ 85040, TEL (602)437-3340

TestAmerica Phoenix
4625 E Cotton Center Blvd
Suite 189
Phoenix, AZ 85040
phone 602.437.3340 fax 602.454.9303

Chain of Custody Record

210745

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☑ Other: CCR

TestAmerica Laboratories, Inc.

Client Contact	Natalie Chrisman	Pam Norris (505-598-8781)	Date:	COC No:
Arizona Public Service	602-250-3608	Lab Contact: Rachel Sester	Carrier:	1 of 1 COCs
PO Box 355, MS 4915	Analysis Turnaround Time			Sampler:
Fruitland, NM 87416	☐ CALENDAR DAYS ☑ WORKING DAYS			For Lab Use Only:
Phone	TAT if different from Below ____			Walk-in Client:
FAX	☑ 2 weeks			Lab Sampling:
Project Name: CCR Groundwater Monitoring	☐ 1 week			Job / SDG No.:
Site: APS Four Corners Power Plant (Multiunit)	☐ 2 days			
PO #: 100622298	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	EPA 300.0 (Cl, F, SO4)	EPA 200.7 - Totals (B)	EPA 200.7 - Totals (B, Ca, Be)	EPA 200.7 - Totals (B, Ca, Be, K, Mg, Na)	EPA 200.7 - Totals (B, Ca, Be, K, Mg, Na, Mn, Fe)	EPA 200.7 - Total Lithium	EPA 200.8 - Totals (Sb, As, Ba, Cd, Co, Cr, Pb, Mo, Se, Tl)	EPA 200.8 - Totals (Co, Mo)	EPA 245.1 - Totals (Hg)	SM 4500-HB (pH)	SM 2540C (TDS)	SM 2320B (CO3 Alkalinity as CaCO3, HCO3 Alkalinity as CaCO3)	9056A - Fluoride	Sample Specific Notes:
FC-CCR-MW07-1123 -1	11/15/2023	1431	G	W	3	N		X		X			X	X		X	X	X			Low Flow
FC-CCR-MW08-1123 -2	11/15/2023	1333	G	W	3	N		X			X		X	X		X	X	X	X		"
FC-CCR-MW49A-1123 -3	11/15/2023	1659	G	W	3	N		X		X			X	X		X	X	X			"

Eurofins Phoenix
4625 East Cotton Center Boulevard Suite #189
Phoenix, AZ 85040
Phone: 602-437-3340

Chain of Custody Record

eurofins

Loc: 550
210745

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Eshelman, Linda	Carrier Tracking No(s):	COC No: 550-38263.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: linda.eshelman@et.eurofinsus.com	State of Origin: Arizona	Page: Page 1 of 1
Company: Eurofins Environment Testing Southwest,		Accreditations Required (See note): State - Arizona; State Program - Arizona		Job #: 550-210745-1
Address: 2841 Dow Avenue, Suite 100, ,	Due Date Requested: 12/4/2023			
City: Tustin	TAT Requested (days):			
State, Zip: CA, 92780				
Phone: 714-895-5494(Tel)	PO #:			
Email:	WO #:			
Project Name: CCR Groundwater Monitoring	Project #: 55009706			
Site: Arizona Public Service	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
E - NaHSO4
F - MeOH
G - Amchlor
H - Ascorbic Acid
I - Ice
J - DI Water
K - EDTA
L - EDA
M - Hexane
N - None
O - AsNaO2
P - Na2O4S
Q - Na2SO3
R - Na2S2O3
S - H2SO4
T - TSP Dodecahydrate
U - Acetone
V - MCAA
W - pH 4-5
Y - Trizma
Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	200.7/200.7_P_TR (MOD) Lithium	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
FC-CCR-MW07-1123 (550-210745-1)	11/15/23	14:31 Arizona		Water			X	1	
FC-CCR-MW08-1123 (550-210745-2)	11/15/23	13:33 Arizona		Water			X	1	
FC-CCR-MW49A-1123 (550-210745-3)	11/15/23	16:59 Arizona		Water			X	1	

550-210745 Chain of Custody

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Southwest, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Southwest, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Southwest, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Southwest, LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[illegible] 11-20-23	14:40	EESW	Fedex		
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
			[illegible]	11/21/23 0930	EE
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact:	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:
Δ Yes Δ No		1.2/1.1 542

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Arizona Public Service Company

Job Number: 550-210745-1

SDG Number: APS Four Corners Power Plant (Multiunit)

Login Number: 210745

List Source: Eurofins Phoenix

List Number: 1

Creator: Maycock, Lisa

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	False	Check done at department level as required.

Login Sample Receipt Checklist

Client: Arizona Public Service Company

Job Number: 550-210745-1
SDG Number: APS Four Corners Power Plant (Multiunit)

Login Number: 210745
List Number: 2
Creator: Khana, Piyush

List Source: Eurofins Calscience
List Creation: 11/21/23 01:13 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	2264078
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.1
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

APPENDIX

E

2023 DATA VALIDATION REPORT

ARIZONA PUBLIC SERVICE COMPANY

2023 DATA VALIDATION REPORT

CCR RULE COMPLIANCE GROUNDWATER MONITORING DATA – APS FOUR CORNERS POWER PLANT
ARIZONA PUBLIC SERVICE FOUR CORNERS POWER PLANT
FRUITLAND, NEW MEXICO

2023 DATA VALIDATION REPORT

CCR RULE COMPLIANCE GROUNDWATER MONITORING DATA – APS FOUR CORNERS POWER PLANT
ARIZONA PUBLIC SERVICE FOUR CORNERS POWER PLANT FRUITLAND, NEW MEXICO

ARIZONA PUBLIC SERVICE COMPANY

PROJECT NO.: 14-2023-2011
DATE: JANUARY 31, 2024

WSP USA ENVIRONMENT & INFRASTRUCTURE INC.
4600 EAST WASHINGTON STREET, SUITE 600
PHOENIX, ARIZONA 85034-1917

T: +1 602-733-6000
WSP.COM

TABLE OF CONTENTS

1 INTRODUCTION 1

2 DATA VALIDATION METHODOLOGY 2

3 EXPLANATION OF DATA QUALITY INDICATORS 3

3.1 Laboratory Control Sample Recoveries 3

3.2 Matrix Spike Recoveries 3

3.3 Blank Concentrations 3

3.4 Laboratory Duplicates 3

4 DEFINITIONS OF DATA VALIDATION QUALIFIERS 4

5 CHAIN OF CUSTODY AND SAMPLE RECEIPT CONDITION DOCUMENTATION 5

6 SPECIFIC DATA VALIDATION FINDINGS 6

6.1 Metals By EPA Methods 200.7, 200.8, and 245.1 6

6.1.1 Holding Times 6

6.1.2 Laboratory Blanks 6

6.1.3 Laboratory Control Sample Accuracy and Precision 6

6.1.4 Matrix Spikes/Matrix Spike Duplicates 6

6.1.5 Analytical Sensitivity 6

6.2 Anions by EPA Method 300.0 7

6.2.1 Holding Times 7

6.2.2 Laboratory Blanks 7

6.2.3 Laboratory Control Sample Accuracy and Precision 7

6.2.4 Matrix Spikes/Matrix Spike Duplicates 7

6.2.5 Laboratory Duplicates 7

6.2.6 Analytical Sensitivity 7

6.3 Total Dissolved Solids by SM 2540C 7

6.3.1 Holding Times 7
6.3.2 Laboratory Blanks 8
6.3.3 Laboratory Control Sample Accuracy and Precision 8
6.3.4 Laboratory Duplicates 8
6.4 pH by SM 4500B 8
6.4.1 Holding Times 8
6.4.2 Laboratory Control Sample Accuracy and Precision 8
6.4.3 Laboratory Duplicates 8
6.5 General Chemistry by SM 2320B 8
6.5.1 Holding Times 8
6.5.2 Laboratory Control Sample Accuracy and Precision 8
6.5.3 Laboratory Duplicates 9
6.6 Radium by EPA Methods 903.0 and 904.0 9
6.6.1 Holding Time 9
6.6.2 Laboratory Blanks 9
6.6.3 Laboratory Control Sample Accuracy and Precision 9
6.6.4 Carrier Accuracy 9
6.6.5 Analytical Sensitivity 9
7 FIELD DUPLICATES 10
8 SUMMARY AND CONCLUSIONS 11
9 LIMITATIONS 12
BIBLIOGRAPHY 13

TABLES

TABLE 1	FIELD SAMPLES SUBMITTED TO ANALYTICAL LABORATORIES
TABLE 2	FIELD DUPLICATE DETECTIONS
TABLE 3	QUALIFIERS ADDED DURING DATA VALIDATION

APPENDICES

APPENDIX A	DATA ASSESSMENT CHECKLISTS BY SAMPLE DELIVERY GROUP

ACRONYMS AND ABBREVIATIONS

%	percent
APS	Arizona Public Service Company
BTVs	background threshold value(s)
CCR	coal combustion residuals
CLP	Contract Laboratory Program
COC	chain of custody
EPA	United States Environmental Protection Agency
GWPS(s)	Groundwater Protection Standard(s)
LCS	laboratory control sample
LCSD	laboratory control sample
MCL	maximum contaminant level
mg/L	milligrams per liter
MS	matrix spike
MSD	matrix spike duplicate
QC	quality control
RL	reporting limit
RPD	relative percent difference
SAP	sampling and analysis plan
SDG	sample delivery group
SM	Standard Method
TDS	total dissolved solids
Wood	Wood Environment & Infrastructure Solutions, Inc.
WSP	WSP USA Environment & Infrastructure Inc

1 INTRODUCTION

Arizona Public Service (APS) collected groundwater Detection and Assessment Monitoring samples to support Coal Combustion Residuals (CCR) Rule Compliance during the 2023 calendar year (the reporting period) at the APS Four Corners Power Plant, located near Fruitland, New Mexico. This report presents the standard methods used to validate reporting period data and documents the results of the data validation process in summary tables and checklists generated as the samples were collected throughout the year.

2 DATA VALIDATION METHODOLOGY

WSP USA Environment & Infrastructure Inc (WSP) performed a United States Environmental Protection Agency (EPA) Stage 2A validation on samples collected by APS during the 2023 calendar year. This is equivalent to a Level I data evaluation as defined in the project sampling and analysis plan (SAP). The Stage 2A validation includes review of the quality control (QC) results in laboratory analytical reports and does not include review or validation of the raw analytical data. Data validation activities have been performed in general accordance with:

- EPA, 2004. SW 846 Test Methods for Evaluating Solid Wastes, Update IIIB.
- EPA, 2017. EPA Contract Laboratory Program (CLP) National Functional Guidelines for Inorganic Superfund Data Review, EPA 540-R-2017-001.
- Wood, 2022. Groundwater Sampling and Analysis Program, Coal Combustion Residuals Rule Groundwater Monitoring System Compliance, Four Corners Power Plant, Fruitland, New Mexico.

The CLP guidelines were written specifically for the CLP, and have been modified for the purposes of data reviews conducted during the reporting period where they differ from method-specific QC requirements.

During each groundwater monitoring round conducted during the reporting period, the laboratory's certified analytical report and supporting documentation were reviewed to assess the following:

- Data package and electronic data deliverable completeness;
- Chain of custody (COC) compliance;
- Holding time compliance;
- Presence or absence of laboratory contamination as demonstrated by laboratory blanks;
- Accuracy and bias as demonstrated by recovery of laboratory control sample (LCS) and matrix spike (MS) samples;
- Analytical precision as relative percent difference (RPD) of analyte concentration between laboratory duplicates, LCS/LCS duplicates (LCSDs), or MSs/MS duplicates (MSDs);
- Insofar as possible, the degree of conformance to method requirements and good laboratory practices.

Appendix A presents data assessment checklists generated for each sample delivery group submitted to the analytical laboratory during the reporting period. The laboratory performing the analyses as well as the methods of analysis are presented in the individual checklists. **Table 1** presents a comprehensive listing of reporting period samples and **Table 2** summarizes field duplicate detections at concentrations greater than analytical reporting limits.

In general, it is important to recognize that no analytical data are guaranteed to be correct, even if all QC audits are passed. Strict QC serves to increase confidence in data, but any reported value may potentially contain error.

3 EXPLANATION OF DATA QUALITY INDICATORS

Summary explanations of the specific data quality indicators reviewed during data validation are presented below.

3.1 LABORATORY CONTROL SAMPLE RECOVERIES

LCSs are aliquots of analyte free matrices that are spiked with the analytes of interest for an analytical method, or a representative subset of those analytes. The spiked matrix is then processed through the same analytical procedures as the samples it accompanies. LCS recovery is an indication of a laboratory's ability to successfully perform an analytical method in an interference free matrix.

3.2 MATRIX SPIKE RECOVERIES

MSs and MSDs are prepared by adding known amounts of the analytes of interest for an analytical method, or a representative subset of those analytes, to an aliquot of sample. The spiked sample is then processed through the same extraction, concentration, cleanup, and analytical procedures as the unspiked samples in an analytical batch.

MS recovery and precision are an indication of a laboratory's ability to successfully recover an analyte in the matrix of a specific sample or closely related sample matrices. It is important not to apply MS results for any specific sample to other samples without understanding how the sample matrices are related.

3.3 BLANK CONCENTRATIONS

Blank samples are aliquots of analyte free matrix that are used as negative controls to verify that the sample collection, storage, preparation, and analysis system does not produce false positive results.

Laboratory blanks are processed by the laboratory using exactly the same procedures as the field samples. Target analytes should not be found in laboratory blanks.

When target analytes are detected in blanks, analyte concentrations in associated samples less than five times the concentration detected in the blank will be U qualified as being not detected.

3.4 LABORATORY DUPLICATES

Laboratory duplicate analysis verifies acceptable method precision by the laboratory at the time of preparation and analysis and/or sampling precision at the time of collection.

4 DEFINITIONS OF DATA VALIDATION QUALIFIERS

The following qualifiers may be added to the data during data validation:

J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to measure the analyte accurately and precisely in the sample.

5 CHAIN OF CUSTODY AND SAMPLE RECEIPT CONDITION DOCUMENTATION

Unless otherwise noted in the Data Assessment Checklists included in **Appendix A**, the samples were received at the laboratories under proper COC, intact, properly preserved, and at temperatures less than the SAP-specified maximum of 6 degrees Celsius.

6 SPECIFIC DATA VALIDATION FINDINGS

Results for groundwater monitoring samples collected in 2023 may be considered usable with the limitations and exceptions summarized in **Table 3**.

The following sections identify requirements used in data assessment. Laboratory-specified limits are noted on the Data Assessment Checklists included in **Appendix A**.

6.1 METALS BY EPA METHODS 200.7, 200.8, AND 245.1

6.1.1 HOLDING TIMES

Samples must be analyzed for metals within the SAP-specified holding time of 28 days for mercury and 180 days for additional metals.

6.1.2 LABORATORY BLANKS

Target analytes must not be detected in the laboratory blanks associated with the analysis of site samples.

6.1.3 LABORATORY CONTROL SAMPLE ACCURACY AND PRECISION

LCS and LCSD recoveries must be within the laboratory-specified limits and RPDs between the LCS and LCSD results must be less than the laboratory-specified maximum.

6.1.4 MATRIX SPIKES/MATRIX SPIKE DUPLICATES

Laboratories performed MS and MSD analysis on the project samples specified in the Data Assessment Checklists included in **Appendix A**. MS/MSD recoveries must be within laboratory-specified limits and RPDs between MS and MSD results must be less than the laboratory-specified maximum.

6.1.5 ANALYTICAL SENSITIVITY

Reporting levels (RLs) for antimony, arsenic, barium, beryllium, cadmium, chromium, mercury, selenium, and thallium must be sufficiently low to meet the National Primary Drinking Water Regulation Maximum Contamination Limits (MCLs). RLs or cobalt, lead, lithium, and molybdenum must be sufficiently low to meet alternative Groundwater Protection Standards (GWPSs).

Boron and calcium are not EPA-regulated analytes in groundwater, and it is not possible to evaluate the RLs for these analytes against the National Primary Drinking Water Regulation MCLs.

6.2 ANIONS BY EPA METHOD 300.0

6.2.1 HOLDING TIMES

Samples must be analyzed for anions within the SAP-specified holding time of 28 days.

6.2.2 LABORATORY BLANKS

Fluoride, chloride, and sulfate must not be detected in the laboratory blanks associated with the analysis of these samples.

6.2.3 LABORATORY CONTROL SAMPLE ACCURACY AND PRECISION

LCS and LCSD recoveries must be within the laboratory-specified limits and RPDs between the LCS and LCSD results must be less than the laboratory-specified maximum values.

6.2.4 MATRIX SPIKES/MATRIX SPIKE DUPLICATES

Laboratories performed MS and MSD analysis on the project samples specified in the Data Assessment Checklists included in **Appendix A**. Recoveries must be within the laboratory-specified limits. RPDs between MS and MSD results must be less than the laboratory-specified limit.

6.2.5 LABORATORY DUPLICATES

Laboratories performed duplicate analysis on the project samples specified in the Data Assessment Checklists included in **Appendix A**. The RPDs between duplicate results must be less than the laboratory-specified limit.

6.2.6 ANALYTICAL SENSITIVITY

Fluoride RLs must be sufficiently low to meet the 4 milligrams per liter (mg/L) MCL. Chloride and sulfate are not EPA-regulated analytes in groundwater, and it is not possible to evaluate the RLs for these analytes against the Primary Drinking Water Regulation MCLs.

There are applicable CCR Groundwater Monitoring Program Background Threshold Values (BTVs) for fluoride, chloride, and sulfate for the site. Analytical sensitivity must also be evaluated for these site-specific comparison criteria.

6.3 TOTAL DISSOLVED SOLIDS BY SM 2540C

6.3.1 HOLDING TIMES

All samples must be analyzed for TDS within the SAP-specified holding time of 7 days.

6.3.2 LABORATORY BLANKS

TDS must not be detected in the laboratory blanks at concentrations above the reporting limit.

6.3.3 LABORATORY CONTROL SAMPLE ACCURACY AND PRECISION

LCS and LCSD recoveries must be within the laboratory-specified limits and RPDs between the LCS and LCSD results must be less than the laboratory-specified maximum.

6.3.4 LABORATORY DUPLICATES

Laboratories performed duplicate analysis for TDS on the project samples specified in the Data Assessment Checklists included in **Appendix A**. RPDs between primary sample and laboratory duplicate results must be less than the laboratory-specified limit.

6.4 PH BY SM 4500B

6.4.1 HOLDING TIMES

All samples must be analyzed for pH within 15 minutes of sample collection.

6.4.2 LABORATORY CONTROL SAMPLE ACCURACY AND PRECISION

LCS recoveries must be within the laboratory-specified limits.

6.4.3 LABORATORY DUPLICATES

Laboratories performed duplicate analysis for pH on the project samples specified in the Data Assessment Checklists included in **Appendix A**. RPDs between primary sample and laboratory duplicate results must be less than the laboratory-specified limit.

6.5 GENERAL CHEMISTRY BY SM 2320B

6.5.1 HOLDING TIMES

Samples must be analyzed for alkalinity within 14 days of sample collection.

6.5.2 LABORATORY CONTROL SAMPLE ACCURACY AND PRECISION

LCS recoveries must be within the laboratory-specified limits.

6.5.3 LABORATORY DUPLICATES

Laboratories performed duplicate analysis on the project samples specified in the Data Assessment Checklists included in **Appendix A.** RPDs between primary sample and laboratory duplicate results must be less than the laboratory-specified limit.

6.6 RADIUM BY EPA METHODS 903.0 AND 904.0

6.6.1 HOLDING TIME

All samples must be analyzed for radium within the EPA-recommended holding time of 6 months.

6.6.2 LABORATORY BLANKS

Radium must not be detected in the laboratory blanks at concentrations above the reporting limit.

6.6.3 LABORATORY CONTROL SAMPLE ACCURACY AND PRECISION

LCS and LCSD recoveries must be within laboratory-specified limits.

6.6.4 CARRIER ACCURACY

Carrier recoveries must be within the laboratory-specified limits.

6.6.5 ANALYTICAL SENSITIVITY

Total radium RLs must be sufficiently low to meet the MCL of 5 picocuries per liter. Pending development of applicable CCR Groundwater Monitoring Program BTVs and/or GPSs for the site, analytical sensitivity must also be evaluated for these site-specific comparison criteria.

7 FIELD DUPLICATES

APS collected field duplicate samples of the specified field original samples as specified in **Table 1**. Target analyte detections are summarized in **Table 2.** Precision values must be less than or equal-to the SAP-specified maximum of 20 percent (%), or the differences between the detected concentrations must be less than or equal-to the RLs.

8 SUMMARY AND CONCLUSIONS

Data are usable with the addition of qualifiers as presented in **Table 3**. The amount of qualified data was reduced by approximately 16% compared to the 2022 data. Similarly to past sampling events, the primary data qualifier reason code for 2023 qualified data was holding time exceedances for pH by SM 4500B. However, significantly more data included J-qualifiers for high laboratory control sample recoveries in 2023 when compared to past sampling events. Approximately (55) 2023 analytical results included J-qualifiers for high laboratory control sample recoveries in 2023 and no data included J-qualifiers for this same reason in 2022.

9 LIMITATIONS

This report was prepared exclusively for Arizona Public Service by WSP USA Environment & Infrastructure, Inc. The quality of information, conclusions, and estimates contained herein is consistent with the level of effort involved in WSP services and based on: i) information available at the time of preparation, ii) data supplied by outside sources, and iii) the assumptions, conditions, and qualifications set forth in this report. This data validation report is intended to be used by Arizona Public Service for the Four Corners Power Plant site only, subject to the terms and conditions of its contract with WSP. Any other use of, or reliance on, this report by any third party is at that party's sole risk.

BIBLIOGRAPHY

- EPA, 2017. EPA Contract Laboratory Program (CLP) National Functional Guidelines for Inorganic Superfund Data Review, EPA 540-R-2017-001.
- EPA, 2004. SW 846 Test Methods for Evaluating Solid Wastes, Update IIIB.
- Wood, 2022. Groundwater Sampling and Analysis Program, Coal Combustion Residuals Rule Groundwater Monitoring System Compliance, Four Corners Power Plant, Fruitland, New Mexico.

TABLES

TABLE 1
FIELD SAMPLES SUBMITTED TO ANALYTICAL LABORATORIES
Coal Combustion Residuals Rule
2023 Compliance Monitoring Groundwater Data

Sampling Program	CCR Unit	Collection Date and Time	Field Sample Identification	Eurofins TestAmerica Phoenix Sample Identification	Radiation Safety Engineering Sample Identification	Notes
Assessment	CWTP	1/27/2023 12:24	FC-CCR-MW62-0123	550-196988-1	--	
Assessment	CWTP/URS	1/27/2023 16:00	FC-CCR-MW71-0123	550-196988-2	--	
Assessment	CWTP/URS	1/27/2023 15:17	FC-CCR-MW72-0123	550-196988-3	--	
Assessment	CWTP/URS	1/27/2023 14:05	FC-CCR-MW73-0123	550-196988-4	--	
Assessment	CWTP	1/27/2023 13:24	FC-CCR-SW1-0123	550-196988-5	--	
Assessment	CWTP	1/27/2023 12:50	FC-CCR-SW2-0123	550-196988-6	--	
Assessment	CWTP	1/27/2023 12:45	FC-CCR-SW3-0123	550-196988-7	--	
Assessment	CWTP	1/27/2023 14:40	FC-CCR-FD01-0123	550-196988-8	--	Field Duplicate of FC-CCR-SW3-0123
Assessment	QC	1/28/2023 14:18	FC-CCR-EB01-0123	550-196988-9	--	Equipment blank
Assessment	CWTP	5/7/2023 14:12	FC-CCR-MW62-0523	550-201909-1	71770	
Assessment	CWTP	5/7/2023 15:41	FC-CCR-MW63-0523	550-201909-2	71771	
Assessment	CWTP	5/7/2023 16:13	FC-CCR-MW64-0523	550-201909-3	71772	
Assessment	CWTP	5/7/2023 11:53	FC-CCR-MW65-0523	550-201909-4	71773	
Assessment	CWTP	5/7/2023 18:42	FC-CCR-SW1-0523	550-201909-5	71774	
Assessment	CWTP	5/7/2023 15:06	FC-CCR-SW2-0523	550-201909-6	71775	
Assessment	CWTP	5/7/2023 15:13	FC-CCR-SW3-0523	550-201909-7	71776	
Assessment	CWTP	5/7/2023 12:34	FC-CCR-FD08-0523	550-201909-8	71777	Field duplicate of FC-CCR-SW1-0523
Assessment	URS	5/7/2023 12:45	FC-CCR-MW66-0523	550-201909-9	71778	
Assessment	URS	5/7/2023 10:59	FC-CCR-MW70-0523	550-201909-10	71779	
Assessment	CWTP/URS	5/7/2023 18:15	FC-CCR-MW73-0523	550-201909-11	71780	
Assessment	URS	5/7/2023 17:21	FC-CCR-MW83-0523	550-201909-12	71781	
Assessment	URS	5/7/2023 13:25	FC-CCR-MW86-0523	550-201909-13	71782	
Assessment	URS	5/7/2023 16:20	FC-CCR-FD02-0523	550-201909-14	71783	Field duplicate of FC-CCR-MW86-0523
Assessment	Multiunit 1	5/2/2023 14:10	FC-CCR-MW52-0523	550-201909-15	--	
Assessment	Multiunit 1	5/4/2023 9:54	FC-CCR-MW61-0523	550-201909-16	71784	
Assessment	Multiunit 1	5/5/2023 10:42	FC-CCR-MW75-0523	550-201909-17	71785	
Assessment	Multiunit 1	5/5/2023 18:06	FC-CCR-MW87-0523	550-201909-18	71786	
Assessment	Multiunit 1	5/2/2023 16:20	FC-CCR-FD03-0523	550-201909-19	--	Field duplicate of FC-CCR-MW52-0523
Assessment	Additional	5/3/2023 14:08	FC-CCR-DMX01-0523	550-201909-20	--	
Assessment	Multiunit 1	5/3/2023 16:47	FC-CCR-DMX03-0523	550-201909-21	71787	
Assessment	Multiunit 1	5/4/2023 16:55	FC-CCR-DMX04-0523	550-201909-22	71788	
Assessment	Additional	5/2/2023 15:42	FC-CCR-MW01-0523	550-201909-23	--	

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FIELD SAMPLES SUBMITTED TO ANALYTICAL LABORATORIES
Coal Combustion Residuals Rule
2023 Compliance Monitoring Groundwater Data

Sampling Program	CCR Unit	Collection Date and Time	Field Sample Identification	Eurofins TestAmerica Phoenix Sample Identification	Radiation Safety Engineering Sample Identification	Notes
Assessment	Additional	5/2/2023 16:25	FC-CCR-MW03-0523	550-201909-24	--	
Assessment	Multiunit 1	5/3/2023 17:38	FC-CCR-MW05-0523	550-201909-25	--	
Assessment	Multiunit 1	5/4/2023 16:13	FC-CCR-MW06-0523	550-201909-26	71789	
Assessment	Additional	5/5/2023 16:31	FC-CCR-MW11-0523	550-201909-27	--	
Assessment	Additional	5/3/2023 12:34	FC-CCR-FD04-0523	550-201909-28	--	Field duplicate of FC-CCR-DMX01-0523
Assessment	Multiunit 1	5/4/2023 14:34	FC-CCR-MW17R-0523	550-201909-29	71790	
Assessment	Multiunit 1	5/4/2023 11:50	FC-CCR-MW18-0523	550-201909-30	--	
Assessment	Additional	5/3/2023 15:07	FC-CCR-MW19-0523	550-201909-31	--	
Assessment	Additional	5/2/2023 17:06	FC-CCR-MW21-0523	550-201909-32	--	
Assessment	Multiunit 1	5/3/2023 16:02	FC-CCR-MW23R-0523	550-201909-33	--	
Assessment	Multiunit 1	5/4/2023 18:12	FC-CCR-MW24-0523	550-201909-34	--	
Assessment	Additional	5/3/2023 9:50	FC-CCR-MW30-0523	550-201909-35	--	
Assessment	Multiunit 1	5/4/2023 12:44	FC-CCR-MW36R-0523	550-201909-36	--	
Assessment	Multiunit 1	5/5/2023 11:20	FC-CCR-MW38R-0523	550-201909-37	71791	
Assessment	Multiunit 1	5/4/2023 13:33	FC-CCR-MW56-0523	550-201909-38	71792	
Assessment	Additional	5/3/2023 16:20	FC-CCR-FD06-0523	550-201909-39	--	Field duplicate of FC-CCR-MW30-0523
Assessment	Multiunit 1	5/5/2023 12:42	FC-CCR-MW57-0523	550-201909-40	71793	
Assessment	Multiunit 1	5/2/2023 15:04	FC-CCR-MW60-0523	550-201909-41	--	
Assessment	Additional	5/3/2023 10:48	FC-CCR-MW77S-0523	550-201909-42	--	
Assessment	Additional	5/3/2023 11:26	FC-CCR-MW78S-0523	550-201909-43	--	
Assessment	Additional	5/3/2023 12:54	FC-CCR-MW79S-0523	550-201909-44	--	
Assessment	Additional	5/3/2023 12:07	FC-CCR-MW81-0523	550-201909-45	--	
Assessment	Additional	5/5/2023 15:32	FC-CCR-MW82S-0523	550-201909-46	--	
Assessment	Additional	5/3/2023 13:31	FC-CCR-FD07-0523	550-201909-47	--	Field duplicate of FC-CCR-MW81-0523
Assessment	Additional	5/3/2023 20:02	FC-CCR-FD05-0523	550-201909-48	--	Field duplicate of FC-CCR-MW19-0523
Assessment	Additional	5/5/2023 8:14	FC-CCR-SUMP1-0523	550-201909-49	--	
Assessment	Additional	5/5/2023 8:27	FC-CCR-SUMP2-0523	550-201909-50	--	
Assessment	Additional	5/5/2023 8:44	FC-CCR-SUMP3-0523	550-201909-51	--	
Assessment	Additional	5/5/2023 8:51	FC-CCR-SUMP7-0523	550-201909-52	--	
Assessment	Additional	5/5/2023 9:00	FC-CCR-SUMP8-0523	550-201909-53	--	
Assessment	Additional	5/5/2023 9:08	FC-CCR-SUMP9-0523	550-201909-54	--	
Assessment	Additional	5/5/2023 9:15	FC-CCR-SUMP10-0523	550-201909-55	--	

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2023 Compliance Monitoring Groundwater Data

Sampling Program	CCR Unit	Collection Date and Time	Field Sample Identification	Eurofins TestAmerica Phoenix Sample Identification	Radiation Safety Engineering Sample Identification	Notes
Assessment	Additional	5/5/2023 9:21	FC-CCR-SUMP11-0523	550-201909-56	--	
Assessment	Additional	5/5/2023 9:29	FC-CCR-SUMP12-0523	550-201909-57	--	
Assessment	Additional	5/5/2023 9:36	FC-CCR-SUMP13-0523	550-201909-58	--	
Assessment	Additional	5/5/2023 9:45	FC-CCR-SUMP14-0523	550-201909-59	--	
Assessment	Additional	5/5/2023 9:48	FC-CCR-SUMP15-0523	550-201909-60	--	
Assessment	Additional	5/5/2023 9:56	FC-CCR-SUMP16-0523	550-201909-61	--	
Assessment	Additional	5/5/2023 10:03	FC-CCR-SUMP17-0523	550-201909-62	--	
Assessment	Additional	5/5/2023 10:08	FC-CCR-SUMP18-0523	550-201909-63	--	
Assessment	Multiunit 1	5/8/2023 10:28	FC-CCR-DMX06-0523	550-202029-1	71817	
Assessment	Multiunit 1	5/8/2023 11:18	FC-CCR-MW15-0523	550-202029-2	71818	
Assessment	Multiunit 1	5/8/2023 12:38	FC-CCR-MW16-0523	550-202029-3	71819	
Assessment	QC	5/10/2023 9:25	FC-CCR-EB01-0523	550-202029-4	71820	Equipment blank
Assessment	Additional	5/8/2023 13:22	FC-CCR-EW17-0523	550-202029-5	--	
Assessment	Additional	5/9/2023 9:04	FC-CCR-APV6-0523	550-202029-6	71821	
Assessment	Multiunit 1	5/8/2023 15:18	FC-CCR-MW07-0523	550-202030-1	71822	
Assessment	Multiunit 1	5/8/2023 14:07	FC-CCR-MW08-0523	550-202030-2	71823	
Assessment	Multiunit 1	5/8/2023 16:34	FC-CCR-MW49A-0523	550-202030-3	71824	
Assessment	URS	5/9/2023 13:25	FC-CCR-MW67-0523	550-202031-1	71807	
Assessment	URS	5/9/2023 16:20	FC-CCR-FD01-0523	550-202031-10	71816	Field duplicate of FC-CCR-MW84-0523
Assessment	URS	5/9/2023 10:49	FC-CCR-MW68-0523	550-202031-2	71808	
Assessment	URS	5/9/2023 10:07	FC-CCR-MW69-0523	550-202031-3	71809	
Assessment	CWTP/URS	5/8/2023 19:13	FC-CCR-MW71-0523	550-202031-4	71810	
Assessment	CWTP/URS	5/8/2023 18:14	FC-CCR-MW72-0523	550-202031-5	71811	
Assessment	URS	5/9/2023 12:39	FC-CCR-MW84-0523	550-202031-6	71812	
Assessment	URS	5/9/2023 14:13	FC-CCR-MW85-0523	550-202031-7	71813	
Assessment	URS	5/9/2023 11:43	FC-CCR-CM01-0523	550-202031-8	71814	
Assessment	URS	5/9/2023 11:48	FC-CCR-CM02-0523	550-202031-9	71815	
Assessment	CWTP/URS	6/27/2023 18:34	FC-CCR-MW71-0623	550-204020-1	72135	
Assessment	CWTP/URS	6/27/2023 17:31	FC-CCR-MW72-0623	550-204020-2	72136	
Assessment	CWTP/URS	6/27/2023 16:23	FC-CCR-MW73-0623	550-204020-3	72137	
Assessment	CWTP	6/28/2023 11:55	FC-CCR-MW62-0623	550-204018-1	72138	
Assessment	CWTP	6/27/2023 14:41	FC-CCR-MW63-0623	550-204018-2	72139	

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2023 Compliance Monitoring Groundwater Data

Sampling Program	CCR Unit	Collection Date and Time	Field Sample Identification	Eurofins TestAmerica Phoenix Sample Identification	Radiation Safety Engineering Sample Identification	Notes
Assessment	CWTP	6/27/2023 12:33	FC-CCR-MW64-0623	550-204018-3	72140	
Assessment	CWTP	6/28/2023 13:01	FC-CCR-MW65-0623	550-204018-4	72141	
Assessment	CWTP	6/28/2023 10:08	FC-CCR-SW1-0623	550-204018-5	72142	
Assessment	CWTP	6/27/2023 13:17	FC-CCR-SW2-0623	550-204018-6	72143	
Assessment	CWTP	6/27/2023 13:31	FC-CCR-SW3-0623	550-204018-7	72144	
Assessment	CWTP	6/28/2023 14:20	FC-CCR-FD01-0623	550-204018-8	72145	Field duplicate of FC-CCR-SW1-0623
Assessment	URS	11/6/2023 16:10	FC-CCR-MW66-1123	550-210427-1	73172	
Assessment	URS	11/6/2023 17:08	FC-CCR-MW70-1123	550-210427-2	73173	
Assessment	URS	11/6/2023 11:06	FC-CCR-MW71-1123	550-210427-3	73174	
Assessment	URS	11/6/2023 12:13	FC-CCR-MW72-1123	550-210427-4	73175	
Assessment	URS	11/6/2023 13:16	FC-CCR-MW73-1123	550-210427-5	73176	
Assessment	URS	11/6/2023 15:25	FC-CCR-MW86-1123	550-210427-6	73177	
Assessment	CWTP	11/6/2023 11:27	FC-CCR-MW62-1123	550-210426-1	73178	
Assessment	CWTP	11/6/2023 12:35	FC-CCR-MW63-1123	550-210426-2	73179	
Assessment	CWTP	11/6/2023 13:29	FC-CCR-MW64-1123	550-210426-3	73180	
Assessment	CWTP	11/6/2023 14:34	FC-CCR-MW65-1123	550-210426-4	73181	
Assessment	Multiunit 1	11/9/2023 12:50	FC-CCR-MW61-1123	--	73182	
Assessment	Multiunit 1	11/8/2023 15:39	FC-CCR-MW75-1123	--	73183	
Assessment	CWTP	11/13/2023 11:13	FC-CCR-SW1-1123	550-210591-1	73264	
Assessment	CWTP	11/13/2023 10:45	FC-CCR-SW2-1123	550-210591-2	73265	
Assessment	CWTP	11/13/2023 10:20	FC-CCR-SW3-1123	550-210591-3	73266	
Assessment	CWTP	11/13/2023 16:20	FC-CCR-FD08-1123	550-210591-4	73267	Field duplicate of FC-CCR-SW1-1123
Assessment	URS	11/13/2023 9:18	FC-CCR-MW67-1123	550-210593-1	73268	
Assessment	URS	11/11/2023 11:28	FC-CCR-MW68-1123	550-210593-2	73269	
Assessment	URS	11/11/2023 10:33	FC-CCR-MW69-1123	550-210593-3	73270	
Assessment	URS	11/11/2023 14:10	FC-CCR-MW83-1123	550-210593-4	73271	
Assessment	URS	11/11/2023 15:53	FC-CCR-MW84-1123	550-210593-5	73272	
Assessment	URS	11/11/2023 15:03	FC-CCR-MW85-1123	550-210593-6	73273	
Assessment	URS	11/11/2023 8:53	FC-CCR-FD01-1123	550-210593-7	73274	Field Duplicate of FC-CCR-MW84-1123
Assessment	URS	11/13/2023 9:41	FC-CCR-CM01-1123	550-210593-8	73275	
Assessment	URS	11/13/2023 9:52	FC-CCR-CM02-1123	550-210593-9	73276	
Assessment	Multiunit 1	11/15/2023 14:31	FC-CCR-MW07-1123	550-210745-1	73277	

TABLE 1
FIELD SAMPLES SUBMITTED TO ANALYTICAL LABORATORIES
Coal Combustion Residuals Rule
2023 Compliance Monitoring Groundwater Data

Sampling Program	CCR Unit	Collection Date and Time	Field Sample Identification	Eurofins TestAmerica Phoenix Sample Identification	Radiation Safety Engineering Sample Identification	Notes
Assessment	Multiunit 1	11/15/2023 13:33	FC-CCR-MW08-1123	550-210745-2	73278	
Assessment	Multiunit 1	11/15/2023 16:59	FC-CCR-MW49A-1123	550-210745-3	73279	
Assessment	Other	11/10/2023 14:45	FC-CCR-DMX01-1123	550-210594-1	--	
Assessment	Other	11/13/2023 14:51	FC-CCR-DMX03-1123	550-210594-2	73252	
Assessment	Other	11/14/2023 17:30	FC-CCR-DMX04-1123	550-210594-3	73253	
Assessment	Other	11/13/2023 16:15	FC-CCR-MW05-1123	550-210594-4	--	
Assessment	Other	11/15/2023 9:15	FC-CCR-DMX06-1123	--	73254	
Assessment	Other	11/14/2023 18:21	FC-CCR-MW06R-1123	550-210594-5	73255	
Assessment	Other	11/10/2023 7:30	FC-CCR-FD04-1123	550-210594-6	--	Field Duplicate of FC-CCR-DMX01-1123
Assessment	Other	11/15/2023 10:33	FC-CCR-MW15-1123	--	73256	
Assessment	Other	11/15/2023 11:47	FC-CCR-MW16-1123	--	73257	
Assessment	Other	11/14/2023 14:07	FC-CCR-MW17R-1123	550-210594-7	73258	
Assessment	Other	11/14/2023 9:50	FC-CCR-MW18-1123	550-210594-8	--	
Assessment	Other	11/13/2023 14:04	FC-CCR-MW19-1123	550-210594-9	--	
Assessment	Other	11/14/2023 11:05	FC-CCR-MW23R-1123	550-210594-10	--	
Assessment	Other	11/14/2023 19:43	FC-CCR-MW24-1123	550-210594-11	--	
Assessment	Other	11/10/2023 10:04	FC-CCR-MW30-1123	550-210594-12	--	
Assessment	Other	11/14/2023 11:59	FC-CCR-MW36R-1123	550-210594-13	--	
Assessment	Other	11/14/2023 14:54	FC-CCR-MW38R-1123	550-210594-14	73259	
Assessment	Other	11/14/2023 12:52	FC-CCR-MW56-1123	550-210594-15	73260	
Assessment	Other	11/13/2023 13:11	FC-CCR-FD05-1123	550-210594-16	--	Field Duplicate of FC-CCR-MW19-1123
Assessment	Other	11/14/2023 16:03	FC-CCR-MW57-1123	550-210594-17	73261	
Assessment	Other	11/10/2023 11:00	FC-CCR-MW77S-1123	550-210594-18	--	
Assessment	Other	11/10/2023 11:45	FC-CCR-MW78S-1123	550-210594-19	--	
Assessment	Other	11/10/2023 13:41	FC-CCR-MW79S-1123	550-210594-20	--	
Assessment	Other	11/10/2023 12:28	FC-CCR-MW81-1123	550-210594-21	--	
Assessment	Other	11/10/2023 15:57	FC-CCR-MW82S-1123	550-210594-22	--	
Assessment	Other	11/10/2023 16:20	FC-CCR-FD06-1123	550-210594-23	--	Field Duplicate of FC-CCR-MW30-1123
Assessment	Other	11/10/2023 13:59	FC-CCR-FD07-1123	550-210594-24	--	Field Duplicate of FC-CCR-MW81-1123
Assessment	Other	11/10/2023 18:18	FC-CCR-FD02-1123	550-210594-25	--	Field Duplicate of FC-CCR-MW82S-1123
Assessment	Other	11/16/2023 11:38	FC-CCR-DMX05R-1123	--	73262	
Assessment	Other	11/16/2023 17:37	FC-CCR-EB01-1123	--	73263	Equipment blank

TABLE 1
FIELD SAMPLES SUBMITTED TO ANALYTICAL LABORATORIES
Coal Combustion Residuals Rule
2023 Compliance Monitoring Groundwater Data

Sampling Program	CCR Unit	Collection Date and Time	Field Sample Identification	Eurofins TestAmerica Phoenix Sample Identification	Radiation Safety Engineering Sample Identification	Notes
Assessment	Other	11/9/2023 15:20	FC-CCR-MW01-1123	550-210428-1	--	
Assessment	Other	11/9/2023 16:05	FC-CCR-MW03-1123	550-210428-2	--	
Assessment	Other	11/9/2023 16:52	FC-CCR-MW-21-1123	550-210428-3	--	
Assessment	Other	11/9/2023 14:30	FC-CCR-MW60-1123	550-210428-4	--	
Assessment	Other	11/9/2023 7:47	FC-CCR-SUMP1-1123	550-210428-5	--	
Assessment	Other	11/9/2023 8:01	FC-CCR-SUMP2-1123	550-210428-6	--	
Assessment	Other	11/9/2023 8:10	FC-CCR-SUMP3-1123	550-210428-7	--	
Assessment	Other	11/9/2023 8:35	FC-CCR-SUMP7-1123	550-210428-8	--	
Assessment	Other	11/9/2023 8:26	FC-CCR-SUMP8-1123	550-210428-9	--	
Assessment	Other	11/9/2023 8:45	FC-CCR-SUMP9-1123	550-210428-10	--	
Assessment	Other	11/9/2023 8:50	FC-CCR-SUMP10-1123	550-210428-11	--	
Assessment	Other	11/9/2023 8:55	FC-CCR-SUMP11-1123	550-210428-12	--	
Assessment	Other	11/9/2023 9:01	FC-CCR-SUMP12-1123	550-210428-13	--	
Assessment	Other	11/9/2023 9:07	FC-CCR-SUMP13-1123	550-210428-14	--	
Assessment	Other	11/9/2023 9:17	FC-CCR-SUMP14-1123	550-210428-15	--	
Assessment	Other	11/9/2023 9:23	FC-CCR-SUMP15-1123	550-210428-16	--	
Assessment	Other	11/9/2023 9:30	FC-CCR-SUMP16-1123	550-210428-17	--	
Assessment	Other	11/9/2023 9:33	FC-CCR-SUMP17-1123	550-210428-18	--	
Assessment	Other	11/9/2023 9:40	FC-CCR-SUMP18-1123	550-210428-19	--	
Assessment	Other	11/9/2023 9:53	FC-CCR-AshPond6-1123	550-210428-20	--	
Assessment	Other	11/15/2023 9:15	FC-CCR-DMX06-1123	550-210744-1	--	
Assessment	Other	11/15/2023 15:27	FC-CCR-MW11-1123	550-210744-2	--	
Assessment	Other	11/15/2023 10:33	FC-CCR-MW15-1123	550-210744-3	--	
Assessment	Other	11/15/2023 11:47	FC-CCR-MW16-1123	550-210744-4	--	
Assessment	Other	11/16/2023 11:38	FC-CCR-DMX05R-1123	550-210744-5	--	
Assessment	Other	11/15/2023 16:09	FC-CCR-EW17-1123	550-210744-6	--	
Assessment	Other	11/16/2023 9:53	FC-CCR-EW12R-1123	550-210744-7	--	
Assessment	Other	11/16/2023 10:41	FC-CCR-EW11R-1123	550-210744-8	--	
Assessment	Other	11/16/2023 17:23	FC-CCR-EW14-1123	550-210744-9	--	
Assessment	Other	11/16/2023 15:36	FC-CCR-EW15-1123	550-210744-10	--	
Assessment	Other	11/16/2023 16:35	FC-CCR-MW34-1123	550-210744-11	--	
Assessment	Other	11/16/2023 17:37	FC-CCR-EB01-1123	550-210744-12	--	Equipment blank

TABLE 1
FIELD SAMPLES SUBMITTED TO ANALYTICAL LABORATORIES
Coal Combustion Residuals Rule
2023 Compliance Monitoring Groundwater Data

Sampling Program	CCR Unit	Collection Date and Time	Field Sample Identification	Eurofins TestAmerica Phoenix Sample Identification	Radiation Safety Engineering Sample Identification	Notes
Assessment	Multiunit 1	11/8/2023 14:40	FC-CCR-MW52-1123	550-210429-1		
Assessment	Multiunit 1	11/9/2023 12:50	FC-CCR-MW61-1123	550-210429-2		
Assessment	Multiunit 1	11/8/2023 15:39	FC-CCR-MW75-1123	550-210429-3		
Assessment	Multiunit 1	11/8/2023 16:11	FC-CCR-FD03-1123	550-210429-4		Field Duplicate of FC-CCR-MW52-1123

TABLE 2
FIELD DUPLICATE DETECTIONS
Coal Combustion Residuals Rule
2023 Compliance Monitoring Groundwater Data

Analyte	Average Reporting Limit	Primary Result	Duplicate Result	RPD	Notes
Samples FC-CCR-SW3-0123 and FC-CCR-FD01-0123					
Boron	0.050 mg/L	0.31	0.31	0.0%	
Calcium	2.0 mg/L	88	89	1.1%	
Samples FC-CCR-MW84-0523 and FC-CCR-FD01-0523					
Chloride	10 mg/L	380	380	0.0%	
Sulfate	1,000 mg/L	6,000	6,000	0.0%	
Lithium	0.020 mg/L	0.31	0.31	0.0%	
Boron	0.050 mg/L	29	28	3.5%	
Calcium	2.0 mg/L	460	450	2.2%	
Barium	3.0 ug/L	9.4	9.9	5.2%	
Cobalt	1.0 ug/L	1.6	1.9	17%	
Nickel	3.0 ug/L	7.4	8.6	15%	
Selenium	5.0 ug/L	26	28	7.4%	
Total Dissolved Solids	100 mg/L	9,200	9,600	4.3%	
pH	1.7 SU	7.3	7.3	0.0%	
Radium 228	1 pCi/L	0.6 U	1.0 ± 0.3	NC	± RL
Total Radium	1 pCi/L	0.6 U	1.0 ± 0.3	NC	± RL
Samples FC-CCR-MW86-0523 and FC-CCR-FD02-0523					
Chloride	400 mg/L	720	690	4.3%	
Sulfate	400 mg/L	5,600	5,400	3.6%	
Lithium	0.020 mg/L	0.25	0.25	0.0%	
Boron	100 ug/L	49,000	49,000	0.0%	
Calcium	200 ug/L	470,000	470,000	0.0%	
Barium	3.0 ug/L	10	10	0.0%	
Cobalt	1.0 ug/L	1.3	1.2	8.0%	
Nickel	3.0 ug/L	9.7	10	3.0%	
Selenium	5.0 ug/L	12	12	0.0%	
Total Dissolved Solids	100 mg/L	9,300	9,400	1.1%	
pH	1.7 SU	7.3	7.3	0.0%	
Samples FC-CCR-MW52-0523 and FC-CCR-FD03-0523					
Boron	100 ug/L	11,000	9,300	17%	
Cobalt	1.0 ug/L	110	96	14%	
Molybdenum	2.0 ug/L	2.1	2.7	25%	± RL
Samples FC-CCR-DMX01-0523 and FC-CCR-FD04-0523					
Boron	750 ug/L	77,000	87,000	12%	
Cobalt	1.0 ug/L	2.0	1.7	16%	
Molybdenum	2.0 ug/L	11	11	0.0%	
Samples FC-CCR-MW19-0523 and FC-CCR-FD05-0523					
Boron	100 ug/L	2,300	2,500	8.3%	
Cobalt	1.0 ug/L	1.4	1.4	0.0%	
Molybdenum	2.0 ug/L	3.3	3.2	3.1%	
Samples FC-CCR-MW30-0523 and FC-CCR-FD06-0523					
Boron	100 ug/L	26,000	24,000	8.0%	
Cobalt	1.0 ug/L	1.3	1.2	8.0%	
Molybdenum	2.0 ug/L	4.8	4.8	0.0%	

TABLE 2
FIELD DUPLICATE DETECTIONS
Coal Combustion Residuals Rule
2023 Compliance Monitoring Groundwater Data

Analyte	Average Reporting Limit	Primary Result	Duplicate Result	RPD	Notes
Samples FC-CCR-MW81-0523 and FC-CCR-FD07-0523					
Boron	100 ug/L	49,000	49,000	0.0%	
Cobalt	1.0 ug/L	19	20	5.1%	
Molybdenum	2.0 ug/L	2.1	2.4	13%	
Samples FC-CCR-SW1-0523 and FC-CCR-FD08-0523					
Chloride	4.0 mg/L	52	52	0.0%	
Fluoride	0.80 mg/L	0.91	0.85	6.8%	
Sulfate	400 mg/L	450	460	2.2%	
Lithium	0.020 mg/L	0.087	0.092	5.6%	
Boron	100 ug/L	340	350	2.9%	
Calcium	200 ug/L	100,000	110,000	9.5%	
Barium	3.0 ug/L	200	190	5.1%	
Molybdenum	2.0 ug/L	6.1	6.5	6.3%	
Total Dissolved Solids	20 mg/L	910	860	5.6%	
pH	1.7 SU	8.6	8.7	1.2%	
Radium 228	1 pCi/L	0.6 U	0.8 ± 0.3	NC	± RL
Total Radium	1 pCi/L	0.6 U	0.8 ± 0.3	NC	± RL
Samples FC-CCR-SW1-0623 and FC-CCR-FD01-0623					
Chloride	4.0 mg/L	51	51	0.0%	
Fluoride	0.80 mg/L	0.83	0.84	1.2%	
Sulfate	40 mg/L	450	450	0.0%	
Lithium	0.020 mg/L	0.093	0.095	2.1%	
Boron	0.050 mg/L	0.34	0.35	2.9%	
Calcium	2.0 mg/L	84	89	5.8%	
Arsenic	0.50 ug/L	3.1	3.3	6.2%	
Barium	0.50 ug/L	180	170	5.7%	
Molybdenum	0.50 ug/L	6.5	6.5	0.0%	
Selenium	0.50 ug/L	0.66	0.92	33%	± RL
Thallium	0.10 ug/L	0.13	0.10 U	NC	± RL
Total Dissolved Solids	20 mg/L	820	800	2.5%	
pH	1.7 SU	8.6	8.5	1.2%	
Samples FC-CCR-SW1-1123 and FC-CCR-FD08-1123					
Chloride	4.0 mg/L	50	50	0.0%	
Fluoride	0.80 mg/L	0.97	0.94	3.1%	
Sulfate	400 mg/L	430	440	2.3%	
Boron	0.25 mg/L	0.55	0.31	56%	± RL
Calcium	10 mg/L	90	88	2.2%	
Magnesium	10 mg/L	36	33	8.7%	
Potassium	2.5 mg/L	8.5	8.1	4.8%	
Sodium	2.5 mg/L	130	120	8.0%	
Lithium	0.050 mg/L	0.10	0.10	0.0%	
Arsenic	0.0050 mg/L	0.0095	0.0089	7%	
Barium	0.0050 mg/L	0.17	0.18	5.7%	
Molybdenum	0.0050 mg/L	0.0062	0.0064	3.2%	
Alkalinity as CaCO3	6.0 mg/L	110	110	0.0%	
Bicarbonate Alkalinity as CaCO3	6.0 mg/L	110	110	0%	
Total Dissolved Solids	20 mg/L	780	800	2.5%	
pH	1.7 SU	8.6	8.5	1.2%	

TABLE 2
FIELD DUPLICATE DETECTIONS
Coal Combustion Residuals Rule
2023 Compliance Monitoring Groundwater Data

Analyte	Average Reporting Limit	Primary Result	Duplicate Result	RPD	Notes
Samples FC-CCR-MW84-1123 and FC-CCR-FD01-1123					
Chloride	400 mg/L	890	890	0.0%	
Sulfate	400 mg/L	8,700	8,800	1.1%	
Boron	0.25 mg/L	66	71	7.3%	
Calcium	10 mg/L	530	550	4%	
Lithium	0.25 mg/L	0.47	0.67	35%	± RL
Arsenic	0.0050 mg/L	0.0077	0.0075	2.6%	
Barium	0.0050 mg/L	0.017	0.018	5.7%	
Cobalt	0.0050 mg/L	0.0077	0.0076	1.3%	
Selenium	0.0050 mg/L	0.067	0.067	0.0%	
Total Dissolved Solids	100 mg/L	15,000	15,000	0%	
pH	1.7 SU	7.2	7.2	0.0%	
Radium 226	1 pCi/L	0.5 U	1.5 ± 0.3	NC	J-FD
Radium 228	1 pCi/L	1.5 ± 0.4	3.0 ± 0.4	67%	J-FD
Total Radium	1 pCi/L	1.5 ± 0.4	4.5 ± 0.5	100%	J-FD
Samples FC-CCR-MW82S-1123 and FC-CCR-FD02-1123					
Chloride	400 mg/L	610	620	1.6%	
Sulfate	400 mg/L	5,700	5,700	0.0%	
Boron	0.25 mg/L	68	65	4.5%	
Calcium	10 mg/L	480	460	4%	
Magnesium	10 mg/L	790	750	5.2%	
Manganese	0.050 mg/L	2.0	1.9	5.1%	
Potassium	2.5 mg/L	25	24	4.1%	
Sodium	2.5 mg/L	1,600	1,500	6.5%	
Cobalt	5.0 ug/L	100	110	9.5%	
Alkalinity as CaCO3	6.0 mg/L	260	260	0%	
Bicarbonate Alkalinity as CaCO3	6.0 mg/L	260	260	0.0%	
Total Dissolved Solids	100 mg/L	9,800	9,900	1.0%	
pH	1.7 SU	7.3	7.2	1.4%	
Samples FC-CCR-MW52-1123 and FC-CCR-FD03-1123					
Boron	0.050 mg/L	11	10	9.5%	
Cobalt	0.50 ug/L	100	99	1.0%	
Molybdenum	0.50 ug/L	2.2	2.7	20%	
Samples FC-CCR-DMX01-1123 and FC-CCR-FD04-1123					
Boron	0.25 mg/L	90	92	2.2%	
Molybdenum	5.0 ug/L	23	22	4.4%	
Samples FC-CCR-MW19-1123 and FC-CCR-FD05-1123					
Boron	0.25 mg/L	2.1	2.1	0.0%	
Samples FC-CCR-MW30-1123 and FC-CCR-FD06-1123					
Boron	0.25 mg/L	25	26	3.9%	
Samples FC-CCR-MW81-1123 and FC-CCR-FD07-1123					
Boron	0.15 mg/L	50	47	6.2%	
Cobalt	5.0 ug/L	22	21	4.7%	

TABLE 3
QUALIFIERS ADDED DURING DATA VALIDATION
Coal Combustion Residuals Rule
2023 Compliance Monitoring Groundwater Data

Sample Identification	Sample Delivery Group	Analyte	Result	Qualifier and Reason Code
FC-CCR-DMX01-0523	201909	Cobalt	2.0 ug/L	J LM
FC-CCR-DMX03-0523	201909	pH	7.2 SU	J HT
FC-CCR-DMX04-0523	201909	pH	7.6 SU	J HT
FC-CCR-FD02-0523	201909	pH	7.3 SU	J HT
FC-CCR-FD08-0523	201909	pH	8.7 SU	J HT
FC-CCR-MW05-0523	201909	pH	7.1 SU	J HT
FC-CCR-MW06-0523	201909	pH	7.3 SU	J HT
FC-CCR-MW11-0523	201909	pH	6.8 SU	J HT
FC-CCR-MW17R-0523	201909	pH	7.4 SU	J HT
FC-CCR-MW18-0523	201909	pH	7.1 SU	J HT
FC-CCR-MW23R-0523	201909	pH	7.2 SU	J HT
FC-CCR-MW24-0523	201909	pH	7.4 SU	J HT
FC-CCR-MW36R-0523	201909	pH	7.4 SU	J HT
FC-CCR-MW38R-0523	201909	pH	7.4 SU	J HT
FC-CCR-MW56-0523	201909	pH	7.3 SU	J HT
FC-CCR-MW57-0523	201909	pH	7.4 SU	J HT
FC-CCR-MW61-0523	201909	pH	8.6 SU	J HT
FC-CCR-MW62-0523	201909	pH	7.0 SU	J HT
FC-CCR-MW63-0523	201909	pH	7.4 SU	J HT
FC-CCR-MW64-0523	201909	pH	7.8 SU	J HT
FC-CCR-MW65-0523	201909	pH	7.6 SU	J HT
FC-CCR-MW66-0523	201909	pH	7.4 SU	J HT
FC-CCR-MW70-0523	201909	pH	7.1 SU	J HT
FC-CCR-MW73-0523	201909	pH	7.0 SU	J HT
FC-CCR-MW75-0523	201909	pH	8.4 SU	J HT
FC-CCR-MW79S-0523	201909	Cobalt	3.5 ug/L	J LM
FC-CCR-MW82S-0523	201909	pH	7.2 SU	J HT
FC-CCR-MW83-0523	201909	pH	7.4 SU	J HT
FC-CCR-MW86-0523	201909	pH	7.3 SU	J HT
FC-CCR-MW87-0523	201909	pH	7.5 SU	J HT
FC-CCR-MW87-0523	201909	Total Dissolved Solids	54,000 mg/L	J MI
FC-CCR-SUMP15-0523	201909	Total Dissolved Solids	37,000 mg/L	J MI
FC-CCR-SW1-0523	201909	pH	8.6 SU	J HT
FC-CCR-SW2-0523	201909	pH	8.6 SU	J HT
FC-CCR-SW3-0523	201909	pH	8.7 SU	J HT
FC-CCR-SW3-0523	201909	Total Dissolved Solids	850 mg/L	J MI
FC-CCR-APV6-0523	202029	pH	7.3 SU	J HT
FC-CCR-DMX06-0523	202029	pH	7.4 SU	J HT
FC-CCR-MW15-0523	202029	pH	7.1 SU	J HT
FC-CCR-MW16-0523	202029	pH	7.3 SU	J HT
FC-CCR-MW07-0523	202030	pH	7.4 SU	J HT
FC-CCR-MW08-0523	202030	pH	7.3 SU	J HT
FC-CCR-MW49A-0523	202030	pH	7.3 SU	J HT
FC-CCR-CM01-0523	202031	pH	7.6 SU	J HT
FC-CCR-CM02-0523	202031	pH	7.1 SU	J HT

TABLE 3
QUALIFIERS ADDED DURING DATA VALIDATION
Coal Combustion Residuals Rule
2023 Compliance Monitoring Groundwater Data

Sample Identification	Sample Delivery Group	Analyte	Result	Qualifier and Reason Code
FC-CCR-FD01-0523	202031	pH	7.3 SU	J HT
FC-CCR-MW67-0523	202031	pH	7.2 SU	J HT
FC-CCR-MW67-0523	202031	Total Dissolved Solids	19,000 mg/L	J MI
FC-CCR-MW68-0523	202031	pH	7.1 SU	J HT
FC-CCR-MW68-0523	202031	pH	7.2 SU	J HT
FC-CCR-MW69-0523	202031	pH	7.4 SU	J HT
FC-CCR-MW69-0523	202031	Total Dissolved Solids	8,600 mg/L	J MI
FC-CCR-MW71-0523	202031	pH	7.2 SU	J HT
FC-CCR-MW72-0523	202031	pH	7.2 SU	J HT
FC-CCR-MW84-0523	202031	pH	7.3 SU	J HT
FC-CCR-MW85-0523	202031	pH	7.3 SU	J HT
FC-CCR-MW71-0623	204020	pH	7.0 SU	J HT
FC-CCR-MW72-0623	204020	pH	7.1 SU	J HT
FC-CCR-MW73-0623	204020	pH	6.9 SU	J HT
FC-CCR-MW62-0623	204018	pH	6.9 SU	J HT
FC-CCR-MW63-0623	204018	pH	7.3 SU	J HT
FC-CCR-MW64-0623	204018	pH	7.7 SU	J HT
FC-CCR-MW65-0623	204018	pH	7.6 SU	J HT
FC-CCR-SW1-0623	204018	pH	8.6 SU	J HT
FC-CCR-SW2-0623	204018	pH	8.6 SU	J HT
FC-CCR-SW3-0623	204018	pH	8.4 SU	J HT
FC-CCR-FD01-0623	204018	pH	8.5 SU	J HT
FC-CCR-FD08-1123	210591	pH	8.5 SU	J HT
FC-CCR-SW1-1123	210591	pH	8.6 SU	J HT
FC-CCR-SW2-1123	210591	Iron	3.7 mg/L	J HL
FC-CCR-SW2-1123	210591	pH	8.5 SU	J HT
FC-CCR-SW3-1123	210591	pH	8.3 SU	J HT
FC-CCR-MW66-1123	210427	Barium	0.019 mg/L	J HL, HD
FC-CCR-MW66-1123	210427	Boron	140 mg/L	J HL
FC-CCR-MW66-1123	210427	Calcium	550 mg/L	J HL
FC-CCR-MW66-1123	210427	pH	7.4 SU	J HT
FC-CCR-MW70-1123	210427	Barium	0.013 mg/L	J HL, HD
FC-CCR-MW70-1123	210427	Boron	99 mg/L	J HL
FC-CCR-MW70-1123	210427	Calcium	590 mg/L	J HL
FC-CCR-MW70-1123	210427	pH	7.2 SU	J HT
FC-CCR-MW71-1123	210427	Barium	0.010 mg/L	J HL, HD
FC-CCR-MW71-1123	210427	Boron	0.67 mg/L	J HL
FC-CCR-MW71-1123	210427	Calcium	540 mg/L	J HL
FC-CCR-MW71-1123	210427	pH	7.2 SU	J HT
FC-CCR-MW71-1123	210427	Total Dissolved Solids	20,000 mg/L	J HT
FC-CCR-MW72-1123	210427	Barium	0.008 mg/L	J HL, HD
FC-CCR-MW72-1123	210427	Boron	0.21 mg/L	J HL
FC-CCR-MW72-1123	210427	Calcium	500 mg/L	J HL
FC-CCR-MW72-1123	210427	pH	7.3 SU	J HT
FC-CCR-MW73-1123	210427	Barium	0.017 mg/L	J HL, HD

TABLE 3
QUALIFIERS ADDED DURING DATA VALIDATION
Coal Combustion Residuals Rule
2023 Compliance Monitoring Groundwater Data

Sample Identification	Sample Delivery Group	Analyte	Result	Qualifier and Reason Code
FC-CCR-MW73-1123	210427	Boron	1.7 mg/L	J HL
FC-CCR-MW73-1123	210427	Calcium	550 mg/L	J HL
FC-CCR-MW73-1123	210427	pH	7.2 SU	J HT
FC-CCR-MW86-1123	210427	Barium	0.013 mg/L	J HL, HD
FC-CCR-MW86-1123	210427	Boron	90 mg/L	J HL
FC-CCR-MW86-1123	210427	Calcium	530 mg/L	J HL
FC-CCR-MW86-1123	210427	pH	7.4 SU	J HT
FC-CCR-FD01-1123	73274	Radium 226	1.5 pCi/L	J FD
FC-CCR-FD01-1123	73274	Radium 228	3.0 pCi/L	J FD
FC-CCR-FD01-1123	73274	Total Radium	4.5 pCi/L	J FD
FC-CCR-MW84-1123	73272	Radium 226	0.53 pCi/L	UJ FD
FC-CCR-MW84-1123	73272	Radium 228	1.5 pCi/L	J FD
FC-CCR-MW84-1123	73272	Total Radium	1.5 pCi/L	J FD
FC-CCR-SUMP18-1123	210428	Chloride	1,600 mg/L	J LM
FC-CCR-SUMP18-1123	210428	Total Dissolved Solids	40,000 mg/L	J HT
FC-CCR-MW62-1123	210426	Barium	23 ug/L	J HL, HD
FC-CCR-MW62-1123	210426	Boron	2.9 mg/L	J HL
FC-CCR-MW62-1123	210426	Calcium	610 mg/L	J HL
FC-CCR-MW62-1123	210426	Iron	24 mg/L	J HL
FC-CCR-MW62-1123	210426	pH	7.0 SU	J HT
FC-CCR-MW63-1123	210426	Barium	25 ug/L	J HL, HD
FC-CCR-MW63-1123	210426	Boron	1.2 mg/L	J HL
FC-CCR-MW63-1123	210426	Calcium	440 mg/L	J HL
FC-CCR-MW63-1123	210426	Iron	0.19 mg/L	J HL
FC-CCR-MW63-1123	210426	pH	7.4 SU	J HT
FC-CCR-MW64-1123	210426	Barium	29 ug/L	J HL, HD
FC-CCR-MW64-1123	210426	Boron	0.58 mg/L	J HL
FC-CCR-MW64-1123	210426	Calcium	87 mg/L	J HL
FC-CCR-MW64-1123	210426	Iron	0.48 mg/L	J HL
FC-CCR-MW64-1123	210426	pH	7.9 SU	J HT
FC-CCR-MW65-1123	210426	Barium	21 ug/L	J HL, HD
FC-CCR-MW65-1123	210426	Boron	0.67 mg/L	J HL
FC-CCR-MW65-1123	210426	Calcium	110 mg/L	J HL
FC-CCR-MW65-1123	210426	pH	7.7 SU	J HT
FC-CCR-DMX03-1123	210594	pH	7.2 SU	J HT
FC-CCR-DMX03-1123	210594	Sodium	3,600 mg/L	J HL
FC-CCR-DMX04-1123	210594	pH	7.6 SU	J HT
FC-CCR-FD02-1123	210594	pH	7.2 SU	J HT
FC-CCR-FD02-1123	210594	Sodium	1,500 mg/L	J HL
FC-CCR-FD06-1123	210594	Boron	26 mg/L	J PJ
FC-CCR-FD07-1123	210594	Boron	47 mg/L	J PJ, HD
FC-CCR-MW05-1123	210594	pH	7.1 SU	J HT
FC-CCR-MW06R-1123	210594	Iron	1.1 mg/L	J HL
FC-CCR-MW06R-1123	210594	pH	7.4 SU	J HT
FC-CCR-MW17R-1123	210594	pH	7.5 SU	J HT

TABLE 3
QUALIFIERS ADDED DURING DATA VALIDATION
Coal Combustion Residuals Rule
2023 Compliance Monitoring Groundwater Data

Sample Identification	Sample Delivery Group	Analyte	Result	Qualifier and Reason Code
FC-CCR-MW18-1123	210594	pH	7.0 SU	J HT
FC-CCR-MW18-1123	210594	Sodium	9,000 mg/L	J HL
FC-CCR-MW23R-1123	210594	pH	7.2 SU	J HT
FC-CCR-MW23R-1123	210594	Sodium	2,800 mg/L	J HL
FC-CCR-MW24-1123	210594	pH	7.5 SU	J HT
FC-CCR-MW24-1123	210594	Sodium	7,800 mg/L	J HL
FC-CCR-MW24-1123	210594	Total Dissolved Solids	22,000 mg/L	J HT
FC-CCR-MW30-1123	210594	Boron	25 mg/L	J PJ
FC-CCR-MW36R-1123	210594	pH	7.4 SU	J HT
FC-CCR-MW36R-1123	210594	Sodium	1,100 mg/L	J HL
FC-CCR-MW38R-1123	210594	pH	7.3 SU	J HT
FC-CCR-MW38R-1123	210594	Sodium	3,700 mg/L	J HL
FC-CCR-MW56-1123	210594	pH	7.3 SU	J HT
FC-CCR-MW56-1123	210594	Sodium	5,700 mg/L	J HL
FC-CCR-MW57-1123	210594	Iron	6.0 mg/L	J HL
FC-CCR-MW57-1123	210594	pH	7.3 SU	J HT
FC-CCR-MW57-1123	210594	Sodium	7,000 mg/L	J HL
FC-CCR-MW81-1123	210594	Boron	50 mg/L	J HD, PJ
FC-CCR-MW82S-1123	210594	pH	7.3 SU	J HT
FC-CCR-MW82S-1123	210594	Sodium	1,600 mg/L	J HL
FC-CCR-MW67-1123	210593	pH	7.4 SU	J HT
FC-CCR-MW67-1123	210593	Fluoride (EPA 300.0)	13 mg/L	J HD
FC-CCR-MW67-1123	210593	Fluoride (EPA 9056)	6.6 mg/L	J HD
FC-CCR-MW68-1123	210593	pH	7.2 SU	J HT
FC-CCR-MW68-1123	210593	Fluoride (EPA 300.0)	13 mg/L	J HD
FC-CCR-MW68-1123	210593	Fluoride (EPA 9056)	6.2 mg/L	J HD
FC-CCR-MW69-1123	210593	pH	7.4 SU	J HT
FC-CCR-MW69-1123	210593	Fluoride (EPA 300.0)	4.7 mg/L	J HD
FC-CCR-MW69-1123	210593	Fluoride (EPA 9056)	2.3 mg/L	J HD
FC-CCR-MW83-1123	210593	pH	7.4 SU	J HT
FC-CCR-MW84-1123	210593	Total Dissolved Solids	15,000 mg/L	J HT
FC-CCR-MW84-1123	210593	pH	7.2 SU	J HT
FC-CCR-MW85-1123	210593	pH	7.2 SU	J HT
FC-CCR-FD01-1123	210593	pH	7.2 SU	J HT
FC-CCR-CM01-1123	210593	pH	7.3 SU	J HT
FC-CCR-CM02-1123	210593	pH	7.0 SU	J HT
FC-CCR-MW07-1123	210745	Barium	0.016 mg/L	J HL
FC-CCR-MW07-1123	210745	pH	7.5 SU	J HT
FC-CCR-MW08-1123	210745	Barium	0.01 mg/L	J HL
FC-CCR-MW08-1123	210745	pH	7.3 SU	J HT
FC-CCR-MW49A-1123	210745	Barium	0.028 mg/L	J HL
FC-CCR-MW49A-1123	210745	pH	7.3 SU	J HT
FC-CCR-DMX05R-1123	J210744	pH	7.5 SU	J HT
FC-CCR-DMX05R-1123	J210744	Total Dissolved Solids	15,000 mg/L	J HT
FC-CCR-DMX06-1123	J210744	pH	7.3 SU	J HT

TABLE 3
QUALIFIERS ADDED DURING DATA VALIDATION
Coal Combustion Residuals Rule
2023 Compliance Monitoring Groundwater Data

Sample Identification	Sample Delivery Group	Analyte	Result	Qualifier and Reason Code
FC-CCR-EW11R-1123	J210744	Total Dissolved Solids	8,200 mg/L	J HT
FC-CCR-EW12R-1123	J210744	Total Dissolved Solids	12,000 mg/L	J HT
FC-CCR-EW14-1123	J210744	Total Dissolved Solids	6,600 mg/L	J HT
FC-CCR-EW15-1123	J210744	Total Dissolved Solids	7,700 mg/L	J HT
FC-CCR-MW11-1123	J210744	pH	7 SU	J HT
FC-CCR-MW15-1123	J210744	pH	7.1 SU	J HT
FC-CCR-MW16-1123	J210744	pH	7.3 SU	J HT
FC-CCR-MW34-1123	J210744	Total Dissolved Solids	7,600 mg/L	J HT
FC-CCR-FD03-1123	J210429	Boron	10 mg/L	J HL
FC-CCR-MW52-1123	J210429	Boron	11 mg/L	J HL
FC-CCR-MW61-1123	J210429	Boron	49 mg/L	J HL
FC-CCR-MW61-1123	J210429	Calcium	620 mg/L	J HL
FC-CCR-MW61-1123	J210429	pH	8.5 SU	J HT
FC-CCR-MW75-1123	J210429	Boron	27 mg/L	J HL
FC-CCR-MW75-1123	J210429	Calcium	530 mg/L	J HL
FC-CCR-MW75-1123	J210429	pH	8.3 SU	J HT

Notes:
ug/L = micrograms per liter
mg/L = milligrams per liter
SU = standard pH units
pCi/L = picocurie per liter

Qualifier Definition:
J = The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
R = The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.

Reason Codes:
FD = Imprecision between primary and field duplicate results.
HD = Imprecision between LCS and LCSD recoveries.
HL = High laboratory control sample recovery.
HT = The maximum recommended hold time was exceeded and the result should be considered an estimated value.
LM = Low matrix spike recovery. Result may be biased low.
MI = Potential matrix interference.
PJ = Professional judgement. Though the spike concentration is too low to assess accuracy based on MS recovery, the concentration detected in the MS and/or MSD is significantly lower than the concentration detected in the unspiked native sample.

APPENDIX

A

DATA ASSESSMENT CHECKLISTS BY SAMPLE DELIVERY GROUP

Four Corners CCR Data Review

Laboratory Name:	Radiation Safety Engineering, Inc.		
Sample Delivery Group:	71770-71824	**Review Date:**	6/5/2023
Validator's Name:	Caitlin Riechmann	**Reviewed By:**	Marie Bevier

Sample Summary:

Field Sample Identification	Collection Date and Time	Laboratory Sample Identification	Notes
FC-CCR-MW62-0523	5/7/2023 14:12	71770	
FC-CCR-MW63-0523	5/7/2023 15:41	71771	
FC-CCR-MW64-0523	5/7/2023 16:13	71772	
FC-CCR-MW65-0523	5/7/2023 11:53	71773	
FC-CCR-SW1-0523	5/7/2023 18:42	71774	
FC-CCR-SW2-0523	5/7/2023 15:06	71775	
FC-CCR-SW3-0523	5/7/2023 15:13	71776	
FC-CCR-FD08-0523	5/7/2023 12:34	71777	Field duplicate of FC-CCR-SW1-0523
FC-CCR-MW66-0523	5/7/2023 12:45	71778	
FC-CCR-MW70-0523	5/7/2023 10:59	71779	
FC-CCR-MW73-0523	5/7/2023 18:15	71780	
FC-CCR-MW83-0523	5/7/2023 17:21	71781	
FC-CCR-MW86-0523	5/7/2023 13:25	71782	
FC-CCR-FD02-0523	5/7/2023 16:20	71783	Field duplicate of FC-CCR-MW86-0523
FC-CCR-DMX06-0523	5/8/2023 10:28	71817	
FC-CCR-MW15-0523	5/8/2023 11:18	71818	
FC-CCR-MW16-0523	5/8/2023 12:38	71819	
FC-CCR-EB01-0523	5/10/2023 9:25	71820	Equipment blank
FC-CCR-APV6-0523	5/9/2023 9:04	71821	
FC-CCR-MW07-0523	5/8/2023 15:18	71822	
FC-CCR-MW08-0523	5/8/2023 14:07	71823	
FC-CCR-MW49A-0523	5/8/2023 16:34	71824	

Analytical Methods:

Analyte	Analyte Group	Method
Radium 226, Radium 228, Total Radium	Radionuclides	HPGE

Qualifier Definitions:

J The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

R The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.

U The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.

UJ The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

Sample Receipt Condition:

COC Signed and Complete? (Yes) No

If No, provide details.

Sample Login Matched COC? Yes (No)

If no, provide details.

Sample FC-CCR-FD08-0523 was logged in with a sample ID of FC-CCR-SWFD08-0523 while the COC listed a sample ID of FC-CCR-FD08-0523. For the remainder of this report, this sample is referred to as FC-CCR-FD08-0523 per the COC.

Sample receipt temperature ≤ 6°C? Yes No (N/A)

If no, provide details.

1. Samples analyzed for metals and radionuclides within 180 days of sampling?

   (Yes) No N/A

2. Samples analyzed for mercury, ammonia, chloride, fluoride, nitrate/nitrite, sulfate, TOC, and/or DOC within 28 days of sampling?

   Yes No (N/A)

3. Samples Analyzed for alkalinity within 14 days of sampling? Yes No (N/A)

4. Samples analyzed for total dissolved solids within 7 days of sampling?

   Yes No (N/A)

5. Samples analyzed for pH within 15 minutes of sampling? Yes No (N/A)

If No:

Sample ID	Analysis	Time Between Collection and Analysis	Effect on Data Usability

6. Target analytes detected in the blanks? (Yes) No N/A

If Yes:

Detected Analyte	Concentration	Samples with concentrations less than 5 times the blank detection	Effect on Data Usability
Radium 228	0.9 ± 0.5 pCi/L	The equipment blank was not associated with any samples reviewed in this report.	None
Total Radium	0.9 ± 0.5 pCi/L	The equipment blank was not associated with any samples reviewed in this report.	None

Abbreviations:
pCi/L = picoCuries per liter

7. LCS recoveries within laboratory-specified limits? Yes No (N/A)

If No:

Analyte	Recovery	QC Limits	Affected Samples	Effect on Data Usability

8. MS performed on a project-specific sample? Yes No (N/A)

If Yes:

Spiked Sample ID	Spiked Analyte(s)

a. Are MS recoveries and/or precision within laboratory specified limits?

Yes No (N/A)

If No:

Sample ID	Analyte	RPD or Recovery	Accuracy or Recovery Limits	Effect on Data Usability

9. Field duplicate collected? (Yes) No

If Yes:

Parent Sample	Field Duplicate
FC-CCR-MW86-0523	FC-CCR-FD02-0523
FC-CCR-SW1-0523	FC-CCR-FD08-0523

b. Are RPDs between primary and duplicate results ≤ 20% or are differences between analyte concentrations ≤ the reporting limit?

(Yes) No N/A

If No:

Primary Sample ID	Duplicate Sample ID	Analyte	RPD	Effect on Data Usability

10. Did the laboratory perform duplicate analyses on project-specific samples?

Yes (No) N/A

If Yes:

Sample ID	Analysis

c. Is the RPD between duplicate results within laboratory-specified limits or is the difference between analyte concentrations less than the reporting limit?

Yes No (N/A)

If No:

Sample ID	Analyte	Effect on Data Usability

11. Are non-detect results sufficiently low to meet EPA primary drinking water criteria?

(Yes) No

Analyte	List	MCL	Alternative GWPS	Units
Antimony	Appendix IV	0.006	--	mg/L
Arsenic	Appendix IV	0.010	--	mg/L
Barium	Appendix IV	2	--	mg/L
Beryllium	Appendix IV	0.004	--	mg/L
Boron	Appendix III	--	--	mg/L
Cadmium	Appendix IV	0.005	--	mg/L
Calcium	Appendix III	--	--	mg/L
Chloride	Appendix III	--	--	mg/L
Chromium	Appendix IV	0.1	--	mg/L
Cobalt	Appendix IV	--	0.006	mg/L
Fluoride	Appendix III/IV	4.0	--	mg/L
Lead	Appendix IV	--	0.015	mg/L
Lithium	Appendix IV	--	0.040	mg/L
Mercury	Appendix IV	0.002	--	mg/L
Molybdenum	Appendix IV	--	0.1	mg/L
pH	Appendix III	--	--	S.U.
Radium 226 + Radium 228	Appendix IV	5	--	pCi/L
Selenium	Appendix IV	0.05	--	mg/L
Sulfate	Appendix III	--	--	mg/L
Total Dissolved Solids	Appendix III	--	--	mg/L
Thallium	Appendix IV	0.002	--	mg/L

If No, list affected samples and analytes.

Sample ID	Analyte	Reporting Limit

Four Corners CCR Data Review

Laboratory Name:	Radiation Safety Engineering, Inc.		
Sample Delivery Group:	71784-71786	**Review Date:**	5/23/23
Validator's Name:	Caitlin Riechmann	**Reviewed By:**	Marie Bevier

Sample Summary:

Field Sample Identification	Collection Date and Time	Laboratory Sample Identification	Notes
FC-CCR-MW61-0523	5/4/2023 9:54	71784	
FC-CCR-MW75-0523	5/5/2023 10:42	71785	
FC-CCR-MW87-0523	5/5/2023 18:06	71786	

Analytical Methods:

Analyte	Analyte Group	Method
Radium 226, Radium 228, Total Radium	Radionuclides	HPGE

Qualifier Definitions:

J The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

R The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.

U The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.

UJ The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

Sample Receipt Condition:

COC Signed and Complete? (Yes) No

If No, provide details.

Sample Login Matched COC? (Yes) No

If no, provide details.

Sample receipt temperature ≤ 6°C? Yes No (N/A)

If no, provide details.

1. Samples analyzed for metals and radionuclides within 180 days of sampling?

   (Yes) No N/A

2. Samples analyzed for mercury, ammonia, chloride, fluoride, nitrate/nitrite, sulfate, TOC, and/or DOC within 28 days of sampling?

   Yes No (N/A)

3. Samples Analyzed for alkalinity within 14 days of sampling? Yes No (N/A)

4. Samples analyzed for total dissolved solids within 7 days of sampling?

   Yes No (N/A)

5. Samples analyzed for pH within 15 minutes of sampling? Yes No (N/A)

If No:

Sample ID	Analysis	Time Between Collection and Analysis	Effect on Data Usability

6. Target analytes detected in the blanks? Yes No (N/A)

If Yes:

Detected Analyte	Concentration	Samples with concentrations less than 5 times the blank detection	Effect on Data Usability

7. LCS recoveries within laboratory-specified limits? Yes No (N/A)

If No:

Analyte	Recovery	QC Limits	Affected Samples	Effect on Data Usability

8. MS performed on a project-specific sample? Yes No (N/A)

If Yes:

Spiked Sample ID	Spiked Analyte(s)

a. Are MS recoveries and/or precision within laboratory specified limits?

Yes No (N/A)

If No:

Sample ID	Analyte	RPD or Recovery	Accuracy or Recovery Limits	Effect on Data Usability

9. Field duplicate collected? Yes (No)

If Yes:

Parent Sample	Field Duplicate

b. Are RPDs between primary and duplicate results ≤ 20% or are differences between analyte concentrations ≤ the reporting limit?

Yes No (N/A)

If No:

Primary Sample ID	Duplicate Sample ID	Analyte	RPD	Effect on Data Usability

10. Did the laboratory perform duplicate analyses on project-specific samples?

Yes (No) N/A

If Yes:

Sample ID	Analysis

c. Is the RPD between duplicate results within laboratory-specified limits or is the difference between analyte concentrations less than the reporting limit?

Yes No (N/A)

If No:

Sample ID	Analyte	Effect on Data Usability

11. Are non-detect results sufficiently low to meet EPA primary drinking water criteria?

Yes (circled) No

Analyte	List	MCL	Alternative GWPS	Units
Antimony	Appendix IV	0.006	--	mg/L
Arsenic	Appendix IV	0.010	--	mg/L
Barium	Appendix IV	2	--	mg/L
Beryllium	Appendix IV	0.004	--	mg/L
Boron	Appendix III	--	--	mg/L
Cadmium	Appendix IV	0.005	--	mg/L
Calcium	Appendix III	--	--	mg/L
Chloride	Appendix III	--	--	mg/L
Chromium	Appendix IV	0.1	--	mg/L
Cobalt	Appendix IV	--	0.006	mg/L
Fluoride	Appendix III/IV	4.0	--	mg/L
Lead	Appendix IV	--	0.015	mg/L
Lithium	Appendix IV	--	0.040	mg/L
Mercury	Appendix IV	0.002	--	mg/L
Molybdenum	Appendix IV	--	0.1	mg/L
pH	Appendix III	--	--	S.U.
Radium 226 + Radium 228	Appendix IV	5	--	pCi/L
Selenium	Appendix IV	0.05	--	mg/L
Sulfate	Appendix III	--	--	mg/L
Total Dissolved Solids	Appendix III	--	--	mg/L
Thallium	Appendix IV	0.002	--	mg/L

If No, list affected samples and analytes.

Sample ID	Analyte	Reporting Limit

Four Corners CCR Data Review

Laboratory Name:	Radiation Safety Engineering, Inc.		
Sample Delivery Group:	71787-71793	**Review Date:**	5/23/2023
Validator's Name:	Caitlin Riechmann	**Reviewed By:**	Marie Bevier

Sample Summary:

Field Sample Identification	Collection Date and Time	Laboratory Sample Identification	Notes
FC-CCR-DMX03-0523	5/3/2023 16:47	71787	
FC-CCR-DMX04-0523	5/4/2023 16:55	71788	
FC-CCR-MW06-0523	5/4/2023 16:13	71789	
FC-CCR-MW17R-0523	5/4/2023 14:34	71790	
FC-CCR-MW38R-0523	5/5/2023 11:20	71791	
FC-CCR-MW56-0523	5/4/2023 13:33	71792	
FC-CCR-MW57-0523	5/5/2023 12:42	71793	

Analytical Methods:

Analyte	Analyte Group	Method
Radium 226, Radium 228, Total Radium	Radionuclides	HPGE

Qualifier Definitions:

J The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

R The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.

U The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.

UJ The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

Sample Receipt Condition:

COC Signed and Complete? (Yes) No

If No, provide details.

Sample Login Matched COC? (Yes) No

If no, provide details.

Sample receipt temperature ≤ 6°C? Yes No (N/A)

If no, provide details.

1. Samples analyzed for metals and radionuclides within 180 days of sampling?

   (Yes) No N/A

2. Samples analyzed for mercury, ammonia, chloride, fluoride, nitrate/nitrite, sulfate, TOC, and/or DOC within 28 days of sampling?

   Yes No (N/A)

3. Samples Analyzed for alkalinity within 14 days of sampling? Yes No (N/A)

4. Samples analyzed for total dissolved solids within 7 days of sampling?

   Yes No (N/A)

5. Samples analyzed for pH within 15 minutes of sampling? Yes No (N/A)

If No:

Sample ID	Analysis	Time Between Collection and Analysis	Effect on Data Usability

6. Target analytes detected in the blanks? Yes No (N/A)

If Yes:

Detected Analyte	Concentration	Samples with concentrations less than 5 times the blank detection	Effect on Data Usability

7. LCS recoveries within laboratory-specified limits? Yes No (N/A)

If No:

Analyte	Recovery	QC Limits	Affected Samples	Effect on Data Usability

8. MS performed on a project-specific sample? Yes No (N/A)

If Yes:

Spiked Sample ID	Spiked Analyte(s)

a. Are MS recoveries and/or precision within laboratory specified limits?

Yes No (N/A)

If No:

Sample ID	Analyte	RPD or Recovery	Accuracy or Recovery Limits	Effect on Data Usability

9. Field duplicate collected? Yes (No)

If Yes:

Parent Sample	Field Duplicate

b. Are RPDs between primary and duplicate results ≤ 20% or are differences between analyte concentrations ≤ the reporting limit?

Yes No (N/A)

If No:

Primary Sample ID	Duplicate Sample ID	Analyte	RPD	Effect on Data Usability

10. Did the laboratory perform duplicate analyses on project-specific samples?

Yes (No) N/A

If Yes:

Sample ID	Analysis

c. Is the RPD between duplicate results within laboratory-specified limits or is the difference between analyte concentrations less than the reporting limit?

Yes No (N/A)

If No:

Sample ID	Analyte	Effect on Data Usability

11. Are non-detect results sufficiently low to meet EPA primary drinking water criteria?

Yes (circled) No

Analyte	List	MCL	Alternative GWPS	Units
Antimony	Appendix IV	0.006	--	mg/L
Arsenic	Appendix IV	0.010	--	mg/L
Barium	Appendix IV	2	--	mg/L
Beryllium	Appendix IV	0.004	--	mg/L
Boron	Appendix III	--	--	mg/L
Cadmium	Appendix IV	0.005	--	mg/L
Calcium	Appendix III	--	--	mg/L
Chloride	Appendix III	--	--	mg/L
Chromium	Appendix IV	0.1	--	mg/L
Cobalt	Appendix IV	--	0.006	mg/L
Fluoride	Appendix III/IV	4.0	--	mg/L
Lead	Appendix IV	--	0.015	mg/L
Lithium	Appendix IV	--	0.040	mg/L
Mercury	Appendix IV	0.002	--	mg/L
Molybdenum	Appendix IV	--	0.1	mg/L
pH	Appendix III	--	--	S.U.
Radium 226 + Radium 228	Appendix IV	5	--	pCi/L
Selenium	Appendix IV	0.05	--	mg/L
Sulfate	Appendix III	--	--	mg/L
Total Dissolved Solids	Appendix III	--	--	mg/L
Thallium	Appendix IV	0.002	--	mg/L

If No, list affected samples and analytes.

Sample ID	Analyte	Reporting Limit

Four Corners CCR Data Review

Laboratory Name:	Radiation Safety Engineering, Inc.		
Sample Delivery Group:	71807-71816	**Review Date:**	6/9/2023
Validator's Name:	Caitlin Riechmann	**Reviewed By:**	Marie Bevier

Sample Summary:

Field Sample Identification	Collection Date and Time	Laboratory Sample Identification	Notes
FC-CCR-MW67-0523	5/9/2023 13:25	71807	
FC-CCR-MW68-0523	5/9/2023 10:49	71808	
FC-CCR-MW69-0523	5/9/2023 10:07	71809	
FC-CCR-MW71-0523	5/8/2023 19:13	71810	
FC-CCR-MW72-0523	5/8/2023 18:14	71811	
FC-CCR-MW84-0523	5/9/2023 12:39	71812	
FC-CCR-MW85-0523	5/9/2023 14:13	71813	
FC-CCR-CM01-0523	5/9/2023 11:43	71814	
FC-CCR-CM02-0523	5/9/2023 11:48	71815	
FC-CCR-FD01-0523	5/9/2023 16:20	71816	Field duplicate of FC-CCR-MW84-0523

Analytical Methods:

Analyte	Analyte Group	Method
Radium 226, Radium 228, Total Radium	Radionuclides	HPGE

Qualifier Definitions:

J The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

R The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.

U The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.

UJ The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

Sample Receipt Condition:

COC Signed and Complete? (Yes) No

If No, provide details.

Sample Login Matched COC? (Yes) No

If no, provide details.

Sample receipt temperature ≤ 6°C? Yes No (N/A)

If no, provide details.

1. Samples analyzed for metals and radionuclides within 180 days of sampling?

   (Yes) No N/A

2. Samples analyzed for mercury, ammonia, chloride, fluoride, nitrate/nitrite, sulfate, TOC, and/or DOC within 28 days of sampling?

   Yes No (N/A)

3. Samples Analyzed for alkalinity within 14 days of sampling? Yes No (N/A)

4. Samples analyzed for total dissolved solids within 7 days of sampling?

   Yes No (N/A)

5. Samples analyzed for pH within 15 minutes of sampling? Yes No (N/A)

If No:

Sample ID	Analysis	Time Between Collection and Analysis	Effect on Data Usability

6. Target analytes detected in the blanks? Yes No (N/A)

If Yes:

Detected Analyte	Concentration	Samples with concentrations less than 5 times the blank detection	Effect on Data Usability

7. LCS recoveries within laboratory-specified limits? Yes No (N/A)

If No:

Analyte	Recovery	QC Limits	Affected Samples	Effect on Data Usability

8. MS performed on a project-specific sample? Yes No (N/A)

If Yes:

Spiked Sample ID	Spiked Analyte(s)

a. Are MS recoveries and/or precision within laboratory specified limits?

Yes No (N/A)

If No:

Sample ID	Analyte	RPD or Recovery	Accuracy or Recovery Limits	Effect on Data Usability

9. Field duplicate collected? (Yes) No

If Yes:

Parent Sample	Field Duplicate
FC-CCR-MW84-0523	FC-CCR-FD01-0523

b. Are RPDs between primary and duplicate results ≤ 20% or are differences between analyte concentrations ≤ the reporting limit?

(Yes) No N/A

If No:

Primary Sample ID	Duplicate Sample ID	Analyte	RPD	Effect on Data Usability

10. Did the laboratory perform duplicate analyses on project-specific samples?

Yes (No) N/A

If Yes:

Sample ID	Analysis

c. Is the RPD between duplicate results within laboratory-specified limits or is the difference between analyte concentrations less than the reporting limit?

Yes No (N/A)

If No:

Sample ID	Analyte	Effect on Data Usability

11. Are non-detect results sufficiently low to meet EPA primary drinking water criteria?

Yes (circled) No

Analyte	List	MCL	Alternative GWPS	Units
Antimony	Appendix IV	0.006	--	mg/L
Arsenic	Appendix IV	0.010	--	mg/L
Barium	Appendix IV	2	--	mg/L
Beryllium	Appendix IV	0.004	--	mg/L
Boron	Appendix III	--	--	mg/L
Cadmium	Appendix IV	0.005	--	mg/L
Calcium	Appendix III	--	--	mg/L
Chloride	Appendix III	--	--	mg/L
Chromium	Appendix IV	0.1	--	mg/L
Cobalt	Appendix IV	--	0.006	mg/L
Fluoride	Appendix III/IV	4.0	--	mg/L
Lead	Appendix IV	--	0.015	mg/L
Lithium	Appendix IV	--	0.040	mg/L
Mercury	Appendix IV	0.002	--	mg/L
Molybdenum	Appendix IV	--	0.1	mg/L
pH	Appendix III	--	--	S.U.
Radium 226 + Radium 228	Appendix IV	5	--	pCi/L
Selenium	Appendix IV	0.05	--	mg/L
Sulfate	Appendix III	--	--	mg/L
Total Dissolved Solids	Appendix III	--	--	mg/L
Thallium	Appendix IV	0.002	--	mg/L

If No, list affected samples and analytes.

Sample ID	Analyte	Reporting Limit

Four Corners CCR Data Review

Laboratory Name:	Eurofins Environment Testing		
Sample Delivery Group:	J202029	**Review Date:**	6/20/2023
Validator's Name:	Marie Bevier	**Reviewed By:**	Bjorn Ottosson

Sample Summary:

Field Sample Identification	Collection Date and Time	Laboratory Sample Identification	Notes
FC-CCR-DMX06-0523	05/08/23 10:28	550-202029-1	
FC-CCR-MW15-0523	05/08/23 11:18	550-202029-2	
FC-CCR-MW16-0523	05/08/23 12:38	550-202029-3	
FC-CCR-EB01-0523	05/10/23 09:25	550-202029-4	Equipment blank
FC-CCR-EW17-0523	05/08/23 13:22	550-202029-5	
FC-CCR-APV6-0523	05/09/23 09:04	550-202029-6	

Analytical Methods:

Analyte	Analyte Group	Method
Chloride, Fluoride, Sulfate	Anions	EPA 300.0
Beryllium, Lithium, Boron, Calcium, Iron, Magnesium, Manganese, Potassium, Sodium	Metals	EPA 200.7
Antimony, Arsenic, Barium, Cadmium, Chromium, Cobalt, Lead, Molybdenum, Nickel, Selenium, Thallium	Metals	EPA 200.8
Mercury	Metals	EPA 245.1
Alkalinity	General Chemistry	SM 2320B
Total Dissolved Solids (TDS)	General Chemistry	SM 2540C
pH	General Chemistry	SM 4500 H+B

Qualifier Definitions:

J The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

R The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.

U The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.

UJ The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

Sample Receipt Condition:

COC Signed and Complete? (Yes) No

If No, provide details.

Sample Login Matched COC? (Yes) No

If no, provide details.

Sample receipt temperature ≤ 6°C? Yes (No) N/A

If no, provide details.

The temperature was recorded as 13.1 °C upon receipt at Eurofins Denver. Denver analyzed the samples for metals, which do not require thermal preservation and data usability is not adversely affected by the elevated sample receipt temperature.

1. Samples analyzed for metals and radionuclides within 180 days of sampling?

   (Yes) No N/A

2. Samples analyzed for mercury, ammonia, chloride, fluoride, nitrate/nitrite, sulfate, TOC, and/or DOC within 28 days of sampling?

   (Yes) No N/A

3. Samples Analyzed for alkalinity within 14 days of sampling? (Yes) No N/A

4. Samples analyzed for total dissolved solids within 7 days of sampling?

   (Yes) No N/A

5. Samples analyzed for pH within 15 minutes of sampling? Yes (No) N/A

If No:

Sample ID	Analysis	Time Between Collection and Analysis	Effect on Data Usability
FC-CCR-DMX06-0523	pH	9 days, 5 hours, 4 minutes	J, HT
FC-CCR-MW15-0523	pH	9 days, 4 hours, 15 minutes	J, HT
FC-CCR-MW16-0523	pH	9 days, 2 hours, 56 minutes	J, HT
FC-CCR-APV6-0523	pH	8 days, 6 hours, 37 minutes	J, HT

Note:

HT = Maximum recommended hold time was exceeded.

6. Target analytes detected in the blanks? (Yes) No N/A

If Yes:

Detected Analyte	Concentration	Samples with concentrations less than 5 times the blank detection	Effect on Data Usability
Sodium TDS	3.8 mg/L 48 mg/L	None	None
TDS	26 mg/L	None	None

7. LCS recoveries within laboratory-specified limits? (Yes) No N/A

If No:

Analyte	Recovery	QC Limits	Affected Samples	Effect on Data Usability

8. MS performed on a project-specific sample? (Yes) No N/A

If Yes:

Spiked Sample ID	Spiked Analyte(s)
FC-CCR-EW17-0523	Sulfate

a. Are MS recoveries and/or precision within laboratory specified limits?

(Yes) No N/A

If No:

Sample ID	Analyte	RPD or Recovery	Accuracy or Recovery Limits	Effect on Data Usability

9. Field duplicate collected? Yes (No)

If Yes:

Parent Sample	Field Duplicate

b. Are RPDs between primary and duplicate results ≤ 20% or are differences between analyte concentrations ≤ the reporting limit?

Yes No (N/A)

If No:

Primary Sample ID	Duplicate Sample ID	Analyte	RPD	Effect on Data Usability

10. Did the laboratory perform duplicate analyses on project-specific samples?

(Yes) No N/A

If Yes:

Sample ID	Analysis
FC-CCR-MW16-0523	Alkalinity
FC-CCR-APV6-0523	TDS

c. Is the RPD between duplicate results within laboratory-specified limits or is the difference between analyte concentrations less than the reporting limit?

(Yes) No N/A

If No:

Sample ID	Analyte	Effect on Data Usability

11. Are non-detect results sufficiently low to meet EPA primary drinking water criteria?

Yes (No)

Analyte	List	MCL	Alternative GWPS	Units
Antimony	Appendix IV	0.006	--	mg/L
Arsenic	Appendix IV	0.010	--	mg/L
Barium	Appendix IV	2	--	mg/L
Beryllium	Appendix IV	0.004	--	mg/L
Boron	Appendix III	--	--	mg/L
Cadmium	Appendix IV	0.005	--	mg/L
Calcium	Appendix III	--	--	mg/L
Chloride	Appendix III	--	--	mg/L
Chromium	Appendix IV	0.1	--	mg/L
Cobalt	Appendix IV	--	0.006	mg/L
Fluoride	Appendix III/IV	4.0	--	mg/L
Lead	Appendix IV	--	0.015	mg/L
Lithium	Appendix IV	--	0.040	mg/L
Mercury	Appendix IV	0.002	--	mg/L
Molybdenum	Appendix IV	--	0.1	mg/L
pH	Appendix III	--	--	S.U.
Radium 226 + Radium 228	Appendix IV	5	--	pCi/L
Selenium	Appendix IV	0.05	--	mg/L
Sulfate	Appendix III	--	--	mg/L
Total Dissolved Solids	Appendix III	--	--	mg/L
Thallium	Appendix IV	0.002	--	mg/L

If No, list affected samples and analytes.

Sample ID	Analyte	Reporting Limit
FC-CCR-DMX06-0523 FC-CCR-MW15-0523 FC-CCR-MW16-0523	Beryllium	0.0050 mg/L

Four Corners CCR Data Review

Laboratory Name:	Eurofins Environment Testing		
Sample Delivery Group:	J202030	**Review Date:**	6/20/2023
Validator's Name:	Marie Bevier	**Reviewed By:**	Bjorn Ottosson

Sample Summary:

Field Sample Identification	Collection Date and Time	Laboratory Sample Identification	Notes
FC-CCR-MW07-0523	05/08/23 15:18	550-202030-1	
FC-CCR-MW08-0523	05/08/23 14:07	550-202030-2	
FC-CCR-MW49A-0523	05/08/23 16:34	550-202030-3	

Analytical Methods:

Analyte	Analyte Group	Method
Chloride, Fluoride, Sulfate	Anions	EPA 300.0
Beryllium, Lithium, Boron, Calcium, Magnesium, Potassium, Sodium	Metals	EPA 200.7
Antimony, Arsenic, Barium, Cadmium, Chromium, Cobalt, Lead, Molybdenum, Nickel, Selenium, Thallium	Metals	EPA 200.8
Mercury	Metals	EPA 245.1
Alkalinity	General Chemistry	SM 2320B
Total Dissolved Solids (TDS)	General Chemistry	SM 2540C
pH	General Chemistry	SM 4500 H+B

Qualifier Definitions:

J The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

R The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.

U The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.

UJ The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

Sample Receipt Condition:

COC Signed and Complete? (Yes) No

If No, provide details.

Sample Login Matched COC? (Yes) No

If no, provide details.

Sample receipt temperature ≤ 6°C? Yes (No) N/A

If no, provide details.

The temperature was recorded as 13.1 °C upon receipt at Eurofins Denver. Denver analyzed the samples for metals, which do not require thermal preservation and data usability is not adversely affected by the elevated sample receipt temperature.

1. Samples analyzed for metals and radionuclides within 180 days of sampling?

   (Yes) No N/A

2. Samples analyzed for mercury, ammonia, chloride, fluoride, nitrate/nitrite, sulfate, TOC, and/or DOC within 28 days of sampling?

   (Yes) No N/A

3. Samples Analyzed for alkalinity within 14 days of sampling? (Yes) No N/A

4. Samples analyzed for total dissolved solids within 7 days of sampling?

   (Yes) No N/A

5. Samples analyzed for pH within 15 minutes of sampling? Yes (No) N/A

If No:

Sample ID	Analysis	Time Between Collection and Analysis	Effect on Data Usability
FC-CCR-MW07-0523	pH	9 days, 24 minutes	J, HT
FC-CCR-MW08-0523	pH	9 days, 1 hour, 37 minutes	J, HT
FC-CCR-MW49A-0523	pH	8 days, 23 hours, 13 minutes	J, HT

Note:

HT = Maximum recommended hold time was exceeded.

6. Target analytes detected in the blanks? (Yes) No N/A

If Yes:

Detected Analyte	Concentration	Samples with concentrations less than 5 times the blank detection	Effect on Data Usability
TDS	26.0 mg/L	None	None

7. LCS recoveries within laboratory-specified limits? (Yes) No N/A

If No:

Analyte	Recovery	QC Limits	Affected Samples	Effect on Data Usability

8. MS performed on a project-specific sample? (Yes) No N/A

If Yes:

Spiked Sample ID	Spiked Analyte(s)
FC-CCR-MW07-0523	Lithium

a. Are MS recoveries and/or precision within laboratory specified limits?

(Yes) No N/A

If No:

Sample ID	Analyte	RPD or Recovery	Accuracy or Recovery Limits	Effect on Data Usability

9. Field duplicate collected? Yes (No)

If Yes:

Parent Sample	Field Duplicate

b. Are RPDs between primary and duplicate results ≤ 20% or are differences between analyte concentrations ≤ the reporting limit?

Yes No (N/A)

If No:

Primary Sample ID	Duplicate Sample ID	Analyte	RPD	Effect on Data Usability

10. Did the laboratory perform duplicate analyses on project-specific samples?

(Yes) No N/A

If Yes:

Sample ID	Analysis
FC-CCR-MW49A-0523	TDS

c. Is the RPD between duplicate results within laboratory-specified limits or is the difference between analyte concentrations less than the reporting limit?

(Yes) No N/A

If No:

Sample ID	Analyte	Effect on Data Usability

11. Other quality control issues? (Yes) No

If Yes:

According to the case narrative, arsenic recovery was high in a continuing calibration verification (CCV) associated with the analysis of samples FC-CCR-MW07-0523, FC-CCR-MW08-0523, and FC-CCR-MW49A-0523. Arsenic was not detected in the associated samples and data usability is not adversely affected by the high CCV recovery.

12. Are non-detect results sufficiently low to meet EPA primary drinking water criteria?

Yes (No)

Analyte	List	MCL	Alternative GWPS	Units
Antimony	Appendix IV	0.006	--	mg/L
Arsenic	Appendix IV	0.010	--	mg/L
Barium	Appendix IV	2	--	mg/L
Beryllium	Appendix IV	0.004	--	mg/L
Boron	Appendix III	--	--	mg/L
Cadmium	Appendix IV	0.005	--	mg/L
Calcium	Appendix III	--	--	mg/L
Chloride	Appendix III	--	--	mg/L
Chromium	Appendix IV	0.1	--	mg/L
Cobalt	Appendix IV	--	0.006	mg/L
Fluoride	Appendix III/IV	4.0	--	mg/L
Lead	Appendix IV	--	0.015	mg/L
Lithium	Appendix IV	--	0.040	mg/L
Mercury	Appendix IV	0.002	--	mg/L
Molybdenum	Appendix IV	--	0.1	mg/L
pH	Appendix III	--	--	S.U.
Radium 226 + Radium 228	Appendix IV	5	--	pCi/L
Selenium	Appendix IV	0.05	--	mg/L
Sulfate	Appendix III	--	--	mg/L
Total Dissolved Solids	Appendix III	--	--	mg/L
Thallium	Appendix IV	0.002	--	mg/L

If No, list affected samples and analytes.

Sample ID	Analyte	Reporting Limit
FC-CCR-MW08-0523	Beryllium	0.005 mg/L

Four Corners CCR Data Review

Laboratory Name:	Eurofins Environment Testing		
Sample Delivery Group:	J202031	**Review Date:**	6/20/2023
Validator's Name:	Marie Bevier	**Reviewed By:**	Bjorn Ottosson

Sample Summary:

Field Sample Identification	Collection Date and Time	Laboratory Sample Identification	Notes
FC-CCR-MW67-0523	05/09/23 13:25	550-202031-1	
FC-CCR-MW68-0523	05/09/23 10:49	550-202031-2	
FC-CCR-MW69-0523	05/09/23 10:07	550-202031-3	
FC-CCR-MW71-0523	05/09/23 19:13	550-202031-4	
FC-CCR-MW72-0523	05/09/23 18:14	550-202031-5	
FC-CCR-MW84-0523	05/09/23 12:39	550-202031-6	
FC-CCR-MW85-0523	05/09/23 14:13	550-202031-7	
FC-CCR-CM01-0523	05/09/23 11:43	550-202031-8	
FC-CCR-CM02-0523	05/09/23 11:48	550-202031-9	
FC-CCR-FD01-0523	05/09/23 16:20	550-202031-10	Field duplicate of FC-CCR-MW84-0523

Analytical Methods:

Analyte	Analyte Group	Method
Chloride, Fluoride, Sulfate	Anions	EPA 300.0
Beryllium, Lithium, Boron, Calcium	Metals	EPA 200.7
Antimony, Arsenic, Barium, Cadmium, Chromium, Cobalt, Lead, Molybdenum, Nickel, Selenium, Thallium	Metals	EPA 200.8
Mercury	Metals	EPA 245.1
Total Dissolved Solids (TDS)	General Chemistry	SM 2540C
pH	General Chemistry	SM 4500 H+B

Qualifier Definitions:

J The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

R The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.

U The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.

UJ The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

Sample Receipt Condition:

COC Signed and Complete? (Yes) No

If No, provide details.

Sample Login Matched COC? (Yes) No

If no, provide details.

Sample receipt temperature ≤ 6°C? Yes (No) N/A

If no, provide details.

The temperature was recorded as 13.1 °C upon receipt at Eurofins Denver. Denver analyzed the samples for metals, which do not require thermal preservation and data usability is not adversely affected by the elevated sample receipt temperature.

1. Samples analyzed for metals and radionuclides within 180 days of sampling?

   (Yes) No N/A

2. Samples analyzed for mercury, ammonia, chloride, fluoride, nitrate/nitrite, sulfate, TOC, and/or DOC within 28 days of sampling?

   (Yes) No N/A

3. Samples Analyzed for alkalinity within 14 days of sampling? (Yes) No N/A

4. Samples analyzed for total dissolved solids within 7 days of sampling?

   (Yes) No N/A

5. Samples analyzed for pH within 15 minutes of sampling? Yes (No) N/A

If No:

Sample ID	Analysis	Time Between Collection and Analysis	Effect on Data Usability
FC-CCR-MW67-0523	pH	8 days, 2 hours, 25 minutes	J, HT
FC-CCR-MW68-0523	pH	8 days, 5 hours, 4 minutes	J, HT
FC-CCR-MW69-0523	pH	8 days, 5 hours, 48 minutes	J, HT
FC-CCR-MW71-0523	pH	8 days, 20 hours, 43 minutes	J, HT
FC-CCR-MW72-0523	pH	8 days, 21 hours, 44 minutes	J, HT
FC-CCR-MW84-0523	pH	8 days, 3 hours, 20 minutes	J, HT
FC-CCR-MW85-0523	pH	8 days, 1 hour, 47 minutes	J, HT
FC-CCR-CM01-0523	pH	8 days, 4 hours, 18 minutes	J, HT
FC-CCR-CM02-0523	pH	8 days, 4 hours, 15 minutes	J, HT
FC-CCR-FD01-0523	pH	7 days, 23 hours, 44 minutes	J, HT

Note:

HT = Maximum recommended hold time was exceeded.

6. Target analytes detected in the blanks? Yes (No) N/A

If Yes:

Detected Analyte	Concentration	Samples with concentrations less than 5 times the blank detection	Effect on Data Usability

7. LCS recoveries within laboratory-specified limits? (Yes) No N/A

If No:

Analyte	Recovery	QC Limits	Affected Samples	Effect on Data Usability

8. MS performed on a project-specific sample? (Yes) No N/A

If Yes:

Spiked Sample ID	Spiked Analyte(s)
FC-CCR-MW67-0523	Lithium

a. Are MS recoveries and/or precision within laboratory specified limits?

(Yes) No N/A

If No:

Sample ID	Analyte	RPD or Recovery	Accuracy or Recovery Limits	Effect on Data Usability

9. Field duplicate collected? (Yes) No

If Yes:

Parent Sample	Field Duplicate
FC-CCR-MW84-0523	FC-CCR-FD01-0523

b. Are RPDs between primary and duplicate results ≤ 20% or are differences between analyte concentrations ≤ the reporting limit?

(Yes) No N/A

If No:

Primary Sample ID	Duplicate Sample ID	Analyte	RPD	Effect on Data Usability

10. Did the laboratory perform duplicate analyses on project-specific samples?

(Yes) No N/A

If Yes:

Sample ID	Analysis
FC-CCR-MW84-0523	TDS
FC-CCR-MW68-0523	pH

c. Is the RPD between duplicate results within laboratory-specified limits or is the difference between analyte concentrations less than the reporting limit?

(Yes) No N/A

If No:

Sample ID	Analyte	Effect on Data Usability

11. Other Quality Control Issues? (Yes) No

If Yes:

According to the case narrative, arsenic recovery was high in a continuing calibration verification associated with the analysis of samples FC-CCR-CM01-0523, FC-CCR-CM02-0523, FC-CCR-FD01-0523, FC-CCR-MW84-0523, and FC-CCR-MW85-0523. Arsenic was not detected in the associated samples and data usability is not adversely affected by the high recovery.

According to the case narrative, constant weight was not achieved after three drying cycles in the TDS analysis of samples FC-CCR-MW67-0523 and FC-CCR-MW69-0523. WSP J qualified the TDS results from these samples because of potential matrix interference. (J, MI)

Note:

MI = Potential matrix interference.

12. Are non-detect results sufficiently low to meet EPA primary drinking water criteria?

Yes (No)

Analyte	List	MCL	Alternative GWPS	Units
Antimony	Appendix IV	0.006	--	mg/L
Arsenic	Appendix IV	0.010	--	mg/L
Barium	Appendix IV	2	--	mg/L
Beryllium	Appendix IV	0.004	--	mg/L
Boron	Appendix III	--	--	mg/L
Cadmium	Appendix IV	0.005	--	mg/L
Calcium	Appendix III	--	--	mg/L
Chloride	Appendix III	--	--	mg/L
Chromium	Appendix IV	0.1	--	mg/L
Cobalt	Appendix IV	--	0.006	mg/L
Fluoride	Appendix III/IV	4.0	--	mg/L
Lead	Appendix IV	--	0.015	mg/L
Lithium	Appendix IV	--	0.040	mg/L
Mercury	Appendix IV	0.002	--	mg/L
Molybdenum	Appendix IV	--	0.1	mg/L
pH	Appendix III	--	--	S.U.
Radium 226 + Radium 228	Appendix IV	5	--	pCi/L
Selenium	Appendix IV	0.05	--	mg/L
Sulfate	Appendix III	--	--	mg/L
Total Dissolved Solids	Appendix III	--	--	mg/L
Thallium	Appendix IV	0.002	--	mg/L

If No, list affected samples and analytes.

Sample ID	Analyte	Reporting Limit
FC-CCR-CM01-0523 FC-CCR-CM02-0523 FC-CCR-MW67-0523 FC-CCR-MW68-0523 FC-CCR-MW72-0523	Beryllium	0.0050 mg/L
FC-CCR-CM01-0523 FC-CCR-MW67-0523 FC-CCR-MW68-0523	Fluoride	20 mg/L

Four Corners CCR Data Review

Laboratory Name:	Eurofins Environment Testing		
Sample Delivery Group:	550-201909-1	**Review Date:**	6/20/2023
Validator's Name:	Marie Bevier	**Reviewed By:**	Bjorn Ottosson

Sample Summary:

Field Sample Identification	Collection Date and Time	Laboratory Sample Identification	Notes
FC-CCR-MW62-0523	05/07/23 14:12	550-201909-1	
FC-CCR-MW63-0523	05/07/23 15:41	550-201909-2	
FC-CCR-MW64-0523	05/07/23 16:13	550-201909-3	
FC-CCR-MW65-0523	05/07/23 11:53	550-201909-4	
FC-CCR-SW1-0523	05/07/23 18:42	550-201909-5	
FC-CCR-SW2-0523	05/07/23 15:06	550-201909-6	
FC-CCR-SW3-0523	05/07/23 15:13	550-201909-7	
FC-CCR-FD08-0523	05/07/23 12:34	550-201909-8	Field duplicate of FC-CCR-SW1-0523
FC-CCR-MW66-0523	05/07/23 12:45	550-201909-9	
FC-CCR-MW70-0523	05/07/23 10:59	550-201909-10	
FC-CCR-MW73-0523	05/07/23 18:15	550-201909-11	
FC-CCR-MW83-0523	05/07/23 17:21	550-201909-12	
FC-CCR-MW86-0523	05/07/23 13:25	550-201909-13	
FC-CCR-FD02-0523	05/07/23 16:20	550-201909-14	Field duplicate of FC-CCR-MW86-0523
FC-CCR-MW52-0523	05/02/23 14:10	550-201909-15	
FC-CCR-MW61-0523	05/04/23 09:54	550-201909-16	
FC-CCR-MW75-0523	05/04/23 10:42	550-201909-17	
FC-CCR-MW87-0523	05/05/23 18:06	550-201909-18	
FC-CCR-FD03-0523	05/02/23 16:20	550-201909-19	Field duplicate of FC-CCR-MW52-0523
FC-CCR-DMX01-0523	05/03/23 14:08	550-201909-20	
FC-CCR-DMX03-0523	05/03/23 16:47	550-201909-21	
FC-CCR-DMX04-0523	05/04/23 15:25	550-201909-22	
FC-CCR-MW01-0523	05/02/23 15:42	550-201909-23	
FC-CCR-MW03-0523	05/02/23 16:25	550-201909-24	
FC-CCR-MW05-0523	05/03/23 17:38	550-201909-25	
FC-CCR-MW06-0523	05/04/23 16:13	550-201909-26	
FC-CCR-MW11-0523	05/05/23 16:31	550-201909-27	
FC-CCR-FD04-0523	05/03/23 12:34	550-201909-28	Field duplicate of FC-CCR-DMX01-0523
FC-CCR-MW17R-0523	05/04/23 14:34	550-201909-29	
FC-CCR-MW18-0523	05/04/23 11:50	550-201909-30	
FC-CCR-MW19-0523	05/03/23 15:07	550-201909-31	
FC-CCR-MW21-0523	05/02/23 17:06	550-201909-32	
FC-CCR-MW23R-0523	05/03/23 16:02	550-201909-33	
FC-CCR-MW24-0523	05/04/23 18:12	550-201909-34	
FC-CCR-MW30-0523	05/03/23 09:50	550-201909-35	
FC-CCR-MW36R-0523	05/04/23 12:44	550-201909-36	
FC-CCR-MW38R-0523	05/05/23 11:20	550-201909-37	

Field Sample Identification	Collection Date and Time	Laboratory Sample Identification	Notes
FC-CCR-MW56-0523	05/04/23 13:33	550-201909-38	
FC-CCR-FD06-0523	05/03/23 16:20	550-201909-39	Field duplicate of FC-CCR-MW30-0523
FC-CCR-MW57-0523	05/05/23 12:42	550-201909-40	
FC-CCR-MW60-0523	05/02/23 15:04	550-201909-41	
FC-CCR-MW77S-0523	05/03/23 10:48	550-201909-42	
FC-CCR-MW78S-0523	05/03/23 11:26	550-201909-43	
FC-CCR-MW79S-0523	05/03/23 12:54	550-201909-44	
FC-CCR-MW81-0523	05/03/23 12:07	550-201909-45	
FC-CCR-MW82S-0523	05/05/23 15:32	550-201909-46	
FC-CCR-FD07-0523	05/03/23 13:31	550-201909-47	Field duplicate of FC-CCR-MW81-0523
FC-CCR-FD05-0523	05/03/23 20:02	550-201909-48	Field duplicate of FC-CCR-MW19-0523
FC-CCR-SUMP1-0523	05/05/23 08:14	550-201909-49	
FC-CCR-SUMP2-0523	05/05/23 08:27	550-201909-50	
FC-CCR-SUMP3-0523	05/05/23 08:44	550-201909-51	
FC-CCR-SUMP7-0523	05/05/23 08:51	550-201909-52	
FC-CCR-SUMP8-0523	05/05/23 09:00	550-201909-53	
FC-CCR-SUMP9-0523	05/05/23 09:08	550-201909-54	
FC-CCR-SUMP10-0523	05/05/23 09:15	550-201909-55	
FC-CCR-SUMP11-0523	05/05/23 09:21	550-201909-56	
FC-CCR-SUMP12-0523	05/05/23 09:29	550-201909-57	
FC-CCR-SUMP13-0523	05/05/23 09:36	550-201909-58	
FC-CCR-SUMP14-0523	05/05/23 09:45	550-201909-59	
FC-CCR-SUMP15-0523	05/05/23 09:48	550-201909-60	
FC-CCR-SUMP16-0523	05/05/23 09:56	550-201909-61	
FC-CCR-SUMP17-0523	05/05/23 10:03	550-201909-62	
FC-CCR-SUMP18-0523	05/05/23 10:08	550-201909-63	

Analytical Method:

Analyte	Analyte Group	Method
Chloride, Fluoride, Sulfate	Anions	EPA 300.0
Beryllium, Boron, Calcium, Iron, Lithium, Magnesium, Manganese, Potassium, Sodium	Metals	EPA 200.7
Antimony, Arsenic, Barium, Cadmium, Chromium, Cobalt, Lead, Molybdenum, Nickel, Selenium, Thallium	Metals	EPA 200.8
Mercury	Metals	EPA 245.1
Alkalinity	General Chemistry	SM 2320B
Total Dissolved Solids (TDS)	General Chemistry	SM 2540C
pH	General Chemistry	SM 4500 H+ B

Qualifier Definitions:

J The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

R The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.

U The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.

UJ The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

Sample Receipt Condition:

COC Signed and Complete? (Yes) No

If No, provide details.

Sample Login Matched COC? (Yes) No

If no, provide details.

Sample receipt temperature ≤ 6°C? (Yes) No N/A

If no, provide details.

1. Samples analyzed for metals and radionuclides within 180 days of sampling?

   (Yes) No N/A

2. Samples analyzed for mercury, ammonia, chloride, fluoride, nitrate/nitrite, sulfate, TOC, and/or DOC within 28 days of sampling?

   (Yes) No N/A

3. Samples Analyzed for alkalinity within 14 days of sampling? (Yes) No N/A

4. Samples analyzed for total dissolved solids within 7 days of sampling?

   (Yes) No N/A

5. Samples analyzed for pH within 15 minutes of sampling? Yes (No) N/A

If No:

Sample ID	Analysis	Time Between Collection and Analysis	Effect on Data Usability
FC-CCR-MW62-0523	pH	2 days, 22 hours, 8 minutes	J, HT
FC-CCR-MW63-0523	pH	2 days, 20 hours, 41 minutes	J, HT
FC-CCR-MW64-0523	pH	2 days, 20 hours, 10 minutes	J, HT
FC-CCR-MW65-0523	pH	3 days, 33 minutes	J, HT
FC-CCR-SW1-0523	pH	2 days, 17 hours, 47 minutes	J, HT
FC-CCR-SW2-0523	pH	2 days, 21 hours, 25 minutes	J, HT
FC-CCR-SW3-0523	pH	2 days, 21 hours, 20 minutes	J, HT
FC-CCR-FD08-0523	pH	3 days, 1 minute	J, HT
FC-CCR-MW66-0523	pH	2 days, 23 hours, 51 minutes	J, HT
FC-CCR-MW70-0523	pH	3 days, 1 hour, 38 minutes	J, HT
FC-CCR-MW73-0523	pH	2 days, 18 hours, 24 minutes	J, HT
FC-CCR-MW83-0523	pH	2 days, 19 hours, 19 minutes	J, HT
FC-CCR-MW86-0523	pH	2 days, 23 hours, 16 minutes	J, HT
FC-CCR-FD02-0523	pH	2 days, 20 hours, 24 minutes	J, HT
FC-CCR-MW61-0523	pH	6 days, 2 hours, 52 minutes	J, HT
FC-CCR-MW75-0523	pH	5 days, 2 hours, 5 minutes	J, HT
FC-CCR-MW87-0523	pH	4 days, 18 hours, 43 minutes	J, HT
FC-CCR-DMX03-0523	pH	6 days, 20 hours, 3 minutes	J, HT
FC-CCR-DMX04-0523	pH	5 days, 19 hours, 56 minutes	J, HT
FC-CCR-MW05-0523	pH	6 days, 19 hours, 14 minutes	J, HT
FC-CCR-MW06-0523	pH	5 days, 20 hours, 41 minutes	J, HT
FC-CCR-MW11-0523	pH	4 days, 20 hours, 24 minutes	J, HT
FC-CCR-MW17R-0523	pH	5 days, 22 hours, 22 minutes	J, HT
FC-CCR-MW18-0523	pH	6 days, 1 hour, 9 minutes	J, HT
FC-CCR-MW23R-0523	pH	6 days, 20 hours, 59 minutes	J, HT

Sample ID	Analysis	Time Between Collection and Analysis	Effect on Data Usability
FC-CCR-MW24-0523	pH	5 days, 18 hours, 50 minutes	J, HT
FC-CCR-MW36R-0523	pH	6 days, 19 minutes	J, HT
FC-CCR-MW38R-0523	pH	5 days, 1 hour, 44 minutes	J, HT
FC-CCR-MW56-0523	pH	5 days, 23 hours, 32 minutes	J, HT
FC-CCR-MW57-0523	pH	5 days, 25 minutes	J, HT
FC-CCR-MW82S-0523	pH	4 days, 21 hours, 36 minutes	J, HT

Note:

HT = The sample was analyzed outside the maximum recommended hold time.

6. Target analytes detected in the blanks? (Yes) No N/A

If Yes:

Detected Analyte	Concentration	Samples with concentrations less than 5 times the blank detection	Effect on Data Usability
Calcium	239 µg/L	None	None
TDS	26 mg/L	None	None

7. LCS recoveries within laboratory-specified limits? (Yes) No N/A

If No:

Analyte	Recovery	QC Limits	Affected Samples	Effect on Data Usability

8. MS performed on a project-specific sample? (Yes) No N/A

If Yes:

Spiked Sample ID	Spiked Analyte(s)
FC-CCR-DMX01-0523 FC-CCR-MW30-0523 FC-CCR-MW52-0523 FC-CCR-MW79S-0523 FC-CCR-MW81-0523	Cobalt, Molybdenum
FC-CCR-DMX03-0523 FC-CCR-DMX04-0523	Beryllium, Boron, Calcium, Iron, Lithium, Magnesium, Manganese, Potassium, Sodium
FC-CCR-MW57-0523	Antimony, Arsenic, Barium, Cadmium, Chromium, Cobalt, Lead, Molybdenum, Nickel, Selenium, Thallium
FC-CCR-MW60-0523	Beryllium, Boron
FC-CCR-MW62-0523 FC-CCR-MW63-0523	Beryllium, Boron, Calcium, Lithium
FC-CCR-MW77S-0523	Boron
FC-CCR-SUMP1-0523	Chloride, Fluoride, Sulfate

a. Are MS recoveries and/or precision within laboratory specified limits?

Yes (No) N/A

If No:

Sample ID	Analyte	RPD or Recovery	Accuracy or Recovery Limits	Effect on Data Usability
FC-CCR-DMX01-0523 (FC-CCR-FD04-0523)	Cobalt	91%, MSD	92 to 115%	J, LM
FC-CCR-DMX03-0523	Magnesium Sodium	240%, -308% 207%, 30%	70 to 130%	NA4
FC-CCR-DMX04-0523	Sodium	327%, MS	70 to 130%	NA4
C-CCR-MW60-0523	Boron	6%, MS	70 to 130%	NA4
FC-CCR-MW62-0523	Calcium	61%, MSD	70 to 130%	NA4
FC-CCR-MW79S-0523	Cobalt	86%, 91%	92 to 115%	J, LM
FC-CCR-SUMP1-0523	Sulfate	59%, 69%	80 to 120%	NA4

Notes:
LM = low MS recovery. Result may be biased low.
NA4 = The concentration detected in the unspiked native sample is more than four times the spike concentration and it is not possible to assess analytical accuracy for this analyte in this sample based on the matrix spike recovery.

9. Field duplicate collected? (Yes) No

If Yes:

Parent Sample	Field Duplicate
FC-CCR-MW86-0523	FC-CCR-FD02-0523
FC-CCR-MW52-0523	FC-CCR-FD03-0523
FC-CCR-DMX01-0523	FC-CCR-FD04-0523
FC-CCR-MW19-0523	FC-CCR-FD05-0523
FC-CCR-MW30-0523	FC-CCR-FD06-0523
FC-CCR-MW81-0523	FC-CCR-FD07-0523
FC-CCR-SW1-0523	FC-CCR-FD08-0523

b. Are RPDs between primary and duplicate results ≤ 20% or are differences between analyte concentrations ≤ the reporting limit?

(Yes) No N/A

If No:

Primary Sample ID	Duplicate Sample ID	Analyte	RPD or Difference	Effect on Data Usability

10. Did the laboratory perform duplicate analyses on project-specific samples?

(Yes) No N/A

If Yes:

Sample ID	Analysis
FC-CCR-DMX03-0523, FC-CCR-DMX04-0523, FC-CCR-MW23R-0523, FC-CCR-MW38R-0523, FC-CCR-MW63-0523, FC-CCR-MW83-0523, FC-CCR-SUMP11-0523	TDS
FC-CCR-FD02-0523, FC-CCR-MW18-0523, FC-CCR-MW65-0523	pH
FC-CCR-MW11-0523, FC-CCR-MW36R-0523, FC-CCR-MW61-0523	Alkalinity

c. Is the RPD between duplicate results within laboratory-specified limits or is the difference between analyte concentrations less than the reporting limit?

(Yes) No N/A

If No:

Sample ID	Analyte	Effect on Data Usability

11. Other quality control Issues? (Yes) No

If Yes:

According to the case narrative, samples FC-CCR-MW87-0523, FC-CCR-SUMP15-0523, and FC-CCR-SW3-0523 did not reach constant weight after three drying cycles. WSP J qualified the TDS results from these samples because of potential matrix interference, (J, MI)

Note:

MI = Potential matrix interference.

12. Are non-detect results sufficiently low to meet EPA primary drinking water criteria?

Yes (No)

Analyte	List	MCL	Alternative GWPS	Units
Antimony	Appendix IV	0.006	--	mg/L
Arsenic	Appendix IV	0.010	--	mg/L
Barium	Appendix IV	2	--	mg/L
Beryllium	Appendix IV	0.004	--	mg/L
Boron	Appendix III	--	--	mg/L
Cadmium	Appendix IV	0.005	--	mg/L
Calcium	Appendix III	--	--	mg/L
Chloride	Appendix III	--	--	mg/L
Chromium	Appendix IV	0.1	--	mg/L
Cobalt	Appendix IV	--	0.006	mg/L
Fluoride	Appendix III/IV	4.0	0.8	mg/L
Lead	Appendix IV	--	0.015	mg/L
Lithium	Appendix IV	--	0.040	mg/L
Mercury	Appendix IV	0.002	--	mg/L
Molybdenum	Appendix IV	--	0.1	mg/L
pH	Appendix III	--	--	s.u.
Radium 226 + Radium 228	Appendix IV	5	--	pCi/L
Selenium	Appendix IV	0.05	--	mg/L
Sulfate	Appendix III	--	--	mg/L
Total Dissolved Solids	Appendix III	--	--	mg/L
Thallium	Appendix IV	0.002	--	mg/L

If No, list affected samples and analytes.

Sample ID	Analyte	Reporting Limit
FC-CCR-MW82S-0523	Beryllium	0.010 mg/L
FC-CCR-MW65-0523	Fluoride	2 mg/L
FC-CCR-MW24-0523 FC-CCR-MW61-0523 FC-CCR-MW75-0523	Fluoride	4 mg/L
FC-CCR-MW17R-0523 FC-CCR-MW36R-0523 FC-CCR-MW38R-0523 FC-CCR-MW63-0523 FC-CCR-MW83-0523	Fluoride	8 mg/L
FC-CCR-DMX04-0523	Fluoride	20 mg/L
FC-CCR-MW57-0523 FC-CCR-MW82S-0523	Fluoride	40 mg/L

Sample ID	Analyte	Reporting Limit
FC-CCR-DMX03-0523	Fluoride	80 mg/L
FC-CCR-FD02-0523		
FC-CCR-MW05-0523		
FC-CCR-MW06-0523		
FC-CCR-MW11-0523		
FC-CCR-MW18-0523		
FC-CCR-MW23R-0523		
FC-CCR-MW56-0523		
FC-CCR-MW62-0523		
FC-CCR-MW66-0523		
FC-CCR-MW70-0523		
FC-CCR-MW73-0523		
FC-CCR-MW86-0523		
FC-CCR-MW87-0523		

Four Corners CCR Data Review

Laboratory Name:	Radiation Safety Engineering, Inc.		
Sample Delivery Group:	73172-73183	**Review Date:**	11/30/2023
Validator's Name:	Caitlin Riechmann	**Reviewed By:**	Marie Bevier

Sample Summary:

Field Sample Identification	Collection Date and Time	Laboratory Sample Identification	Notes
FC-CCR-MW66-1123	11/6/2023 16:10	73172	
FC-CCR-MW70-1123	11/6/2023 17:08	73173	
FC-CCR-MW71-1123	11/6/2023 11:06	73174	
FC-CCR-MW72-1123	11/6/2023 12:13	73175	
FC-CCR-MW73-1123	11/6/2023 13:16	73176	
FC-CCR-MW86-1123	11/6/2023 15:25	73177	
FC-CCR-MW62-1123	11/6/2023 11:27	73178	
FC-CCR-MW63-1123	11/6/2023 12:35	73179	
FC-CCR-MW64-1123	11/6/2023 13:29	73180	
FC-CCR-MW65-1123	11/6/2023 14:34	73181	
FC-CCR-MW61-1123	11/9/2023 12:50	73182	
FC-CCR-MW75-1123	11/8/2023 15:39	73183	

Analytical Methods:

Analyte	Analyte Group	Method
Radium 226, Radium 228, Total Radium	Radionuclides	HPGE

Qualifier Definitions:

J The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

R The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.

U The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.

UJ The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

Sample Receipt Condition:

COC Signed and Complete? Yes (No)

If No, provide details.

The collection time for sample FC-CCR-MW61-1123 was missing on the COC.

Sample Login Matched COC? Yes (No)

If no, provide details.

The collection time for sample FC-CCR-MW61-1123 was missing on the COC, but the sample was logged with a collection time of 12:50.

Sample receipt temperature ≤ 6°C? Yes No (N/A)

If no, provide details.

1. Samples analyzed for metals and radionuclides within 180 days of sampling?

   (Yes) No N/A

2. Samples analyzed for mercury, ammonia, chloride, fluoride, nitrate/nitrite, sulfate, TOC, and/or DOC within 28 days of sampling?

   Yes No (N/A)

3. Samples Analyzed for alkalinity within 14 days of sampling? Yes No (N/A)

4. Samples analyzed for total dissolved solids within 7 days of sampling?

   Yes No (N/A)

5. Samples analyzed for pH within 15 minutes of sampling? Yes No (N/A)

If No:

Sample ID	Analysis	Time Between Collection and Analysis	Effect on Data Usability

6. Target analytes detected in the blanks? Yes No (N/A)

If Yes:

Detected Analyte	Concentration	Samples with concentrations less than 5 times the blank detection	Effect on Data Usability

7. LCS recoveries within laboratory-specified limits? Yes No (N/A)

If No:

Analyte	Recovery	QC Limits	Affected Samples	Effect on Data Usability

8. MS performed on a project-specific sample? Yes No (N/A)

If Yes:

Spiked Sample ID	Spiked Analyte(s)

a. Are MS recoveries and/or precision within laboratory specified limits?

Yes No (N/A)

If No:

Sample ID	Analyte	RPD or Recovery	Accuracy or Recovery Limits	Effect on Data Usability

9. Field duplicate collected? Yes (No)

If Yes:

Parent Sample	Field Duplicate

b. Are RPDs between primary and duplicate results ≤ 20% or are differences between analyte concentrations ≤ the reporting limit?

Yes No (N/A)

If No:

Primary Sample ID	Duplicate Sample ID	Analyte	RPD	Effect on Data Usability

10. Did the laboratory perform duplicate analyses on project-specific samples?

Yes (No) N/A

If Yes:

Sample ID	Analysis

c. Is the RPD between duplicate results within laboratory-specified limits or is the difference between analyte concentrations less than the reporting limit?

Yes No (N/A)

If No:

Sample ID	Analyte	Effect on Data Usability

11. Are non-detect results sufficiently low to meet EPA primary drinking water criteria?

Yes (circled) No

Analyte	List	MCL	Alternative GWPS	Units
Antimony	Appendix IV	0.006	--	mg/L
Arsenic	Appendix IV	0.010	--	mg/L
Barium	Appendix IV	2	--	mg/L
Beryllium	Appendix IV	0.004	--	mg/L
Boron	Appendix III	--	--	mg/L
Cadmium	Appendix IV	0.005	--	mg/L
Calcium	Appendix III	--	--	mg/L
Chloride	Appendix III	--	--	mg/L
Chromium	Appendix IV	0.1	--	mg/L
Cobalt	Appendix IV	--	0.006	mg/L
Fluoride	Appendix III/IV	4.0	--	mg/L
Lead	Appendix IV	--	0.015	mg/L
Lithium	Appendix IV	--	0.040	mg/L
Mercury	Appendix IV	0.002	--	mg/L
Molybdenum	Appendix IV	--	0.1	mg/L
pH	Appendix III	--	--	S.U.
Radium 226 + Radium 228	Appendix IV	5	--	pCi/L
Selenium	Appendix IV	0.05	--	mg/L
Sulfate	Appendix III	--	--	mg/L
Total Dissolved Solids	Appendix III	--	--	mg/L
Thallium	Appendix IV	0.002	--	mg/L

If No, list affected samples and analytes.

Sample ID	Analyte	Reporting Limit

Four Corners CCR Data Review

Laboratory Name:	Radiation Safety Engineering, Inc.		
Sample Delivery Group:	73252-73263	**Review Date:**	12/8/2023
Validator's Name:	Caitlin Riechmann	**Reviewed By:**	Marie Bevier

Sample Summary:

Field Sample Identification	Collection Date and Time	Laboratory Sample Identification	Notes
FC-CCR-DMX03-1123	11/13/2023 14:51	73252	
FC-CCR-DMX04-1123	11/14/2023 17:30	73253	
FC-CCR-DMX06-1123	11/15/2023 9:15	73254	
FC-CCR-MW06R-1123	11/14/2023 18:21	73255	
FC-CCR-MW15-1123	11/15/2023 10:33	73256	
FC-CCR-MW16-1123	11/15/2023 11:47	73257	
FC-CCR-MW17R-1123	11/14/2023 14:07	73258	
FC-CCR-MW38R-1123	11/14/2023 14:54	73259	
FC-CCR-MW56-1123	11/14/2023 12:52	73260	
FC-CCR-MW57-1123	11/14/2023 16:03	73261	
FC-CCR-DMX05R-1123	11/16/2023 11:38	73262	
FC-CCR-EB01-1123	11/16/2023 17:37	73263	Equipment blank

Analytical Methods:

Analyte	Analyte Group	Method
Radium 226, Radium 228, Total Radium	Radionuclides	HPGE

Qualifier Definitions:

J The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

R The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.

U The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.

UJ The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

Sample Receipt Condition:

COC Signed and Complete? (Yes) No

If No, provide details.

Sample Login Matched COC? (Yes) No

If no, provide details.

Sample receipt temperature ≤ 6°C? Yes No (N/A)

If no, provide details.

1. Samples analyzed for metals and radionuclides within 180 days of sampling?

   (Yes) No N/A

2. Samples analyzed for mercury, ammonia, chloride, fluoride, nitrate/nitrite, sulfate, TOC, and/or DOC within 28 days of sampling?

   Yes No (N/A)

3. Samples Analyzed for alkalinity within 14 days of sampling? Yes No (N/A)

4. Samples analyzed for total dissolved solids within 7 days of sampling?

   Yes No (N/A)

5. Samples analyzed for pH within 15 minutes of sampling? Yes No (N/A)

If No:

Sample ID	Analysis	Time Between Collection and Analysis	Effect on Data Usability

6. Target analytes detected in the blanks? Yes (No) N/A

If Yes:

Detected Analyte	Concentration	Samples with concentrations less than 5 times the blank detection	Effect on Data Usability

7. LCS recoveries within laboratory-specified limits? Yes No (N/A)

If No:

Analyte	Recovery	QC Limits	Affected Samples	Effect on Data Usability

8. MS performed on a project-specific sample? Yes No (N/A)

If Yes:

Spiked Sample ID	Spiked Analyte(s)

a. Are MS recoveries and/or precision within laboratory specified limits?

Yes No (N/A)

If No:

Sample ID	Analyte	RPD or Recovery	Accuracy or Recovery Limits	Effect on Data Usability

9. Field duplicate collected? Yes (No)

If Yes:

Parent Sample	Field Duplicate

b. Are RPDs between primary and duplicate results ≤ 20% or are differences between analyte concentrations ≤ the reporting limit?

Yes No (N/A)

If No:

Primary Sample ID	Duplicate Sample ID	Analyte	RPD	Effect on Data Usability

10. Did the laboratory perform duplicate analyses on project-specific samples?

Yes (No) N/A

If Yes:

Sample ID	Analysis

c. Is the RPD between duplicate results within laboratory-specified limits or is the difference between analyte concentrations less than the reporting limit?

Yes No (N/A)

If No:

Sample ID	Analyte	Effect on Data Usability

11. Are non-detect results sufficiently low to meet EPA primary drinking water criteria?

Yes (circled) No

Analyte	List	MCL	Alternative GWPS	Units
Antimony	Appendix IV	0.006	--	mg/L
Arsenic	Appendix IV	0.010	--	mg/L
Barium	Appendix IV	2	--	mg/L
Beryllium	Appendix IV	0.004	--	mg/L
Boron	Appendix III	--	--	mg/L
Cadmium	Appendix IV	0.005	--	mg/L
Calcium	Appendix III	--	--	mg/L
Chloride	Appendix III	--	--	mg/L
Chromium	Appendix IV	0.1	--	mg/L
Cobalt	Appendix IV	--	0.006	mg/L
Fluoride	Appendix III/IV	4.0	--	mg/L
Lead	Appendix IV	--	0.015	mg/L
Lithium	Appendix IV	--	0.040	mg/L
Mercury	Appendix IV	0.002	--	mg/L
Molybdenum	Appendix IV	--	0.1	mg/L
pH	Appendix III	--	--	S.U.
Radium 226 + Radium 228	Appendix IV	5	--	pCi/L
Selenium	Appendix IV	0.05	--	mg/L
Sulfate	Appendix III	--	--	mg/L
Total Dissolved Solids	Appendix III	--	--	mg/L
Thallium	Appendix IV	0.002	--	mg/L

If No, list affected samples and analytes.

Sample ID	Analyte	Reporting Limit

Four Corners CCR Data Review

Laboratory Name:	Radiation Safety Engineering, Inc.		
Sample Delivery Group:	73264-73267	**Review Date:**	12/8/2023
Validator's Name:	Caitlin Riechmann	**Reviewed By:**	Marie Bevier

Sample Summary:

Field Sample Identification	Collection Date and Time	Laboratory Sample Identification	Notes
FC-CCR-SW1-1123	11/13/2023 11:13	73264	
FC-CCR-SW2-1123	11/13/2023 10:45	73265	
FC-CCR-SW3-1123	11/13/2023 10:20	73266	
FC-CCR-FD08-1123	11/13/2023 16:20	73267	Field Duplicate of FC-CCR-SW1-1123

Analytical Methods:

Analyte	Analyte Group	Method
Radium 226, Radium 228, Total Radium	Radionuclides	HPGE

Qualifier Definitions:

J The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

R The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.

U The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.

UJ The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

Sample Receipt Condition:

COC Signed and Complete? (Yes) No

If No, provide details.

Sample Login Matched COC? (Yes) No

If no, provide details.

Sample receipt temperature ≤ 6°C? Yes No (N/A)

If no, provide details.

1. Samples analyzed for metals and radionuclides within 180 days of sampling?

   (Yes) No N/A

2. Samples analyzed for mercury, ammonia, chloride, fluoride, nitrate/nitrite, sulfate, TOC, and/or DOC within 28 days of sampling?

   Yes No (N/A)

3. Samples Analyzed for alkalinity within 14 days of sampling? Yes No (N/A)

4. Samples analyzed for total dissolved solids within 7 days of sampling?

   Yes No (N/A)

5. Samples analyzed for pH within 15 minutes of sampling? Yes No (N/A)

If No:

Sample ID	Analysis	Time Between Collection and Analysis	Effect on Data Usability

6. Target analytes detected in the blanks? Yes No (N/A)

If Yes:

Detected Analyte	Concentration	Samples with concentrations less than 5 times the blank detection	Effect on Data Usability

7. LCS recoveries within laboratory-specified limits? Yes No (N/A)

If No:

Analyte	Recovery	QC Limits	Affected Samples	Effect on Data Usability

8. MS performed on a project-specific sample? Yes No (N/A)

If Yes:

Spiked Sample ID	Spiked Analyte(s)

a. Are MS recoveries and/or precision within laboratory specified limits?

Yes No (N/A)

If No:

Sample ID	Analyte	RPD or Recovery	Accuracy or Recovery Limits	Effect on Data Usability

9. Field duplicate collected? (Yes) No

If Yes:

Parent Sample	Field Duplicate
FC-CCR-SW1-1123	FC-CCR-FD08-1123

b. Are RPDs between primary and duplicate results ≤ 20% or are differences between analyte concentrations ≤ the reporting limit?

(Yes) No N/A

If No:

Primary Sample ID	Duplicate Sample ID	Analyte	RPD	Effect on Data Usability

10. Did the laboratory perform duplicate analyses on project-specific samples?

Yes (No) N/A

If Yes:

Sample ID	Analysis

c. Is the RPD between duplicate results within laboratory-specified limits or is the difference between analyte concentrations less than the reporting limit?

Yes No (N/A)

If No:

Sample ID	Analyte	Effect on Data Usability

11. Are non-detect results sufficiently low to meet EPA primary drinking water criteria?

Yes (circled) No

Analyte	List	MCL	Alternative GWPS	Units
Antimony	Appendix IV	0.006	--	mg/L
Arsenic	Appendix IV	0.010	--	mg/L
Barium	Appendix IV	2	--	mg/L
Beryllium	Appendix IV	0.004	--	mg/L
Boron	Appendix III	--	--	mg/L
Cadmium	Appendix IV	0.005	--	mg/L
Calcium	Appendix III	--	--	mg/L
Chloride	Appendix III	--	--	mg/L
Chromium	Appendix IV	0.1	--	mg/L
Cobalt	Appendix IV	--	0.006	mg/L
Fluoride	Appendix III/IV	4.0	--	mg/L
Lead	Appendix IV	--	0.015	mg/L
Lithium	Appendix IV	--	0.040	mg/L
Mercury	Appendix IV	0.002	--	mg/L
Molybdenum	Appendix IV	--	0.1	mg/L
pH	Appendix III	--	--	S.U.
Radium 226 + Radium 228	Appendix IV	5	--	pCi/L
Selenium	Appendix IV	0.05	--	mg/L
Sulfate	Appendix III	--	--	mg/L
Total Dissolved Solids	Appendix III	--	--	mg/L
Thallium	Appendix IV	0.002	--	mg/L

If No, list affected samples and analytes.

Sample ID	Analyte	Reporting Limit

Four Corners CCR Data Review

Laboratory Name:	Radiation Safety Engineering, Inc.		
Sample Delivery Group:	73268-73297	**Review Date:**	12/6/2023
Validator's Name:	Caitlin Riechmann	**Reviewed By:**	Marie Bevier

Sample Summary:

Field Sample Identification	Collection Date and Time	Laboratory Sample Identification	Notes
FC-CCR-MW67-1123	11/13/2023 9:18	73268	
FC-CCR-MW68-1123	11/11/2023 11:28	73269	
FC-CCR-MW69-1123	11/11/2023 10:33	73270	
FC-CCR-MW83-1123	11/11/2023 14:10	73271	
FC-CCR-MW84-1123	11/11/2023 15:53	73272	
FC-CCR-MW85-1123	11/11/2023 15:03	73273	
FC-CCR-FD01-1123	11/11/2023 8:53	73274	Field Duplicate of FC-CCR-MW84-1123
FC-CCR-CM01-1123	11/13/2023 9:41	73275	
FC-CCR-CM02-1123	11/13/2023 9:52	73276	
FC-CCR-MW07-1123	11/15/2023 14:31	73277	
FC-CCR-MW08-1123	11/15/2023 13:33	73278	
FC-CCR-MW49A-1123	11/15/2023 16:59	73279	

Analytical Methods:

Analyte	Analyte Group	Method
Radium 226, Radium 228, Total Radium	Radionuclides	HPGE

Qualifier Definitions:

J The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

R The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.

U The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.

UJ The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

Sample Receipt Condition:

COC Signed and Complete? (Yes) No

If No, provide details.

Sample Login Matched COC? (Yes) No

If no, provide details.

Sample receipt temperature ≤ 6°C? Yes No (N/A)

If no, provide details.

1. Samples analyzed for metals and radionuclides within 180 days of sampling?

   (Yes) No N/A

2. Samples analyzed for mercury, ammonia, chloride, fluoride, nitrate/nitrite, sulfate, TOC, and/or DOC within 28 days of sampling?

   Yes No (N/A)

3. Samples Analyzed for alkalinity within 14 days of sampling? Yes No (N/A)

4. Samples analyzed for total dissolved solids within 7 days of sampling?

   Yes No (N/A)

5. Samples analyzed for pH within 15 minutes of sampling? Yes No (N/A)

If No:

Sample ID	Analysis	Time Between Collection and Analysis	Effect on Data Usability

6. Target analytes detected in the blanks? Yes No (N/A)

If Yes:

Detected Analyte	Concentration	Samples with concentrations less than 5 times the blank detection	Effect on Data Usability

7. LCS recoveries within laboratory-specified limits? Yes No (N/A)

If No:

Analyte	Recovery	QC Limits	Affected Samples	Effect on Data Usability

8. MS performed on a project-specific sample? Yes No (N/A)

If Yes:

Spiked Sample ID	Spiked Analyte(s)

a. Are MS recoveries and/or precision within laboratory specified limits?

Yes No (N/A)

If No:

Sample ID	Analyte	RPD or Recovery	Accuracy or Recovery Limits	Effect on Data Usability

9. Field duplicate collected? (Yes) No

If Yes:

Parent Sample	Field Duplicate
FC-CCR-MW84-1123	FC-CCR-FD01-1123

b. Are RPDs between primary and duplicate results ≤ 20% or are differences between analyte concentrations ≤ the reporting limit?

Yes (No) N/A

If No:

Primary Sample ID	Duplicate Sample ID	Analyte	RPD	Effect on Data Usability
FC-CCR-MW84-1123	FC-CCR-FD01-1123	Radium 226	NC	J/UJ-FD
FC-CCR-MW84-1123	FC-CCR-FD01-1123	Radium 228	67%	J-FD
FC-CCR-MW84-1123	FC-CCR-FD01-1123	Total Radium	100%	J-FD

Note:
FD = Imprecision between primary and field duplicate results.
NC = RPD not calculable but the difference between analyte concentrations was greater than the reporting limit.

10. Did the laboratory perform duplicate analyses on project-specific samples?

Yes (No) N/A

If Yes:

Sample ID	Analysis

c. Is the RPD between duplicate results within laboratory-specified limits or is the difference between analyte concentrations less than the reporting limit?

Yes No (N/A)

If No:

Sample ID	Analyte	Effect on Data Usability

11. Are non-detect results sufficiently low to meet EPA primary drinking water criteria?

Yes (circled) No

Analyte	List	MCL	Alternative GWPS	Units
Antimony	Appendix IV	0.006	--	mg/L
Arsenic	Appendix IV	0.010	--	mg/L
Barium	Appendix IV	2	--	mg/L
Beryllium	Appendix IV	0.004	--	mg/L
Boron	Appendix III	--	--	mg/L
Cadmium	Appendix IV	0.005	--	mg/L
Calcium	Appendix III	--	--	mg/L
Chloride	Appendix III	--	--	mg/L
Chromium	Appendix IV	0.1	--	mg/L
Cobalt	Appendix IV	--	0.006	mg/L
Fluoride	Appendix III/IV	4.0	--	mg/L
Lead	Appendix IV	--	0.015	mg/L
Lithium	Appendix IV	--	0.040	mg/L
Mercury	Appendix IV	0.002	--	mg/L
Molybdenum	Appendix IV	--	0.1	mg/L
pH	Appendix III	--	--	S.U.
Radium 226 + Radium 228	Appendix IV	5	--	pCi/L
Selenium	Appendix IV	0.05	--	mg/L
Sulfate	Appendix III	--	--	mg/L
Total Dissolved Solids	Appendix III	--	--	mg/L
Thallium	Appendix IV	0.002	--	mg/L

If No, list affected samples and analytes.

Sample ID	Analyte	Reporting Limit

Four Corners CCR Data Review

Laboratory Name:	Eurofins Environment Testing		
Sample Delivery Group:	J210426	**Review Date:**	12/8/2023
Validator's Name:	Caitlin Riechmann	**Reviewed By:**	Marie Bevier

Sample Summary:

Field Sample Identification	Collection Date and Time	Laboratory Sample Identification	Notes
FC-CCR-MW62-1123	11/06/23 11:27	550-210426-1	
FC-CCR-MW63-1123	11/06/23 12:35	550-210426-2	
FC-CCR-MW64-1123	11/06/23 13:29	550-210426-3	
FC-CCR-MW65-1123	11/06/23 14:34	550-210426-4	

Analytical Methods:

Analyte	Analyte Group	Method
Chloride, Fluoride, Sulfate	Anions	EPA 300.0
Beryllium, Boron, Calcium, Iron, Lithium, Magnesium, Manganese, Potassium, Sodium	Metals	EPA 200.7
Antimony, Arsenic, Barium, Cadmium, Chromium, Cobalt, Lead, Molybdenum, Selenium, Thallium	Metals	EPA 200.8
Mercury	Metals	EPA 245.1
Alkalinity	General Chemistry	SM 2320B
Total Dissolved Solids (TDS)	General Chemistry	SM 2540C
pH	General Chemistry	SM 4500 H+B

Qualifier Definitions:

J The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

R The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.

U The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.

UJ The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

Sample Receipt Condition:

COC Signed and Complete? (Yes) No

If No, provide details.

Sample Login Matched COC? (Yes) No

If no, provide details.

Sample receipt temperature ≤ 6°C? (Yes) No N/A

If no, provide details.

1. Samples analyzed for metals and radionuclides within 180 days of sampling?

   (Yes) No N/A

2. Samples analyzed for mercury, ammonia, chloride, fluoride, nitrate/nitrite, sulfate, TOC, and/or DOC within 28 days of sampling?

   (Yes) No N/A

3. Samples Analyzed for alkalinity within 14 days of sampling? (Yes) No N/A

4. Samples analyzed for total dissolved solids within 7 days of sampling?

   (Yes) No N/A

5. Samples analyzed for pH within 15 minutes of sampling? Yes (No) N/A

If No:

Sample ID	Analysis	Time Between Collection and Analysis	Effect on Data Usability
FC-CCR-MW62-1123	pH	9 days, 2 hours, 4 minutes	J-HT
FC-CCR-MW63-1123	pH	9 days, 0 hours, 58 minutes	J-HT
FC-CCR-MW64-1123	pH	9 days, 0 hours, 5 minutes	J-HT
FC-CCR-MW65-1123	pH	8 days, 23 hours, 1 minute	J-HT

Note:
HT = Maximum recommended hold time was exceeded.

6. Target analytes detected in the blanks? Yes (No) N/A

If Yes:

Detected Analyte	Concentration	Samples with concentrations less than 5 times the blank detection	Effect on Data Usability

7. LCS recoveries within laboratory-specified limits? Yes (No) N/A

If No:

Analyte	Recovery	QC Limits	Affected Samples	Effect on Data Usability
Barium	145%, LCS	85-115%	FC-CCR-MW62-1123, FC-CCR-MW63-1123, FC-CCR-MW64-1123, FC-CCR-MW65-1123	J-HL
Barium	23% RPD	20%	FC-CCR-MW62-1123, FC-CCR-MW63-1123, FC-CCR-MW64-1123, FC-CCR-MW65-1123	J-HD
Boron	116%, LCS	85-115%	FC-CCR-MW62-1123, FC-CCR-MW63-1123, FC-CCR-MW64-1123, FC-CCR-MW65-1123	J-HL
Calcium	117%, LCS	85-115%	FC-CCR-MW62-1123, FC-CCR-MW63-1123, FC-CCR-MW64-1123, FC-CCR-MW65-1123	J-HL
Iron	118%, 116%	85-115%	FC-CCR-MW62-1123, FC-CCR-MW63-1123, FC-CCR-MW64-1123	J-HL
Beryllium	117%, 117%	85-115%	None	NA
Lead	126%, 119%	85-115%	None	NA

Notes:
HD = Imprecision between LCS and LCSD recoveries.
HL = High LCS recovery.
NA = Not applicable.

8. MS performed on a project-specific sample? Yes (No) N/A

If Yes:

Spiked Sample ID	Spiked Analyte(s)

a. Are MS recoveries and/or precision within laboratory specified limits?

Yes No (N/A)

If No:

Sample ID	Analyte	RPD or Recovery	Accuracy or Recovery Limits	Effect on Data Usability

9. Field duplicate collected? Yes (No)

If Yes:

Parent Sample	Field Duplicate

b. Are RPDs between primary and duplicate results ≤ 20% or are differences between analyte concentrations ≤ the reporting limit?

Yes No (N/A)

If No:

Primary Sample ID	Duplicate Sample ID	Analyte	RPD	Effect on Data Usability

10. Did the laboratory perform duplicate analyses on project-specific samples?

(Yes) No N/A

If Yes:

Sample ID	Analysis
FC-CCR-MW62-1123	pH

c. Is the RPD between duplicate results within laboratory-specified limits or is the difference between analyte concentrations less than the reporting limit?

(Yes) No N/A

If No:

Sample ID	Analyte	Effect on Data Usability

11. Are non-detect results sufficiently low to meet EPA primary drinking water criteria?

Yes (No)

Analyte	List	MCL	Alternative GWPS	Units
Antimony	Appendix IV	0.006	--	mg/L
Arsenic	Appendix IV	0.010	--	mg/L
Barium	Appendix IV	2	--	mg/L
Beryllium	Appendix IV	0.004	--	mg/L
Boron	Appendix III	--	--	mg/L
Cadmium	Appendix IV	0.005	--	mg/L
Calcium	Appendix III	--	--	mg/L
Chloride	Appendix III	--	--	mg/L
Chromium	Appendix IV	0.1	--	mg/L
Cobalt	Appendix IV	--	0.006	mg/L
Fluoride	Appendix III/IV	4.0	--	mg/L
Lead	Appendix IV	--	0.015	mg/L
Lithium	Appendix IV	--	0.040	mg/L
Mercury	Appendix IV	0.002	--	mg/L
Molybdenum	Appendix IV	--	0.1	mg/L
pH	Appendix III	--	--	S.U.
Radium 226 + Radium 228	Appendix IV	5	--	pCi/L
Selenium	Appendix IV	0.05	--	mg/L
Sulfate	Appendix III	--	--	mg/L
Total Dissolved Solids	Appendix III	--	--	mg/L
Thallium	Appendix IV	0.002	--	mg/L

If No, list affected samples and analytes.

Sample ID	Analyte	Reporting Limit
FC-CCR-MW64-1123, FC-CCR-MW65-1123	Lithium	0.050 mg/L

Four Corners CCR Data Review

Laboratory Name:	Eurofins Environment Testing		
Sample Delivery Group:	J210427	**Review Date:**	12/6/2023
Validator's Name:	Caitlin Riechmann	**Reviewed By:**	Marie Bevier

Sample Summary:

Field Sample Identification	Collection Date and Time	Laboratory Sample Identification	Notes
FC-CCR-MW66-1123	11/06/23 16:10	550-210427-1	
FC-CCR-MW70-1123	11/06/23 17:08	550-210427-2	
FC-CCR-MW71-1123	11/08/23 11:06	550-210427-3	
FC-CCR-MW72-1123	11/08/23 12:13	550-210427-4	
FC-CCR-MW73-1123	11/08/23 13:16	550-210427-5	
FC-CCR-MW86-1123	11/06/23 15:25	550-210427-6	

Analytical Methods:

Analyte	Analyte Group	Method
Chloride, Fluoride, Sulfate	Anions	EPA 300.0
Beryllium, Boron, Calcium, Lithium	Metals	EPA 200.7
Antimony, Arsenic, Barium, Cadmium, Chromium, Cobalt, Lead, Molybdenum, Selenium, Thallium	Metals	EPA 200.8
Mercury	Metals	EPA 245.1
Total Dissolved Solids (TDS)	General Chemistry	SM 2540C
pH	General Chemistry	SM 4500 H+B

Qualifier Definitions:

J The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

R The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.

U The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.

UJ The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

Sample Receipt Condition:

COC Signed and Complete? (Yes) No

If No, provide details.

Sample Login Matched COC? (Yes) No

If no, provide details.

Sample receipt temperature ≤ 6°C? (Yes) No N/A

If no, provide details.

1. Samples analyzed for metals and radionuclides within 180 days of sampling?

   (Yes) No N/A

2. Samples analyzed for mercury, ammonia, chloride, fluoride, nitrate/nitrite, sulfate, TOC, and/or DOC within 28 days of sampling?

   (Yes) No N/A

3. Samples Analyzed for alkalinity within 14 days of sampling? Yes No (N/A)

4. Samples analyzed for total dissolved solids within 7 days of sampling?

   Yes (No) N/A

5. Samples analyzed for pH within 15 minutes of sampling? Yes (No) N/A

If No:

Sample ID	Analysis	Time Between Collection and Analysis	Effect on Data Usability
FC-CCR-MW66-1123	pH	8 days, 21 hours, 26 minutes	J-HT
FC-CCR-MW70-1123	pH	8 days, 20 hours, 30 minutes	J-HT
FC-CCR-MW71-1123	pH	7 days, 2 hours, 33 minutes	J-HT
FC-CCR-MW71-1123	TDS	8 days	J-HT
FC-CCR-MW72-1123	pH	7 days, 1 hour, 27 minutes	J-HT
FC-CCR-MW73-1123	pH	7 days, 0 hours, 26 minutes	J-HT
FC-CCR-MW86-1123	pH	8 days, 22 hours, 18 minutes	J-HT

Note:
HT = Maximum recommended hold time was exceeded.

6. Target analytes detected in the blanks? Yes (No) N/A

If Yes:

Detected Analyte	Concentration	Samples with concentrations less than 5 times the blank detection	Effect on Data Usability

7. LCS recoveries within laboratory-specified limits? Yes (No) N/A

If No:

Analyte	Recovery	QC Limits	Affected Samples	Effect on Data Usability
Barium	145%, LCS	85-115%	FC-CCR-MW66-1123, FC-CCR-MW70-1123, FC-CCR-MW71-1123, FC-CCR-MW72-1123, FC-CCR-MW73-1123, FC-CCR-MW86-1123	J-HL
Barium	23% RPD	20%	FC-CCR-MW66-1123, FC-CCR-MW70-1123, FC-CCR-MW71-1123, FC-CCR-MW72-1123, FC-CCR-MW73-1123, FC-CCR-MW86-1123	J-HD
Boron	116%, LCS	85-115%	FC-CCR-MW66-1123, FC-CCR-MW70-1123, FC-CCR-MW71-1123, FC-CCR-MW72-1123, FC-CCR-MW73-1123, FC-CCR-MW86-1123	J-HL
Calcium	117%, LCS	85-115%	FC-CCR-MW66-1123, FC-CCR-MW70-1123, FC-CCR-MW71-1123, FC-CCR-MW72-1123, FC-CCR-MW73-1123, FC-CCR-MW86-1123	J-HL
Beryllium	117%, 117%	85-115%	None	NA
Lead	126%, 119%	85-115%	None	NA

Note:
HL = High LCS recovery.
HD = Imprecision between LCS and LCSD recoveries.
NA = Not applicable.

8. MS performed on a project-specific sample? (Yes) No N/A

If Yes:

Spiked Sample ID	Spiked Analyte(s)
FC-CCR-MW66-1123	Lithium

a. Are MS recoveries and/or precision within laboratory specified limits?

(Yes) No N/A

If No:

Sample ID	Analyte	RPD or Recovery	Accuracy or Recovery Limits	Effect on Data Usability

9. Field duplicate collected? Yes (No)

If Yes:

Parent Sample	Field Duplicate

b. Are RPDs between primary and duplicate results ≤ 20% or are differences between analyte concentrations ≤ the reporting limit?

Yes No (N/A)

If No:

Primary Sample ID	Duplicate Sample ID	Analyte	RPD	Effect on Data Usability

10. Did the laboratory perform duplicate analyses on project-specific samples?

Yes (No) N/A

If Yes:

Sample ID	Analysis

c. Is the RPD between duplicate results within laboratory-specified limits or is the difference between analyte concentrations less than the reporting limit?

Yes No (N/A)

If No:

Sample ID	Analyte	Effect on Data Usability

11. Are non-detect results sufficiently low to meet EPA primary drinking water criteria?

Yes (circled) No

Analyte	List	MCL	Alternative GWPS	Units
Antimony	Appendix IV	0.006	--	mg/L
Arsenic	Appendix IV	0.010	--	mg/L
Barium	Appendix IV	2	--	mg/L
Beryllium	Appendix IV	0.004	--	mg/L
Boron	Appendix III	--	--	mg/L
Cadmium	Appendix IV	0.005	--	mg/L
Calcium	Appendix III	--	--	mg/L
Chloride	Appendix III	--	--	mg/L
Chromium	Appendix IV	0.1	--	mg/L
Cobalt	Appendix IV	--	0.006	mg/L
Fluoride	Appendix III/IV	4.0	--	mg/L
Lead	Appendix IV	--	0.015	mg/L
Lithium	Appendix IV	--	0.040	mg/L
Mercury	Appendix IV	0.002	--	mg/L
Molybdenum	Appendix IV	--	0.1	mg/L
pH	Appendix III	--	--	S.U.
Radium 226 + Radium 228	Appendix IV	5	--	pCi/L
Selenium	Appendix IV	0.05	--	mg/L
Sulfate	Appendix III	--	--	mg/L
Total Dissolved Solids	Appendix III	--	--	mg/L
Thallium	Appendix IV	0.002	--	mg/L

If No, list affected samples and analytes.

Sample ID	Analyte	Reporting Limit

Four Corners CCR Data Review

Laboratory Name:	Eurofins Environment Testing		
Sample Delivery Group:	J210428	**Review Date:**	12/8/2023
Validator's Name:	Caitlin Riechmann	**Reviewed By:**	Marie Bevier

Sample Summary:

Field Sample Identification	Collection Date and Time	Laboratory Sample Identification	Notes
FC-CCR-MW01-1123	11/09/23 15:20	550-210428-1	
FC-CCR-MW03-1123	11/09/23 16:05	550-210428-2	
FC-CCR-MW-21-1123	11/09/23 16:52	550-210428-3	
FC-CCR-MW60-1123	11/09/23 14:30	550-210428-4	
FC-CCR-SUMP1-1123	11/09/23 07:47	550-210428-5	
FC-CCR-SUMP2-1123	11/09/23 08:01	550-210428-6	
FC-CCR-SUMP3-1123	11/09/23 08:10	550-210428-7	
FC-CCR-SUMP7-1123	11/09/23 08:35	550-210428-8	
FC-CCR-SUMP8-1123	11/09/23 08:26	550-210428-9	
FC-CCR-SUMP9-1123	11/09/23 08:45	550-210428-10	
FC-CCR-SUMP10-1123	11/09/23 08:50	550-210428-11	
FC-CCR-SUMP11-1123	11/09/23 08:55	550-210428-12	
FC-CCR-SUMP12-1123	11/09/23 09:01	550-210428-13	
FC-CCR-SUMP13-1123	11/09/23 09:07	550-210428-14	
FC-CCR-SUMP14-1123	11/09/23 09:17	550-210428-15	
FC-CCR-SUMP15-1123	11/09/23 09:23	550-210428-16	
FC-CCR-SUMP16-1123	11/09/23 09:30	550-210428-17	
FC-CCR-SUMP17-1123	11/09/23 09:33	550-210428-18	
FC-CCR-SUMP18-1123	11/09/23 09:40	550-210428-19	
FC-CCR-AshPond6-1123	11/09/23 09:53	550-210428-20	

Analytical Methods:

Analyte	Analyte Group	Method
Chloride	Anions	EPA 300.0
Boron, Iron, Magnesium, Manganese	Metals	EPA 200.7
Cobalt, Molybdenum	Metals	EPA 200.8
Total Dissolved Solids (TDS)	General Chemistry	SM 2540C

Qualifier Definitions:

J The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

R The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.

U The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.

UJ The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

Sample Receipt Condition:

COC Signed and Complete? (Yes) No

If No, provide details.

Sample Login Matched COC? (Yes) No

If no, provide details.

Sample receipt temperature ≤ 6°C? (Yes) No N/A

If no, provide details.

1. Samples analyzed for metals and radionuclides within 180 days of sampling?

   (Yes) No N/A

2. Samples analyzed for mercury, ammonia, chloride, fluoride, nitrate/nitrite, sulfate, TOC, and/or DOC within 28 days of sampling?

   (Yes) No N/A

3. Samples Analyzed for alkalinity within 14 days of sampling? Yes No (N/A)

4. Samples analyzed for total dissolved solids within 7 days of sampling?

   Yes (No) N/A

5. Samples analyzed for pH within 15 minutes of sampling? Yes No (N/A)

If No:

Sample ID	Analysis	Time Between Collection and Analysis	Effect on Data Usability
FC-CCR-SUMP18-1123	TDS	8 days	J-HT

Note:
HT = Maximum recommended hold time was exceeded.

6. Target analytes detected in the blanks? Yes (No) N/A

If Yes:

Detected Analyte	Concentration	Samples with concentrations less than 5 times the blank detection	Effect on Data Usability

7. LCS recoveries within laboratory-specified limits? (Yes) No N/A

If No:

Analyte	Recovery	QC Limits	Affected Samples	Effect on Data Usability

8. MS performed on a project-specific sample? (Yes) No N/A

If Yes:

Spiked Sample ID	Spiked Analyte(s)
FC-CCR-SUMP18-1123	Chloride
FC-CCR-SUMP2-1123	Boron, Iron, Magnesium, Manganese
FC-CCR-MW01-1123	Cobalt, Molybdenum

a. Are MS recoveries and/or precision within laboratory specified limits?

Yes (No) N/A

If No:

Sample ID	Analyte	RPD or Recovery	Accuracy or Recovery Limits	Effect on Data Usability
FC-CCR-SUMP18-1123	Chloride	0%, MS	80-120%	J-LM
FC-CCR-SUMP2-1123	Boron	-110%, -86%	70-130%	NA4
FC-CCR-SUMP2-1123	Magnesium	58%, 25%	70-130%	NA4

Notes:
LM = Low matrix spike recovery. Result may be biased low.
NA4 = The concentration detected in the unspiked native sample is more than four times the spike concentration and it is not possible to assess data usability based on the MS recovery.

9. Field duplicate collected? Yes (No)

If Yes:

Parent Sample	Field Duplicate

b. Are RPDs between primary and duplicate results ≤ 20% or are differences between analyte concentrations ≤ the reporting limit?

Yes No (N/A)

If No:

Primary Sample ID	Duplicate Sample ID	Analyte	RPD	Effect on Data Usability

10. Did the laboratory perform duplicate analyses on project-specific samples?

(Yes) No N/A

If Yes:

Sample ID	Analysis
FC-CCR-SUMP11-1123	TDS

c. Is the RPD between duplicate results within laboratory-specified limits or is the difference between analyte concentrations less than the reporting limit?

(Yes) No N/A

If No:

Sample ID	Analyte	Effect on Data Usability

11. Are non-detect results sufficiently low to meet EPA primary drinking water criteria?

Yes (circled) No

Analyte	List	MCL	Alternative GWPS	Units
Antimony	Appendix IV	0.006	--	mg/L
Arsenic	Appendix IV	0.010	--	mg/L
Barium	Appendix IV	2	--	mg/L
Beryllium	Appendix IV	0.004	--	mg/L
Boron	Appendix III	--	--	mg/L
Cadmium	Appendix IV	0.005	--	mg/L
Calcium	Appendix III	--	--	mg/L
Chloride	Appendix III	--	--	mg/L
Chromium	Appendix IV	0.1	--	mg/L
Cobalt	Appendix IV	--	0.006	mg/L
Fluoride	Appendix III/IV	4.0	--	mg/L
Lead	Appendix IV	--	0.015	mg/L
Lithium	Appendix IV	--	0.040	mg/L
Mercury	Appendix IV	0.002	--	mg/L
Molybdenum	Appendix IV	--	0.1	mg/L
pH	Appendix III	--	--	S.U.
Radium 226 + Radium 228	Appendix IV	5	--	pCi/L
Selenium	Appendix IV	0.05	--	mg/L
Sulfate	Appendix III	--	--	mg/L
Total Dissolved Solids	Appendix III	--	--	mg/L
Thallium	Appendix IV	0.002	--	mg/L

If No, list affected samples and analytes.

Sample ID	Analyte	Reporting Limit

Four Corners CCR Data Review

Laboratory Name:	Eurofins Environment Testing		
Sample Delivery Group:	J210429	**Review Date:**	12/14/2023
Validator's Name:	Caitlin Riechmann	**Reviewed By:**	Marie Bevier

Sample Summary:

Field Sample Identification	Collection Date and Time	Laboratory Sample Identification	Notes
FC-CCR-MW52-1123	11/08/23 14:40	550-210429-1	
FC-CCR-MW61-1123	11/09/23 12:50	550-210429-2	
FC-CCR-MW75-1123	11/08/23 15:39	550-210429-3	
FC-CCR-FD03-1123	11/08/23 16:11	550-210429-4	Field Duplicate of FC-CCR-MW52-1123

Analytical Methods:

Analyte	Analyte Group	Method
Chloride, Fluoride, Sulfate	Anions	EPA 300.0
Fluoride	Anions	SW846 9056A
Beryllium, Boron, Calcium, Lithium, Magnesium, Potassium, Sodium	Metals	EPA 200.7
Antimony, Arsenic, Barium, Cadmium, Chromium, Cobalt, Lead, Molybdenum, Selenium, Thallium	Metals	EPA 200.8
Mercury	Metals	EPA 245.1
Alkalinity	General Chemistry	SM 2320B
Total Dissolved Solids (TDS)	General Chemistry	SM 2540C
pH	General Chemistry	SM 4500 H+B

Qualifier Definitions:

J The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

R The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.

U The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.

UJ The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

Sample Receipt Condition:

COC Signed and Complete? (Yes) No

If No, provide details.

Sample Login Matched COC? (Yes) No

If no, provide details.

Sample receipt temperature ≤ 6°C? (Yes) No N/A

If no, provide details.

1. Samples analyzed for metals and radionuclides within 180 days of sampling?

   (Yes) No N/A

2. Samples analyzed for mercury, ammonia, chloride, fluoride, nitrate/nitrite, sulfate, TOC, and/or DOC within 28 days of sampling?

   (Yes) No N/A

3. Samples Analyzed for alkalinity within 14 days of sampling? (Yes) No N/A

4. Samples analyzed for total dissolved solids within 7 days of sampling?

   Yes (No) N/A

5. Samples analyzed for pH within 15 minutes of sampling? Yes (No) N/A

If No:

Sample ID	Analysis	Time Between Collection and Analysis	Effect on Data Usability
FC-CCR-MW61-1123	pH	6 days, 0 hours, 56 minutes	J-HT
FC-CCR-MW75-1123	pH	6 days, 22 hours, 9 minutes	J-HT

Note:
HT = Maximum recommended hold time was exceeded.

6. Target analytes detected in the blanks? Yes (No) N/A

If Yes:

Detected Analyte	Concentration	Samples with concentrations less than 5 times the blank detection	Effect on Data Usability

7. LCS recoveries within laboratory-specified limits? Yes (No) N/A

If No:

Analyte	Recovery	QC Limits	Affected Samples	Effect on Data Usability
Beryllium	117%, 117%	85-115%	None	NA
Boron	116%, LCS	85-115%	FC-CCR-MW52-1123, FC-CCR-MW61-1123, FC-CCR-MW75-1123, FC-CCR-FD03-1123	J-HL
Calcium	117%, LCS	85-115%	FC-CCR-MW61-1123, FC-CCR-MW75-1123	J-HL

Note:
HL = High LCS recovery.
NA = Not applicable.

8. MS performed on a project-specific sample? (Yes) No N/A

If Yes:

Spiked Sample ID	Spiked Analyte(s)
FC-CCR-MW52-1123	Boron, Cobalt, Molybdenum

a. Are MS recoveries and/or precision within laboratory specified limits?

Yes (No) N/A

If No:

Sample ID	Analyte	RPD or Recovery	Accuracy or Recovery Limits	Effect on Data Usability
FC-CCR-MW52-1123	Boron	56%, 52%	70-130%	NA4

Note:
NA4 = The concentration detected in the unspiked native sample is more than four times the spike concentration and it is not possible to assess data usability based on the MS recovery.

9. Field duplicate collected? (Yes) No

If Yes:

Parent Sample	Field Duplicate
FC-CCR-MW52-1123	FC-CCR-FD03-1123

b. Are RPDs between primary and duplicate results ≤ 20% or are differences between analyte concentrations ≤ the reporting limit?

(Yes) No N/A

If No:

Primary Sample ID	Duplicate Sample ID	Analyte	RPD	Effect on Data Usability

10. Did the laboratory perform duplicate analyses on project-specific samples?

(Yes) No N/A

If Yes:

Sample ID	Analysis
FC-CCR-MW61-1123	pH

c. Is the RPD between duplicate results within laboratory-specified limits or is the difference between analyte concentrations less than the reporting limit?

(Yes) No N/A

If No:

Sample ID	Analyte	Effect on Data Usability

11. Are non-detect results sufficiently low to meet EPA primary drinking water criteria?

Yes (circled) No

Analyte	List	MCL	Alternative GWPS	Units
Antimony	Appendix IV	0.006	--	mg/L
Arsenic	Appendix IV	0.010	--	mg/L
Barium	Appendix IV	2	--	mg/L
Beryllium	Appendix IV	0.004	--	mg/L
Boron	Appendix III	--	--	mg/L
Cadmium	Appendix IV	0.005	--	mg/L
Calcium	Appendix III	--	--	mg/L
Chloride	Appendix III	--	--	mg/L
Chromium	Appendix IV	0.1	--	mg/L
Cobalt	Appendix IV	--	0.006	mg/L
Fluoride	Appendix III/IV	4.0	--	mg/L
Lead	Appendix IV	--	0.015	mg/L
Lithium	Appendix IV	--	0.040	mg/L
Mercury	Appendix IV	0.002	--	mg/L
Molybdenum	Appendix IV	--	0.1	mg/L
pH	Appendix III	--	--	S.U.
Radium 226 + Radium 228	Appendix IV	5	--	pCi/L
Selenium	Appendix IV	0.05	--	mg/L
Sulfate	Appendix III	--	--	mg/L
Total Dissolved Solids	Appendix III	--	--	mg/L
Thallium	Appendix IV	0.002	--	mg/L

If No, list affected samples and analytes.

Sample ID	Analyte	Reporting Limit

Four Corners CCR Data Review

Laboratory Name:	Eurofins Environment Testing		
Sample Delivery Group:	J210591	**Review Date:**	12/6/2023
Validator's Name:	Caitlin Riechmann	**Reviewed By:**	Marie Bevier

Sample Summary:

Field Sample Identification	Collection Date and Time	Laboratory Sample Identification	Notes
FC-CCR-SW1-1123	11/13/23 11:13	550-210591-1	
FC-CCR-SW2-1123	11/13/23 10:45	550-210591-2	
FC-CCR-SW3-1123	11/13/23 10:20	550-210591-3	
FC-CCR-FD08-1123	11/13/23 16:20	550-210591-4	Field Duplicate of FC-CCR-SW1-1123

Analytical Methods:

Analyte	Analyte Group	Method
Chloride, Fluoride, Sulfate	Anions	EPA 300.0
Beryllium, Boron, Calcium, Iron, Lithium, Magnesium, Manganese, Potassium, Sodium	Metals	EPA 200.7
Antimony, Arsenic, Barium, Cadmium, Chromium, Cobalt, Lead, Molybdenum, Selenium, Thallium	Metals	EPA 200.8
Mercury	Metals	EPA 245.1
Alkalinity	General Chemistry	SM 2320B
Total Dissolved Solids (TDS)	General Chemistry	SM 2540C
pH	General Chemistry	SM 4500 H+B

Qualifier Definitions:

J The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

R The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.

U The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.

UJ The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

Sample Receipt Condition:

COC Signed and Complete? (Yes) No

If No, provide details.

Sample Login Matched COC? (Yes) No

If no, provide details.

Sample receipt temperature ≤ 6°C? (Yes) No N/A

If no, provide details.

1. Samples analyzed for metals and radionuclides within 180 days of sampling?

   (Yes) No N/A

2. Samples analyzed for mercury, ammonia, chloride, fluoride, nitrate/nitrite, sulfate, TOC, and/or DOC within 28 days of sampling?

   (Yes) No N/A

3. Samples Analyzed for alkalinity within 14 days of sampling? (Yes) No N/A

4. Samples analyzed for total dissolved solids within 7 days of sampling?

   (Yes) No N/A

5. Samples analyzed for pH within 15 minutes of sampling? Yes (No) N/A

If No:

Sample ID	Analysis	Time Between Collection and Analysis	Effect on Data Usability
FC-CCR-SW1-1123	pH	3 days, 2 hours, 53 minutes	J-HT
FC-CCR-SW2-1123	pH	3 days, 3 hours, 22 minutes	J-HT
FC-CCR-SW3-1123	pH	3 days, 3 hours, 53 minutes	J-HT
FC-CCR-FD08-1123	pH	2 days, 21 hours, 58 minutes	J-HT

Note:
HT = Maximum recommended hold time was exceeded.

6. Target analytes detected in the blanks? Yes (No) N/A

If Yes:

Detected Analyte	Concentration	Samples with concentrations less than 5 times the blank detection	Effect on Data Usability

7. LCS recoveries within laboratory-specified limits? Yes (No) N/A

If No:

Analyte	Recovery	QC Limits	Affected Samples	Effect on Data Usability
Iron	120%, LCS	85-115%	FC-CCR-SW2-1123	J-HL
Beryllium	122%, 116%	85-115%	None	NA

Note:
HL = High LCS recovery.
NA = Not applicable.

8. MS performed on a project-specific sample? (Yes) No N/A

If Yes:

Spiked Sample ID	Spiked Analyte(s)
FC-CCR-SW1-1123	Lithium, Mercury

a. Are MS recoveries and/or precision within laboratory specified limits?

(Yes) No N/A

If No:

Sample ID	Analyte	RPD or Recovery	Accuracy or Recovery Limits	Effect on Data Usability

9. Field duplicate collected? (Yes) No

If Yes:

Parent Sample	Field Duplicate
FC-CCR-SW1-1123	FC-CCR-FD08-1123

b. Are RPDs between primary and duplicate results ≤ 20% or are differences between analyte concentrations ≤ the reporting limit?

(Yes) No N/A

If No:

Primary Sample ID	Duplicate Sample ID	Analyte	RPD	Effect on Data Usability

10. Did the laboratory perform duplicate analyses on project-specific samples?

(Yes) No N/A

If Yes:

Sample ID	Analysis
FC-CCR-SW3-1123	pH

c. Is the RPD between duplicate results within laboratory-specified limits or is the difference between analyte concentrations less than the reporting limit?

(Yes) No N/A

If No:

Sample ID	Analyte	Effect on Data Usability

11. Are non-detect results sufficiently low to meet EPA primary drinking water criteria?

Yes (No)

Analyte	List	MCL	Alternative GWPS	Units
Antimony	Appendix IV	0.006	--	mg/L
Arsenic	Appendix IV	0.010	--	mg/L
Barium	Appendix IV	2	--	mg/L
Beryllium	Appendix IV	0.004	--	mg/L
Boron	Appendix III	--	--	mg/L
Cadmium	Appendix IV	0.005	--	mg/L
Calcium	Appendix III	--	--	mg/L
Chloride	Appendix III	--	--	mg/L
Chromium	Appendix IV	0.1	--	mg/L
Cobalt	Appendix IV	--	0.006	mg/L
Fluoride	Appendix III/IV	4.0	--	mg/L
Lead	Appendix IV	--	0.015	mg/L
Lithium	Appendix IV	--	0.040	mg/L
Mercury	Appendix IV	0.002	--	mg/L
Molybdenum	Appendix IV	--	0.1	mg/L
pH	Appendix III	--	--	S.U.
Radium 226 + Radium 228	Appendix IV	5	--	pCi/L
Selenium	Appendix IV	0.05	--	mg/L
Sulfate	Appendix III	--	--	mg/L
Total Dissolved Solids	Appendix III	--	--	mg/L
Thallium	Appendix IV	0.002	--	mg/L

If No, list affected samples and analytes.

Sample ID	Analyte	Reporting Limit
FC-CCR-SW1-1123 FC-CCR-SW2-1123 FC-CCR-SW3-1123 FC-CCR-FD08-1123	Antimony	0.010 mg/L
FC-CCR-SW1-1123 FC-CCR-SW2-1123 FC-CCR-SW3-1123 FC-CCR-FD08-1123	Beryllium	0.0050 mg/L

Four Corners CCR Data Review

Laboratory Name:	Eurofins Environment Testing		
Sample Delivery Group:	J210593	**Review Date:**	12/8/2023
Validator's Name:	Caitlin Riechmann	**Reviewed By:**	Marie Bevier

Sample Summary:

Field Sample Identification	Collection Date and Time	Laboratory Sample Identification	Notes
FC-CCR-MW67-1123	11/13/23 09:18	550-210593-1	
FC-CCR-MW68-1123	11/11/23 11:28	550-210593-2	
FC-CCR-MW69-1123	11/11/23 10:33	550-210593-3	
FC-CCR-MW83-1123	11/11/23 14:10	550-210593-4	
FC-CCR-MW84-1123	11/11/23 15:53	550-210593-5	
FC-CCR-MW85-1123	11/11/23 15:03	550-210593-6	
FC-CCR-FD01-1123	11/11/23 08:53	550-210593-7	Field Duplicate of FC-CCR-MW84-1123
FC-CCR-CM01-1123	11/13/23 09:41	550-210593-8	
FC-CCR-CM02-1123	11/13/23 09:52	550-210593-9	

Analytical Methods:

Analyte	Analyte Group	Method
Chloride, Fluoride, Sulfate	Anions	EPA 300.0
Fluoride	Anions	EPA 9056A
Beryllium, Boron, Calcium, Lithium	Metals	EPA 200.7
Antimony, Arsenic, Barium, Cadmium, Chromium, Cobalt, Lead, Molybdenum, Selenium, Thallium	Metals	EPA 200.8
Mercury	Metals	EPA 245.1
Alkalinity	General Chemistry	SM 2320B
Total Dissolved Solids (TDS)	General Chemistry	SM 2540C
pH	General Chemistry	SM 4500 H+B

Qualifier Definitions:

J The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

R The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.

U The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.

UJ The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

Sample Receipt Condition:

COC Signed and Complete? (Yes) No

If No, provide details.

Sample Login Matched COC? (Yes) No

If no, provide details.

Sample receipt temperature ≤ 6°C? (Yes) No N/A

If no, provide details.

1. Samples analyzed for metals and radionuclides within 180 days of sampling?

   (Yes) No N/A

2. Samples analyzed for mercury, ammonia, chloride, fluoride, nitrate/nitrite, sulfate, TOC, and/or DOC within 28 days of sampling?

   (Yes) No N/A

3. Samples Analyzed for alkalinity within 14 days of sampling? (Yes) No N/A

4. Samples analyzed for total dissolved solids within 7 days of sampling?

   Yes (No) N/A

5. Samples analyzed for pH within 15 minutes of sampling? Yes (No) N/A

If No:

Sample ID	Analysis	Time Between Collection and Analysis	Effect on Data Usability
FC-CCR-MW67-1123	pH	3 days, 5 hours, 2 minutes	J-HT
FC-CCR-MW68-1123	pH	5 days, 2 hours, 55 minutes	J-HT
FC-CCR-MW69-1123	pH	5 days, 3 hours, 53 minutes	J-HT
FC-CCR-MW83-1123	pH	5 days, 0 hours, 18 minutes	J-HT
FC-CCR-MW84-1123	pH	4 days, 22 hours, 38 minutes	J-HT
FC-CCR-MW84-1123	TDS	23 days	J-HT
FC-CCR-MW85-1123	pH	4 days, 23 hours, 30 minutes	J-HT
FC-CCR-FD01-1123	pH	5 days, 5 hours, 42 minutes	J-HT
FC-CCR-CM01-1123	pH	3 days, 4 hours, 55 minutes	J-HT
FC-CCR-CM02-1123	pH	3 days, 4 hours, 49 minutes	J-HT

Note:
HT = Maximum recommended hold time was exceeded.

6. Target analytes detected in the blanks? Yes (No) N/A

If Yes:

Detected Analyte	Concentration	Samples with concentrations less than 5 times the blank detection	Effect on Data Usability

7. LCS recoveries within laboratory-specified limits? Yes (No) N/A

If No:

Analyte	Recovery	QC Limits	Affected Samples	Effect on Data Usability
Beryllium	122%, 116%	85-115%	None	NA

Notes:
NA = Not applicable.

8. MS performed on a project-specific sample? (Yes) No N/A

If Yes:

Spiked Sample ID	Spiked Analyte(s)
FC-CCR-MW85-1123	Mercury

a. Are MS recoveries and/or precision within laboratory specified limits?

(Yes) No N/A

If No:

Sample ID	Analyte	RPD or Recovery	Accuracy or Recovery Limits	Effect on Data Usability

9. Field duplicate collected? (Yes) No

If Yes:

Parent Sample	Field Duplicate
FC-CCR-MW84-1123	FC-CCR-FD01-1123

b. Are RPDs between primary and duplicate results ≤ 20% or are differences between analyte concentrations ≤ the reporting limit?

(Yes) No N/A

If No:

Primary Sample ID	Duplicate Sample ID	Analyte	RPD	Effect on Data Usability

10. Did the laboratory perform duplicate analyses on project-specific samples?

(Yes) No N/A

If Yes:

Sample ID	Analysis
FC-CCR-MW84-1123	TDS
FC-CCR-CM02-1123	pH

c. Is the RPD between duplicate results within laboratory-specified limits or is the difference between analyte concentrations less than the reporting limit?

(Yes) No N/A

If No:

Sample ID	Analyte	Effect on Data Usability

11. Other QC Issues? (Yes) No

If yes:

There is a significant difference between the fluoride results from the 300.0 and 9056A analyses of samples FC-CCR-MW67-1123, FC-CCR-MW68-1123, and FC-CCR-MW69-1123. WSP J qualified the results from both analyses due to the results not being comparable. (J, HD)

Note:

HD = Imprecision between analytical results.

12. Are non-detect results sufficiently low to meet EPA primary drinking water criteria?

Yes (No)

Analyte	List	MCL	Alternative GWPS	Units
Antimony	Appendix IV	0.006	--	mg/L
Arsenic	Appendix IV	0.010	--	mg/L
Barium	Appendix IV	2	--	mg/L
Beryllium	Appendix IV	0.004	--	mg/L
Boron	Appendix III	--	--	mg/L
Cadmium	Appendix IV	0.005	--	mg/L
Calcium	Appendix III	--	--	mg/L
Chloride	Appendix III	--	--	mg/L
Chromium	Appendix IV	0.1	--	mg/L
Cobalt	Appendix IV	--	0.006	mg/L
Fluoride	Appendix III/IV	4.0	--	mg/L
Lead	Appendix IV	--	0.015	mg/L
Lithium	Appendix IV	--	0.040	mg/L
Mercury	Appendix IV	0.002	--	mg/L
Molybdenum	Appendix IV	--	0.1	mg/L
pH	Appendix III	--	--	S.U.
Radium 226 + Radium 228	Appendix IV	5	--	pCi/L
Selenium	Appendix IV	0.05	--	mg/L
Sulfate	Appendix III	--	--	mg/L
Total Dissolved Solids	Appendix III	--	--	mg/L
Thallium	Appendix IV	0.002	--	mg/L

If No, list affected samples and analytes.

Sample ID	Analyte	Reporting Limit
FC-CCR-MW67-1123 FC-CCR-MW68-1123 FC-CCR-MW69-1123 FC-CCR-MW83-1123 FC-CCR-MW84-1123 FC-CCR-MW85-1123 FC-CCR-FD01-1123 FC-CCR-CM01-1123 FC-CCR-CM02-1123	Antimony	0.010 mg/L
FC-CCR-MW67-1123 FC-CCR-MW68-1123 FC-CCR-MW69-1123 FC-CCR-MW83-1123 FC-CCR-MW84-1123 FC-CCR-MW85-1123 FC-CCR-FD01-1123 FC-CCR-CM01-1123	Beryllium	0.0050 mg/L

FC-CCR-CM02-1123		

Four Corners CCR Data Review

Laboratory Name:	Eurofins Environment Testing		
Sample Delivery Group:	J210594	**Review Date:**	12/8/2023
Validator's Name:	Caitlin Riechmann	**Reviewed By:**	Marie Bevier

Sample Summary:

Field Sample Identification	Collection Date and Time	Laboratory Sample Identification	Notes
FC-CCR-DMX01-1123	11/10/23 14:45	550-210594-1	
FC-CCR-DMX03-1123	11/13/23 14:51	550-210594-2	
FC-CCR-DMX04-1123	11/14/23 17:30	550-210594-3	
FC-CCR-MW05-1123	11/13/23 16:15	550-210594-4	
FC-CCR-MW06R-1123	11/14/23 18:21	550-210594-5	
FC-CCR-FD04-1123	11/10/23 07:30	550-210594-6	Field Duplicate of FC-CCR-DMX01-1123
FC-CCR-MW17R-1123	11/14/23 14:07	550-210594-7	
FC-CCR-MW18-1123	11/14/23 09:50	550-210594-8	
FC-CCR-MW19-1123	11/13/23 14:04	550-210594-9	
FC-CCR-MW23R-1123	11/14/23 11:05	550-210594-10	
FC-CCR-MW24-1123	11/14/23 19:43	550-210594-11	
FC-CCR-MW30-1123	11/10/23 10:04	550-210594-12	
FC-CCR-MW36R-1123	11/14/23 11:59	550-210594-13	
FC-CCR-MW38R-1123	11/14/23 14:54	550-210594-14	
FC-CCR-MW56-1123	11/14/23 12:52	550-210594-15	
FC-CCR-FD05-1123	11/13/23 13:11	550-210594-16	Field Duplicate of FC-CCR-MW19-1123
FC-CCR-MW57-1123	11/14/23 16:03	550-210594-17	
FC-CCR-MW77S-1123	11/10/23 11:00	550-210594-18	
FC-CCR-MW78S-1123	11/10/23 11:45	550-210594-19	
FC-CCR-MW79S-1123	11/10/23 13:41	550-210594-20	
FC-CCR-MW81-1123	11/10/23 12:28	550-210594-21	
FC-CCR-MW82S-1123	11/10/23 15:57	550-210594-22	
FC-CCR-FD06-1123	11/10/23 16:20	550-210594-23	Field Duplicate of FC-CCR-MW30-1123
FC-CCR-FD07-1123	11/10/23 13:59	550-210594-24	Field Duplicate of FC-CCR-MW81-1123
FC-CCR-FD02-1123	11/10/23 18:18	550-210594-25	Field Duplicate of FC-CCR-MW82S-1123

Analytical Methods:

Analyte	Analyte Group	Method
Chloride, Fluoride, Sulfate	Anions	EPA 300.0
Beryllium, Boron, Calcium, Iron, Lithium, Magnesium, Manganese, Potassium, Sodium	Metals	EPA 200.7
Antimony, Arsenic, Barium, Cadmium, Chromium, Cobalt, Lead, Molybdenum, Selenium, Thallium	Metals	EPA 200.8
Alkalinity	General Chemistry	SM 2320B
Total Dissolved Solids (TDS)	General Chemistry	SM 2540C
pH	General Chemistry	SM 4500 H+B

Qualifier Definitions:

J The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

R The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.

U The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.

UJ The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

Sample Receipt Condition:

COC Signed and Complete? (Yes) No

If No, provide details.

Sample Login Matched COC? (Yes) No

If no, provide details.

Sample receipt temperature ≤ 6°C? (Yes) No N/A

If no, provide details.

1. Samples analyzed for metals and radionuclides within 180 days of sampling?

   (Yes) No N/A

2. Samples analyzed for mercury, ammonia, chloride, fluoride, nitrate/nitrite, sulfate, TOC, and/or DOC within 28 days of sampling?

   (Yes) No N/A

3. Samples Analyzed for alkalinity within 14 days of sampling? (Yes) No N/A

4. Samples analyzed for total dissolved solids within 7 days of sampling?

   Yes (No) N/A

5. Samples analyzed for pH within 15 minutes of sampling? Yes (No) N/A

If No:

Sample ID	Analysis	Time Between Collection and Analysis	Effect on Data Usability
FC-CCR-DMX03-1123	pH	2 days, 23 hours, 52 minutes	J-HT
FC-CCR-DMX04-1123	pH	1 day, 21 hours, 14 minutes	J-HT
FC-CCR-MW05-1123	pH	2 days, 22 hours, 30 minutes	J-HT
FC-CCR-MW06R-1123	pH	1 day, 20 hours, 25 minutes	J-HT
FC-CCR-MW17R-1123	pH	2 days, 0 hours, 40 minutes	J-HT
FC-CCR-MW18-1123	pH	2 days, 4 hours, 58 minutes	J-HT
FC-CCR-MW23R-1123	pH	2 days, 3 hours, 44 minutes	J-HT
FC-CCR-MW24-1123	pH	1 day, 19 hours, 7 minutes	J-HT
FC-CCR-MW24-1123	TDS	8 days	J-HT
FC-CCR-MW36R-1123	pH	2 days, 2 hours, 52 minutes	J-HT
FC-CCR-MW38R-1123	pH	2 days, 0 hours, 0 minutes	J-HT
FC-CCR-MW56-1123	pH	2 days, 2 hours, 2 minutes	J-HT
FC-CCR-MW57-1123	pH	1 day, 22 hours, 54 minutes	J-HT
FC-CCR-MW82S-1123	pH	5 days, 23 hours, 1 minute	J-HT
FC-CCR-FD02-1123	pH	5 days, 20 hours, 41 minutes	J-HT

Note:
HT = Maximum recommended hold time was exceeded.

6. Target analytes detected in the blanks? Yes (No) N/A

If Yes:

Detected Analyte	Concentration	Samples with concentrations less than 5 times the blank detection	Effect on Data Usability

7. LCS recoveries within laboratory-specified limits? Yes (No) N/A

If No:

Analyte	Recovery	QC Limits	Affected Samples	Effect on Data Usability
Iron	123%, LCS	85-115%	FC-CCR-MW57-1123	J-HL
Iron	120%, LCS	85-115%	FC-CCR-MW06R-1123	J-HL
Sodium	117%, LCS	85-115%	FC-CCR-DMX03-1123, FC-CCR-MW18-1123, FC-CCR-MW23R-1123, FC-CCR-MW24-1123, FC-CCR-MW36R-1123, FC-CCR-MW38R-1123, FC-CCR-MW56-1123, FC-CCR-MW57-1123, FC-CCR-MW82S-1123 FC-CCR-FD02-1123	J-HL
Beryllium	118%, 116%	85-115%	None	NA
Beryllium	122%, 116%	85-115%	None	NA

Notes:
HL = High LCS recovery.
NA = Not applicable.

8. MS performed on a project-specific sample? (Yes) No N/A

If Yes:

Spiked Sample ID	Spiked Analyte(s)
FC-CCR-MW30-1123	Boron, Cobalt, Molybdenum
FC-CCR-DMX01-1123	Boron, Cobalt, Molybdenum
FC-CCR-MW81-1123	Boron, Cobalt, Molybdenum
FC-CCR-MW18-1123	Lithium

a. Are MS recoveries and/or precision within laboratory specified limits?

Yes (No) N/A

If No:

Sample ID	Analyte	RPD or Recovery	Accuracy or Recovery Limits	Effect on Data Usability
FC-CCR-MW81-1123 (FC-CCR-FD07-1123)	Boron	196% RPD	20%	J-HD
FC-CCR-MW81-1123 (FC-CCR-FD07-1123)	Boron	-4,972%, -136%	70-130%	J-PJ
FC-CCR-MW30-1123 (FC-CCR-FD06-1123)	Boron	-2,012%, -2,008%	70-130%	J-PJ

Sample ID	Analyte	RPD or Recovery	Accuracy or Recovery Limits	Effect on Data Usability
FC-CCR-DMX01-1123 (FC-CCR-FD04-1123)	Boron	-801%, -187%	70-130%	NA4

Notes:
HD = Imprecision between MS and MSD results.
NA4 = The concentration detected in the unspiked native sample is more than four times the spike concentration and it is not possible to assess data usability based on the MS recovery.
PJ = Professional judgement. Though the spike concentration is too low to assess accuracy based on MS recovery, the concentration detected in the MS and/or MSD is significantly lower than the concentration detected in the unspiked native sample.

9. Field duplicate collected? (Yes) No

If Yes:

Parent Sample	Field Duplicate
FC-CCR-MW82S-1123	FC-CCR-FD02-1123
FC-CCR-DMX01-1123	FC-CCR-FD04-1123
FC-CCR-MW19-1123	FC-CCR-FD05-1123
FC-CCR-MW30-1123	FC-CCR-FD06-1123
FC-CCR-MW81-1123	FC-CCR-FD07-1123

b. Are RPDs between primary and duplicate results ≤ 20% or are differences between analyte concentrations ≤ the reporting limit?

(Yes) No N/A

If No:

Primary Sample ID	Duplicate Sample ID	Analyte	RPD	Effect on Data Usability

10. Did the laboratory perform duplicate analyses on project-specific samples?

(Yes) No N/A

If Yes:

Sample ID	Analysis
FC-CCR-MW06R-1123	Alkalinity
FC-CCR-MW36R-1123	TDS
FC-CCR-MW38R-1123	pH

c. Is the RPD between duplicate results within laboratory-specified limits or is the difference between analyte concentrations less than the reporting limit?

Yes (circled) No N/A

If No:

Sample ID	Analyte	Effect on Data Usability

11. Are non-detect results sufficiently low to meet EPA primary drinking water criteria?

Yes No (circled)

Analyte	List	MCL	Alternative GWPS	Units
Antimony	Appendix IV	0.006	--	mg/L
Arsenic	Appendix IV	0.010	--	mg/L
Barium	Appendix IV	2	--	mg/L
Beryllium	Appendix IV	0.004	--	mg/L
Boron	Appendix III	--	--	mg/L
Cadmium	Appendix IV	0.005	--	mg/L
Calcium	Appendix III	--	--	mg/L
Chloride	Appendix III	--	--	mg/L
Chromium	Appendix IV	0.1	--	mg/L
Cobalt	Appendix IV	--	0.006	mg/L
Fluoride	Appendix III/IV	4.0	--	mg/L
Lead	Appendix IV	--	0.015	mg/L
Lithium	Appendix IV	--	0.040	mg/L
Mercury	Appendix IV	0.002	--	mg/L
Molybdenum	Appendix IV	--	0.1	mg/L
pH	Appendix III	--	--	S.U.
Radium 226 + Radium 228	Appendix IV	5	--	pCi/L
Selenium	Appendix IV	0.05	--	mg/L
Sulfate	Appendix III	--	--	mg/L
Total Dissolved Solids	Appendix III	--	--	mg/L
Thallium	Appendix IV	0.002	--	mg/L

If No, list affected samples and analytes.

Sample ID	Analyte	Reporting Limit
FC-CCR-MW38R-1123 FC-CCR-MW56-1123 FC-CCR-MW57-1123 FC-CCR-DMX03-1123 FC-CCR-DMX04-1123 FC-CCR-MW06R-1123 FC-CCR-MW17R-1123	Antimony	0.010 mg/L

Sample ID	Analyte	Reporting Limit
FC-CCR-MW23R-1123	Beryllium	0.0050 mg/L
FC-CCR-MW24-1123		
FC-CCR-MW36R-1123		
FC-CCR-MW38R-1123		
FC-CCR-MW56-1123		
FC-CCR-MW57-1123		
FC-CCR-DMX03-1123		
FC-CCR-MW82S-1123		
FC-CCR-FD02-1123		
FC-CCR-DMX04-1123		
FC-CCR-MW05-1123		
FC-CCR-MW06R-1123		
FC-CCR-MW17R-1123		
FC-CCR-MW18-1123		

Four Corners CCR Data Review

Laboratory Name:	Eurofins Environment Testing		
Sample Delivery Group:	J210744	**Review Date:**	12/14/2023, Revised 1/2/2024
Validator's Name:	Caitlin Riechmann	**Reviewed By:**	Marie Bevier

Sample Summary:

Field Sample Identification	Collection Date and Time	Laboratory Sample Identification	Notes
FC-CCR-DMX06-1123	11/15/23 09:15	550-210744-1	
FC-CCR-MW11-1123	11/15/23 15:27	550-210744-2	
FC-CCR-MW15-1123	11/15/23 10:33	550-210744-3	
FC-CCR-MW16-1123	11/15/23 11:47	550-210744-4	
FC-CCR-DMX05R-1123	11/16/23 11:38	550-210744-5	
FC-CCR-EW17-1123	11/15/23 16:09	550-210744-6	
FC-CCR-EW12R-1123	11/16/23 09:53	550-210744-7	
FC-CCR-EW11R-1123	11/16/23 10:41	550-210744-8	
FC-CCR-EW14-1123	11/16/23 17:23	550-210744-9	
FC-CCR-EW15-1123	11/16/23 15:36	550-210744-10	
FC-CCR-MW34-1123	11/16/23 16:35	550-210744-11	
FC-CCR-EB01-1123	11/16/23 17:37	550-210744-12	Equipment Blank

Analytical Methods:

Analyte	Analyte Group	Method
Chloride, Fluoride, Sulfate	Anions	EPA 300.0
Beryllium, Boron, Calcium, Iron, Lithium, Magnesium, Manganese, Potassium, Sodium	Metals	EPA 200.7
Antimony, Arsenic, Barium, Cadmium, Chromium, Cobalt, Manganese, Molybdenum, Selenium, Thallium, Zinc	Metals	EPA 200.8
Mercury	Metals	EPA 245.1
Alkalinity	General Chemistry	SM 2320B
Total Dissolved Solids (TDS)	General Chemistry	SM 2540C
pH	General Chemistry	SM 4500 H+B

Qualifier Definitions:

J The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

R The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.

U The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.

UJ The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

Sample Receipt Condition:

COC Signed and Complete? (Yes) No

If No, provide details.

Sample Login Matched COC? (Yes) No

If no, provide details.

Sample receipt temperature ≤ 6°C? (Yes) No N/A

If no, provide details.

1. Samples analyzed for metals and radionuclides within 180 days of sampling?

   (Yes) No N/A

2. Samples analyzed for mercury, ammonia, chloride, fluoride, nitrate/nitrite, sulfate, TOC, and/or DOC within 28 days of sampling?

   (Yes) No N/A

3. Samples Analyzed for alkalinity within 14 days of sampling? (Yes) No N/A

4. Samples analyzed for total dissolved solids within 7 days of sampling?

   Yes (No) N/A

5. Samples analyzed for pH within 15 minutes of sampling? Yes (No) N/A

If No:

Sample ID	Analysis	Time Between Collection and Analysis	Effect on Data Usability
FC-CCR-DMX06-1123	pH	14 days, 3 hours, 25 minutes	J-HT
FC-CCR-MW11-1123	pH	13 days, 21 hours, 14 minutes	J-HT
FC-CCR-MW15-1123	pH	14 days, 2 hours, 10 minutes	J-HT
FC-CCR-MW16-1123	pH	14 days, 0 hours, 57 minutes	J-HT
FC-CCR-DMX05R-1123	pH	13 days, 1 hour, 8 minutes	J-HT
FC-CCR-DMX05R-1123	TDS	11 days	J-HT
FC-CCR-EW12R-1123	TDS	11 days	J-HT
FC-CCR-EW11R-1123	TDS	11 days	J-HT
FC-CCR-EW14-1123	TDS	11 days	J-HT
FC-CCR-EW15-1123	TDS	11 days	J-HT
FC-CCR-MW34-1123	TDS	11 days	J-HT

Note:
HT = Maximum recommended hold time was exceeded.

6. Target analytes detected in the blanks? (Yes) No N/A

If Yes:

Detected Analyte	Concentration	Samples with concentrations less than 5 times the blank detection	Effect on Data Usability
TDS	34 mg/L	None	NA

Note:
NA = not applicable

7. LCS recoveries within laboratory-specified limits? (Yes) No N/A

If No:

Analyte	Recovery	QC Limits	Affected Samples	Effect on Data Usability

8. MS performed on a project-specific sample? (Yes) No N/A

If Yes:

Spiked Sample ID	Spiked Analyte(s)
FC-CCR-DMX06-1123	Lithium
FC-CCR-EB01-1123	Antimony, Arsenic, Barium, Cadmium, Chromium, Cobalt, Lead, Manganese, Molybdenum, Selenium, Thallium, Zinc

a. Are MS recoveries and/or precision within laboratory specified limits?

(Yes) No N/A

If No:

Sample ID	Analyte	RPD or Recovery	Accuracy or Recovery Limits	Effect on Data Usability

9. Field duplicate collected? Yes (No)

If Yes:

Parent Sample	Field Duplicate

b. Are RPDs between primary and duplicate results ≤ 20% or are differences between analyte concentrations ≤ the reporting limit?

Yes No (N/A)

If No:

Primary Sample ID	Duplicate Sample ID	Analyte	RPD	Effect on Data Usability

10. Did the laboratory perform duplicate analyses on project-specific samples?

Yes (circled) No N/A

If Yes:

Sample ID	Analysis
FC-CCR-DMX05R-1123	pH

c. Is the RPD between duplicate results within laboratory-specified limits or is the difference between analyte concentrations less than the reporting limit?

Yes (circled) No N/A

If No:

Sample ID	Analyte	Effect on Data Usability

11. Are non-detect results sufficiently low to meet EPA primary drinking water criteria?

Yes (No)

Analyte	List	MCL	Alternative GWPS	Units
Antimony	Appendix IV	0.006	--	mg/L
Arsenic	Appendix IV	0.010	--	mg/L
Barium	Appendix IV	2	--	mg/L
Beryllium	Appendix IV	0.004	--	mg/L
Boron	Appendix III	--	--	mg/L
Cadmium	Appendix IV	0.005	--	mg/L
Calcium	Appendix III	--	--	mg/L
Chloride	Appendix III	--	--	mg/L
Chromium	Appendix IV	0.1	--	mg/L
Cobalt	Appendix IV	--	0.006	mg/L
Fluoride	Appendix III/IV	4.0	--	mg/L
Lead	Appendix IV	--	0.015	mg/L
Lithium	Appendix IV	--	0.040	mg/L
Mercury	Appendix IV	0.002	--	mg/L
Molybdenum	Appendix IV	--	0.1	mg/L
pH	Appendix III	--	--	S.U.
Radium 226 + Radium 228	Appendix IV	5	--	pCi/L
Selenium	Appendix IV	0.05	--	mg/L
Sulfate	Appendix III	--	--	mg/L
Total Dissolved Solids	Appendix III	--	--	mg/L
Thallium	Appendix IV	0.002	--	mg/L

If No, list affected samples and analytes.

Sample ID	Analyte	Reporting Limit
FC-CCR-DMX05R-1123 FC-CCR-DMX06-1123 FC-CCR-MW15-1123 FC-CCR-MW16-1123	Antimony	0.010 mg/L

Four Corners CCR Data Review

Laboratory Name:	Eurofins Environment Testing		
Sample Delivery Group:	J210745	**Review Date:**	12/8/2023
Validator's Name:	Caitlin Riechmann	**Reviewed By:**	Marie Bevier

Sample Summary:

Field Sample Identification	Collection Date and Time	Laboratory Sample Identification	Notes
FC-CCR-MW07-1123	11/15/23 14:31	550-210745-1	
FC-CCR-MW08-1123	11/15/23 13:33	550-210745-2	
FC-CCR-MW49A-1123	11/15/23 16:59	550-210745-3	

Analytical Methods:

Analyte	Analyte Group	Method
Chloride, Fluoride, Sulfate	Anions	EPA 300.0
Beryllium, Boron, Calcium, Lithium, Magnesium, Potassium, Sodium	Metals	EPA 200.7
Antimony, Arsenic, Barium, Cadmium, Chromium, Cobalt, Lead, Molybdenum, Selenium, Thallium	Metals	EPA 200.8
Mercury	Metals	EPA 245.1
Alkalinity	General Chemistry	SM 2320B
Total Dissolved Solids (TDS)	General Chemistry	SM 2540C
pH	General Chemistry	SM 4500 H+B

Qualifier Definitions:

J The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

R The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.

U The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.

UJ The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

Sample Receipt Condition:

COC Signed and Complete? (Yes) No

If No, provide details.

Sample Login Matched COC? (Yes) No

If no, provide details.

Sample receipt temperature ≤ 6°C? (Yes) No N/A

If no, provide details.

1. Samples analyzed for metals and radionuclides within 180 days of sampling?

   (Yes) No N/A

2. Samples analyzed for mercury, ammonia, chloride, fluoride, nitrate/nitrite, sulfate, TOC, and/or DOC within 28 days of sampling?

   (Yes) No N/A

3. Samples Analyzed for alkalinity within 14 days of sampling? (Yes) No N/A

4. Samples analyzed for total dissolved solids within 7 days of sampling?

   (Yes) No N/A

5. Samples analyzed for pH within 15 minutes of sampling? Yes (No) N/A

If No:

Sample ID	Analysis	Time Between Collection and Analysis	Effect on Data Usability
FC-CCR-MW07-1123	pH	13 days, 22 hours, 19 minutes	J-HT
FC-CCR-MW08-1123	pH	13 days, 23 hours, 19 minutes	J-HT
FC-CCR-MW49A-1123	pH	13 days, 19 hours, 55 minutes	J-HT

Note:
HT = Maximum recommended hold time was exceeded.

6. Target analytes detected in the blanks? Yes (No) N/A

If Yes:

Detected Analyte	Concentration	Samples with concentrations less than 5 times the blank detection	Effect on Data Usability

7. LCS recoveries within laboratory-specified limits? Yes (No) N/A

If No:

Analyte	Recovery	QC Limits	Affected Samples	Effect on Data Usability
Barium	117%, 119%	85-115%	FC-CCR-MW07-1123 FC-CCR-MW08-1123 FC-CCR-MW49A-1123	J- HL

Note:
HL = High LCS recovery. Result may be biased high

8. MS performed on a project-specific sample? (Yes) No N/A

If Yes:

Spiked Sample ID	Spiked Analyte(s)
FC-CCR-MW07-1123	Lithium

a. Are MS recoveries and/or precision within laboratory specified limits?

(Yes) No N/A

If No:

Sample ID	Analyte	RPD or Recovery	Accuracy or Recovery Limits	Effect on Data Usability

9. Field duplicate collected? Yes (No)

If Yes:

Parent Sample	Field Duplicate

b. Are RPDs between primary and duplicate results ≤ 20% or are differences between analyte concentrations ≤ the reporting limit?

Yes No (N/A)

If No:

Primary Sample ID	Duplicate Sample ID	Analyte	RPD	Effect on Data Usability

10. Did the laboratory perform duplicate analyses on project-specific samples?

Yes (No) N/A

If Yes:

Sample ID	Analysis

c. Is the RPD between duplicate results within laboratory-specified limits or is the difference between analyte concentrations less than the reporting limit?

Yes No (N/A)

If No:

Sample ID	Analyte	Effect on Data Usability

11. Are non-detect results sufficiently low to meet EPA primary drinking water criteria?

Yes (No)

Analyte	List	MCL	Alternative GWPS	Units
Antimony	Appendix IV	0.006	--	mg/L
Arsenic	Appendix IV	0.010	--	mg/L
Barium	Appendix IV	2	--	mg/L
Beryllium	Appendix IV	0.004	--	mg/L
Boron	Appendix III	--	--	mg/L
Cadmium	Appendix IV	0.005	--	mg/L
Calcium	Appendix III	--	--	mg/L
Chloride	Appendix III	--	--	mg/L
Chromium	Appendix IV	0.1	--	mg/L
Cobalt	Appendix IV	--	0.006	mg/L
Fluoride	Appendix III/IV	4.0	--	mg/L
Lead	Appendix IV	--	0.015	mg/L
Lithium	Appendix IV	--	0.040	mg/L
Mercury	Appendix IV	0.002	--	mg/L
Molybdenum	Appendix IV	--	0.1	mg/L
pH	Appendix III	--	--	S.U.
Radium 226 + Radium 228	Appendix IV	5	--	pCi/L
Selenium	Appendix IV	0.05	--	mg/L
Sulfate	Appendix III	--	--	mg/L
Total Dissolved Solids	Appendix III	--	--	mg/L
Thallium	Appendix IV	0.002	--	mg/L

If No, list affected samples and analytes.

Sample ID	Analyte	Reporting Limit
FC-CCR-MW07-1123 FC-CCR-MW08-1123 FC-CCR-MW49A-1123	Antimony	0.010 mg/L

APPENDIX

F

GROUNDWATER QUALITY DATA TABLES THROUGH 2023

Table F-1
Groundwater Sampling Results for the URS Monitoring Wells - Appendix III Constituents

					Appendix III Constituents							
				Constituent:	Boron	Calcium	Chloride	Fluoride	pH (Field Measurement)	pH (Laboratory Measurement)	Sulfate	Total Dissolved Solids
				Filtered:	N	N	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	su	su	mg/L	mg/L
				URS BTV (applicable to downgradient wells)	*1.9*	*540*	*710*	*<RL*	*LPL and UPL*	*LPL and UPL*	*13,000*	*20,000*
				URS GWPS (applicable to downgradient wells)	--	--	--	--	--	--	--	--
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**								
MW-71	URS/CWTP	Background	3/5/2016	FC-CCR-MW-71-030516	**0.44**	**450**	**660**	<0.050	**7.73**	--	**8,500**	**13,000**
MW-71	URS/CWTP	Background	3/5/2016	FC-CCR-MW-71-030516	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	3/5/2016	*DUP* FC-CCR-FD-2-030516	**0.46**	**480**	**670**	<0.050	--	--	**8,500**	**13,000**
MW-71	URS/CWTP	Background	3/5/2016	*DUP* FC-CCR-FD-2-030516	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	4/26/2016	FC-CCR-MW-71-042616	**0.69**	**470**	**670**	<2.0	**6.58**	--	**13,000**	**21,000**
MW-71	URS/CWTP	Background	6/6/2016	FC-CCR-MW71-616	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	6/6/2016	FC-CCR-MW71-616	**0.70**	**460**	**750**	<0.40	**6.47**	**6.87**	**13,000**	**20,000**
MW-71	URS/CWTP	Background	8/21/2016	FC-CCR-MW71-816	**0.56**	**450**	**590**	<0.80	**7.04**	**7.1**	**8,400**	**14,000**
MW-71	URS/CWTP	Background	8/21/2016	FC-CCR-MW71-816	--	--	--	<0.80	--	--	--	--
MW-71	URS/CWTP	Background	8/21/2016	FC-CCR-MW71-816	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	8/21/2016	FC-CCR-MW101-816	--	--	--	--	--	**7.1**	--	**14,000**
MW-71	URS/CWTP	Background	8/21/2016	FC-CCR-MW101-816	--	--	--	<0.40	--	--	--	--
MW-71	URS/CWTP	Background	8/21/2016	FC-CCR-MW101-816	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	9/12/2016	FC-CCR-MW71-916	**0.58**	**460**	**570**	<0.40	**6.86**	**7.2**	**9,300**	**16,000**
MW-71	URS/CWTP	Background	9/12/2016	FC-CCR-MW71-916	--	--	--	<0.40	--	--	--	--
MW-71	URS/CWTP	Background	9/12/2016	FC-CCR-MW71-916	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	10/20/2016	FC-CCR-MW71-1016	**0.55**	**410**	**580**	<0.40	**6.90**	**7.3**	**9,100**	**15,000**
MW-71	URS/CWTP	Background	10/20/2016	FC-CCR-MW71-1016	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	2/2/2017	FC-CCR-MW71-117	**0.62**	**440**	**610**	<0.40	**6.64**	**7.6**	**14,000**	**17,000**
MW-71	URS/CWTP	Background	2/2/2017	FC-CCR-MW71-117	--	--	--	<0.40	--	--	--	--
MW-71	URS/CWTP	Background	2/2/2017	FC-CCR-MW71-117	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	4/17/2017	FC-CCR-MW71-41717	**0.52**	**400**	**550**	<2.0	**6.81**	**7.6**	**9,400**	**15,000**
MW-71	URS/CWTP	Background	4/17/2017	FC-CCR-MW71-41717	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	4/17/2017	FC-CCR-MW71-41717	--	--	--	<2.0	--	--	--	--
MW-71	URS/CWTP	Background	5/2/2017	FC-CCR-MW71-5217	--	--	--	<13	**6.86**	--	--	--
MW-71	URS/CWTP	Background	5/2/2017	FC-CCR-MW71-5217	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	5/29/2017	FC-CCR-MW71-52917	--	--	--	<2.0	**6.76**	--	--	--
MW-71	URS/CWTP	Background	5/29/2017	FC-CCR-MW71-52917	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	6/22/2017	FC-CCR-MW71-62217	**0.60**	**460**	**620**	--	**6.79**	**7.2**	**4,600**	**17,000**
MW-71	URS/CWTP	Background	6/22/2017	FC-CCR-MW71-62217	--	--	--	<2.0	--	--	--	--
MW-71	URS/CWTP	Background	6/22/2017	FC-CCR-MW71-62117	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	7/21/2017	FC-CCR-MW71-72117	**0.55**	**450**	**590**	<2.0	**7.00**	**7.1**	**10,000**	**15,000**
MW-71	URS/CWTP	Background	7/21/2017	FC-CCR-MW71-72117	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	7/21/2017	FC-CCR-MW71-72117	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	8/10/2017	FC-CCR-MW71-81017	**0.55**	**450**	**560**	--	**6.59**	**7.4**	**10,000**	**15,000**
MW-71	URS/CWTP	Background	8/10/2017	FC-CCR-MW71-81017	--	--	--	<2.0	--	--	--	--
MW-71	URS/CWTP	Background	8/10/2017	FC-CCR-MW71-81017	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	8/17/2017	FC-CCR-MW71-81717	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	8/17/2017	FC-CCR-MW71-81717	**0.56**	**480**	**570**	<2.0	**6.62**	**7.3**	**9,500**	**15,000**
MW-71	URS/CWTP	Background	9/11/2017	FC-CCR-MW71-91117	**0.55**	**470**	**570**	--	**6.56**	**7.1**	**9,900**	**15,000**
MW-71	URS/CWTP	Background	9/11/2017	FC-CCR-MW71-91117	--	--	--	<2.0	--	--	--	--
MW-71	URS/CWTP	Background	9/11/2017	FC-CCR-MW71-91117	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	10/13/2017	FC-CCR-MW71-101317	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	10/13/2017	FC-CCR-MW71-101317	**0.54**	**420**	**570**	<2.0	**6.79**	**7.2**	**10,000**	**15,000**
MW-71	URS/CWTP	Background	11/30/2017	FC-CCR-MW71-113017	**0.56**	**490**	**540**	<2.0	**6.71**	**7.1**	**10,000**	**15,000**
MW-71	URS/CWTP	Background	3/16/2018	FC-CCR-MW71-31618	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	6/2/2018	FC-CCR-MW-71-6218	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	6/2/2018	FC-CCR-MW-71-6218	**0.55**	**420**	**520**	<0.80	**6.85**	**7.1**	**10,000**	**15,000**
MW-71	URS/CWTP	Background	11/3/2018	FC-CCR-MW71-11318	**0.56**	**470**	**520**	<2.0	**6.81**	**7.0**	**11,000**	**16,000**

Table F-1
Groundwater Sampling Results for the URS Monitoring Wells - Appendix III Constituents

					Appendix III Constituents							
				Constituent:	Boron	Calcium	Chloride	Fluoride	pH (Field Measurement)	pH (Laboratory Measurement)	Sulfate	Total Dissolved Solids
				Filtered:	N	N	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	su	su	mg/L	mg/L
				URS BTV (applicable to downgradient wells)	*1.9*	*540*	*710*	*<RL*	*LPL and UPL*	*LPL and UPL*	*13,000*	*20,000*
				URS GWPS (applicable to downgradient wells)	--	--	--	--	--	--	--	--
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**								
MW-71	URS/CWTP	Background	11/3/2018	FC-CCR-MW71-11318	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	11/3/2018	FC-CCR-MW71-11318	--	--	--	<0.80	--	--	--	--
MW-71	URS/CWTP	Background	11/3/2018	*DUP* FC-CCR-FD01-11318	**0.54**	**450**	**520**	<0.80	**6.68**	**7.2**	**11,000**	**16,000**
MW-71	URS/CWTP	Background	11/3/2018	*DUP* FC-CCR-FD01-11318	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	3/18/2019	FC-CCR-MW71-031819	--	--	--	<0.80	--	--	--	--
MW-71	URS/CWTP	Background	3/18/2019	FC-CCR-MW71-031819	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	5/6/2019	FC-CCR-MW71-5719	--	--	--	--	**6.66**	--	--	--
MW-71	URS/CWTP	Background	12/2/2019	FC-CCR-MW71-120219	**0.50**	**440**	**500**	<0.80	**6.66**	**7.2 J**	**10,000**	**16000 J**
MW-71	URS/CWTP	Background	6/20/2020	FC-CCR-MW71-0620	**0.59**	**450**	**480**	<0.8	**6.71**	**7.3 J**	**9,900**	**15,000**
MW-71	URS/CWTP	Background	11/5/2020	FC-CCR-MW71-1120	**0.59**	**460**	**490**	<0.4	**6.78**	**7.2 J**	**10,000**	**16,000**
MW-71	URS/CWTP	Background	4/22/2021	FC-CCR-MW71-0421	**0.73**	**510**	**560**	**3.8N J**	**6.83**	**7.2 J**	**14,000**	**19,000**
MW-71	URS/CWTP	Background	11/12/2021	FC-CCR-MW71-1121	**0.54**	**440**	**560**	**0.14 J**	**6.74**	**7.4 J**	**12,000**	**8,000**
MW-71	URS/CWTP	Background	5/21/2022	FC-CCR-MW71-0522	**0.56**	**450**	**560**	<0.8	**6.74**	**7.58 J**	**9,900**	**16,000**
MW-71	URS/CWTP	Background	5/21/2022	FC-CCR-SS04-0522	**0.78 J**	**467**	**642**	<50/0.28 J	**6.74**	**7.8 J**	**12,400**	**16,000**
MW-71	URS/CWTP	Background	11/13/2022	FC-CCR-MW71-1122	**0.52**	**490**	**530**	<0.8	**6.79**	**7.1 J**	**12,000**	**19,000**
MW-71	URS/CWTP	Background	5/8/2023	FC-CCR-MW71-0523	**0.58**	**470**	**570**	<2	**6.80**	**7.2 J**	**10,000**	**17,000**
MW-71	URS/CWTP	Background	6/27/2023	FC-CCR-MW71-0623	**0.57**	**530**	**600**	< 20	**7.04**	**7.0 J**	**14,000**	**20,000**
MW-71	URS/CWTP	Background	11/08/2023	FC-CCR-MW71-1123	**0.67 J**	**540 J**	**640**	<0.8	**6.86**	**7.2 J**	**14,000**	**20,000 J**
MW-72	URS/CWTP	Background	3/7/2016	FC-CCR-MW72-030716	**0.16**	**480**	**490**	<0.050	**7.71**	--	**12,000**	**17,000**
MW-72	URS/CWTP	Background	3/7/2016	FC-CCR-MW72-030716	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	4/26/2016	FC-CCR-MW-72-042616	**0.22**	**470**	**430**	<2.0	**6.87**	--	**11,000**	**19,000**
MW-72	URS/CWTP	Background	6/6/2016	FC-CCR-MW72-616	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	6/6/2016	FC-CCR-MW72-616	**0.25**	**570**	**530**	<0.40	**6.56**	**6.99**	**4,500**	**9,500**
MW-72	URS/CWTP	Background	8/21/2016	FC-CCR-MW72-816	**0.23**	**450**	**440**	<0.40	**6.72**	**7.0**	**10,000**	**17,000**
MW-72	URS/CWTP	Background	8/21/2016	FC-CCR-MW72-816	--	--	--	<0.40	--	--	--	--
MW-72	URS/CWTP	Background	8/21/2016	FC-CCR-MW72-816	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	9/13/2016	FC-CCR-MW72-916	**0.24**	**470**	**450**	<0.40	**6.17**	**7.1**	**10,000**	**17,000**
MW-72	URS/CWTP	Background	9/13/2016	FC-CCR-MW72-916	--	--	--	<0.40	--	--	--	--
MW-72	URS/CWTP	Background	9/13/2016	FC-CCR-MW72-916	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	10/20/2016	FC-CCR-MW72-1016	**0.23**	**400**	**480**	<0.40	**6.84**	**7.1**	**11,000**	**17,000**
MW-72	URS/CWTP	Background	10/20/2016	FC-CCR-MW72-1016	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	2/2/2017	FC-CCR-MW72-117	**0.23**	**420**	**430**	<0.40	**6.63**	**7.5**	**11,000**	**16,000**
MW-72	URS/CWTP	Background	2/2/2017	FC-CCR-MW72-117	--	--	--	<0.40	--	--	--	--
MW-72	URS/CWTP	Background	2/2/2017	FC-CCR-MW72-117	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	2/2/2017	FC-CCR-MW101-117	**0.21**	**430**	**450**	<0.40	--	**7.5**	**11,000**	**16,000**
MW-72	URS/CWTP	Background	2/2/2017	FC-CCR-MW101-117	--	--	--	<0.40	--	--	--	--
MW-72	URS/CWTP	Background	2/2/2017	FC-CCR-MW101-117	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	4/17/2017	FC-CCR-MW-72-41717	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	4/17/2017	FC-CCR-MW72-41717	**0.20**	**440**	**450**	<2.0	**6.73**	**7.4**	**610**	**17,000**
MW-72	URS/CWTP	Background	4/17/2017	FC-CCR-MW72-41717	--	--	--	<2.0	--	--	--	--
MW-72	URS/CWTP	Background	5/2/2017	FC-CCR-MW-72-5217	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	5/2/2017	FC-CCR-MW72-5217	--	--	--	<13	**6.83**	--	--	--
MW-72	URS/CWTP	Background	5/29/2017	FC-CCR-MW72-52917	--	--	--	<2.0	**6.68**	--	--	--
MW-72	URS/CWTP	Background	6/22/2017	FC-CCR-MW72-62217	**0.23**	**450**	**450**	--	**6.65**	**7.1**	**11,000**	**17,000**
MW-72	URS/CWTP	Background	6/22/2017	FC-CCR-MW72-62217	--	--	--	<2.0	--	--	--	--
MW-72	URS/CWTP	Background	6/22/2017	FC-CCR-MW-72-62117	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	6/22/2017	*DUP* FC-CCR-FD02-62217	**0.22**	**440**	**450**	--	--	**7.0**	**11,000**	**17,000**
MW-72	URS/CWTP	Background	6/22/2017	*DUP* FC-CCR-FD02-62217	--	--	--	<2.0	--	--	--	--
MW-72	URS/CWTP	Background	6/22/2017	*DUP* FC-CCR-FD02-62117	--	--	--	--	--	--	--	--

Table F-1
Groundwater Sampling Results for the URS Monitoring Wells - Appendix III Constituents

					Appendix III Constituents							
				Constituent:	Boron	Calcium	Chloride	Fluoride	pH (Field Measurement)	pH (Laboratory Measurement)	Sulfate	Total Dissolved Solids
				Filtered:	N	N	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	su	su	mg/L	mg/L
				URS BTV (applicable to downgradient wells)	*1.9*	*540*	*710*	*<RL*	*LPL and UPL*	*LPL and UPL*	*13,000*	*20,000*
				URS GWPS (applicable to downgradient wells)	--	--	--	--	--	--	--	--
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**								
MW-72	URS/CWTP	Background	7/21/2017	FC-CCR-MW72-72117	**0.23**	**450**	**460**	<2.0	**6.93**	**7.1**	**11,000**	**17,000**
MW-72	URS/CWTP	Background	7/21/2017	FC-CCR-MW72-72117	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	7/21/2017	FC-CCR-MW72-72117	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	8/10/2017	FC-CCR-MW72-81017	**0.21**	**450**	**460**	--	**6.47**	**7.3**	**11,000**	**17,000**
MW-72	URS/CWTP	Background	8/10/2017	FC-CCR-MW72-81017	--	--	--	<2.0	--	--	--	--
MW-72	URS/CWTP	Background	8/10/2017	FC-CCR-MW72-81017	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	8/10/2017	*DUP* FC-CCR-FD02-81017	**0.25**	**460**	**460**	--	--	**7.2**	**12,000**	**17,000**
MW-72	URS/CWTP	Background	8/10/2017	*DUP* FC-CCR-FD02-81017	--	--	--	<2.0	--	--	--	--
MW-72	URS/CWTP	Background	8/10/2017	*DUP* FC-CCR-FD02-81017	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	8/17/2017	FC-CCR-MW72-81717	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	8/17/2017	FC-CCR-MW72-81717	**0.26**	**490**	**450**	<2.0	**6.18**	**7.1**	**11,000**	**17,000**
MW-72	URS/CWTP	Background	8/17/2017	*DUP* FC-CCR-FD02-81717	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	8/17/2017	*DUP* FC-CCR-FD02-81717	**0.27**	**480**	**460**	<2.0	--	**7.2**	**12,000**	**17,000**
MW-72	URS/CWTP	Background	9/10/2017	FC-CCR-MW72-91017	**0.21**	**470**	**460**	--	**6.61**	**7.0**	**11,000**	**17,000**
MW-72	URS/CWTP	Background	9/10/2017	FC-CCR-MW72-91017	--	--	--	<2.0	--	--	--	--
MW-72	URS/CWTP	Background	9/10/2017	FC-CCR-MW72-91017	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	10/13/2017	FC-CCR-MW72-101317	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	10/13/2017	FC-CCR-MW72-101317	**0.22**	**430**	**450**	<2.0	**6.65**	**7.2**	**11,000**	**16,000**
MW-72	URS/CWTP	Background	11/29/2017	FC-CCR-MW72-112917	**0.22**	**500**	**450**	<2.0	**6.63**	**7.2**	**10,000**	**16,000**
MW-72	URS/CWTP	Background	3/16/2018	FC-CCR-MW72-31618	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	6/2/2018	FC-CCR-MW-72-6218	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	6/2/2018	FC-CCR-MW-72-6218	**0.21**	**410**	**450**	<0.80	**6.75**	**7.0**	**11,000**	**16,000**
MW-72	URS/CWTP	Background	11/3/2018	FC-CCR-MW72-11318	**0.22**	**470**	**450**	<2.0	**6.75**	**7.0**	**11,000**	**16,000**
MW-72	URS/CWTP	Background	11/3/2018	FC-CCR-MW72-11318	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	11/3/2018	FC-CCR-MW72-11318	--	--	--	<0.80	--	--	--	--
MW-72	URS/CWTP	Background	11/3/2018	*DUP* FC-CCR-FD02-11318	**0.21**	**460**	**450**	<2.0	--	**7.1**	**11,000**	**16,000**
MW-72	URS/CWTP	Background	11/3/2018	*DUP* FC-CCR-FD02-11318	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	3/17/2019	FC-CCR-MW72-031719	--	--	--	<0.80	**6.68**	--	--	--
MW-72	URS/CWTP	Background	3/17/2019	FC-CCR-MW72-031719	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	5/7/2019	FC-CCR-MW72-5719	--	--	--	--	**6.85**	--	--	--
MW-72	URS/CWTP	Background	12/2/2019	FC-CCR-MW72-120219	**0.19**	**430**	**430**	<0.80	**6.62**	**7.1 J**	**11,000**	**16000 J**
MW-72	URS/CWTP	Background	6/19/2020	FC-CCR-MW72-0620	**0.23**	**440**	**400**	<0.8	**6.65**	**7.2 J**	**11,000**	**16,000**
MW-72	URS/CWTP	Background	11/5/2020	FC-CCR-MW72-1120	**0.24**	**470**	**430**	<0.4	**6.70**	**7.1 J**	**10,000**	**16,000**
MW-72	URS/CWTP	Background	4/22/2021	FC-CCR-MW72-0421	**0.25**	**480**	**400**	<0.8	**6.89**	**7.2 J**	**10,000**	**16,000**
MW-72	URS/CWTP	Background	11/12/2021	FC-CCR-MW72-1121	**0.22**	**440**	**450**	<0.8	**6.64**	**7.1 J**	**11,000**	**14,000**
MW-72	URS/CWTP	Background	5/22/2022	FC-CCR-MW72-0522	**0.22**	**440**	**410**	<0.8	**6.63**	**7.5 J**	**9,600**	**13,000**
MW-72	URS/CWTP	Background	11/13/2022	FC-CCR-MW72-1122	**0.15**	**470**	**400**	<0.8	**6.81**	**7.2 J**	**10,000**	**15,000**
MW-72	URS/CWTP	Background	5/8/2023	FC-CCR-MW72-0523	**0.28**	**440**	**440**	**4.2**	**6.75**	**7.2 J**	**9,800**	**15,000**
MW-72	URS/CWTP	Background	6/27/2023	FC-CCR-MW72-0623	**0.18**	**510**	**430**	< 20	**7.06**	**7.1 J**	**9,700**	**15,000**
MW-72	URS/CWTP	Background	11/08/2023	FC-CCR-MW72-1123	**0.21 J**	**500 J**	**430**	<0.8	**6.89**	**7.3 J**	**9,500**	**15,000**
MW-73	URS/CWTP	Background	2/2/2017	FC-CCR-MW73-117	**1.6**	**480**	**380**	<0.40	**6.65**	**7.5**	**5,400**	**8,800**
MW-73	URS/CWTP	Background	2/2/2017	FC-CCR-MW73-117	--	--	--	<0.40	--	--	--	--
MW-73	URS/CWTP	Background	2/2/2017	FC-CCR-MW73-117	--	--	--	--	--	--	--	--
MW-73	URS/CWTP	Background	4/18/2017	FC-CCR-MW73-41817	**1.6**	**450**	**340**	<0.80	**6.70**	**7.3**	**5,700**	**9,200**
MW-73	URS/CWTP	Background	4/18/2017	FC-CCR-MW73-41817	--	--	--	--	--	--	--	--
MW-73	URS/CWTP	Background	4/18/2017	FC-CCR-MW73-41817	--	--	--	<0.80	--	--	--	--
MW-73	URS/CWTP	Background	5/2/2017	FC-CCR-MW73-5217	--	--	--	<5.0	**6.70**	--	--	--
MW-73	URS/CWTP	Background	5/2/2017	FC-CCR-MW73-5217	--	--	--	--	--	--	--	--
MW-73	URS/CWTP	Background	5/29/2017	FC-CCR-MW73-52917	--	--	--	<0.80	**6.70**	--	--	--

Table F-1
Groundwater Sampling Results for the URS Monitoring Wells - Appendix III Constituents

					Appendix III Constituents							
				Constituent:	Boron	Calcium	Chloride	Fluoride	pH (Field Measurement)	pH (Laboratory Measurement)	Sulfate	Total Dissolved Solids
				Filtered:	N	N	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	su	su	mg/L	mg/L
				URS BTV (applicable to downgradient wells)	*1.9*	*540*	*710*	*<RL*	*LPL and UPL*	*LPL and UPL*	*13,000*	*20,000*
				URS GWPS (applicable to downgradient wells)	--	--	--	--	--	--	--	--
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**								
MW-73	URS/CWTP	Background	5/29/2017	FC-CCR-MW73-52917	--	--	--	--	--	--	--	--
MW-73	URS/CWTP	Background	6/22/2017	FC-CCR-MW73-62217	**1.6**	**490**	**450**	--	**6.74**	**7.0**	**6,700**	**11,000**
MW-73	URS/CWTP	Background	6/22/2017	FC-CCR-MW73-62217	--	--	--	<0.80	--	--	--	--
MW-73	URS/CWTP	Background	6/22/2017	FC-CCR-MW73-62117	--	--	--	--	--	--	--	--
MW-73	URS/CWTP	Background	7/22/2017	FC-CCR-MW73-72217	**1.6**	**490**	**520**	<0.80	**6.83**	**7.1**	**8,000**	**12,000**
MW-73	URS/CWTP	Background	7/22/2017	FC-CCR-MW73-72217	--	--	--	<2.0	--	--	--	--
MW-73	URS/CWTP	Background	7/22/2017	FC-CCR-MW73-72217	--	--	--	--	--	--	--	--
MW-73	URS/CWTP	Background	7/22/2017	*DUP* FC-CCR-FD02-72217	**1.6**	**490**	**500**	<2.0	--	**7.1**	**7,800**	**12,000**
MW-73	URS/CWTP	Background	7/22/2017	*DUP* FC-CCR-FD02-72217	--	--	--	--	--	--	--	--
MW-73	URS/CWTP	Background	8/10/2017	FC-CCR-MW73-81017	**1.7**	**500**	**540**	--	**6.45**	**7.4**	**7,700**	**12,000**
MW-73	URS/CWTP	Background	8/10/2017	FC-CCR-MW73-81017	--	--	--	<0.80	--	--	--	--
MW-73	URS/CWTP	Background	8/10/2017	FC-CCR-MW73-81017	--	--	--	--	--	--	--	--
MW-73	URS/CWTP	Background	8/17/2017	FC-CCR-MW73-81717	--	--	--	--	--	--	--	--
MW-73	URS/CWTP	Background	8/17/2017	FC-CCR-MW73-81717	**1.7**	**540**	**550**	<0.80	**6.50**	**7.0**	**7,600**	**11,000**
MW-73	URS/CWTP	Background	9/10/2017	FC-CCR-MW73-91017	**1.9**	**520**	**470**	--	**6.62**	**7.0**	**6,000**	**9,900**
MW-73	URS/CWTP	Background	9/10/2017	FC-CCR-MW73-91017	--	--	--	<0.80	--	--	--	--
MW-73	URS/CWTP	Background	9/10/2017	FC-CCR-MW73-91017	--	--	--	--	--	--	--	--
MW-73	URS/CWTP	Background	10/12/2017	FC-CCR-MW73-101217	--	--	--	--	--	--	--	--
MW-73	URS/CWTP	Background	10/12/2017	FC-CCR-MW73-101217	**2.0**	**510**	**310**	<0.80	**6.64**	**7.3**	**3,900**	**6,600**
MW-73	URS/CWTP	Background	10/12/2017	*DUP* FC-CCR-FD01-101217	--	--	--	--	--	--	--	--
MW-73	URS/CWTP	Background	10/12/2017	*DUP* FC-CCR-FD01-101217	**2.0**	**510**	**300**	<0.80	--	**7.1**	**3,700**	**6,600**
MW-73	URS/CWTP	Background	11/29/2017	FC-CCR-MW73-112917	**1.8**	**550**	**420**	<0.80	**6.61**	**7.1**	**5,600**	**8,900**
MW-73	URS/CWTP	Background	3/16/2018	FC-CCR-MW73-31618	--	--	--	--	--	--	--	--
MW-73	URS/CWTP	Background	6/2/2018	FC-CCR-MW-73-6218	--	--	--	--	--	--	--	--
MW-73	URS/CWTP	Background	6/2/2018	FC-CCR-MW-73-6218	**1.6**	**460**	**550**	<0.80	**6.67**	**6.9**	**7,100**	**12,000**
MW-73	URS/CWTP	Background	11/3/2018	FC-CCR-MW73-11318	**1.7**	**480**	**660**	<0.80	**6.64**	**7.0**	**7,500**	**12,000**
MW-73	URS/CWTP	Background	11/3/2018	FC-CCR-MW73-11318	--	--	--	--	--	--	--	--
MW-73	URS/CWTP	Background	3/18/2019	FC-CCR-MW73-031819	--	--	--	<0.80	**6.95**	--	--	--
MW-73	URS/CWTP	Background	3/18/2019	FC-CCR-MW73-031819	--	--	--	--	--	--	--	--
MW-73	URS/CWTP	Background	5/6/2019	FC-CCR-MW73-5619	--	--	--	--	**6.51**	--	--	--
MW-73	URS/CWTP	Background	12/2/2019	FC-CCR-MW73-120219	**1.6**	**460**	**520**	<0.80	**6.49**	**7.1 J**	**7,100**	**11000 J**
MW-73	URS/CWTP	Background	12/2/2019	*DUP* FC-CCR-FD01-120219	**1.7**	**480**	**500**	<0.80	--	**7.0 J**	**6,900**	**11000 J**
MW-73	URS/CWTP	Background	6/20/2020	FC-CCR-MW73-0620	**1.7**	**450**	**520**	<0.8	**6.53**	**7.2 J**	**7,200**	**12,000**
MW-73	URS/CWTP	Background	11/5/2020	FC-CCR-MW73-1120	**1.6**	**480**	**530**	**0.063 J**	**6.65**	**7.0 J**	**7,100**	**12,000**
MW-73	URS/CWTP	Background	4/22/2021	FC-CCR-MW73-0421	**1.6**	**530**	**380**	<0.4	**6.76**	**7.1 J**	**5,700**	**9,700**
MW-73	URS/CWTP	Background	11/13/2021	FC-CCR-MW73-1121	**1.6**	**460**	**560**	**0.12 J**	**6.48**	**7.0 J**	**7,400**	**9,600**
MW-73	URS/CWTP	Background	5/22/2022	FC-CCR-MW73-0522	**1.6**	**470**	**570**	<0.8	**6.55**	**7.47 J**	**7,100**	**11,000**
MW-73	URS/CWTP	Background	11/14/2022	FC-CCR-MW73-1122	**1.6**	**490**	**610**	<0.8	**6.73**	**7.0 J**	**6,800**	**12,000**
MW-73	URS/CWTP	Background	5/7/2023	FC-CCR-MW73-0523	**1.9**	**510**	**740**	<80	**6.62**	**7.0 J**	**8,200**	**12,000**
MW-73	URS/CWTP	Background	6/27/2023	FC-CCR-MW73-0623	**1.7**	**520**	**640**	< 20	**6.82**	**6.9 J**	**7,000**	**12,000**
MW-73	URS/CWTP	Background	11/08/2023	FC-CCR-MW73-1123	**1.7 J**	**550 J**	**650**	<0.8	**6.72**	**7.2 J**	**7,000**	**12,000**
MW-66	URS	Downgradient Boundary	11/5/2015	FC-CCR-MW66-110515	**87**	**470**	**870**	**18**	--	--	**7,300**	**11,000**
MW-66	URS	Downgradient Boundary	11/5/2015	FC-CCR-MW66-110515	--	--	--	--	--	--	--	--
MW-66	URS	Downgradient Boundary	4/27/2016	FC-CCR-MW-66-042716	--	--	--	**18**	--	--	--	--
MW-66	URS	Downgradient Boundary	6/5/2016	FC-CCR-MW66-616	--	--	--	--	--	--	--	--
MW-66	URS	Downgradient Boundary	6/5/2016	FC-CCR-MW66-616	**89**	**470**	**1,300**	**20**	--	**7.31**	**7,000**	**13,000**
MW-66	URS	Downgradient Boundary	8/20/2016	FC-CCR-MW66-816	**100**	**480**	**1,400**	**20**	--	**7.3**	**7,600**	**15,000**
MW-66	URS	Downgradient Boundary	8/20/2016	FC-CCR-MW66-816	--	--	--	**19**	--	--	--	--
MW-66	URS	Downgradient Boundary	8/20/2016	FC-CCR-MW66-816	--	--	--	--	--	--	--	--

Table F-1
Groundwater Sampling Results for the URS Monitoring Wells - Appendix III Constituents

					Appendix III Constituents							
				Constituent:	Boron	Calcium	Chloride	Fluoride	pH (Field Measurement)	pH (Laboratory Measurement)	Sulfate	Total Dissolved Solids
				Filtered:	N	N	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	su	su	mg/L	mg/L
				URS BTV (applicable to downgradient wells)	*1.9*	*540*	*710*	*<RL*	*LPL and UPL*	*LPL and UPL*	*13,000*	*20,000*
				URS GWPS (applicable to downgradient wells)	--	--	--	--	--	--	--	--
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**								
MW-66	URS	Downgradient Boundary	9/12/2016	FC-CCR-MW66-916	110	470	1,500	12	--	7.4	8,000	15,000
MW-66	URS	Downgradient Boundary	9/12/2016	FC-CCR-MW66-916	--	--	--	17	--	--	--	--
MW-66	URS	Downgradient Boundary	9/12/2016	FC-CCR-MW66-916	--	--	--	--	--	--	--	--
MW-66	URS	Downgradient Boundary	10/19/2016	FC-CCR-MW66-1016	130	440	1,600	17	--	7.4	9,100	16,000
MW-66	URS	Downgradient Boundary	10/19/2016	FC-CCR-MW66-1016	--	--	--	--	--	--	--	--
MW-66	URS	Downgradient Boundary	2/1/2017	FC-CCR-MW66-117	130	470	1,800	18	--	7.5	10,000	16,000
MW-66	URS	Downgradient Boundary	2/1/2017	FC-CCR-MW66-117	--	--	--	19	--	--	--	--
MW-66	URS	Downgradient Boundary	2/1/2017	FC-CCR-MW66-117	--	--	--	--	--	--	--	--
MW-66	URS	Downgradient Boundary	4/16/2017	FC-CCR-MW66-41617	140	460	1,600	25	--	7.4	11,000	17,000
MW-66	URS	Downgradient Boundary	4/16/2017	FC-CCR-MW66-41617	--	--	--	--	--	--	--	--
MW-66	URS	Downgradient Boundary	4/16/2017	FC-CCR-MW66-41617	--	--	--	23	--	--	--	--
MW-66	URS	Downgradient Boundary	5/1/2017	FC-CCR-MW66-5117	--	--	--	32	--	--	--	--
MW-66	URS	Downgradient Boundary	5/1/2017	FC-CCR-MW66-5117	--	--	--	--	--	--	--	--
MW-66	URS	Downgradient Boundary	5/29/2017	FC-CCR-MW66-52917	--	--	--	25	--	--	--	--
MW-66	URS	Downgradient Boundary	5/29/2017	FC-CCR-MW66-52917	--	--	--	--	--	--	--	--
MW-66	URS	Downgradient Boundary	6/21/2017	FC-CCR-MW66-62117	130	450	1,700	--	--	7.3	11,000	18,000
MW-66	URS	Downgradient Boundary	6/21/2017	FC-CCR-MW66-62117	--	--	--	24	--	--	--	--
MW-66	URS	Downgradient Boundary	6/21/2017	FC-CCR-MW66-62117	--	--	--	--	--	--	--	--
MW-66	URS	Downgradient Boundary	7/21/2017	FC-CCR-MW66-72117	140	450	1,700	25	--	7.3	12,000	19,000
MW-66	URS	Downgradient Boundary	7/21/2017	FC-CCR-MW66-72117	--	--	--	--	--	--	--	--
MW-66	URS	Downgradient Boundary	7/21/2017	FC-CCR-MW66-72117	--	--	--	--	--	--	--	--
MW-66	URS	Downgradient Boundary	8/9/2017	FC-CCR-MW66-8917	140	460	1,700	--	--	7.4	12,000	19,000
MW-66	URS	Downgradient Boundary	8/9/2017	FC-CCR-MW66-8917	--	--	--	26	--	--	--	--
MW-66	URS	Downgradient Boundary	8/9/2017	FC-CCR-MW66-8917	--	--	--	--	--	--	--	--
MW-66	URS	Downgradient Boundary	8/16/2017	FC-CCR-MW66-81617	--	--	--	--	--	--	--	--
MW-66	URS	Downgradient Boundary	8/16/2017	FC-CCR-MW66-81617	150	510	1,700	25	--	7.5	11,000	19,000
MW-66	URS	Downgradient Boundary	9/9/2017	FC-CCR-MW66-9917	140	480	1,800	--	--	7.3	12,000	19,000
MW-66	URS	Downgradient Boundary	9/9/2017	FC-CCR-MW66-9917	--	--	--	26	--	--	--	--
MW-66	URS	Downgradient Boundary	9/9/2017	FC-CCR-MW66-9917	--	--	--	--	--	--	--	--
MW-66	URS	Downgradient Boundary	10/13/2017	FC-CCR-MW66-101317	--	--	--	--	--	--	--	--
MW-66	URS	Downgradient Boundary	10/13/2017	FC-CCR-MW66-101317	150	440	2,000	26	--	7.3	13,000	18,000
MW-66	URS	Downgradient Boundary	11/30/2017	FC-CCR-MW66-113017	140	500	1,900	26	--	7.3	13,000	19,000
MW-66	URS	Downgradient Boundary	3/16/2018	FC-CCR-MW66-31618	--	--	--	--	--	--	--	--
MW-66	URS	Downgradient Boundary	3/16/2018	*DUP* FC-CCR-FD01-31618	--	--	--	--	--	--	--	--
MW-66	URS	Downgradient Boundary	5/31/2018	FC-CCR-MW-66-53118	--	--	--	--	--	--	--	--
MW-66	URS	Downgradient Boundary	5/31/2018	FC-CCR-MW-66-53118	150	440	1,800	25	--	7.2	12,000	19,000
MW-66	URS	Downgradient Boundary	11/2/2018	FC-CCR-MW66-11218	140	470	1,800	--	--	7.3	12,000	20,000
MW-66	URS	Downgradient Boundary	11/2/2018	FC-CCR-MW66-11218	--	--	--	--	--	--	--	--
MW-66	URS	Downgradient Boundary	3/18/2019	FC-CCR-MW66-031819	--	--	--	23	--	--	--	--
MW-66	URS	Downgradient Boundary	3/18/2019	FC-CCR-MW66-031819	--	--	--	--	--	--	--	--
MW-66	URS	Downgradient Boundary	5/7/2019	FC-CCR-MW66-5719	--	--	--	--	--	--	--	--
MW-66	URS	Downgradient Boundary	12/3/2019	FC-CCR-MW66-120319	130	430	1,800	22	--	7.2 J	12,000	19,000
MW-66	URS	Downgradient Boundary	12/3/2019	*DUP* FC-CCR-FD02-120319	150	460	1,800	22	--	7.3 J	14,000	19,000
MW-66	URS	Downgradient Boundary	6/18/2020	FC-CCR-MW66-0620	140	450	1,700	17	6.85	7.3 J	12,000	20,000
MW-66	URS	Downgradient Boundary	11/5/2020	FC-CCR-MW66-1120	140	490	1,700	26 J	7.07	7.3 J	13,000	18,000
MW-66	URS	Downgradient Boundary	11/5/2020	*DUP* FC-CCR-FD02-1120	140	490	1,800	21 J	--	7.3 J	13,000	20,000
MW-66	URS	Downgradient Boundary	4/21/2021	FC-CCR-MW66-0421	150	500	1,700	19	7.24	7.4 J	12,000	19,000 J
MW-66	URS	Downgradient Boundary	11/12/2021	FC-CCR-MW66-1121	140	460	1,700	20	6.98	7.4 J	12,000	18,000
MW-66	URS	Downgradient Boundary	5/20/2022	FC-CCR-MW66-05222	140	450	1,500	16	7.18	7.45 J	11,000	17,000

Table F-1
Groundwater Sampling Results for the URS Monitoring Wells - Appendix III Constituents

					Appendix III Constituents							
				Constituent:	Boron	Calcium	Chloride	Fluoride	pH (Field Measurement)	pH (Laboratory Measurement)	Sulfate	Total Dissolved Solids
				Filtered:	N	N	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	su	su	mg/L	mg/L
				URS BTV (applicable to downgradient wells)	*1.9*	*540*	*710*	*<RL*	*LPL and UPL*	*LPL and UPL*	*13,000*	*20,000*
				URS GWPS (applicable to downgradient wells)	--	--	--	--	--	--	--	--
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**								
MW-66	URS	Downgradient Boundary	11/13/2022	FC-CCR-MW66-1122	130	480	1,600	16	7.08	7.3 J	11,000	19,000
MW-66	URS	Downgradient Boundary	5/7/2023	FC-CCR-MW66-0523	170	490	1,600	<80	7.10	7.4 J	11,000	18,000
MW-66	URS	Downgradient Boundary	11/06/2023	FC-CCR-MW66-1123	140 J	550 J	1,500	19	7.08	7.4 J	11,000	18,000
MW-67	URS	Downgradient Boundary	11/4/2015	FC-CCR-MW67-110415	75	330	990	18	--	--	6,900	11,000
MW-67	URS	Downgradient Boundary	11/4/2015	FC-CCR-MW67-110415	--	--	--	--	--	--	--	--
MW-67	URS	Downgradient Boundary	4/27/2016	FC-CCR-MW-67-042716	--	--	--	19	--	--	--	--
MW-67	URS	Downgradient Boundary	4/27/2016	FC-CCR-DUP2-042716	--	--	--	21	--	--	--	--
MW-67	URS	Downgradient Boundary	6/6/2016	FC-CCR-MW67-616	--	--	--	--	--	--	--	--
MW-67	URS	Downgradient Boundary	6/6/2016	FC-CCR-MW67-616	90	490	1,600	24	--	7.27	7,000	13,000
MW-67	URS	Downgradient Boundary	8/20/2016	FC-CCR-MW67-816	100	510	1,400	23	--	7.1	7,500	15,000
MW-67	URS	Downgradient Boundary	8/20/2016	FC-CCR-MW67-816	--	--	--	19	--	--	--	--
MW-67	URS	Downgradient Boundary	8/20/2016	FC-CCR-MW67-816	--	--	--	--	--	--	--	--
MW-67	URS	Downgradient Boundary	8/20/2016	FC-CCR-MW100-816	--	--	--	--	--	7.1	--	16,000
MW-67	URS	Downgradient Boundary	8/20/2016	FC-CCR-MW100-816	--	--	--	20	--	--	--	--
MW-67	URS	Downgradient Boundary	8/20/2016	FC-CCR-MW100-816	--	--	--	--	--	--	--	--
MW-67	URS	Downgradient Boundary	9/13/2016	FC-CCR-MW67-916	110	510	1,500	23	--	7.3	7,900	16,000
MW-67	URS	Downgradient Boundary	9/13/2016	FC-CCR-MW67-916	--	--	--	17	--	--	--	--
MW-67	URS	Downgradient Boundary	9/13/2016	FC-CCR-MW67-916	--	--	--	--	--	--	--	--
MW-67	URS	Downgradient Boundary	10/20/2016	FC-CCR-MW67-1016	120	480	1,500	16	--	7.3	8,300	16,000
MW-67	URS	Downgradient Boundary	10/20/2016	FC-CCR-MW67-1016	--	--	--	--	--	--	--	--
MW-67	URS	Downgradient Boundary	2/1/2017	FC-CCR-MW67-117	120	510	1,800	16	--	7.5	9,400	16,000
MW-67	URS	Downgradient Boundary	2/1/2017	FC-CCR-MW67-117	--	--	--	16	--	--	--	--
MW-67	URS	Downgradient Boundary	2/1/2017	FC-CCR-MW67-117	--	--	--	--	--	--	--	--
MW-67	URS	Downgradient Boundary	4/17/2017	FC-CCR-MW67-41717	130	500	1,700	22	--	7.3	10,000	17,000
MW-67	URS	Downgradient Boundary	4/17/2017	FC-CCR-MW67-41717	--	--	--	--	--	--	--	--
MW-67	URS	Downgradient Boundary	4/17/2017	FC-CCR-MW67-41717	--	--	--	21	--	--	--	--
MW-67	URS	Downgradient Boundary	5/1/2017	FC-CCR-MW67-5117	--	--	--	--	--	--	--	--
MW-67	URS	Downgradient Boundary	5/2/2017	FC-CCR-MW67-5217	--	--	--	28	--	--	--	--
MW-67	URS	Downgradient Boundary	5/29/2017	FC-CCR-MW67-52917	--	--	--	21	--	--	--	--
MW-67	URS	Downgradient Boundary	5/29/2017	FC-CCR-MW67-52917	--	--	--	--	--	--	--	--
MW-67	URS	Downgradient Boundary	6/21/2017	FC-CCR-MW67-62117	130	480	1,900	--	--	7.3	11,000	18,000
MW-67	URS	Downgradient Boundary	6/21/2017	FC-CCR-MW67-62117	--	--	--	21	--	--	--	--
MW-67	URS	Downgradient Boundary	6/21/2017	FC-CCR-MW67-62117	--	--	--	--	--	--	--	--
MW-67	URS	Downgradient Boundary	7/21/2017	FC-CCR-MW67-72117	150	520	2,000	22	--	7.1	12,000	20,000
MW-67	URS	Downgradient Boundary	7/21/2017	FC-CCR-MW67-72117	--	--	--	--	--	--	--	--
MW-67	URS	Downgradient Boundary	7/21/2017	FC-CCR-MW67-72117	--	--	--	--	--	--	--	--
MW-67	URS	Downgradient Boundary	8/9/2017	FC-CCR-MW67-8917	160	490	2,200	--	--	7.4	13,000	21,000
MW-67	URS	Downgradient Boundary	8/9/2017	FC-CCR-MW67-8917	--	--	--	22	--	--	--	--
MW-67	URS	Downgradient Boundary	8/9/2017	FC-CCR-MW67-8917	--	--	--	--	--	--	--	--
MW-67	URS	Downgradient Boundary	8/16/2017	FC-CCR-MW67-81617	--	--	--	--	--	--	--	--
MW-67	URS	Downgradient Boundary	8/16/2017	FC-CCR-MW67-81617	160	550	2,000	22	--	7.4	12,000	22,000
MW-67	URS	Downgradient Boundary	9/10/2017	FC-CCR-MW67-91017	150	500	2,100	--	--	7.3	13,000	21,000
MW-67	URS	Downgradient Boundary	9/10/2017	FC-CCR-MW67-91017	--	--	--	24	--	--	--	--
MW-67	URS	Downgradient Boundary	9/10/2017	FC-CCR-MW67-91017	--	--	--	--	--	--	--	--
MW-67	URS	Downgradient Boundary	10/13/2017	FC-CCR-MW67-101317	--	--	--	--	--	--	--	--
MW-67	URS	Downgradient Boundary	10/13/2017	FC-CCR-MW67-101317	160	460	2,300	25	--	7.1	14,000	21,000
MW-67	URS	Downgradient Boundary	11/29/2017	FC-CCR-MW67-112917	160	520	2,300	24	--	7.3	15,000	23,000
MW-67	URS	Downgradient Boundary	3/16/2018	FC-CCR-MW67-31618	--	--	--	--	--	--	--	--
MW-67	URS	Downgradient Boundary	6/2/2018	FC-CCR-MW-67-6218	--	--	--	--	--	--	--	--

Table F-1
Groundwater Sampling Results for the URS Monitoring Wells - Appendix III Constituents

					Appendix III Constituents							
				Constituent:	Boron	Calcium	Chloride	Fluoride	pH (Field Measurement)	pH (Laboratory Measurement)	Sulfate	Total Dissolved Solids
				Filtered:	N	N	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	su	su	mg/L	mg/L
				URS BTV (applicable to downgradient wells)	*1.9*	*540*	*710*	*<RL*	*LPL and UPL*	*LPL and UPL*	*13,000*	*20,000*
				URS GWPS (applicable to downgradient wells)	--	--	--	--	--	--	--	--
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**								
MW-67	URS	Downgradient Boundary	6/2/2018	FC-CCR-MW-67-6218	200	430	2,000	25	--	7.1	15,000	23,000
MW-67	URS	Downgradient Boundary	11/3/2018	FC-CCR-MW67-11318	170	470	2,000	16	--	7.4	13,000	19,000
MW-67	URS	Downgradient Boundary	11/3/2018	FC-CCR-MW67-11318	--	--	--	--	--	--	--	--
MW-67	URS	Downgradient Boundary	3/17/2019	FC-CCR-MW67-031719	--	--	--	15	--	--	--	--
MW-67	URS	Downgradient Boundary	3/17/2019	FC-CCR-MW67-031719	--	--	--	--	--	--	--	--
MW-67	URS	Downgradient Boundary	5/7/2019	FC-CCR-MW67-5719	--	--	--	--	--	--	--	--
MW-67	URS	Downgradient Boundary	12/2/2019	FC-CCR-MW67-120219	150	450	1,900	14	--	7.4 J	13,000	20000 J
MW-67	URS	Downgradient Boundary	6/19/2020	FC-CCR-MW67-0620	160	440	1,900	12	7.14	7.5 J	13,000	20,000
MW-67	URS	Downgradient Boundary	11/4/2020	FC-CCR-MW67-1120	160	470	2,000	15	7.30	7.4 J	14,000	20,000
MW-67	URS	Downgradient Boundary	11/4/2020	*DUP* FC-CCR-FD01-1120	170	470	1,900	15	--	7.4 J	14,000	20,000
MW-67	URS	Downgradient Boundary	4/21/2021	FC-CCR-MW67-0421	160	490	1,800	12	7.31	7.4 J	13,000	19,000 J
MW-67	URS	Downgradient Boundary	4/21/2021	*DUP* FC-CCR-FD01-0421	160	490	1,800	12	7.31	7.4 J	13,000	20,000 J
MW-67	URS	Downgradient Boundary	11/12/2021	FC-CCR-MW67-1121	170	460	2,100	13	6.81	7.5 J	15,000	21,000
MW-67	URS	Downgradient Boundary	5/21/2022	FC-CCR-MW67-0522	160	460	1,800	8.2	6.84	7.37 J	13,000	1,900
MW-67	URS	Downgradient Boundary	11/16/2022	FC-CCR-MW67-1122	160	500	1,900	13	6.95	7.2 J	12,000	21,000
MW-67	URS	Downgradient Boundary	5/9/2023	FC-CCR-MW67-0523	160	470	1,900	<20	6.84	7.2 J	13,000	19,000 J
MW-67	URS	Downgradient Boundary	11/13/2023	FC-CCR-MW67-1123	170	500	1,800	13 J	7.02	7.4 J	13,000	20,000
MW-68	URS	Downgradient Boundary	11/6/2015	FC-CCR-MW68-110615	93	470	1,200	7.0	--	7.11	7,900	12,000
MW-68	URS	Downgradient Boundary	11/6/2015	FC-CCR-MW68-110615	--	--	--	--	--	--	--	--
MW-68	URS	Downgradient Boundary	4/26/2016	FC-CCR-MW-68-042616	110	460	1,300	8.0	--	--	7,700	14,000
MW-68	URS	Downgradient Boundary	6/5/2016	FC-CCR-MW68-616	--	--	--	--	--	--	--	--
MW-68	URS	Downgradient Boundary	6/5/2016	FC-CCR-MW68-616	100	450	1,500	10	--	7.05	8,000	15,000
MW-68	URS	Downgradient Boundary	8/20/2016	FC-CCR-MW68-816	120	460	1,300	8.6	--	7.0	8,100	16,000
MW-68	URS	Downgradient Boundary	8/20/2016	FC-CCR-MW68-816	--	--	--	7.5	--	--	--	--
MW-68	URS	Downgradient Boundary	8/20/2016	FC-CCR-MW68-816	--	--	--	--	--	--	--	--
MW-68	URS	Downgradient Boundary	9/13/2016	FC-CCR-MW68-916	120	480	1,400	9.7	--	7.1	8,500	16,000
MW-68	URS	Downgradient Boundary	9/13/2016	FC-CCR-MW68-916	--	--	--	5.7	--	--	--	--
MW-68	URS	Downgradient Boundary	9/13/2016	FC-CCR-MW68-916	--	--	--	--	--	--	--	--
MW-68	URS	Downgradient Boundary	10/20/2016	FC-CCR-MW68-1016	120	430	1,400	6.8	--	7.1	11,000	16,000
MW-68	URS	Downgradient Boundary	10/20/2016	FC-CCR-MW68-1016	--	--	--	--	--	--	--	--
MW-68	URS	Downgradient Boundary	2/1/2017	FC-CCR-MW68-117	120	450	1,600	6.4	--	7.5	10,000	16,000
MW-68	URS	Downgradient Boundary	2/1/2017	FC-CCR-MW68-117	--	--	--	6.8	--	--	--	--
MW-68	URS	Downgradient Boundary	2/1/2017	FC-CCR-MW68-117	--	--	--	--	--	--	--	--
MW-68	URS	Downgradient Boundary	4/17/2017	FC-CCR-MW68-41717	130	450	1,400	10	--	7.1	9,900	16,000
MW-68	URS	Downgradient Boundary	4/17/2017	FC-CCR-MW68-41717	--	--	--	--	--	--	--	--
MW-68	URS	Downgradient Boundary	4/17/2017	FC-CCR-MW68-41717	--	--	--	9.7	--	--	--	--
MW-68	URS	Downgradient Boundary	5/1/2017	FC-CCR-MW68-5117	--	--	--	--	--	--	--	--
MW-68	URS	Downgradient Boundary	5/2/2017	FC-CCR-MW68-5217	--	--	--	18	--	--	--	--
MW-68	URS	Downgradient Boundary	5/29/2017	FC-CCR-MW68-52917	--	--	--	8.3	--	--	--	--
MW-68	URS	Downgradient Boundary	5/29/2017	FC-CCR-MW68-52917	--	--	--	--	--	--	--	--
MW-68	URS	Downgradient Boundary	6/21/2017	FC-CCR-MW68-62117	120	470	1,400	--	--	7.1	9,700	17,000
MW-68	URS	Downgradient Boundary	6/21/2017	FC-CCR-MW68-62117	--	--	--	8.7	--	--	--	--
MW-68	URS	Downgradient Boundary	6/21/2017	FC-CCR-MW68-62117	--	--	--	--	--	--	--	--
MW-68	URS	Downgradient Boundary	7/21/2017	FC-CCR-MW68-72117	130	470	1,500	9.6	--	7.0	10,000	17,000
MW-68	URS	Downgradient Boundary	7/21/2017	FC-CCR-MW68-72117	--	--	--	--	--	--	--	--
MW-68	URS	Downgradient Boundary	7/21/2017	FC-CCR-MW68-72117	--	--	--	--	--	--	--	--
MW-68	URS	Downgradient Boundary	8/9/2017	FC-CCR-MW68-8917	120	460	1,600	--	--	7.2	11,000	18,000
MW-68	URS	Downgradient Boundary	8/9/2017	FC-CCR-MW68-8917	--	--	--	11	--	--	--	--
MW-68	URS	Downgradient Boundary	8/9/2017	FC-CCR-MW68-8917	--	--	--	--	--	--	--	--

Table F-1
Groundwater Sampling Results for the URS Monitoring Wells - Appendix III Constituents

					Appendix III Constituents							
				Constituent:	Boron	Calcium	Chloride	Fluoride	pH (Field Measurement)	pH (Laboratory Measurement)	Sulfate	Total Dissolved Solids
				Filtered:	N	N	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	su	su	mg/L	mg/L
				URS BTV (applicable to downgradient wells)	*1.9*	*540*	*710*	*<RL*	*LPL and UPL*	*LPL and UPL*	*13,000*	*20,000*
				URS GWPS (applicable to downgradient wells)	--	--	--	--	--	--	--	--
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**								
MW-68	URS	Downgradient Boundary	8/16/2017	FC-CCR-MW68-81617	--	--	--	--	--	--	--	--
MW-68	URS	Downgradient Boundary	8/16/2017	FC-CCR-MW68-81617	130	510	1,500	11	--	7.2	9,900	17,000
MW-68	URS	Downgradient Boundary	9/10/2017	FC-CCR-MW68-91017	130	480	1,500	--	--	7.0	10,000	18,000
MW-68	URS	Downgradient Boundary	9/10/2017	FC-CCR-MW68-91017	--	--	--	11	--	--	--	--
MW-68	URS	Downgradient Boundary	9/10/2017	FC-CCR-MW68-91017	--	--	--	--	--	--	--	--
MW-68	URS	Downgradient Boundary	10/13/2017	FC-CCR-MW68-101317	--	--	--	--	--	--	--	--
MW-68	URS	Downgradient Boundary	10/13/2017	FC-CCR-MW68-101317	140	450	1,800	10	--	7.1	11,000	17,000
MW-68	URS	Downgradient Boundary	11/30/2017	FC-CCR-MW68-113017	130	520	1,400	10	--	7.1	9,700	16,000
MW-68	URS	Downgradient Boundary	11/30/2017	*DUP* FC-CCR-FD01-113017	130	520	1,400	10	--	7.1	9,400	16,000
MW-68	URS	Downgradient Boundary	3/16/2018	FC-CCR-MW68-31618	--	--	--	--	--	--	--	--
MW-68	URS	Downgradient Boundary	6/2/2018	FC-CCR-MW-68-6218	--	--	--	--	--	--	--	--
MW-68	URS	Downgradient Boundary	6/2/2018	FC-CCR-MW-68-6218	130	430	1,500	12	--	6.9	10,000	17,000
MW-68	URS	Downgradient Boundary	11/3/2018	FC-CCR-MW68-11318	150	460	1,500	12	--	7.2	11,000	18,000
MW-68	URS	Downgradient Boundary	11/3/2018	FC-CCR-MW68-11318	--	--	--	--	--	--	--	--
MW-68	URS	Downgradient Boundary	3/17/2019	FC-CCR-MW68-031719	--	--	--	9.2	--	--	--	--
MW-68	URS	Downgradient Boundary	3/17/2019	FC-CCR-MW68-031719	--	--	--	--	--	--	--	--
MW-68	URS	Downgradient Boundary	5/7/2019	FC-CCR-MW68-5719	--	--	--	--	--	--	--	--
MW-68	URS	Downgradient Boundary	12/2/2019	FC-CCR-MW68-120219	94	450	1,200	10	--	7.0 J	9,600	15000 J
MW-68	URS	Downgradient Boundary	6/19/2020	FC-CCR-MW68-0620	110	460	5,000	7.7	6.75	7.3 J	9,000	16,000
MW-68	URS	Downgradient Boundary	11/4/2020	FC-CCR-MW68-1120	110	470	1,300	10	6.86	7.2 J	11,000	17,000
MW-68	URS	Downgradient Boundary	4/22/2021	FC-CCR-MW68-0421	110	500	1,200	8.6	6.94	7.3 J	11,000	17,000
MW-68	URS	Downgradient Boundary	11/12/2021	FC-CCR-MW68-1121	110	460	1,100	10	6.67	7.3 J	13,000	10,000
MW-68	URS	Downgradient Boundary	5/21/2022	FC-CCR-MW68-0522	110	450	1,000	7.5	6.55	7.47 J	11,000	18,000
MW-68	URS	Downgradient Boundary	11/13/2022	FC-CCR-MW68-1122	120	490	1,100	7.5	6.79	7.1 J	12,000	18,000
MW-68	URS	Downgradient Boundary	5/9/2023	FC-CCR-MW68-0523	150	460	1,400	<20	6.68	7.1 J	14,000	22,000
MW-68	URS	Downgradient Boundary	11/11/2023	FC-CCR-MW68-1123	170	490	1,500	13 J	6.79	7.2 J	15,000	24,000
MW-69	URS	Downgradient Boundary	11/4/2015	FC-CCR-MW69-110415	80	490	1,000	9.8	--	--	6,600	10,000
MW-69	URS	Downgradient Boundary	11/4/2015	FC-CCR-MW69-110415	--	--	--	--	--	--	--	--
MW-69	URS	Downgradient Boundary	4/26/2016	FC-CCR-MW-69-042616	95	480	1,200	13	--	--	7,100	13,000
MW-69	URS	Downgradient Boundary	4/26/2016	FC-CCR-DUP1-042616	97	490	1,200	13	--	--	7,200	13,000
MW-69	URS	Downgradient Boundary	6/6/2016	FC-CCR-MW69-616	--	--	--	--	--	--	--	--
MW-69	URS	Downgradient Boundary	6/6/2016	FC-CCR-MW69-616	94	470	1,400	13	--	7.47	7,600	13,000
MW-69	URS	Downgradient Boundary	8/21/2016	FC-CCR-MW69-816	110	480	1,300	16	--	7.4	8,500	16,000
MW-69	URS	Downgradient Boundary	8/21/2016	FC-CCR-MW69-816	--	--	--	13	--	--	--	--
MW-69	URS	Downgradient Boundary	8/21/2016	FC-CCR-MW69-816	--	--	--	--	--	--	--	--
MW-69	URS	Downgradient Boundary	9/13/2016	FC-CCR-MW69-916	110	500	1,400	16	--	7.1	8,700	17,000
MW-69	URS	Downgradient Boundary	9/13/2016	FC-CCR-MW69-916	--	--	--	11	--	--	--	--
MW-69	URS	Downgradient Boundary	9/13/2016	FC-CCR-MW69-916	--	--	--	--	--	--	--	--
MW-69	URS	Downgradient Boundary	10/20/2016	FC-CCR-MW69-1016	120	450	1,400	9.0	--	7.4	9,800	18,000
MW-69	URS	Downgradient Boundary	10/20/2016	FC-CCR-MW69-1016	--	--	--	--	--	--	--	--
MW-69	URS	Downgradient Boundary	2/1/2017	FC-CCR-MW69-117	130	460	1,500	11	--	7.6	12,000	18,000
MW-69	URS	Downgradient Boundary	2/1/2017	FC-CCR-MW69-117	--	--	--	12	--	--	--	--
MW-69	URS	Downgradient Boundary	2/1/2017	FC-CCR-MW69-117	--	--	--	--	--	--	--	--
MW-69	URS	Downgradient Boundary	4/17/2017	FC-CCR-MW69-41717	130	470	1,400	17	--	7.5	11,000	18,000
MW-69	URS	Downgradient Boundary	4/17/2017	FC-CCR-MW69-41717	--	--	--	--	--	--	--	--
MW-69	URS	Downgradient Boundary	4/17/2017	FC-CCR-MW69-41717	--	--	--	17	--	--	--	--
MW-69	URS	Downgradient Boundary	4/17/2017	*DUP* FC-CCR-FD02-41717	140	470	1,400	17	--	7.5	12,000	18,000
MW-69	URS	Downgradient Boundary	4/17/2017	*DUP* FC-CCR-FD02-41717	--	--	--	--	--	--	--	--
MW-69	URS	Downgradient Boundary	4/17/2017	*DUP* FC-CCR-FD02-41717	--	--	--	17	--	--	--	--

Table F-1
Groundwater Sampling Results for the URS Monitoring Wells - Appendix III Constituents

					Appendix III Constituents							
				Constituent:	Boron	Calcium	Chloride	Fluoride	pH (Field Measurement)	pH (Laboratory Measurement)	Sulfate	Total Dissolved Solids
				Filtered:	N	N	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	su	su	mg/L	mg/L
				URS BTV (applicable to downgradient wells)	*1.9*	*540*	*710*	*<RL*	*LPL and UPL*	*LPL and UPL*	*13,000*	*20,000*
				URS GWPS (applicable to downgradient wells)	--	--	--	--	--	--	--	--
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**								
MW-69	URS	Downgradient Boundary	5/2/2017	FC-CCR-MW69-5217	--	--	--	**24**	--	--	--	--
MW-69	URS	Downgradient Boundary	5/2/2017	FC-CCR-MW69-5217	--	--	--	--	--	--	--	--
MW-69	URS	Downgradient Boundary	5/29/2017	FC-CCR-MW69-52917	--	--	--	**16**	--	--	--	--
MW-69	URS	Downgradient Boundary	5/29/2017	FC-CCR-MW69-52917	--	--	--	--	--	--	--	--
MW-69	URS	Downgradient Boundary	6/21/2017	FC-CCR-MW69-62117	**120**	**460**	**1,400**	--	--	**7.5**	**10,000**	**16,000**
MW-69	URS	Downgradient Boundary	6/21/2017	FC-CCR-MW69-62117	--	--	--	**14**	--	--	--	--
MW-69	URS	Downgradient Boundary	6/21/2017	FC-CCR-MW69-62117	--	--	--	--	--	--	--	--
MW-69	URS	Downgradient Boundary	7/21/2017	FC-CCR-MW69-72117	**150**	**470**	**1,600**	**18**	--	**7.4**	**13,000**	**19,000**
MW-69	URS	Downgradient Boundary	7/21/2017	FC-CCR-MW69-72117	--	--	--	--	--	--	--	--
MW-69	URS	Downgradient Boundary	7/21/2017	FC-CCR-MW69-72117	--	--	--	--	--	--	--	--
MW-69	URS	Downgradient Boundary	8/9/2017	FC-CCR-MW69-8917	**140**	**470**	**1,600**	--	--	**7.5**	**12,000**	**19,000**
MW-69	URS	Downgradient Boundary	8/9/2017	FC-CCR-MW69-8917	--	--	--	**17**	--	--	--	--
MW-69	URS	Downgradient Boundary	8/9/2017	FC-CCR-MW69-8917	--	--	--	--	--	--	--	--
MW-69	URS	Downgradient Boundary	8/9/2017	*DUP* FC-CCR-FD01-8917	**150**	**470**	**1,500**	--	--	**7.5**	**12,000**	**19,000**
MW-69	URS	Downgradient Boundary	8/9/2017	*DUP* FC-CCR-FD01-8917	--	--	--	**17**	--	--	--	--
MW-69	URS	Downgradient Boundary	8/9/2017	*DUP* FC-CCR-FD01-8917	--	--	--	--	--	--	--	--
MW-69	URS	Downgradient Boundary	8/16/2017	FC-CCR-MW69-81617	--	--	--	--	--	--	--	--
MW-69	URS	Downgradient Boundary	8/16/2017	FC-CCR-MW69-81617	**130**	**520**	**1,500**	**17**	--	**7.6**	**11,000**	**20,000**
MW-69	URS	Downgradient Boundary	9/10/2017	FC-CCR-MW69-91017	**150**	**490**	**1,600**	--	--	**7.5**	**13,000**	**18,000**
MW-69	URS	Downgradient Boundary	9/10/2017	FC-CCR-MW69-91017	--	--	--	**20**	--	--	--	--
MW-69	URS	Downgradient Boundary	9/10/2017	FC-CCR-MW69-91017	--	--	--	--	--	--	--	--
MW-69	URS	Downgradient Boundary	9/10/2017	*DUP* FC-CCR-FD02-91017	**150**	**480**	**1,600**	--	--	**7.5**	**13,000**	**20,000**
MW-69	URS	Downgradient Boundary	9/10/2017	*DUP* FC-CCR-FD02-91017	--	--	--	**20**	--	--	--	--
MW-69	URS	Downgradient Boundary	9/10/2017	*DUP* FC-CCR-FD02-91017	--	--	--	--	--	--	--	--
MW-69	URS	Downgradient Boundary	10/13/2017	FC-CCR-MW69-101317	--	--	--	--	--	--	--	--
MW-69	URS	Downgradient Boundary	10/13/2017	FC-CCR-MW69-101317	**150**	**430**	**1,600**	**20**	--	**7.5**	**13,000**	**19,000**
MW-69	URS	Downgradient Boundary	11/29/2017	FC-CCR-MW69-112917	**150**	**500**	**1,600**	**21**	--	**7.4**	**13,000**	**20,000**
MW-69	URS	Downgradient Boundary	3/16/2018	FC-CCR-MW69-31618	--	--	--	--	--	--	--	--
MW-69	URS	Downgradient Boundary	6/2/2018	FC-CCR-MW-69-6218	--	--	--	--	--	--	--	--
MW-69	URS	Downgradient Boundary	6/2/2018	FC-CCR-MW-69-6218	**120**	**430**	**1,400**	**21**	--	**7.3**	**12,000**	**18,000**
MW-69	URS	Downgradient Boundary	6/2/2018	*DUP* FC-CCR-FD02-6218	--	--	--	--	--	--	--	--
MW-69	URS	Downgradient Boundary	6/2/2018	*DUP* FC-CCR-FD02-6218	**130**	**430**	**1,300**	**21**	--	**7.3**	**12,000**	**18,000**
MW-69	URS	Downgradient Boundary	11/3/2018	FC-CCR-MW69-11318	**92**	**470**	**1,200**	**11**	--	**7.3**	**8,700**	**14,000**
MW-69	URS	Downgradient Boundary	11/3/2018	FC-CCR-MW69-11318	--	--	--	--	--	--	--	--
MW-69	URS	Downgradient Boundary	3/17/2019	FC-CCR-MW69-031719	--	--	--	**3.1**	--	--	--	--
MW-69	URS	Downgradient Boundary	3/17/2019	FC-CCR-MW69-031719	--	--	--	--	--	--	--	--
MW-69	URS	Downgradient Boundary	5/7/2019	FC-CCR-MW69-5719	--	--	--	--	--	--	--	--
MW-69	URS	Downgradient Boundary	12/3/2019	FC-CCR-MW69-120219	**88**	**490**	**1,000**	**9.0**	--	**7.2 J**	**8,100**	**13000 J**
MW-69	URS	Downgradient Boundary	6/19/2020	FC-CCR-MW69-0620	**58**	**500**	**830**	**5.5**	**6.89**	**7.4 J**	**5,500**	**9,700**
MW-69	URS	Downgradient Boundary	11/4/2020	FC-CCR-MW69-1120	**63**	**550**	**890**	**5.8**	**6.75**	**7.3 J**	**6,000**	**9,600**
MW-69	URS	Downgradient Boundary	4/21/2021	FC-CCR-MW69-0421	**53**	**590**	**810**	**4.1**	**7.18**	**7.4 J**	**5,000**	**8,300 J**
MW-69	URS	Downgradient Boundary	11/12/2021	FC-CCR-MW69-1121	**62**	**530**	**1,000**	**4.9**	**6.72**	**7.4 J**	**6,900**	**5,100**
MW-69	URS	Downgradient Boundary	5/21/2022	FC-CCR-MW69-0522	**45**	**500**	**790**	**3.9**	**6.57**	**7.57 J**	**4,800**	**8,300**
MW-69	URS	Downgradient Boundary	5/21/2022	FC-CCR-SS03-0522	**45.1**	**527**	**942**	<25/3.33	**6.57**	**7.8 J**	**5,360**	**8,270 J**
MW-69	URS	Downgradient Boundary	11/14/2022	FC-CCR-MW69-1122	**40**	**550**	**790**	**4.2**	**7.15**	**7.4 J**	**4,600**	**8,000**
MW-69	URS	Downgradient Boundary	5/9/2023	FC-CCR-MW69-0523	**49**	**530**	**970**	**4.1**	**6.91**	**7.4 J**	**4,800**	**8,600 J**
MW-69	URS	Downgradient Boundary	11/11/2023	FC-CCR-MW69-1123	**57**	**560**	**920**	**4.7 J**	**7.07**	**7.4 J**	**5,000**	**8,900**
MW-70	URS	Downgradient Boundary	11/9/2015	FC-CCR-MW70-110915	**95**	**500**	**1,200**	**2.6**	--	**6.87**	**7,000**	**11,000**
MW-70	URS	Downgradient Boundary	11/9/2015	FC-CCR-MW70-110915	--	--	--	--	--	--	--	--

Table F-1
Groundwater Sampling Results for the URS Monitoring Wells - Appendix III Constituents

					Appendix III Constituents							
				Constituent:	Boron	Calcium	Chloride	Fluoride	pH (Field Measurement)	pH (Laboratory Measurement)	Sulfate	Total Dissolved Solids
				Filtered:	N	N	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	su	su	mg/L	mg/L
				URS BTV (applicable to downgradient wells)	*1.9*	*540*	*710*	*<RL*	*LPL and UPL*	*LPL and UPL*	*13,000*	*20,000*
				URS GWPS (applicable to downgradient wells)	--	--	--	--	--	--	--	--
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**								
MW-70	URS	Downgradient Boundary	4/27/2016	FC-CCR-MW-70-042716	--	--	--	**2.3**	--	--	--	--
MW-70	URS	Downgradient Boundary	6/5/2016	FC-CCR-MW70-616	--	--	--	--	--	--	--	--
MW-70	URS	Downgradient Boundary	6/5/2016	FC-CCR-MW70-616	**89**	**480**	**1,200**	**2.1**	--	**6.97**	**6,300**	**12,000**
MW-70	URS	Downgradient Boundary	6/5/2016	FC-CCR-DUP-616	--	--	--	--	--	--	--	--
MW-70	URS	Downgradient Boundary	6/5/2016	FC-CCR-DUP-616	**89**	**480**	**1,100**	**2.2**	--	**6.94**	**6,300**	**12,000**
MW-70	URS	Downgradient Boundary	8/20/2016	FC-CCR-MW70-816	**91**	**490**	**1,100**	**0.66**	--	**7.0**	**5,800**	**12,000**
MW-70	URS	Downgradient Boundary	8/20/2016	FC-CCR-MW70-816	--	--	--	<0.80	--	--	--	--
MW-70	URS	Downgradient Boundary	8/20/2016	FC-CCR-MW70-816	--	--	--	--	--	--	--	--
MW-70	URS	Downgradient Boundary	9/12/2016	FC-CCR-MW70-916	**93**	**500**	**1,100**	**0.69**	--	**7.0**	**5,900**	**12,000**
MW-70	URS	Downgradient Boundary	9/12/2016	FC-CCR-MW70-916	--	--	--	<0.40	--	--	--	--
MW-70	URS	Downgradient Boundary	9/12/2016	FC-CCR-MW70-916	--	--	--	--	--	--	--	--
MW-70	URS	Downgradient Boundary	10/19/2016	FC-CCR-MW70-1016	**91**	**450**	**1,100**	<0.40	--	**7.1**	**6,400**	**12,000**
MW-70	URS	Downgradient Boundary	10/19/2016	FC-CCR-MW70-1016	--	--	--	--	--	--	--	--
MW-70	URS	Downgradient Boundary	2/1/2017	FC-CCR-MW70-117	**90**	**480**	**1,100**	<0.40	--	**7.5**	**6,400**	**11,000**
MW-70	URS	Downgradient Boundary	2/1/2017	FC-CCR-MW70-117	--	--	--	<0.40	--	--	--	--
MW-70	URS	Downgradient Boundary	2/1/2017	FC-CCR-MW70-117	--	--	--	--	--	--	--	--
MW-70	URS	Downgradient Boundary	4/16/2017	FC-CCR-MW70-41717	--	--	--	--	--	--	--	--
MW-70	URS	Downgradient Boundary	4/16/2017	FC-CCR-MW70-41617	**94**	**490**	**1,100**	**0.94**	--	**7.1**	**6,000**	**11,000**
MW-70	URS	Downgradient Boundary	4/16/2017	FC-CCR-MW70-41617	--	--	--	**0.85**	--	--	--	--
MW-70	URS	Downgradient Boundary	4/16/2017	*DUP* FC-CCR-FD01-41617	**92**	**460**	**1,100**	**0.95**	--	**7.1**	**6,100**	**11,000**
MW-70	URS	Downgradient Boundary	4/16/2017	*DUP* FC-CCR-FD01-41617	--	--	--	--	--	--	--	--
MW-70	URS	Downgradient Boundary	4/16/2017	*DUP* FC-CCR-FD01-41617	--	--	--	**0.85**	--	--	--	--
MW-70	URS	Downgradient Boundary	5/1/2017	FC-CCR-MW70-5117	--	--	--	<5.0	--	--	--	--
MW-70	URS	Downgradient Boundary	5/1/2017	FC-CCR-MW70-5117	--	--	--	--	--	--	--	--
MW-70	URS	Downgradient Boundary	5/29/2017	FC-CCR-MW70-52917	--	--	--	**2.6**	--	--	--	--
MW-70	URS	Downgradient Boundary	5/29/2017	FC-CCR-MW70-52917	--	--	--	--	--	--	--	--
MW-70	URS	Downgradient Boundary	6/21/2017	FC-CCR-MW70-62117	**92**	**500**	**1,000**	--	--	**7.1**	**6,200**	**11,000**
MW-70	URS	Downgradient Boundary	6/21/2017	FC-CCR-MW70-62117	--	--	--	**2.9**	--	--	--	--
MW-70	URS	Downgradient Boundary	6/21/2017	FC-CCR-MW70-62117	--	--	--	--	--	--	--	--
MW-70	URS	Downgradient Boundary	7/21/2017	FC-CCR-MW70-72117	**100**	**510**	**1,100**	**2.1**	--	**7.0**	**6,800**	**12,000**
MW-70	URS	Downgradient Boundary	7/21/2017	FC-CCR-MW70-72117	--	--	--	--	--	--	--	--
MW-70	URS	Downgradient Boundary	7/21/2017	FC-CCR-MW70-72117	--	--	--	--	--	--	--	--
MW-70	URS	Downgradient Boundary	8/9/2017	FC-CCR-MW70-8917	**98**	**510**	**1,100**	--	--	**7.2**	**6,800**	**11,000**
MW-70	URS	Downgradient Boundary	8/9/2017	FC-CCR-MW70-8917	--	--	--	**3.0**	--	--	--	--
MW-70	URS	Downgradient Boundary	8/9/2017	FC-CCR-MW70-8917	--	--	--	--	--	--	--	--
MW-70	URS	Downgradient Boundary	8/16/2017	FC-CCR-MW70-81617	--	--	--	--	--	--	--	--
MW-70	URS	Downgradient Boundary	8/16/2017	FC-CCR-MW70-81617	**94**	**540**	**1,100**	**3.2**	--	**7.1**	**6,200**	**12,000**
MW-70	URS	Downgradient Boundary	9/9/2017	FC-CCR-MW70-9917	**99**	**520**	**1,100**	--	--	**7.0**	**6,500**	**12,000**
MW-70	URS	Downgradient Boundary	9/9/2017	FC-CCR-MW70-9917	--	--	--	**2.5**	--	--	--	--
MW-70	URS	Downgradient Boundary	9/9/2017	FC-CCR-MW70-9917	--	--	--	--	--	--	--	--
MW-70	URS	Downgradient Boundary	10/13/2017	FC-CCR-MW70-101317	--	--	--	--	--	--	--	--
MW-70	URS	Downgradient Boundary	10/13/2017	FC-CCR-MW70-101317	**97**	**490**	**1,200**	**1.0**	--	**7.1**	**6,600**	**12,000**
MW-70	URS	Downgradient Boundary	11/30/2017	FC-CCR-MW70-113017	**92**	**560**	**1,100**	**2.7**	--	**6.9**	**6,300**	**11,000**
MW-70	URS	Downgradient Boundary	3/16/2018	FC-CCR-MW70-31618	--	--	--	--	--	--	--	--
MW-70	URS	Downgradient Boundary	5/31/2018	FC-CCR-MW-70-53118	--	--	--	--	--	--	--	--
MW-70	URS	Downgradient Boundary	5/31/2018	FC-CCR-MW-70-53118	**100**	**490**	**1,100**	**1.8**	--	**6.9**	**6,500**	**11,000**
MW-70	URS	Downgradient Boundary	11/2/2018	FC-CCR-MW70-11218	**88**	**510**	**1,100**	**2.7**	--	**7.0**	**6,400**	**11,000**
MW-70	URS	Downgradient Boundary	11/2/2018	FC-CCR-MW70-11218	--	--	--	--	--	--	--	--
MW-70	URS	Downgradient Boundary	3/18/2019	FC-CCR-MW70-031819	--	--	--	**2.3**	--	--	--	--

Table F-1
Groundwater Sampling Results for the URS Monitoring Wells - Appendix III Constituents

					Appendix III Constituents							
				Constituent:	Boron	Calcium	Chloride	Fluoride	pH (Field Measurement)	pH (Laboratory Measurement)	Sulfate	Total Dissolved Solids
				Filtered:	N	N	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	su	su	mg/L	mg/L
				URS BTV (applicable to downgradient wells)	*1.9*	*540*	*710*	*<RL*	*LPL and UPL*	*LPL and UPL*	*13,000*	*20,000*
				URS GWPS (applicable to downgradient wells)	--	--	--	--	--	--	--	--
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**								
MW-70	URS	Downgradient Boundary	3/18/2019	FC-CCR-MW70-031819	--	--	--	--	--	--	--	--
MW-70	URS	Downgradient Boundary	5/7/2019	FC-CCR-MW70-5719	--	--	--	--	--	--	--	--
MW-70	URS	Downgradient Boundary	12/3/2019	FC-CCR-MW70-120319	95	510	1,200	2.1	--	7.0 J	6,400	11,000
MW-70	URS	Downgradient Boundary	6/19/2020	FC-CCR-MW70-0620	98	490	1,100	1.9	6.54	7.1 J	6,300	11,000
MW-70	URS	Downgradient Boundary	11/5/2020	FC-CCR-MW70-1120	93	510	1,100	2.0	6.69	7.1 J	6,300	10,000
MW-70	URS	Downgradient Boundary	4/21/2021	FC-CCR-MW70-0421	97	540	1,100	1.8	6.73	7.0 J	5,600	11,000 J
MW-70	URS	Downgradient Boundary	11/12/2021	FC-CCR-MW70-1121	95	510	1,300	1.9	6.51	7.1 J	6,900	9,800
MW-70	URS	Downgradient Boundary	5/20/2022	FC-CCR-MW70-0522	92	510	1,200	1.6	6.76	7.51 J	5,600	9,900
MW-70	URS	Downgradient Boundary	11/13/2022	FC-CCR-MW70-1122	90	540	1,100	1.4	6.71	7.1 J	5,700	11,000
MW-70	URS	Downgradient Boundary	5/7/2023	FC-CCR-MW70-0523	110	560	1,200	<80	6.68	7.1 J	5,600	11,000
MW-70	URS	Downgradient Boundary	11/06/2023	FC-CCR-MW70-1123	99 J	590 J	1,100	1.5	6.74	7.2 J	5,800	11,000
MW-83	URS	Downgradient	3/18/2019	FC-CCR-MW83-031819	--	--	--	1.2	--	--	--	--
MW-83	URS	Downgradient	3/18/2019	FC-CCR-MW83-031819	--	--	--	--	--	--	--	--
MW-83	URS	Downgradient	5/6/2019	FC-CCR-MW83-5619	--	--	--	--	--	--	--	--
MW-83	URS	Downgradient	5/6/2019	*DUP* FC-CCR-FD01-5619	--	--	--	--	--	--	--	--
MW-83	URS	Downgradient	12/2/2019	FC-CCR-MW83-120319	2.5	480	130	1.8	--	7.4 J	3,600	5,400
MW-83	URS	Downgradient	6/19/2020	FC-CCR-MW83-0620	2.1	290	83	1.0	6.80	7.4 J	1,500	2,800
MW-83	URS	Downgradient	6/19/2020	*DUP* FC-CCR-FD01-0620	2.2	340	83	1.0	--	7.3 J	1,500	2,800
MW-83	URS	Downgradient	11/4/2020	FC-CCR-MW83-1120	2.2	300	84	0.98	7.00	7.3 J	1,500	2,700
MW-83	URS	Downgradient	4/21/2021	FC-CCR-MW83-0421	2.3	310	77	0.55	7.12	7.3 J	1,200	2,100 J
MW-83	URS	Downgradient	11/12/2021	FC-CCR-MW83-1121	2.5	460	120	1.8	6.96	7.4 J	4,500	4,300
MW-83	URS	Downgradient	5/21/2022	FC-CCR-MW83-0522	2.4	440	130	2.0	6.93	7.71 J	3,500	5,300
MW-83	URS	Downgradient	5/21/2022	FC-CCR-SS05-0522	2.46	503	112	2.85 J/1.78	6.93	8.1 J	3,530	5,450 J
MW-83	URS	Downgradient	11/14/2022	FC-CCR-MW83-1122	2.5	490	130	2.0	7.13	7.4 J	3,400	5,800
MW-83	URS	Downgradient	5/7/2023	FC-CCR-MW83-0523	2.8	530	120	<8	7.02	7.4 J	3,400	5,300
MW-83	URS	Downgradient	11/11/2023	FC-CCR-MW83-1123	2.8	520	120	2.1	7.07	7.4 J	3,500	620
MW-84	URS	Downgradient	3/17/2019	FC-CCR-MW84-031719	--	--	--	<0.80	--	--	--	--
MW-84	URS	Downgradient	3/17/2019	FC-CCR-MW84-031719	--	--	--	--	--	--	--	--
MW-84	URS	Downgradient	5/7/2019	FC-CCR-MW84-5719	--	--	--	--	--	--	--	--
MW-84	URS	Downgradient	12/3/2019	FC-CCR-MW84-120319	110	470	1,400	<0.80	--	7.0 J	8,900	14,000
MW-84	URS	Downgradient	6/20/2020	FC-CCR-MW84-0620	45	480	590	0.83	6.71	7.3 J	6,000	9,600
MW-84	URS	Downgradient	11/4/2020	FC-CCR-MW84-1120	32	490	630	0.71	6.91	7.2 J	7,200	11,000
MW-84	URS	Downgradient	4/21/2021	FC-CCR-MW84-0421	27	470	430	0.82	7.05	7.2 J	6,900	11,000 J
MW-84	URS	Downgradient	11/12/2021	FC-CCR-MW84-1121	92	450	1,300	0.12 J	6.64	7.1 J	10,000 J	13,000
MW-84	URS	Downgradient	11/12/2021	FC-CCR-FD01-1121	96	500	1,200	0.12 J	6.64	7.2 J	9,800 J	13,000
MW-84	URS	Downgradient	5/21/2022	FC-CCR-MW84-0522	77	480	940	<0.8	6.6	7.35 J	8,100	13,000
MW-84	URS	Downgradient	5/21/2022	*DUP* FC-CCR-FD01-0522	81	490	950	<0.8	6.6	7.47 J	8,400	13,000
MW-84	URS	Downgradient	11/14/2022	FC-CCR-MW84-1122	67	490	870	<0.8	6.84	7.1 J	8,400	15,000
MW-84	URS	Downgradient	11/14/2022	*DUP* FC-CCR-FD01-1122	68	500	890	<0.8	6.84	7.2 J	8,800	15,000
MW-84	URS	Downgradient	5/9/2023	FC-CCR-MW84-0523	29	460	380	<2	6.83	7.3 J	6,000	9,200
MW-84	URS	Downgradient	5/9/2023	*DUP* FC-CCR-FD01-0523	28	450	380	<2	6.83	7.3 J	6,000	9,600
MW-84	URS	Downgradient	11/11/2023	FC-CCR-MW84-1123	66	530	890	<0.8	6.81	7.2 J	8,700	15,000 J
MW-84	URS	Downgradient	11/11/2023	*DUP* FC-CCR-FD01-1123	71	550	890	<0.8	6.81	7.2 J	8,800	15,000
MW-85	URS	Downgradient	3/20/2019	FC-CCR-MW85-032019	--	--	--	<0.80	--	--	--	--
MW-85	URS	Downgradient	3/20/2019	FC-CCR-MW85-032019	--	--	--	--	--	--	--	--
MW-85	URS	Downgradient	3/20/2019	*DUP* FC-CCR-FD01-032019	--	--	--	<0.80	--	--	--	--
MW-85	URS	Downgradient	3/20/2019	*DUP* FC-CCR-FD01-032019	--	--	--	--	--	--	--	--
MW-85	URS	Downgradient	5/7/2019	FC-CCR-MW85-5719	--	--	--	--	--	--	--	--
MW-85	URS	Downgradient	12/3/2019	FC-CCR-MW85-120319	20	500	580	<0.80	--	7.0 J	4,600	8,200

Table F-1
Groundwater Sampling Results for the URS Monitoring Wells - Appendix III Constituents

					Appendix III Constituents							
				Constituent:	Boron	Calcium	Chloride	Fluoride	pH (Field Measurement)	pH (Laboratory Measurement)	Sulfate	Total Dissolved Solids
				Filtered:	N	N	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	su	su	mg/L	mg/L
				URS BTV (applicable to downgradient wells)	*1.9*	*540*	*710*	*<RL*	*LPL and UPL*	*LPL and UPL*	*13,000*	*20,000*
				URS GWPS (applicable to downgradient wells)	--	--	--	--	--	--	--	--
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**								
MW-85	URS	Downgradient	6/19/2020	FC-CCR-MW85-0620	**38**	**510**	**620**	<0.8	**6.61**	**7.1 J**	**4,900**	**8,700**
MW-85	URS	Downgradient	11/4/2020	FC-CC-MW85-1120	**35**	**540**	**670**	**0.35 J**	**6.69**	**7.0 J**	**5,000**	**8,400**
MW-85	URS	Downgradient	4/21/2021	FC-CCR-MW85-0421	**30**	**560**	**560**	**0.22 J**	**6.85**	**7.2 J**	**4,800**	**8,300 J**
MW-85	URS	Downgradient	11/12/2021	FC-CCR-MW85-1121	**51**	**530**	**680**	**0.27 J**	**6.62**	**7.3 J**	**6,300**	**9,900**
MW-85	URS	Downgradient	11/16/2022	FC-CCR-MW85-1122	**67**	**530**	**710**	<4	**6.83**	**7.2 J**	**5,900**	**10,000**
MW-85	URS	Downgradient	5/9/2023	FC-CCR-MW85-0523	**65**	**500**	**680**	<2	**6.76**	**7.3 J**	**6,100**	**10,000**
MW-85	URS	Downgradient	11/11/2023	FC-CCR-MW85-1123	**75**	**580**	**630**	**1.9**	**6.84**	**7.2 J**	**5,900**	**10,000**
MW-86	URS	Downgradient	3/18/2019	FC-CCR-MW86-031819	--	--	--	<0.80	--	--	--	--
MW-86	URS	Downgradient	3/18/2019	FC-CCR-MW86-031819	--	--	--	--	--	--	--	--
MW-86	URS	Downgradient	5/7/2019	FC-CCR-MW86-5719	--	--	--	--	--	--	--	--
MW-86	URS	Downgradient	5/7/2019	*DUP* FC-CCR-FD02-5719	--	--	--	--	--	--	--	--
MW-86	URS	Downgradient	12/3/2019	FC-CCR-MW86-120319	**120**	**480**	**1,400**	<0.80	--	**7.1 J**	**8,700**	**14,000**
MW-86	URS	Downgradient	6/19/2020	FC-CCR-MW86-0620	**110**	**500**	**1,300**	<0.8	**6.71**	**7.1 J**	**8,300**	**14,000**
MW-86	URS	Downgradient	6/20/2020	*DUP* FC-CCR-FD02-0620	**46**	**460**	**620**	**0.83**	--	**7.1 J**	**6,100**	**9,700**
MW-86	URS	Downgradient	11/5/2020	FC-CCR-MW86-1120	**120**	**470**	**1,500**	**0.63 J**	**6.87**	**7.2 J**	**9,400**	**15,000**
MW-86	URS	Downgradient	4/21/2021	FC-CCR-MW86-0421	**110**	**500**	**1,300**	**0.58 J**	**7.00**	**7.2 J**	**8,900**	**14,000 J**
MW-86	URS	Downgradient	4/21/2021	*DUP* FC-CCR-FD02-0421	**110**	**510**	**1,300**	**0.60 J**	**7.00**	**7.3 J**	**8,700**	**14,000 J**
MW-86	URS	Downgradient	11/12/2021	FC-CCR-MW86-1121	**120**	**510**	**1,600**	**0.56 J**	**6.69**	**7.2 J**	**11,000**	**15,000**
MW-86	URS	Downgradient	11/12/2021	FC-CCR-FD02-1121	**120**	**490**	**1,600**	**0.55 J**	**6.69**	**7.2 J**	**11,000**	**14,000**
MW-86	URS	Downgradient	5/20/2022	FC-CCR-MW86-0522	**110**	**470**	**1,200**	**0.92**	**6.96**	**7.45 J**	**8,600**	**14,000**
MW-86	URS	Downgradient	5/20/2022	*DUP* FC-CCR-FD02-0522	**110**	**460**	**1,200**	**0.94**	**6.96**	**7.31 J**	**8,400**	**14,000**
MW-86	URS	Downgradient	11/13/2022	FC-CCR-MW86-1122	**110**	**500**	**1,300**	<0.8	**6.86**	**7.3 J**	**8,600**	**15,000**
MW-86	URS	Downgradient	11/13/2022	*DUP* FC-CCR-FD02-1122	**110**	**490**	**1,300**	**1.0**	**6.86**	**7.2 J**	**9,000**	**15,000**
MW-86	URS	Downgradient	5/7/2023	FC-CCR-MW86-0523	**49**	**470**	**720**	<80	**7.00**	**7.3 J**	**5,600**	**9,300**
MW-86	URS	Downgradient	5/7/2023	*DUP* FC-CCR-FD02-0523	**49**	**470**	**690**	<80	**7.00**	**7.3 J**	**5,400**	**9,400**
MW-86	URS	Downgradient	11/06/2023	FC-CCR-MW86-1123	**90 J**	**530 J**	**970**	**0.95**	**6.95**	**7.4 J**	**7,200**	**12,000**
CM-01	URS	Extraction	11/4/2020	FC-CCR-CM01-1120	--	--	**1,700**	**3.7**	**6.94**	**7.3 J**	**12,000**	**19,000 J**
CM-01	URS	Extraction	5/9/2023	FC-CCR-CM01-0523	**120**	**480**	**1,500**	<20	**7.35**	**7.6 J**	**9,300**	**16,000**
CM-01	URS	Extraction	11/13/2023	FC-CCR-CM01-1123	**120**	**540**	**1,400**	**3.3**	**7.04**	**7.3 J**	**9,100**	**16,000**
CM-02	URS	Extraction	11/4/2020	FC-CCR-CM02-1120	--	--	**1,800**	**6.8**	**7.12**	**7.4 J**	**12,000**	**19,000 J**
CM-02	URS	Extraction	5/9/2023	FC-CCR-CM02-0523	**110**	**450**	**1,300**	**4.1**	**6.90**	**7.1 J**	**9,600**	**16,000**
CM-02	URS	Extraction	11/13/2023	FC-CCR-CM02-1123	**110**	**510**	**1,100**	**4.2**	**6.88**	**7.0 J**	**9,200**	**15,000**

Table F-1
Groundwater Sampling Results for the URS Monitoring Wells - Appendix III Constituents

					Appendix III Constituents							
				Constituent:	Boron	Calcium	Chloride	Fluoride	pH (Field Measurement)	pH (Laboratory Measurement)	Sulfate	Total Dissolved Solids
				Filtered:	N	N	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	su	su	mg/L	mg/L
				URS BTV (applicable to downgradient wells)	*1.9*	*540*	*710*	*<RL*	*LPL and UPL*	*LPL and UPL*	*13,000*	*20,000*
				URS GWPS (applicable to downgradient wells)	--	--	--	--	--	--	--	--
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**								
CM-03	URS	Supplementary	11/4/2020	FC-CCR-CM03-1120	--	--	**1,600**	**16**	**7.11**	**7.4 J**	**14,000**	**21,000 J**
CM-04	URS	Supplementary	11/4/2020	FC-CCR-CM04-1120	--	--	**1,700**	**10**	**7.07**	**7.4 J**	**11,000**	**17,000 J**

Notes:

BTV exceedances are shown in grey shaded cells. GWPS exceedence are shown in red text.

Abbreviations and Data Qualifiers:

< = less than
BTV = Background Threshold Value
CCR = Coal Combustion Residual
degrees C = degrees Celsius
GWPS = Groundwater Protection Standard
ID = Identification
J = The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
NJ = The analyte has been "tentatively identified" or "presumptively" as present and the associated numerical value is the estimated concentration in the sample.
mg/L = milligrams per liter
pCi/L = Picocuries per liter
su = standard units
UJ = The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

Table F-2
Groundwater Sampling Results for the URS Monitoring Wells - Appendix IV Constituents

					Appendix IV Constituents														
				Constituent:	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Fluoride	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium	Total Radium
				Filtered:	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L
				URS BTV (applicable to downgradient wells)	*0.01*	*0.13*	*0.051*	*0.001*	*0.001*	*0.01*	*0.016*	*4*	*0.005*	*0.8*	*0.0002*	*0.011*	*0.45*	*0.002*	*5*
				URS GWPS (applicable to downgradient wells)	*0.01*	*0.13*	*2*	*0.004*	*0.005*	*0.1*	*0.016*	*4*	*0.015*	*0.8*	*0.002*	*0.1*	*0.45*	*0.002*	*5.4*
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**															
MW-71	URS/CWTP	Background	3/5/2016	FC-CCR-MW-71-030516	**0.00016**	**0.016**	**0.027**	**0.00064**	**0.00019**	**0.00078**	**0.0028**	<0.050	**0.00061**	**0.28**	<0.00020	**0.0028**	**0.19**	**0.00031**	--
MW-71	URS/CWTP	Background	3/5/2016	FC-CCR-MW-71-030516	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	3/5/2016	*DUP* FC-CCR-FD-2-030516	<0.0020	**0.017**	**0.025**	<0.0010	**0.00010**	**0.00054**	**0.0028**	<0.050	**0.00021**	**0.28**	<0.00020	**0.0029**	**0.20**	**0.00026**	--
MW-71	URS/CWTP	Background	3/5/2016	*DUP* FC-CCR-FD-2-030516	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	4/26/2016	FC-CCR-MW-71-042616	<0.0025	**0.0064**	**0.019**	<0.0010	**0.00015**	<0.00050	**0.0049**	<2.0	<0.00050	**0.45**	<0.00020	**0.0018**	**0.31**	**0.00047**	**2.2**
MW-71	URS/CWTP	Background	6/6/2016	FC-CCR-MW71-616	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**3.2**
MW-71	URS/CWTP	Background	6/6/2016	FC-CCR-MW71-616	**0.00012**	**0.0069**	**0.020**	<0.0010	**0.00015**	<0.00050	**0.0041**	<0.40	**0.00073**	**0.41**	<0.00020	**0.0014**	**0.28**	**0.00043**	--
MW-71	URS/CWTP	Background	8/21/2016	FC-CCR-MW71-816	--	--	--	--	--	--	--	<0.80	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	8/21/2016	FC-CCR-MW71-816	**0.00022**	**0.0066**	**0.014**	<0.0010	<0.00020	<0.0010	<0.0010	<0.80	<0.0010	**0.36**	<0.00020	**0.0025**	**0.26**	**0.00029**	--
MW-71	URS/CWTP	Background	8/21/2016	FC-CCR-MW71-816	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.6**
MW-71	URS/CWTP	Background	8/21/2016	FC-CCR-MW101-816	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	8/21/2016	FC-CCR-MW101-816	**0.00024**	**0.0076**	**0.013**	<0.0010	<0.00020	<0.0010	<0.0010	<0.40	<0.0010	**0.37**	<0.00020	**0.0024**	**0.25**	**0.00028**	--
MW-71	URS/CWTP	Background	8/21/2016	FC-CCR-MW101-816	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.1**
MW-71	URS/CWTP	Background	9/12/2016	FC-CCR-MW71-916	--	--	--	--	--	--	--	<0.40	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	9/12/2016	FC-CCR-MW71-916	<0.0025	<0.0010	**0.013**	<0.0010	<0.00050	<0.0025	**0.0012**	<0.40	<0.00050	**0.30**	<0.00020	**0.0013**	**0.18**	<0.00050	--
MW-71	URS/CWTP	Background	9/12/2016	FC-CCR-MW71-916	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.1**
MW-71	URS/CWTP	Background	10/20/2016	FC-CCR-MW71-1016	--	--	--	--	--	--	--	<0.40	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	10/20/2016	FC-CCR-MW71-1016	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.4**
MW-71	URS/CWTP	Background	2/2/2017	FC-CCR-MW71-117	--	--	--	--	--	--	--	<0.40	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	2/2/2017	FC-CCR-MW71-117	<0.0010	**0.0094**	**0.012**	<0.0010	**0.00011**	<0.00050	**0.0012**	<0.40	<0.00050	**0.39**	<0.00020	**0.00078**	**0.34**	**0.00037**	--
MW-71	URS/CWTP	Background	2/2/2017	FC-CCR-MW71-117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.9**
MW-71	URS/CWTP	Background	4/17/2017	FC-CCR-MW71-41717	--	--	--	--	--	--	--	<2.0	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	4/17/2017	FC-CCR-MW71-41717	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.2**
MW-71	URS/CWTP	Background	4/17/2017	FC-CCR-MW71-41717	<0.0040	**0.0063**	**0.010**	<0.0010	<0.00040	<0.0020	<0.0020	<2.0	<0.0020	**0.32**	<0.00020	<0.0020	**0.20**	<0.00040	--
MW-71	URS/CWTP	Background	5/2/2017	FC-CCR-MW71-5217	<0.0010	**0.0072**	**0.0087**	<0.0010	<0.00010	<0.0010	<0.0010	<13	<0.00050	**0.34**	<0.00020	<0.0010	**0.27**	**0.00025**	--
MW-71	URS/CWTP	Background	5/2/2017	FC-CCR-MW71-5217	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.7**
MW-71	URS/CWTP	Background	5/29/2017	FC-CCR-MW71-52917	<0.010	**0.0070**	**0.010**	<0.0010	<0.0010	<0.0050	<0.0050	<2.0	<0.0050	**0.33**	<0.00020	<0.0050	**0.21**	<0.0010	--
MW-71	URS/CWTP	Background	5/29/2017	FC-CCR-MW71-52917	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.6
MW-71	URS/CWTP	Background	6/22/2017	FC-CCR-MW71-62217	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	6/22/2017	FC-CCR-MW71-62217	<0.0040	**0.0063**	**0.012**	<0.0010	<0.00040	<0.0020	<0.0020	<2.0	<0.0020	**0.38**	<0.00020	<0.0020	**0.25**	<0.00040	--
MW-71	URS/CWTP	Background	6/22/2017	FC-CCR-MW71-62117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.7**
MW-71	URS/CWTP	Background	7/21/2017	FC-CCR-MW71-72117	--	--	--	--	--	--	--	<2.0	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	7/21/2017	FC-CCR-MW71-72117	<0.0040	**0.0053**	**0.0086**	<0.0010	<0.00040	<0.0020	<0.0010	--	<0.0020	<0.40	<0.00020	<0.0020	**0.24**	<0.00040	--
MW-71	URS/CWTP	Background	7/21/2017	FC-CCR-MW71-72117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.5
MW-71	URS/CWTP	Background	8/10/2017	FC-CCR-MW71-81017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	8/10/2017	FC-CCR-MW71-81017	<0.010	**0.0048**	**0.0092**	<0.0010	<0.0010	<0.0040	<0.0020	<2.0	<0.0050	**0.34**	<0.00020	<0.0050	**0.21**	<0.0010	--
MW-71	URS/CWTP	Background	8/10/2017	FC-CCR-MW71-81017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.7
MW-71	URS/CWTP	Background	8/17/2017	FC-CCR-MW71-81717	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.0**
MW-71	URS/CWTP	Background	8/17/2017	FC-CCR-MW71-81717	--	--	--	--	--	--	--	<2.0	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	9/11/2017	FC-CCR-MW71-91117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	9/11/2017	FC-CCR-MW71-91117	<0.0040	**0.0048**	**0.0089**	<0.0010	<0.00040	<0.0040	<0.0020	<2.0	<0.0020	**0.32**	<0.00020	<0.0020	**0.20**	<0.00040	--
MW-71	URS/CWTP	Background	9/11/2017	FC-CCR-MW71-91117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.7
MW-71	URS/CWTP	Background	10/13/2017	FC-CCR-MW71-101317	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.6**
MW-71	URS/CWTP	Background	10/13/2017	FC-CCR-MW71-101317	<0.010	<0.0050	**0.012**	<0.0010	<0.0010	<0.010	<0.0050	<2.0	<0.0050	**0.33**	<0.00020	<0.0050	**0.20**	<0.0010	--
MW-71	URS/CWTP	Background	11/30/2017	FC-CCR-MW71-113017	--	--	--	--	--	--	--	<2.0	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	3/16/2018	FC-CCR-MW71-31618	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.8**
MW-71	URS/CWTP	Background	6/2/2018	FC-CCR-MW-71-6218	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.9**
MW-71	URS/CWTP	Background	6/2/2018	FC-CCR-MW-71-6218	--	**0.012**	<0.010	--	--	--	<0.010	<0.80	--	**0.32**	<0.00020	<0.010	**0.20**	<0.0020	--
MW-71	URS/CWTP	Background	11/3/2018	FC-CCR-MW71-11318	--	--	--	--	--	--	--	<2.0	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	11/3/2018	FC-CCR-MW71-11318	--	**0.0046**	**0.0098**	--	--	--	<0.00050	--	--	**0.35**	--	**0.00079**	**0.27**	**0.00031**	**1.2**
MW-71	URS/CWTP	Background	11/3/2018	FC-CCR-MW71-11318	--	--	--	--	--	--	--	<0.80	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	11/3/2018	*DUP* FC-CCR-FD01-11318	--	--	--	--	--	--	--	<0.80	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	11/3/2018	*DUP* FC-CCR-FD01-11318	--	**0.0068**	**0.0095**	--	--	--	<0.00050	--	--	**0.34**	--	**0.00065**	**0.31**	**0.00030**	**1.8**
MW-71	URS/CWTP	Background	3/18/2019	FC-CCR-MW71-031819	<0.0010	**0.0069**	**0.010**	<0.0010	<0.00010	<0.0010	<0.00050	<0.80	<0.00050	**0.32**	<0.00020	**0.00066**	**0.37**	**0.00031**	--
MW-71	URS/CWTP	Background	3/18/2019	FC-CCR-MW71-031819	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.7
MW-71	URS/CWTP	Background	5/6/2019	FC-CCR-MW71-5719	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.0**
MW-71	URS/CWTP	Background	12/2/2019	FC-CCR-MW71-120219	<0.0040	**0.0095**	**0.012**	<0.0010	<0.00040	<0.0040	<0.0020	<0.80	<0.0020	**0.32**	<0.00020	<0.0020	**0.27**	**0.00065**	--
MW-71	URS/CWTP	Background	6/20/2020	FC-CCR-MW71-0620	<0.002	**0.0048**	**0.0045**	--	<0.0002	<0.002	<0.001	<0.8	<0.001	**0.75**	--	<0.001	**0.15**	**0.00025**	<0.8
MW-71	URS/CWTP	Background	11/5/2020	FC-CCR-MW71-1120	<0.002	**0.012**	**0.0092**	<0.001	<0.0002U	<0.002	**0.00026 J**	<0.4	<0.001	**0.35**	<0.0002	**0.00061 J**	**0.28**	**0.00023**	<0.8
MW-71	URS/CWTP	Background	4/22/2021	FC-CCR-MW71-0421	<0.004	**0.0013 J**	**0.014**	<0.001	**0.00012 J**	<0.004	**0.0003 J**	**3.8N J**	<0.002	**0.40**	<0.0002	<0.002	**0.36**	**0.00040**	**0.7**
MW-71	URS/CWTP	Background	11/12/2021	FC-CCR-MW71-1121	<0.002	<0.001	**0.010**	<0.001	**0.00010 J**	<0.002	**0.00013 J**	**0.14 J**	<0.001	**0.37**	<0.0002 UJ	<0.001	**0.24**	**0.00042**	**0.5**
MW-71	URS/CWTP	Background	5/21/2022	FC-CCR-MW71-0522	<0.002	<0.001	**0.0094**	<0.001	<0.0002	<0.002	<0.001	<0.8	<0.001	**0.37**	<0.0002	<0.001	**0.28**	**0.00037**	**1.2**
MW-71	URS/CWTP	Background	5/21/2022	FC-CCR-SS04-0522	<0.02	<0.01	**0.00887 J**	<0.0025	<0.0025	<0.02	**0.00147 J**	<50/0.28 J	<0.005	**0.367 J**	<0.001	<0.005	**0.233**	<0.005	--
MW-71	URS/CWTP	Background	11/13/2022	FC-CCR-MW71-1122	<0.001	**0.00073**	**0.012**	<0.001	<0.0001	<0.001	<0.0005	<0.8	<0.0005	**0.37**	<0.0002	**0.00052**	**0.36**	**0.00043**	**1.0**
MW-71	URS/CWTP	Background	5/8/2023	FC-CCR-MW71-0523	<0.002	<0.005	**0.0095**	<0.001	<0.001	<0.003	<0.001	<2	<0.001	**0.4**	<0.0002	<0.002	**0.2**	<0.001	**1.7**
MW-71	URS/CWTP	Background	6/27/2023	FC-CCR-MW71-0623	< 0.01	< 0.005	**0.011**	**0.0022**	< 0.001	< 0.01	< 0.005	< 20	< 0.0005	**0.45**	< 0.0002	< 0.005	**0.25**	**0.00039**	**2.2**
MW-71	URS/CWTP	Background	11/08/2023	FC-CCR-MW71-1123	<0.004	**0.0024**	**0.010 J**	<0.001	<0.0004	<0.004	<0.002	<0.8	<0.0005	**0.40**	<0.0002	<0.002	**0.28**	**0.0004**	**1.8**
MW-72	URS/CWTP	Background	3/7/2016	FC-CCR-MW72-030716	<0.0020	**0.011**	**0.035**	<0.0010	**0.000078**	**0.00044**	**0.019**	<0.050	**0.00013**	**0.33**	<0.00020	**0.011**	**0.13**	**0.0012**	--
MW-72	URS/CWTP	Background	3/7/2016	FC-CCR-MW72-030716	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Table F-2
Groundwater Sampling Results for the URS Monitoring Wells - Appendix IV Constituents

					Appendix IV Constituents														
				Constituent:	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Fluoride	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium	Total Radium
				Filtered:	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L
				URS BTV (applicable to downgradient wells)	*0.01*	*0.13*	*0.051*	*0.001*	*0.001*	*0.01*	*0.016*	*4*	*0.005*	*0.8*	*0.0002*	*0.011*	*0.45*	*0.002*	*5*
				URS GWPS (applicable to downgradient wells)	*0.01*	*0.13*	*2*	*0.004*	*0.005*	*0.1*	*0.016*	*4*	*0.015*	*0.8*	*0.002*	*0.1*	*0.45*	*0.002*	*5.4*
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**															
MW-72	URS/CWTP	Background	4/26/2016	FC-CCR-MW-72-042616	<0.0025	**0.0038**	**0.034**	<0.0010	<0.00010	**0.0028**	**0.0087**	<2.0	**0.0011**	**0.40**	<0.00020	**0.0093**	**0.16**	**0.00081**	<0.8
MW-72	URS/CWTP	Background	6/6/2016	FC-CCR-MW72-616	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.3**
MW-72	URS/CWTP	Background	6/6/2016	FC-CCR-MW72-616	**0.00027**	**0.0084**	**0.051**	<0.0010	<0.00020	**0.00060**	**0.0029**	<0.40	<0.0010	<0.20	<0.00020	**0.0052**	**0.39**	**0.00058**	--
MW-72	URS/CWTP	Background	8/21/2016	FC-CCR-MW72-816	--	--	--	--	--	--	--	<0.40	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	8/21/2016	FC-CCR-MW72-816	**0.00026**	**0.0047**	**0.016**	<0.0010	<0.00020	<0.0010	**0.0034**	<0.40	<0.0010	**0.42**	<0.00020	**0.0061**	**0.18**	**0.0011**	--
MW-72	URS/CWTP	Background	8/21/2016	FC-CCR-MW72-816	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**3.2**
MW-72	URS/CWTP	Background	9/13/2016	FC-CCR-MW72-916	--	--	--	--	--	--	--	<0.40	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	9/13/2016	FC-CCR-MW72-916	<0.0025	<0.0010	**0.019**	<0.0010	<0.00050	<0.0025	**0.0073**	<0.40	<0.00050	**0.35**	<0.00020	**0.011**	<0.0030	**0.00056**	--
MW-72	URS/CWTP	Background	9/13/2016	FC-CCR-MW72-916	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**3.9**
MW-72	URS/CWTP	Background	10/20/2016	FC-CCR-MW72-1016	--	--	--	--	--	--	--	<0.40	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	10/20/2016	FC-CCR-MW72-1016	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**4.2**
MW-72	URS/CWTP	Background	2/2/2017	FC-CCR-MW72-117	--	--	--	--	--	--	--	<0.40	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	2/2/2017	FC-CCR-MW72-117	<0.0010	**0.0041**	**0.0093**	<0.0010	<0.00010	<0.0010	**0.0025**	<0.40	<0.00050	**0.39**	<0.00020	**0.00093**	**0.13**	**0.00094**	--
MW-72	URS/CWTP	Background	2/2/2017	FC-CCR-MW72-117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**4.0**
MW-72	URS/CWTP	Background	2/2/2017	FC-CCR-MW101-117	--	--	--	--	--	--	--	<0.40	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	2/2/2017	FC-CCR-MW101-117	<0.0020	**0.0027**	**0.0084**	<0.0010	<0.00020	<0.0010	**0.0025**	<0.40	<0.0010	**0.39**	<0.00020	**0.0010**	**0.12**	**0.00096**	--
MW-72	URS/CWTP	Background	2/2/2017	FC-CCR-MW101-117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.6**
MW-72	URS/CWTP	Background	4/17/2017	FC-CCR-MW-72-41717	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**3.5**
MW-72	URS/CWTP	Background	4/17/2017	FC-CCR-MW72-41717	--	--	--	--	--	--	--	<2.0	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	4/17/2017	FC-CCR-MW72-41717	<0.0040	**0.0028**	**0.0096**	<0.0010	<0.00040	<0.0020	**0.0024**	<2.0	<0.0020	**0.35**	<0.00020	<0.0020	**0.10**	**0.00096**	--
MW-72	URS/CWTP	Background	5/2/2017	FC-CCR-MW-72-5217	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**3.8**
MW-72	URS/CWTP	Background	5/2/2017	FC-CCR-MW72-5217	<0.0010	**0.0030**	**0.0079**	<0.0010	<0.00010	<0.0010	**0.0024**	<13	<0.00050	**0.38**	<0.00020	<0.0010	**0.12**	**0.00091**	--
MW-72	URS/CWTP	Background	5/29/2017	FC-CCR-MW72-52917	<0.010	<0.0050	**0.0093**	<0.0010	<0.0010	<0.0050	<0.0050	<2.0	<0.0050	**0.37**	<0.00020	<0.0050	**0.11**	**0.0011**	--
MW-72	URS/CWTP	Background	6/22/2017	FC-CCR-MW72-62217	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	6/22/2017	FC-CCR-MW72-62217	<0.0040	**0.0023**	**0.0077**	<0.0010	<0.00040	<0.0020	**0.0025**	<2.0	<0.0020	**0.39**	<0.00020	<0.0020	**0.10**	**0.0010**	--
MW-72	URS/CWTP	Background	6/22/2017	FC-CCR-MW-72-62117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.8**
MW-72	URS/CWTP	Background	6/22/2017	*DUP* FC-CCR-FD02-62217	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	6/22/2017	*DUP* FC-CCR-FD02-62217	<0.0040	<0.0020	**0.0086**	<0.0010	<0.00040	<0.0020	**0.0025**	<2.0	<0.0020	**0.40**	**0.00020**	<0.0020	**0.099**	**0.0011**	--
MW-72	URS/CWTP	Background	6/22/2017	*DUP* FC-CCR-FD02-62117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**3.0**
MW-72	URS/CWTP	Background	7/21/2017	FC-CCR-MW72-72117	--	--	--	--	--	--	--	<2.0	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	7/21/2017	FC-CCR-MW72-72117	<0.0040	**0.0026**	**0.0073**	<0.0010	<0.00040	<0.0020	**0.0024**	--	<0.0020	<0.80	<0.00020	<0.0020	**0.13**	**0.00089**	--
MW-72	URS/CWTP	Background	7/21/2017	FC-CCR-MW72-72117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.7**
MW-72	URS/CWTP	Background	8/10/2017	FC-CCR-MW72-81017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	8/10/2017	FC-CCR-MW72-81017	<0.0010	**0.0040**	**0.0075**	<0.0010	<0.00010	<0.0010	**0.0023**	<2.0	<0.00050	**0.41**	<0.00020	**0.00087**	**0.14**	**0.00091**	--
MW-72	URS/CWTP	Background	8/10/2017	FC-CCR-MW72-81017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.8**
MW-72	URS/CWTP	Background	8/10/2017	*DUP* FC-CCR-FD02-81017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	8/10/2017	*DUP* FC-CCR-FD02-81017	<0.010	**0.0028**	**0.0089**	<0.0010	<0.0010	<0.0040	**0.0025**	<2.0	<0.0050	**0.42**	<0.00020	<0.0050	**0.10**	**0.0010**	--
MW-72	URS/CWTP	Background	8/10/2017	*DUP* FC-CCR-FD02-81017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.7**
MW-72	URS/CWTP	Background	8/17/2017	FC-CCR-MW72-81717	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.1**
MW-72	URS/CWTP	Background	8/17/2017	FC-CCR-MW72-81717	--	--	--	--	--	--	--	<2.0	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	8/17/2017	*DUP* FC-CCR-FD02-81717	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**3.0**
MW-72	URS/CWTP	Background	8/17/2017	*DUP* FC-CCR-FD02-81717	--	--	--	--	--	--	--	<2.0	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	9/10/2017	FC-CCR-MW72-91017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	9/10/2017	FC-CCR-MW72-91017	<0.0040	**0.0029**	**0.0086**	<0.0010	<0.00040	<0.0040	**0.0023**	<2.0	<0.0020	**0.37**	<0.00020	<0.0020	**0.10**	**0.00095**	--
MW-72	URS/CWTP	Background	9/10/2017	FC-CCR-MW72-91017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.3**
MW-72	URS/CWTP	Background	10/13/2017	FC-CCR-MW72-101317	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**3.1**
MW-72	URS/CWTP	Background	10/13/2017	FC-CCR-MW72-101317	<0.010	**0.0052**	**0.011**	<0.0010	<0.0010	<0.010	<0.0050	<2.0	<0.0050	**0.38**	<0.00020	<0.0050	**0.11**	**0.0010**	--
MW-72	URS/CWTP	Background	11/29/2017	FC-CCR-MW72-112917	--	--	--	--	--	--	--	<2.0	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	3/16/2018	FC-CCR-MW72-31618	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.9**
MW-72	URS/CWTP	Background	6/2/2018	FC-CCR-MW-72-6218	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.8**
MW-72	URS/CWTP	Background	6/2/2018	FC-CCR-MW-72-6218	--	<0.010	<0.010	--	--	--	<0.010	<0.80	--	**0.35**	<0.00020	<0.010	**0.10**	<0.0020	--
MW-72	URS/CWTP	Background	11/3/2018	FC-CCR-MW72-11318	--	--	--	--	--	--	--	<2.0	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	11/3/2018	FC-CCR-MW72-11318	--	**0.0031**	**0.0075**	--	--	--	**0.0020**	--	--	**0.37**	--	**0.00078**	**0.13**	**0.00088**	**1.7**
MW-72	URS/CWTP	Background	11/3/2018	FC-CCR-MW72-11318	--	--	--	--	--	--	--	<0.80	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	11/3/2018	*DUP* FC-CCR-FD02-11318	--	--	--	--	--	--	--	<2.0	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	11/3/2018	*DUP* FC-CCR-FD02-11318	--	**0.0026**	**0.0075**	--	--	--	**0.0020**	--	--	**0.37**	--	**0.00078**	**0.15**	**0.00087**	**2.0**
MW-72	URS/CWTP	Background	3/17/2019	FC-CCR-MW72-031719	<0.0010	**0.0034**	**0.0077**	<0.0010	<0.00010	<0.0010	**0.0022**	<0.80	<0.00050	**0.36**	<0.00020	**0.00095**	**0.13**	**0.00095**	--
MW-72	URS/CWTP	Background	3/17/2019	FC-CCR-MW72-031719	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.4**
MW-72	URS/CWTP	Background	5/7/2019	FC-CCR-MW72-5719	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**3.4**
MW-72	URS/CWTP	Background	12/2/2019	FC-CCR-MW72-120219	<0.0020	**0.0031**	**0.0081**	<0.0010	<0.00020	<0.0040	**0.0023**	<0.80	<0.0010	**0.36**	<0.00020	**0.0014**	**0.11**	**0.0011**	--
MW-72	URS/CWTP	Background	6/19/2020	FC-CCR-MW72-0620	<0.004	**0.0044**	**0.020**	--	<0.0004	<0.004	**0.0027**	<0.8	<0.001	**0.89**	--	<0.002	**0.11**	**0.0011**	**3.5**
MW-72	URS/CWTP	Background	11/5/2020	FC-CCR-MW72-1120	<0.001U	**0.0053**	**0.018**	<0.001	<0.0001U	**0.00071 J**	**0.0013**	<0.4	<0.0005	**0.38**	<0.0002	**0.0020**	**0.11**	<0.00011U	**2.4**
MW-72	URS/CWTP	Background	4/22/2021	FC-CCR-MW72-0421	<0.004	**0.0026**	**0.0086**	<0.001	**0.00012 J**	<0.004	**0.0029**	<0.8	<0.002	**0.37**	<0.0002	**0.0011 J**	**0.11**	**0.0010**	**2.2**
MW-72	URS/CWTP	Background	11/12/2021	FC-CCR-MW72-1121	<0.002	<0.001	**0.0085**	<0.001	**0.00006 J**	<0.002	**0.0026**	<0.8	<0.001	**0.38**	<0.0002	**0.00055 J**	**0.087**	**0.0010**	**3.7**
MW-72	URS/CWTP	Background	5/22/2022	FC-CCR-MW72-0522	<0.002	<0.001	**0.0073**	<0.001	<0.0002	<0.002	**0.0025**	<0.8	<0.001	**0.37**	<0.0002	<0.001	**0.095**	**0.00094**	**1.2**
MW-72	URS/CWTP	Background	11/13/2022	FC-CCR-MW72-1122	<0.001	**0.00070**	**0.0086**	<0.001	<0.0001	<0.001	**0.0026**	<0.8	<0.0005	**0.34**	<0.0002	**0.00077**	**0.12**	**0.0010**	**1.9**
MW-72	URS/CWTP	Background	5/8/2023	FC-CCR-MW72-0523	<0.002	<0.005	**0.0068**	<0.005	<0.001	<0.003	**0.0025**	**4.2**	<0.001	**0.38**	<0.0002	<0.002	**0.064**	<0.001	**4**
MW-72	URS/CWTP	Background	6/27/2023	FC-CCR-MW72-0623	< 0.01	**0.0014**	**0.0073**	**0.0011**	< 0.001	< 0.001	**0.0023**	< 20	< 0.0005	**0.37**	< 0.0002	< 0.005	**0.11**	**0.00093**	**1.9**
MW-72	URS/CWTP	Background	11/08/2023	FC-CCR-MW72-1123	<0.001	**0.0024**	**0.008 J**	<0.001	<0.0001	<0.004	**0.0023**	<0.8	<0.0005	**0.29**	<0.0002	**0.0008**	**0.076**	**0.00096**	**5.1**

Table F-2
Groundwater Sampling Results for the URS Monitoring Wells - Appendix IV Constituents

					Appendix IV Constituents													
				Constituent:	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Fluoride	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium	Total Radium
				Filtered:	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L
				URS BTV (applicable to downgradient wells)	*0.01*	*0.13*	*0.051*	*0.001*	*0.001*	*0.01*	*0.016*	*4*	*0.005*	*0.8*	*0.0002*	*0.011*	*0.45*	*0.002*	*5*
				URS GWPS (applicable to downgradient wells)	*0.01*	*0.13*	*2*	*0.004*	*0.005*	*0.1*	*0.016*	*4*	*0.015*	*0.8*	*0.002*	*0.1*	*0.45*	*0.002*	*5.4*
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**														
MW-73	URS/CWTP	Background	2/2/2017	FC-CCR-MW73-117	--	--	--	--	--	--	--	<0.40	--	--	--	--	--	--	--
MW-73	URS/CWTP	Background	2/2/2017	FC-CCR-MW73-117	<0.0010	**0.0015**	**0.043**	<0.0010	**0.00017**	<0.0010	**0.0073**	<0.40	<0.00050	**0.21**	<0.00020	**0.0086**	**0.029**	**0.00020**	--
MW-73	URS/CWTP	Background	2/2/2017	FC-CCR-MW73-117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**3.2**
MW-73	URS/CWTP	Background	4/18/2017	FC-CCR-MW73-41817	--	--	--	--	--	--	--	<0.80	--	--	--	--	--	--	--
MW-73	URS/CWTP	Background	4/18/2017	FC-CCR-MW73-41817	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.8**
MW-73	URS/CWTP	Background	4/18/2017	FC-CCR-MW73-41817	<0.0040	<0.0020	**0.027**	<0.0010	<0.00040	<0.0020	**0.0058**	<0.80	<0.0020	**0.22**	<0.00020	**0.0041**	**0.019**	<0.00040	--
MW-73	URS/CWTP	Background	5/2/2017	FC-CCR-MW73-5217	<0.0020	<0.0010	**0.026**	<0.0010	**0.00021**	<0.0010	**0.0067**	<5.0	<0.00050	**0.24**	<0.00020	**0.0037**	**0.015**	**0.00024**	--
MW-73	URS/CWTP	Background	5/2/2017	FC-CCR-MW73-5217	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.3**
MW-73	URS/CWTP	Background	5/29/2017	FC-CCR-MW73-52917	<0.010	<0.0050	**0.028**	<0.0010	<0.0010	<0.0050	<0.0050	<0.80	<0.0050	<0.20	<0.00020	<0.0050	**0.043**	<0.0010	--
MW-73	URS/CWTP	Background	5/29/2017	FC-CCR-MW73-52917	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.6
MW-73	URS/CWTP	Background	6/22/2017	FC-CCR-MW73-62217	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-73	URS/CWTP	Background	6/22/2017	FC-CCR-MW73-62217	<0.0040	<0.0020	**0.029**	<0.0010	<0.00040	<0.0020	**0.0066**	<0.80	<0.0020	**0.25**	<0.00020	<0.0020	**0.019**	<0.00040	--
MW-73	URS/CWTP	Background	6/22/2017	FC-CCR-MW73-62117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**3.1**
MW-73	URS/CWTP	Background	7/22/2017	FC-CCR-MW73-72217	--	--	--	--	--	--	--	<0.80	--	--	--	--	--	--	--
MW-73	URS/CWTP	Background	7/22/2017	FC-CCR-MW73-72217	<0.0040	<0.0020	**0.024**	<0.0010	<0.00040	<0.0020	**0.0067**	<2.0	<0.0020	<0.40	<0.00020	**0.0023**	**0.016**	<0.00040	--
MW-73	URS/CWTP	Background	7/22/2017	FC-CCR-MW73-72217	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.0**
MW-73	URS/CWTP	Background	7/22/2017	*DUP* FC-CCR-FD02-72217	--	--	--	--	--	--	--	<2.0	--	--	--	--	--	--	--
MW-73	URS/CWTP	Background	7/22/2017	*DUP* FC-CCR-FD02-72217	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.8**
MW-73	URS/CWTP	Background	8/10/2017	FC-CCR-MW73-81017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-73	URS/CWTP	Background	8/10/2017	FC-CCR-MW73-81017	<0.010	<0.0020	**0.024**	<0.0010	<0.0010	**0.0041**	**0.0065**	<0.80	<0.0050	**0.27**	<0.00020	<0.0050	**0.017**	<0.0010	--
MW-73	URS/CWTP	Background	8/10/2017	FC-CCR-MW73-81017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.1**
MW-73	URS/CWTP	Background	8/17/2017	FC-CCR-MW73-81717	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.5**
MW-73	URS/CWTP	Background	8/17/2017	FC-CCR-MW73-81717	--	--	--	--	--	--	--	<0.80	--	--	--	--	--	--	--
MW-73	URS/CWTP	Background	9/10/2017	FC-CCR-MW73-91017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-73	URS/CWTP	Background	9/10/2017	FC-CCR-MW73-91017	<0.0040	**0.0020**	**0.023**	<0.0010	<0.00040	<0.0040	**0.0048**	<0.80	<0.0020	**0.22**	<0.00020	**0.0024**	**0.033**	<0.00040	--
MW-73	URS/CWTP	Background	9/10/2017	FC-CCR-MW73-91017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.5**
MW-73	URS/CWTP	Background	10/12/2017	FC-CCR-MW73-101217	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.9**
MW-73	URS/CWTP	Background	10/12/2017	FC-CCR-MW73-101217	<0.010	<0.0050	**0.024**	<0.0010	<0.0010	<0.010	<0.0050	<0.80	<0.0050	<0.20	<0.00020	<0.0050	**0.048**	<0.0010	--
MW-73	URS/CWTP	Background	10/12/2017	*DUP* FC-CCR-FD01-101217	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.9**
MW-73	URS/CWTP	Background	10/12/2017	*DUP* FC-CCR-FD01-101217	<0.010	<0.0050	**0.024**	<0.0010	<0.0010	<0.010	<0.0050	<0.80	<0.0050	<0.20	<0.00020	<0.0050	**0.047**	<0.0010	--
MW-73	URS/CWTP	Background	11/29/2017	FC-CCR-MW73-112917	--	--	--	--	--	--	--	<0.80	--	--	--	--	--	--	--
MW-73	URS/CWTP	Background	3/16/2018	FC-CCR-MW73-31618	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.6**
MW-73	URS/CWTP	Background	6/2/2018	FC-CCR-MW-73-6218	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.8**
MW-73	URS/CWTP	Background	6/2/2018	FC-CCR-MW-73-6218	--	<0.010	**0.023**	--	--	--	<0.010	<0.80	--	**0.26**	<0.00020	<0.010	**0.011**	<0.0020	--
MW-73	URS/CWTP	Background	11/3/2018	FC-CCR-MW73-11318	--	--	--	--	--	--	--	<0.80	--	--	--	--	--	--	--
MW-73	URS/CWTP	Background	11/3/2018	FC-CCR-MW73-11318	--	<0.00050	**0.022**	--	--	--	**0.0078**	--	--	**0.31**	--	**0.0026**	**0.0062**	**0.00020**	**2.9**
MW-73	URS/CWTP	Background	3/18/2019	FC-CCR-MW73-031819	<0.0010	<0.00050	**0.023**	<0.0010	**0.00013**	<0.0010	**0.0038**	<0.80	<0.00050	**0.26**	<0.00020	**0.0017**	**0.0069**	**0.00025**	--
MW-73	URS/CWTP	Background	3/18/2019	FC-CCR-MW73-031819	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.6**
MW-73	URS/CWTP	Background	5/6/2019	FC-CCR-MW73-5619	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.7**
MW-73	URS/CWTP	Background	12/2/2019	FC-CCR-MW73-120219	<0.0020	<0.0010	**0.020**	<0.0010	<0.00020	<0.0040	**0.0040**	<0.80	<0.0010	**0.23**	<0.00020	**0.0020**	**0.0086**	**0.00022**	--
MW-73	URS/CWTP	Background	12/2/2019	*DUP* FC-CCR-FD01-120219	<0.0020	<0.0010	**0.020**	<0.0010	<0.00020	<0.0040	**0.0039**	<0.80	<0.0010	**0.23**	<0.00020	**0.0021**	**0.0094**	**0.00021**	--
MW-73	URS/CWTP	Background	6/20/2020	FC-CCR-MW73-0620	<0.004	<0.002	**0.033**	--	<0.0004	<0.004	**0.0062**	<0.8	<0.002	**0.65**	--	**0.0035**	**0.0077**	<0.0004	**3.4**
MW-73	URS/CWTP	Background	11/5/2020	FC-CCR-MW73-1120	<0.002U	**0.0012**	**0.020**	<0.001	<0.0002U	**0.00073 J**	**0.0067**	**0.063 J**	<0.001	**0.29**	<0.0002	**0.0016**	**0.0099**	**0.00022**	**2.8**
MW-73	URS/CWTP	Background	4/22/2021	FC-CCR-MW73-0421	<0.004	<0.002	**0.021**	<0.001	**0.00016 J**	<0.004	**0.0027**	<0.4	<0.002	**0.23**	<0.0002	**0.0011 J**	**0.015**	**0.00026 J**	**1.8**
MW-73	URS/CWTP	Background	11/13/2021	FC-CCR-MW73-1121	**0.00017 J**	<0.001	**0.022**	<0.001	**0.00018 J**	<0.002	**0.0041**	**0.12 J**	<0.001	**0.31**	<0.0002 UJ	**0.00093 J**	**0.0072**	**0.00023**	**2.8**
MW-73	URS/CWTP	Background	5/22/2022	FC-CCR-MW73-0522	<0.002	<0.001	**0.018**	<0.001	<0.0002	<0.002	**0.0042**	<0.8	<0.001	**0.34**	<0.0002	**0.0012**	**0.0038**	**0.00023**	**1.4**
MW-73	URS/CWTP	Background	11/14/2022	FC-CCR-MW73-1122	<0.001	**0.00092**	**0.022**	<0.001	**0.00017**	<0.001	**0.0042**	<0.8	<0.0005	**0.29**	<0.0002	**0.0011**	**0.0095**	**0.00025**	**4.9**
MW-73	URS/CWTP	Background	5/7/2023	FC-CCR-MW73-0523	<0.002	<0.005	**0.018**	<0.001	<0.001	<0.003	**0.0045**	<80	<0.001	**0.33**	<0.0002	<0.002	<0.005	<0.001	**0.8**
MW-73	URS/CWTP	Background	6/27/2023	FC-CCR-MW73-0623	< 0.01	< 0.005	**0.016**	**0.0014**	< 0.001	< 0.01	< 0.005	< 20	< 0.0005	**0.34**	< 0.0002	< 0.005	< 0.005	**0.00021**	**3.2**
MW-73	URS/CWTP	Background	11/08/2023	FC-CCR-MW73-1123	<0.001	**0.0021**	**0.017 J**	<0.001	**0.00018**	<0.004	**0.0037**	<0.8	<0.0005	**0.32**	<0.0002	**0.0011**	**0.002**	**0.00025**	**2.3**
MW-66	URS	Downgradient Boundary	11/5/2015	FC-CCR-MW66-110515	<0.0020	**0.0034**	**0.016**	<0.0010	**0.000062**	**0.0010**	**0.0051**	18	**0.00018**	**0.24**	<0.00020	**0.016**	**0.0022**	**0.00063**	--
MW-66	URS	Downgradient Boundary	11/5/2015	FC-CCR-MW66-110515	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-66	URS	Downgradient Boundary	4/27/2016	FC-CCR-MW-66-042716	<0.0025	**0.0013**	**0.024**	<0.0010	<0.00010	**0.0031**	**0.0076**	18	**0.00072**	**0.29**	<0.00020	**0.012**	**0.0018**	**0.00070**	**0.6**
MW-66	URS	Downgradient Boundary	6/5/2016	FC-CCR-MW66-616	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.7**
MW-66	URS	Downgradient Boundary	6/5/2016	FC-CCR-MW66-616	<0.00010	**0.00067**	**0.016**	<0.0010	<0.00010	**0.00074**	**0.0078**	20	<0.00050	**0.28**	<0.00020	**0.013**	**0.0016**	**0.00060**	--
MW-66	URS	Downgradient Boundary	8/20/2016	FC-CCR-MW66-816	--	--	--	--	--	--	--	20	--	--	--	--	--	--	--
MW-66	URS	Downgradient Boundary	8/20/2016	FC-CCR-MW66-816	**0.00013**	**0.0013**	**0.021**	<0.0010	<0.00010	**0.0012**	**0.0080**	19	<0.00050	**0.32**	<0.00020	**0.039**	**0.0018**	**0.00062**	--
MW-66	URS	Downgradient Boundary	8/20/2016	FC-CCR-MW66-816	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.4**
MW-66	URS	Downgradient Boundary	9/12/2016	FC-CCR-MW66-916	--	--	--	--	--	--	--	12	--	--	--	--	--	--	--
MW-66	URS	Downgradient Boundary	9/12/2016	FC-CCR-MW66-916	<0.0025	<0.0010	**0.011**	<0.0010	<0.00050	<0.0025	**0.0029**	17	<0.00050	**0.27**	<0.00020	**0.010**	**0.11**	**0.00088**	--
MW-66	URS	Downgradient Boundary	9/12/2016	FC-CCR-MW66-916	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.9**
MW-66	URS	Downgradient Boundary	10/19/2016	FC-CCR-MW66-1016	--	--	--	--	--	--	--	17	--	--	--	--	--	--	--
MW-66	URS	Downgradient Boundary	10/19/2016	FC-CCR-MW66-1016	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**3.0**
MW-66	URS	Downgradient Boundary	2/1/2017	FC-CCR-MW66-117	--	--	--	--	--	--	--	18	--	--	--	--	--	--	--
MW-66	URS	Downgradient Boundary	2/1/2017	FC-CCR-MW66-117	<0.0010	**0.0014**	**0.021**	<0.0010	<0.00010	**0.0031**	**0.0064**	19	<0.00050	**0.29**	<0.00020	**0.020**	**0.0019**	**0.00040**	--
MW-66	URS	Downgradient Boundary	2/1/2017	FC-CCR-MW66-117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**4.0**
MW-66	URS	Downgradient Boundary	4/16/2017	FC-CCR-MW66-41617	--	--	--	--	--	--	--	25	--	--	--	--	--	--	--
MW-66	URS	Downgradient Boundary	4/16/2017	FC-CCR-MW66-41617	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**3.8**
MW-66	URS	Downgradient Boundary	4/16/2017	FC-CCR-MW66-41617	<0.0040	<0.0020	**0.020**	<0.0010	<0.00040	<0.0020	**0.0071**	23	<0.0020	**0.31**	<0.00020	**0.022**	<0.0020	<0.00040	--

Table F-2
Groundwater Sampling Results for the URS Monitoring Wells - Appendix IV Constituents

					Appendix IV Constituents													
				Constituent:	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Fluoride	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium	Total Radium
				Filtered:	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L
				URS BTV (applicable to downgradient wells)	*0.01*	*0.13*	*0.051*	*0.001*	*0.001*	*0.01*	*0.016*	*4*	*0.005*	*0.8*	*0.0002*	*0.011*	*0.45*	*0.002*	*5*
				URS GWPS (applicable to downgradient wells)	*0.01*	*0.13*	*2*	*0.004*	*0.005*	*0.1*	*0.016*	*4*	*0.015*	*0.8*	*0.002*	*0.1*	*0.45*	*0.002*	*5.4*
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**															
MW-66	URS	Downgradient Boundary	5/1/2017	FC-CCR-MW66-5117	<0.0010	**0.0018**	**0.020**	<0.0010	<0.00010	<0.0010	**0.0073**	32	<0.00050	**0.32**	<0.00020	**0.023**	**0.0022**	**0.00033**	--
MW-66	URS	Downgradient Boundary	5/1/2017	FC-CCR-MW66-5117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.9**
MW-66	URS	Downgradient Boundary	5/29/2017	FC-CCR-MW66-52917	<0.010	<0.0050	**0.022**	<0.0010	<0.0010	<0.0050	**0.0077**	25	<0.0050	**0.30**	<0.00020	**0.023**	<0.0050	<0.0010	--
MW-66	URS	Downgradient Boundary	5/29/2017	FC-CCR-MW66-52917	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.8**
MW-66	URS	Downgradient Boundary	6/21/2017	FC-CCR-MW66-62117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-66	URS	Downgradient Boundary	6/21/2017	FC-CCR-MW66-62117	<0.0010	**0.0028**	**0.022**	<0.0010	<0.00010	**0.00088**	**0.0074**	24	<0.00050	**0.32**	<0.00020	**0.023**	**0.0022**	**0.00041**	--
MW-66	URS	Downgradient Boundary	6/21/2017	FC-CCR-MW66-62117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**3.7**
MW-66	URS	Downgradient Boundary	7/21/2017	FC-CCR-MW66-72117	--	--	--	--	--	--	--	25	--	--	--	--	--	--	--
MW-66	URS	Downgradient Boundary	7/21/2017	FC-CCR-MW66-72117	<0.0040	<0.0020	**0.020**	<0.0010	<0.00040	<0.0020	**0.0065**	--	<0.0020	<0.80	<0.00020	**0.021**	<0.0020	<0.00040	--
MW-66	URS	Downgradient Boundary	7/21/2017	FC-CCR-MW66-72117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.2**
MW-66	URS	Downgradient Boundary	8/9/2017	FC-CCR-MW66-8917	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-66	URS	Downgradient Boundary	8/9/2017	FC-CCR-MW66-8917	<0.010	<0.0020	**0.019**	<0.0010	<0.0010	<0.0040	**0.0072**	26	<0.0050	**0.34**	<0.00020	**0.022**	<0.0020	<0.0010	--
MW-66	URS	Downgradient Boundary	8/9/2017	FC-CCR-MW66-8917	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**3.2**
MW-66	URS	Downgradient Boundary	8/16/2017	FC-CCR-MW66-81617	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.5**
MW-66	URS	Downgradient Boundary	8/16/2017	FC-CCR-MW66-81617	--	--	--	--	--	--	--	25	--	--	--	--	--	--	--
MW-66	URS	Downgradient Boundary	9/9/2017	FC-CCR-MW66-9917	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-66	URS	Downgradient Boundary	9/9/2017	FC-CCR-MW66-9917	<0.0040	<0.0020	**0.019**	<0.0010	<0.00040	<0.0040	**0.0069**	26	<0.0020	**0.32**	<0.00020	**0.021**	<0.0020	<0.00040	--
MW-66	URS	Downgradient Boundary	9/9/2017	FC-CCR-MW66-9917	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.5**
MW-66	URS	Downgradient Boundary	10/13/2017	FC-CCR-MW66-101317	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**5.1**
MW-66	URS	Downgradient Boundary	10/13/2017	FC-CCR-MW66-101317	<0.0010	**0.0021**	**0.021**	<0.0010	<0.00010	<0.0010	**0.0075**	26	<0.00050	**0.34**	<0.00020	**0.023**	**0.0021**	**0.00036**	--
MW-66	URS	Downgradient Boundary	11/30/2017	FC-CCR-MW66-113017	--	--	--	--	--	--	--	26	--	--	--	--	--	--	--
MW-66	URS	Downgradient Boundary	3/16/2018	FC-CCR-MW66-31618	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<1.5
MW-66	URS	Downgradient Boundary	3/16/2018	*DUP* FC-CCR-FD01-31618	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**4.0**
MW-66	URS	Downgradient Boundary	5/31/2018	FC-CCR-MW-66-53118	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.1**
MW-66	URS	Downgradient Boundary	5/31/2018	FC-CCR-MW-66-53118	--	<0.010	**0.020**	--	--	--	**0.010**	25	--	**0.36**	<0.00020	**0.015**	<0.010	**0.0025**	--
MW-66	URS	Downgradient Boundary	11/2/2018	FC-CCR-MW66-11218	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-66	URS	Downgradient Boundary	11/2/2018	FC-CCR-MW66-11218	--	**0.0015**	**0.023**	--	--	--	**0.012**	--	--	**0.38**	--	**0.019**	**0.0020**	**0.0011**	**2.9**
MW-66	URS	Downgradient Boundary	3/18/2019	FC-CCR-MW66-031819	<0.0010	**0.0012**	**0.023**	<0.0010	**0.00016**	**0.0010**	0.017	23	<0.00050	**0.37**	<0.00020	**0.016**	**0.0024 J**	**0.0011**	--
MW-66	URS	Downgradient Boundary	3/18/2019	FC-CCR-MW66-031819	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.1**
MW-66	URS	Downgradient Boundary	5/7/2019	FC-CCR-MW66-5719	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.5**
MW-66	URS	Downgradient Boundary	12/3/2019	FC-CCR-MW66-120319	<0.0020	<0.0020	**0.024**	<0.0010	<0.00020	<0.0040	**0.012**	22	<0.0010	**0.32**	<0.00020	**0.023**	<0.0020	**0.0010**	--
MW-66	URS	Downgradient Boundary	12/3/2019	*DUP* FC-CCR-FD02-120319	<0.0020	**0.0013**	**0.021**	<0.0010	<0.00020	<0.0040	**0.011**	22	<0.0010	**0.33**	<0.00020	**0.020**	**0.0020**	**0.00083**	--
MW-66	URS	Downgradient Boundary	6/18/2020	FC-CCR-MW66-0620	<0.002	**0.0016**	**0.019 J**	--	<0.0002	<0.002	**0.011**	17	<0.001	0.81	--	**0.019**	**0.0019**	**0.00094**	**1.5**
MW-66	URS	Downgradient Boundary	11/5/2020	FC-CCR-MW66-1120	<0.001U	**0.0037**	**0.016 J**	<0.001	<0.00018U	**0.0014 J**	**0.01 J**	26 J	<0.0005	**0.36**	<0.0002	**0.0014 J**	**0.0041**	**0.00038 J**	**2.4**
MW-66	URS	Downgradient Boundary	11/5/2020	*DUP* FC-CCR-FD02-1120	<0.001U	**0.0031**	**0.021 J**	<0.001	<0.00014U	**0.00082 J**	**0.00058 J**	21 J	<0.001	**0.35**	<0.0002	**0.0067 J**	**0.0053**	**0.0009 J**	**2.0**
MW-66	URS	Downgradient Boundary	4/21/2021	FC-CCR-MW66-0421	<0.0004U	**0.0014 J**	**0.021**	<0.001	**0.00013 J**	<0.004	**0.010**	19	<0.002	**0.32**	<0.0002	**0.022**	**0.0028**	**0.00082**	**2.5**
MW-66	URS	Downgradient Boundary	11/12/2021	FC-CCR-MW66-1121	**0.00012 J**	<0.001	**0.022**	<0.001	**0.000068 J**	<0.002	**0.0066**	20	<0.001	**0.33**	<0.0002	**0.021**	**0.0019**	**0.00089**	**2.0**
MW-66	URS	Downgradient Boundary	5/20/2022	FC-CCR-MW66-05222	<0.002	<0.001	**0.025**	<0.001	<0.0002	<0.002	**0.0063**	16	<0.001	**0.35**	<0.0002	**0.019**	**0.0033**	**0.00066**	**1.0**
MW-66	URS	Downgradient Boundary	11/13/2022	FC-CCR-MW66-1122	<0.001	**0.0013**	**0.020**	<0.001	<0.0001	**0.0010**	**0.015**	16	<0.0005	**0.30**	<0.0002	**0.019**	**0.0025**	**0.00099**	**3.2**
MW-66	URS	Downgradient Boundary	5/7/2023	FC-CCR-MW66-0523	<0.002	<0.005	**0.017**	<0.001	<0.001	<0.003	**0.0079**	<80	<0.001	**0.33**	<0.0002	**0.017**	<0.005	<0.001	**2.5**
MW-66	URS	Downgradient Boundary	11/06/2023	FC-CCR-MW66-1123	<0.001	**0.0028**	**0.019 J**	<0.001	<0.0001	<0.004	**0.0092**	19	<0.0005	**0.27**	<0.0002	**0.017**	**0.0022**	**0.0010**	**2.0**
MW-67	URS	Downgradient Boundary	11/4/2015	FC-CCR-MW67-110415	**0.00019**	**0.00099**	**0.017**	**0.00017**	**0.00018**	**0.00078**	**0.0078**	18	**0.00017**	**0.25**	<0.00020	**0.050**	**0.0053**	**0.00047**	--
MW-67	URS	Downgradient Boundary	11/4/2015	FC-CCR-MW67-110415	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-67	URS	Downgradient Boundary	4/27/2016	FC-CCR-MW-67-042716	<0.0025	**0.0025**	**0.018**	<0.0010	<0.00010	**0.00057**	**0.0028**	19	<0.00050	**0.31**	<0.00020	**0.044**	**0.043**	**0.00038**	**2.1**
MW-67	URS	Downgradient Boundary	4/27/2016	FC-CCR-DUP2-042716	<0.0025	**0.0029**	**0.017**	<0.0010	<0.00010	**0.00069**	**0.0027**	21	<0.00050	**0.32**	<0.00020	**0.043**	**0.043**	**0.00037**	--
MW-67	URS	Downgradient Boundary	6/6/2016	FC-CCR-MW67-616	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.0**
MW-67	URS	Downgradient Boundary	6/6/2016	FC-CCR-MW67-616	**0.00014**	**0.0030**	**0.018**	<0.0010	<0.00010	<0.00050	**0.0025**	24	<0.00050	**0.30**	<0.00020	**0.041**	**0.044**	**0.00031**	--
MW-67	URS	Downgradient Boundary	8/20/2016	FC-CCR-MW67-816	--	--	--	--	--	--	--	23	--	--	--	--	--	--	--
MW-67	URS	Downgradient Boundary	8/20/2016	FC-CCR-MW67-816	**0.00021**	**0.0039**	**0.020**	<0.0010	**0.00011**	**0.0010**	**0.0055**	19	<0.00050	**0.36**	<0.00020	**0.064**	**0.067**	**0.00031**	--
MW-67	URS	Downgradient Boundary	8/20/2016	FC-CCR-MW67-816	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.3**
MW-67	URS	Downgradient Boundary	8/20/2016	FC-CCR-MW 100-816	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-67	URS	Downgradient Boundary	8/20/2016	FC-CCR-MW 100-816	**0.00029**	**0.0040**	**0.022**	<0.0010	<0.00020	**0.0016**	**0.0064**	20	<0.0010	**0.35**	<0.00020	**0.063**	**0.068**	**0.00034**	--
MW-67	URS	Downgradient Boundary	8/20/2016	FC-CCR-MW 100-816	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**3.0**
MW-67	URS	Downgradient Boundary	9/13/2016	FC-CCR-MW67-916	--	--	--	--	--	--	--	23	--	--	--	--	--	--	--
MW-67	URS	Downgradient Boundary	9/13/2016	FC-CCR-MW67-916	<0.0025	**0.0023**	**0.021**	<0.0010	<0.00050	<0.0025	**0.0057**	17	<0.00050	**0.31**	<0.00020	**0.045**	**0.059**	<0.00050	--
MW-67	URS	Downgradient Boundary	9/13/2016	FC-CCR-MW67-916	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.1**
MW-67	URS	Downgradient Boundary	10/20/2016	FC-CCR-MW67-1016	--	--	--	--	--	--	--	16	--	--	--	--	--	--	--
MW-67	URS	Downgradient Boundary	10/20/2016	FC-CCR-MW67-1016	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**4.1**
MW-67	URS	Downgradient Boundary	2/1/2017	FC-CCR-MW67-117	--	--	--	--	--	--	--	16	--	--	--	--	--	--	--
MW-67	URS	Downgradient Boundary	2/1/2017	FC-CCR-MW67-117	<0.0010	**0.0033**	**0.019**	<0.0010	**0.00015**	**0.00058**	**0.0058**	16	<0.00050	**0.36**	<0.00020	**0.046**	**0.064**	**0.00039**	--
MW-67	URS	Downgradient Boundary	2/1/2017	FC-CCR-MW67-117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**3.0**
MW-67	URS	Downgradient Boundary	4/17/2017	FC-CCR-MW67-41717	--	--	--	--	--	--	--	22	--	--	--	--	--	--	--
MW-67	URS	Downgradient Boundary	4/17/2017	FC-CCR-MW67-41717	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**3.2**
MW-67	URS	Downgradient Boundary	4/17/2017	FC-CCR-MW67-41717	<0.0040	**0.0020**	**0.020**	<0.0010	<0.00040	<0.0020	**0.0062**	21	<0.0020	**0.42**	<0.00020	**0.039**	**0.032**	<0.00040	--
MW-67	URS	Downgradient Boundary	5/1/2017	FC-CCR-MW67-5117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**3.3**
MW-67	URS	Downgradient Boundary	5/2/2017	FC-CCR-MW67-5217	<0.0010	**0.0027**	**0.019**	<0.0010	**0.00015**	<0.0010	**0.0065**	28	<0.00050	**0.43**	<0.00020	**0.041**	**0.048**	**0.00042**	--
MW-67	URS	Downgradient Boundary	5/29/2017	FC-CCR-MW67-52917	<0.010	<0.0050	**0.022**	<0.0010	<0.0010	<0.0050	**0.0060**	21	<0.0050	**0.38**	<0.00020	**0.040**	**0.030**	<0.0010	--
MW-67	URS	Downgradient Boundary	5/29/2017	FC-CCR-MW67-52917	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.2**
MW-67	URS	Downgradient Boundary	6/21/2017	FC-CCR-MW67-62117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Table F-2
Groundwater Sampling Results for the URS Monitoring Wells - Appendix IV Constituents

					Appendix IV Constituents													
				Constituent:	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Fluoride	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium	Total Radium
				Filtered:	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L
				URS BTV (applicable to downgradient wells)	*0.01*	*0.13*	*0.051*	*0.001*	*0.001*	*0.01*	*0.016*	*4*	*0.005*	*0.8*	*0.0002*	*0.011*	*0.45*	*0.002*	*5*
				URS GWPS (applicable to downgradient wells)	*0.01*	*0.13*	*2*	*0.004*	*0.005*	*0.1*	*0.016*	*4*	*0.015*	*0.8*	*0.002*	*0.1*	*0.45*	*0.002*	*5.4*
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**															
MW-67	URS	Downgradient Boundary	6/21/2017	FC-CCR-MW67-62117	<0.0040	**0.0020**	**0.020**	<0.0010	<0.00040	<0.0020	**0.0049**	21	<0.0020	**0.40**	<0.00020	**0.039**	**0.024**	**0.00057**	--
MW-67	URS	Downgradient Boundary	6/21/2017	FC-CCR-MW67-62117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**4.2**
MW-67	URS	Downgradient Boundary	7/21/2017	FC-CCR-MW67-72117	--	--	--	--	--	--	--	22	--	--	--	--	--	--	--
MW-67	URS	Downgradient Boundary	7/21/2017	FC-CCR-MW67-72117	<0.0040	**0.0027**	**0.020**	<0.0010	<0.00040	<0.0020	**0.0053**	--	<0.0020	<0.80	<0.00020	**0.039**	**0.053**	**0.00050**	--
MW-67	URS	Downgradient Boundary	7/21/2017	FC-CCR-MW67-72117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<2.0
MW-67	URS	Downgradient Boundary	8/9/2017	FC-CCR-MW67-8917	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-67	URS	Downgradient Boundary	8/9/2017	FC-CCR-MW67-8917	<0.010	**0.0023**	**0.020**	<0.0010	<0.0010	<0.0040	**0.0045**	22	<0.0050	**0.44**	<0.00020	**0.038**	**0.021**	<0.0010	--
MW-67	URS	Downgradient Boundary	8/9/2017	FC-CCR-MW67-8917	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.4**
MW-67	URS	Downgradient Boundary	8/16/2017	FC-CCR-MW67-81617	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.6**
MW-67	URS	Downgradient Boundary	8/16/2017	FC-CCR-MW67-81617	--	--	--	--	--	--	--	22	--	--	--	--	--	--	--
MW-67	URS	Downgradient Boundary	9/10/2017	FC-CCR-MW67-91017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-67	URS	Downgradient Boundary	9/10/2017	FC-CCR-MW67-91017	<0.0040	<0.0020	**0.020**	<0.0010	<0.00040	<0.0040	**0.0047**	24	<0.0020	**0.43**	<0.00020	**0.038**	**0.023**	**0.00056**	--
MW-67	URS	Downgradient Boundary	9/10/2017	FC-CCR-MW67-91017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**3.1**
MW-67	URS	Downgradient Boundary	10/13/2017	FC-CCR-MW67-101317	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.7**
MW-67	URS	Downgradient Boundary	10/13/2017	FC-CCR-MW67-101317	<0.0010	**0.0027**	**0.022**	<0.0010	**0.00016**	<0.0010	**0.0064**	25	<0.00050	**0.49**	<0.00020	**0.045**	**0.038**	**0.00054**	--
MW-67	URS	Downgradient Boundary	11/29/2017	FC-CCR-MW67-112917	--	--	--	--	--	--	--	24	--	--	--	--	--	--	--
MW-67	URS	Downgradient Boundary	3/16/2018	FC-CCR-MW67-31618	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.9**
MW-67	URS	Downgradient Boundary	6/2/2018	FC-CCR-MW-67-6218	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.5**
MW-67	URS	Downgradient Boundary	6/2/2018	FC-CCR-MW-67-6218	--	<0.010	**0.020**	--	--	--	<0.010	25	--	**0.50**	<0.00020	**0.041**	<0.010	<0.0020	--
MW-67	URS	Downgradient Boundary	11/3/2018	FC-CCR-MW67-11318	--	--	--	--	--	--	--	16	--	--	--	--	--	--	--
MW-67	URS	Downgradient Boundary	11/3/2018	FC-CCR-MW67-11318	--	**0.0016**	**0.017**	--	--	--	**0.0061**	--	--	**0.39**	--	**0.037**	**0.0043**	**0.00078**	**1.6**
MW-67	URS	Downgradient Boundary	3/17/2019	FC-CCR-MW67-031719	<0.0010	**0.0016**	**0.014**	<0.0010	<0.00010	<0.0010	**0.0058**	15	<0.00050	**0.37**	<0.00020	**0.036**	**0.0050**	**0.00086**	--
MW-67	URS	Downgradient Boundary	3/17/2019	FC-CCR-MW67-031719	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**4.6**
MW-67	URS	Downgradient Boundary	5/7/2019	FC-CCR-MW67-5719	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.6**
MW-67	URS	Downgradient Boundary	12/2/2019	FC-CCR-MW67-120219	<0.0020	**0.0035**	**0.020**	<0.0010	<0.00020	<0.0040	**0.0096**	14	<0.0010	**0.37**	<0.00020	**0.038**	**0.0045**	**0.0011**	--
MW-67	URS	Downgradient Boundary	6/19/2020	FC-CCR-MW67-0620	<0.002	**0.0017**	**0.012**	--	<0.0002	<0.002	**0.0052**	12	<0.001	0.90	--	**0.039**	**0.0040**	**0.00098**	**3.2**
MW-67	URS	Downgradient Boundary	11/4/2020	FC-CCR-MW67-1120	**0.00027 J**	**0.0027 J**	**0.0079 J**	<0.001	<0.00025U	<0.001	**0.0009 J**	15	<0.0005	**0.40**	<0.0002	**0.011 J**	**0.0054**	**0.00031 J**	**3.6**
MW-67	URS	Downgradient Boundary	11/4/2020	*DUP* FC-CCR-FD01-1120	<0.002	**0.004 J**	**0.014 J**	<0.001	<0.0002U	**0.0018 J**	**0.0078 J**	15	<0.001	**0.40**	<0.0002	**0.038 J**	**0.0069**	**0.0010 J**	**3.5**
MW-67	URS	Downgradient Boundary	4/21/2021	FC-CCR-MW67-0421	<0.0004U	**0.0018 J**	**0.019**	<0.001	**0.00027 J**	<0.004	**0.012**	12	<0.002	**0.39**	<0.0002	**0.044**	**0.0042**	**0.0011**	**4.4 J**
MW-67	URS	Downgradient Boundary	4/21/2021	*DUP* FC-CCR-FD01-0421	<0.0004U	**0.0020**	**0.018**	<0.001	**0.00026 J**	<0.004	**0.011**	12	<0.002	**0.39**	<0.0002	**0.041**	**0.0044**	**0.0011**	**2.0 J**
MW-67	URS	Downgradient Boundary	11/12/2021	FC-CCR-MW67-1121	**0.000088 J**	<0.001	**0.014**	<0.001	**0.00021**	<0.002	**0.0069**	13	<0.001	**0.41**	<0.0002 UJ	**0.046**	**0.004**	**0.0013**	**3.8**
MW-67	URS	Downgradient Boundary	5/21/2022	FC-CCR-MW67-0522	<0.002	<0.001	**0.012**	<0.001	**0.00022**	<0.002	**0.0062**	8.2	<0.001	**0.42**	<0.0002	**0.034**	**0.0041**	**0.0011**	**1.8**
MW-67	URS	Downgradient Boundary	11/16/2022	FC-CCR-MW67-1122	<0.001	**0.00067**	**0.024**	<0.001	**0.00021**	<0.001	**0.0049**	13	<0.0005	**0.37**	<0.0002	**0.029**	**0.0022**	**0.0010**	**2.2**
MW-67	URS	Downgradient Boundary	5/9/2023	FC-CCR-MW67-0523	<0.002	<0.005	**0.035**	<0.005	<0.001	**0.0044**	**0.0085**	<20	**0.0017**	**0.39**	<0.0002	**0.030**	<0.005	**0.0011**	**1.2**
MW-67	URS	Downgradient Boundary	11/13/2023	FC-CCR-MW67-1123	<0.01	**0.0075**	**0.014**	<0.005	<0.001	<0.01	**0.0082**	13 J	<0.005	0.91	<0.0002	**0.040**	<0.005	**0.0012**	**3.6**
MW-68	URS	Downgradient Boundary	11/6/2015	FC-CCR-MW68-110615	**0.00045**	**0.0027**	**0.0093**	**0.00033**	**0.00046**	**0.0012**	**0.0053**	7.0	**0.00019**	**0.22**	<0.00020	**0.010**	**0.045**	**0.00089**	--
MW-68	URS	Downgradient Boundary	11/6/2015	FC-CCR-MW68-110615	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-68	URS	Downgradient Boundary	4/26/2016	FC-CCR-MW-68-042616	<0.0025	**0.0032**	**0.013**	<0.0010	<0.00010	**0.0012**	**0.0030**	8.0	**0.00052**	**0.31**	<0.00020	**0.0075**	**0.10**	**0.00056**	**1.5**
MW-68	URS	Downgradient Boundary	6/5/2016	FC-CCR-MW68-616	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.9**
MW-68	URS	Downgradient Boundary	6/5/2016	FC-CCR-MW68-616	**0.00011**	**0.0032**	**0.0099**	<0.0010	<0.00010	**0.00073**	**0.0042**	10	<0.00050	**0.27**	<0.00020	**0.010**	**0.11**	**0.00066**	--
MW-68	URS	Downgradient Boundary	8/20/2016	FC-CCR-MW68-816	--	--	--	--	--	--	--	8.6	--	--	--	--	--	--	--
MW-68	URS	Downgradient Boundary	8/20/2016	FC-CCR-MW68-816	**0.00012**	**0.0065**	**0.0078**	<0.0010	**0.00016**	**0.00072**	**0.0020**	7.5	<0.00050	**0.35**	<0.00020	**0.0095**	**0.22**	**0.00063**	--
MW-68	URS	Downgradient Boundary	8/20/2016	FC-CCR-MW68-816	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.9**
MW-68	URS	Downgradient Boundary	9/13/2016	FC-CCR-MW68-916	--	--	--	--	--	--	--	9.7	--	--	--	--	--	--	--
MW-68	URS	Downgradient Boundary	9/13/2016	FC-CCR-MW68-916	<0.0025	**0.0016**	**0.0074**	<0.0010	<0.00050	<0.0025	**0.0025**	5.7	<0.00050	**0.29**	<0.00020	**0.012**	**0.15**	**0.0012**	--
MW-68	URS	Downgradient Boundary	9/13/2016	FC-CCR-MW68-916	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**3.8**
MW-68	URS	Downgradient Boundary	10/20/2016	FC-CCR-MW68-1016	--	--	--	--	--	--	--	6.8	--	--	--	--	--	--	--
MW-68	URS	Downgradient Boundary	10/20/2016	FC-CCR-MW68-1016	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.4**
MW-68	URS	Downgradient Boundary	2/1/2017	FC-CCR-MW68-117	--	--	--	--	--	--	--	6.4	--	--	--	--	--	--	--
MW-68	URS	Downgradient Boundary	2/1/2017	FC-CCR-MW68-117	<0.0010	**0.0048**	**0.0082**	<0.0010	**0.00012**	**0.00081**	**0.0034**	6.8	<0.00050	**0.32**	<0.00020	**0.010**	**0.17**	**0.00080**	--
MW-68	URS	Downgradient Boundary	2/1/2017	FC-CCR-MW68-117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.1**
MW-68	URS	Downgradient Boundary	4/17/2017	FC-CCR-MW68-41717	--	--	--	--	--	--	--	10	--	--	--	--	--	--	--
MW-68	URS	Downgradient Boundary	4/17/2017	FC-CCR-MW68-41717	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.2**
MW-68	URS	Downgradient Boundary	4/17/2017	FC-CCR-MW68-41717	<0.0040	**0.0051**	**0.0078**	<0.0010	<0.00040	<0.0020	**0.0028**	9.7	<0.0020	**0.38**	<0.00020	**0.0080**	**0.16**	**0.00067**	--
MW-68	URS	Downgradient Boundary	5/1/2017	FC-CCR-MW68-5117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.2**
MW-68	URS	Downgradient Boundary	5/2/2017	FC-CCR-MW68-5217	<0.0010	**0.0084**	**0.0068**	<0.0010	<0.00010	<0.0010	**0.0024**	18	<0.00050	**0.37**	<0.00020	**0.0073**	**0.28**	**0.00068**	--
MW-68	URS	Downgradient Boundary	5/29/2017	FC-CCR-MW68-52917	<0.010	**0.0085**	**0.0086**	<0.0010	<0.0010	<0.0050	<0.0050	8.3	<0.0050	**0.32**	<0.00020	**0.0054**	**0.29**	<0.0010	--
MW-68	URS	Downgradient Boundary	5/29/2017	FC-CCR-MW68-52917	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.6
MW-68	URS	Downgradient Boundary	6/21/2017	FC-CCR-MW68-62117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-68	URS	Downgradient Boundary	6/21/2017	FC-CCR-MW68-62117	<0.0040	**0.0079**	**0.0075**	<0.0010	<0.00040	<0.0020	<0.0020	8.7	<0.0020	**0.33**	<0.00020	**0.0051**	**0.28**	**0.00065**	--
MW-68	URS	Downgradient Boundary	6/21/2017	FC-CCR-MW68-62117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.2**
MW-68	URS	Downgradient Boundary	7/21/2017	FC-CCR-MW68-72117	--	--	--	--	--	--	--	9.6	--	--	--	--	--	--	--
MW-68	URS	Downgradient Boundary	7/21/2017	FC-CCR-MW68-72117	<0.0040	**0.0081**	**0.0066**	<0.0010	<0.00040	<0.0020	**0.0017**	--	<0.0020	<0.80	<0.00020	**0.0058**	**0.30**	**0.00062**	--
MW-68	URS	Downgradient Boundary	7/21/2017	FC-CCR-MW68-72117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.9**
MW-68	URS	Downgradient Boundary	8/9/2017	FC-CCR-MW68-8917	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-68	URS	Downgradient Boundary	8/9/2017	FC-CCR-MW68-8917	<0.010	**0.0055**	**0.0074**	<0.0010	<0.0010	<0.0040	**0.0025**	11	<0.0050	**0.37**	<0.00020	**0.0067**	**0.27**	<0.0010	--
MW-68	URS	Downgradient Boundary	8/9/2017	FC-CCR-MW68-8917	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**3.3**
MW-68	URS	Downgradient Boundary	8/16/2017	FC-CCR-MW68-81617	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.2**
MW-68	URS	Downgradient Boundary	8/16/2017	FC-CCR-MW68-81617	--	--	--	--	--	--	--	11	--	--	--	--	--	--	--

Table F-2
Groundwater Sampling Results for the URS Monitoring Wells - Appendix IV Constituents

					Appendix IV Constituents													
				Constituent:	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Fluoride	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium	Total Radium
				Filtered:	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L
				URS BTV (applicable to downgradient wells)	*0.01*	*0.13*	*0.051*	*0.001*	*0.001*	*0.01*	*0.016*	*4*	*0.005*	*0.8*	*0.0002*	*0.011*	*0.45*	*0.002*	*5*
				URS GWPS (applicable to downgradient wells)	*0.01*	*0.13*	*2*	*0.004*	*0.005*	*0.1*	*0.016*	*4*	*0.015*	*0.8*	*0.002*	*0.1*	*0.45*	*0.002*	*5.4*
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**															
MW-68	URS	Downgradient Boundary	9/10/2017	FC-CCR-MW68-91017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-68	URS	Downgradient Boundary	9/10/2017	FC-CCR-MW68-91017	<0.0040	**0.0086**	**0.0075**	<0.0010	<0.00040	<0.0040	**0.0023**	11	<0.0020	**0.34**	<0.00020	**0.0063**	**0.29**	**0.00083**	--
MW-68	URS	Downgradient Boundary	9/10/2017	FC-CCR-MW68-91017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.9**
MW-68	URS	Downgradient Boundary	10/13/2017	FC-CCR-MW68-101317	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.9**
MW-68	URS	Downgradient Boundary	10/13/2017	FC-CCR-MW68-101317	<0.0010	**0.0097**	**0.0078**	<0.0010	**0.00011**	<0.0010	**0.0019**	10	<0.00050	**0.37**	<0.00020	**0.0063**	**0.37**	**0.00069**	--
MW-68	URS	Downgradient Boundary	11/30/2017	FC-CCR-MW68-113017	--	--	--	--	--	--	--	10	--	--	--	--	--	--	--
MW-68	URS	Downgradient Boundary	11/30/2017	*DUP* FC-CCR-FD01-113017	--	--	--	--	--	--	--	10	--	--	--	--	--	--	--
MW-68	URS	Downgradient Boundary	3/16/2018	FC-CCR-MW68-31618	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.0**
MW-68	URS	Downgradient Boundary	6/2/2018	FC-CCR-MW-68-6218	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.6**
MW-68	URS	Downgradient Boundary	6/2/2018	FC-CCR-MW-68-6218	--	<0.010	<0.010	--	--	--	<0.010	12	--	**0.38**	<0.00020	<0.010	**0.24**	<0.0020	--
MW-68	URS	Downgradient Boundary	11/3/2018	FC-CCR-MW68-11318	--	--	--	--	--	--	--	12	--	--	--	--	--	--	--
MW-68	URS	Downgradient Boundary	11/3/2018	FC-CCR-MW68-11318	--	**0.0030**	**0.0081**	--	--	--	**0.0038**	--	--	**0.42**	--	**0.0078**	**0.11**	**0.0016**	**1.9**
MW-68	URS	Downgradient Boundary	3/17/2019	FC-CCR-MW68-031719	<0.0010	**0.0035**	**0.0084**	<0.0010	**0.00014**	<0.0010	**0.0026**	9.2	<0.00050	**0.37**	<0.00020	**0.0067**	**0.14**	**0.0010**	--
MW-68	URS	Downgradient Boundary	3/17/2019	FC-CCR-MW68-031719	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.6**
MW-68	URS	Downgradient Boundary	5/7/2019	FC-CCR-MW68-5719	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.1**
MW-68	URS	Downgradient Boundary	12/2/2019	FC-CCR-MW68-120219	<0.0020	**0.0058**	0.068	<0.0010	<0.00020	<0.0040	**0.0037**	10	**0.0013**	**0.37**	<0.00020	**0.0068**	**0.12**	**0.0017**	--
MW-68	URS	Downgradient Boundary	6/19/2020	FC-CCR-MW68-0620	<0.002	**0.0048**	**0.0093**	--	<0.0002	<0.002	**0.0053**	7.7	<0.001	0.85	--	**0.0063**	**0.13**	**0.0015**	**0.9**
MW-68	URS	Downgradient Boundary	11/4/2020	FC-CCR-MW68-1120	<0.001U	**0.0038**	**0.012**	<0.001	<0.00012U	**0.0012**	**0.00066**	10	<0.0005	**0.41**	<0.0002	**0.0045**	**0.069**	<0.0001U	**1.8**
MW-68	URS	Downgradient Boundary	4/22/2021	FC-CCR-MW68-0421	<0.0004U	**0.0017 J**	**0.011**	<0.001	**0.00016 J**	<0.004	**0.0076**	8.6	<0.002	**0.41**	<0.0002	**0.0079**	**0.036**	**0.0016**	**0.9**
MW-68	URS	Downgradient Boundary	11/12/2021	FC-CCR-MW68-1121	<0.002	<0.001	**0.0097 J**	<0.001	**0.00009 J**	<0.002	**0.0084**	10	<0.001	**0.43**	<0.0002	**0.0059**	**0.0069**	**0.0018**	**1.5**
MW-68	URS	Downgradient Boundary	5/21/2022	FC-CCR-MW68-0522	<0.002	<0.001	**0.017**	<0.001	<0.0002	<0.002	**0.011**	7.5	<0.001	**0.45**	<0.0002	**0.0063**	**0.0060**	**0.0016**	<0.7
MW-68	URS	Downgradient Boundary	11/13/2022	FC-CCR-MW68-1122	<0.001	**0.0012**	**0.017**	<0.001	<0.0001	**0.0011**	**0.0034**	7.5	<0.0005	**0.40**	<0.0002	**0.0054**	**0.011**	**0.0014**	**1.3**
MW-68	URS	Downgradient Boundary	5/9/2023	FC-CCR-MW68-0523	<0.002	<0.005	0.080	<0.005	<0.001	**0.0030**	**0.011**	<20	**0.0018**	**0.48**	<0.0002	**0.0055**	**0.0052**	**0.0015**	**1.3**
MW-68	URS	Downgradient Boundary	11/11/2023	FC-CCR-MW68-1123	<0.01	**0.0099**	0.14	<0.005	<0.001	<0.01	0.020	13 J	<0.005	0.93	<0.0002	**0.0069**	**0.0078**	**0.0018**	<0.8
MW-69	URS	Downgradient Boundary	11/4/2015	FC-CCR-MW69-110415	**0.00046**	**0.0026**	**0.013**	**0.00029**	**0.00031**	**0.00081**	**0.0035**	9.8	**0.00021**	**0.27**	<0.00020	0.015	**0.010**	**0.00047**	--
MW-69	URS	Downgradient Boundary	11/4/2015	FC-CCR-MW69-110415	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-69	URS	Downgradient Boundary	4/26/2016	FC-CCR-MW-69-042616	<0.0025	**0.0031**	**0.013**	<0.0010	<0.00010	<0.00050	**0.0029**	13	<0.00050	**0.31**	<0.00020	0.013	**0.011**	**0.00028**	**3.1**
MW-69	URS	Downgradient Boundary	4/26/2016	FC-CCR-DUP1-042616	<0.0025	**0.0031**	**0.013**	<0.0010	<0.00010	**0.00050**	**0.0029**	13	<0.00050	**0.32**	<0.00020	0.014	**0.011**	**0.00028**	**3.2**
MW-69	URS	Downgradient Boundary	6/6/2016	FC-CCR-MW69-616	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**3.2**
MW-69	URS	Downgradient Boundary	6/6/2016	FC-CCR-MW69-616	**0.00021**	**0.0037**	**0.015**	<0.0010	<0.00010	<0.00050	**0.0027**	13	<0.00050	**0.27**	<0.00020	0.015	**0.018**	**0.00022**	--
MW-69	URS	Downgradient Boundary	8/21/2016	FC-CCR-MW69-816	--	--	--	--	--	--	--	16	--	--	--	--	--	--	--
MW-69	URS	Downgradient Boundary	8/21/2016	FC-CCR-MW69-816	**0.00054**	**0.011**	**0.016**	<0.0010	<0.00010	**0.00076**	**0.0037**	13	<0.00050	**0.37**	<0.00020	0.015	**0.015**	**0.00024**	--
MW-69	URS	Downgradient Boundary	8/21/2016	FC-CCR-MW69-816	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**3.9**
MW-69	URS	Downgradient Boundary	9/13/2016	FC-CCR-MW69-916	--	--	--	--	--	--	--	16	--	--	--	--	--	--	--
MW-69	URS	Downgradient Boundary	9/13/2016	FC-CCR-MW69-916	<0.0025	**0.0093**	**0.016**	<0.0010	<0.00050	<0.0025	**0.0042**	11	<0.00050	**0.31**	<0.00020	0.015	**0.012**	<0.00050	--
MW-69	URS	Downgradient Boundary	9/13/2016	FC-CCR-MW69-916	--	--	--	--	--	--	--	--	--	--	--	--	--	--	5.4
MW-69	URS	Downgradient Boundary	10/20/2016	FC-CCR-MW69-1016	--	--	--	--	--	--	--	9.0	--	--	--	--	--	--	--
MW-69	URS	Downgradient Boundary	10/20/2016	FC-CCR-MW69-1016	--	--	--	--	--	--	--	--	--	--	--	--	--	--	5.5
MW-69	URS	Downgradient Boundary	2/1/2017	FC-CCR-MW69-117	--	--	--	--	--	--	--	11	--	--	--	--	--	--	--
MW-69	URS	Downgradient Boundary	2/1/2017	FC-CCR-MW69-117	<0.0010	**0.0042**	**0.017**	<0.0010	<0.00010	**0.00083**	**0.0046**	12	<0.00050	**0.40**	<0.00020	0.016	**0.015**	**0.00017**	--
MW-69	URS	Downgradient Boundary	2/1/2017	FC-CCR-MW69-117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	5.4
MW-69	URS	Downgradient Boundary	4/17/2017	FC-CCR-MW69-41717	--	--	--	--	--	--	--	17	--	--	--	--	--	--	--
MW-69	URS	Downgradient Boundary	4/17/2017	FC-CCR-MW69-41717	--	--	--	--	--	--	--	--	--	--	--	--	--	--	6.0
MW-69	URS	Downgradient Boundary	4/17/2017	FC-CCR-MW69-41717	<0.0040	**0.0066**	**0.016**	<0.0010	<0.00040	<0.0020	**0.0045**	17	<0.0020	**0.45**	<0.00020	0.014	**0.011**	<0.00040	--
MW-69	URS	Downgradient Boundary	4/17/2017	*DUP* FC-CCR-FD02-41717	--	--	--	--	--	--	--	17	--	--	--	--	--	--	--
MW-69	URS	Downgradient Boundary	4/17/2017	*DUP* FC-CCR-FD02-41717	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**4.9**
MW-69	URS	Downgradient Boundary	4/17/2017	*DUP* FC-CCR-FD02-41717	<0.0040	**0.0063**	**0.016**	<0.0010	<0.00040	<0.0020	**0.0044**	17	<0.0020	**0.44**	<0.00020	0.014	**0.010**	<0.00040	--
MW-69	URS	Downgradient Boundary	5/2/2017	FC-CCR-MW69-5217	<0.0010	**0.0087**	**0.015**	<0.0010	<0.00010	<0.0010	**0.0043**	24	<0.00050	**0.45**	<0.00020	0.014	**0.019**	**0.00017**	--
MW-69	URS	Downgradient Boundary	5/2/2017	FC-CCR-MW69-5217	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**5.0**
MW-69	URS	Downgradient Boundary	5/29/2017	FC-CCR-MW69-52917	<0.010	**0.0076**	**0.018**	<0.0010	<0.0010	<0.0050	<0.0050	16	<0.0050	**0.37**	<0.00020	0.016	**0.013**	<0.0010	--
MW-69	URS	Downgradient Boundary	5/29/2017	FC-CCR-MW69-52917	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**3.6**
MW-69	URS	Downgradient Boundary	6/21/2017	FC-CCR-MW69-62117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-69	URS	Downgradient Boundary	6/21/2017	FC-CCR-MW69-62117	<0.0040	**0.0063**	**0.016**	<0.0010	<0.00040	<0.0020	**0.0041**	14	<0.0020	**0.36**	<0.00020	0.017	**0.017**	<0.00040	--
MW-69	URS	Downgradient Boundary	6/21/2017	FC-CCR-MW69-62117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**4.3**
MW-69	URS	Downgradient Boundary	7/21/2017	FC-CCR-MW69-72117	--	--	--	--	--	--	--	18	--	--	--	--	--	--	--
MW-69	URS	Downgradient Boundary	7/21/2017	FC-CCR-MW69-72117	<0.0040	**0.0083**	**0.016**	<0.0010	<0.00040	<0.0020	**0.0048**	--	<0.0020	<0.80	<0.00020	0.014	**0.013**	<0.00040	--
MW-69	URS	Downgradient Boundary	7/21/2017	FC-CCR-MW69-72117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**3.4**
MW-69	URS	Downgradient Boundary	8/9/2017	FC-CCR-MW69-8917	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-69	URS	Downgradient Boundary	8/9/2017	FC-CCR-MW69-8917	<0.010	**0.0066**	**0.016**	<0.0010	<0.0010	<0.0040	**0.0044**	17	<0.0050	**0.44**	<0.00020	0.016	**0.014**	<0.0010	--
MW-69	URS	Downgradient Boundary	8/9/2017	FC-CCR-MW69-8917	--	--	--	--	--	--	--	--	--	--	--	--	--	--	5.1
MW-69	URS	Downgradient Boundary	8/9/2017	*DUP* FC-CCR-FD01-8917	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-69	URS	Downgradient Boundary	8/9/2017	*DUP* FC-CCR-FD01-8917	<0.010	**0.0072**	**0.013**	<0.0010	<0.0010	**0.0059**	**0.0044**	17	<0.0050	**0.43**	<0.00020	0.014	**0.016**	<0.0010	--
MW-69	URS	Downgradient Boundary	8/9/2017	*DUP* FC-CCR-FD01-8917	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**3.7**
MW-69	URS	Downgradient Boundary	8/16/2017	FC-CCR-MW69-81617	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**3.6**
MW-69	URS	Downgradient Boundary	8/16/2017	FC-CCR-MW69-81617	--	--	--	--	--	--	--	17	--	--	--	--	--	--	--
MW-69	URS	Downgradient Boundary	9/10/2017	FC-CCR-MW69-91017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-69	URS	Downgradient Boundary	9/10/2017	FC-CCR-MW69-91017	<0.0040	**0.0073**	**0.018**	<0.0010	<0.00040	<0.0040	**0.0043**	20	**0.0060**	**0.46**	<0.00020	0.016	**0.014**	<0.00040	--
MW-69	URS	Downgradient Boundary	9/10/2017	FC-CCR-MW69-91017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	5.9
MW-69	URS	Downgradient Boundary	9/10/2017	*DUP* FC-CCR-FD02-91017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Table F-2
Groundwater Sampling Results for the URS Monitoring Wells - Appendix IV Constituents

					Appendix IV Constituents														
				Constituent:	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Fluoride	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium	Total Radium
				Filtered:	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L
				URS BTV (applicable to downgradient wells)	*0.01*	*0.13*	*0.051*	*0.001*	*0.001*	*0.01*	*0.016*	*4*	*0.005*	*0.8*	*0.0002*	*0.011*	*0.45*	*0.002*	*5*
				URS GWPS (applicable to downgradient wells)	*0.01*	*0.13*	*2*	*0.004*	*0.005*	*0.1*	*0.016*	*4*	*0.015*	*0.8*	*0.002*	*0.1*	*0.45*	*0.002*	*5.4*
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**															
MW-69	URS	Downgradient Boundary	9/10/2017	*DUP* FC-CCR-FD02-91017	<0.0040	**0.0075**	**0.018**	<0.0010	<0.00040	<0.0040	**0.0044**	20	<0.0020	**0.46**	<0.00020	**0.017**	**0.013**	<0.00040	--
MW-69	URS	Downgradient Boundary	9/10/2017	*DUP* FC-CCR-FD02-91017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**4.9**
MW-69	URS	Downgradient Boundary	10/13/2017	FC-CCR-MW69-101317	--	--	--	--	--	--	--	--	--	--	--	--	--	--	6.7
MW-69	URS	Downgradient Boundary	10/13/2017	FC-CCR-MW69-101317	<0.0010	**0.0078**	**0.019**	<0.0010	<0.00010	<0.0010	**0.0051**	20	<0.00050	**0.50**	<0.00020	**0.015**	**0.023**	**0.00022**	--
MW-69	URS	Downgradient Boundary	11/29/2017	FC-CCR-MW69-112917	--	--	--	--	--	--	--	21	--	--	--	--	--	--	--
MW-69	URS	Downgradient Boundary	3/16/2018	FC-CCR-MW69-31618	--	--	--	--	--	--	--	--	--	--	--	--	--	--	5.4
MW-69	URS	Downgradient Boundary	6/2/2018	FC-CCR-MW-69-6218	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**4.6**
MW-69	URS	Downgradient Boundary	6/2/2018	FC-CCR-MW-69-6218	--	<0.010	**0.016**	--	--	--	<0.010	21	--	**0.49**	<0.00020	**0.016**	**0.014**	<0.0020	--
MW-69	URS	Downgradient Boundary	6/2/2018	*DUP* FC-CCR-FD02-6218	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**3.1**
MW-69	URS	Downgradient Boundary	6/2/2018	*DUP* FC-CCR-FD02-6218	--	<0.010	**0.014**	--	--	--	<0.010	21	--	**0.49**	<0.00020	**0.015**	**0.013**	<0.0020	--
MW-69	URS	Downgradient Boundary	11/3/2018	FC-CCR-MW69-11318	--	--	--	--	--	--	--	11	--	--	--	--	--	--	--
MW-69	URS	Downgradient Boundary	11/3/2018	FC-CCR-MW69-11318	--	**0.0042**	**0.012**	--	--	--	**0.0041**	--	--	**0.35**	--	**0.012**	**0.025**	**0.00024**	**3.0**
MW-69	URS	Downgradient Boundary	3/17/2019	FC-CCR-MW69-031719	<0.0010	**0.0032**	**0.010**	<0.0010	**0.00021**	<0.0010	**0.0031**	**3.1**	<0.00050	**0.27**	<0.00020	**0.011**	**0.038**	**0.00020**	--
MW-69	URS	Downgradient Boundary	3/17/2019	FC-CCR-MW69-031719	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.6**
MW-69	URS	Downgradient Boundary	5/7/2019	FC-CCR-MW69-5719	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.8**
MW-69	URS	Downgradient Boundary	12/3/2019	FC-CCR-MW69-120219	<0.0020	**0.0070**	**0.011**	<0.0010	<0.00020	<0.0040	**0.0047**	9.0	<0.0010	**0.35**	<0.00020	**0.0096**	**0.12**	**0.00053**	--
MW-69	URS	Downgradient Boundary	6/19/2020	FC-CCR-MW69-0620	<0.002	**0.0040**	**0.014**	--	<0.0002	<0.002	**0.0027**	5.5	<0.001	**0.55**	--	**0.0072**	**0.089**	**0.00030**	**1.9**
MW-69	URS	Downgradient Boundary	11/4/2020	FC-CCR-MW69-1120	<0.002U	**0.0058**	**0.0081**	<0.001	<0.0002U	**0.00092 J**	**0.0028**	5.8	<0.0005	**0.26**	<0.0002	**0.0075**	**0.11**	**0.00034**	**1.3**
MW-69	URS	Downgradient Boundary	4/21/2021	FC-CCR-MW69-0421	<0.0004U	**0.0021**	**0.0090**	<0.001	<0.0004	<0.004	**0.0021**	4.1	<0.002	**0.19**	<0.0002	**0.0075**	**0.14**	**0.0003 J**	**0.7**
MW-69	URS	Downgradient Boundary	11/12/2021	FC-CCR-MW69-1121	**0.00022 J**	<0.001	**0.0081**	<0.001	**0.000074 J**	<0.002	**0.0023**	4.9	<0.001	**0.24**	<0.0002	**0.0061**	**0.17**	**0.00032**	**1.9**
MW-69	URS	Downgradient Boundary	5/21/2022	FC-CCR-MW69-0522	<0.002	**0.0014**	**0.0073**	<0.001	<0.0002	<0.002	**0.0018**	**3.9**	<0.001	**0.21**	<0.0002	**0.0056**	**0.14**	**0.00032**	**0.8**
MW-69	URS	Downgradient Boundary	5/21/2022	FC-CCR-SS03-0522	<0.01	<0.005	**0.00627 J**	<0.00125	<0.00125	<0.01	**0.00279**	<25/3.33	<0.0025	**0.215**	<0.001	**0.00583**	**0.131**	<0.0025	--
MW-69	URS	Downgradient Boundary	11/14/2022	FC-CCR-MW69-1122	<0.001	**0.0015**	**0.008**	<0.001	<0.0001	<0.001	**0.0024**	4.2	<0.0005	**0.18**	<0.0002	**0.006**	**0.18**	**0.00027**	**1.3**
MW-69	URS	Downgradient Boundary	5/9/2023	FC-CCR-MW69-0523	<0.002	<0.005	**0.0055**	<0.001	<0.001	<0.003	**0.0020**	4.1	<0.001	**0.23**	<0.0002	**0.0051**	**0.17**	<0.001	**1.4**
MW-69	URS	Downgradient Boundary	11/11/2023	FC-CCR-MW69-1123	<0.01	**0.0086**	**0.0061**	<0.005	<0.001	<0.01	<0.005	4.7 J	<0.005	**0.33**	<0.0002	**0.0057**	**0.20**	<0.001	<0.8
MW-70	URS	Downgradient Boundary	11/9/2015	FC-CCR-MW70-110915	**0.00017**	**0.0094**	**0.015**	**0.00011**	**0.00014**	**0.00060**	**0.0057**	**2.6**	**0.00015**	**0.28**	<0.00020	**0.0096**	**0.20**	**0.00049**	--
MW-70	URS	Downgradient Boundary	11/9/2015	FC-CCR-MW70-110915	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-70	URS	Downgradient Boundary	4/27/2016	FC-CCR-MW-70-042716	<0.0025	**0.0053**	**0.012**	<0.0010	<0.00010	**0.00062**	**0.0057**	**2.3**	<0.00050	**0.33**	<0.00020	**0.0062**	**0.20**	**0.00038**	**1.0**
MW-70	URS	Downgradient Boundary	6/5/2016	FC-CCR-MW70-616	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.9**
MW-70	URS	Downgradient Boundary	6/5/2016	FC-CCR-MW70-616	**0.00011**	**0.0048**	**0.012**	<0.0010	<0.00010	**0.00063**	**0.0051**	**2.1**	<0.00050	**0.31**	<0.00020	**0.0060**	**0.17**	**0.00028**	--
MW-70	URS	Downgradient Boundary	6/5/2016	FC-CCR-DUP-616	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.9**
MW-70	URS	Downgradient Boundary	6/5/2016	FC-CCR-DUP-616	**0.00011**	**0.0044**	**0.013**	<0.0010	<0.00010	**0.00084**	**0.0051**	**2.2**	<0.00050	**0.32**	<0.00020	**0.0060**	**0.16**	**0.00027**	--
MW-70	URS	Downgradient Boundary	8/20/2016	FC-CCR-MW70-816	--	--	--	--	--	--	--	**0.66**	--	--	--	--	--	--	--
MW-70	URS	Downgradient Boundary	8/20/2016	FC-CCR-MW70-816	**0.00026**	**0.0051**	**0.016**	<0.0010	<0.00020	**0.0037**	**0.0032**	<0.80	<0.0010	**0.35**	<0.00020	**0.027**	**0.23**	**0.00057**	--
MW-70	URS	Downgradient Boundary	8/20/2016	FC-CCR-MW70-816	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.5**
MW-70	URS	Downgradient Boundary	9/12/2016	FC-CCR-MW70-916	--	--	--	--	--	--	--	**0.69**	--	--	--	--	--	--	--
MW-70	URS	Downgradient Boundary	9/12/2016	FC-CCR-MW70-916	<0.0025	<0.0010	**0.0073**	<0.0010	<0.00050	<0.0025	**0.0023**	<0.40	<0.00050	**0.29**	<0.00020	**0.0036**	**0.13**	<0.00050	--
MW-70	URS	Downgradient Boundary	9/12/2016	FC-CCR-MW70-916	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.6**
MW-70	URS	Downgradient Boundary	10/19/2016	FC-CCR-MW70-1016	--	--	--	--	--	--	--	<0.40	--	--	--	--	--	--	--
MW-70	URS	Downgradient Boundary	10/19/2016	FC-CCR-MW70-1016	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.6**
MW-70	URS	Downgradient Boundary	2/1/2017	FC-CCR-MW70-117	--	--	--	--	--	--	--	<0.40	--	--	--	--	--	--	--
MW-70	URS	Downgradient Boundary	2/1/2017	FC-CCR-MW70-117	<0.0010	**0.0071**	**0.0089**	<0.0010	**0.00011**	**0.0016**	**0.0031**	<0.40	<0.00050	**0.28**	<0.00020	**0.0026**	**0.26**	**0.00040**	--
MW-70	URS	Downgradient Boundary	2/1/2017	FC-CCR-MW70-117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**3.3**
MW-70	URS	Downgradient Boundary	4/16/2017	FC-CCR-MW70-41717	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.6**
MW-70	URS	Downgradient Boundary	4/16/2017	FC-CCR-MW70-41617	--	--	--	--	--	--	--	**0.94**	--	--	--	--	--	--	--
MW-70	URS	Downgradient Boundary	4/16/2017	FC-CCR-MW70-41617	<0.0040	**0.0054**	**0.0084**	<0.0010	<0.00040	<0.0020	**0.0035**	**0.85**	<0.0020	**0.31**	<0.00020	**0.0035**	**0.18**	**0.00041**	--
MW-70	URS	Downgradient Boundary	4/16/2017	*DUP* FC-CCR-FD01-41617	--	--	--	--	--	--	--	**0.95**	--	--	--	--	--	--	--
MW-70	URS	Downgradient Boundary	4/16/2017	*DUP* FC-CCR-FD01-41617	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.1**
MW-70	URS	Downgradient Boundary	4/16/2017	*DUP* FC-CCR-FD01-41617	<0.0040	**0.0045**	**0.0090**	<0.0010	<0.00040	<0.0020	**0.0038**	**0.85**	<0.0020	**0.32**	<0.00020	**0.0037**	**0.20**	**0.00042**	--
MW-70	URS	Downgradient Boundary	5/1/2017	FC-CCR-MW70-5117	<0.0010	**0.0070**	**0.0097**	<0.0010	<0.00010	<0.0010	**0.0053**	<5.0	<0.00050	**0.32**	<0.00020	**0.0057**	**0.25**	**0.00039**	--
MW-70	URS	Downgradient Boundary	5/1/2017	FC-CCR-MW70-5117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.4**
MW-70	URS	Downgradient Boundary	5/29/2017	FC-CCR-MW70-52917	<0.010	<0.0050	**0.014**	<0.0010	<0.0010	<0.0050	**0.0071**	**2.6**	<0.0050	**0.31**	<0.00020	**0.0090**	**0.18**	<0.0010	--
MW-70	URS	Downgradient Boundary	5/29/2017	FC-CCR-MW70-52917	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.3**
MW-70	URS	Downgradient Boundary	6/21/2017	FC-CCR-MW70-62117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-70	URS	Downgradient Boundary	6/21/2017	FC-CCR-MW70-62117	<0.0040	**0.0049**	**0.014**	<0.0010	<0.00040	<0.0020	**0.0075**	**2.9**	<0.0020	**0.32**	<0.00020	**0.0088**	**0.18**	<0.00040	--
MW-70	URS	Downgradient Boundary	6/21/2017	FC-CCR-MW70-62117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.5**
MW-70	URS	Downgradient Boundary	7/21/2017	FC-CCR-MW70-72117	--	--	--	--	--	--	--	**2.1**	--	--	--	--	--	--	--
MW-70	URS	Downgradient Boundary	7/21/2017	FC-CCR-MW70-72117	<0.0040	**0.0042**	**0.0095**	<0.0010	<0.00040	<0.0020	**0.0055**	--	<0.0020	<0.80	<0.00020	**0.0055**	**0.21**	<0.00040	--
MW-70	URS	Downgradient Boundary	7/21/2017	FC-CCR-MW70-72117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.7
MW-70	URS	Downgradient Boundary	8/9/2017	FC-CCR-MW70-8917	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-70	URS	Downgradient Boundary	8/9/2017	FC-CCR-MW70-8917	<0.010	**0.0047**	**0.013**	<0.0010	<0.0010	<0.0040	**0.0077**	**3.0**	<0.0050	**0.34**	<0.00020	**0.0093**	**0.18**	<0.0010	--
MW-70	URS	Downgradient Boundary	8/9/2017	FC-CCR-MW70-8917	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.6**
MW-70	URS	Downgradient Boundary	8/16/2017	FC-CCR-MW70-81617	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.8**
MW-70	URS	Downgradient Boundary	8/16/2017	FC-CCR-MW70-81617	--	--	--	--	--	--	--	**3.2**	--	--	--	--	--	--	--
MW-70	URS	Downgradient Boundary	9/9/2017	FC-CCR-MW70-9917	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-70	URS	Downgradient Boundary	9/9/2017	FC-CCR-MW70-9917	<0.0040	**0.0056**	**0.010**	<0.0010	<0.00040	<0.0040	**0.0057**	**2.5**	<0.0020	**0.31**	<0.00020	**0.0063**	**0.17**	<0.00040	--
MW-70	URS	Downgradient Boundary	9/9/2017	FC-CCR-MW70-9917	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.0**
MW-70	URS	Downgradient Boundary	10/13/2017	FC-CCR-MW70-101317	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.6
MW-70	URS	Downgradient Boundary	10/13/2017	FC-CCR-MW70-101317	<0.010	**0.0062**	**0.011**	<0.0010	<0.0010	<0.010	<0.0050	**1.0**	<0.0050	**0.31**	<0.00020	<0.0050	**0.21**	<0.0010	--

Table F-2
Groundwater Sampling Results for the URS Monitoring Wells - Appendix IV Constituents

					Appendix IV Constituents													
				Constituent:	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Fluoride	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium	Total Radium
				Filtered:	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L
				URS BTV (applicable to downgradient wells)	*0.01*	*0.13*	*0.051*	*0.001*	*0.001*	*0.01*	*0.016*	*4*	*0.005*	*0.8*	*0.0002*	*0.011*	*0.45*	*0.002*	*5*
				URS GWPS (applicable to downgradient wells)	*0.01*	*0.13*	*2*	*0.004*	*0.005*	*0.1*	*0.016*	*4*	*0.015*	*0.8*	*0.002*	*0.1*	*0.45*	*0.002*	*5.4*
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**															
MW-70	URS	Downgradient Boundary	11/30/2017	FC-CCR-MW70-113017	--	--	--	--	--	--	--	**2.7**	--	--	--	--	--	--	--
MW-70	URS	Downgradient Boundary	3/16/2018	FC-CCR-MW70-31618	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.6**
MW-70	URS	Downgradient Boundary	5/31/2018	FC-CCR-MW-70-53118	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.8**
MW-70	URS	Downgradient Boundary	5/31/2018	FC-CCR-MW-70-53118	--	<0.010	**0.012**	--	--	--	<0.010	**1.8**	--	**0.30**	<0.00020	<0.010	**0.18**	<0.0020	--
MW-70	URS	Downgradient Boundary	11/2/2018	FC-CCR-MW70-11218	--	--	--	--	--	--	--	**2.7**	--	--	--	--	--	--	--
MW-70	URS	Downgradient Boundary	11/2/2018	FC-CCR-MW70-11218	--	**0.0043**	**0.010**	--	--	--	**0.0041**	--	--	**0.32**	--	**0.0064**	**0.19**	**0.00029**	**0.7**
MW-70	URS	Downgradient Boundary	3/18/2019	FC-CCR-MW70-031819	<0.0010	**0.0054**	**0.0099**	<0.0010	<0.00010	<0.0010	**0.0040**	**2.3**	<0.00050	**0.32**	<0.00020	**0.0057**	**0.24**	**0.00029**	--
MW-70	URS	Downgradient Boundary	3/18/2019	FC-CCR-MW70-031819	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.2**
MW-70	URS	Downgradient Boundary	5/7/2019	FC-CCR-MW70-5719	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.4**
MW-70	URS	Downgradient Boundary	12/3/2019	FC-CCR-MW70-120319	<0.0020	**0.0076**	**0.012**	<0.0010	<0.00020	<0.0040	**0.0036**	**2.1**	<0.0010	**0.33**	<0.00020	**0.0075**	**0.19**	**0.00028**	--
MW-70	URS	Downgradient Boundary	6/19/2020	FC-CCR-MW70-0620	<0.002	**0.0070**	**0.010**	--	<0.0002	<0.002	**0.0043**	**1.9**	<0.001	**0.71**	--	**0.0060**	**0.21**	**0.00023**	**1.9**
MW-70	URS	Downgradient Boundary	11/5/2020	FC-CCR-MW70-1120	<0.002	**0.0078**	**0.011**	<0.001	<0.0002U	**0.001 J**	**0.0035**	**2**	<0.001	**0.36**	<0.0002	**0.0054**	**0.21**	**0.00034**	**1.8**
MW-70	URS	Downgradient Boundary	4/21/2021	FC-CCR-MW70-0421	<0.004	<0.002	**0.012**	<0.001	<0.0004	<0.004	**0.0034**	**1.8**	<0.002	**0.34**	<0.0002	**0.0057**	**0.19**	**0.00024 J**	**3.1**
MW-70	URS	Downgradient Boundary	11/12/2021	FC-CCR-MW70-1121	<0.002	<0.001	**0.011**	<0.001	**0.0001 J**	<0.002	**0.0032**	**1.9**	<0.001	**0.36**	<0.0002 UJ	**0.0050**	**0.16**	**0.00020**	**1.5**
MW-70	URS	Downgradient Boundary	5/20/2022	FC-CCR-MW70-0522	<0.002	<0.001	**0.012**	<0.001	<0.0002	<0.002	**0.0027**	**1.6**	<0.001	**0.37**	<0.0002	**0.0051**	**0.17**	**0.00020**	**2.2**
MW-70	URS	Downgradient Boundary	11/13/2022	FC-CCR-MW70-1122	<0.001	**0.00089**	**0.012**	<0.001	**0.00029**	**0.0015**	**0.0030**	**1.4**	<0.0005	**0.32**	<0.0002	**0.0049**	**0.20**	**0.00019**	**2.4**
MW-70	URS	Downgradient Boundary	5/7/2023	FC-CCR-MW70-0523	<0.002	<0.005	**0.011**	<0.001	<0.001	<0.003	**0.0017**	<80	<0.001	**0.36**	<0.0002	**0.0044**	**0.14**	<0.001	**2.1**
MW-70	URS	Downgradient Boundary	11/06/2023	FC-CCR-MW70-1123	<0.001	**0.0027**	**0.013 J**	<0.001	**0.0001**	<0.004	**0.0021**	**1.5**	<0.0005	**0.34**	<0.0002	**0.0035**	**0.15**	**0.00039**	**1.4**
MW-83	URS	Downgradient	3/18/2019	FC-CCR-MW83-031819	<0.0010	**0.0023**	**0.034**	<0.0010	<0.00010	<0.0010	<0.00050	**1.2**	<0.00050	<0.20	<0.00020	**0.053**	**0.0012**	<0.00010	--
MW-83	URS	Downgradient	3/18/2019	FC-CCR-MW83-031819	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.7
MW-83	URS	Downgradient	5/6/2019	FC-CCR-MW83-5619	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.7
MW-83	URS	Downgradient	5/6/2019	*DUP* FC-CCR-FD01-5619	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.7
MW-83	URS	Downgradient	12/2/2019	FC-CCR-MW83-120319	<0.0020	<0.0010	**0.018**	<0.0010	<0.00020	<0.0040	**0.0023**	**1.8**	<0.0010	<0.20	<0.00020	**0.0096**	**0.0021**	<0.00020	--
MW-83	URS	Downgradient	6/19/2020	FC-CCR-MW83-0620	<0.004	**0.0021**	**0.012 J**	--	<0.0004	<0.004	<0.002	**1.0**	<0.001	**0.27**	--	**0.044**	<0.002	<0.0002	<0.8
MW-83	URS	Downgradient	6/19/2020	*DUP* FC-CCR-FD01-0620	<0.004	**0.0020**	**0.038 J**	--	<0.0004	<0.004	<0.002	**1.0**	<0.002	**0.30**	--	**0.046**	<0.002	<0.0004	<0.6
MW-83	URS	Downgradient	11/4/2020	FC-CCR-MW83-1120	<0.001U	**0.0029**	**0.017**	<0.001U	**0.0011**	**0.0020**	**0.068**	**0.98**	**0.0016**	**0.20**	<0.0002	**0.035**	<0.0025U	**0.00026**	<0.8
MW-83	URS	Downgradient	4/21/2021	FC-CCR-MW83-0421	<0.004	**0.0026**	**0.038**	<0.001	<0.0004	<0.004	<0.002	**0.55**	<0.002	**0.19**	<0.0002	**0.060**	**0.00042 J**	<0.0004	**0.5**
MW-83	URS	Downgradient	11/12/2021	FC-CCR-MW83-1121	**0.000096 J**	<0.001	**0.0095**	<0.001	**0.00006 J**	<0.002	**0.0015**	**1.8**	<0.001	**0.18**	<0.0002	**0.0081**	**0.002**	**0.000042 J**	**0.7**
MW-83	URS	Downgradient	5/21/2022	FC-CCR-MW83-0522	<0.002	<0.001	**0.009**	<0.001	<0.0002	<0.002	**0.0015**	**2.0**	<0.001	**0.18**	<0.0002	**0.0073**	**0.0012**	<0.0002	<0.7
MW-83	URS	Downgradient	5/21/2022	FC-CCR-SS05-0522	<0.01	<0.005	**0.00917 J**	<0.00125	<0.00125	<0.01	**0.00241**	**2.85 J/1.78**	<0.0025	**0.189 J**	<0.001	**0.00732**	**0.00101 J**	<0.0025	--
MW-83	URS	Downgradient	11/14/2022	FC-CCR-MW83-1122	<0.001	**0.00069**	**0.012**	<0.001	<0.0001	<0.001	**0.0017**	**2.0**	<0.0005	**0.16**	<0.0002	**0.0075**	**0.0022**	<0.0001	**1.0**
MW-83	URS	Downgradient	5/7/2023	FC-CCR-MW83-0523	<0.002	<0.005	**0.0085**	<0.001	<0.001	<0.003	**0.0016**	<8	<0.001	**0.19**	<0.0002	**0.0068**	<0.005	<0.001	<0.6
MW-83	URS	Downgradient	11/11/2023	FC-CCR-MW83-1123	<0.01	**0.0077**	**0.011**	<0.005	<0.001	<0.01	<0.005	**2.1**	<0.005	**0.24**	<0.0002	**0.0076**	<0.005	<0.001	<0.8
MW-84	URS	Downgradient	3/17/2019	FC-CCR-MW84-031719	<0.0010	**0.00065**	**0.020**	<0.0010	**0.00021**	**0.0010**	**0.0071**	<0.80	<0.00050	**0.20**	<0.00020	**0.0091**	**0.0036 J**	**0.00046**	--
MW-84	URS	Downgradient	3/17/2019	FC-CCR-MW84-031719	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.5**
MW-84	URS	Downgradient	5/7/2019	FC-CCR-MW84-5719	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.9**
MW-84	URS	Downgradient	12/3/2019	FC-CCR-MW84-120319	<0.0020	**0.0011**	**0.019**	<0.0010	**0.00030**	<0.0040	**0.0086**	<0.80	<0.0010	<0.20	<0.00020	**0.0051**	**0.0028**	**0.00036**	--
MW-84	URS	Downgradient	6/20/2020	FC-CCR-MW84-0620	<0.004	<0.002	**0.037 J**	--	<0.0004	<0.004	**0.0022**	**0.83**	<0.002	**0.61**	--	**0.0027**	**0.024**	**0.00067**	**1.0**
MW-84	URS	Downgradient	11/4/2020	FC-CCR-MW84-1120	<0.001U	**0.0033**	**0.019**	<0.001	**0.0015**	**0.00058 J**	**0.075**	**0.71**	**0.0024**	**0.35**	<0.0002	**0.0014**	**0.066**	**0.00028**	<0.8
MW-84	URS	Downgradient	4/21/2021	FC-CCR-MW84-0421	<0.0004U	**0.0010 J**	**0.017**	<0.001	**0.00016 J**	<0.004	**0.001 J**	**0.82**	<0.002	**0.34**	<0.0002	**0.0027**	**0.053**	**0.00062**	<0.7
MW-84	URS	Downgradient	11/12/2021	FC-CCR-MW84-1121	**0.00013 J**	<0.001	**0.019 J**	<0.001	**0.00031**	<0.002	**0.0079**	**0.12 J**	<0.001	**0.24**	<0.0002	**0.0014**	**0.030**	**0.00071 J**	**2.1**
MW-84	URS	Downgradient	11/12/2021	FC-CCR-FD01-1121	<0.002	<0.001	**0.017 J**	<0.001	**0.00027**	<0.002	**0.0078**	**0.12 J**	<0.001	**0.24**	<0.0002	**0.0012**	**0.032**	**0.00041 J**	**2.3**
MW-84	URS	Downgradient	5/21/2022	FC-CCR-MW84-0522	<0.002	<0.001	**0.015**	<0.001	**0.00022**	<0.002	**0.0068**	<0.8	<0.001	**0.25**	<0.0002	**0.0020**	**0.070**	**0.0010 J**	**0.5**
MW-84	URS	Downgradient	5/21/2022	*DUP* FC-CCR-FD01-0522	<0.002	<0.001	**0.016**	<0.001	<0.0002	<0.002	**0.0071**	<0.8	<0.001	**0.25**	<0.0002	**0.0020**	**0.074**	**0.00035 J**	**0.9**
MW-84	URS	Downgradient	11/14/2022	FC-CCR-MW84-1122	<0.001	**0.0010**	**0.018**	<0.001	**0.00019**	**0.0010**	**0.0080**	<0.8	<0.0005	**0.23**	<0.0002	**0.0012**	**0.12**	**0.00046**	**4.5 J**
MW-84	URS	Downgradient	11/14/2022	*DUP* FC-CCR-FD01-1122	<0.001	**0.00084**	**0.017**	<0.001	**0.00019**	<0.001	**0.0074**	<0.8	<0.0005	**0.22**	<0.0002	**0.0013**	**0.12**	**0.00044**	**2.6 J**
MW-84	URS	Downgradient	5/9/2023	FC-CCR-MW84-0523	<0.002	<0.005	**0.0094**	<0.001	<0.001	<0.003	**0.0016**	<2	<0.001	**0.31**	<0.0002	<0.002	**0.026**	<0.001	<0.6
MW-84	URS	Downgradient	5/9/2023	*DUP* FC-CCR-FD01-0523	<0.002	<0.005	**0.0099**	<0.001	<0.001	<0.003	**0.0019**	<2	<0.001	**0.31**	<0.0002	<0.002	**0.028**	<0.001	**1.0**
MW-84	URS	Downgradient	11/11/2023	FC-CCR-MW84-1123	<0.01	**0.0077**	**0.017**	<0.005	<0.001	<0.01	**0.0077**	<0.8	<0.005	**0.47**	<0.0002	<0.005	**0.067**	<0.001	**1.5 J**
MW-84	URS	Downgradient	11/11/2023	*DUP* FC-CCR-FD01-1123	<0.01	**0.0075**	**0.018**	<0.005	<0.001	<0.01	**0.0076**	<0.8	<0.005	**0.67**	<0.0002	<0.005	**0.067**	<0.001	**4.5 J**
MW-85	URS	Downgradient	3/20/2019	FC-CCR-MW85-032019	<0.0010	**0.0043**	**0.016**	<0.0010	<0.00010	**0.0028" J, UJ"**	<0.00050	<0.80	<0.00050	**0.25**	<0.00020	**0.0052**	**0.16**	**0.00023**	--
MW-85	URS	Downgradient	3/20/2019	FC-CCR-MW85-032019	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.8**
MW-85	URS	Downgradient	3/20/2019	*DUP* FC-CCR-FD01-032019	<0.0010	**0.0041**	**0.017**	<0.0010	<0.00010	<0.0010" J, UJ"	<0.00050	<0.80	<0.00050	**0.25**	<0.00020	**0.0045**	**0.16**	**0.00023**	--
MW-85	URS	Downgradient	3/20/2019	*DUP* FC-CCR-FD01-032019	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.7
MW-85	URS	Downgradient	5/7/2019	FC-CCR-MW85-5719	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.7
MW-85	URS	Downgradient	12/3/2019	FC-CCR-MW85-120319	<0.0020	**0.0061**	**0.017**	<0.0010	<0.00020	<0.0040	<0.0010	<0.80	<0.0010	**0.23**	<0.00020	**0.0021**	**0.13**	**0.00030**	--
MW-85	URS	Downgradient	6/19/2020	FC-CCR-MW85-0620	<0.004	**0.0079**	**0.015**	--	<0.0004	**0.0044**	<0.002	<0.8	<0.002	**0.44**	--	**0.049**	**0.22**	<0.0004	**0.5**
MW-85	URS	Downgradient	11/4/2020	FC-CC-MW85-1120	<0.002	**0.0097**	**0.016**	<0.001	<0.0002U	**0.003**	**0.00065 J**	**0.35 J**	<0.001	**0.29**	<0.0002	**0.049**	**0.22**	**0.0002**	**0.7**
MW-85	URS	Downgradient	4/21/2021	FC-CCR-MW85-0421	<0.004	**0.0021**	**0.022**	<0.001	<0.0004	**0.0049**	<0.002	**0.22 J**	<0.002	**0.25**	<0.0002	**0.0039**	**0.20**	**0.00022 J**	**1.9**
MW-85	URS	Downgradient	11/12/2021	FC-CCR-MW85-1121	<0.002	**0.00094 J**	**0.017**	<0.001	<0.0002	**0.017**	**0.00020 J**	**0.27 J**	<0.001	**0.36**	<0.0002	**0.0019**	**0.30**	**0.00029**	**1.9**
MW-85	URS	Downgradient	11/16/2022	FC-CCR-MW85-1122	<0.001	**0.0016**	**0.021**	<0.001	**0.0016**	**0.020**	**0.0042**	<4	<0.0005	**0.35**	**0.00029**	**0.0080**	**0.34**	**0.00069**	**1.9**
MW-85	URS	Downgradient	5/9/2023	FC-CCR-MW85-0523	<0.002	<0.005	**0.013**	<0.001	<0.001	**0.0050**	**0.0010**	<2	<0.001	**0.36**	<0.0002	**0.0071**	**0.19**	<0.001	**1.6**
MW-85	URS	Downgradient	11/11/2023	FC-CCR-MW85-1123	<0.01	**0.0084**	**0.017**	<0.005	<0.001	<0.01	<0.005	**1.9**	<0.005	**0.50**	<0.0002	**0.0057**	**0.37**	<0.001	**2.4**
MW-86	URS	Downgradient	3/18/2019	FC-CCR-MW86-031819	<0.0010	**0.0011**	**0.016**	<0.0010	**0.00012**	**0.0025**	**0.0043**	<0.80	<0.00050	**0.30**	<0.00020	**0.0028**	**0.0050**	**0.00057**	--
MW-86	URS	Downgradient	3/18/2019	FC-CCR-MW86-031819	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.7
MW-86	URS	Downgradient	5/7/2019	FC-CCR-MW86-5719	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.1**
MW-86	URS	Downgradient	5/7/2019	*DUP* FC-CCR-FD02-5719	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.1**
MW-86	URS	Downgradient	12/3/2019	FC-CCR-MW86-120319	<0.0020	**0.0014**	**0.018**	<0.0010	<0.00020	**0.035**	**0.0055**	<0.80	<0.0010	**0.31**	<0.00020	**0.0015**	**0.0015**	**0.00075**	--
MW-86	URS	Downgradient	6/19/2020	FC-CCR-MW86-0620	<0.004	<0.002	**0.012**	--	<0.0004	<0.004	**0.0056**	<0.8	<0.002	<2	--	<0.002	**0.0024**	**0.00072**	**1.8**

Table F-2
Groundwater Sampling Results for the URS Monitoring Wells - Appendix IV Constituents

					Appendix IV Constituents														
				Constituent:	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Fluoride	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium	Total Radium
				Filtered:	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L
				URS BTV (applicable to downgradient wells)	*0.01*	*0.13*	*0.051*	*0.001*	*0.001*	*0.01*	*0.016*	*4*	*0.005*	*0.8*	*0.0002*	*0.011*	*0.45*	*0.002*	*5*
				URS GWPS (applicable to downgradient wells)	*0.01*	*0.13*	*2*	*0.004*	*0.005*	*0.1*	*0.016*	*4*	*0.015*	*0.8*	*0.002*	*0.1*	*0.45*	*0.002*	*5.4*
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**															
MW-86	URS	Downgradient	6/20/2020	*DUP* FC-CCR-FD02-0620	<0.004	**0.0022**	**0.020 J**	--	<0.0004	<0.004	**0.0022**	**0.83**	<0.002	**0.46**	--	**0.0025**	**0.023**	**0.00069**	**0.9**
MW-86	URS	Downgradient	11/5/2020	FC-CCR-MW86-1120	<0.002	**0.0035**	**0.013**	<0.001	<0.0002U	**0.0018 J**	**0.0057**	**0.63 J**	<0.001	**0.33**	<0.0002	**0.0013**	**0.0053**	**0.00076**	**0.6**
MW-86	URS	Downgradient	4/21/2021	FC-CCR-MW86-0421	<0.0004U	**0.0012 J**	**0.015 J**	<0.001	**0.00028 J**	<0.004	**0.0052**	**0.58 J**	<0.002	**0.30**	<0.0002	**0.0022**	**0.0046 J**	**0.00080**	**1.6 J**
MW-86	URS	Downgradient	4/21/2021	*DUP* FC-CCR-FD02-0421	<0.004	**0.0017 J**	**0.014 J**	<0.001	**0.00016 J**	<0.004	**0.0049**	**0.6 J**	<0.002	**0.31**	<0.0002	**0.0018 J**	**0.0042 J**	**0.00070**	**3.9 J**
MW-86	URS	Downgradient	11/12/2021	FC-CCR-MW86-1121	**0.0001 J**	<0.001	**0.017**	<0.001	**0.00020**	**0.0014 J**	**0.0065**	**0.56 J**	**0.00056 J**	**0.35**	<0.0002	**0.0011**	**0.0013**	**0.00085**	**0.5**
MW-86	URS	Downgradient	11/12/2021	FC-CCR-FD02-1121	**0.00009 J**	<0.001	**0.017**	<0.001	**0.00017 J**	**0.0014 J**	**0.0063**	**0.55 J**	<0.001	**0.36**	<0.0002	**0.0011**	**0.0021**	**0.00083**	**1.9**
MW-86	URS	Downgradient	5/20/2022	FC-CCR-MW86-0522	<0.002	<0.001	**0.014**	<0.001	<0.0002	<0.002	**0.0052**	**0.92**	<0.001	**0.34**	<0.0002	**0.0016**	**0.0029 J**	**0.00064**	<0.7
MW-86	URS	Downgradient	5/20/2022	*DUP* FC-CCR-FD02-0522	<0.002	<0.001	**0.016**	<0.001	<0.0002	<0.002	**0.0051**	**0.94**	<0.001	**0.33**	<0.0002	**0.0016**	**0.0016 J**	**0.00062**	<0.7
MW-86	URS	Downgradient	11/13/2022	FC-CCR-MW86-1122	<0.001	**0.0012**	**0.014**	<0.001	<0.0001	<0.001	**0.0053**	<0.8	<0.0005	**0.29**	<0.0002	**0.0012**	**0.0026 J**	**0.00080**	**0.4 J**
MW-86	URS	Downgradient	11/13/2022	*DUP* FC-CCR-FD02-1122	<0.001	**0.0011**	**0.014**	<0.001	<0.0001	<0.001	**0.0052**	**1.0**	<0.0005	**0.30**	<0.0002	**0.0012**	**0.0032 J**	**0.00082**	**1.9 J**
MW-86	URS	Downgradient	5/7/2023	FC-CCR-MW86-0523	<0.002	<0.005	**0.010**	<0.001	<0.001	<0.003	**0.0013**	<80	<0.001	**0.25**	<0.0002	<0.002	**0.012**	<0.001	<0.6
MW-86	URS	Downgradient	5/7/2023	*DUP* FC-CCR-FD02-0523	<0.002	<0.005	**0.010**	<0.001	<0.001	<0.003	**0.0012**	<80	<0.001	**0.25**	<0.0002	<0.002	**0.012**	<0.001	<0.6
MW-86	URS	Downgradient	11/06/2023	FC-CCR-MW86-1123	<0.001	**0.0027**	**0.013 J**	<0.001	**0.00013**	<0.004	**0.003**	**0.95**	<0.0005	**0.25**	<0.0002	**0.0016**	**0.0078**	**0.0006**	**1.7**

Table F-2
Groundwater Sampling Results for the URS Monitoring Wells - Appendix IV Constituents

					Appendix IV Constituents														
				Constituent:	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Fluoride	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium	Total Radium
				Filtered:	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L
				URS BTV (applicable to downgradient wells)	*0.01*	*0.13*	*0.051*	*0.001*	*0.001*	*0.01*	*0.016*	*4*	*0.005*	*0.8*	*0.0002*	*0.011*	*0.45*	*0.002*	*5*
				URS GWPS (applicable to downgradient wells)	*0.01*	*0.13*	*2*	*0.004*	*0.005*	*0.1*	*0.016*	*4*	*0.015*	*0.8*	*0.002*	*0.1*	*0.45*	*0.002*	*5.4*
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**															
CM-01	URS	Extraction	11/4/2020	FC-CCR-CM01-1120	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CM-01	URS	Extraction	5/9/2023	FC-CCR-CM01-0523	<0.002	<0.005	**0.033**	<0.005	<0.001	<0.003	**0.0081**	<20	<0.001	**0.43**	<0.0002	**0.0063**	**0.034**	<0.001	**0.8**
CM-01	URS	Extraction	11/13/2023	FC-CCR-CM01-1123	<0.01	**0.0081**	**0.028**	<0.005	<0.001	<0.01	**0.0097**	**3.3**	<0.005	**0.75**	<0.0002	**0.0053**	**0.071**	<0.001	**1.0**
CM-02	URS	Extraction	11/4/2020	FC-CCR-CM02-1120	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CM-02	URS	Extraction	5/9/2023	FC-CCR-CM02-0523	<0.002	<0.005	**0.014**	<0.005	<0.001	<0.003	**0.0081**	**4.1**	<0.001	**0.38**	<0.0002	**0.0044**	**0.014**	**0.0011**	**2.3**
CM-02	URS	Extraction	11/13/2023	FC-CCR-CM02-1123	<0.01	**0.0081**	**0.016**	<0.005	<0.001	<0.01	**0.0084**	**4.2**	<0.005	**0.61**	<0.0002	<0.005	**0.013**	**0.0012**	**2.3**
CM-03	URS	Supplementary	11/4/2020	FC-CCR-CM03-1120	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CM-04	URS	Supplementary	11/4/2020	FC-CCR-CM04-1120	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:

BTV exceedances are shown in grey shaded cells. GWPS exceedence are shown in red text.

Abbreviations and Data Qualifiers:

< = less than
BTV = Background Threshold Value
CCR = Coal Combustion Residual
degrees C = degrees Celsius
GWPS = Groundwater Protection Standard
ID = Identification
J = The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
NJ = The analyte has been "tentatively identified" or "presumptively" as present and the associated numerical value is the estimated concentration in the sample.
mg/L = milligrams per liter
pCi/L = Picocuries per liter
su = standard units
UJ = The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

Table F-3
Groundwater Sampling Results for the URS Monitoring Wells - Additional Analyses

				Constituent:	Additional Analyses											
					Alkalinity Bicarbonate	Alkalinity Carbonate	Alkalinity Hydroxide	Alkalinity(as CaCO3)	Alkalinity, Phenolphthalein, as CaCO3	Magnesium	Nickel	Potassium	Radium 226	Radium 228	Sodium
				Filtered:	N	N	N	N	N	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L	pCi/L	mg/L
				URS BTV (applicable to downgradient wells)	--	--	--	--	--	--	--	--	--	--	--
				URS GWPS (applicable to downgradient wells)	--	--	--	--	--	--	--	--	--	--	--
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**											
MW-71	URS/CWTP	Background	3/5/2016	FC-CCR-MW-71-030516	**490**	<5.0	--	**490**	--	**1,600**	--	**23**	--	--	**880**
MW-71	URS/CWTP	Background	3/5/2016	FC-CCR-MW-71-030516	--	--	--	--	--	--	--	--	**0.656**	**1.2**	--
MW-71	URS/CWTP	Background	3/5/2016	*DUP* FC-CCR-FD-2-030516	**410**	<5.0	--	**410**	--	**1,700**	--	**24**	--	--	**940**
MW-71	URS/CWTP	Background	3/5/2016	*DUP* FC-CCR-FD-2-030516	--	--	--	--	--	--	--	--	**0.717**	**1.26**	--
MW-71	URS/CWTP	Background	4/26/2016	FC-CCR-MW-71-042616	--	--	--	--	--	--	--	--	**0.7**	**1.5**	--
MW-71	URS/CWTP	Background	6/6/2016	FC-CCR-MW71-616	--	--	--	--	--	--	--	--	**1.1**	**2.1**	--
MW-71	URS/CWTP	Background	6/6/2016	FC-CCR-MW71-616	--	--	--	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	8/21/2016	FC-CCR-MW71-816	--	--	--	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	8/21/2016	FC-CCR-MW71-816	--	--	--	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	8/21/2016	FC-CCR-MW71-816	--	--	--	--	--	--	--	--	**0.6**	**1.0**	--
MW-71	URS/CWTP	Background	8/21/2016	FC-CCR-MW101-816	--	--	--	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	8/21/2016	FC-CCR-MW101-816	--	--	--	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	8/21/2016	FC-CCR-MW101-816	--	--	--	--	--	--	--	--	**0.3**	**0.8**	--
MW-71	URS/CWTP	Background	9/12/2016	FC-CCR-MW71-916	--	--	--	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	9/12/2016	FC-CCR-MW71-916	--	--	--	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	9/12/2016	FC-CCR-MW71-916	--	--	--	--	--	--	--	--	**0.5**	**1.6**	--
MW-71	URS/CWTP	Background	10/20/2016	FC-CCR-MW71-1016	--	--	--	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	10/20/2016	FC-CCR-MW71-1016	--	--	--	--	--	--	--	--	**0.4**	<0.7	--
MW-71	URS/CWTP	Background	2/2/2017	FC-CCR-MW71-117	**550**	<6.0	<6.0	**550**	<6.0	**2,300**	--	**32**	--	--	**1,200**
MW-71	URS/CWTP	Background	2/2/2017	FC-CCR-MW71-117	--	--	--	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	2/2/2017	FC-CCR-MW71-117	--	--	--	--	--	--	--	--	<0.4	**1.9**	--
MW-71	URS/CWTP	Background	4/17/2017	FC-CCR-MW71-41717	**420**	<6.0	<6.0	**420**	<6.0	**1,800**	--	**25**	--	--	**980**
MW-71	URS/CWTP	Background	4/17/2017	FC-CCR-MW71-41717	--	--	--	--	--	--	--	--	<0.4	**1.2**	--
MW-71	URS/CWTP	Background	4/17/2017	FC-CCR-MW71-41717	--	--	--	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	5/2/2017	FC-CCR-MW71-5217	--	--	--	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	5/2/2017	FC-CCR-MW71-5217	--	--	--	--	--	--	--	--	**0.7**	<0.6	--
MW-71	URS/CWTP	Background	5/29/2017	FC-CCR-MW71-52917	--	--	--	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	5/29/2017	FC-CCR-MW71-52917	--	--	--	--	--	--	--	--	<0.4	<0.6	--
MW-71	URS/CWTP	Background	6/22/2017	FC-CCR-MW71-62217	**540**	<6.0	<6.0	**540**	<6.0	**2,400**	--	**31**	--	--	**1,200**
MW-71	URS/CWTP	Background	6/22/2017	FC-CCR-MW71-62217	--	--	--	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	6/22/2017	FC-CCR-MW71-62117	--	--	--	--	--	--	--	--	**1.2**	**1.5**	--
MW-71	URS/CWTP	Background	7/21/2017	FC-CCR-MW71-72117	**420**	<6.0	<6.0	**420**	<6.0	**1,800**	--	**27**	--	--	**1,100**
MW-71	URS/CWTP	Background	7/21/2017	FC-CCR-MW71-72117	--	--	--	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	7/21/2017	FC-CCR-MW71-72117	--	--	--	--	--	--	--	--	<0.5	<0.4	--
MW-71	URS/CWTP	Background	8/10/2017	FC-CCR-MW71-81017	**420**	<6.0	<6.0	**420**	<6.0	**2,000**	--	**27**	--	--	**1,100**
MW-71	URS/CWTP	Background	8/10/2017	FC-CCR-MW71-81017	--	--	--	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	8/10/2017	FC-CCR-MW71-81017	--	--	--	--	--	--	--	--	<0.4	<0.7	--
MW-71	URS/CWTP	Background	8/17/2017	FC-CCR-MW71-81717	--	--	--	--	--	--	--	--	<0.4	**2.0**	--
MW-71	URS/CWTP	Background	8/17/2017	FC-CCR-MW71-81717	**430**	<6.0	<6.0	**430**	<6.0	**1,800**	--	**30**	--	--	**1,100**
MW-71	URS/CWTP	Background	9/11/2017	FC-CCR-MW71-91117	**420**	<6.0	<6.0	**420**	<6.0	**1,800**	--	**26**	--	--	**1,100**
MW-71	URS/CWTP	Background	9/11/2017	FC-CCR-MW71-91117	--	--	--	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	9/11/2017	FC-CCR-MW71-91117	--	--	--	--	--	--	--	--	<0.4	<0.7	--
MW-71	URS/CWTP	Background	10/13/2017	FC-CCR-MW71-101317	--	--	--	--	--	--	--	--	**0.8**	**0.8**	--
MW-71	URS/CWTP	Background	10/13/2017	FC-CCR-MW71-101317	**430**	<6.0	<6.0	**430**	<6.0	**1,700**	--	**26**	--	--	**1,000**
MW-71	URS/CWTP	Background	11/30/2017	FC-CCR-MW71-113017	**430**	<6.0	<6.0	**430**	<6.0	**1,700**	--	**29**	--	--	**1,100**
MW-71	URS/CWTP	Background	3/16/2018	FC-CCR-MW71-31618	--	--	--	--	--	--	--	--	<1.0	**0.8**	--
MW-71	URS/CWTP	Background	6/2/2018	FC-CCR-MW-71-6218	--	--	--	--	--	--	--	--	**0.4**	**1.5**	--
MW-71	URS/CWTP	Background	6/2/2018	FC-CCR-MW-71-6218	**430**	<6.0	<6.0	**430**	<6.0	**2,000**	--	**27**	--	--	**1,000**
MW-71	URS/CWTP	Background	11/3/2018	FC-CCR-MW71-11318	--	--	--	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	11/3/2018	FC-CCR-MW71-11318	--	--	--	--	--	--	--	--	**1.2**	<0.7	--
MW-71	URS/CWTP	Background	11/3/2018	FC-CCR-MW71-11318	--	--	--	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	11/3/2018	*DUP* FC-CCR-FD01-11318	--	--	--	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	11/3/2018	*DUP* FC-CCR-FD01-11318	--	--	--	--	--	--	--	--	**1.8**	<0.7	--
MW-71	URS/CWTP	Background	3/18/2019	FC-CCR-MW71-031819	--	--	--	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	3/18/2019	FC-CCR-MW71-031819	--	--	--	--	--	--	--	--	<0.4	<0.7	--
MW-71	URS/CWTP	Background	5/6/2019	FC-CCR-MW71-5719	--	--	--	--	--	--	--	--	<0.4	**1.0**	--

Table F-3
Groundwater Sampling Results for the URS Monitoring Wells - Additional Analyses

				Constituent:	Additional Analyses										
					Alkalinity Bicarbonate	Alkalinity Carbonate	Alkalinity Hydroxide	Alkalinity(as CaCO3)	Alkalinity, Phenolphthalein, as CaCO3	Magnesium	Nickel	Potassium	Radium 226	Radium 228	Sodium
				Filtered:	N	N	N	N	N	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L	pCi/L	mg/L
				URS BTV (applicable to downgradient wells)	--	--	--	--	--	--	--	--	--	--	--
				URS GWPS (applicable to downgradient wells)	--	--	--	--	--	--	--	--	--	--	--
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**											
MW-71	URS/CWTP	Background	12/2/2019	FC-CCR-MW71-120219	--	--	--	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	6/20/2020	FC-CCR-MW71-0620	--	--	--	--	--	--	--	--	<0.4	<0.8	--
MW-71	URS/CWTP	Background	11/5/2020	FC-CCR-MW71-1120	--	--	--	--	--	--	--	--	<0.5	<0.8	--
MW-71	URS/CWTP	Background	4/22/2021	FC-CCR-MW71-0421	--	--	--	--	--	--	--	--	**0.7**	<0.7	--
MW-71	URS/CWTP	Background	11/12/2021	FC-CCR-MW71-1121	--	--	--	--	--	--	--	--	**0.5**	<0.6	--
MW-71	URS/CWTP	Background	5/21/2022	FC-CCR-MW71-0522	--	--	--	--	--	--	--	--	**0.4**	**0.8**	--
MW-71	URS/CWTP	Background	5/21/2022	FC-CCR-SS04-0522							--		--	--	
MW-71	URS/CWTP	Background	11/13/2022	FC-CCR-MW71-1122	--	--	--	--	--	--	--	--	<0.4	**1.0**	--
MW-71	URS/CWTP	Background	5/8/2023	FC-CCR-MW71-0523	--	--	--	--	--	--	**0.0035**		<0.4	**1.7**	--
MW-71	URS/CWTP	Background	6/27/2023	FC-CCR-MW71-0623	--	--	--	--	--	--	--	--	< 0.4	**2.2**	--
MW-71	URS/CWTP	Background	11/08/2023	FC-CCR-MW71-1123	--	--	--	--	--	--	--	--	**0.8**	**1.0**	--
MW-72	URS/CWTP	Background	3/7/2016	FC-CCR-MW72-030716	**620**	<5.0	--	**620**	--	**2,300**	--	**29**	--	--	**720**
MW-72	URS/CWTP	Background	3/7/2016	FC-CCR-MW72-030716	--	--	--	--	--	--	--	--	**1.06**	**1.85**	--
MW-72	URS/CWTP	Background	4/26/2016	FC-CCR-MW-72-042616	--	--	--	--	--	--	--	--	<0.4	<0.8	--
MW-72	URS/CWTP	Background	6/6/2016	FC-CCR-MW72-616	--	--	--	--	--	--	--	--	**0.5**	**0.8**	--
MW-72	URS/CWTP	Background	6/6/2016	FC-CCR-MW72-616	--	--	--	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	8/21/2016	FC-CCR-MW72-816	--	--	--	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	8/21/2016	FC-CCR-MW72-816	--	--	--	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	8/21/2016	FC-CCR-MW72-816	--	--	--	--	--	--	--	--	**0.5**	**2.7**	--
MW-72	URS/CWTP	Background	9/13/2016	FC-CCR-MW72-916	--	--	--	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	9/13/2016	FC-CCR-MW72-916	--	--	--	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	9/13/2016	FC-CCR-MW72-916	--	--	--	--	--	--	--	--	**0.5**	**3.4**	--
MW-72	URS/CWTP	Background	10/20/2016	FC-CCR-MW72-1016	--	--	--	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	10/20/2016	FC-CCR-MW72-1016	--	--	--	--	--	--	--	--	**0.7**	**3.5**	--
MW-72	URS/CWTP	Background	2/2/2017	FC-CCR-MW72-117	**560**	<6.0	<6.0	**560**	<6.0	**2,200**	--	**27**	--	--	**700**
MW-72	URS/CWTP	Background	2/2/2017	FC-CCR-MW72-117	--	--	--	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	2/2/2017	FC-CCR-MW72-117	--	--	--	--	--	--	--	--	**0.7**	**3.3**	--
MW-72	URS/CWTP	Background	2/2/2017	FC-CCR-MW101-117	**560**	<6.0	<6.0	**560**	<6.0	**2,300**	--	**28**	--	--	**710**
MW-72	URS/CWTP	Background	2/2/2017	FC-CCR-MW101-117	--	--	--	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	2/2/2017	FC-CCR-MW101-117	--	--	--	--	--	--	--	--	**0.6**	**0.6**	--
MW-72	URS/CWTP	Background	4/17/2017	FC-CCR-MW-72-41717	--	--	--	--	--	--	--	--	**0.6**	**2.9**	--
MW-72	URS/CWTP	Background	4/17/2017	FC-CCR-MW72-41717	**600**	<6.0	<6.0	**600**	<6.0	**2,400**	--	**29**	--	--	**760**
MW-72	URS/CWTP	Background	4/17/2017	FC-CCR-MW72-41717	--	--	--	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	5/2/2017	FC-CCR-MW-72-5217	--	--	--	--	--	--	--	--	**0.7**	**3.1**	--
MW-72	URS/CWTP	Background	5/2/2017	FC-CCR-MW72-5217	--	--	--	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	5/29/2017	FC-CCR-MW72-52917	--	--	--	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	6/22/2017	FC-CCR-MW72-62217	**600**	<6.0	<6.0	**600**	<6.0	**2,400**	--	**29**	--	--	**760**
MW-72	URS/CWTP	Background	6/22/2017	FC-CCR-MW72-62217	--	--	--	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	6/22/2017	FC-CCR-MW-72-62117	--	--	--	--	--	--	--	--	**0.6**	**2.2**	--
MW-72	URS/CWTP	Background	6/22/2017	*DUP* FC-CCR-FD02-62217	**610**	<6.0	<6.0	**610**	<6.0	**2,500**	--	**30**	--	--	**770**
MW-72	URS/CWTP	Background	6/22/2017	*DUP* FC-CCR-FD02-62217	--	--	--	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	6/22/2017	*DUP* FC-CCR-FD02-62117	--	--	--	--	--	--	--	--	**0.5**	**2.5**	--
MW-72	URS/CWTP	Background	7/21/2017	FC-CCR-MW72-72117	**600**	<6.0	<6.0	**600**	<6.0	**2,300**	--	**29**	--	--	**760**
MW-72	URS/CWTP	Background	7/21/2017	FC-CCR-MW72-72117	--	--	--	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	7/21/2017	FC-CCR-MW72-72117	--	--	--	--	--	--	--	--	<0.5	**1.7**	--
MW-72	URS/CWTP	Background	8/10/2017	FC-CCR-MW72-81017	**600**	<6.0	<6.0	**600**	<6.0	**2,500**	--	**30**	--	--	**780**
MW-72	URS/CWTP	Background	8/10/2017	FC-CCR-MW72-81017	--	--	--	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	8/10/2017	FC-CCR-MW72-81017	--	--	--	--	--	--	--	--	<0.4	**2.8**	--
MW-72	URS/CWTP	Background	8/10/2017	*DUP* FC-CCR-FD02-81017	**610**	<6.0	<6.0	**610**	<6.0	**2,600**	--	**30**	--	--	**800**
MW-72	URS/CWTP	Background	8/10/2017	*DUP* FC-CCR-FD02-81017	--	--	--	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	8/10/2017	*DUP* FC-CCR-FD02-81017	--	--	--	--	--	--	--	--	<0.4	**1.7**	--
MW-72	URS/CWTP	Background	8/17/2017	FC-CCR-MW72-81717	--	--	--	--	--	--	--	--	<0.4	**2.1**	--
MW-72	URS/CWTP	Background	8/17/2017	FC-CCR-MW72-81717	**610**	<6.0	<6.0	**610**	<6.0	**2,300**	--	**33**	--	--	**790**
MW-72	URS/CWTP	Background	8/17/2017	*DUP* FC-CCR-FD02-81717	--	--	--	--	--	--	--	--	**0.9**	**2.1**	--
MW-72	URS/CWTP	Background	8/17/2017	*DUP* FC-CCR-FD02-81717	**600**	<6.0	<6.0	**600**	<6.0	**2,400**	--	**32**	--	--	**770**
MW-72	URS/CWTP	Background	9/10/2017	FC-CCR-MW72-91017	**610**	<6.0	<6.0	**610**	<6.0	**2,300**	--	**28**	--	--	**730**

Table F-3
Groundwater Sampling Results for the URS Monitoring Wells - Additional Analyses

				Constituent:	Additional Analyses: Alkalinity Bicarbonate	Alkalinity Carbonate	Alkalinity Hydroxide	Alkalinity(as CaCO3)	Alkalinity, Phenolphthalein, as CaCO3	Magnesium	Nickel	Potassium	Radium 226	Radium 228	Sodium
				Filtered:	N	N	N	N	N	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L	pCi/L	mg/L
				URS BTV (applicable to downgradient wells)	--	--	--	--	--	--	--	--	--	--	--
				URS GWPS (applicable to downgradient wells)	--	--	--	--	--	--	--	--	--	--	--
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**											
MW-72	URS/CWTP	Background	9/10/2017	FC-CCR-MW72-91017	--	--	--	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	9/10/2017	FC-CCR-MW72-91017	--	--	--	--	--	--	--	--	<0.4	**2.3**	--
MW-72	URS/CWTP	Background	10/13/2017	FC-CCR-MW72-101317	--	--	--	--	--	--	--	--	**0.7**	**2.4**	--
MW-72	URS/CWTP	Background	10/13/2017	FC-CCR-MW72-101317	**610**	<6.0	<6.0	**610**	<6.0	**2,300**	--	**28**	--	--	**740**
MW-72	URS/CWTP	Background	11/29/2017	FC-CCR-MW72-112917	**590**	<6.0	<6.0	**590**	<6.0	**2,300**	--	**28**	--	--	**760**
MW-72	URS/CWTP	Background	3/16/2018	FC-CCR-MW72-31618	--	--	--	--	--	--	--	--	<1.0	**1.9**	--
MW-72	URS/CWTP	Background	6/2/2018	FC-CCR-MW-72-6218	--	--	--	--	--	--	--	--	<0.4	**2.8**	--
MW-72	URS/CWTP	Background	6/2/2018	FC-CCR-MW-72-6218	**610**	<6.0	<6.0	**610**	<6.0	**2,300**	--	**26**	--	--	**670**
MW-72	URS/CWTP	Background	11/3/2018	FC-CCR-MW72-11318	--	--	--	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	11/3/2018	FC-CCR-MW72-11318	--	--	--	--	--	--	--	--	**0.7**	**1.0**	--
MW-72	URS/CWTP	Background	11/3/2018	FC-CCR-MW72-11318	--	--	--	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	11/3/2018	*DUP* FC-CCR-FD02-11318	--	--	--	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	11/3/2018	*DUP* FC-CCR-FD02-11318	--	--	--	--	--	--	--	--	**0.5**	**1.5**	--
MW-72	URS/CWTP	Background	3/17/2019	FC-CCR-MW72-031719	--	--	--	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	3/17/2019	FC-CCR-MW72-031719	--	--	--	--	--	--	--	--	<0.4	**2.4**	--
MW-72	URS/CWTP	Background	5/7/2019	FC-CCR-MW72-5719	--	--	--	--	--	--	--	--	<0.4	**3.4**	--
MW-72	URS/CWTP	Background	12/2/2019	FC-CCR-MW72-120219	--	--	--	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	6/19/2020	FC-CCR-MW72-0620	--	--	--	--	--	--	--	--	**0.9**	**2.6**	--
MW-72	URS/CWTP	Background	11/5/2020	FC-CCR-MW72-1120	--	--	--	--	--	--	--	--	**0.7**	**1.7**	--
MW-72	URS/CWTP	Background	4/22/2021	FC-CCR-MW72-0421	--	--	--	--	--	--	--	--	**0.7**	**1.5**	--
MW-72	URS/CWTP	Background	11/12/2021	FC-CCR-MW72-1121	--	--	--	--	--	--	--	--	**1.3**	**2.4**	--
MW-72	URS/CWTP	Background	5/22/2022	FC-CCR-MW72-0522	--	--	--	--	--	--	--	--	<0.4	**1.2**	--
MW-72	URS/CWTP	Background	11/13/2022	FC-CCR-MW72-1122	--	--	--	--	--	--	--	--	<0.4	**1.9**	--
MW-72	URS/CWTP	Background	5/8/2023	FC-CCR-MW72-0523	--	--	--	--	--	--	**0.0047**		<0.4	**4**	--
MW-72	URS/CWTP	Background	6/27/2023	FC-CCR-MW72-0623	--	--	--	--	--	--	--	--	**0.5**	**1.4**	--
MW-72	URS/CWTP	Background	11/08/2023	FC-CCR-MW72-1123	--	--	--	--	--	--	--	--	**0.6**	**4.5**	--
MW-73	URS/CWTP	Background	2/2/2017	FC-CCR-MW73-117	**560**	<6.0	<6.0	**560**	<6.0	**580**	--	**28**	--	--	**1,100**
MW-73	URS/CWTP	Background	2/2/2017	FC-CCR-MW73-117	--	--	--	--	--	--	--	--	--	--	--
MW-73	URS/CWTP	Background	2/2/2017	FC-CCR-MW73-117	--	--	--	--	--	--	--	--	**1.0**	**2.2**	--
MW-73	URS/CWTP	Background	4/18/2017	FC-CCR-MW73-41817	**650**	<6.0	<6.0	**650**	<6.0	**630**	--	**29**	--	--	**1,200**
MW-73	URS/CWTP	Background	4/18/2017	FC-CCR-MW73-41817	--	--	--	--	--	--	--	--	**0.7**	**1.1**	--
MW-73	URS/CWTP	Background	4/18/2017	FC-CCR-MW73-41817	--	--	--	--	--	--	--	--	--	--	--
MW-73	URS/CWTP	Background	5/2/2017	FC-CCR-MW73-5217	--	--	--	--	--	--	--	--	--	--	--
MW-73	URS/CWTP	Background	5/2/2017	FC-CCR-MW73-5217	--	--	--	--	--	--	--	--	**0.5**	**1.8**	--
MW-73	URS/CWTP	Background	5/29/2017	FC-CCR-MW73-52917	--	--	--	--	--	--	--	--	--	--	--
MW-73	URS/CWTP	Background	5/29/2017	FC-CCR-MW73-52917	--	--	--	--	--	--	--	--	<0.4	<0.6	--
MW-73	URS/CWTP	Background	6/22/2017	FC-CCR-MW73-62217	**780**	<6.0	<6.0	**780**	<6.0	**750**	--	**34**	--	--	**1,600**
MW-73	URS/CWTP	Background	6/22/2017	FC-CCR-MW73-62217	--	--	--	--	--	--	--	--	--	--	--
MW-73	URS/CWTP	Background	6/22/2017	FC-CCR-MW73-62117	--	--	--	--	--	--	--	--	**1.5**	**1.6**	--
MW-73	URS/CWTP	Background	7/22/2017	FC-CCR-MW73-72217	**800**	<6.0	<6.0	**800**	<6.0	**840**	--	**37**	--	--	**1,800**
MW-73	URS/CWTP	Background	7/22/2017	FC-CCR-MW73-72217	--	--	--	--	--	--	--	--	--	--	--
MW-73	URS/CWTP	Background	7/22/2017	FC-CCR-MW73-72217	--	--	--	--	--	--	--	--	<0.5	**2.0**	--
MW-73	URS/CWTP	Background	7/22/2017	*DUP* FC-CCR-FD02-72217	**800**	<6.0	<6.0	**800**	<6.0	**850**	--	**37**	--	--	**1,800**
MW-73	URS/CWTP	Background	7/22/2017	*DUP* FC-CCR-FD02-72217	--	--	--	--	--	--	--	--	**0.7**	**1.1**	--
MW-73	URS/CWTP	Background	8/10/2017	FC-CCR-MW73-81017	**800**	<6.0	<6.0	**800**	<6.0	**820**	--	**36**	--	--	**1,800**
MW-73	URS/CWTP	Background	8/10/2017	FC-CCR-MW73-81017	--	--	--	--	--	--	--	--	--	--	--
MW-73	URS/CWTP	Background	8/10/2017	FC-CCR-MW73-81017	--	--	--	--	--	--	--	--	<0.4	**1.1**	--
MW-73	URS/CWTP	Background	8/17/2017	FC-CCR-MW73-81717	--	--	--	--	--	--	--	--	<0.4	**1.5**	--
MW-73	URS/CWTP	Background	8/17/2017	FC-CCR-MW73-81717	**800**	<6.0	<6.0	**800**	<6.0	**860**	--	**41**	--	--	**1,800**
MW-73	URS/CWTP	Background	9/10/2017	FC-CCR-MW73-91017	**730**	<6.0	<6.0	**730**	<6.0	**680**	--	**30**	--	--	**1,300**
MW-73	URS/CWTP	Background	9/10/2017	FC-CCR-MW73-91017	--	--	--	--	--	--	--	--	--	--	--
MW-73	URS/CWTP	Background	9/10/2017	FC-CCR-MW73-91017	--	--	--	--	--	--	--	--	**1.2**	**1.3**	--
MW-73	URS/CWTP	Background	10/12/2017	FC-CCR-MW73-101217	--	--	--	--	--	--	--	--	<0.3	**0.9**	--
MW-73	URS/CWTP	Background	10/12/2017	FC-CCR-MW73-101217	**480**	<6.0	<6.0	**480**	<6.0	**440**	--	**20**	--	--	**600**
MW-73	URS/CWTP	Background	10/12/2017	*DUP* FC-CCR-FD01-101217	--	--	--	--	--	--	--	--	**0.7**	**1.2**	--
MW-73	URS/CWTP	Background	10/12/2017	*DUP* FC-CCR-FD01-101217	**480**	<6.0	<6.0	**480**	<6.0	**430**	--	**20**	--	--	**590**

Table F-3
Groundwater Sampling Results for the URS Monitoring Wells - Additional Analyses

					Additional Analyses											
				Constituent:	Alkalinity Bicarbonate	Alkalinity Carbonate	Alkalinity Hydroxide	Alkalinity(as CaCO3)	Alkalinity, Phenolphthalein, as CaCO3	Magnesium	Nickel	Potassium	Radium 226	Radium 228	Sodium
				Filtered:	N	N	N	N	N	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L	pCi/L	mg/L
				URS BTV (applicable to downgradient wells)	--	--	--	--	--	--	--	--	--	--	--
				URS GWPS (applicable to downgradient wells)	--	--	--	--	--	--	--	--	--	--	--
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**											
MW-73	URS/CWTP	Background	11/29/2017	FC-CCR-MW73-112917	**650**	<6.0	<6.0	**650**	<6.0	**640**	--	**32**	--	--	**1,200**
MW-73	URS/CWTP	Background	3/16/2018	FC-CCR-MW73-31618	--	--	--	--	--	--	--	--	<1.0	**2.6**	--
MW-73	URS/CWTP	Background	6/2/2018	FC-CCR-MW-73-6218	--	--	--	--	--	--	--	--	**0.8**	**2.0**	--
MW-73	URS/CWTP	Background	6/2/2018	FC-CCR-MW-73-6218	**800**	<6.0	<6.0	**800**	<6.0	**710**	--	**34**	--	--	**1,600**
MW-73	URS/CWTP	Background	11/3/2018	FC-CCR-MW73-11318	--	--	--	--	--	--	--	--	--	--	--
MW-73	URS/CWTP	Background	11/3/2018	FC-CCR-MW73-11318	--	--	--	--	--	--	--	--	**1.5**	**1.4**	--
MW-73	URS/CWTP	Background	3/18/2019	FC-CCR-MW73-031819	--	--	--	--	--	--	--	--	--	--	--
MW-73	URS/CWTP	Background	3/18/2019	FC-CCR-MW73-031819	--	--	--	--	--	--	--	--	<0.4	**1.6**	--
MW-73	URS/CWTP	Background	5/6/2019	FC-CCR-MW73-5619	--	--	--	--	--	--	--	--	<0.4	**1.7**	--
MW-73	URS/CWTP	Background	12/2/2019	FC-CCR-MW73-120219	--	--	--	--	--	--	--	--	--	--	--
MW-73	URS/CWTP	Background	12/2/2019	*DUP* FC-CCR-FD01-120219	--	--	--	--	--	--	--	--	--	--	--
MW-73	URS/CWTP	Background	6/20/2020	FC-CCR-MW73-0620	--	--	--	--	--	--	--	--	**1.5**	**1.9**	--
MW-73	URS/CWTP	Background	11/5/2020	FC-CCR-MW73-1120	--	--	--	--	--	--	--	--	**0.6**	**2.2**	--
MW-73	URS/CWTP	Background	4/22/2021	FC-CCR-MW73-0421	--	--	--	--	--	--	--	--	**0.7**	**1.1**	--
MW-73	URS/CWTP	Background	11/13/2021	FC-CCR-MW73-1121	--	--	--	--	--	--	--	--	**1.0**	**1.8**	--
MW-73	URS/CWTP	Background	5/22/2022	FC-CCR-MW73-0522	--	--	--	--	--	--	--	--	<0.4	**1.4**	--
MW-73	URS/CWTP	Background	11/14/2022	FC-CCR-MW73-1122	--	--	--	--	--	--	--	--	**2.7**	**2.2**	--
MW-73	URS/CWTP	Background	5/7/2023	FC-CCR-MW73-0523	--	--	--	--	--	--	**0.013**		<0.49	**0.8**	--
MW-73	URS/CWTP	Background	6/27/2023	FC-CCR-MW73-0623	--	--	--	--	--	--	--	--	**1.5**	**1.7**	--
MW-73	URS/CWTP	Background	11/08/2023	FC-CCR-MW73-1123	--	--	--	--	--	--	--	--	<0.44	**2.3**	--
MW-66	URS	Downgradient Boundary	11/5/2015	FC-CCR-MW66-110515	**250**	<5.0	--	**250**	--	**1,700**	--	**29**	--	--	**310**
MW-66	URS	Downgradient Boundary	11/5/2015	FC-CCR-MW66-110515	--	--	--	--	--	--	--	--	**0.722**	**1.06**	--
MW-66	URS	Downgradient Boundary	4/27/2016	FC-CCR-MW-66-042716	--	--	--	--	--	--	--	--	**0.6**	<0.8	--
MW-66	URS	Downgradient Boundary	6/5/2016	FC-CCR-MW66-616	--	--	--	--	--	--	--	--	**0.6**	**1.1**	--
MW-66	URS	Downgradient Boundary	6/5/2016	FC-CCR-MW66-616	--	--	--	--	--	--	--	--	--	--	--
MW-66	URS	Downgradient Boundary	8/20/2016	FC-CCR-MW66-816	--	--	--	--	--	--	--	--	--	--	--
MW-66	URS	Downgradient Boundary	8/20/2016	FC-CCR-MW66-816	--	--	--	--	--	--	--	--	--	--	--
MW-66	URS	Downgradient Boundary	8/20/2016	FC-CCR-MW66-816	--	--	--	--	--	--	--	--	**0.4**	<0.7	--
MW-66	URS	Downgradient Boundary	9/12/2016	FC-CCR-MW66-916	--	--	--	--	--	--	--	--	--	--	--
MW-66	URS	Downgradient Boundary	9/12/2016	FC-CCR-MW66-916	--	--	--	--	--	--	--	--	--	--	--
MW-66	URS	Downgradient Boundary	9/12/2016	FC-CCR-MW66-916	--	--	--	--	--	--	--	--	**0.9**	**2.0**	--
MW-66	URS	Downgradient Boundary	10/19/2016	FC-CCR-MW66-1016	--	--	--	--	--	--	--	--	--	--	--
MW-66	URS	Downgradient Boundary	10/19/2016	FC-CCR-MW66-1016	--	--	--	--	--	--	--	--	**0.9**	**2.1**	--
MW-66	URS	Downgradient Boundary	2/1/2017	FC-CCR-MW66-117	**240**	<6.0	<6.0	**240**	<6.0	**2,300**	--	**40**	--	--	**500**
MW-66	URS	Downgradient Boundary	2/1/2017	FC-CCR-MW66-117	--	--	--	--	--	--	--	--	--	--	--
MW-66	URS	Downgradient Boundary	2/1/2017	FC-CCR-MW66-117	--	--	--	--	--	--	--	--	**1.2**	**2.8**	--
MW-66	URS	Downgradient Boundary	4/16/2017	FC-CCR-MW66-41617	**260**	<6.0	<6.0	**260**	<6.0	**2,700**	--	**42**	--	--	**590**
MW-66	URS	Downgradient Boundary	4/16/2017	FC-CCR-MW66-41617	--	--	--	--	--	--	--	--	**1.4**	**2.4**	--
MW-66	URS	Downgradient Boundary	4/16/2017	FC-CCR-MW66-41617	--	--	--	--	--	--	--	--	--	--	--
MW-66	URS	Downgradient Boundary	5/1/2017	FC-CCR-MW66-5117	--	--	--	--	--	--	--	--	--	--	--
MW-66	URS	Downgradient Boundary	5/1/2017	FC-CCR-MW66-5117	--	--	--	--	--	--	--	--	**1.3**	**1.6**	--
MW-66	URS	Downgradient Boundary	5/29/2017	FC-CCR-MW66-52917	--	--	--	--	--	--	--	--	--	--	--
MW-66	URS	Downgradient Boundary	5/29/2017	FC-CCR-MW66-52917	--	--	--	--	--	--	--	--	**0.8**	**2.0**	--
MW-66	URS	Downgradient Boundary	6/21/2017	FC-CCR-MW66-62117	**270**	<6.0	<6.0	**270**	<6.0	**2,700**	--	**43**	--	--	**600**
MW-66	URS	Downgradient Boundary	6/21/2017	FC-CCR-MW66-62117	--	--	--	--	--	--	--	--	--	--	--
MW-66	URS	Downgradient Boundary	6/21/2017	FC-CCR-MW66-62117	--	--	--	--	--	--	--	--	**1.2**	**2.5**	--
MW-66	URS	Downgradient Boundary	7/21/2017	FC-CCR-MW66-72117	**260**	<6.0	<6.0	**260**	<6.0	**2,600**	--	**44**	--	--	**620**
MW-66	URS	Downgradient Boundary	7/21/2017	FC-CCR-MW66-72117	--	--	--	--	--	--	--	--	--	--	--
MW-66	URS	Downgradient Boundary	7/21/2017	FC-CCR-MW66-72117	--	--	--	--	--	--	--	--	<0.5	**1.2**	--
MW-66	URS	Downgradient Boundary	8/9/2017	FC-CCR-MW66-8917	**260**	<6.0	<6.0	**260**	<6.0	**2,700**	--	**44**	--	--	**640**
MW-66	URS	Downgradient Boundary	8/9/2017	FC-CCR-MW66-8917	--	--	--	--	--	--	--	--	--	--	--
MW-66	URS	Downgradient Boundary	8/9/2017	FC-CCR-MW66-8917	--	--	--	--	--	--	--	--	**0.6**	**2.6**	--
MW-66	URS	Downgradient Boundary	8/16/2017	FC-CCR-MW66-81617	--	--	--	--	--	--	--	--	**0.6**	**1.9**	--
MW-66	URS	Downgradient Boundary	8/16/2017	FC-CCR-MW66-81617	**260**	<6.0	<6.0	**260**	<6.0	**2,500**	--	**50**	--	--	**690**
MW-66	URS	Downgradient Boundary	9/9/2017	FC-CCR-MW66-9917	**260**	<6.0	<6.0	**260**	<6.0	**2,600**	--	**43**	--	--	**640**
MW-66	URS	Downgradient Boundary	9/9/2017	FC-CCR-MW66-9917	--	--	--	--	--	--	--	--	--	--	--

Table F-3
Groundwater Sampling Results for the URS Monitoring Wells - Additional Analyses

					Additional Analyses											
				Constituent:	Alkalinity Bicarbonate	Alkalinity Carbonate	Alkalinity Hydroxide	Alkalinity(as CaCO3)	Alkalinity, Phenolphthalein, as CaCO3	Magnesium	Nickel	Potassium	Radium 226	Radium 228	Sodium
				Filtered:	N	N	N	N	N	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L	pCi/L	mg/L
				URS BTV (applicable to downgradient wells)	--	--	--	--	--	--	--	--	--	--	--
				URS GWPS (applicable to downgradient wells)	--	--	--	--	--	--	--	--	--	--	--
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**											
MW-66	URS	Downgradient Boundary	9/9/2017	FC-CCR-MW66-9917	--	--	--	--	--	--	--	--	**0.9**	**1.6**	--
MW-66	URS	Downgradient Boundary	10/13/2017	FC-CCR-MW66-101317	--	--	--	--	--	--	--	--	**1.9**	**3.2**	--
MW-66	URS	Downgradient Boundary	10/13/2017	FC-CCR-MW66-101317	**270**	<6.0	<6.0	**270**	<6.0	**2,600**	--	**45**	--	--	**700**
MW-66	URS	Downgradient Boundary	11/30/2017	FC-CCR-MW66-113017	**270**	<6.0	<6.0	**270**	<6.0	**2,900**	--	**48**	--	--	**770**
MW-66	URS	Downgradient Boundary	3/16/2018	FC-CCR-MW66-31618	--	--	--	--	--	--	--	--	<1.5	<1.5	--
MW-66	URS	Downgradient Boundary	3/16/2018	*DUP* FC-CCR-FD01-31618	--	--	--	--	--	--	--	--	**1.4**	**2.6**	--
MW-66	URS	Downgradient Boundary	5/31/2018	FC-CCR-MW-66-53118	--	--	--	--	--	--	--	--	**1.1**	**1.0**	--
MW-66	URS	Downgradient Boundary	5/31/2018	FC-CCR-MW-66-53118	**300**	<6.0	<6.0	**300**	<6.0	**2,800**	--	**39**	--	--	**630**
MW-66	URS	Downgradient Boundary	11/2/2018	FC-CCR-MW66-11218	--	--	--	--	--	--	--	--	--	--	--
MW-66	URS	Downgradient Boundary	11/2/2018	FC-CCR-MW66-11218	--	--	--	--	--	--	--	--	**2.0**	**0.9**	--
MW-66	URS	Downgradient Boundary	3/18/2019	FC-CCR-MW66-031819	--	--	--	--	--	--	--	--	--	--	--
MW-66	URS	Downgradient Boundary	3/18/2019	FC-CCR-MW66-031819	--	--	--	--	--	--	--	--	<0.5	**1.1**	--
MW-66	URS	Downgradient Boundary	5/7/2019	FC-CCR-MW66-5719	--	--	--	--	--	--	--	--	<0.4	**2.5**	--
MW-66	URS	Downgradient Boundary	12/3/2019	FC-CCR-MW66-120319	--	--	--	--	--	--	--	--	--	--	--
MW-66	URS	Downgradient Boundary	12/3/2019	*DUP* FC-CCR-FD02-120319	--	--	--	--	--	--	--	--	--	--	--
MW-66	URS	Downgradient Boundary	6/18/2020	FC-CCR-MW66-0620	--	--	--	--	--	--	--	--	**1.5**	<0.8	--
MW-66	URS	Downgradient Boundary	11/5/2020	FC-CCR-MW66-1120	--	--	--	--	--	--	--	--	**1.2**	**1.2**	--
MW-66	URS	Downgradient Boundary	11/5/2020	*DUP* FC-CCR-FD02-1120	--	--	--	--	--	--	--	--	**0.9**	**1.1**	--
MW-66	URS	Downgradient Boundary	4/21/2021	FC-CCR-MW66-0421	--	--	--	--	--	--	--	--	**0.9**	**1.6**	--
MW-66	URS	Downgradient Boundary	11/12/2021	FC-CCR-MW66-1121	--	--	--	--	--	--	--	--	**1.1**	**0.9**	--
MW-66	URS	Downgradient Boundary	5/20/2022	FC-CCR-MW66-05222	--	--	--	--	--	--	--	--	**1.0**	<0.7	--
MW-66	URS	Downgradient Boundary	11/13/2022	FC-CCR-MW66-1122	--	--	--	--	--	--	--	--	**0.5**	**2.7**	--
MW-66	URS	Downgradient Boundary	5/7/2023	FC-CCR-MW66-0523	--	--	--	--	--	--	**0.020**		**0.4**	**2.1**	--
MW-66	URS	Downgradient Boundary	11/06/2023	FC-CCR-MW66-1123	--	--	--	--	--	--	--	--	**0.7**	**1.3**	--
MW-67	URS	Downgradient Boundary	11/4/2015	FC-CCR-MW67-110415	**260**	<5.0	--	**260**	--	**1,400**	--	**23**	--	--	**270**
MW-67	URS	Downgradient Boundary	11/4/2015	FC-CCR-MW67-110415	--	--	--	--	--	--	--	--	**0.846**	**1.83**	--
MW-67	URS	Downgradient Boundary	4/27/2016	FC-CCR-MW-67-042716	--	--	--	--	--	--	--	--	**0.4**	**1.7**	--
MW-67	URS	Downgradient Boundary	4/27/2016	FC-CCR-DUP2-042716	--	--	--	--	--	--	--	--	--	--	--
MW-67	URS	Downgradient Boundary	6/6/2016	FC-CCR-MW67-616	--	--	--	--	--	--	--	--	**0.8**	**1.2**	--
MW-67	URS	Downgradient Boundary	6/6/2016	FC-CCR-MW67-616	--	--	--	--	--	--	--	--	--	--	--
MW-67	URS	Downgradient Boundary	8/20/2016	FC-CCR-MW67-816	--	--	--	--	--	--	--	--	--	--	--
MW-67	URS	Downgradient Boundary	8/20/2016	FC-CCR-MW67-816	--	--	--	--	--	--	--	--	--	--	--
MW-67	URS	Downgradient Boundary	8/20/2016	FC-CCR-MW67-816	--	--	--	--	--	--	--	--	**0.7**	**1.6**	--
MW-67	URS	Downgradient Boundary	8/20/2016	FC-CCR-MW100-816	--	--	--	--	--	--	--	--	--	--	--
MW-67	URS	Downgradient Boundary	8/20/2016	FC-CCR-MW100-816	--	--	--	--	--	--	--	--	--	--	--
MW-67	URS	Downgradient Boundary	8/20/2016	FC-CCR-MW100-816	--	--	--	--	--	--	--	--	**0.9**	**2.1**	--
MW-67	URS	Downgradient Boundary	9/13/2016	FC-CCR-MW67-916	--	--	--	--	--	--	--	--	--	--	--
MW-67	URS	Downgradient Boundary	9/13/2016	FC-CCR-MW67-916	--	--	--	--	--	--	--	--	--	--	--
MW-67	URS	Downgradient Boundary	9/13/2016	FC-CCR-MW67-916	--	--	--	--	--	--	--	--	<0.4	**2.1**	--
MW-67	URS	Downgradient Boundary	10/20/2016	FC-CCR-MW67-1016	--	--	--	--	--	--	--	--	--	--	--
MW-67	URS	Downgradient Boundary	10/20/2016	FC-CCR-MW67-1016	--	--	--	--	--	--	--	--	**1.2**	**2.9**	--
MW-67	URS	Downgradient Boundary	2/1/2017	FC-CCR-MW67-117	**350**	<6.0	<6.0	**350**	<6.0	**2,300**	--	**30**	--	--	**470**
MW-67	URS	Downgradient Boundary	2/1/2017	FC-CCR-MW67-117	--	--	--	--	--	--	--	--	--	--	--
MW-67	URS	Downgradient Boundary	2/1/2017	FC-CCR-MW67-117	--	--	--	--	--	--	--	--	<0.5	**3.0**	--
MW-67	URS	Downgradient Boundary	4/17/2017	FC-CCR-MW67-41717	**390**	<6.0	<6.0	**390**	<6.0	**2,600**	--	**33**	--	--	**570**
MW-67	URS	Downgradient Boundary	4/17/2017	FC-CCR-MW67-41717	--	--	--	--	--	--	--	--	**1.0**	**2.2**	--
MW-67	URS	Downgradient Boundary	4/17/2017	FC-CCR-MW67-41717	--	--	--	--	--	--	--	--	--	--	--
MW-67	URS	Downgradient Boundary	5/1/2017	FC-CCR-MW67-5117	--	--	--	--	--	--	--	--	**0.6**	**2.7**	--
MW-67	URS	Downgradient Boundary	5/2/2017	FC-CCR-MW67-5217	--	--	--	--	--	--	--	--	--	--	--
MW-67	URS	Downgradient Boundary	5/29/2017	FC-CCR-MW67-52917	--	--	--	--	--	--	--	--	--	--	--
MW-67	URS	Downgradient Boundary	5/29/2017	FC-CCR-MW67-52917	--	--	--	--	--	--	--	--	**0.8**	**1.4**	--
MW-67	URS	Downgradient Boundary	6/21/2017	FC-CCR-MW67-62117	**330**	<6.0	<6.0	**330**	<6.0	**2,700**	--	**39**	--	--	**620**
MW-67	URS	Downgradient Boundary	6/21/2017	FC-CCR-MW67-62117	--	--	--	--	--	--	--	--	--	--	--
MW-67	URS	Downgradient Boundary	6/21/2017	FC-CCR-MW67-62117	--	--	--	--	--	--	--	--	**1.3**	**2.9**	--
MW-67	URS	Downgradient Boundary	7/21/2017	FC-CCR-MW67-72117	**370**	<6.0	<6.0	**370**	<6.0	**2,800**	--	**39**	--	--	**690**
MW-67	URS	Downgradient Boundary	7/21/2017	FC-CCR-MW67-72117	--	--	--	--	--	--	--	--	--	--	--

Table F-3
Groundwater Sampling Results for the URS Monitoring Wells - Additional Analyses

					Additional Analyses											
				Constituent:	Alkalinity Bicarbonate	Alkalinity Carbonate	Alkalinity Hydroxide	Alkalinity(as CaCO3)	Alkalinity, Phenolphthalein, as CaCO3	Magnesium	Nickel	Potassium	Radium 226	Radium 228	Sodium
				Filtered:	N	N	N	N	N	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L	pCi/L	mg/L
				URS BTV (applicable to downgradient wells)	--	--	--	--	--	--	--	--	--	--	--
				URS GWPS (applicable to downgradient wells)	--	--	--	--	--	--	--	--	--	--	--
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**											
MW-67	URS	Downgradient Boundary	7/21/2017	FC-CCR-MW67-72117	--	--	--	--	--	--	--	--	<0.5	<2.0	--
MW-67	URS	Downgradient Boundary	8/9/2017	FC-CCR-MW67-8917	**320**	<6.0	<6.0	**320**	<6.0	**3,000**	--	**42**	--	--	**720**
MW-67	URS	Downgradient Boundary	8/9/2017	FC-CCR-MW67-8917	--	--	--	--	--	--	--	--	--	--	--
MW-67	URS	Downgradient Boundary	8/9/2017	FC-CCR-MW67-8917	--	--	--	--	--	--	--	--	<0.4	**1.4**	--
MW-67	URS	Downgradient Boundary	8/16/2017	FC-CCR-MW67-81617	--	--	--	--	--	--	--	--	**0.5**	**2.1**	--
MW-67	URS	Downgradient Boundary	8/16/2017	FC-CCR-MW67-81617	**310**	<6.0	<6.0	**310**	<6.0	**2,900**	--	**52**	--	--	**800**
MW-67	URS	Downgradient Boundary	9/10/2017	FC-CCR-MW67-91017	**340**	<6.0	<6.0	**340**	<6.0	**3,000**	--	**41**	--	--	**720**
MW-67	URS	Downgradient Boundary	9/10/2017	FC-CCR-MW67-91017	--	--	--	--	--	--	--	--	--	--	--
MW-67	URS	Downgradient Boundary	9/10/2017	FC-CCR-MW67-91017	--	--	--	--	--	--	--	--	**0.9**	**2.2**	--
MW-67	URS	Downgradient Boundary	10/13/2017	FC-CCR-MW67-101317	--	--	--	--	--	--	--	--	**0.7**	**2.0**	--
MW-67	URS	Downgradient Boundary	10/13/2017	FC-CCR-MW67-101317	**380**	<6.0	<6.0	**380**	<6.0	**2,900**	--	**39**	--	--	**770**
MW-67	URS	Downgradient Boundary	11/29/2017	FC-CCR-MW67-112917	**320**	<6.0	<6.0	**320**	<6.0	**3,200**	--	**51**	--	--	**910**
MW-67	URS	Downgradient Boundary	3/16/2018	FC-CCR-MW67-31618	--	--	--	--	--	--	--	--	<1.2	**0.9**	--
MW-67	URS	Downgradient Boundary	6/2/2018	FC-CCR-MW-67-6218	--	--	--	--	--	--	--	--	<0.4	**1.5**	--
MW-67	URS	Downgradient Boundary	6/2/2018	FC-CCR-MW-67-6218	**350**	<6.0	<6.0	**350**	<6.0	**3,500**	--	**43**	--	--	**940**
MW-67	URS	Downgradient Boundary	11/3/2018	FC-CCR-MW67-11318	--	--	--	--	--	--	--	--	--	--	--
MW-67	URS	Downgradient Boundary	11/3/2018	FC-CCR-MW67-11318	--	--	--	--	--	--	--	--	**0.8**	**0.8**	--
MW-67	URS	Downgradient Boundary	3/17/2019	FC-CCR-MW67-031719	--	--	--	--	--	--	--	--	--	--	--
MW-67	URS	Downgradient Boundary	3/17/2019	FC-CCR-MW67-031719	--	--	--	--	--	--	--	--	**1.3**	**3.3**	--
MW-67	URS	Downgradient Boundary	5/7/2019	FC-CCR-MW67-5719	--	--	--	--	--	--	--	--	<0.4	**2.6**	--
MW-67	URS	Downgradient Boundary	12/2/2019	FC-CCR-MW67-120219	--	--	--	--	--	--	--	--	--	--	--
MW-67	URS	Downgradient Boundary	6/19/2020	FC-CCR-MW67-0620	--	--	--	--	--	--	--	--	**0.8**	**2.4**	--
MW-67	URS	Downgradient Boundary	11/4/2020	FC-CCR-MW67-1120	--	--	--	--	--	--	--	--	**0.7**	**2.9**	--
MW-67	URS	Downgradient Boundary	11/4/2020	*DUP* FC-CCR-FD01-1120	--	--	--	--	--	--	--	--	<0.4	**3.5**	--
MW-67	URS	Downgradient Boundary	4/21/2021	FC-CCR-MW67-0421	--	--	--	--	--	--	--	--	**1.3 J**	**3.1 J**	--
MW-67	URS	Downgradient Boundary	4/21/2021	*DUP* FC-CCR-FD01-0421	--	--	--	--	--	--	--	--	<0.4 UJ	**2.0 J**	--
MW-67	URS	Downgradient Boundary	11/12/2021	FC-CCR-MW67-1121	--	--	--	--	--	--	--	--	**1.1**	**2.7**	--
MW-67	URS	Downgradient Boundary	5/21/2022	FC-CCR-MW67-0522	--	--	--	--	--	--	--	--	**0.7**	**1.1**	--
MW-67	URS	Downgradient Boundary	11/16/2022	FC-CCR-MW67-1122	--	--	--	--	--	--	--	--	**0.4**	**1.8**	--
MW-67	URS	Downgradient Boundary	5/9/2023	FC-CCR-MW67-0523	--	--	--	--	--	--	**0.029**		**0.5**	**0.7**	--
MW-67	URS	Downgradient Boundary	11/13/2023	FC-CCR-MW67-1123	--	--	--	--	--	--	--	--	**1.0**	**2.6**	--
MW-68	URS	Downgradient Boundary	11/6/2015	FC-CCR-MW68-110615	**320**	<5.0	--	**320**	--	**1,700**	--	**17**	--	--	**360**
MW-68	URS	Downgradient Boundary	11/6/2015	FC-CCR-MW68-110615	--	--	--	--	--	--	--	--	**0.552**	**0.8**	--
MW-68	URS	Downgradient Boundary	4/26/2016	FC-CCR-MW-68-042616	--	--	--	--	--	--	--	--	**0.6**	**0.9**	--
MW-68	URS	Downgradient Boundary	6/5/2016	FC-CCR-MW68-616	--	--	--	--	--	--	--	--	**0.8**	**2.1**	--
MW-68	URS	Downgradient Boundary	6/5/2016	FC-CCR-MW68-616	--	--	--	--	--	--	--	--	--	--	--
MW-68	URS	Downgradient Boundary	8/20/2016	FC-CCR-MW68-816	--	--	--	--	--	--	--	--	--	--	--
MW-68	URS	Downgradient Boundary	8/20/2016	FC-CCR-MW68-816	--	--	--	--	--	--	--	--	--	--	--
MW-68	URS	Downgradient Boundary	8/20/2016	FC-CCR-MW68-816	--	--	--	--	--	--	--	--	**0.5**	**1.4**	--
MW-68	URS	Downgradient Boundary	9/13/2016	FC-CCR-MW68-916	--	--	--	--	--	--	--	--	--	--	--
MW-68	URS	Downgradient Boundary	9/13/2016	FC-CCR-MW68-916	--	--	--	--	--	--	--	--	--	--	--
MW-68	URS	Downgradient Boundary	9/13/2016	FC-CCR-MW68-916	--	--	--	--	--	--	--	--	**1.1**	**2.7**	--
MW-68	URS	Downgradient Boundary	10/20/2016	FC-CCR-MW68-1016	--	--	--	--	--	--	--	--	--	--	--
MW-68	URS	Downgradient Boundary	10/20/2016	FC-CCR-MW68-1016	--	--	--	--	--	--	--	--	**0.5**	**0.9**	--
MW-68	URS	Downgradient Boundary	2/1/2017	FC-CCR-MW68-117	**400**	<6.0	<6.0	**400**	<6.0	**2,300**	--	**21**	--	--	**570**
MW-68	URS	Downgradient Boundary	2/1/2017	FC-CCR-MW68-117	--	--	--	--	--	--	--	--	--	--	--
MW-68	URS	Downgradient Boundary	2/1/2017	FC-CCR-MW68-117	--	--	--	--	--	--	--	--	<0.4	**2.1**	--
MW-68	URS	Downgradient Boundary	4/17/2017	FC-CCR-MW68-41717	**450**	<6.0	<6.0	**450**	<6.0	**2,400**	--	**20**	--	--	**620**
MW-68	URS	Downgradient Boundary	4/17/2017	FC-CCR-MW68-41717	--	--	--	--	--	--	--	--	**0.4**	**1.8**	--
MW-68	URS	Downgradient Boundary	4/17/2017	FC-CCR-MW68-41717	--	--	--	--	--	--	--	--	--	--	--
MW-68	URS	Downgradient Boundary	5/1/2017	FC-CCR-MW68-5117	--	--	--	--	--	--	--	--	<0.3	**1.2**	--
MW-68	URS	Downgradient Boundary	5/2/2017	FC-CCR-MW68-5217	--	--	--	--	--	--	--	--	--	--	--
MW-68	URS	Downgradient Boundary	5/29/2017	FC-CCR-MW68-52917	--	--	--	--	--	--	--	--	--	--	--
MW-68	URS	Downgradient Boundary	5/29/2017	FC-CCR-MW68-52917	--	--	--	--	--	--	--	--	<0.4	<0.6	--
MW-68	URS	Downgradient Boundary	6/21/2017	FC-CCR-MW68-62117	**560**	<6.0	<6.0	**560**	<6.0	**2,400**	--	**17**	--	--	**640**
MW-68	URS	Downgradient Boundary	6/21/2017	FC-CCR-MW68-62117	--	--	--	--	--	--	--	--	--	--	--

Table F-3
Groundwater Sampling Results for the URS Monitoring Wells - Additional Analyses

					Additional Analyses											
				Constituent:	Alkalinity Bicarbonate	Alkalinity Carbonate	Alkalinity Hydroxide	Alkalinity(as CaCO3)	Alkalinity, Phenolphthalein, as CaCO3	Magnesium	Nickel	Potassium	Radium 226	Radium 228	Sodium
				Filtered:	N	N	N	N	N	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L	pCi/L	mg/L
				URS BTV (applicable to downgradient wells)	--	--	--	--	--	--	--	--	--	--	--
				URS GWPS (applicable to downgradient wells)	--	--	--	--	--	--	--	--	--	--	--
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**											
MW-68	URS	Downgradient Boundary	6/21/2017	FC-CCR-MW68-62117	--	--	--	--	--	--	--	--	**0.4**	**1.8**	--
MW-68	URS	Downgradient Boundary	7/21/2017	FC-CCR-MW68-72117	**550**	<6.0	<6.0	**550**	<6.0	**2,300**	--	**17**	--	--	**670**
MW-68	URS	Downgradient Boundary	7/21/2017	FC-CCR-MW68-72117	--	--	--	--	--	--	--	--	--	--	--
MW-68	URS	Downgradient Boundary	7/21/2017	FC-CCR-MW68-72117	--	--	--	--	--	--	--	--	<0.5	**0.9**	--
MW-68	URS	Downgradient Boundary	8/9/2017	FC-CCR-MW68-8917	**500**	<6.0	<6.0	**500**	<6.0	**2,500**	--	**20**	--	--	**640**
MW-68	URS	Downgradient Boundary	8/9/2017	FC-CCR-MW68-8917	--	--	--	--	--	--	--	--	--	--	--
MW-68	URS	Downgradient Boundary	8/9/2017	FC-CCR-MW68-8917	--	--	--	--	--	--	--	--	<0.5	**2.8**	--
MW-68	URS	Downgradient Boundary	8/16/2017	FC-CCR-MW68-81617	--	--	--	--	--	--	--	--	<0.4	**2.2**	--
MW-68	URS	Downgradient Boundary	8/16/2017	FC-CCR-MW68-81617	**510**	<6.0	<6.0	**510**	<6.0	**2,300**	--	**23**	--	--	**630**
MW-68	URS	Downgradient Boundary	9/10/2017	FC-CCR-MW68-91017	**530**	<6.0	<6.0	**530**	<6.0	**2,300**	--	**18**	--	--	**610**
MW-68	URS	Downgradient Boundary	9/10/2017	FC-CCR-MW68-91017	--	--	--	--	--	--	--	--	--	--	--
MW-68	URS	Downgradient Boundary	9/10/2017	FC-CCR-MW68-91017	--	--	--	--	--	--	--	--	**0.5**	**2.4**	--
MW-68	URS	Downgradient Boundary	10/13/2017	FC-CCR-MW68-101317	--	--	--	--	--	--	--	--	**1.3**	**1.6**	--
MW-68	URS	Downgradient Boundary	10/13/2017	FC-CCR-MW68-101317	**550**	<6.0	<6.0	**550**	<6.0	**2,200**	--	**18**	--	--	**650**
MW-68	URS	Downgradient Boundary	11/30/2017	FC-CCR-MW68-113017	**580**	<6.0	<6.0	**580**	<6.0	**2,200**	--	**16**	--	--	**680**
MW-68	URS	Downgradient Boundary	11/30/2017	*DUP* FC-CCR-FD01-113017	**580**	<6.0	<6.0	**580**	<6.0	**2,200**	--	**16**	--	--	**680**
MW-68	URS	Downgradient Boundary	3/16/2018	FC-CCR-MW68-31618	--	--	--	--	--	--	--	--	<1.2	**1.0**	--
MW-68	URS	Downgradient Boundary	6/2/2018	FC-CCR-MW-68-6218	--	--	--	--	--	--	--	--	**0.6**	<0.6	--
MW-68	URS	Downgradient Boundary	6/2/2018	FC-CCR-MW-68-6218	**570**	<6.0	<6.0	**570**	<6.0	**2,300**	--	**17**	--	--	**650**
MW-68	URS	Downgradient Boundary	11/3/2018	FC-CCR-MW68-11318	--	--	--	--	--	--	--	--	--	--	--
MW-68	URS	Downgradient Boundary	11/3/2018	FC-CCR-MW68-11318	--	--	--	--	--	--	--	--	**0.6**	**1.3**	--
MW-68	URS	Downgradient Boundary	3/17/2019	FC-CCR-MW68-031719	--	--	--	--	--	--	--	--	--	--	--
MW-68	URS	Downgradient Boundary	3/17/2019	FC-CCR-MW68-031719	--	--	--	--	--	--	--	--	<0.5	**2.6**	--
MW-68	URS	Downgradient Boundary	5/7/2019	FC-CCR-MW68-5719	--	--	--	--	--	--	--	--	<0.5	**2.1**	--
MW-68	URS	Downgradient Boundary	12/2/2019	FC-CCR-MW68-120219	--	--	--	--	--	--	--	--	--	--	--
MW-68	URS	Downgradient Boundary	6/19/2020	FC-CCR-MW68-0620	--	--	--	--	--	--	--	--	<0.4	**0.9**	--
MW-68	URS	Downgradient Boundary	11/4/2020	FC-CCR-MW68-1120	--	--	--	--	--	--	--	--	**0.7**	**1.1**	--
MW-68	URS	Downgradient Boundary	4/22/2021	FC-CCR-MW68-0421	--	--	--	--	--	--	--	--	<0.4	**0.9**	--
MW-68	URS	Downgradient Boundary	11/12/2021	FC-CCR-MW68-1121	--	--	--	--	--	--	--	--	**0.7**	**0.8**	--
MW-68	URS	Downgradient Boundary	5/21/2022	FC-CCR-MW68-0522	--	--	--	--	--	--	--	--	<0.4	<0.7	--
MW-68	URS	Downgradient Boundary	11/13/2022	FC-CCR-MW68-1122	--	--	--	--	--	--	--	--	<0.4	**1.3**	--
MW-68	URS	Downgradient Boundary	5/9/2023	FC-CCR-MW68-0523	--	--	--	--	--	--	**0.028**		**1.3**	<0.6	--
MW-68	URS	Downgradient Boundary	11/11/2023	FC-CCR-MW68-1123	--	--	--	--	--	--	--	--	<0.57	<0.75	--
MW-69	URS	Downgradient Boundary	11/4/2015	FC-CCR-MW69-110415	**210**	<5.0	--	**210**	--	**1,500**	--	**32**	--	--	**290**
MW-69	URS	Downgradient Boundary	11/4/2015	FC-CCR-MW69-110415	--	--	--	--	--	--	--	--	**1.29**	**1.88**	--
MW-69	URS	Downgradient Boundary	4/26/2016	FC-CCR-MW-69-042616	--	--	--	--	--	--	--	--	**0.8**	**2.3**	--
MW-69	URS	Downgradient Boundary	4/26/2016	FC-CCR-DUP1-042616	--	--	--	--	--	--	--	--	**1.2**	**2.0**	--
MW-69	URS	Downgradient Boundary	6/6/2016	FC-CCR-MW69-616	--	--	--	--	--	--	--	--	**0.8**	**2.4**	--
MW-69	URS	Downgradient Boundary	6/6/2016	FC-CCR-MW69-616	--	--	--	--	--	--	--	--	--	--	--
MW-69	URS	Downgradient Boundary	8/21/2016	FC-CCR-MW69-816	--	--	--	--	--	--	--	--	--	--	--
MW-69	URS	Downgradient Boundary	8/21/2016	FC-CCR-MW69-816	--	--	--	--	--	--	--	--	--	--	--
MW-69	URS	Downgradient Boundary	8/21/2016	FC-CCR-MW69-816	--	--	--	--	--	--	--	--	**1.2**	**2.7**	--
MW-69	URS	Downgradient Boundary	9/13/2016	FC-CCR-MW69-916	--	--	--	--	--	--	--	--	--	--	--
MW-69	URS	Downgradient Boundary	9/13/2016	FC-CCR-MW69-916	--	--	--	--	--	--	--	--	--	--	--
MW-69	URS	Downgradient Boundary	9/13/2016	FC-CCR-MW69-916	--	--	--	--	--	--	--	--	**1.1**	**4.3**	--
MW-69	URS	Downgradient Boundary	10/20/2016	FC-CCR-MW69-1016	--	--	--	--	--	--	--	--	--	--	--
MW-69	URS	Downgradient Boundary	10/20/2016	FC-CCR-MW69-1016	--	--	--	--	--	--	--	--	**1.8**	**3.7**	--
MW-69	URS	Downgradient Boundary	2/1/2017	FC-CCR-MW69-117	**320**	<6.0	<6.0	**320**	<6.0	**2,600**	--	**40**	--	--	**550**
MW-69	URS	Downgradient Boundary	2/1/2017	FC-CCR-MW69-117	--	--	--	--	--	--	--	--	--	--	--
MW-69	URS	Downgradient Boundary	2/1/2017	FC-CCR-MW69-117	--	--	--	--	--	--	--	--	**1.4**	**4.0**	--
MW-69	URS	Downgradient Boundary	4/17/2017	FC-CCR-MW69-41717	**360**	<6.0	<6.0	**360**	<6.0	**2,800**	--	**40**	--	--	**630**
MW-69	URS	Downgradient Boundary	4/17/2017	FC-CCR-MW69-41717	--	--	--	--	--	--	--	--	**1.6**	**4.4**	--
MW-69	URS	Downgradient Boundary	4/17/2017	FC-CCR-MW69-41717	--	--	--	--	--	--	--	--	--	--	--
MW-69	URS	Downgradient Boundary	4/17/2017	*DUP* FC-CCR-FD02-41717	**340**	<6.0	<6.0	**340**	<6.0	**2,700**	--	**41**	--	--	**640**
MW-69	URS	Downgradient Boundary	4/17/2017	*DUP* FC-CCR-FD02-41717	--	--	--	--	--	--	--	--	**1.4**	**3.5**	--
MW-69	URS	Downgradient Boundary	4/17/2017	*DUP* FC-CCR-FD02-41717	--	--	--	--	--	--	--	--	--	--	--

Table F-3
Groundwater Sampling Results for the URS Monitoring Wells - Additional Analyses

				Constituent:	Additional Analyses										
					Alkalinity Bicarbonate	Alkalinity Carbonate	Alkalinity Hydroxide	Alkalinity(as CaCO3)	Alkalinity, Phenolphthalein, as CaCO3	Magnesium	Nickel	Potassium	Radium 226	Radium 228	Sodium
				Filtered:	N	N	N	N	N	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L	pCi/L	mg/L
				URS BTV (applicable to downgradient wells)	--	--	--	--	--	--	--	--	--	--	--
				URS GWPS (applicable to downgradient wells)	--	--	--	--	--	--	--	--	--	--	--
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**											
MW-69	URS	Downgradient Boundary	5/2/2017	FC-CCR-MW69-5217	--	--	--	--	--	--	--	--	--	--	--
MW-69	URS	Downgradient Boundary	5/2/2017	FC-CCR-MW69-5217	--	--	--	--	--	--	--	--	**1.5**	**3.5**	--
MW-69	URS	Downgradient Boundary	5/29/2017	FC-CCR-MW69-52917	--	--	--	--	--	--	--	--	--	--	--
MW-69	URS	Downgradient Boundary	5/29/2017	FC-CCR-MW69-52917	--	--	--	--	--	--	--	--	**1.6**	**2.0**	--
MW-69	URS	Downgradient Boundary	6/21/2017	FC-CCR-MW69-62117	**290**	<6.0	<6.0	**290**	<6.0	**2,400**	--	**39**	--	--	**590**
MW-69	URS	Downgradient Boundary	6/21/2017	FC-CCR-MW69-62117	--	--	--	--	--	--	--	--	--	--	--
MW-69	URS	Downgradient Boundary	6/21/2017	FC-CCR-MW69-62117	--	--	--	--	--	--	--	--	**1.7**	**2.6**	--
MW-69	URS	Downgradient Boundary	7/21/2017	FC-CCR-MW69-72117	**330**	<6.0	<6.0	**330**	<6.0	**2,700**	--	**46**	--	--	**700**
MW-69	URS	Downgradient Boundary	7/21/2017	FC-CCR-MW69-72117	--	--	--	--	--	--	--	--	--	--	--
MW-69	URS	Downgradient Boundary	7/21/2017	FC-CCR-MW69-72117	--	--	--	--	--	--	--	--	<0.5	**3.4**	--
MW-69	URS	Downgradient Boundary	8/9/2017	FC-CCR-MW69-8917	**310**	<6.0	<6.0	**310**	<6.0	**2,800**	--	**44**	--	--	**690**
MW-69	URS	Downgradient Boundary	8/9/2017	FC-CCR-MW69-8917	--	--	--	--	--	--	--	--	--	--	--
MW-69	URS	Downgradient Boundary	8/9/2017	FC-CCR-MW69-8917	--	--	--	--	--	--	--	--	**1.6**	**3.5**	--
MW-69	URS	Downgradient Boundary	8/9/2017	*DUP* FC-CCR-FD01-8917	**300**	<6.0	<6.0	**300**	<6.0	**2,800**	--	**43**	--	--	**680**
MW-69	URS	Downgradient Boundary	8/9/2017	*DUP* FC-CCR-FD01-8917	--	--	--	--	--	--	--	--	--	--	--
MW-69	URS	Downgradient Boundary	8/9/2017	*DUP* FC-CCR-FD01-8917	--	--	--	--	--	--	--	--	**1.1**	**2.6**	--
MW-69	URS	Downgradient Boundary	8/16/2017	FC-CCR-MW69-81617	--	--	--	--	--	--	--	--	**1.0**	**2.6**	--
MW-69	URS	Downgradient Boundary	8/16/2017	FC-CCR-MW69-81617	**300**	<6.0	<6.0	**300**	<6.0	**2,500**	--	**49**	--	--	**710**
MW-69	URS	Downgradient Boundary	9/10/2017	FC-CCR-MW69-91017	**340**	<6.0	<6.0	**340**	<6.0	**2,700**	--	**46**	--	--	**720**
MW-69	URS	Downgradient Boundary	9/10/2017	FC-CCR-MW69-91017	--	--	--	--	--	--	--	--	--	--	--
MW-69	URS	Downgradient Boundary	9/10/2017	FC-CCR-MW69-91017	--	--	--	--	--	--	--	--	**2.2**	**3.7**	--
MW-69	URS	Downgradient Boundary	9/10/2017	*DUP* FC-CCR-FD02-91017	**340**	<6.0	<6.0	**340**	<6.0	**2,800**	--	**45**	--	--	**720**
MW-69	URS	Downgradient Boundary	9/10/2017	*DUP* FC-CCR-FD02-91017	--	--	--	--	--	--	--	--	--	--	--
MW-69	URS	Downgradient Boundary	9/10/2017	*DUP* FC-CCR-FD02-91017	--	--	--	--	--	--	--	--	**1.1**	**3.8**	--
MW-69	URS	Downgradient Boundary	10/13/2017	FC-CCR-MW69-101317	--	--	--	--	--	--	--	--	**1.7**	**5.0**	--
MW-69	URS	Downgradient Boundary	10/13/2017	FC-CCR-MW69-101317	**360**	<6.0	<6.0	**360**	<6.0	**2,600**	--	**43**	--	--	**720**
MW-69	URS	Downgradient Boundary	11/29/2017	FC-CCR-MW69-112917	**330**	<6.0	<6.0	**330**	<6.0	**2,800**	--	**51**	--	--	**830**
MW-69	URS	Downgradient Boundary	3/16/2018	FC-CCR-MW69-31618	--	--	--	--	--	--	--	--	**1.6**	**3.8**	--
MW-69	URS	Downgradient Boundary	6/2/2018	FC-CCR-MW-69-6218	--	--	--	--	--	--	--	--	**1.3**	**3.3**	--
MW-69	URS	Downgradient Boundary	6/2/2018	FC-CCR-MW-69-6218	**360**	<6.0	<6.0	**360**	<6.0	**2,600**	--	**38**	--	--	**680**
MW-69	URS	Downgradient Boundary	6/2/2018	*DUP* FC-CCR-FD02-6218	--	--	--	--	--	--	--	--	**0.9**	**2.2**	--
MW-69	URS	Downgradient Boundary	6/2/2018	*DUP* FC-CCR-FD02-6218	**350**	<6.0	<6.0	**350**	<6.0	**2,500**	--	**38**	--	--	**680**
MW-69	URS	Downgradient Boundary	11/3/2018	FC-CCR-MW69-11318	--	--	--	--	--	--	--	--	--	--	--
MW-69	URS	Downgradient Boundary	11/3/2018	FC-CCR-MW69-11318	--	--	--	--	--	--	--	--	**1.7**	**1.3**	--
MW-69	URS	Downgradient Boundary	3/17/2019	FC-CCR-MW69-031719	--	--	--	--	--	--	--	--	--	--	--
MW-69	URS	Downgradient Boundary	3/17/2019	FC-CCR-MW69-031719	--	--	--	--	--	--	--	--	**0.6**	**2.0**	--
MW-69	URS	Downgradient Boundary	5/7/2019	FC-CCR-MW69-5719	--	--	--	--	--	--	--	--	<0.4	**1.8**	--
MW-69	URS	Downgradient Boundary	12/3/2019	FC-CCR-MW69-120219	--	--	--	--	--	--	--	--	--	--	--
MW-69	URS	Downgradient Boundary	6/19/2020	FC-CCR-MW69-0620	--	--	--	--	--	--	--	--	**0.6**	**1.3**	--
MW-69	URS	Downgradient Boundary	11/4/2020	FC-CCR-MW69-1120	--	--	--	--	--	--	--	--	<0.4	**1.3**	--
MW-69	URS	Downgradient Boundary	4/21/2021	FC-CCR-MW69-0421	--	--	--	--	--	--	--	--	**0.7**	<0.7	--
MW-69	URS	Downgradient Boundary	11/12/2021	FC-CCR-MW69-1121	--	--	--	--	--	--	--	--	**1.0**	**0.9**	--
MW-69	URS	Downgradient Boundary	5/21/2022	FC-CCR-MW69-0522	--	--	--	--	--	--	--	--	<0.4	**0.8**	--
MW-69	URS	Downgradient Boundary	5/21/2022	FC-CCR-SS03-0522							--		--	--	
MW-69	URS	Downgradient Boundary	11/14/2022	FC-CCR-MW69-1122	--	--	--	--	--	--	--	--	<0.4	**1.3**	--
MW-69	URS	Downgradient Boundary	5/9/2023	FC-CCR-MW69-0523	--	--	--	--	--	--	**0.0082**		**0.6**	**0.8**	--
MW-69	URS	Downgradient Boundary	11/11/2023	FC-CCR-MW69-1123	--	--	--	--	--	--	--	--	<0.56	<0.75	--
MW-70	URS	Downgradient Boundary	11/9/2015	FC-CCR-MW70-110915	**540**	<5.0	--	**540**	--	**1,300**	--	**19**	--	--	**830**
MW-70	URS	Downgradient Boundary	11/9/2015	FC-CCR-MW70-110915	--	--	--	--	--	--	--	--	**0.616**	**1.02**	--
MW-70	URS	Downgradient Boundary	4/27/2016	FC-CCR-MW-70-042716	--	--	--	--	--	--	--	--	<0.4	**1.0**	--
MW-70	URS	Downgradient Boundary	6/5/2016	FC-CCR-MW70-616	--	--	--	--	--	--	--	--	**0.5**	**2.4**	--
MW-70	URS	Downgradient Boundary	6/5/2016	FC-CCR-MW70-616	--	--	--	--	--	--	--	--	--	--	--
MW-70	URS	Downgradient Boundary	6/5/2016	FC-CCR-DUP-616	--	--	--	--	--	--	--	--	**0.6**	**1.3**	--
MW-70	URS	Downgradient Boundary	6/5/2016	FC-CCR-DUP-616	--	--	--	--	--	--	--	--	--	--	--
MW-70	URS	Downgradient Boundary	8/20/2016	FC-CCR-MW70-816	--	--	--	--	--	--	--	--	--	--	--
MW-70	URS	Downgradient Boundary	8/20/2016	FC-CCR-MW70-816	--	--	--	--	--	--	--	--	--	--	--

Table F-3
Groundwater Sampling Results for the URS Monitoring Wells - Additional Analyses

				Constituent:	Additional Analyses										
					Alkalinity Bicarbonate	Alkalinity Carbonate	Alkalinity Hydroxide	Alkalinity(as CaCO3)	Alkalinity, Phenolphthalein, as CaCO3	Magnesium	Nickel	Potassium	Radium 226	Radium 228	Sodium
				Filtered:	N	N	N	N	N	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L	pCi/L	mg/L
				URS BTV (applicable to downgradient wells)	--	--	--	--	--	--	--	--	--	--	--
				URS GWPS (applicable to downgradient wells)	--	--	--	--	--	--	--	--	--	--	--
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**											
MW-70	URS	Downgradient Boundary	8/20/2016	FC-CCR-MW70-816	--	--	--	--	--	--	--	--	<0.3	**1.5**	--
MW-70	URS	Downgradient Boundary	9/12/2016	FC-CCR-MW70-916	--	--	--	--	--	--	--	--	--	--	--
MW-70	URS	Downgradient Boundary	9/12/2016	FC-CCR-MW70-916	--	--	--	--	--	--	--	--	--	--	--
MW-70	URS	Downgradient Boundary	9/12/2016	FC-CCR-MW70-916	--	--	--	--	--	--	--	--	**0.6**	**2.0**	--
MW-70	URS	Downgradient Boundary	10/19/2016	FC-CCR-MW70-1016	--	--	--	--	--	--	--	--	--	--	--
MW-70	URS	Downgradient Boundary	10/19/2016	FC-CCR-MW70-1016	--	--	--	--	--	--	--	--	**0.6**	**1.0**	--
MW-70	URS	Downgradient Boundary	2/1/2017	FC-CCR-MW70-117	**470**	<6.0	<6.0	**470**	<6.0	**1,300**	--	**17**	--	--	**770**
MW-70	URS	Downgradient Boundary	2/1/2017	FC-CCR-MW70-117	--	--	--	--	--	--	--	--	--	--	--
MW-70	URS	Downgradient Boundary	2/1/2017	FC-CCR-MW70-117	--	--	--	--	--	--	--	--	<0.4	**3.3**	--
MW-70	URS	Downgradient Boundary	4/16/2017	FC-CCR-MW70-41717	--	--	--	--	--	--	--	--	<0.4	**2.6**	--
MW-70	URS	Downgradient Boundary	4/16/2017	FC-CCR-MW70-41617	**510**	<6.0	<6.0	**510**	<6.0	**1,300**	--	**18**	--	--	**820**
MW-70	URS	Downgradient Boundary	4/16/2017	FC-CCR-MW70-41617	--	--	--	--	--	--	--	--	--	--	--
MW-70	URS	Downgradient Boundary	4/16/2017	*DUP* FC-CCR-FD01-41617	**510**	<6.0	<6.0	**510**	<6.0	**1,300**	--	**18**	--	--	**790**
MW-70	URS	Downgradient Boundary	4/16/2017	*DUP* FC-CCR-FD01-41617	--	--	--	--	--	--	--	--	<0.4	**2.1**	--
MW-70	URS	Downgradient Boundary	4/16/2017	*DUP* FC-CCR-FD01-41617	--	--	--	--	--	--	--	--	--	--	--
MW-70	URS	Downgradient Boundary	5/1/2017	FC-CCR-MW70-5117	--	--	--	--	--	--	--	--	--	--	--
MW-70	URS	Downgradient Boundary	5/1/2017	FC-CCR-MW70-5117	--	--	--	--	--	--	--	--	**0.5**	**1.9**	--
MW-70	URS	Downgradient Boundary	5/29/2017	FC-CCR-MW70-52917	--	--	--	--	--	--	--	--	--	--	--
MW-70	URS	Downgradient Boundary	5/29/2017	FC-CCR-MW70-52917	--	--	--	--	--	--	--	--	<0.4	**1.3**	--
MW-70	URS	Downgradient Boundary	6/21/2017	FC-CCR-MW70-62117	**510**	<6.0	<6.0	**510**	<6.0	**1,300**	--	**18**	--	--	**850**
MW-70	URS	Downgradient Boundary	6/21/2017	FC-CCR-MW70-62117	--	--	--	--	--	--	--	--	--	--	--
MW-70	URS	Downgradient Boundary	6/21/2017	FC-CCR-MW70-62117	--	--	--	--	--	--	--	--	**0.7**	**1.8**	--
MW-70	URS	Downgradient Boundary	7/21/2017	FC-CCR-MW70-72117	**500**	<6.0	<6.0	**500**	<6.0	**1,300**	--	**19**	--	--	**870**
MW-70	URS	Downgradient Boundary	7/21/2017	FC-CCR-MW70-72117	--	--	--	--	--	--	--	--	--	--	--
MW-70	URS	Downgradient Boundary	7/21/2017	FC-CCR-MW70-72117	--	--	--	--	--	--	--	--	<0.5	<0.7	--
MW-70	URS	Downgradient Boundary	8/9/2017	FC-CCR-MW70-8917	**500**	<6.0	<6.0	**500**	<6.0	**1,300**	--	**18**	--	--	**880**
MW-70	URS	Downgradient Boundary	8/9/2017	FC-CCR-MW70-8917	--	--	--	--	--	--	--	--	--	--	--
MW-70	URS	Downgradient Boundary	8/9/2017	FC-CCR-MW70-8917	--	--	--	--	--	--	--	--	<0.4	**1.6**	--
MW-70	URS	Downgradient Boundary	8/16/2017	FC-CCR-MW70-81617	--	--	--	--	--	--	--	--	<0.4	**1.8**	--
MW-70	URS	Downgradient Boundary	8/16/2017	FC-CCR-MW70-81617	**510**	<6.0	<6.0	**510**	<6.0	**1,300**	--	**21**	--	--	**890**
MW-70	URS	Downgradient Boundary	9/9/2017	FC-CCR-MW70-9917	**510**	<6.0	<6.0	**510**	<6.0	**1,200**	--	**17**	--	--	**820**
MW-70	URS	Downgradient Boundary	9/9/2017	FC-CCR-MW70-9917	--	--	--	--	--	--	--	--	--	--	--
MW-70	URS	Downgradient Boundary	9/9/2017	FC-CCR-MW70-9917	--	--	--	--	--	--	--	--	**0.7**	**1.3**	--
MW-70	URS	Downgradient Boundary	10/13/2017	FC-CCR-MW70-101317	--	--	--	--	--	--	--	--	<0.3	<0.6	--
MW-70	URS	Downgradient Boundary	10/13/2017	FC-CCR-MW70-101317	**510**	<6.0	<6.0	**510**	<6.0	**1,200**	--	**18**	--	--	**810**
MW-70	URS	Downgradient Boundary	11/30/2017	FC-CCR-MW70-113017	**510**	<6.0	<6.0	**510**	<6.0	**1,200**	--	**19**	--	--	**880**
MW-70	URS	Downgradient Boundary	3/16/2018	FC-CCR-MW70-31618	--	--	--	--	--	--	--	--	<1.1	**2.6**	--
MW-70	URS	Downgradient Boundary	5/31/2018	FC-CCR-MW-70-53118	--	--	--	--	--	--	--	--	**0.5**	**2.3**	--
MW-70	URS	Downgradient Boundary	5/31/2018	FC-CCR-MW-70-53118	**520**	<6.0	<6.0	**520**	<6.0	**1,300**	--	**17**	--	--	**780**
MW-70	URS	Downgradient Boundary	11/2/2018	FC-CCR-MW70-11218	--	--	--	--	--	--	--	--	--	--	--
MW-70	URS	Downgradient Boundary	11/2/2018	FC-CCR-MW70-11218	--	--	--	--	--	--	--	--	**0.7**	<0.7	--
MW-70	URS	Downgradient Boundary	3/18/2019	FC-CCR-MW70-031819	--	--	--	--	--	--	--	--	--	--	--
MW-70	URS	Downgradient Boundary	3/18/2019	FC-CCR-MW70-031819	--	--	--	--	--	--	--	--	<0.4	**1.2**	--
MW-70	URS	Downgradient Boundary	5/7/2019	FC-CCR-MW70-5719	--	--	--	--	--	--	--	--	<0.5	**2.4**	--
MW-70	URS	Downgradient Boundary	12/3/2019	FC-CCR-MW70-120319	--	--	--	--	--	--	--	--	--	--	--
MW-70	URS	Downgradient Boundary	6/19/2020	FC-CCR-MW70-0620	--	--	--	--	--	--	--	--	**0.6**	**1.3**	--
MW-70	URS	Downgradient Boundary	11/5/2020	FC-CCR-MW70-1120	--	--	--	--	--	--	--	--	<0.5	**1.8**	--
MW-70	URS	Downgradient Boundary	4/21/2021	FC-CCR-MW70-0421	--	--	--	--	--	--	--	--	**0.8**	**2.3**	--
MW-70	URS	Downgradient Boundary	11/12/2021	FC-CCR-MW70-1121	--	--	--	--	--	--	--	--	**0.4**	**1.1**	--
MW-70	URS	Downgradient Boundary	5/20/2022	FC-CCR-MW70-0522	--	--	--	--	--	--	--	--	**0.6**	**1.6**	--
MW-70	URS	Downgradient Boundary	11/13/2022	FC-CCR-MW70-1122	--	--	--	--	--	--	--	--	<0.4	**2.4**	--
MW-70	URS	Downgradient Boundary	5/7/2023	FC-CCR-MW70-0523	--	--	--	--	--	--	**0.011**		**0.5**	**1.6**	--
MW-70	URS	Downgradient Boundary	11/06/2023	FC-CCR-MW70-1123	--	--	--	--	--	--	--	--	<0.46	**1.4**	--
MW-83	URS	Downgradient	3/18/2019	FC-CCR-MW83-031819	--	--	--	--	--	--	--	--	--	--	--
MW-83	URS	Downgradient	3/18/2019	FC-CCR-MW83-031819	--	--	--	--	--	--	--	--	<0.4	<0.7	--
MW-83	URS	Downgradient	5/6/2019	FC-CCR-MW83-5619	--	--	--	--	--	--	--	--	<0.4	<0.7	--

Table F-3
Groundwater Sampling Results for the URS Monitoring Wells - Additional Analyses

				Constituent:	Additional Analyses										
					Alkalinity Bicarbonate	Alkalinity Carbonate	Alkalinity Hydroxide	Alkalinity(as CaCO3)	Alkalinity, Phenolphthalein, as CaCO3	Magnesium	Nickel	Potassium	Radium 226	Radium 228	Sodium
				Filtered:	N	N	N	N	N	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L	pCi/L	mg/L
				URS BTV (applicable to downgradient wells)	--	--	--	--	--	--	--	--	--	--	--
				URS GWPS (applicable to downgradient wells)	--	--	--	--	--	--	--	--	--	--	--
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**											
MW-83	URS	Downgradient	5/6/2019	*DUP* FC-CCR-FD01-5619	--	--	--	--	--	--	--	--	<0.4	<0.7	--
MW-83	URS	Downgradient	12/2/2019	FC-CCR-MW83-120319	--	--	--	--	--	--	--	--	--	--	--
MW-83	URS	Downgradient	6/19/2020	FC-CCR-MW83-0620	--	--	--	--	--	--	--	--	<0.4	<0.8	--
MW-83	URS	Downgradient	6/19/2020	*DUP* FC-CCR-FD01-0620	--	--	--	--	--	--	--	--	<0.4	<0.6	--
MW-83	URS	Downgradient	11/4/2020	FC-CCR-MW83-1120	--	--	--	--	--	--	--	--	<0.4	<0.8	--
MW-83	URS	Downgradient	4/21/2021	FC-CCR-MW83-0421	--	--	--	--	--	--	--	--	**0.5**	<0.7	--
MW-83	URS	Downgradient	11/12/2021	FC-CCR-MW83-1121	--	--	--	--	--	--	--	--	**0.7**	<0.6	--
MW-83	URS	Downgradient	5/21/2022	FC-CCR-MW83-0522	--	--	--	--	--	--	--	--	<0.4	<0.7	--
MW-83	URS	Downgradient	5/21/2022	FC-CCR-SS05-0522							--		--	--	--
MW-83	URS	Downgradient	11/14/2022	FC-CCR-MW83-1122	--	--	--	--	--	--	--	--	**1.0**	<0.6	--
MW-83	URS	Downgradient	5/7/2023	FC-CCR-MW83-0523	--	--	--	--	--	--	**0.0077**		<0.48	<0.6	--
MW-83	URS	Downgradient	11/11/2023	FC-CCR-MW83-1123	--	--	--	--	--	--	--	--	<0.55	<0.75	--
MW-84	URS	Downgradient	3/17/2019	FC-CCR-MW84-031719	--	--	--	--	--	--	--	--	--	--	--
MW-84	URS	Downgradient	3/17/2019	FC-CCR-MW84-031719	--	--	--	--	--	--	--	--	<0.5	**1.5**	--
MW-84	URS	Downgradient	5/7/2019	FC-CCR-MW84-5719	--	--	--	--	--	--	--	--	**0.7**	**1.2**	--
MW-84	URS	Downgradient	12/3/2019	FC-CCR-MW84-120319	--	--	--	--	--	--	--	--	--	--	--
MW-84	URS	Downgradient	6/20/2020	FC-CCR-MW84-0620	--	--	--	--	--	--	--	--	<0.4	**1.0**	--
MW-84	URS	Downgradient	11/4/2020	FC-CCR-MW84-1120	--	--	--	--	--	--	--	--	<0.4	<0.8	--
MW-84	URS	Downgradient	4/21/2021	FC-CCR-MW84-0421	--	--	--	--	--	--	--	--	<0.4	<0.7	--
MW-84	URS	Downgradient	11/12/2021	FC-CCR-MW84-1121	--	--	--	--	--	--	--	--	**1.4**	**0.7**	--
MW-84	URS	Downgradient	11/12/2021	FC-CCR-FD01-1121	--	--	--	--	--	--	--	--	**1.2**	**1.1**	--
MW-84	URS	Downgradient	5/21/2022	FC-CCR-MW84-0522	--	--	--	--	--	--	--	--	**0.5**	<0.7	--
MW-84	URS	Downgradient	5/21/2022	*DUP* FC-CCR-FD01-0522	--	--	--	--	--	--	--	--	**0.9**	<0.7	--
MW-84	URS	Downgradient	11/14/2022	FC-CCR-MW84-1122	--	--	--	--	--	--	--	--	**2.5**	**2.0 J**	--
MW-84	URS	Downgradient	11/14/2022	*DUP* FC-CCR-FD01-1122	--	--	--	--	--	--	--	--	**2.6**	<0.6 UJ	--
MW-84	URS	Downgradient	5/9/2023	FC-CCR-MW84-0523	--	--	--	--	--	--	**0.0074**		<0.4	<0.6	--
MW-84	URS	Downgradient	5/9/2023	*DUP* FC-CCR-FD01-0523	--	--	--	--	--	--	**0.0086**		<0.4	**1.0**	--
MW-84	URS	Downgradient	11/11/2023	FC-CCR-MW84-1123	--	--	--	--	--	--	--	--	<0.53U J	**1.5 J**	--
MW-84	URS	Downgradient	11/11/2023	*DUP* FC-CCR-FD01-1123	--	--	--	--	--	--	--	--	**1.5 J**	**3.0 J**	--
MW-85	URS	Downgradient	3/20/2019	FC-CCR-MW85-032019	--	--	--	--	--	--	--	--	--	--	--
MW-85	URS	Downgradient	3/20/2019	FC-CCR-MW85-032019	--	--	--	--	--	--	--	--	<0.5	**0.8**	--
MW-85	URS	Downgradient	3/20/2019	*DUP* FC-CCR-FD01-032019	--	--	--	--	--	--	--	--	--	--	--
MW-85	URS	Downgradient	3/20/2019	*DUP* FC-CCR-FD01-032019	--	--	--	--	--	--	--	--	<0.4	<0.7	--
MW-85	URS	Downgradient	5/7/2019	FC-CCR-MW85-5719	--	--	--	--	--	--	--	--	<0.4	<0.7	--
MW-85	URS	Downgradient	12/3/2019	FC-CCR-MW85-120319	--	--	--	--	--	--	--	--	--	--	--
MW-85	URS	Downgradient	6/19/2020	FC-CCR-MW85-0620	--	--	--	--	--	--	--	--	**0.5**	<0.6	--
MW-85	URS	Downgradient	11/4/2020	FC-CC-MW85-1120	--	--	--	--	--	--	--	--	**0.7**	<0.8	--
MW-85	URS	Downgradient	4/21/2021	FC-CCR-MW85-0421	--	--	--	--	--	--	--	--	**0.5**	**1.9**	--
MW-85	URS	Downgradient	11/12/2021	FC-CCR-MW85-1121	--	--	--	--	--	--	--	--	**0.5**	**1.4**	--
MW-85	URS	Downgradient	11/16/2022	FC-CCR-MW85-1122	--	--	--	--	--	--	--	--	**1.0**	**0.9**	--
MW-85	URS	Downgradient	5/9/2023	FC-CCR-MW85-0523	--	--	--	--	--	--	**0.013**		**0.6**	**1.0**	--
MW-85	URS	Downgradient	11/11/2023	FC-CCR-MW85-1123	--	--	--	--	--	--	--	--	**0.7**	**1.7**	--
MW-86	URS	Downgradient	3/18/2019	FC-CCR-MW86-031819	--	--	--	--	--	--	--	--	--	--	--
MW-86	URS	Downgradient	3/18/2019	FC-CCR-MW86-031819	--	--	--	--	--	--	--	--	<0.4	<0.7	--
MW-86	URS	Downgradient	5/7/2019	FC-CCR-MW86-5719	--	--	--	--	--	--	--	--	<0.4	**1.1**	--
MW-86	URS	Downgradient	5/7/2019	*DUP* FC-CCR-FD02-5719	--	--	--	--	--	--	--	--	<0.4	**1.1**	--
MW-86	URS	Downgradient	12/3/2019	FC-CCR-MW86-120319	--	--	--	--	--	--	--	--	--	--	--
MW-86	URS	Downgradient	6/19/2020	FC-CCR-MW86-0620	--	--	--	--	--	--	--	--	**0.6**	**1.2**	--
MW-86	URS	Downgradient	6/20/2020	*DUP* FC-CCR-FD02-0620	--	--	--	--	--	--	--	--	<0.4	**0.9**	--
MW-86	URS	Downgradient	11/5/2020	FC-CCR-MW86-1120	--	--	--	--	--	--	--	--	**0.6**	<0.8	--
MW-86	URS	Downgradient	4/21/2021	FC-CCR-MW86-0421	--	--	--	--	--	--	--	--	**0.6**	**1.6 J**	--
MW-86	URS	Downgradient	4/21/2021	*DUP* FC-CCR-FD02-0421	--	--	--	--	--	--	--	--	**0.7**	**3.2 J**	--
MW-86	URS	Downgradient	11/12/2021	FC-CCR-MW86-1121	--	--	--	--	--	--	--	--	**0.5**	<0.6	--
MW-86	URS	Downgradient	11/12/2021	FC-CCR-FD02-1121	--	--	--	--	--	--	--	--	**0.5**	**1.4**	--
MW-86	URS	Downgradient	5/20/2022	FC-CCR-MW86-0522	--	--	--	--	--	--	--	--	<0.4	<0.7	--
MW-86	URS	Downgradient	5/20/2022	*DUP* FC-CCR-FD02-0522	--	--	--	--	--	--	--	--	<0.4	<0.7	--

Table F-3
Groundwater Sampling Results for the URS Monitoring Wells - Additional Analyses

				Constituent:	Additional Analyses											
					Alkalinity Bicarbonate	Alkalinity Carbonate	Alkalinity Hydroxide	Alkalinity(as CaCO3)	Alkalinity, Phenolphthalein, as CaCO3	Magnesium	Nickel	Potassium	Radium 226	Radium 228	Sodium
				Filtered:	N	N	N	N	N	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L	pCi/L	mg/L
				URS BTV (applicable to downgradient wells)	--	--	--	--	--	--	--	--	--	--	--
				URS GWPS (applicable to downgradient wells)	--	--	--	--	--	--	--	--	--	--	--
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**											
MW-86	URS	Downgradient	11/13/2022	FC-CCR-MW86-1122	--	--	--	--	--	--	--	--	**0.4 J**	<0.6	--
MW-86	URS	Downgradient	11/13/2022	*DUP* FC-CCR-FD02-1122	--	--	--	--	--	--	--	--	**1.9 J**	<0.6	--
MW-86	URS	Downgradient	5/7/2023	FC-CCR-MW86-0523	--	--	--	--	--	--	**0.0097**		<0.48	<0.6	--
MW-86	URS	Downgradient	5/7/2023	*DUP* FC-CCR-FD02-0523	--	--	--	--	--	--	**0.010**		<0.47	<0.6	--
MW-86	URS	Downgradient	11/06/2023	FC-CCR-MW86-1123	--	--	--	--	--	--	--	--	<0.44	**1.7**	--
CM-01	URS	Extraction	11/4/2020	FC-CCR-CM01-1120	**400**	<6	<6	**400**	<6	**2,700**	--	**39**	--	--	**700**
CM-01	URS	Extraction	5/9/2023	FC-CCR-CM01-0523	--	--	--	--	--	--	**0.029**		**0.8**	<0.61	--
CM-01	URS	Extraction	11/13/2023	FC-CCR-CM01-1123	--	--	--	--	--	--	--	--	<0.51	**1.0**	--
CM-02	URS	Extraction	11/4/2020	FC-CCR-CM02-1120	**280**	<6	<6	**280**	<6	**2,700**	--	**42**	--	--	**700**
CM-02	URS	Extraction	5/9/2023	FC-CCR-CM02-0523	--	--	--	--	--	--	**0.023**		**0.9**	**1.4**	--
CM-02	URS	Extraction	11/13/2023	FC-CCR-CM02-1123	--	--	--	--	--	--	--	--	<0.55	**2.3**	--
CM-03	URS	Supplementary	11/4/2020	FC-CCR-CM03-1120	**490**	<6	<6	**490**	<6	**3,000**	--	**55**	--	--	**780**
CM-04	URS	Supplementary	11/4/2020	FC-CCR-CM04-1120	**300**	<6	<6	**300**	<6	**2,300**	--	**43**	--	--	**850**

Notes:

BTV exceedances are shown in grey shaded cells. GWPS exceedence are shown in red text.

Abbreviations and Data Qualifiers:

< = less than
BTV = Background Threshold Value
CCR = Coal Combustion Residual
degrees C = degrees Celsius
GWPS = Groundwater Protection Standard
ID = Identification
J = The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
NJ = The analyte has been "tentatively identified" or "presumptively" as present and the associated numerical value is the estimated concentration in the sample.
mg/L = milligrams per liter
pCi/L = Picocuries per liter
su = standard units
UJ = The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

Table F-4
Groundwater Sampling Results for the Multiunit 1 Monitoring Wells - Appendix III Constituents

					Appendix III Constituents										
				Constituent:	Boron	Boron	Calcium	Calcium	Chloride	Fluoride	pH (Field Measurement)	pH (Laboratory Measurement)	Sulfate	Total Dissolved Solids
				Filtered:	N	Y	N	Y	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	su	su	mg/L	mg/L
				Multiunit 1 BTV	*3.95*	*3.95*	*454.1*	*454*	*604.7*	*2.1*	*6.52-7.88*	*6.52-7.88*	*22,000*	*34,397*
				Multiunit 1 GWPS	--	--	--	--	--	--	--	--	--	--
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**										
MW-43	Multiunit 1	Background	11/18/2013	FC-43-111813	**1.2**	--	**530**	--	**750**	<2.0	--	--	**5,900**	**10,000**
MW-43	Multiunit 1	Background	9/8/2014	FCPP-43-090814	**1.1**	--	**520**	--	**800**	<0.40	--	--	**5,900**	**11,000**
MW-43	Multiunit 1	Background	3/16/2015	FCPP-43-031615	**1.2**	--	**490**	--	**820**	<0.40	--	--	**6,300**	**11,000**
MW-43	Multiunit 1	Background	12/1/2015	FC-CCR-MW43-120115	**0.91**	--	**470**	--	**720**	<0.25	--	--	**6,800**	**7,900**
MW-49A	Multiunit 1	Background	9/10/2014	FCPP-49A-091014	**0.78**	--	**180**	--	**1,100**	<2.0	--	--	**34,000**	**40,000**
MW-49A	Multiunit 1	Background	3/19/2015	FCPP-49A-031915	**0.93**	--	**420**	--	**1,400**	<2.0	--	--	**34,000**	**51,000**
MW-49A	Multiunit 1	Background	7/1/2015	MW-47A	**1.1**	--	**450**	--	**1,500**	<4.0	--	**7.42**	**32,000**	**52,000**
MW-49A	Multiunit 1	Background	8/29/2015	FCPP-49A-082915	**0.75**	--	**440**	--	**930**	<2.0	--	**7.36**	**26,000**	**42,000**
MW-49A	Multiunit 1	Background	12/1/2015	FC-CCR-MW49A-120115	**6.0**	--	**440**	--	**340**	<0.25	--	--	**14,000**	**17,000**
MW-49A	Multiunit 1	Background	12/1/2015	FC-CCR-MW49A-120115	--	--	--	--	--	--	--	--	--	--
MW-49A	Multiunit 1	Background	4/26/2016	FC-CCR-MW-49A-042616	**2.7**	--	**440**	--	**550**	<2.0	--	--	**18,000**	**30,000**
MW-49A	Multiunit 1	Background	6/7/2016	FC-CCR-MW49A-616	--	--	--	--	--	--	--	--	--	--
MW-49A	Multiunit 1	Background	6/7/2016	FC-CCR-MW49A-616	**4.4**	--	**410**	--	**430**	**1.1**	--	**7.44**	**15,000**	**22,000**
MW-49A	Multiunit 1	Background	8/21/2016	FC-CCR-MW49A-816	**2.3**	--	**390**	--	**560**	<0.80	--	**7.2**	**20,000**	**29,000**
MW-49A	Multiunit 1	Background	8/21/2016	FC-CCR-MW49A-816	--	--	--	--	--	<0.80	--	--	--	--
MW-49A	Multiunit 1	Background	8/21/2016	FC-CCR-MW49A-816	--	--	--	--	--	--	--	--	--	--
MW-49A	Multiunit 1	Background	9/13/2016	FC-CCR-MW49A-916	**2.4**	--	**400**	--	**530**	**0.65**	--	**7.4**	**19,000**	**28,000**
MW-49A	Multiunit 1	Background	9/13/2016	FC-CCR-MW49A-916	--	--	--	--	--	<0.40	--	--	--	--
MW-49A	Multiunit 1	Background	9/13/2016	FC-CCR-MW49A-916	--	--	--	--	--	--	--	--	--	--
MW-49A	Multiunit 1	Background	10/20/2016	FC-CCR-MW49A-1016	**2.2**	--	**390**	--	**540**	<0.40	--	**7.5**	**19,000**	**28,000**
MW-49A	Multiunit 1	Background	10/20/2016	FC-CCR-MW49A-1016	--	--	--	--	--	--	--	--	--	--
MW-49A	Multiunit 1	Background	2/2/2017	FC-CCR-MW49A-117	**2.0**	--	**390**	--	**530**	<0.40	--	**7.8**	**19,000**	**29,000**
MW-49A	Multiunit 1	Background	2/2/2017	FC-CCR-MW49A-117	--	--	--	--	--	<0.40	--	--	--	--
MW-49A	Multiunit 1	Background	2/2/2017	FC-CCR-MW49A-117	--	--	--	--	--	--	--	--	--	--
MW-49A	Multiunit 1	Background	4/18/2017	FC-CCR-MW49A-41817	**2.6**	--	**410**	--	**1,000**	<2.0	--	**7.4**	**20,000**	**29,000**
MW-49A	Multiunit 1	Background	4/18/2017	FC-CCR-MW49A-41817	--	--	--	--	--	--	--	--	--	--
MW-49A	Multiunit 1	Background	4/18/2017	FC-CCR-MW49A-41817	--	--	--	--	--	<2.0	--	--	--	--
MW-49A	Multiunit 1	Background	5/3/2017	FC-CCR-MW49A-5317	--	--	--	--	--	<13	--	--	--	--
MW-49A	Multiunit 1	Background	5/3/2017	FC-CCR-MW49A-5317	--	--	--	--	--	--	--	--	--	--
MW-49A	Multiunit 1	Background	5/30/2017	FC-CCR-MW49A-53017	--	--	--	--	--	<2.0	--	--	--	--
MW-49A	Multiunit 1	Background	5/30/2017	FC-CCR-MW49A-53017	--	--	--	--	--	--	--	--	--	--
MW-49A	Multiunit 1	Background	6/22/2017	FC-CCR-MW49A-62217	**2.1**	--	**380**	--	**510**	--	--	**7.5**	**22,000**	**24,000**
MW-49A	Multiunit 1	Background	6/22/2017	FC-CCR-MW49A-62217	--	--	--	--	--	<2.0	--	--	--	--
MW-49A	Multiunit 1	Background	6/22/2017	FC-CCR-MW49A-62217	--	--	--	--	--	--	--	--	--	--
MW-49A	Multiunit 1	Background	7/22/2017	FC-CCR-MW49A-72217	**2.2**	--	**390**	--	**520**	<4.0	--	**7.6**	**18,000**	**25,000**
MW-49A	Multiunit 1	Background	7/22/2017	FC-CCR-MW49A-72217	--	--	--	--	--	--	--	--	--	--
MW-49A	Multiunit 1	Background	7/22/2017	FC-CCR-MW49A-72217	--	--	--	--	--	--	--	--	--	--
MW-49A	Multiunit 1	Background	8/10/2017	FC-CCR-MW49A-81017	**2.7**	--	**400**	--	**520**	--	--	**7.5**	**18,000**	**23,000**
MW-49A	Multiunit 1	Background	8/10/2017	FC-CCR-MW49A-81017	--	--	--	--	--	<4.0	--	--	--	--
MW-49A	Multiunit 1	Background	8/10/2017	FC-CCR-MW49A-81017	--	--	--	--	--	--	--	--	--	--
MW-49A	Multiunit 1	Background	8/17/2017	FC-CCR-MW49A-81717	--	--	--	--	--	--	--	--	--	--
MW-49A	Multiunit 1	Background	8/17/2017	FC-CCR-MW49A-81717	**2.9**	--	**440**	--	**510**	<4.0	--	**7.5**	**16,000**	**22,000**
MW-49A	Multiunit 1	Background	9/10/2017	FC-CCR-MW49A-91017	**3.4**	--	**410**	--	**490**	--	--	**7.4**	**16,000**	**22,000**
MW-49A	Multiunit 1	Background	9/10/2017	FC-CCR-MW49A-91017	--	--	--	--	--	<4.0	--	--	--	--
MW-49A	Multiunit 1	Background	9/10/2017	FC-CCR-MW49A-91017	--	--	--	--	--	--	--	--	--	--
MW-49A	Multiunit 1	Background	10/12/2017	FC-CCR-MW49A-101217	--	--	--	--	--	--	--	--	--	--
MW-49A	Multiunit 1	Background	10/12/2017	FC-CCR-MW49A-101217	**3.1**	--	**370**	--	**490**	<4.0	--	**7.4**	**16,000**	**22,000**
MW-49A	Multiunit 1	Background	11/30/2017	FC-CCR-MW49A-113017	**2.2**	--	**420**	--	**560**	<4.0	--	**7.4**	**17,000**	**23,000**
MW-49A	Multiunit 1	Background	3/17/2018	FC-CCR-MW49A-31718	--	--	--	--	--	--	--	--	--	--
MW-49A	Multiunit 1	Background	6/1/2018	FC-CCR-MW-49A-6118	--	--	--	--	--	--	--	--	--	--
MW-49A	Multiunit 1	Background	6/1/2018	FC-CCR-MW-49A-6118	**2.5**	--	**380**	--	**560**	<0.80	--	**7.4**	**18,000**	**26,000**
MW-49A	Multiunit 1	Background	11/4/2018	FC-CCR-MW49A-11418	**1.8**	--	**380**	--	**590**	<0.80	--	**7.4**	**19,000**	**27,000**
MW-49A	Multiunit 1	Background	11/4/2018	FC-CCR-MW49A-11418	--	--	--	--	--	--	--	--	--	--
MW-49A	Multiunit 1	Background	11/4/2018	FC-CCR-MW49A-11418	--	--	--	--	--	--	--	--	--	--

Table F-4
Groundwater Sampling Results for the Multiunit 1 Monitoring Wells - Appendix III Constituents

					Appendix III Constituents									
				Constituent:	Boron	Boron	Calcium	Calcium	Chloride	Fluoride	pH (Field Measurement)	pH (Laboratory Measurement)	Sulfate	Total Dissolved Solids
				Filtered:	N	Y	N	Y	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	su	su	mg/L	mg/L
				Multiunit 1 BTV	*3.95*	*3.95*	*454.1*	*454*	*604.7*	*2.1*	*6.52-7.88*	*6.52-7.88*	*22,000*	*34,397*
				Multiunit 1 GWPS	--	--	--	--	--	--	--	--	--	--
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**										
MW-49A	Multiunit 1	Background	3/19/2019	FC-CCR-MW49A-031919	--	--	--	--	--	**0.92**	--	--	--	--
MW-49A	Multiunit 1	Background	3/19/2019	FC-CCR-MW49A-031919	--	--	--	--	--	--	--	--	--	--
MW-49A	Multiunit 1	Background	5/14/2019	FC-CCR-MW49A-51419	**7.4**	--	**350**	--	**420**	**1.2**	--	**7.6 J**	**11,000**	**15,000**
MW-49A	Multiunit 1	Background	5/14/2019	FC-CCR-MW49A-51419	--	--	--	--	--	--	--	--	--	--
MW-49A	Multiunit 1	Background	11/19/2019	FC-CCR-MW49A-111919	**6.2**	--	**380**	--	**400**	<0.80	--	**7.5 J**	**12,000**	**18,000**
MW-49A	Multiunit 1	Background	6/23/2020	FC-CCR-MW49A-0620	**6.3**	--	**430**	--	**720**	<0.8	**7.01**	**7.6 J**	**13,000**	**17,000**
MW-49A	Multiunit 1	Background	11/6/2020	FC-CCR-MW49-1120	**5.6**	--	**420**	--	**430**	**0.66 J**	**7.14**	**7.5 J**	**14,000**	**18,000**
MW-49A	Multiunit 1	Background	4/27/2021	FC-CCR-MW49A-0421	**5.2**	--	**420**	--	**440**	**0.47 J**	**7.90**	**7.5 J**	**14,000**	**19,000**
MW-49A	Multiunit 1	Background	11/15/2021	FC-CCR-MW49A-1121	**5.0**	--	**440**	--	**510**	**0.51 J**	**6.99**	**7.4 J**	**16,000**	**20,000**
MW-49A	Multiunit 1	Background	5/26/2022	FC-CCR-MW49A-0522	**4.5**	--	**420**	--	**460**	<0.8	**7.42**	**7.53 J**	**14,000**	**16,000**
MW-49A	Multiunit 1	Background	11/16/2022	FC-CCR-MW49A-1122	**4.2**	--	**420**	--	**510**	<4	**7.05**	**7.3 J**	**14,000**	**21,000**
MW-49A	Multiunit 1	Background	5/8/2023	FC-CCR-MW49A-0523	**4.6**	--	**380**	--	**510**	<20	**7.00**	**7.3 J**	**15,000**	**19,000**
MW-49A	Multiunit 1	Background	11/15/2023	FC-CCR-MW49A-1124	**5.8**	--	**490**	--	**480**	<0.8	**7.02**	**7.3 J**	**5,600**	**19,000**
MW-50A	Multiunit 1	Background	3/19/2015	FCPP-50A-031915	**3.0**	--	**430**	--	**460**	<0.40	--	--	**4,800**	**7,700**
MW-50A	Multiunit 1	Background	12/1/2015	FC-CCR-MW50-120115	**2.4**	--	**440**	--	**400**	<0.25	--	--	**4,800**	**5,600**
MW-50A	Multiunit 1	Background	12/1/2015	FC-CCR-MW50-120115	--	--	--	--	--	--	--	--	--	--
MW-50A	Multiunit 1	Background	2/2/2017	FC-CCR-MW50A-117	**3.1**	--	**410**	--	**440**	**0.52**	--	**7.9**	**4,400**	**7,000**
MW-50A	Multiunit 1	Background	2/2/2017	FC-CCR-MW50A-117	--	--	--	--	--	<0.40	--	--	--	--
MW-74	Multiunit 1	Background	2/2/2017	FC-CCR-MW74-117	**1.7**	--	**420**	--	**590**	**1.6**	--	**8.0**	**7,600**	**12,000**
MW-74	Multiunit 1	Background	2/2/2017	FC-CCR-MW74-117	--	--	--	--	--	**1.7**	--	--	--	--
MW-74	Multiunit 1	Background	2/2/2017	FC-CCR-MW74-117	--	--	--	--	--	--	--	--	--	--
MW-74	Multiunit 1	Background	4/18/2017	FC-CCR-MW74-41817	**1.6**	--	**360**	--	**430**	**1.8**	--	**8.0**	**7,700**	**12,000**
MW-74	Multiunit 1	Background	4/18/2017	FC-CCR-MW74-41817	--	--	--	--	--	--	--	--	--	--
MW-74	Multiunit 1	Background	4/18/2017	FC-CCR-MW74-41817	--	--	--	--	--	**1.6**	--	--	--	--
MW-74	Multiunit 1	Background	5/2/2017	FC-CCR-MW74-5217	--	--	--	--	--	<13	--	--	--	--
MW-74	Multiunit 1	Background	5/2/2017	FC-CCR-MW74-5217	--	--	--	--	--	--	--	--	--	--
MW-74	Multiunit 1	Background	5/29/2017	FC-CCR-MW74-52917	--	--	--	--	--	**1.9**	--	--	--	--
MW-74	Multiunit 1	Background	5/29/2017	FC-CCR-MW74-52917	--	--	--	--	--	--	--	--	--	--
MW-74	Multiunit 1	Background	6/22/2017	FC-CCR-MW74-62217	**1.6**	--	**420**	--	**410**	--	--	**7.8**	**7,800**	**12,000**
MW-74	Multiunit 1	Background	6/22/2017	FC-CCR-MW74-62217	--	--	--	--	--	**1.9**	--	--	--	--
MW-74	Multiunit 1	Background	6/22/2017	FC-CCR-MW74-62117	--	--	--	--	--	--	--	--	--	--
MW-74	Multiunit 1	Background	7/22/2017	FC-CCR-MW74-72217	**1.6**	--	**420**	--	**410**	**1.9**	--	**7.8**	**8,400**	**12,000**
MW-74	Multiunit 1	Background	7/22/2017	FC-CCR-MW74-72217	--	--	--	--	--	--	--	--	--	--
MW-74	Multiunit 1	Background	7/22/2017	FC-CCR-MW74-72217	--	--	--	--	--	--	--	--	--	--
MW-74	Multiunit 1	Background	8/10/2017	FC-CCR-MW74-81017	**1.5**	--	**420**	--	**420**	--	--	**7.9**	**10,000**	**13,000**
MW-74	Multiunit 1	Background	8/10/2017	FC-CCR-MW74-81017	--	--	--	--	--	**2.0**	--	--	--	--
MW-74	Multiunit 1	Background	8/10/2017	FC-CCR-MW74-81017	--	--	--	--	--	--	--	--	--	--
MW-74	Multiunit 1	Background	9/10/2017	FC-CCR-MW74-91017	**1.9**	--	**420**	--	**470**	--	--	**7.7**	**11,000**	**15,000**
MW-74	Multiunit 1	Background	9/10/2017	FC-CCR-MW74-91017	--	--	--	--	--	**2.0**	--	--	--	--
MW-74	Multiunit 1	Background	9/10/2017	FC-CCR-MW74-91017	--	--	--	--	--	--	--	--	--	--
MW-74	Multiunit 1	Background	10/11/2017	FC-CCR-MW74-101117	--	--	--	--	--	--	--	--	--	--
MW-74	Multiunit 1	Background	10/11/2017	FC-CCR-MW74-101117	**1.3**	--	**380**	--	**490**	**2.1**	--	**7.8**	**13,000**	**18,000**
MW-74	Multiunit 1	Background	11/30/2017	FC-CCR-MW74-113017	**1.4**	--	**460**	--	**470**	**1.9**	--	**7.6**	**12,000**	**17,000**
MW-74	Multiunit 1	Background	3/17/2018	FC-CCR-MW74-31718	--	--	--	--	--	--	--	--	--	--
MW-74	Multiunit 1	Background	6/1/2018	FC-CCR-MW-74-6118	--	--	--	--	--	--	--	--	--	--
MW-74	Multiunit 1	Background	6/1/2018	FC-CCR-MW-74-6118	**1.5**	--	**400**	--	**460**	**2.1**	--	**7.7**	**11,000**	**17,000**
MW-74	Multiunit 1	Background	3/19/2019	FC-CCR-MW74-031919	--	--	--	--	--	**2.4**	--	--	--	--
MW-74	Multiunit 1	Background	3/19/2019	FC-CCR-MW74-031919	--	--	--	--	--	--	--	--	--	--
MW-74	Multiunit 1	Background	5/13/2019	FC-CCR-MW74-51319	**1.6**	--	**400**	--	**610**	**1.9**	--	**7.7 J**	**16,000**	**23,000**
MW-74	Multiunit 1	Background	5/13/2019	FC-CCR-MW74-51319	--	--	--	--	--	--	--	--	--	--
MW-74	Multiunit 1	Background	6/20/2020	FC-CCR-MW74-0620	**2.2**	--	**430**	--	**700**	**1.1**	**7.09**	**7.7 J**	**18,000**	**28,000**
MW-74	Multiunit 1	Background	4/23/2021	FC-CCR-MW74-0421	**2.0**	--	**460**	--	**850**	**1.5**	**8.00**	**7.7 J**	**22,000**	**31,000**
DMX-3	Multiunit 1	Supplementary	4/21/1992	DMX-3_4/21/1992	--	**0.70**	--	**459**	**440**	**0.23**	--	**7.6**	**8,900**	**15,000**
DMX-3	Multiunit 1	Supplementary	3/12/2014	FC-DMX3-031214	**1.8**	--	**440**	--	**520**	<0.80	--	--	**7,500**	**12,000**

Table F-4
Groundwater Sampling Results for the Multiunit 1 Monitoring Wells - Appendix III Constituents

					Appendix III Constituents										
				Constituent:	Boron	Boron	Calcium	Calcium	Chloride	Fluoride	pH (Field Measurement)	pH (Laboratory Measurement)	Sulfate	Total Dissolved Solids
				Filtered:	N	Y	N	Y	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	su	su	mg/L	mg/L
				Multiunit 1 BTV	*3.95*	*3.95*	*454.1*	*454*	*604.7*	*2.1*	*6.52-7.88*	*6.52-7.88*	*22,000*	*34,397*
				Multiunit 1 GWPS	--	--	--	--	--	--	--	--	--	--
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**										
DMX-3	Multiunit 1	Supplementary	9/11/2014	FCPP-DMX3-91114	1.7	--	450	--	650	<0.40	--	--	9,600	14,000
DMX-3	Multiunit 1	Supplementary	12/8/2014	FCPP-DUP1-12914	1.7	--	--	--	--	--	--	--	--	--
DMX-3	Multiunit 1	Supplementary	12/8/2014	FCPP-DMX03-12914	1.7	--	--	--	--	--	--	--	--	--
DMX-3	Multiunit 1	Supplementary	3/18/2015	FCPP-DMX3-031815	2.0	--	430	--	780	<0.40	--	--	11,000	16,000
DMX-3	Multiunit 1	Supplementary	6/24/2015	DMX-3	1.5	--	410	--	810	<8.0	--	7.2	5,600	17,000
DMX-3	Multiunit 1	Supplementary	11/5/2015	FC DMX -3-(051115)	1.4	--	440	--	850	<2.0	--	7.16	11,000	17,000
DMX-3	Multiunit 1	Supplementary	6/21/2016	FC-SEEPS-DMX-3-062116	1.0	--	420	--	1,000	<0.40	--	7.19	11,000	19,000
DMX-3	Multiunit 1	Supplementary	9/15/2016	FC-Seep-DMX3-916	0.97	--	400	--	970	<0.40	--	7.2	12,000	19,000
DMX-3	Multiunit 1	Supplementary	6/22/2020	FC-CCR-DMX03-0620	--	--	--	--	--	--	6.88	--	--	--
DMX-3	Multiunit 1	Supplementary	11/7/2020	FC-CCR-DMX03-1120	0.86	--	440	--	1,100	0.31 J	6.98	7.5 J	13,000 J	19,000
DMX-3	Multiunit 1	Supplementary	4/25/2021	FC-CCR-DMX03-0421	0.92	--	470	--	1,100 J	0.17 J	7.64	7.4 J	13,000	20,000
DMX-3	Multiunit 1	Supplementary	11/14/2021	FC-CCR-DMX03	0.93	--	430	--	1,300	<0.8	6.84	7.4 J	15,000	39,000
DMX-3	Multiunit 1	Supplementary	2/1/2022	FC-CCR-DMX03-0222	0.80	--	420	--	1,100	<0.8	6.71	7.6 J	14,000	17,000
DMX-3	Multiunit 1	Supplementary	5/25/2022	FC-CCR-DMX03-0522	0.77	--	490	--	2,200 J	<0.8 U J	6.74	7.53 J	28,000	21,000
DMX-3	Multiunit 1	Supplementary	8/12/2022	FC-CCR-DMX03-0822	0.77	--	450	--	1,100	<0.8	6.35	7.2 J	13,000	20,000
DMX-3	Multiunit 1	Supplementary	11/11/2022	FC-CCR-DMX03-1122	0.82	--	430	--	1,200	<0.8	6.90	7.2 J	13,000	21,000
DMX-3	Multiunit 1	Supplementary	5/3/2023	FC-CCR-DMX03-0523	0.96	--	440	--	1,200	<80	6.82	7.2 J	13,000	21,000
DMX-3	Multiunit 1	Supplementary	11/13/2023	FC-CCR-DMX03-1124	1.2	--	470	--	1,100	<0.8	6.92	7.2 J	13,000	19,000
DMX-4	Multiunit 1	Supplementary	4/21/1992	DMX-4_4/21/1992	--	0.47	--	433	550	0.93	--	7.8	9,400	16,000
DMX-4	Multiunit 1	Supplementary	3/18/2015	FCPP-DMX4-031815	1.0	--	430	--	460	<0.40	--	--	7,100	11,000
DMX-4	Multiunit 1	Supplementary	6/24/2015	DMX-4	0.92	--	390	--	430	0.58	--	7.51	7,000	11,000
DMX-4	Multiunit 1	Supplementary	8/29/2015	FCPP-DMX4-082915	0.93	--	430	--	430	<2.0	--	7.54	6,200	10,000
DMX-4	Multiunit 1	Supplementary	11/7/2015	FC DMX-4-(07115)	1.2	--	440	--	430	0.44	--	7.61	6,600	11,000
DMX-4	Multiunit 1	Supplementary	11/7/2015	*DUP* FC FD-3-(071115)	1.3	--	490	--	--	--	--	7.59	--	10,000
DMX-4	Multiunit 1	Supplementary	6/21/2016	FC-SEEPS-DMX-4-062116	0.93	--	420	--	450	0.89	--	7.54	6,600	11,000
DMX-4	Multiunit 1	Supplementary	9/15/2016	FC-Seep-DMX4-916	0.91	--	380	--	390	0.87	--	7.5	6,300	21,000
DMX-4	Multiunit 1	Supplementary	3/19/2019	FC-CCR-DMX4-031919	--	--	--	--	--	<0.80	--	--	--	--
DMX-4	Multiunit 1	Supplementary	3/19/2019	FC-CCR-DMX4-031919	--	--	--	--	--	--	--	--	--	--
DMX-4	Multiunit 1	Supplementary	5/14/2019	FC-CCR-DMX4-51419	1.2	--	410	--	420	0.83	--	7.6 J	6,400	11,000
DMX-4	Multiunit 1	Supplementary	5/14/2019	FC-CCR-DMX4-51419	--	--	--	--	--	--	--	--	--	--
DMX-4	Multiunit 1	Supplementary	11/19/2019	FC-CCR-DMX4-111919	1.3	--	420	--	510	<0.80	--	7.7 J	6,900	11,000
DMX-4	Multiunit 1	Supplementary	6/22/2020	FC-CCR-DMX04-0620	1.3	--	410	--	490	<0.8	7.30	7.7 J	7,400	12,000
DMX-4	Multiunit 1	Supplementary	11/7/2020	FC-CCR-DMX04-1120	3.1	--	410	--	770	0.92	7.38	7.7 J	9,400	15,000
DMX-4	Multiunit 1	Supplementary	4/25/2021	FC-CCR-DMX04-0421	2.7	--	440	--	660 J	0.89	8.22	7.7 J	8,500	14,000
DMX-4	Multiunit 1	Supplementary	11/16/2021	FC-CCR-DMX04-1121	1.7	--	420	--	510	0.94	7.28	7.8 J	8,000	12,000 J
DMX-4	Multiunit 1	Supplementary	2/8/2022	FC-CCR-DMX04-0222	2.2	--	440	--	490	0.69	7.24	7.8 J	7,400	11,000
DMX-4	Multiunit 1	Supplementary	5/25/2022	FC-CCR-DMX04-0522	1.4	--	450	--	860	0.88	7.30	7.76 J	16,000	10,000
DMX-4	Multiunit 1	Supplementary	8/12/2022	FC-CCR-DMX04-0822	1.3	--	430	--	450	1.0	7.04	7.7 J	6,700	10,000
DMX-4	Multiunit 1	Supplementary	11/14/2022	FC-CCR-DMX04-1122	1.6	--	430	--	540	<2	7.48	7.6 J	7,400	12,000
DMX-4	Multiunit 1	Supplementary	5/4/2023	FC-CCR-DMX04-0523	1.4	--	430	--	450	<20	7.38	7.6 J	6,800	11,000
DMX-4	Multiunit 1	Supplementary	11/14/2023	FC-CCR-DMX04-1124	1.6	--	450	--	440	0.95	7.44	7.6 J	6,500	10,000
DMX-05R	Multiunit 1	Extraction (Inactive)	11/16/2023	FC-CCR-DMX05R-1124	15	--	470	--	1,300	<0.8	7.22	7.5 J	9,700	15,000 J
DMX-6	Multiunit 1	Supplementary	4/21/1992	DMX-6_4/21/1992	--	5.76	--	496	330	0.26	--	7.7	4,900	8,400
DMX-6	Multiunit 1	Supplementary	3/17/2015	FCPP-DMX6-031715	9.4	--	440	--	350	<0.80	--	--	5,600	8,600
DMX-6	Multiunit 1	Supplementary	6/24/2015	DMX-6	4.4	--	400	--	1,800	<8.0	--	7.12	13,000	19,000
DMX-6	Multiunit 1	Supplementary	8/29/2015	FCPP-DMX6-082915	7.1	--	430	--	420	<2.0	--	7.25	6,200	10,000
DMX-6	Multiunit 1	Supplementary	11/10/2015	FC DMX-6-(101115)	7.9	--	450	--	--	--	--	7.26	--	10,000
DMX-6	Multiunit 1	Supplementary	6/22/2016	FC-SEEPS-DMX6-062216	6.7	--	410	--	430	<0.40	--	7.32	6,000	10,000
DMX-6	Multiunit 1	Supplementary	9/15/2016	FC-Seep-DMX6-916	6.7	--	390	--	650	<0.40	--	7.2	7,200	11,000
DMX-6	Multiunit 1	Supplementary	3/19/2019	FC-CCR-DMX6-031919	--	--	--	--	--	<0.80	--	--	--	--
DMX-6	Multiunit 1	Supplementary	3/19/2019	FC-CCR-DMX6-031919	--	--	--	--	--	--	--	--	--	--
DMX-6	Multiunit 1	Supplementary	5/14/2019	FC-CCR-DMX6-51419	5.5	--	330	--	880	<0.80	--	7.2 J	8,100	13,000
DMX-6	Multiunit 1	Supplementary	5/14/2019	FC-CCR-DMX6-51419	--	--	--	--	--	--	--	--	--	--
DMX-6	Multiunit 1	Supplementary	11/19/2019	FC-CCR-DMX6-111919	6.1	--	360	--	710	<0.80	--	7.2 J	7,300	12,000

Table F-4
Groundwater Sampling Results for the Multiunit 1 Monitoring Wells - Appendix III Constituents

					Appendix III Constituents										
				Constituent:	Boron	Boron	Calcium	Calcium	Chloride	Fluoride	pH (Field Measurement)	pH (Laboratory Measurement)	Sulfate	Total Dissolved Solids
				Filtered:	N	Y	N	Y	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	su	su	mg/L	mg/L
				Multiunit 1 BTV	*3.95*	*3.95*	*454.1*	*454*	*604.7*	*2.1*	*6.52-7.88*	*6.52-7.88*	*22,000*	*34,397*
				Multiunit 1 GWPS	--	--	--	--	--	--	--	--	--	--
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**										
DMX-6	Multiunit 1	Supplementary	6/23/2020	FC-CCR-DMX06-0620	**6.0**	--	**350**	--	**880**	<0.8	**6.77**	**7.3 J**	**8,000**	**13,000**
DMX-6	Multiunit 1	Supplementary	11/6/2020	FC-CCR-DMX06-1120	**5.0**	--	**330**	--	**1,100**	**0.53**	**6.90**	**7.3 J**	**9,100**	**14,000**
DMX-6	Multiunit 1	Supplementary	4/27/2021	FC-CCR-DMX06-0421	**6.5**	--	**410**	--	**630 J**	**0.36 J**	**7.71**	**7.3 J**	**6,900**	**12,000**
DMX-6	Multiunit 1	Supplementary	11/18/2021	FC-CCR-DMX06-1121	**5.6**	--	**380**	--	**910**	**0.27 J**	**6.87**	**7.5 J**	**9,100**	**12,000**
DMX-6	Multiunit 1	Supplementary	2/8/2022	FC-CCR-DMX06-0222	**5.7**	--	**390**	--	**820**	**0.29**	**6.75**	**7.5 J**	**8,200**	**13,000**
DMX-6	Multiunit 1	Supplementary	5/24/2022	FC-CCR-DMX06-0522	**5.5**	--	**350**	--	**750**	<0.8	**6.89**	**7.47 J**	**7,500**	**12,000**
DMX-6	Multiunit 1	Supplementary	8/13/2022	FC-CCR-DMX06-0822	**5.9**	--	**400**	--	**670**	<0.8	**6.94**	**7.2 J**	**7,300**	**11,000**
DMX-6	Multiunit 1	Supplementary	11/16/2022	FC-CCR-DMX06-1122	**5.6**	--	**380**	--	**830**	<4	**6.95**	**7.1 J**	**7,500**	**12,000**
DMX-6	Multiunit 1	Supplementary	5/8/2023	FC-CCR-DMX06-0523	**6.0**	--	**360**	--	**840**	<2	**6.89**	**7.4 J**	**7,500**	**12,000**
DMX-6	Multiunit 1	Supplementary	11/15/2023	FC-CCR-DMX06-1124	**6.3**	--	**430**	--	**950**	<0.8	**6.98**	**7.3 J**	**7,000**	**14,000**
MW-05	Multiunit 1	Supplementary	4/1/1987	MW-5_4/1/1987	--	**1.0**	--	**480**	**1,900**	**0.60**	**7.40**	**7.1**	**15,000**	**20,000**
MW-05	Multiunit 1	Supplementary	10/2/1987	MW-5_10/2/1987	--	**0.94**	--	**460**	**1,800**	<0.5	**7.32**	**7.4**	**16,000**	**27,000**
MW-05	Multiunit 1	Supplementary	6/14/1988	MW-5-19880614	--	--	**452**	--	**1,644**	**0.90**	**7.09**	--	**12,777**	**22,543**
MW-05	Multiunit 1	Supplementary	9/21/1988	MW-5-19880921	**1.0**	--	**433**	--	**1,583**	**1.1**	**7.04**	--	**12,922**	**25,575**
MW-05	Multiunit 1	Supplementary	11/28/1988	MW-5-19881128	**1.0**	--	**429**	--	**1,727**	**0.80**	**7.06**	--	**15,345**	**23,120**
MW-05	Multiunit 1	Supplementary	2/28/1989	MW-5-19890228	**1.0**	--	**440**	--	**1,430**	**0.90**	**7.20**	--	**13,713**	**23,010**
MW-05	Multiunit 1	Supplementary	9/11/1989	MW-5-19890911	**1.0**	--	**465**	--	**1,491**	**1.0**	**7.0**	--	**13,185**	**23,710**
MW-05	Multiunit 1	Supplementary	3/22/1990	MW-5-19900322	**1.0**	--	**500**	--	**1,261**	**0.80**	**7.10**	--	**12,903**	**23,200**
MW-05	Multiunit 1	Supplementary	10/30/1990	MW-5-19901030	**1.0**	--	**420**	--	**1,047**	**0.30**	**7.05**	--	**13,120**	**19,533**
MW-05	Multiunit 1	Supplementary	4/4/1991	MW-5-19910404	**1.0**	--	**400**	--	**1,048**	**0.30**	**6.94**	--	**13,185**	**19,930**
MW-05	Multiunit 1	Supplementary	9/30/1991	MW-5-19910930	**1.0**	--	**390**	--	**955**	**0.30**	**7.21**	--	**12,500**	**19,320**
MW-05	Multiunit 1	Supplementary	4/15/1992	MW-5-19920415	**1.0**	--	**420**	--	**1,151**	**0.40**	**7.20**	--	**12,680**	**21,150**
MW-05	Multiunit 1	Supplementary	11/3/1992	MW-5-19921103	**1.0**	--	**400**	--	**1,803**	**0.30**	**6.96**	--	**14,184**	**24,840**
MW-05	Multiunit 1	Supplementary	6/22/1993	MW-5-19930622	**0.60**	--	**380**	--	**927**	**0.40**	**6.98**	--	**11,436**	**19,210**
MW-05	Multiunit 1	Supplementary	11/30/1993	MW-5-19931130	**1.0**	--	**400**	--	**810**	**0.30**	**6.99**	--	**11,810**	**18,610**
MW-05	Multiunit 1	Supplementary	5/10/1994	MW-5-19940510	**1.0**	--	**420**	--	**931**	**0.40**	**7.08**	--	**11,670**	**19,240**
MW-05	Multiunit 1	Supplementary	11/8/1994	MW-5-19941108	**1.0**	--	**400**	--	**943**	**0.30**	**7.10**	--	**10,944**	**18,670**
MW-05	Multiunit 1	Supplementary	4/6/1995	MW-5-19950406	**1.0**	--	**420**	--	**929**	**0.30**	**7.02**	--	**10,568**	**19,370**
MW-05	Multiunit 1	Supplementary	12/13/1995	MW-5-19951213	**0.89**	--	**400**	--	**900**	**0.30**	**7.07**	--	**11,068**	**18,090**
MW-05	Multiunit 1	Supplementary	8/15/1996	MW-5-19960815	**0.67**	--	**360**	--	**762**	**0.20**	**7.02**	--	**9,929**	**17,210**
MW-05	Multiunit 1	Supplementary	4/15/1997	MW-5-19970415	**0.99**	--	**360**	--	**759.8**	**0.20**	**7.37**	--	**9,614**	**17,380**
MW-05	Multiunit 1	Supplementary	10/13/1997	MW-5-19971013	<0.05	--	**400**	--	**786.2**	**0.20**	**7.20**	--	**9,887**	**16,050**
MW-05	Multiunit 1	Supplementary	4/14/1998	MW-5-19980414	--	--	**420**	--	**774.2**	**0.20**	**6.86**	--	**9,217**	**16,410**
MW-05	Multiunit 1	Supplementary	10/20/1998	MW-5-19981020	**1.02**	--	**380**	--	**850.6**	**0.20**	**7.16**	--	**10,063**	**16,600**
MW-05	Multiunit 1	Supplementary	6/8/1999	MW-5-19990608	**1.8**	--	**420**	--	**889.6**	**0.30**	**7.04**	--	**9,983**	**17,740**
MW-05	Multiunit 1	Supplementary	12/1/1999	MW-5-19991201	**1.6**	--	**440**	--	**747.4**	**0.30**	**7.02**	--	**8,913**	**18,140**
MW-05	Multiunit 1	Supplementary	5/30/2000	MW-5-20000530	**1.83**	--	**430**	--	**1,220**	**0.30**	**6.96**	--	**12,493**	**16,900**
MW-05	Multiunit 1	Supplementary	11/14/2000	MW-5-20001114	**2.02**	--	**40**	--	**754.2**	**0.2972**	**7.01**	--	**8,457**	**16,410**
MW-05	Multiunit 1	Supplementary	8/21/2001	MW-5-20010821	**1.61**	--	**400**	--	**823.8**	**0.30**	**6.94**	--	**8,732**	**15,320**
MW-05	Multiunit 1	Supplementary	12/4/2001	MW-5-20011204	**1.4**	--	**440**	--	**781**	**0.30**	**6.80**	--	**9,030**	**15,300**
MW-05	Multiunit 1	Supplementary	6/11/2002	MW-5-20020611	**1.6**	--	**400**	--	**857**	**0.40**	**7.05**	--	**8,785**	**16,320**
MW-05	Multiunit 1	Supplementary	12/18/2002	MW-5-20021218	**1.57**	--	**380**	--	**809.4**	**0.30**	**7.07**	--	**8,517**	**16,310**
MW-05	Multiunit 1	Supplementary	5/28/2003	MW-5-20030528	**1.84**	--	**400**	--	**899.2**	**0.20**	**6.92**	--	**8,022**	**10,180**
MW-05	Multiunit 1	Supplementary	12/15/2003	MW-5-20031215	**0.90**	--	**320**	--	**791.4**	**0.29**	**6.97**	--	**8,312**	**15,850**
MW-05	Multiunit 1	Supplementary	6/18/2004	MW-5-20040618	--	--	**400**	--	**862.2**	**0.30**	**6.97**	--	**8,886**	**47,050**
MW-05	Multiunit 1	Supplementary	11/30/2004	MW-5-20041130	**1.3**	--	**440**	--	**875.6**	**0.30**	**7.10**	--	**6,119**	**16,360**
MW-05	Multiunit 1	Supplementary	5/11/2005	MW-5-20050511	**0.952**	--	**440**	--	**860.4**	**0.20**	**6.76**	--	**8,955**	**15,920**
MW-05	Multiunit 1	Supplementary	12/12/2005	MW-5-20051212	**0.841**	--	**445**	--	**958.4**	**0.30**	**7.10**	--	**9,241**	**16,780**
MW-05	Multiunit 1	Supplementary	5/15/2006	MW-5-20060515	**0.837**	--	**444**	--	**977**	**0.226**	**7.01**	--	**11,400**	**17,200**
MW-05	Multiunit 1	Supplementary	10/13/2006	MW-5-20061013	**0.997**	--	**476**	--	**852**	**0.219**	**6.96**	--	**10,000**	**17,300**
MW-05	Multiunit 1	Supplementary	4/19/2007	MW-5-20070419	**0.97**	--	**429**	--	**836**	**0.133**	**7.00**	--	**9,120**	**16,500**
MW-05	Multiunit 1	Supplementary	11/20/2007	MW-5-20071120	**0.743**	--	**348**	--	**1,040**	**0.30**	**7.00**	--	**9,800**	**18,100**
MW-05	Multiunit 1	Supplementary	5/8/2008	MW-5-20080508	**0.50**	--	**356**	--	**1,010**	**0.30**	**7.03**	--	**10,900**	**17,770**
MW-05	Multiunit 1	Supplementary	9/27/2012	MW-5-092712-01	**1.2**	--	**420**	--	**3,300**	<4.0	--	--	**14,000**	**24,000**

Table F-4
Groundwater Sampling Results for the Multiunit 1 Monitoring Wells - Appendix III Constituents

					Appendix III Constituents										
				Constituent:	Boron	Boron	Calcium	Calcium	Chloride	Fluoride	pH (Field Measurement)	pH (Laboratory Measurement)	Sulfate	Total Dissolved Solids
				Filtered:	N	Y	N	Y	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	su	su	mg/L	mg/L
				Multiunit 1 BTV	*3.95*	*3.95*	*454.1*	*454*	*604.7*	*2.1*	*6.52-7.88*	*6.52-7.88*	*22,000*	*34,397*
				Multiunit 1 GWPS	--	--	--	--	--	--	--	--	--	--
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**										
MW-05	Multiunit 1	Supplementary	9/10/2014	FCPP-05-091014	1.1	--	420	--	3,800	<0.80	--	--	17,000	25,000
MW-05	Multiunit 1	Supplementary	3/18/2015	FCPP-05-031815	1.2	--	450	--	3,400	<0.80	--	--	14,000	24,000
MW-05	Multiunit 1	Supplementary	6/30/2015	MW-5	1.2	--	420	--	3,100	<4.0	--	7.0	13,000	21,000
MW-05	Multiunit 1	Supplementary	8/25/2015	FCPP-5-082515	1.2	--	450	--	3,400	<4.0	--	6.98	13,000	26,000
MW-05	Multiunit 1	Supplementary	11/6/2015	FC MW-5-(061115)	1.1	--	450	--	2,300	<4.0	--	6.93	13,000	22,000
MW-05	Multiunit 1	Supplementary	6/17/2016	FC-Seep-MW5-616	1.0	--	460	--	3,000	<0.80	--	7.27	14,000	23,000
MW-05	Multiunit 1	Supplementary	6/17/2016	FC-Seep-Dup1-616	0.98	--	450	--	3,000	<0.80	--	7.27	14,000	25,000
MW-05	Multiunit 1	Supplementary	9/15/2016	FC-Seep-MW5-916	1.0	--	440	--	2,900	<2.0	--	7.0	14,000	25,000
MW-05	Multiunit 1	Supplementary	6/22/2020	FC-CCR-MW05-0620	--	--	--	--	--	--	6.64	--	--	--
MW-05	Multiunit 1	Supplementary	11/7/2020	FC-CCR-MW05-1120	1.2	--	--	--	--	--	6.71	--	--	--
MW-05	Multiunit 1	Supplementary	4/25/2021	FC-CCR-MW05-0421	1.2	--	510	--	4,400 J	0.52 J	7.33	7.2 J	15,000	26,000
MW-05	Multiunit 1	Supplementary	11/16/2021	FC-CCR-MW05-1121	1.2	--	510	--	8,100	0.51 J	6.58	7.2 J	27,000	28,000 J
MW-05	Multiunit 1	Supplementary	2/1/2022	FC-CCR-MW05-0222	1.1	--	460	--	8,200	<0.8	6.54	7.5 J	13,000	22,000
MW-05	Multiunit 1	Supplementary	5/25/2022	FC-CCR-MW05-0522	1.1	--	530	--	8,700	<0.8	6.62	7.49 J	34,000	20,000
MW-05	Multiunit 1	Supplementary	8/12/2022	FC-CCR-MW05-0822	1.2	--	520	--	4,200	0.85	6.32	7.0 J	14,000	27,000
MW-05	Multiunit 1	Supplementary	11/11/2022	FC-CCR-MW05-1122	1.2	--	520	--	4,200	<4	6.79	7.0 J	15,000	27,000
MW-05	Multiunit 1	Supplementary	5/3/2023	FC-CCR-MW05-0523	1.3	--	460	--	4,200	<80	6.73	7.1 J	14,000	28,000
MW-05	Multiunit 1	Supplementary	11/13/2023	FC-CCR-MW05-1124	1.3	--	520	--	4,200	<0.8	6.83	7.1 J	14,000	27,000
MW-06	Multiunit 1	Supplementary	4/1/1987	MW-6_4/1/1987	--	0.70	--	430	420	<0.5	7.60	7.4	9,000	11,000
MW-06	Multiunit 1	Supplementary	9/30/1987	MW-6_9/30/1987	--	0.60	--	410	410	<0.5	7.60	7.6	8,500	13,000
MW-06	Multiunit 1	Supplementary	6/15/1988	MW-6-19880615	--	--	396	--	469	0.60	7.29	--	8,590	13,690
MW-06	Multiunit 1	Supplementary	9/21/1988	MW-6-19880921	1.0	--	370	--	374	0.50	7.03	--	7,922	13,885
MW-06	Multiunit 1	Supplementary	11/29/1988	MW-6-19881129	1.0	--	389	--	397	0.40	7.26	--	8,366	13,535
MW-06	Multiunit 1	Supplementary	2/27/1989	MW-6-19890227	1.0	--	397	--	375	0.40	7.29	--	8,201	13,195
MW-06	Multiunit 1	Supplementary	9/12/1989	MW-6-19890912	1.0	--	340	--	369	0.30	7.25	--	7,022	12,370
MW-06	Multiunit 1	Supplementary	3/26/1990	MW-6-19900326	1.0	--	370	--	397	0.30	7.40	--	7,699	12,190
MW-06	Multiunit 1	Supplementary	10/30/1990	MW-6-19901030	1.0	--	380	--	396	0.20	7.35	--	7,792	11,898
MW-06	Multiunit 1	Supplementary	4/2/1991	MW-6-19910402	1.0	--	370	--	394	0.20	7.37	--	7,532	14,600
MW-06	Multiunit 1	Supplementary	9/24/1991	MW-6-19910924	1.0	--	356	--	396	0.20	7.41	--	7,174	11,860
MW-06	Multiunit 1	Supplementary	5/5/1992	MW-6-19920505	1.0	--	350	--	391.1	0.20	7.54	--	7,040	11,550
MW-06	Multiunit 1	Supplementary	11/27/1992	MW-6-19921127	1.0	--	360	--	411.6	0.30	7.29	--	8,030	12,060
MW-06	Multiunit 1	Supplementary	4/21/1993	MW-6-19930421	0.76	--	360	--	495	0.30	7.20	--	8,506	12,960
MW-06	Multiunit 1	Supplementary	11/22/1993	MW-6-19931122	1.0	--	380	--	360	0.20	7.31	--	6,894	11,130
MW-06	Multiunit 1	Supplementary	4/20/1994	MW-6-19940420	1.0	--	390	--	391	0.40	7.33	--	6,742	11,520
MW-06	Multiunit 1	Supplementary	9/20/1994	MW-6-19940920	1.0	--	370	--	389	0.20	7.35	--	6,754	11,260
MW-06	Multiunit 1	Supplementary	12/14/1994	MW-6-19941214	--	--	410	--	--	--	7.28	--	--	--
MW-06	Multiunit 1	Supplementary	4/5/1995	MW-6-19950405	1.0	--	360	--	421	0.20	7.30	--	6,826	11,120
MW-06	Multiunit 1	Supplementary	11/21/1995	MW-6-19951121	1.78	--	400	--	384	0.20	7.37	--	6,426	10,680
MW-06	Multiunit 1	Supplementary	8/14/1996	MW-6-19960814	1.53	--	310	--	338.3	0.20	7.37	--	6,500	10,830
MW-06	Multiunit 1	Supplementary	4/23/1997	MW-6-19970423	1.97	--	300	--	426.5	0.20	7.32	--	6,406	11,110
MW-06	Multiunit 1	Supplementary	10/14/1997	MW-6-19971014	<0.05	--	380	--	393.7	0.10	7.52	--	6,250	9,920
MW-06	Multiunit 1	Supplementary	10/21/1998	MW-6-19981021	3.15	--	370	--	395	0.20	7.28	--	6,342	10,060
MW-06	Multiunit 1	Supplementary	6/9/1999	MW-6-19990609	4.0	--	390	--	374.8	0.20	7.35	--	6,130	10,390
MW-06	Multiunit 1	Supplementary	12/1/1999	MW-6-19991201	4.2	--	480	--	345.3	0.20	7.51	--	5,662	9,570
MW-06	Multiunit 1	Supplementary	6/8/2000	MW-6-20000608	3.83	--	423	--	522	0.20	7.43	--	6,873	9,680
MW-06	Multiunit 1	Supplementary	11/28/2000	MW-6-20001128	4.19	--	490	--	329.9	0.1855	7.20	--	5,790	9,840
MW-06	Multiunit 1	Supplementary	8/21/2001	MW-6-20010821	--	--	450	--	376	0.20	7.24	--	6,090	10,110
MW-06	Multiunit 1	Supplementary	12/3/2001	MW-6-20011203	4.4	--	490	--	334.5	0.20	7.26	--	5,839	9,440
MW-06	Multiunit 1	Supplementary	6/24/2002	MW-6-20020624	4.43	--	400	--	323.9	0.10	7.50	--	5,592	9,790
MW-06	Multiunit 1	Supplementary	12/18/2002	MW-6-20021218	6.0	--	380	--	320.3	0.20	7.56	--	5,507	9,520
MW-06	Multiunit 1	Supplementary	6/3/2003	MW-6-20030603	--	--	400	--	352.6	0.28	7.30	--	5,253	9,590
MW-06	Multiunit 1	Supplementary	9/24/2003	MW-6-20030924	5.94	--	330	--	311	0.22	7.27	--	5,505	9,500
MW-06	Multiunit 1	Supplementary	6/16/2004	MW-6-20040616	--	--	40	--	353.6	0.20	7.25	--	5,658	9,310
MW-06	Multiunit 1	Supplementary	11/9/2004	MW-6-20041109	9.1	--	425	--	304	<0.2	7.38	--	4,870	8,810

Table F-4
Groundwater Sampling Results for the Multiunit 1 Monitoring Wells - Appendix III Constituents

					Appendix III Constituents									
				Constituent:	Boron	Boron	Calcium	Calcium	Chloride	Fluoride	pH (Field Measurement)	pH (Laboratory Measurement)	Sulfate	Total Dissolved Solids
				Filtered:	N	Y	N	Y	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	su	su	mg/L	mg/L
				Multiunit 1 BTV	*3.95*	*3.95*	*454.1*	*454*	*604.7*	*2.1*	*6.52-7.88*	*6.52-7.88*	*22,000*	*34,397*
				Multiunit 1 GWPS	--	--	--	--	--	--	--	--	--	--
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**										
MW-06	Multiunit 1	Supplementary	5/12/2005	MW-6-20050512	9.47	--	450	--	321.9	0.10	7.30	--	5,588	8,580
MW-06	Multiunit 1	Supplementary	11/1/2005	MW-6-20051101	11.1	--	404	--	316.4	0.10	7.19	--	4,881	8,990
MW-06	Multiunit 1	Supplementary	5/16/2006	MW-6-20060516	12.4	--	419	--	314	0.15	7.23	--	5,100	8,500
MW-06	Multiunit 1	Supplementary	10/13/2006	MW-6-20061013	14.1	--	454	--	318	0.149	7.33	--	5,590	7,920
MW-06	Multiunit 1	Supplementary	4/18/2007	MW-6-20070418	30.9	--	422	--	352	0.112	7.35	--	5,370	8,050
MW-06	Multiunit 1	Supplementary	11/20/2007	MW-6-20071120	13.5	--	378	--	352	0.20	7.42	--	5,100	8,070
MW-06	Multiunit 1	Supplementary	8/1/2008	MW-6-20080801	13.9	--	389	--	400	<0.2	7.45	--	5,450	8,120
MW-06	Multiunit 1	Supplementary	12/3/2009	MW-6-20091203	10.1	--	377	--	680	0.30	7.13	--	7,100	11,700
MW-06	Multiunit 1	Supplementary	9/28/2012	MW-6-092812-01	21	--	440	--	650	<2.0	--	--	4,200	7,700
MW-06	Multiunit 1	Supplementary	11/20/2013	FC-06-112013	9.3	--	480	--	1,100	<2.0	--	--	9,400	15,000
MW-06	Multiunit 1	Supplementary	3/12/2014	FC-06-031214	8.2	--	430	--	1,100	<0.80	--	--	9,300	14,000
MW-06	Multiunit 1	Supplementary	9/11/2014	FCPP-06-91114	9.1	--	400	--	1,200	<0.40	--	--	9,400	15,000
MW-06	Multiunit 1	Supplementary	12/8/2014	FCPP-MW06-12914	8.4	--	--	--	--	--	--	--	--	--
MW-06	Multiunit 1	Supplementary	3/19/2015	FCPP-06-031915	10	--	430	--	1,300	<0.40	--	--	9,700	15,000
MW-06	Multiunit 1	Supplementary	6/24/2015	MW-6	9.6	--	410	--	1,400	<0.40	--	7.17	9,400	16,000
MW-06	Multiunit 1	Supplementary	8/29/2015	FCPP-06-082915	12	--	440	--	1,100	<2.0	--	7.16	8,300	14,000
MW-06	Multiunit 1	Supplementary	11/7/2015	FC MW-6-(07115)	10	--	470	--	1,300	<0.40	--	7.21	9,400	15,000
MW-06	Multiunit 1	Supplementary	6/20/2016	FC-Seep-MW6-616	8.3	--	450	--	1,400	<0.40	--	7.24	9,600	16,000
MW-06	Multiunit 1	Supplementary	9/15/2016	FC-Seep-MW6-916	8.1	--	420	--	1,300	<0.40	--	7.2	9,700	15,000
MW-06	Multiunit 1	Supplementary	3/19/2019	FC-CCR-MW6-031919	--	--	--	--	--	<0.80	--	--	--	--
MW-06	Multiunit 1	Supplementary	3/19/2019	FC-CCR-MW6-031919	--	--	--	--	--	--	--	--	--	--
MW-06	Multiunit 1	Supplementary	5/14/2019	FC-CCR-MW6-51419	5.9	--	430	--	1,500	<0.80	--	7.3 J	11,000	18,000
MW-06	Multiunit 1	Supplementary	5/14/2019	FC-CCR-MW6-51419	--	--	--	--	--	--	--	--	--	--
MW-06	Multiunit 1	Supplementary	11/19/2019	FC-CCR-MW6-111919	6.0	--	500	--	1,900	<0.80	--	7.3 J	16,000	22,000
MW-06	Multiunit 1	Supplementary	6/23/2020	FC-CCR-MW06-0620	5.9	--	520	--	2,200	<0.8	7.00	7.5 J	18,000	29,000
MW-06	Multiunit 1	Supplementary	11/7/2020	FC-CCR-MW06-1120	5.9	--	460	--	2,700	--	7.13	7.5 J	23,000	31,000
MW-06	Multiunit 1	Supplementary	4/26/2021	FC-CCR-MW06-0421	5.8	--	490	--	2,500	0.58 J	7.87	7.5 J	20,000	29,000
MW-06	Multiunit 1	Supplementary	11/16/2021	FC-CCR-MW06-1121	6.1	--	480	--	5,500	0.58 J	7.02	7.7 J	51,000	34,000
MW-06	Multiunit 1	Supplementary	2/8/2022	FC-CCR-MW06-0222	6.1	--	500	--	2,900	0.34	6.94	7.5 J	21,000	35,000
MW-06	Multiunit 1	Supplementary	5/25/2022	FC-CCR-MW06-0522	6.0	--	510	--	5,800	<0.8	7.04	7.59 J	21,000	25,000
MW-06	Multiunit 1	Supplementary	9/1/2022	FC-CCR-MW06-0922	6.2		480		3,200	<0.8	6.97	7.4 J	23,000	33,000
MW-06	Multiunit 1	Supplementary	11/14/2022	FC-CCR-MW06-1122	6.1	--	500	--	2,800	<4	7.07	7.3 J	21,000	34,000
MW-06	Multiunit 1	Supplementary	5/4/2023	FC-CCR-MW06-0523	6.2	--	420	--	2,700	<80	7.01	7.3 J	20,000	31,000
MW-06R	Multiunit 1	Supplementary	11/14/2023	FC-CCR-MW06R-1124	1.2	--	290	--	1,200	<0.8	7.19	7.4 J	8,000	13,000
MW-07	Multiunit 1	Downgradient Boundary	4/1/1987	MW-7_4/1/1987	--	4.4	--	500	460	<0.5	8.00	7.6	3,100	5.6*
MW-07	Multiunit 1	Downgradient Boundary	4/1/1987	MW-7 dup_4/1/1987	--	4.6	--	510	460	<0.5	8.00	7.6	3,800	5,200
MW-07	Multiunit 1	Downgradient Boundary	9/30/1987	MW-7_9/30/1987	--	5.8	--	460	770	<0.5	6.90	7.2	4,000	7,700
MW-07	Multiunit 1	Downgradient Boundary	6/16/1988	MW-7-19880616	--	--	436	--	408	0.50	7.40	--	3,678	6,167
MW-07	Multiunit 1	Downgradient Boundary	9/21/1988	MW-7-19880921	7.0	--	424	--	309	0.50	7.05	--	3,260	5,813
MW-07	Multiunit 1	Downgradient Boundary	11/14/1988	MW-7-19881114	7.0	--	417	--	348	0.50	7.17	--	3,477	6,300
MW-07	Multiunit 1	Downgradient Boundary	3/6/1989	MW-7-19890306	8.0	--	421	--	317	0.50	7.28	--	3,480	5,840
MW-07	Multiunit 1	Downgradient Boundary	9/12/1989	MW-7-19890912	9.0	--	430	--	292	0.40	7.41	--	3,100	5,430
MW-07	Multiunit 1	Downgradient Boundary	3/22/1990	MW-7-19900322	9.0	--	420	--	291	0.40	7.40	--	3,372	5,720
MW-07	Multiunit 1	Downgradient Boundary	9/24/1990	MW-7-19900924	8.0	--	470	--	309	0.30	7.55	--	3,378	5,590
MW-07	Multiunit 1	Downgradient Boundary	3/27/1991	MW-7-19910327	9.0	--	410	--	338	0.30	7.39	--	3,500	5,730
MW-07	Multiunit 1	Downgradient Boundary	9/24/1991	MW-7-19910924	8.0	--	440	--	312	0.30	7.50	--	3,472	5,490
MW-07	Multiunit 1	Downgradient Boundary	4/30/1992	MW-7-19920430	13	--	500	--	346	0.40	7.42	--	3,238	5,920
MW-07	Multiunit 1	Downgradient Boundary	10/27/1992	MW-7-19921027	15	--	500	--	285	0.40	7.25	--	3,274	5,230
MW-07	Multiunit 1	Downgradient Boundary	4/22/1993	MW-7-19930422	14	--	400	--	338.9	0.30	7.32	--	3,375	5,660
MW-07	Multiunit 1	Downgradient Boundary	11/22/1993	MW-7-19931122	14	--	500	--	299	0.30	7.30	--	3,074	5,370
MW-07	Multiunit 1	Downgradient Boundary	4/20/1994	MW-7-19940420	13	--	500	--	366	0.40	7.30	--	3,353	6,070
MW-07	Multiunit 1	Downgradient Boundary	9/21/1994	MW-7-19940921	2.04	--	500	--	326	0.30	7.35	--	3,319	5,880
MW-07	Multiunit 1	Downgradient Boundary	12/14/1994	MW-7-19941214	--	--	420	--	--	--	7.18	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	4/4/1995	MW-7-19950404	1.6	--	400	--	360	0.30	7.33	--	3,352	5,780

Table F-4
Groundwater Sampling Results for the Multiunit 1 Monitoring Wells - Appendix III Constituents

					Appendix III Constituents										
				Constituent:	Boron	Boron	Calcium	Calcium	Chloride	Fluoride	pH (Field Measurement)	pH (Laboratory Measurement)	Sulfate	Total Dissolved Solids
				Filtered:	N	Y	N	Y	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	su	su	mg/L	mg/L
				Multiunit 1 BTV	*3.95*	*3.95*	*454.1*	*454*	*604.7*	*2.1*	*6.52-7.88*	*6.52-7.88*	*22,000*	*34,397*
				Multiunit 1 GWPS	--	--	--	--	--	--	--	--	--	--
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**										
MW-07	Multiunit 1	Downgradient Boundary	11/18/1995	MW-7-19951118	**10.8**	--	**500**	--	**308.6**	**0.30**	**7.27**	--	**3,045**	**5,410**
MW-07	Multiunit 1	Downgradient Boundary	8/13/1996	MW-7-19960813	**16.5**	--	**500**	--	**318**	**0.30**	**7.42**	--	**2,939**	**5,340**
MW-07	Multiunit 1	Downgradient Boundary	4/15/1997	MW-7-19970415	**15.8**	--	**500**	--	**347.5**	**0.30**	**7.24**	--	**2,992**	**5,540**
MW-07	Multiunit 1	Downgradient Boundary	10/7/1997	MW-7-19971007	<0.05	--	**460**	--	**393.5**	**0.30**	**7.55**	--	**3,402**	**5,880**
MW-07	Multiunit 1	Downgradient Boundary	4/13/1998	MW-7-19980413	--	--	**460**	--	**354.6**	**0.30**	**7.39**	--	**3,069**	**5,870**
MW-07	Multiunit 1	Downgradient Boundary	10/20/1998	MW-7-19981020	**16.9**	--	**460**	--	**251.1**	**0.30**	**7.58**	--	**2,180**	**5,570**
MW-07	Multiunit 1	Downgradient Boundary	5/11/1999	MW-7-19990511	**15.4**	--	**480**	--	--	**0.40**	**7.50**	--	--	**5,990**
MW-07	Multiunit 1	Downgradient Boundary	11/30/1999	MW-7-19991130	**14.5**	--	**560**	--	**429.55**	**0.30**	**7.48**	--	**3,369**	**6,030**
MW-07	Multiunit 1	Downgradient Boundary	6/8/2000	MW-7-20000608	**15.5**	--	**477**	--	**430.2**	**0.40**	**7.30**	--	**3,680**	**5,480**
MW-07	Multiunit 1	Downgradient Boundary	11/28/2000	MW-7-20001128	**17.4**	--	**600**	--	**358.8**	**0.4086**	**7.29**	--	**2,999**	**5,500**
MW-07	Multiunit 1	Downgradient Boundary	8/22/2001	MW-7-20010822	**14.2**	--	**450**	--	**485.9**	**0.40**	**7.28**	--	**3,724**	**6,960**
MW-07	Multiunit 1	Downgradient Boundary	12/3/2001	MW-7-20011203	**16.1**	--	**720**	--	**396.5**	**0.40**	**7.25**	--	**3,658**	**6,280**
MW-07	Multiunit 1	Downgradient Boundary	6/24/2002	MW-7-20020624	**16.1**	--	**460**	--	**407.2**	**0.30**	**7.55**	--	**3,430**	**6,170**
MW-07	Multiunit 1	Downgradient Boundary	12/19/2002	MW-7-20021219	**33.2**	--	**460**	--	**440.5**	**0.40**	**7.35**	--	**3,462**	**6,310**
MW-07	Multiunit 1	Downgradient Boundary	5/29/2003	MW-7-20030529	**18.7**	--	**460**	--	--	**0.40**	**6.81**	--	--	**8,100**
MW-07	Multiunit 1	Downgradient Boundary	12/24/2003	MW-7-20031224	**17**	--	**320**	--	**750.8**	**0.24**	**7.08**	--	**4,017**	**7,820**
MW-07	Multiunit 1	Downgradient Boundary	6/21/2004	MW-7-20040621	--	--	**440**	--	**387.45**	**0.40**	**7.13**	--	**2,039**	**8,000**
MW-07	Multiunit 1	Downgradient Boundary	11/29/2004	MW-7-20041129	**18.6**	--	**400**	--	**741**	**0.28**	**7.17**	--	**2,615**	**7,630**
MW-07	Multiunit 1	Downgradient Boundary	6/13/2005	MW-7-20050613	**15.9**	--	**500**	--	**584.3**	**0.30**	**7.20**	--	**3,386**	**6,830**
MW-07	Multiunit 1	Downgradient Boundary	12/14/2005	MW-7-20051214	**17.2**	--	**474**	--	**1,578**	**0.30**	**7.00**	--	**8,580**	**8,210**
MW-07	Multiunit 1	Downgradient Boundary	5/16/2006	MW-7-20060516	**17.7**	--	**449**	--	**584**	**0.373**	**7.20**	--	**3,910**	**7,120**
MW-07	Multiunit 1	Downgradient Boundary	10/11/2006	MW-7-20061011	**16.2**	--	**454**	--	**772**	**0.327**	**7.13**	--	**3,510**	**8,320**
MW-07	Multiunit 1	Downgradient Boundary	4/19/2007	MW-7-20070419	**18.2**	--	**459**	--	**698**	**0.259**	**7.20**	--	**4,100**	**7,430**
MW-07	Multiunit 1	Downgradient Boundary	11/19/2007	MW-7-20071119	**13.2**	--	**376**	--	**860**	**0.30**	**7.12**	--	**5,200**	**8,400**
MW-07	Multiunit 1	Downgradient Boundary	8/7/2008	MW-7-20080807	**14.1**	--	**387**	--	**830**	**0.30**	**7.14**	--	**5,260**	**9,040**
MW-07	Multiunit 1	Downgradient Boundary	7/10/2012	MW-7	**9.8**	--	**360**	--	**750**	<0.80	--	**7.3**	**5,900**	**10,000**
MW-07	Multiunit 1	Downgradient Boundary	9/27/2012	MW-7-092712-01	**6.5**	--	**420**	--	**640**	<2.0	--	--	**8,100**	**13,000**
MW-07	Multiunit 1	Downgradient Boundary	11/19/2013	FC-07-111913	**8.6**	--	**490**	--	**290**	<2.0	--	--	**6,100**	**9,600**
MW-07	Multiunit 1	Downgradient Boundary	9/10/2014	FCPP-07-091014	**8.5**	--	**420**	--	**590**	<0.40	--	--	**6,800**	**10,000**
MW-07	Multiunit 1	Downgradient Boundary	3/16/2015	FCPP-07-031615	**8.9**	--	**360**	--	**760**	<0.40	--	--	**6,600**	**11,000**
MW-07	Multiunit 1	Downgradient Boundary	8/26/2015	FCPP-7-082615	**9.0**	--	**330**	--	**960**	<0.80	--	**7.33**	**6,700**	**11,000**
MW-07	Multiunit 1	Downgradient Boundary	11/7/2015	FC-CCR-MW7-110715	**9.4**	--	**390**	--	**580**	**0.35**	--	**7.25**	**6,400**	**9,800**
MW-07	Multiunit 1	Downgradient Boundary	11/7/2015	FC-CCR-MW7-110715	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	4/26/2016	FC-CCR-MW-7-042616	**10**	--	**430**	--	**740**	<2.0	--	--	**6,000**	**11,000**
MW-07	Multiunit 1	Downgradient Boundary	6/6/2016	FC-CCR-MW7-616	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	6/6/2016	FC-CCR-MW7-616	**10**	--	**380**	--	**880**	**0.41**	--	**7.23**	**6,300**	**11,000**
MW-07	Multiunit 1	Downgradient Boundary	8/21/2016	FC-CCR-MW7-816	**11**	--	**430**	--	**450**	<0.40	--	**7.1**	**5,900**	**10,000**
MW-07	Multiunit 1	Downgradient Boundary	8/21/2016	FC-CCR-MW7-816	--	--	--	--	--	<0.40	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	8/21/2016	FC-CCR-MW7-816	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	9/13/2016	FC-CCR-MW7-916	**10**	--	**410**	--	**530**	<0.40	--	**7.3**	**6,200**	**10,000**
MW-07	Multiunit 1	Downgradient Boundary	9/13/2016	FC-CCR-MW7-916	--	--	--	--	--	<0.40	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	9/13/2016	FC-CCR-MW7-916	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	10/20/2016	FC-CCR-MW7-1016	**10**	--	**390**	--	**540**	<0.40	--	**7.4**	**6,000**	**10,000**
MW-07	Multiunit 1	Downgradient Boundary	10/20/2016	FC-CCR-MW7-1016	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	2/2/2017	FC-CCR-MW7-117	**9.0**	--	**400**	--	**460**	<0.40	--	**7.8**	**6,400**	**9,700**
MW-07	Multiunit 1	Downgradient Boundary	2/2/2017	FC-CCR-MW7-117	--	--	--	--	--	<0.40	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	2/2/2017	FC-CCR-MW7-117	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	4/18/2017	FC-CCR-MW7-41817	**8.6**	--	**430**	--	**430**	<0.80	--	**7.4**	**6,500**	**11,000**
MW-07	Multiunit 1	Downgradient Boundary	4/18/2017	FC-CCR-MW7-41817	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	4/18/2017	FC-CCR-MW7-41817	--	--	--	--	--	<0.80	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	5/3/2017	FC-CCR-MW7-5317	--	--	--	--	--	**5.1**	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	5/3/2017	FC-CCR-MW7-53117	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	5/29/2017	FC-CCR-MW-72-52917	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	5/30/2017	FC-CCR-MW7-53017	--	--	--	--	--	<0.80	--	--	--	--

Table F-4
Groundwater Sampling Results for the Multiunit 1 Monitoring Wells - Appendix III Constituents

					Appendix III Constituents										
				Constituent:	Boron	Boron	Calcium	Calcium	Chloride	Fluoride	pH (Field Measurement)	pH (Laboratory Measurement)	Sulfate	Total Dissolved Solids
				Filtered:	N	Y	N	Y	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	su	su	mg/L	mg/L
				Multiunit 1 BTV	*3.95*	*3.95*	*454.1*	*454*	*604.7*	*2.1*	*6.52-7.88*	*6.52-7.88*	*22,000*	*34,397*
				Multiunit 1 GWPS	--	--	--	--	--	--	--	--	--	--
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**										
MW-07	Multiunit 1	Downgradient Boundary	5/30/2017	FC-CCR-MW7-53017	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	6/22/2017	FC-CCR-MW7-62217	**7.6**	--	**410**	--	**430**	--	--	**7.5**	**7,300**	**10,000**
MW-07	Multiunit 1	Downgradient Boundary	6/22/2017	FC-CCR-MW7-62217	--	--	--	--	--	<0.80	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	6/22/2017	FC-CCR-MW7-62217	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	7/22/2017	FC-CCR-MW7-72217	**7.6**	--	**400**	--	**430**	<0.80	--	**7.5**	**7,500**	**10,000**
MW-07	Multiunit 1	Downgradient Boundary	7/22/2017	FC-CCR-MW7-72217	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	7/22/2017	FC-CCR-MW7-72217	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	8/10/2017	FC-CCR-MW7-81017	**7.8**	--	**420**	--	**420**	--	--	**7.5**	**7,400**	**10,000**
MW-07	Multiunit 1	Downgradient Boundary	8/10/2017	FC-CCR-MW7-81017	--	--	--	--	--	<0.80	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	8/10/2017	FC-CCR-MW7-81017	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	8/17/2017	FC-CCR-MW7-81717	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	8/17/2017	FC-CCR-MW7-81717	**7.5**	--	**460**	--	**320**	<0.80	--	**7.6**	**6,500**	**10,000**
MW-07	Multiunit 1	Downgradient Boundary	9/10/2017	FC-CCR-MW7-91017	**8.0**	--	**430**	--	**350**	--	--	**7.5**	**6,600**	**9,900**
MW-07	Multiunit 1	Downgradient Boundary	9/10/2017	FC-CCR-MW7-91017	--	--	--	--	--	<0.80	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	9/10/2017	FC-CCR-MW7-91017	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	10/12/2017	FC-CCR-MW7-101217	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	10/12/2017	FC-CCR-MW7-101217	**7.2**	--	**390**	--	<400	<0.80	--	**7.6**	**7,100**	**10,000**
MW-07	Multiunit 1	Downgradient Boundary	11/30/2017	FC-CCR-MW7-113017	**7.7**	--	**420**	--	**440**	<0.80	--	**7.5**	**6,600**	**10,000**
MW-07	Multiunit 1	Downgradient Boundary	3/17/2018	FC-CCR-MW7-31718	--	--	--	--	--	**0.49**	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	3/17/2018	FC-CCR-MW7-31718	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	3/17/2018	*DUP* FC-CCR-FD02-31718	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	6/1/2018	FC-CCR-MW-7-6118	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	6/1/2018	FC-CCR-MW-7-6118	**7.6**	--	**360**	--	**580**	<0.80	--	**7.4**	**6,400**	**10,000**
MW-07	Multiunit 1	Downgradient Boundary	11/4/2018	FC-CCR-MW7-11418	**7.4**	--	**320**	--	**680**	<0.80	--	**7.4**	**6,100**	**9,900**
MW-07	Multiunit 1	Downgradient Boundary	11/4/2018	FC-CCR-MW7-11418	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	11/4/2018	FC-CCR-MW7-11418	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	3/19/2019	FC-CCR-MW7-031919	--	--	--	--	--	<0.40	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	3/19/2019	FC-CCR-MW7-031919	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	5/14/2019	FC-CCR-MW7-51419	**8.3**	--	**340**	--	**570**	<0.80	--	**7.4 J**	**5,400**	**9,200**
MW-07	Multiunit 1	Downgradient Boundary	5/14/2019	FC-CCR-MW7-51419	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	11/19/2019	FC-CCR-MW7-111919	**8.2**	--	**370**	--	**620**	<0.80	--	**7.3 J**	**5,600**	**8,900**
MW-07	Multiunit 1	Downgradient Boundary	6/23/2020	FC-CCR-MW07-0620	**9.4**	--	**360**	--	**740**	<0.8	**6.85**	**7.5 J**	**5,600**	**8,600**
MW-07	Multiunit 1	Downgradient Boundary	11/6/2020	FC-CCR-MW07-1120	**8.6**	--	**400**	--	**600**	**0.33 J**	**6.97**	**7.3 J**	**5,600**	**9,400**
MW-07	Multiunit 1	Downgradient Boundary	11/6/2020	*DUP* FC-CCR-FD05-1120	**8.5**	--	**400**	--	**540**	**0.37 J**	--	**7.4 J**	**5,800**	**8,800**
MW-07	Multiunit 1	Downgradient Boundary	4/27/2021	FC-CCR-MW07-0421	**8.6**	--	**470**	--	**340 J**	**0.25 J**	**7.93**	**7.6 J**	**5,700**	**8,900**
MW-07	Multiunit 1	Downgradient Boundary	4/27/2021	*DUP* FC-CCR-FD04-0421	**8.6**	--	**470**	--	**320 J**	**0.26 J**	**7.93**	**7.6 J**	**5,700**	**8,900**
MW-07	Multiunit 1	Downgradient Boundary	11/18/2021	FC-CCR-MW07-1121	**8.1**	--	**390**	--	**850**	**0.25 J**	**6.95**	**7.5 J**	**7,200**	**9,500**
MW-07	Multiunit 1	Downgradient Boundary	5/26/2022	FC-CCR-MW07-0522	**7.3**	--	**370**	--	**670**	<0.8	**6.98**	**7.66 J**	**6,000**	**10,000**
MW-07	Multiunit 1	Downgradient Boundary	11/16/2022	FC-CCR-MW07-1122	**7.8**	--	**420**	--	**580**	<2	**7.04**	**7.3 J**	**5,700**	**9,500**
MW-07	Multiunit 1	Downgradient Boundary	5/8/2023	FC-CCR-MW07-0523	**8.7**	--	**370**	--	**520**	<2	**6.98**	**7.4 J**	**5,500**	**9,300**
MW-07	Multiunit 1	Downgradient Boundary	11/15/2023	FC-CCR-MW07-1124	**9.6**	--	**490**	--	**480**	<0.8	**7.09**	**7.5 J**	**5,600**	**9,600**
MW-08	Multiunit 1	Downgradient Boundary	10/2/1987	MW-8_10/2/1987	--	**13**	--	**470**	**840**	<0.5	**7.53**	**7.2**	**6,000**	**10,000**
MW-08	Multiunit 1	Downgradient Boundary	6/16/1988	MW-8-19880616	--	--	**448**	--	**910**	**0.70**	**7.35**	--	**5,527**	**9,962**
MW-08	Multiunit 1	Downgradient Boundary	9/21/1988	MW-8-19880921	**17**	--	**438**	--	**787**	**0.70**	**7.25**	--	**5,171**	**9,833**
MW-08	Multiunit 1	Downgradient Boundary	11/14/1988	MW-8-19881114	**17**	--	**430**	--	**696**	**0.70**	**7.29**	--	**5,132**	**9,595**
MW-08	Multiunit 1	Downgradient Boundary	3/8/1989	MW-8-19890308	**14**	--	**428**	--	**782**	**0.60**	**7.29**	--	**5,529**	**10,195**
MW-08	Multiunit 1	Downgradient Boundary	9/12/1989	MW-8-19890912	**21**	--	**410**	--	**587**	**0.60**	**7.15**	--	**4,429**	**8,270**
MW-08	Multiunit 1	Downgradient Boundary	3/22/1990	MW-8-19900322	**19**	--	**430**	--	**622**	**0.40**	**7.20**	--	**4,394**	**7,940**
MW-08	Multiunit 1	Downgradient Boundary	10/29/1990	MW-8-19901029	**20**	--	**430**	--	**617**	**0.50**	**7.37**	--	**4,398**	**7,700**
MW-08	Multiunit 1	Downgradient Boundary	3/27/1991	MW-8-19910327	**22**	--	**420**	--	**604**	**0.40**	**7.18**	--	**4,856**	**7,760**
MW-08	Multiunit 1	Downgradient Boundary	10/1/1991	MW-8-19911001	**21**	--	**386**	--	**639**	**0.40**	**7.41**	--	**4,218**	**7,890**
MW-08	Multiunit 1	Downgradient Boundary	5/1/1992	MW-8-19920501	**24**	--	**430**	--	**562**	**0.40**	**7.30**	--	**4,011**	**6,850**
MW-08	Multiunit 1	Downgradient Boundary	11/3/1992	MW-8-19921103	**22**	--	**330**	--	**627.8**	**0.50**	**7.28**	--	**3,803**	**6,990**

Table F-4
Groundwater Sampling Results for the Multiunit 1 Monitoring Wells - Appendix III Constituents

					Appendix III Constituents										
				Constituent:	Boron	Boron	Calcium	Calcium	Chloride	Fluoride	pH (Field Measurement)	pH (Laboratory Measurement)	Sulfate	Total Dissolved Solids
				Filtered:	N	Y	N	Y	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	su	su	mg/L	mg/L
				Multiunit 1 BTV	*3.95*	*3.95*	*454.1*	*454*	*604.7*	*2.1*	*6.52-7.88*	*6.52-7.88*	*22,000*	*34,397*
				Multiunit 1 GWPS	--	--	--	--	--	--	--	--	--	--
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**										
MW-08	Multiunit 1	Downgradient Boundary	4/28/1993	MW-8-19930428	**23**	--	**360**	--	**503.4**	**0.41**	**7.39**	--	**3,752**	**6,300**
MW-08	Multiunit 1	Downgradient Boundary	11/30/1993	MW-8-19931130	**23**	--	**380**	--	**510**	**0.50**	**7.30**	--	**3,708**	**6,600**
MW-08	Multiunit 1	Downgradient Boundary	4/28/1994	MW-8-19940428	**26**	--	**430**	--	**499**	**0.60**	**7.28**	--	**3,718**	**6,590**
MW-08	Multiunit 1	Downgradient Boundary	11/16/1994	MW-8-19941116	**24**	--	**370**	--	**562**	**0.50**	**7.31**	--	**3,738**	**6,450**
MW-08	Multiunit 1	Downgradient Boundary	12/14/1994	MW-8-19941214	--	--	**520**	--	--	--	**7.25**	--	--	--
MW-08	Multiunit 1	Downgradient Boundary	4/5/1995	MW-8-19950405	**26**	--	**410**	--	**472**	**0.40**	**7.20**	--	**3,391**	**6,010**
MW-08	Multiunit 1	Downgradient Boundary	11/18/1995	MW-8-19951118	**24.6**	--	**440**	--	**468.6**	**0.70**	**7.29**	--	**3,275**	**6,040**
MW-08	Multiunit 1	Downgradient Boundary	8/19/1996	MW-8-19960819	**24.5**	--	**330**	--	**535.7**	**0.50**	**6.99**	--	**3,315**	**6,240**
MW-08	Multiunit 1	Downgradient Boundary	6/24/1997	MW-8-19970624	**21.8**	--	**410**	--	**425.7**	**0.50**	**7.04**	--	**3,023**	**6,050**
MW-08	Multiunit 1	Downgradient Boundary	10/7/1997	MW-8-19971007	<0.05	--	**340**	--	**524.7**	**0.50**	**7.45**	--	**3,548**	**6,440**
MW-08	Multiunit 1	Downgradient Boundary	4/14/1998	MW-8-19980414	--	--	**400**	--	**503.9**	**0.50**	**6.94**	--	**3,317**	**6,690**
MW-08	Multiunit 1	Downgradient Boundary	10/21/1998	MW-8-19981021	--	--	**380**	--	**591.4**	**0.50**	**7.14**	--	**3,601**	--
MW-08	Multiunit 1	Downgradient Boundary	5/11/1999	MW-8-19990511	**24.8**	--	--	--	**496.6**	**0.50**	**7.23**	--	**3,337**	**6,530**
MW-08	Multiunit 1	Downgradient Boundary	12/1/1999	MW-8-19991201	**24.5**	--	**460**	--	**505.3**	**0.50**	**7.09**	--	**3,380**	**6,190**
MW-08	Multiunit 1	Downgradient Boundary	6/7/2000	MW-8-20000607	**26.4**	--	**429**	--	**644.5**	**0.60**	**7.77**	--	**5,345**	**6,100**
MW-08	Multiunit 1	Downgradient Boundary	12/12/2000	MW-8-20001212	**25.2**	--	**520**	--	**507.8**	**0.58**	--	--	**3,299**	--
MW-08	Multiunit 1	Downgradient Boundary	8/22/2001	MW-8-20010822	**25.8**	--	**460**	--	**474.2**	**0.60**	**7.11**	--	**3,473**	**6,490**
MW-08	Multiunit 1	Downgradient Boundary	12/3/2001	MW-8-20011203	**24.1**	--	**540**	--	**590.4**	**0.60**	**6.60**	--	**4,089**	**7,360**
MW-08	Multiunit 1	Downgradient Boundary	6/24/2002	MW-8-20020624	**25**	--	**400**	--	**508.9**	**0.50**	**7.22**	--	**3,665**	**7,190**
MW-08	Multiunit 1	Downgradient Boundary	12/18/2002	MW-8-20021218	**23.8**	--	**420**	--	**547.8**	**0.50**	**7.09**	--	**3,615**	**7,150**
MW-08	Multiunit 1	Downgradient Boundary	6/3/2003	MW-8-20030603	--	--	**420**	--	**465.7**	**0.60**	**6.95**	--	**3,007**	**6,060**
MW-08	Multiunit 1	Downgradient Boundary	9/23/2003	MW-8-20030923	**28**	--	**330**	--	**505**	**0.66**	**6.83**	--	**3,708**	**7,090**
MW-08	Multiunit 1	Downgradient Boundary	6/16/2004	MW-8-20040616	--	--	**400**	--	**498.2**	**0.60**	**6.91**	--	**3,465**	**6,400**
MW-08	Multiunit 1	Downgradient Boundary	11/9/2004	MW-8-20041109	**28.9**	--	**465**	--	**502.2**	**0.60**	**6.95**	--	**3,330**	**6,720**
MW-08	Multiunit 1	Downgradient Boundary	5/12/2005	MW-8-20050512	**27.4**	--	**500**	--	**590.6**	**0.50**	**6.89**	--	**3,916**	**7,430**
MW-08	Multiunit 1	Downgradient Boundary	11/1/2005	MW-8-20051101	**32.4**	--	**465**	--	**577.6**	**0.50**	**6.90**	--	**3,783**	**7,730**
MW-08	Multiunit 1	Downgradient Boundary	5/16/2006	MW-8-20060516	**31.7**	--	**472**	--	**572**	**0.649**	**7.01**	--	**4,540**	**8,230**
MW-08	Multiunit 1	Downgradient Boundary	10/11/2006	MW-8-20061011	**35.1**	--	**491**	--	**565**	**0.627**	**6.98**	--	**5,230**	**8,640**
MW-08	Multiunit 1	Downgradient Boundary	4/18/2007	MW-8-20070418	**31.2**	--	**473**	--	**674**	**1.03**	**7.03**	--	**5,170**	**8,420**
MW-08	Multiunit 1	Downgradient Boundary	11/14/2007	MW-8-20071114	**23.4**	--	**413**	--	**640**	**0.70**	**6.96**	--	**5,900**	**9,690**
MW-08	Multiunit 1	Downgradient Boundary	5/7/2008	MW-8-20080507	**24.8**	--	**419**	--	**660**	**0.70**	**7.05**	--	**6,110**	**9,750**
MW-08	Multiunit 1	Downgradient Boundary	12/3/2009	MW-8-20091203	**22.9**	--	**455**	--	**830**	**0.70**	**6.88**	--	**7,100**	**12,500**
MW-08	Multiunit 1	Downgradient Boundary	9/27/2012	MW-8-092712-01	**27**	--	**400**	--	**710**	<2.0	--	--	**6,200**	**10,000**
MW-08	Multiunit 1	Downgradient Boundary	11/19/2013	FC-08-111913	**2.2**	--	**450**	--	**680**	<4.0	--	--	**5,800**	**9,900**
MW-08	Multiunit 1	Downgradient Boundary	9/10/2014	FCPP-08-091014	**27**	--	**440**	--	**700**	<0.40	--	--	**6,600**	**10,000**
MW-08	Multiunit 1	Downgradient Boundary	3/17/2015	FCPP-08-031715	**24**	--	**470**	--	**840**	<0.40	--	--	**8,000**	**13,000**
MW-08	Multiunit 1	Downgradient Boundary	6/29/2015	MW-8	**23**	--	**460**	--	**930**	<0.80	--	**7.05**	**7,900**	**14,000**
MW-08	Multiunit 1	Downgradient Boundary	8/26/2015	FCPP-8-082615	**21**	--	**480**	--	**940**	<0.80	--	**7.08**	**8,700**	**14,000**
MW-08	Multiunit 1	Downgradient Boundary	12/1/2015	FC-CCR-MW8-120115	**17**	--	**500**	--	**880**	<0.25	--	--	**9,100**	**13,000**
MW-08	Multiunit 1	Downgradient Boundary	12/1/2015	FC-CCR-MW8-120115	--	--	--	--	--	--	--	--	--	--
MW-08	Multiunit 1	Downgradient Boundary	4/26/2016	FC-CCR-MW-8-042616	**20**	--	**480**	--	**920**	<2.0	--	--	**8,400**	**15,000**
MW-08	Multiunit 1	Downgradient Boundary	6/7/2016	FC-CCR-MW8-616	--	--	--	--	--	--	--	--	--	--
MW-08	Multiunit 1	Downgradient Boundary	6/7/2016	FC-CCR-MW8-616	**20**	--	**420**	--	**1,100**	**0.70**	--	**7.03**	**8,600**	**15,000**
MW-08	Multiunit 1	Downgradient Boundary	8/21/2016	FC-CCR-MW8-816	**19**	--	**460**	--	**980**	**0.61**	--	**6.9**	**8,600**	**15,000**
MW-08	Multiunit 1	Downgradient Boundary	8/21/2016	FC-CCR-MW8-816	--	--	--	--	--	<0.40	--	--	--	--
MW-08	Multiunit 1	Downgradient Boundary	8/21/2016	FC-CCR-MW8-816	--	--	--	--	--	--	--	--	--	--
MW-08	Multiunit 1	Downgradient Boundary	9/13/2016	FC-CCR-MW8-916	**18**	--	**430**	--	**970**	**0.77**	--	**7.2**	**8,600**	**15,000**
MW-08	Multiunit 1	Downgradient Boundary	9/13/2016	FC-CCR-MW8-916	--	--	--	--	--	<0.40	--	--	--	--
MW-08	Multiunit 1	Downgradient Boundary	9/13/2016	FC-CCR-MW8-916	--	--	--	--	--	--	--	--	--	--
MW-08	Multiunit 1	Downgradient Boundary	4/18/2017	FC-CCR-MW8-41817	**17**	--	**440**	--	**1,100**	<2.0	--	**7.4**	**18,000**	**15,000**
MW-08	Multiunit 1	Downgradient Boundary	4/18/2017	FC-CCR-MW8-41817	--	--	--	--	--	--	--	--	--	--
MW-08	Multiunit 1	Downgradient Boundary	4/18/2017	FC-CCR-MW8-41817	--	--	--	--	--	<0.80	--	--	--	--
MW-08	Multiunit 1	Downgradient Boundary	5/3/2017	FC-CCR-MW8-5317	--	--	--	--	--	**5.3**	--	--	--	--
MW-08	Multiunit 1	Downgradient Boundary	5/3/2017	FC-CCR-MW8-5317	--	--	--	--	--	--	--	--	--	--

Table F-4
Groundwater Sampling Results for the Multiunit 1 Monitoring Wells - Appendix III Constituents

					Appendix III Constituents									
				Constituent:	Boron	Boron	Calcium	Calcium	Chloride	Fluoride	pH (Field Measurement)	pH (Laboratory Measurement)	Sulfate	Total Dissolved Solids
				Filtered:	N	Y	N	Y	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	su	su	mg/L	mg/L
				Multiunit 1 BTV	*3.95*	*3.95*	*454.1*	*454*	*604.7*	*2.1*	*6.52-7.88*	*6.52-7.88*	*22,000*	*34,397*
				Multiunit 1 GWPS	--	--	--	--	--	--	--	--	--	--
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**										
MW-08	Multiunit 1	Downgradient Boundary	5/30/2017	FC-CCR-MW8-53017	--	--	--	--	--	<2.0	--	--	--	--
MW-08	Multiunit 1	Downgradient Boundary	5/30/2017	FC-CCR-MW8-53017	--	--	--	--	--	--	--	--	--	--
MW-08	Multiunit 1	Downgradient Boundary	6/1/2018	FC-CCR-MW-8-6118	--	--	--	--	--	--	--	--	--	--
MW-08	Multiunit 1	Downgradient Boundary	6/1/2018	FC-CCR-MW-8-6118	**15**	--	**420**	--	**1,100**	**0.91**	--	**7.3**	**9,800**	**15,000**
MW-08	Multiunit 1	Downgradient Boundary	11/4/2018	FC-CCR-MW8-11418	**14**	--	**390**	--	**1,200**	<0.80	--	**7.3**	**10,000**	**15,000**
MW-08	Multiunit 1	Downgradient Boundary	11/4/2018	FC-CCR-MW8-11418	--	--	--	--	--	--	--	--	--	--
MW-08	Multiunit 1	Downgradient Boundary	11/4/2018	FC-CCR-MW8-11418	--	--	--	--	--	--	--	--	--	--
MW-08	Multiunit 1	Downgradient Boundary	3/19/2019	FC-CCR-MW8-031919	--	--	--	--	--	**0.41**	--	--	--	--
MW-08	Multiunit 1	Downgradient Boundary	3/19/2019	FC-CCR-MW8-031919	--	--	--	--	--	--	--	--	--	--
MW-08	Multiunit 1	Downgradient Boundary	5/14/2019	FC-CCR-MW8-51419	**14**	--	**430**	--	**1,100**	<0.80	--	**7.4 J**	**10,000**	**15,000**
MW-08	Multiunit 1	Downgradient Boundary	5/14/2019	FC-CCR-MW8-51419	--	--	--	--	--	--	--	--	--	--
MW-08	Multiunit 1	Downgradient Boundary	11/19/2019	FC-CCR-MW8-111919	**15**	--	**420**	--	**1,200**	<0.80	--	**7.1 J**	**9,600**	**15,000**
MW-08	Multiunit 1	Downgradient Boundary	6/23/2020	FC-CCR-MW08-0620	**18**	--	**440**	--	**1,000**	<0.8 U J	--	**7.4 J**	**9,500**	**15,000**
MW-08	Multiunit 1	Downgradient Boundary	6/23/2020	*DUP* FC-CCR-FD04-0620	**19**	--	**460**	--	**970**	<0.8 U J	**6.76**	**7.3 J**	**9,300**	**14,000**
MW-08	Multiunit 1	Downgradient Boundary	11/6/2020	FC-CCR-MW08-1120	**21**	--	**470**	--	**830**	**0.58 J**	**6.80**	**7.2 J**	**9,100**	**14,000**
MW-08	Multiunit 1	Downgradient Boundary	4/27/2021	FC-CCR-MW08-0421	**20**	--	**450**	--	**860**	**0.42 J**	**7.53**	**7.3 J**	**9,400**	**14,000**
MW-08	Multiunit 1	Downgradient Boundary	11/18/2021	FC-CCR-MW08-1121	**18**	--	**420**	--	**970**	**0.56 J**	**6.83**	**7.5 J**	**11,000**	**14,000**
MW-08	Multiunit 1	Downgradient Boundary	5/24/2022	FC-CCR-MW08-0522	**17**	--	**420**	--	**1,100**	<0.8	**6.78**	**7.65 J**	**10,000**	**15,000**
MW-08	Multiunit 1	Downgradient Boundary	5/24/2022	FC-CCR-SS06-0522	**17**	--	**444**	--	**1,070**	<50/0.7	**6.78**	**7.9 J**	**10,600**	**16,100**
MW-08	Multiunit 1	Downgradient Boundary	11/16/2022	FC-CCR-MW08-1122	**16**	--	**460**	--	**1,000**	<4	**6.88**	**7.2 J**	**9,900**	**16,000**
MW-08	Multiunit 1	Downgradient Boundary	5/8/2023	FC-CCR-MW08-0523	**17**	--	**420**	--	**1,100**	<2	**6.79**	**7.3 J**	**10,000**	**16,000**
MW-08	Multiunit 1	Downgradient Boundary	11/15/2023	FC-CCR-MW08-1124	**19**	--	**520**	--	**1,000**	<0.8	**6.89**	**7.3 J**	**8,800**	**17,000**
MW-15	Multiunit 1	Supplementary	9/30/1987	MW-15_9/30/1987	--	**0.82**	--	**440**	**370**	<0.5	**7.30**	**7.3**	**6,200**	**9,500**
MW-15	Multiunit 1	Supplementary	6/20/1988	MW-15-19880620	--	--	**452**	--	**393**	**2.0**	**7.13**	--	**5,224**	**8,618**
MW-15	Multiunit 1	Supplementary	9/22/1988	MW-15-19880922	**1.0**	--	**411**	--	**200**	**0.40**	**7.05**	--	**4,630**	**8,570**
MW-15	Multiunit 1	Supplementary	11/14/1988	MW-15-19881114	**1.0**	--	**409**	--	**338**	**0.60**	**7.13**	--	**4,808**	**8,760**
MW-15	Multiunit 1	Supplementary	3/8/1989	MW-15-19890308	**2.0**	--	**431**	--	**413**	**0.50**	**7.16**	--	**4,980**	**8,535**
MW-15	Multiunit 1	Supplementary	9/13/1989	MW-15-19890913	**2.0**	--	**380**	--	**326**	**0.40**	**7.08**	--	**4,974**	**8,600**
MW-15	Multiunit 1	Supplementary	3/22/1990	MW-15-19900322	**2.0**	--	**420**	--	**301**	**0.30**	**7.20**	--	**4,616**	**7,870**
MW-15	Multiunit 1	Supplementary	9/24/1990	MW-15-19900924	**2.0**	--	**430**	--	**341**	**0.20**	**7.19**	--	**4,790**	**8,120**
MW-15	Multiunit 1	Supplementary	3/27/1991	MW-15-19910327	**3.0**	--	**436**	--	**298**	**0.20**	**7.12**	--	**4,544**	**7,660**
MW-15	Multiunit 1	Supplementary	9/27/1991	MW-15-19910927	**2.0**	--	**434**	--	**313.6**	**0.20**	**7.19**	--	**4,306**	**7,720**
MW-15	Multiunit 1	Supplementary	5/1/1992	MW-15-19920501	**5.0**	--	**460**	--	**299**	**0.30**	**7.18**	--	**4,624**	**7,075**
MW-15	Multiunit 1	Supplementary	10/28/1992	MW-15-19921028	**4.0**	--	**420**	--	**289.8**	**0.30**	**7.15**	--	**4,122**	**7,110**
MW-15	Multiunit 1	Supplementary	4/23/1993	MW-15-19930423	**3.0**	--	**340**	--	**375**	**0.28**	**7.28**	--	**4,593**	**7,760**
MW-15	Multiunit 1	Supplementary	11/22/1993	MW-15-19931122	**4.0**	--	**420**	--	**338**	**0.30**	**7.05**	--	**4,192**	**7,430**
MW-15	Multiunit 1	Supplementary	4/20/1994	MW-15-19940420	**5.0**	--	**440**	--	**356**	**0.20**	**7.13**	--	**4,556**	**7,200**
MW-15	Multiunit 1	Supplementary	11/8/1994	MW-15-19941108	**6.0**	--	**480**	--	**357**	**0.20**	**7.02**	--	**4,354**	**7,240**
MW-15	Multiunit 1	Supplementary	4/5/1995	MW-15-19950405	**7.0**	--	**460**	--	**322**	**0.20**	**7.10**	--	**4,012**	**6,820**
MW-15	Multiunit 1	Supplementary	11/18/1995	MW-15-19951118	**6.48**	--	**460**	--	**349.4**	**0.20**	**6.98**	--	**4,301**	**6,260**
MW-15	Multiunit 1	Supplementary	8/14/1996	MW-15-19960814	**5.93**	--	**440**	--	**347.1**	**0.20**	**7.06**	--	**4,226**	**7,360**
MW-15	Multiunit 1	Supplementary	4/23/1997	MW-15-19970423	**7.72**	--	**440**	--	**311.95**	**0.20**	**7.22**	--	**3,776**	**6,780**
MW-15	Multiunit 1	Supplementary	10/8/1997	MW-15-19971008	<0.05	--	**400**	--	**429.4**	**0.20**	**7.39**	--	**4,344**	**7,780**
MW-15	Multiunit 1	Supplementary	4/14/1998	MW-15-19980414	--	--	**420**	--	**348.5**	**0.20**	**7.02**	--	**3,772**	**7,260**
MW-15	Multiunit 1	Supplementary	5/11/1999	MW-15-19990511	**1.8**	--	**460**	--	**322.5**	**0.20**	**7.23**	--	**3,712**	**7,040**
MW-15	Multiunit 1	Supplementary	12/1/1999	MW-15-19991201	**10.1**	--	**520**	--	**355.8**	**0.20**	**7.19**	--	**3,877**	**7,000**
MW-15	Multiunit 1	Supplementary	6/8/2000	MW-15-20000608	**9.45**	--	**454**	--	**519.1**	**0.20**	**7.61**	--	**5,662**	**6,970**
MW-15	Multiunit 1	Supplementary	12/12/2000	MW-15-20001212	**9.45**	--	**480**	--	**373.7**	**0.2524**	**6.90**	--	**3,803**	--
MW-15	Multiunit 1	Supplementary	8/22/2001	MW-15-20010822	**10.9**	--	**435**	--	**328.1**	**0.20**	**7.00**	--	**3,958**	**7,170**
MW-15	Multiunit 1	Supplementary	12/3/2001	MW-15-20011203	**11.5**	--	**600**	--	**299.8**	**0.20**	**6.86**	--	**3,944**	**6,910**
MW-15	Multiunit 1	Supplementary	6/24/2002	MW-15-20020624	**11.7**	--	**420**	--	**358.2**	**0.20**	**7.31**	--	**4,014**	**7,450**
MW-15	Multiunit 1	Supplementary	12/18/2002	MW-15-20021218	**12.2**	--	**440**	--	**317.3**	**0.20**	**7.07**	--	**3,900**	**7,390**
MW-15	Multiunit 1	Supplementary	5/28/2003	MW-15-20030528	**13.9**	--	**460**	--	**342.8**	**0.20**	**6.88**	--	**3,640**	**7,150**
MW-15	Multiunit 1	Supplementary	12/24/2003	MW-15-20031224	**12.6**	--	**340**	--	**328**	**0.30**	**6.99**	--	**3,708**	**7,330**

Table F-4
Groundwater Sampling Results for the Multiunit 1 Monitoring Wells - Appendix III Constituents

					Appendix III Constituents										
				Constituent:	Boron	Boron	Calcium	Calcium	Chloride	Fluoride	pH (Field Measurement)	pH (Laboratory Measurement)	Sulfate	Total Dissolved Solids
				Filtered:	N	Y	N	Y	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	su	su	mg/L	mg/L
				Multiunit 1 BTV	*3.95*	*3.95*	*454.1*	*454*	*604.7*	*2.1*	*6.52-7.88*	*6.52-7.88*	*22,000*	*34,397*
				Multiunit 1 GWPS	--	--	--	--	--	--	--	--	--	--
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**										
MW-15	Multiunit 1	Supplementary	6/16/2004	MW-15-20040616	--	--	420	--	365.6	0.20	6.95	--	4,043	7,680
MW-15	Multiunit 1	Supplementary	11/29/2004	MW-15-20041129	15.2	--	500	--	402.8	0.30	7.08	--	2,727	7,900
MW-15	Multiunit 1	Supplementary	5/13/2005	MW-15-20050513	11.2	--	440	--	368.2	0.30	7.00	--	4,053	7,840
MW-15	Multiunit 1	Supplementary	12/14/2005	MW-15-20051214	14	--	464	--	357	--	6.95	--	3,943	7,890
MW-15	Multiunit 1	Supplementary	6/17/2006	MW-15-20060617	13.5	--	454	--	328	0.177	6.98	--	4,590	7,730
MW-15	Multiunit 1	Supplementary	10/11/2006	MW-15-20061011	12.9	--	445	--	366	0.221	7.00	--	4,980	7,940
MW-15	Multiunit 1	Supplementary	4/18/2007	MW-15-20070418	13.9	--	441	--	395	0.373	7.08	--	4,770	7,760
MW-15	Multiunit 1	Supplementary	11/14/2007	MW-15-20071114	11.3	--	377	--	480	0.30	7.04	--	5,400	8,610
MW-15	Multiunit 1	Supplementary	5/7/2008	MW-15-20080507	11.7	--	382	--	320	0.20	7.08	--	5,440	8,160
MW-15	Multiunit 1	Supplementary	11/19/2013	FC-15MS-111913	--	--	490	--	--	--	--	--	--	--
MW-15	Multiunit 1	Supplementary	11/19/2013	FC-15-111913	11	--	480	--	830	<4.0	--	--	5,500	9,600
MW-15	Multiunit 1	Supplementary	9/9/2014	FCPP-15-090914	9.4	--	450	--	910	<0.40	--	--	5,800	10,000
MW-15	Multiunit 1	Supplementary	3/17/2015	FCPP-15-031715	9.2	--	450	--	1,000	<0.40	--	--	6,300	11,000
MW-15	Multiunit 1	Supplementary	6/29/2015	MW-15	9.1	--	410	--	1,000	<0.80	--	7.05	5,700	11,000
MW-15	Multiunit 1	Supplementary	8/26/2015	FCPP-15-082615	8.8	--	420	--	1,100	<0.80	--	7.08	6,500	11,000
MW-15	Multiunit 1	Supplementary	6/18/2016	FC-Seep-MW15-616	8.6	--	470	--	1,100	<0.40	--	7.19	6,100	11,000
MW-15	Multiunit 1	Supplementary	9/15/2016	FC-Seep-MW15-916	8.5	--	430	--	1,200	<0.40	--	7.0	7,400	11,000
MW-15	Multiunit 1	Supplementary	3/20/2019	FC-CCR-MW15-032019	--	--	--	--	--	<0.80	--	--	--	--
MW-15	Multiunit 1	Supplementary	3/20/2019	FC-CCR-MW15-032019	--	--	--	--	--	--	--	--	--	--
MW-15	Multiunit 1	Supplementary	5/14/2019	FC-CCR-MW15-51419	8.3	--	440	--	940	<0.80	--	7.0 J	6,400	11,000
MW-15	Multiunit 1	Supplementary	5/14/2019	FC-CCR-MW15-51419	--	--	--	--	--	--	--	--	--	--
MW-15	Multiunit 1	Supplementary	11/19/2019	FC-CCR-MW15-111919	8.2	--	440	--	1,000	<0.80	--	6.9 J	6,600	11,000
MW-15	Multiunit 1	Supplementary	6/23/2020	FC-CCR-MW15-0620	8.8	--	440	--	990	<0.8	6.62	7.0 J	6,600	12,000
MW-15	Multiunit 1	Supplementary	11/6/2020	FC-CCR-MW15-1120	7.9	--	430	--	1,000	<0.4	6.68	7.2 J	6,800	11,000
MW-15	Multiunit 1	Supplementary	4/27/2021	FC-CCR-MW15-0421	7.8	--	470	--	1,000	0.27 J	7.38	7.2 J	6,400	11,000
MW-15	Multiunit 1	Supplementary	11/18/2021	FC-CCR-MW15-1121	7.3	--	420	--	1,200	0.37 J	6.66	7.4 J	8,400	11,000
MW-15	Multiunit 1	Supplementary	2/8/2022	FC-CCR-MW15-0222	8.2	--	480	--	1,100	0.18	6.51	7.3 J	7,100	11,000
MW-15	Multiunit 1	Supplementary	5/24/2022	FC-CCR-MW15-0522	7.9	--	440	--	1,000	<0.8	6.78	7.50 J	6,500	12,000
MW-15	Multiunit 1	Supplementary	8/13/2022	FC-CCR-MW15-0822	8.1	--	470	--	1,000	<0.8	6.70	7.0 J	6,700	11,000
MW-15	Multiunit 1	Supplementary	11/16/2022	FC-CCR-MW15-1122	7.8	--	470	--	1,000	<2	6.67	7.1 J	6,600	12,000
MW-15	Multiunit 1	Supplementary	5/8/2023	FC-CCR-MW15-0523	8.1	--	450	--	1,100	<2	6.61	7.1 J	6,800	11,000
MW-15	Multiunit 1	Supplementary	11/15/2023	FC-CCR-MW15-1124	8.9	--	520	--	1,100	<0.8	6.71	7.1 J	6,600	13,000
MW-16	Multiunit 1	Supplementary	9/30/1987	MW-16_9/30/1987	--	1.3	--	410	770	<0.5	7.38	7.4	12,000	20,000
MW-16	Multiunit 1	Supplementary	6/20/1988	MW-16-19880620	--	--	412	--	685	0.50	7.41	--	6,063	19,249
MW-16	Multiunit 1	Supplementary	9/21/1988	MW-16-19880921	2.0	--	378	--	664	0.60	7.15	--	11,592	20,028
MW-16	Multiunit 1	Supplementary	11/14/1988	MW-16-19881114	2.0	--	358	--	620	0.50	7.30	--	11,983	20,760
MW-16	Multiunit 1	Supplementary	3/8/1989	MW-16-19890308	2.0	--	347	--	683	0.60	7.30	--	12,519	19,880
MW-16	Multiunit 1	Supplementary	9/13/1989	MW-16-19890913	2.0	--	320	--	549	0.60	7.31	--	11,421	18,780
MW-16	Multiunit 1	Supplementary	3/26/1990	MW-16-19900326	2.0	--	340	--	580	0.50	7.30	--	11,981	18,700
MW-16	Multiunit 1	Supplementary	9/24/1990	MW-16-19900924	1.0	--	300	--	592	0.30	7.32	--	11,738	17,890
MW-16	Multiunit 1	Supplementary	4/2/1991	MW-16-19910402	2.0	--	320	--	677	0.30	7.23	--	11,080	17,420
MW-16	Multiunit 1	Supplementary	10/1/1991	MW-16-19911001	2.0	--	261	--	574.4	0.30	7.52	--	9,634	16,260
MW-16	Multiunit 1	Supplementary	5/7/1992	MW-16-19920507	2.0	--	250	--	557.2	0.30	7.39	--	9,994	16,220
MW-16	Multiunit 1	Supplementary	11/5/1992	MW-16-19921105	2.0	--	320	--	556	0.30	7.32	--	8,898	15,100
MW-16	Multiunit 1	Supplementary	4/26/1993	MW-16-19930426	2.0	--	330	--	527.8	0.20	7.33	--	9,830	14,170
MW-16	Multiunit 1	Supplementary	11/23/1993	MW-16-19931123	2.0	--	330	--	523	0.30	7.30	--	8,832	14,780
MW-16	Multiunit 1	Supplementary	4/20/1994	MW-16-19940420	2.0	--	390	--	581	0.30	7.28	--	9,260	15,320
MW-16	Multiunit 1	Supplementary	9/21/1994	MW-16-19940921	2.0	--	350	--	517	0.30	7.33	--	8,530	14,040
MW-16	Multiunit 1	Supplementary	4/4/1995	MW-16-19950404	1.0	--	390	--	531	0.30	7.34	--	8,186	13,220
MW-16	Multiunit 1	Supplementary	11/21/1995	MW-16-19951121	3.06	--	400	--	428.6	0.30	7.34	--	7,076	11,890
MW-16	Multiunit 1	Supplementary	8/15/1996	MW-16-19960815	2.79	--	320	--	424.4	0.20	7.31	--	7,115	11,820
MW-16	Multiunit 1	Supplementary	4/15/1997	MW-16-19970415	3.49	--	340	--	408.5	0.30	7.59	--	6,336	11,240
MW-16	Multiunit 1	Supplementary	10/8/1997	MW-16-19971008	<0.05	--	320	--	414.3	0.20	7.42	--	6,952	10,850
MW-16	Multiunit 1	Supplementary	4/15/1998	MW-16-19980415	3.32	--	420	--	385.5	0.20	7.27	--	6,311	11,220

Table F-4
Groundwater Sampling Results for the Multiunit 1 Monitoring Wells - Appendix III Constituents

					Appendix III Constituents										
				Constituent:	Boron	Boron	Calcium	Calcium	Chloride	Fluoride	pH (Field Measurement)	pH (Laboratory Measurement)	Sulfate	Total Dissolved Solids
				Filtered:	N	Y	N	Y	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	su	su	mg/L	mg/L
				Multiunit 1 BTV	*3.95*	*3.95*	*454.1*	*454*	*604.7*	*2.1*	*6.52-7.88*	*6.52-7.88*	*22,000*	*34,397*
				Multiunit 1 GWPS	--	--	--	--	--	--	--	--	--	--
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**										
MW-16	Multiunit 1	Supplementary	5/11/1999	MW-16-19990511	3.9	--	440	--	412.6	0.30	7.38	--	6,520	11,790
MW-16	Multiunit 1	Supplementary	11/30/1999	MW-16-19991130	4.0	--	520	--	417.9	0.20	7.54	--	6,331	10,980
MW-16	Multiunit 1	Supplementary	6/8/2000	MW-16-20000608	4.73	--	462	--	618.3	0.30	7.20	--	7,616	11,390
MW-16	Multiunit 1	Supplementary	12/12/2000	MW-16-20001212	4.97	--	540	--	426.7	0.2809	7.00	--	6,014	--
MW-16	Multiunit 1	Supplementary	8/22/2001	MW-16-20010822	5.44	--	480	--	434	0.27	7.28	--	5,883	9,990
MW-16	Multiunit 1	Supplementary	12/3/2001	MW-16-20011203	5.7	--	620	--	386.4	0.30	7.21	--	5,470	10,240
MW-16	Multiunit 1	Supplementary	6/12/2002	MW-16-20020612	5.47	--	420	--	493.5	0.40	7.57	--	6,693	11,830
MW-16	Multiunit 1	Supplementary	12/18/2002	MW-16-20021218	64.2	--	440	--	429.8	0.20	7.52	--	5,924	10,780
MW-16	Multiunit 1	Supplementary	5/29/2003	MW-16-20030529	6.55	--	480	--	536.6	0.70	7.21	--	6,005	11,460
MW-16	Multiunit 1	Supplementary	12/24/2003	MW-16-20031224	6.59	--	330	--	415	0.34	7.22	--	5,816	10,330
MW-16	Multiunit 1	Supplementary	6/16/2004	MW-16-20040616	--	--	440	--	429.3	0.30	7.17	--	6,128	10,350
MW-16	Multiunit 1	Supplementary	11/29/2004	MW-16-20041129	8.8	--	420	--	411.9	0.40	7.23	--	3,752	10,080
MW-16	Multiunit 1	Supplementary	6/13/2005	MW-16-20050613	7.41	--	470	--	371.6	0.30	7.25	--	5,373	9,900
MW-16	Multiunit 1	Supplementary	10/31/2005	MW-16-20051031	--	--	--	--	351.2	0.20	7.10	--	5,078	9,410
MW-16	Multiunit 1	Supplementary	5/16/2006	MW-16-20060516	10.3	--	460	--	322	0.267	7.18	--	5,440	9,200
MW-16	Multiunit 1	Supplementary	10/11/2006	MW-16-20061011	9.63	--	463	--	327	0.287	7.18	--	6,010	9,160
MW-16	Multiunit 1	Supplementary	4/18/2007	MW-16-20070418	9.69	--	460	--	380	0.59	7.22	--	5,860	9,040
MW-16	Multiunit 1	Supplementary	11/14/2007	MW-16-20071114	8.78	--	391	--	374	0.20	7.22	--	5,700	9,040
MW-16	Multiunit 1	Supplementary	5/7/2008	MW-16-20080507	9.7	--	400	--	330	0.30	7.27	--	6,020	8,780
MW-16	Multiunit 1	Supplementary	12/4/2009	MW-16-20091204	10.7	--	408	--	360	0.30	7.21	--	4,900	8,250
MW-16	Multiunit 1	Supplementary	9/27/2012	MW-16-092712-01	9.5	--	400	--	450	<2.0	--	--	5,400	8,900
MW-16	Multiunit 1	Supplementary	11/19/2013	FC-16-111913	7.3	--	490	--	680	<4.0	--	--	6,200	11,000
MW-16	Multiunit 1	Supplementary	3/12/2014	FC-16-031214	7.6	--	460	--	690	<0.80	--	--	6,500	11,000
MW-16	Multiunit 1	Supplementary	9/9/2014	FCPP-16-090914	7.7	--	440	--	670	<0.40	--	--	6,300	10,000
MW-16	Multiunit 1	Supplementary	3/17/2015	FCPP-16-031715	8.8	--	460	--	820	<0.40	--	--	6,300	10,000
MW-16	Multiunit 1	Supplementary	6/29/2015	MW-16	8.7	--	430	--	940	<0.80	--	7.21	6,200	12,000
MW-16	Multiunit 1	Supplementary	8/26/2015	FCPP-16-082615	8.3	--	440	--	890	2.7	--	7.17	7,700	12,000
MW-16	Multiunit 1	Supplementary	11/10/2015	FC MW-16-(111115)	8.1	--	530	--	1,000	<4.0	--	7.24	9,000	17,000
MW-16	Multiunit 1	Supplementary	6/18/2016	FC-Seep-MW16-616	8.0	--	470	--	1,200	<0.40	--	7.35	8,500	15,000
MW-16	Multiunit 1	Supplementary	9/15/2016	FC-Seep-MW16-916	7.5	--	420	--	1,300	<0.40	--	7.1	12,000	16,000
MW-16	Multiunit 1	Supplementary	3/20/2019	FC-CCR-MW16-032019	--	--	--	--	--	<0.80	--	--	--	--
MW-16	Multiunit 1	Supplementary	3/20/2019	FC-CCR-MW16-032019	--	--	--	--	--	--	--	--	--	--
MW-16	Multiunit 1	Supplementary	5/14/2019	FC-CCR-MW16-51419	6.6	--	410	--	1,300	<0.80	--	7.2 J	11,000	17,000
MW-16	Multiunit 1	Supplementary	5/14/2019	FC-CCR-MW16-51419	--	--	--	--	--	--	--	--	--	--
MW-16	Multiunit 1	Supplementary	5/14/2019	*DUP* FC-CCR-FD02-51419	6.6	--	410	--	1,000	<0.80	--	7.2 J	10,000	17,000
MW-16	Multiunit 1	Supplementary	5/14/2019	*DUP* FC-CCR-FD02-51419	--	--	--	--	--	--	--	--	--	--
MW-16	Multiunit 1	Supplementary	11/19/2019	FC-CCR-MW16-111919	7.1	--	420	--	900	<0.80	--	7.1 J	11,000	17,000
MW-16	Multiunit 1	Supplementary	6/23/2020	FC-CCR-MW16-0620	7.8	--	430	--	870	<0.8	6.81	7.3 J	12,000	18,000
MW-16	Multiunit 1	Supplementary	11/6/2020	FC-CCR-MW16-1120	7.3	--	410	--	1,400	<0.4	6.90	7.4 J	11,000	16,000
MW-16	Multiunit 1	Supplementary	4/27/2021	FC-CCR-MW16-0421	7.9	--	420	--	780	0.19 J	7.67	7.3 J	11,000	18,000
MW-16	Multiunit 1	Supplementary	11/18/2021	FC-CCR-MW16-1121	8.4	--	430	--	1,300	0.39 J	6.86	7.5 J	22,000	18,000
MW-16	Multiunit 1	Supplementary	2/8/2022	FC-CCR-MW16-0222	9.0	--	470	--	840	0.13	6.73	7.3 J	12,000	19,000
MW-16	Multiunit 1	Supplementary	5/26/2022	FC-CCR-MW16-0522	8.5	--	480	--	1,200	<0.8	6.97	7.48 J	22,000	19,000
MW-16	Multiunit 1	Supplementary	8/13/2022	FC-CCR-MW16-0822	8.9	--	430	--	770	<0.8	6.90	7.1 J	12,000	18,000
MW-16	Multiunit 1	Supplementary	11/16/2022	FC-CCR-MW16-1122	8.2	--	410	--	1,000	<8	6.90	7.2 J	16,000	19,000
MW-16	Multiunit 1	Supplementary	5/8/2023	FC-CCR-MW16-0523	9.3	--	440	--	980	<2	6.87	7.3 J	13,000	21,000
MW-16	Multiunit 1	Supplementary	11/15/2023	FC-CCR-MW16-1124	11	--	490	--	840	<0.8	6.92	7.3 J	12,000	19,000
MW-17R	Multiunit 1	Supplementary	3/12/2014	FC-17R-031214	34	--	470	--	400	0.43	--	--	3,900	6,100
MW-17R	Multiunit 1	Supplementary	9/9/2014	FCPP-17R-090914	33	--	420	--	370	<0.40	--	--	3,900	6,300
MW-17R	Multiunit 1	Supplementary	3/17/2015	FCPP-17R-031715	34	--	450	--	420	0.40	--	--	4,100	6,200
MW-17R	Multiunit 1	Supplementary	6/30/2015	MW-17R	34	--	430	--	410	<0.80	--	7.41	3,600	6,300
MW-17R	Multiunit 1	Supplementary	8/25/2015	FCPP-17R-082515	33	--	460	--	420	<0.40	--	7.32	4,100	6,500
MW-17R	Multiunit 1	Supplementary	11/4/2015	FC MW-17R-(041115)	30	--	440	--	--	--	--	7.21	--	--
MW-17R	Multiunit 1	Supplementary	11/13/2015	FC MW-17R-(131115)	36	--	430	--	400	<2.0	--	7.37	4,000	6,500

Table F-4
Groundwater Sampling Results for the Multiunit 1 Monitoring Wells - Appendix III Constituents

					Appendix III Constituents										
				Constituent:	Boron	Boron	Calcium	Calcium	Chloride	Fluoride	pH (Field Measurement)	pH (Laboratory Measurement)	Sulfate	Total Dissolved Solids
				Filtered:	N	Y	N	Y	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	su	su	mg/L	mg/L
				Multiunit 1 BTV	*3.95*	*3.95*	*454.1*	*454*	*604.7*	*2.1*	*6.52-7.88*	*6.52-7.88*	*22,000*	*34,397*
				Multiunit 1 GWPS	--	--	--	--	--	--	--	--	--	--
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**										
MW-17R	Multiunit 1	Supplementary	6/18/2016	FC-Seep-MW17B-616	33	--	470	--	400	0.45	--	7.57	3,800	6,600
MW-17R	Multiunit 1	Supplementary	9/15/2016	FC-Seep-MW17R-916	36	--	430	--	370	0.49	--	7.4	4,100	6,400
MW-17R	Multiunit 1	Supplementary	3/19/2019	FC-CCR-MW17R-031919	--	--	--	--	--	<0.40	--	--	--	--
MW-17R	Multiunit 1	Supplementary	3/19/2019	FC-CCR-MW17R-031919	--	--	--	--	--	--	--	--	--	--
MW-17R	Multiunit 1	Supplementary	5/14/2019	FC-CCR-MW17R-51419	33	--	440	--	390	<0.80	--	7.5 J	4,000	6,200
MW-17R	Multiunit 1	Supplementary	5/14/2019	FC-CCR-MW17R-51419	--	--	--	--	--	--	--	--	--	--
MW-17R	Multiunit 1	Supplementary	5/14/2019	*DUP* FC-CCR-FD01-51419	33	--	430	--	380	<0.80	--	7.5 J	3,900	6,300
MW-17R	Multiunit 1	Supplementary	5/14/2019	*DUP* FC-CCR-FD01-51419	--	--	--	--	--	--	--	--	--	--
MW-17R	Multiunit 1	Supplementary	11/19/2019	FC-CCR-MW17R-111919	36	--	460	--	390	<0.80	--	7.4 J	4,100	6,200
MW-17R	Multiunit 1	Supplementary	6/22/2020	FC-CCR-MW17R-0620	36	--	440	--	380	<0.8	7.14	7.5 J	3,900	6,100
MW-17R	Multiunit 1	Supplementary	11/7/2020	FC-CCR-MW17R-1120	36	--	440	--	400	0.4	7.24	7.5 J	4,300	5,900
MW-17R	Multiunit 1	Supplementary	4/25/2021	FC-CCR-MW17R-0421	36	--	470	--	390	0.45	8.06	7.6 J	4,000	6,200
MW-17R	Multiunit 1	Supplementary	11/16/2021	FC-CCR-MW17R-1121	39	--	470	--	490	0.62 J	7.12	7.7 J	5,700	6,300
MW-17R	Multiunit 1	Supplementary	2/9/2022	FC-CCR-MW17R-0222	37	--	480	--	450	0.48	7.22	7.5 J	4,600	6,400
MW-17R	Multiunit 1	Supplementary	2/9/2022	*DUP* FC-CCR-FD01-0222	36	--	460	--	440	0.50	7.22	7.5 J	4,500	6,300
MW-17R	Multiunit 1	Supplementary	5/25/2022	FC-CCR-MW17R-0522	34	--	440	--	400	<0.8	7.11	7.47 J	8,500	6,500
MW-17R	Multiunit 1	Supplementary	8/11/2022	FC-CCR-MW17R-0822	35	--	450	--	430	<0.8	7.11	7.4 J	4,000	6,400
MW-17R	Multiunit 1	Supplementary	11/15/2022	FC-CCR-MW17R-1122	37	--	480	--	430	<2	7.19	7.4 J	4,000	6,700
MW-17R	Multiunit 1	Supplementary	5/4/2023	FC-CCR-MW17R-0523	38	--	480	--	420	<8	7.19	7.4 J	4,000	6,200
MW-17R	Multiunit 1	Supplementary	11/14/2023	FC-CCR-MW17R-1124	39	--	490	--	410	<0.8	7.23	7.5 J	4,100	6,300
MW-18	Multiunit 1	Supplementary	9/29/1987	MW-18_9/29/1987	--	0.76	--	430	480	<0.5	7.45	7.5	9,500	15,000
MW-18	Multiunit 1	Supplementary	6/15/1988	MW-18-19880615	--	--	428	--	901	0.50	7.11	--	9,631	18,180
MW-18	Multiunit 1	Supplementary	9/21/1988	MW-18-19880921	1.0	--	377	--	703	0.50	7.18	--	9,681	18,120
MW-18	Multiunit 1	Supplementary	11/28/1988	MW-18-19881128	1.0	--	369	--	626	0.40	7.18	--	11,222	16,320
MW-18	Multiunit 1	Supplementary	2/27/1989	MW-18-19890227	1.0	--	408	--	692	0.40	7.19	--	10,056	16,895
MW-18	Multiunit 1	Supplementary	9/11/1989	MW-18-19890911	1.0	--	340	--	516	0.40	7.21	--	9,057	15,200
MW-18	Multiunit 1	Supplementary	3/26/1990	MW-18-19900326	1.0	--	380	--	667	0.30	7.20	--	9,976	16,490
MW-18	Multiunit 1	Supplementary	9/18/1990	MW-18-19900918	1.0	--	340	--	549	0.20	7.23	--	9,780	16,475
MW-18	Multiunit 1	Supplementary	5/30/1991	MW-18-19910530	1.0	--	350	--	1,147	0.30	7.10	--	13,240	20,660
MW-18	Multiunit 1	Supplementary	9/11/1991	MW-18-19910911	1.0	--	370	--	773	0.20	7.24	--	10,542	17,250
MW-18	Multiunit 1	Supplementary	5/5/1992	MW-18-19920505	1.0	--	210	--	1,772	0.20	7.32	--	17,150	27,820
MW-18	Multiunit 1	Supplementary	10/27/1992	MW-18-19921027	1.0	--	240	--	1,789	0.30	7.00	--	19,960	28,980
MW-18	Multiunit 1	Supplementary	4/26/1993	MW-18-19930426	1.0	--	290	--	1,506	0.20	7.08	--	18,415	22,480
MW-18	Multiunit 1	Supplementary	11/23/1993	MW-18-19931123	1.0	--	320	--	1,330	0.20	7.06	--	19,000	19,210
MW-18	Multiunit 1	Supplementary	4/21/1994	MW-18-19940421	1.0	--	380	--	699	0.20	7.22	--	12,560	18,170
MW-18	Multiunit 1	Supplementary	9/20/1994	MW-18-19940920	1.0	--	370	--	846	0.20	7.13	--	10,340	18,330
MW-18	Multiunit 1	Supplementary	12/14/1994	MW-18-19941214	--	--	400	--	--	--	7.32	--	--	--
MW-18	Multiunit 1	Supplementary	4/5/1995	MW-18-19950405	1.0	--	300	--	1,134	0.20	7.09	--	14,220	23,650
MW-18	Multiunit 1	Supplementary	12/13/1995	MW-18-19951213	0.74	--	350	--	921.5	0.20	7.16	--	11,850	18,500
MW-18	Multiunit 1	Supplementary	8/12/1996	MW-18-19960812	0.50	--	220	--	884.5	0.20	7.19	--	11,253	19,330
MW-18	Multiunit 1	Supplementary	4/23/1997	MW-18-19970423	0.94	--	180	--	1,586	0.20	7.14	--	13,940	25,750
MW-18	Multiunit 1	Supplementary	10/20/1997	MW-18-19971020	<0.05	--	200	--	605.6	0.20	7.47	--	8,757	15,120
MW-18	Multiunit 1	Supplementary	4/14/1998	MW-18-19980414	--	--	400	--	547.6	0.20	7.24	--	8,297	15,840
MW-18	Multiunit 1	Supplementary	6/8/1999	MW-18-19990608	1.6	--	--	--	--	0.20	7.76	--	9,699	16,510
MW-18	Multiunit 1	Supplementary	12/8/1999	MW-18-19991208	--	--	420	--	601.8	0.20	7.29	--	8,860	15,460
MW-18	Multiunit 1	Supplementary	6/8/2000	MW-18-20000608	1.57	--	425	--	866.6	0.20	7.26	--	11,148	12,960
MW-18	Multiunit 1	Supplementary	11/28/2000	MW-18-20001128	1.67	--	450	--	441.2	0.2462	7.15	--	7,021	13,380
MW-18	Multiunit 1	Supplementary	8/21/2001	MW-18-20010821	1.29	--	460	--	490	0.23	7.11	--	5,668	25,800
MW-18	Multiunit 1	Supplementary	12/5/2001	MW-18-20011205	1.3	--	420	--	598.8	0.30	7.16	--	8,647	14,750
MW-18	Multiunit 1	Supplementary	6/12/2002	MW-18-20020612	1.29	--	360	--	435	0.40	7.42	--	6,795	11,830
MW-18	Multiunit 1	Supplementary	12/18/2002	MW-18-20021218	1.35	--	390	--	584.6	0.20	7.45	--	8,137	14,690
MW-18	Multiunit 1	Supplementary	6/3/2003	MW-18-20030603	--	--	370	--	430	0.30	7.23	--	5,332	14,490
MW-18	Multiunit 1	Supplementary	9/24/2003	MW-18-20030924	0.76	--	315	--	444	0.36	7.19	--	7,104	12,560
MW-18	Multiunit 1	Supplementary	6/16/2004	MW-18-20040616	--	--	350	--	494.2	0.30	7.22	--	7,197	12,750

Table F-4
Groundwater Sampling Results for the Multiunit 1 Monitoring Wells - Appendix III Constituents

					Appendix III Constituents										
				Constituent:	Boron	Boron	Calcium	Calcium	Chloride	Fluoride	pH (Field Measurement)	pH (Laboratory Measurement)	Sulfate	Total Dissolved Solids
				Filtered:	N	Y	N	Y	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	su	su	mg/L	mg/L
				Multiunit 1 BTV	*3.95*	*3.95*	*454.1*	*454*	*604.7*	*2.1*	*6.52-7.88*	*6.52-7.88*	*22,000*	*34,397*
				Multiunit 1 GWPS	--	--	--	--	--	--	--	--	--	--
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**										
MW-18	Multiunit 1	Supplementary	11/9/2004	MW-18-20041109	**1.0**	--	**435**	--	**445.4**	**0.30**	**7.29**	--	**6,620**	**12,680**
MW-18	Multiunit 1	Supplementary	5/12/2005	MW-18-20050512	**0.787**	--	**420**	--	**594.8**	**0.30**	**7.13**	--	**7,685**	**13,980**
MW-18	Multiunit 1	Supplementary	11/1/2005	MW-18-20051101	**0.784**	--	**401**	--	**752**	**0.30**	**6.98**	--	**8,431**	**16,100**
MW-18	Multiunit 1	Supplementary	5/15/2006	MW-18-20060515	**0.792**	--	**418**	--	**595**	**0.213**	**7.17**	--	**8,560**	**14,500**
MW-18	Multiunit 1	Supplementary	10/13/2006	MW-18-20061013	**0.775**	--	**449**	--	**522**	**0.21**	**7.15**	--	**8,640**	**11,700**
MW-18	Multiunit 1	Supplementary	4/18/2007	MW-18-20070418	**0.96**	--	**416**	--	**723**	**0.629**	**7.16**	--	**9,600**	**14,600**
MW-18	Multiunit 1	Supplementary	11/20/2007	MW-18-20071120	**0.781**	--	**359**	--	**600**	**0.20**	**7.22**	--	**7,500**	**13,700**
MW-18	Multiunit 1	Supplementary	4/30/2008	MW-18-20080430	**0.80**	--	**379**	--	**550**	**0.20**	**7.26**	--	**8,630**	**12,900**
MW-18	Multiunit 1	Supplementary	12/3/2009	MW-18-20091203	**1.0**	--	**376**	--	**1,460**	**0.30**	**7.05**	--	**12,200**	**20,900**
MW-18	Multiunit 1	Supplementary	9/27/2012	MW-18-092712-01	**1.0**	--	**400**	--	**2,200**	<4.0	--	--	**13,000**	**21,000**
MW-18	Multiunit 1	Supplementary	11/19/2013	FC-18-111913	**1.1**	--	**480**	--	**2,100**	<4.0	--	--	**12,000**	**20,000**
MW-18	Multiunit 1	Supplementary	3/12/2014	FC-18-031214	**1.0**	--	**430**	--	**2,400**	<2.0	--	--	**12,000**	**19,000**
MW-18	Multiunit 1	Supplementary	9/10/2014	FCPP-18-091014	**1.1**	--	**390**	--	**2,300**	<0.80	--	--	**13,000**	**22,000**
MW-18	Multiunit 1	Supplementary	3/18/2015	FCPP-18-031815	**1.1**	--	**450**	--	**2,900**	<0.80	--	--	**14,000**	**24,000**
MW-18	Multiunit 1	Supplementary	6/30/2015	MW-18	**1.1**	--	**400**	--	**2,400**	<4.0	--	**7.09**	**12,000**	**22,000**
MW-18	Multiunit 1	Supplementary	8/25/2015	FCPP-18-082515	**1.1**	--	**430**	--	**3,300**	<2.0	--	**7.01**	**14,000**	**23,000**
MW-18	Multiunit 1	Supplementary	11/6/2015	FC MW-18-(061115)	**1.3**	--	**460**	--	**2,700**	<4.0	--	**7.02**	**13,000**	**22,000**
MW-18	Multiunit 1	Supplementary	6/17/2016	FC-Seep-MW18-616	**1.0**	--	**440**	--	**3,300**	<0.80	--	**7.28**	**13,000**	**24,000**
MW-18	Multiunit 1	Supplementary	9/15/2016	FC-Seep-MW18-916	**1.3**	--	**430**	--	**660**	<0.40	--	**7.2**	**8,800**	**13,000**
MW-18	Multiunit 1	Supplementary	6/22/2020	FC-CCR-MW18-0620	--	--	--	--	--	--	**6.65**	--	--	--
MW-18	Multiunit 1	Supplementary	11/7/2020	FC-CCR-MW18-1120	**1.1**	--	--	--	--	--	**6.74**	--	--	--
MW-18	Multiunit 1	Supplementary	4/25/2021	FC-CCR-MW18-0421	**1.3**	--	**510**	--	**4,800**	<0.8	**7.37**	**7.2 J**	**16,000**	**5,900**
MW-18	Multiunit 1	Supplementary	11/16/2021	FC-CCR-MW18-1121	**1.2**	--	**510**	--	**5,100**	<0.8	**6.65**	**7.6 J**	**16,000**	**28,000 J**
MW-18	Multiunit 1	Supplementary	2/8/2022	FC-CCR-MW18-0222	**1.3**	--	**520**	--	**9,800**	**0.58**	**6.59**	**7.3 J**	**15,000**	**26,000**
MW-18	Multiunit 1	Supplementary	5/25/2022	FC-CCR-MW18-0522	**1.2**	--	**470**	--	**9,200**	<0.8	**6.67**	**7.38 J**	**37,000**	**25,000**
MW-18	Multiunit 1	Supplementary	8/12/2022	FC-CCR-MW18-0822	**1.3**	--	**520**	--	**4,600**	<0.8	**6.34**	**7.0 J**	**15,000**	**28,000**
MW-18	Multiunit 1	Supplementary	11/14/2022	FC-CCR-MW18-1122	**1.2**	--	**490**	--	**4,700**	<4	**6.79**	**7.0 J**	**16,000**	**32,000**
MW-18	Multiunit 1	Supplementary	5/4/2023	FC-CCR-MW18-0523	**1.5**	--	**440**	--	**5,100**	<80	**6.71**	**7.1 J**	**16,000**	**29,000**
MW-18	Multiunit 1	Supplementary	11/14/2023	FC-CCR-MW18-1124	**1.4**	--	**490**	--	**4,700**	<0.8	**6.76**	**7.0 J**	**15,000**	**29,000**
MW-23R	Multiunit 1	Supplementary	3/11/2014	FC-23RMS-031114	**1.7**	--	**450**	--	--	--	--	--	--	--
MW-23R	Multiunit 1	Supplementary	3/11/2014	FC-23R-031114	**1.7**	--	**440**	--	**470**	<0.80	--	--	**7,200**	**5,800**
MW-23R	Multiunit 1	Supplementary	9/11/2014	FCPP-23R-91114	**9.0**	--	**1,700**	--	**520**	<0.40	--	--	**7,900**	**12,000**
MW-23R	Multiunit 1	Supplementary	12/8/2014	FCPP-MW23R-12914	**1.9**	--	--	--	--	--	--	--	--	--
MW-23R	Multiunit 1	Supplementary	3/18/2015	FCPP-23R-031815	**3.5**	--	**450**	--	**530**	<0.40	--	--	**7,100**	**12,000**
MW-23R	Multiunit 1	Supplementary	6/30/2015	MW-23R	**6.9**	--	**420**	--	**580**	<2.0	--	**7.24**	**6,400**	**11,000**
MW-23R	Multiunit 1	Supplementary	11/3/2015	FC MW-23R-(031115)	**9.9**	--	**490**	--	--	--	--	**7.29**	--	**11,000**
MW-23R	Multiunit 1	Supplementary	11/13/2015	FC MW-23R-(131115)	**2.8**	--	**410**	--	**500**	<2.0	--	**7.25**	**7,100**	**11,000**
MW-23R	Multiunit 1	Supplementary	6/21/2016	FC-SEEPS-MW-23R-062116	**14**	--	**450**	--	**590**	<0.40	--	**7.23**	**6,100**	**11,000**
MW-23R	Multiunit 1	Supplementary	9/15/2016	FC-Seep-MW23R-916	**6.6**	--	**420**	--	**530**	**0.45**	--	**7.2**	**7,000**	**11,000**
MW-23R	Multiunit 1	Supplementary	6/21/2020	FC-CCR-MW23R-0620	--	--	--	--	--	--	**6.76**	--	--	--
MW-23R	Multiunit 1	Supplementary	11/7/2020	FC-CCR-MW23R-1120	**13**	--	--	--	--	--	**6.94**	--	--	--
MW-23R	Multiunit 1	Supplementary	4/25/2021	FC-CCR-MW23R-0421	**15**	--	**480**	--	**730**	**0.27 J**	**7.64**	**7.4 J**	**8,700**	**13,000**
MW-23R	Multiunit 1	Supplementary	11/14/2021	FC-CCR-MW23R	**14**	--	**470**	--	**900**	**0.28 J**	**6.83**	**7.4 J**	**11,000**	**17,000**
MW-23R	Multiunit 1	Supplementary	2/9/2022	FC-CCR-MW23R-0222	**14**	--	**490**	--	**830**	**0.30**	**6.88**	**7.4 J**	**10,000**	**15,000**
MW-23R	Multiunit 1	Supplementary	5/25/2022	FC-CCR-MW23R-0522	**13**	--	**470**	--	**770**	<0.8	**6.70**	**7.44 J**	**9,400**	**15,000**
MW-23R	Multiunit 1	Supplementary	8/12/2022	FC-CCR-MW23R-0822	**13**	--	**500**	--	**720**	<0.8	**6.40**	**7.1 J**	**9,100**	**14,000**
MW-23R	Multiunit 1	Supplementary	11/11/2022	FC-CCR-MW23R-1122	**12**	--	**500**	--	**850**	<4	**6.92**	**7.2 J**	**9,400**	**16,000**
MW-23R	Multiunit 1	Supplementary	5/3/2023	FC-CCR-MW23R-0523	**16**	--	**520**	--	**750**	<80	**6.84**	**7.2 J**	**8,800**	**14,000**
MW-23R	Multiunit 1	Supplementary	11/14/2023	FC-CCR-MW23R-1124	**11**	--	**480**	--	**900**	<0.8	**6.93**	**7.2 J**	**11,000**	**17,000**
MW-24	Multiunit 1	Supplementary	3/19/2015	FCPP-24-031915	**1.1**	--	**400**	--	**4,100**	<0.80	--	--	**10,000**	**21,000**
MW-24	Multiunit 1	Supplementary	6/29/2015	MW-24	**1.1**	--	**350**	--	**3,700**	<4.0	--	**7.92**	**10,000**	**20,000**
MW-24	Multiunit 1	Supplementary	8/26/2015	FCPP-24-082615	**0.99**	--	**410**	--	**5,100**	<4.0	--	**7.62**	**12,000**	**23,000**
MW-24	Multiunit 1	Supplementary	6/20/2016	FC-Seep-MW24-616	**1.0**	--	**490**	--	**4,500**	<0.80	--	**7.38**	**11,000**	**23,000**
MW-24	Multiunit 1	Supplementary	9/15/2016	FC-Seep-MW24-916	**0.96**	--	**420**	--	**4,200**	<2.0	--	**7.3**	**11,000**	**23,000**

Table F-4
Groundwater Sampling Results for the Multiunit 1 Monitoring Wells - Appendix III Constituents

					Appendix III Constituents										
				Constituent:	Boron	Boron	Calcium	Calcium	Chloride	Fluoride	pH (Field Measurement)	pH (Laboratory Measurement)	Sulfate	Total Dissolved Solids
				Filtered:	N	Y	N	Y	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	su	su	mg/L	mg/L
				Multiunit 1 BTV	*3.95*	*3.95*	*454.1*	*454*	*604.7*	*2.1*	*6.52-7.88*	*6.52-7.88*	*22,000*	*34,397*
				Multiunit 1 GWPS	--	--	--	--	--	--	--	--	--	--
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**										
MW-24	Multiunit 1	Supplementary	4/26/2021	FC-CCR-MW24-0421	**1.0**	--	**510**	--	**5,600**	**0.66 J**	**8.07**	**7.6 J**	**14,000**	**23,000**
MW-24	Multiunit 1	Supplementary	11/16/2021	FC-CCR-MW24-1121	**1.0**	--	**490**	--	**5,200**	**0.21 J**	**7.18**	**7.7 J**	**13,000**	**23,000 J**
MW-24	Multiunit 1	Supplementary	2/8/2022	FC-CCR-MW24-0222	**1.0**	--	**510**	--	**4,800**	**0.23**	**7.11**	**7.6 J**	**12,000**	**24,000**
MW-24	Multiunit 1	Supplementary	5/25/2022	FC-CCR-MW24-0522	**0.94**	--	**460**	--	**5,000**	<0.8	**7.21**	**7.68 J**	**12,000**	**19,000**
MW-24	Multiunit 1	Supplementary	8/12/2022	FC-CCR-MW24-0822	**1.0**	--	**510**	--	**4,600**	<0.8	**7.12**	**7.4 J**	**11,000**	**22,000**
MW-24	Multiunit 1	Supplementary	11/14/2022	FC-CCR-MW24-1122	**0.98**	--	**490**	--	**4,800**	<2	**7.29**	**7.4 J**	**12,000**	**23,000**
MW-24	Multiunit 1	Supplementary	5/4/2023	FC-CCR-MW24-0523	**1.1**	--	**460**	--	**4,800**	<4	**7.19**	**7.4 J**	**11,000**	**24,000**
MW-24	Multiunit 1	Supplementary	11/14/2023	FC-CCR-MW24-1124	**1.1**	--	**470**	--	**4,600**	<0.8	**7.33**	**7.5 J**	**11,000**	**22,000 J**
MW-34	Multiunit 1	Supplementary	6/23/2020	FC-CCR-MW34-0620	**11**	--	**410**	--	**350**	<0.8	--	**7.7 J**	**5,000**	**7,700**
MW-34	Multiunit 1	Supplementary	11/16/2023	FC-CCR-MW34-1124	**11**	--	--	--	**18**	<0.8	**7.40**	--	**5,100**	**7600 J**
MW-36R	Multiunit 1	Supplementary	9/9/2014	FCPP-36R-090914	**32**	--	**450**	--	**560**	<0.40	--	--	**4,200**	**7,100**
MW-36R	Multiunit 1	Supplementary	3/19/2015	FCPP-36R-031915	**27**	--	**460**	--	**620**	<0.40	--	--	**5,200**	**8,400**
MW-36R	Multiunit 1	Supplementary	6/30/2015	MW-36R	**37**	--	**440**	--	**620**	<0.80	--	**7.24**	**4,100**	**7,600**
MW-36R	Multiunit 1	Supplementary	8/25/2015	FCPP-36R-082515	**21**	--	**440**	--	**650**	<0.80	--	**7.16**	**5,500**	**8,900**
MW-36R	Multiunit 1	Supplementary	11/3/2015	FC MW-36R-(031115)	**28**	--	**480**	--	--	--	--	**7.14**	--	**8,400**
MW-36R	Multiunit 1	Supplementary	11/13/2015	FC MW-36R-(131115)	**23**	--	**390**	--	**610**	<2.0	--	**7.21**	**4,700**	**8,300**
MW-36R	Multiunit 1	Supplementary	6/17/2016	FC-Seep-MW36R-616	**28**	--	**460**	--	**640**	<0.40	--	**7.32**	**4,800**	**7,900**
MW-36R	Multiunit 1	Supplementary	9/15/2016	FC-Seep-MW36R-916	**50**	--	**430**	--	**540**	<0.40	--	**7.3**	**4,100**	**6,600**
MW-36R	Multiunit 1	Supplementary	6/21/2020	FC-CCR-MW36R-0620	--	--	--	--	--	--	b	--	--	--
MW-36R	Multiunit 1	Supplementary	11/7/2020	FC-CCR-MW36R-1120	**53**	--	--	--	--	--	**7.21**	--	--	--
MW-36R	Multiunit 1	Supplementary	11/7/2020	*DUP* FC-CCR-FD04-1120	**55**	--	--	--	--	--	--	--	--	--
MW-36R	Multiunit 1	Supplementary	4/25/2021	FC-CCR-MW36R-0421	**53**	--	**500**	--	**510**	**0.29 J**	**8.04**	**7.6 J**	**4,300**	**6,800**
MW-36R	Multiunit 1	Supplementary	11/14/2021	FC-CCR-MW36R	**57**	--	--	--	--	--	**7.16**	--	--	--
MW-36R	Multiunit 1	Supplementary	2/9/2022	FC-CCR-MW36R-0222	**1.6**	--	**490**	--	**500**	**0.32**	**7.21**	**7.6 J**	**4,300**	**7,500**
MW-36R	Multiunit 1	Supplementary	5/25/2022	FC-CCR-MW36R-0522	**51**	--	**460**	--	**460**	<0.8	**7.06**	**7.50 J**	**3,900**	**7,200**
MW-36R	Multiunit 1	Supplementary	8/11/2022	FC-CCR-MW36R-0822	**52**	--	**470**	--	**490**	<0.8	**7.34**	**7.5 J**	**4,100**	**6,600**
MW-36R	Multiunit 1	Supplementary	11/11/2022	FC-CCR-MW36R-1122	**55**	--	**500**	--	**520**	<2	**7.25**	**7.4 J**	**4,000**	**7,200**
MW-36R	Multiunit 1	Supplementary	5/4/2023	FC-CCR-MW36R-0523	**58**	--	**530**	--	**510**	<8	**7.23**	**7.4 J**	**3,900**	**6,800**
MW-36R	Multiunit 1	Supplementary	11/14/2023	FC-CCR-MW36R-1124	**59**	--	**480**	--	**480**	<0.8	**7.27**	**7.4 J**	**4,100**	**6,500**
MW-38R	Multiunit 1	Supplementary	3/12/2014	FC-38R-031214	**39**	--	**440**	--	**1,300**	<0.80	--	--	**12,000**	**18,000**
MW-38R	Multiunit 1	Supplementary	9/11/2014	FCPP-38R-91114	**43**	--	**420**	--	**1,400**	<0.80	--	--	**20,000**	**32,000**
MW-38R	Multiunit 1	Supplementary	3/19/2015	FCPP-38R-031915	**34**	--	**410**	--	**1,200**	<0.80	--	--	**18,000**	**29,000**
MW-38R	Multiunit 1	Supplementary	6/30/2015	MW-38R	**35**	--	**390**	--	**710**	<2.0	--	**7.51**	**9,500**	**16,000**
MW-38R	Multiunit 1	Supplementary	8/29/2015	FCPP-38R-082915	**33**	--	**420**	--	**560**	<2.0	--	**7.47**	**8,800**	**14,000**
MW-38R	Multiunit 1	Supplementary	11/10/2015	FC MW-38R-(101115)	**34**	--	**490**	--	**810**	<2.0	--	**7.25**	**16,000**	**20,000**
MW-38R	Multiunit 1	Supplementary	6/21/2016	FC-SEEPS-MW-38R-DUP 06211	**27**	--	**400**	--	**520**	<0.40	--	**7.37**	**8,200**	**12,000**
MW-38R	Multiunit 1	Supplementary	6/21/2016	FC-SEEPS-MW-38R-062116	**25**	--	**400**	--	**590**	<0.40	--	**7.32**	**9,400**	**15,000**
MW-38R	Multiunit 1	Supplementary	9/15/2016	FC-Seep-MW38R-916	**26**	--	**380**	--	**420**	<0.40	--	**7.4**	**7,700**	**12,000**
MW-38R	Multiunit 1	Supplementary	9/15/2016	FC-Seep-MW106-916	**27**	--	**390**	--	**470**	<0.40	--	**7.4**	**8,600**	**13,000**
MW-38R	Multiunit 1	Supplementary	3/19/2019	FC-CCR-MW38R-031919	--	--	--	--	--	<0.40	--	--	--	--
MW-38R	Multiunit 1	Supplementary	3/19/2019	FC-CCR-MW38R-031919	--	--	--	--	--	--	--	--	--	--
MW-38R	Multiunit 1	Supplementary	5/14/2019	FC-CCR-MW38R-51419	**24**	--	**400**	--	**300**	<0.80	--	**7.7 J**	**4,900**	**8,200**
MW-38R	Multiunit 1	Supplementary	5/14/2019	FC-CCR-MW38R-51419	--	--	--	--	--	--	--	--	--	--
MW-38R	Multiunit 1	Supplementary	11/19/2019	FC-CCR-MW38R-111919	**26**	--	**450**	--	**270**	<0.80	--	**7.5 J**	**4,000**	**6,100**
MW-38R	Multiunit 1	Supplementary	11/19/2019	*DUP* FC-CCR-FD01-111919	**27**	--	**450**	--	**270**	<0.80	--	**7.5 J**	**4,000**	**5,900**
MW-38R	Multiunit 1	Supplementary	6/22/2020	FC-CCR-MW38R-0620	**29**	--	**450**	--	**290**	<0.8	**6.96**	**7.2 J**	**3,700**	**5,600**
MW-38R	Multiunit 1	Supplementary	6/22/2020	*DUP* FC-CCR-FD05-0620	**30**	--	**440**	--	**290**	<0.8	--	**7.4 J**	**3,800**	**5,400**
MW-38R	Multiunit 1	Supplementary	11/6/2020	FC-CCR-MW38R-1120	**27**	--	**490/430**	--	**280**	**0.36 J**	**7.03**	**7.4 J**	**4,000**	**5,800**
MW-38R	Multiunit 1	Supplementary	4/27/2021	FC-CCR-MW384R-0421	**29**	--	**490**	--	**310 J**	**0.33 J**	**7.79**	**7.3 J**	**4,100**	**5,900**
MW-38R	Multiunit 1	Supplementary	11/16/2021	FC-CCR-MW38R-1121	**27**	--	**460**	--	**320**	**0.4 J**	**6.94**	**7.6 J**	**4,500**	**6,000**
MW-38R	Multiunit 1	Supplementary	2/9/2022	FC-CCR-MW38R-0222	**27**	--	**470**	--	**320**	**0.45**	**7.01**	**7.5 J**	**4,400**	**6,000**
MW-38R	Multiunit 1	Supplementary	5/25/2022	FC-CCR-MW38R-0522	**27**	--	**440**	--	**310**	<0.8	**6.97**	**7.45 J**	**4,600**	**6,200**
MW-38R	Multiunit 1	Supplementary	8/11/2022	FC-CCR-MW38R-0822	**26**	--	**430**	--	**330**	<0.8	**7.41**	**7.4 J**	**4,400**	**6,600**
MW-38R	Multiunit 1	Supplementary	11/15/2022	FC-CCR-MW38R-1122	**24**	--	**460**	--	**370**	<2	**7.03**	**7.4 J**	**5,300**	**8,500**

Table F-4
Groundwater Sampling Results for the Multiunit 1 Monitoring Wells - Appendix III Constituents

					Appendix III Constituents										
				Constituent:	Boron	Boron	Calcium	Calcium	Chloride	Fluoride	pH (Field Measurement)	pH (Laboratory Measurement)	Sulfate	Total Dissolved Solids
				Filtered:	N	Y	N	Y	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	su	su	mg/L	mg/L
				Multiunit 1 BTV	*3.95*	*3.95*	*454.1*	*454*	*604.7*	*2.1*	*6.52-7.88*	*6.52-7.88*	*22,000*	*34,397*
				Multiunit 1 GWPS	--	--	--	--	--	--	--	--	--	--
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**										
MW-38R	Multiunit 1	Supplementary	5/5/2023	FC-CCR-MW38R-0523	**27**	--	**480**	--	**350**	<8	**7.02**	**7.4 J**	**5,400**	**8,900**
MW-38R	Multiunit 1	Supplementary	11/14/2023	FC-CCR-MW38R-1124	**14**	--	**440**	--	**530**	<0.8	**7.09**	**7.3 J**	**12,000**	**18,000**
MW-40R	Multiunit 1	Downgradient Boundary	2/2/2017	FC-CCR-MW40R-117	**18**	--	**410**	--	**1,900**	<0.40	--	**7.8**	**12,000**	**18,000**
MW-40R	Multiunit 1	Downgradient Boundary	2/2/2017	FC-CCR-MW40R-117	--	--	--	--	--	<0.40	--	--	--	--
MW-40R	Multiunit 1	Downgradient Boundary	2/2/2017	FC-CCR-MW40R-117	--	--	--	--	--	--	--	--	--	--
MW-40R	Multiunit 1	Downgradient Boundary	4/26/2021	FC-CCR-MW40R-0421	9.0		440		2,900	0.28 J	7.43	7.0 J	18,000	27,000
MW-46	Multiunit 1	Supplementary	6/30/2015	MW-46	**0.37**	--	**400**	--	**2,400**	<4.0	--	**7.44**	**18,000**	**28,000**
MW-46	Multiunit 1	Supplementary	11/7/2015	FC MW-46-(07115)	**0.50**	--	**460**	--	**2,200**	<4.0	--	**7.51**	**17,000**	**29,000**
MW-52	Multiunit 1	Supplementary	3/17/2015	FCPP-MSD02-031715	**5.4**	--	**450**	--	**470**	<0.40	--	--	**5,300**	**8,100**
MW-52	Multiunit 1	Supplementary	3/17/2015	FCPP-52-031715	**5.3**	--	**450**	--	**470**	<0.40	--	--	**5,400**	**8,500**
MW-52	Multiunit 1	Supplementary	8/26/2015	FCPP-52-082615	**6.1**	--	**430**	--	**500**	<0.80	--	**7.48**	**5,600**	**8,300**
MW-52	Multiunit 1	Supplementary	11/3/2015	FC MW-52-(031115)	**6.0**	--	**460**	--	**470**	<0.80	--	**7.47**	**5,400**	**8,400**
MW-52	Multiunit 1	Supplementary	6/18/2016	FC-Seep-MW52-616	**5.7**	--	**450**	--	**480**	<0.40	--	**7.64**	**5,000**	**8,400**
MW-52	Multiunit 1	Supplementary	9/16/2016	FC-Seep-MW52-916	**5.9**	--	**420**	--	**440**	<0.40	--	**7.5**	**5,000**	**8,300**
MW-52	Multiunit 1	Supplementary	6/20/2020	FC-CCR-MW52-0620	--	--	--	--	--	--	**7.17**	--	--	--
MW-52	Multiunit 1	Supplementary	11/8/2020	FC-CCR-MW52-1120	**7.8**	--	--	--	--	--	**7.32**	--	--	--
MW-52	Multiunit 1	Supplementary	4/23/2021	FC-CCR-MW52-0421	**7.6**	--	--	--	--	--	**8.11**	--	--	--
MW-52	Multiunit 1	Supplementary	11/13/2021	FC-CCR-MW52-1121	**11**	--	**450**	--	--	--	**7.24**	--	--	--
MW-52	Multiunit 1	Supplementary	11/13/2021	FC-CCR-FD03-1121	**9.7**	--	**420**	--	--	--	**7.24**	--	--	--
MW-52	Multiunit 1	Supplementary	5/22/2022	FC-CCR-MW52-0522	**16**	--	--	--	--	--	**7.24**	--	--	--
MW-52	Multiunit 1	Supplementary	5/22/2022	*DUP* FC-CCR-FD03-0522	**15**	--	--	--	--	--	**7.24**	--	--	--
MW-52	Multiunit 1	Supplementary	11/10/2022	FC-CCR-MW52-1122	**9.3**	--	--	--	--	--	**7.38**	--	--	--
MW-52	Multiunit 1	Supplementary	11/10/2022	*DUP* FC-CCR-FD03-1122	**11**	--	--	--	--	--	**7.38**	--	--	--
MW-52	Multiunit 1	Supplementary	5/2/2023	FC-CCR-MW52-0523	**11**	--	--	--	--	--	**7.33**	--	--	--
MW-52	Multiunit 1	Supplementary	5/2/2023	*DUP* FC-CCR-FD03-0523	**9.3**	--	--	--	--	--	**7.33**	--	--	--
MW-52	Multiunit 1	Supplementary	11/08/2023	FC-CCR-MW52-1124	**11 J**	--	--	--	--	--	**7.42**	--	--	--
MW-52	Multiunit 1	Supplementary	11/08/2023	*DUP* FC-CCR-FD03-1124	**10 J**	--	--	--	--	--	**7.42**	--	--	--
MW-54	Multiunit 1	Supplementary	9/10/2014	FCPP-54-091014	**3.1**	--	**440**	--	**13,000**	<4.0	--	--	**190,000**	**28,000**
MW-54	Multiunit 1	Supplementary	3/17/2015	FCPP-54-031715	**1.6**	--	**420**	--	**1,100**	<4.0	--	--	**17,000**	**24,000**
MW-54	Multiunit 1	Supplementary	8/26/2015	FCPP-54-082615	**1.4**	--	**410**	--	**1,100**	<0.80	--	**7.58**	**35,000**	**25,000**
MW-54	Multiunit 1	Supplementary	11/3/2015	FC MW-54-(031115)	**2.7**	--	**860**	--	**980**	<0.80	--	**7.56**	**19,000**	**27,000**
MW-54	Multiunit 1	Supplementary	6/20/2016	FC-Seep-MW54-616	**1.6**	--	**420**	--	**910**	**0.86**	--	**7.66**	**15,000**	**21,000**
MW-54	Multiunit 1	Supplementary	9/16/2016	FC-Seep-MW54-916	**1.8**	--	**400**	--	**730**	**0.85**	--	**7.8**	**13,000**	**19,000**
MW-56	Multiunit 1	Supplementary	3/12/2014	FC-56-031214	**3.4**	--	**460**	--	**1,300**	<0.80	--	--	**12,000**	**20,000**
MW-56	Multiunit 1	Supplementary	9/10/2014	FCPP-56-091014	**3.5**	--	**320**	--	**1,000**	<0.40	--	--	**11,000**	**16,000**
MW-56	Multiunit 1	Supplementary	3/19/2015	FCPP-56-031915	**2.4**	--	**450**	--	**1,500**	<0.40	--	--	**14,000**	**21,000**
MW-56	Multiunit 1	Supplementary	6/30/2015	MW-56	**2.2**	--	**410**	--	**1,600**	<4.0	--	**7.01**	**14,000**	**24,000**
MW-56	Multiunit 1	Supplementary	8/25/2015	FCPP-56-082515	**1.9**	--	**430**	--	**2,300**	<2.0	--	**7.3**	**18,000**	**29,000**
MW-56	Multiunit 1	Supplementary	11/5/2015	FC MW-56-(051115)	**2.2**	--	**480**	--	**2,100**	<2.0	--	**6.88**	**17,000**	**25,000**
MW-56	Multiunit 1	Supplementary	6/18/2016	FC-Seep-MW56-616	**2.5**	--	**450**	--	**1,600**	<0.40	--	**7.27**	**12,000**	**21,000**
MW-56	Multiunit 1	Supplementary	9/15/2016	FC-Seep-MW56-916	**5.4**	--	**390**	--	**670**	<0.40	--	**7.3**	**7,600**	**13,000**
MW-56	Multiunit 1	Supplementary	3/20/2019	FC-CCR-MW56-032019	--	--	--	--	--	<0.80	--	--	--	--
MW-56	Multiunit 1	Supplementary	3/20/2019	FC-CCR-MW56-032019	--	--	--	--	--	--	--	--	--	--
MW-56	Multiunit 1	Supplementary	5/14/2019	FC-CCR-MW56-51419	**2.7**	--	**440**	--	**1,700**	<0.80	--	**7.1 J**	**13,000**	**22,000**
MW-56	Multiunit 1	Supplementary	5/14/2019	FC-CCR-MW56-51419	--	--	--	--	--	--	--	--	--	--
MW-56	Multiunit 1	Supplementary	11/19/2019	FC-CCR-MW56-111919	**2.4**	--	**460**	--	**1,900**	<0.80	--	**7.2 J**	**15,000**	**24,000**
MW-56	Multiunit 1	Supplementary	6/22/2020	FC-CCR-MW56-0620	**2.2**	--	**460**	--	**2,000**	<0.8	**7.00**	**7.1 J**	**16,000**	**28,000**
MW-56	Multiunit 1	Supplementary	11/7/2020	FC-CCR-MW56-1120	**2.0**	--	**460**	--	**2,100**	<0.8	**6.84**	**7.4 J**	**16,000**	**27,000**
MW-56	Multiunit 1	Supplementary	4/26/2021	FC-CCR-MW56-0421	**1.8**	--	**490**	--	**2,300**	<0.8	**7.43**	**7.4 J**	**19,000**	**28,000**
MW-56	Multiunit 1	Supplementary	11/16/2021	FC-CCR-MW56-1121	**1.8**	--	**470**	--	**2,400**	<0.8	**6.83**	**7.8 J**	**20,000**	**30,000 J**
MW-56	Multiunit 1	Supplementary	2/8/2022	FC-CCR-MW56-0222	**53**	--	**490**	--	**2,400**	<0.8	**6.98**	**7.5 J**	**19,000**	**29,000**
MW-56	Multiunit 1	Supplementary	8/11/2022	FC-CCR-MW56-0822	**1.6**	--	**500**	--	**2,200**	<0.8	**7.24**	**7.3 J**	**18,000**	**30,000**
MW-56	Multiunit 1	Supplementary	11/15/2022	FC-CCR-MW56-1122	**1.5**	--	**470**	--	**3,300**	<8	**7.00**	**7.4 J**	**19,000**	**32,000**
MW-56	Multiunit 1	Supplementary	5/4/2023	FC-CCR-MW56-0523	**1.7**	--	**440**	--	**2,300**	<80	**7.02**	**7.3 J**	**19,000**	**30,000**

Table F-4
Groundwater Sampling Results for the Multiunit 1 Monitoring Wells - Appendix III Constituents

					Appendix III Constituents										
				Constituent:	Boron	Boron	Calcium	Calcium	Chloride	Fluoride	pH (Field Measurement)	pH (Laboratory Measurement)	Sulfate	Total Dissolved Solids
				Filtered:	N	Y	N	Y	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	su	su	mg/L	mg/L
				Multiunit 1 BTV	*3.95*	*3.95*	*454.1*	*454*	*604.7*	*2.1*	*6.52-7.88*	*6.52-7.88*	*22,000*	*34,397*
				Multiunit 1 GWPS	--	--	--	--	--	--	--	--	--	--
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**										
MW-56	Multiunit 1	Supplementary	11/14/2023	FC-CCR-MW56-1124	1.6	--	470	--	2,300	<0.8	7.01	7.3 J	19,000	30,000
MW-57	Multiunit 1	Supplementary	3/12/2014	FC-57-031214	4.9	--	450	--	360	<0.80	--	--	5,800	8,900
MW-57	Multiunit 1	Supplementary	9/9/2014	FCPP-57MS-090914	7.8	--	440	--	--	--	--	--	--	--
MW-57	Multiunit 1	Supplementary	9/9/2014	FCPP-57-090914	10	--	440	--	330	<0.40	--	--	5,400	8,700
MW-57	Multiunit 1	Supplementary	3/17/2015	FCPP-57-031715	9.3	--	440	--	360	<0.40	--	--	5,800	8,500
MW-57	Multiunit 1	Supplementary	6/29/2015	MW-57	9.4	--	410	--	370	<0.80	--	7.54	5,300	8,800
MW-57	Multiunit 1	Supplementary	8/26/2015	FCPP-57-082615	6.4	--	420	--	370	<0.80	--	7.46	6,100	9,600
MW-57	Multiunit 1	Supplementary	11/10/2015	FC MW-57-(101115)-MSD	4.3	--	450	--	--	--	--	7.55	--	9,500
MW-57	Multiunit 1	Supplementary	11/10/2015	FC MW-57-(101115)-MS	4.4	--	480	--	--	--	--	7.54	--	9,300
MW-57	Multiunit 1	Supplementary	11/10/2015	FC MW-57-(101115)	4.4	--	430	--	190	<0.80	--	7.53	6,700	9,400
MW-57	Multiunit 1	Supplementary	11/11/2015	*DUP* FC FD-4-(101115)	4.2	--	430	--	--	--	--	7.54	--	9,200
MW-57	Multiunit 1	Supplementary	6/18/2016	FC-Seep-MW57-616	3.5	--	430	--	370	<0.40	--	7.59	5,900	9,700
MW-57	Multiunit 1	Supplementary	9/15/2016	FC-Seep-MW57-916	8.7	--	410	--	330	<0.40	--	7.6	5,700	8,400
MW-57	Multiunit 1	Supplementary	3/19/2019	FC-CCR-MW57-031919	--	--	--	--	--	<0.40	--	--	--	--
MW-57	Multiunit 1	Supplementary	3/19/2019	FC-CCR-MW57-031919	--	--	--	--	--	--	--	--	--	--
MW-57	Multiunit 1	Supplementary	5/14/2019	FC-CCR-MW57-51419	1.8	--	420	--	470	<0.80	--	7.4 J	7,300	12,000
MW-57	Multiunit 1	Supplementary	5/14/2019	FC-CCR-MW57-51419	--	--	--	--	--	--	--	--	--	--
MW-57	Multiunit 1	Supplementary	11/19/2019	FC-CCR-MW57-111919	1.4	--	410	--	410	<0.80	--	7.3 J	7,100	11,000
MW-57	Multiunit 1	Supplementary	6/22/2020	FC-CCR-MW57-0620	1.3	--	410	--	430	<0.8	6.85	7.5 J	7,500	11,000
MW-57	Multiunit 1	Supplementary	11/6/2020	FC-CCR-MW57-1120	1.6	--	440	--	540	<0.4	6.96	7.5 J	8,300	12,000
MW-57	Multiunit 1	Supplementary	4/27/2021	FC-CCR-MW57-0421	0.96	--	460	--	420	<0.4	7.57	7.5 J	7,400	12,000
MW-57	Multiunit 1	Supplementary	11/17/2021	FC-CCR-MW57-1121	1.1	--	470	--	480	0.19 J	6.96	7.9 J	8,400	11,000
MW-57	Multiunit 1	Supplementary	2/8/2022	FC-CCR-MW57-0222	1.4	--	450	--	560	0.25	6.86	7.6 J	8,700	20,000
MW-57	Multiunit 1	Supplementary	5/24/2022	FC-CCR-MW57-0522	1.0	--	400	--	520	<0.8	6.88	7.77 J	7,500	12,000
MW-57	Multiunit 1	Supplementary	5/24/2022	FC-CCR-SS09-0522	1.25	--	442	--	484	<50/0.19 J	6.88	8.0 J	8,420	11,800
MW-57	Multiunit 1	Supplementary	8/11/2022	FC-CCR-MW57-0822	1.3	--	480	--	510	<0.8	7.25	7.4 J	8,500	12,000
MW-57	Multiunit 1	Supplementary	11/15/2022	FC-CCR-MW571122	1.3	--	460	--	670	<4	7.05	7.3 J	9,600	17,000
MW-57	Multiunit 1	Supplementary	5/5/2023	FC-CCR-MW57-0523	1.5	--	480	--	590	<40	7.01	7.4 J	9,100	14,000
MW-57	Multiunit 1	Supplementary	11/14/2023	FC-CCR-MW57-1124	2.4	--	480	--	1,600	<0.8	7.15	7.3 J	20,000	34,000
MW-60	Multiunit 1	Supplementary	11/8/2015	FC-CCR-MW60-110815	46	--	430	--	700	4.5	--	7.35	7,500	11,000
MW-60	Multiunit 1	Supplementary	11/8/2015	FC-CCR-MW60-110815	--	--	--	--	--	--	--	--	--	--
MW-60	Multiunit 1	Supplementary	4/26/2016	FC-CCR-MW-60-042616	51	--	460	--	560	2.7	--	--	6,000	11,000
MW-60	Multiunit 1	Supplementary	6/6/2016	FC-CCR-MW60-616	--	--	--	--	--	--	--	--	--	--
MW-60	Multiunit 1	Supplementary	6/6/2016	FC-CCR-MW60-616	49	--	410	--	730	2.4	--	7.12	6,500	11,000
MW-60	Multiunit 1	Supplementary	8/21/2016	FC-CCR-MW60-816	64	--	440	--	430	6.5	--	7.4	4,900	8,500
MW-60	Multiunit 1	Supplementary	8/21/2016	FC-CCR-MW60-816	--	--	--	--	--	15	--	--	--	--
MW-60	Multiunit 1	Supplementary	8/21/2016	FC-CCR-MW60-816	--	--	--	--	--	--	--	--	--	--
MW-60	Multiunit 1	Supplementary	9/13/2016	FC-CCR-MW60-916	64	--	450	--	440	7.2	--	7.6	5,100	8,500
MW-60	Multiunit 1	Supplementary	9/13/2016	FC-CCR-MW60-916	--	--	--	--	--	6.2	--	--	--	--
MW-60	Multiunit 1	Supplementary	9/13/2016	FC-CCR-MW60-916	--	--	--	--	--	--	--	--	--	--
MW-60	Multiunit 1	Supplementary	9/13/2016	FC-CCR-MW100-916	65	--	440	--	440	6.0	--	7.6	5,100	8,400
MW-60	Multiunit 1	Supplementary	9/13/2016	FC-CCR-MW100-916	--	--	--	--	--	6.4	--	--	--	--
MW-60	Multiunit 1	Supplementary	9/13/2016	FC-CCR-MW100-916	--	--	--	--	--	--	--	--	--	--
MW-60	Multiunit 1	Supplementary	10/20/2016	FC-CCR-MW60-1016	61	--	410	--	460	--	--	7.6	5,000	8,300
MW-60	Multiunit 1	Supplementary	10/20/2016	FC-CCR-MW60-1016	--	--	--	--	--	--	--	--	--	--
MW-60	Multiunit 1	Supplementary	10/20/2016	FC-CCR-MW60-1016	--	--	--	--	--	5.5	--	--	--	--
MW-60	Multiunit 1	Supplementary	2/2/2017	FC-CCR-MW60-117	66	--	450	--	440	7.2	--	7.8	5,200	8,200
MW-60	Multiunit 1	Supplementary	2/2/2017	FC-CCR-MW60-117	--	--	--	--	--	7.2	--	--	--	--
MW-60	Multiunit 1	Supplementary	2/2/2017	FC-CCR-MW60-117	--	--	--	--	--	--	--	--	--	--
MW-60	Multiunit 1	Supplementary	4/18/2017	FC-CCR-MW60-41817	63	--	440	--	430	6.4	--	7.7	5,000	8,400
MW-60	Multiunit 1	Supplementary	4/18/2017	FC-CCR-MW60-41817	--	--	--	--	--	--	--	--	--	--
MW-60	Multiunit 1	Supplementary	4/18/2017	FC-CCR-MW60-41817	--	--	--	--	--	6.5	--	--	--	--
MW-60	Multiunit 1	Supplementary	5/3/2017	FC-CCR-MW60-5317	--	--	--	--	--	10	--	--	--	--
MW-60	Multiunit 1	Supplementary	5/3/2017	FC-CCR-MW60-5317	--	--	--	--	--	--	--	--	--	--

Table F-4
Groundwater Sampling Results for the Multiunit 1 Monitoring Wells - Appendix III Constituents

					Appendix III Constituents										
				Constituent:	Boron	Boron	Calcium	Calcium	Chloride	Fluoride	pH (Field Measurement)	pH (Laboratory Measurement)	Sulfate	Total Dissolved Solids
				Filtered:	N	Y	N	Y	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	su	su	mg/L	mg/L
				Multiunit 1 BTV	*3.95*	*3.95*	*454.1*	*454*	*604.7*	*2.1*	*6.52-7.88*	*6.52-7.88*	*22,000*	*34,397*
				Multiunit 1 GWPS	--	--	--	--	--	--	--	--	--	--
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**										
MW-60	Multiunit 1	Supplementary	5/30/2017	FC-CCR-MW60-53017	--	--	--	--	--	7.0	--	--	--	--
MW-60	Multiunit 1	Supplementary	5/30/2017	FC-CCR-MW60-53017	--	--	--	--	--	--	--	--	--	--
MW-60	Multiunit 1	Supplementary	6/22/2017	FC-CCR-MW60-62217	63	--	440	--	450	--	--	7.7	5,400	8,100
MW-60	Multiunit 1	Supplementary	6/22/2017	FC-CCR-MW60-62217	--	--	--	--	--	7.1	--	--	--	--
MW-60	Multiunit 1	Supplementary	6/22/2017	FC-CCR-MW60-62217	--	--	--	--	--	--	--	--	--	--
MW-60	Multiunit 1	Supplementary	7/22/2017	FC-CCR-MW60-72217	64	--	450	--	900	7.0	--	7.6	10,000	8,300
MW-60	Multiunit 1	Supplementary	7/22/2017	FC-CCR-MW60-72217	--	--	--	--	--	--	--	--	--	--
MW-60	Multiunit 1	Supplementary	7/22/2017	FC-CCR-MW60-72217	--	--	--	--	--	--	--	--	--	--
MW-60	Multiunit 1	Supplementary	8/10/2017	FC-CCR-MW60-81017	66	--	470	--	920	--	--	7.7	11,000	8,100
MW-60	Multiunit 1	Supplementary	8/10/2017	FC-CCR-MW60-81017	--	--	--	--	--	7.1	--	--	--	--
MW-60	Multiunit 1	Supplementary	8/10/2017	FC-CCR-MW60-81017	--	--	--	--	--	--	--	--	--	--
MW-60	Multiunit 1	Supplementary	8/17/2017	FC-CCR-MW60-81717	--	--	--	--	--	--	--	--	--	--
MW-60	Multiunit 1	Supplementary	8/17/2017	FC-CCR-MW60-81717	63	--	490	--	440	7.4	--	7.7	5,100	8,200
MW-60	Multiunit 1	Supplementary	9/10/2017	FC-CCR-MW60-91017	67	--	470	--	450	--	--	7.6	5,200	7,900
MW-60	Multiunit 1	Supplementary	9/10/2017	FC-CCR-MW60-91017	--	--	--	--	--	7.4	--	--	--	--
MW-60	Multiunit 1	Supplementary	9/10/2017	FC-CCR-MW60-91017	--	--	--	--	--	--	--	--	--	--
MW-60	Multiunit 1	Supplementary	10/12/2017	FC-CCR-MW60-101217	--	--	--	--	--	--	--	--	--	--
MW-60	Multiunit 1	Supplementary	10/12/2017	FC-CCR-MW60-101217	64	--	440	--	480	7.0	--	7.5	5,100	8,300
MW-60	Multiunit 1	Supplementary	6/21/2020	FC-CCR-MW60-0620	--	--	--	--	--	--	7.44	--	--	--
MW-60	Multiunit 1	Supplementary	11/8/2020	FC-CCR-MW60-1120	61	--	--	--	--	--	7.87	--	--	--
MW-60	Multiunit 1	Supplementary	4/24/2021	FC-CCR-MW60-0421	60	--	--	--	--	--	8.53	--	--	--
MW-60	Multiunit 1	Supplementary	11/13/2021	FC-CCR-MW60	65	--	--	--	--	--	7.68	--	--	--
MW-60	Multiunit 1	Supplementary	5/23/2022	FC-CCR-MW60-0522	57	--	--	--	--	--	7.60	--	--	--
MW-60	Multiunit 1	Supplementary	11/10/2022	FC-CCR-MW60-1122	60	--	--	--	--	--	7.76	--	--	--
MW-60	Multiunit 1	Supplementary	5/2/2023	FC-CCR-MW60-0523	62	--	--	--	--	--	7.53	--	--	--
MW-60	Multiunit 1	Supplementary	11/09/2023	FC-CCR-MW60-1124	78	--	--	--	--	--	7.81	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	11/6/2015	FC-CCR-MW61-110615	35	--	460	--	320	1.2	--	8.81	3,700	5,400
MW-61	Multiunit 1	Downgradient Boundary	11/6/2015	FC-CCR-MW61-110615	--	--	--	--	--	--	--	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	11/6/2015	*DUP* FC-CCR-FD-1-110615	42	--	490	--	330	1.2	--	--	3,700	5,000
MW-61	Multiunit 1	Downgradient Boundary	11/6/2015	*DUP* FC-CCR-FD-1-110615	--	--	--	--	--	--	--	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	4/26/2016	FC-CCR-MW-61-042616	39	--	510	--	280	1.3	--	--	3,400	5,700
MW-61	Multiunit 1	Downgradient Boundary	6/6/2016	FC-CCR-MW61-616	--	--	--	--	--	--	--	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	6/6/2016	FC-CCR-MW61-616	38	--	460	--	650	1.2	--	8.62	3,500	5,500
MW-61	Multiunit 1	Downgradient Boundary	8/21/2016	FC-CCR-MW61-816	38	--	470	--	300	1.2	--	8.5	3,400	5,700
MW-61	Multiunit 1	Downgradient Boundary	8/21/2016	FC-CCR-MW61-816	--	--	--	--	--	0.91	--	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	8/21/2016	FC-CCR-MW61-816	--	--	--	--	--	--	--	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	9/13/2016	FC-CCR-MW61-916	40	--	480	--	330	1.3	--	8.6	3,500	5,700
MW-61	Multiunit 1	Downgradient Boundary	9/13/2016	FC-CCR-MW61-916	--	--	--	--	--	1.1	--	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	9/13/2016	FC-CCR-MW61-916	--	--	--	--	--	--	--	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	10/19/2016	FC-CCR-MW101-1016	38	--	440	--	310	0.84	--	8.6	3,700	5,700
MW-61	Multiunit 1	Downgradient Boundary	10/19/2016	FC-CCR-MW101-1016	--	--	--	--	--	--	--	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	10/20/2016	FC-CCR-MW61-1016	37	--	420	--	300	0.95	--	8.6	3,500	5,600
MW-61	Multiunit 1	Downgradient Boundary	10/20/2016	FC-CCR-MW61-1016	--	--	--	--	--	--	--	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	2/2/2017	FC-CCR-MW61-117	37	--	470	--	300	1.2	--	8.6	3,500	5,300
MW-61	Multiunit 1	Downgradient Boundary	2/2/2017	FC-CCR-MW61-117	--	--	--	--	--	1.1	--	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	2/2/2017	FC-CCR-MW61-117	--	--	--	--	--	--	--	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	4/18/2017	FC-CCR-MW61-41817	39	--	480	--	300	1.1	--	8.6	3,500	5,600
MW-61	Multiunit 1	Downgradient Boundary	4/18/2017	FC-CCR-MW61-41817	--	--	--	--	--	--	--	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	4/18/2017	FC-CCR-MW61-41817	--	--	--	--	--	1.1	--	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	5/3/2017	FC-CCR-MW61-5317	--	--	--	--	--	2.8	--	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	5/3/2017	FC-CCR-MW61-5317	--	--	--	--	--	--	--	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	5/30/2017	FC-CCR-MW61-53017	--	--	--	--	--	1.2	--	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	5/30/2017	FC-CCR-MW61-53017	--	--	--	--	--	--	--	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	6/22/2017	FC-CCR-MW61-62217	38	--	480	--	310	--	--	8.6	3,700	5,400

Table F-4
Groundwater Sampling Results for the Multiunit 1 Monitoring Wells - Appendix III Constituents

					Appendix III Constituents										
				Constituent:	Boron	Boron	Calcium	Calcium	Chloride	Fluoride	pH (Field Measurement)	pH (Laboratory Measurement)	Sulfate	Total Dissolved Solids
				Filtered:	N	Y	N	Y	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	su	su	mg/L	mg/L
				Multiunit 1 BTV	*3.95*	*3.95*	*454.1*	*454*	*604.7*	*2.1*	*6.52-7.88*	*6.52-7.88*	*22,000*	*34,397*
				Multiunit 1 GWPS	--	--	--	--	--	--	--	--	--	--
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**										
MW-61	Multiunit 1	Downgradient Boundary	6/22/2017	FC-CCR-MW61-62217	--	--	--	--	--	1.3	--	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	6/22/2017	FC-CCR-MW61-62217	--	--	--	--	--	--	--	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	7/22/2017	FC-CCR-MW61-72217	39	--	490	--	310	1.3	--	8.5	3,700	5,600
MW-61	Multiunit 1	Downgradient Boundary	7/22/2017	FC-CCR-MW61-72217	--	--	--	--	--	--	--	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	7/22/2017	FC-CCR-MW61-72217	--	--	--	--	--	--	--	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	8/10/2017	FC-CCR-MW61-81017	40	--	500	--	310	--	--	8.7	3,700	5,500
MW-61	Multiunit 1	Downgradient Boundary	8/10/2017	FC-CCR-MW61-81017	--	--	--	--	--	1.2	--	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	8/10/2017	FC-CCR-MW61-81017	--	--	--	--	--	--	--	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	8/17/2017	FC-CCR-MW61-81717	--	--	--	--	--	--	--	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	8/17/2017	FC-CCR-MW61-81717	39	--	520	--	300	1.4	--	8.7	3,600	5,500
MW-61	Multiunit 1	Downgradient Boundary	9/10/2017	FC-CCR-MW61-91017	41	--	510	--	310	--	--	8.7	3,600	5,600
MW-61	Multiunit 1	Downgradient Boundary	9/10/2017	FC-CCR-MW61-91017	--	--	--	--	--	1.2	--	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	9/10/2017	FC-CCR-MW61-91017	--	--	--	--	--	--	--	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	10/12/2017	FC-CCR-MW61-101217	--	--	--	--	--	--	--	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	10/12/2017	FC-CCR-MW61-101217	38	--	470	--	320	1.2	--	8.6	3,500	5,600
MW-61	Multiunit 1	Downgradient Boundary	11/30/2017	FC-CCR-MW61-113017	39	--	520	--	310	1.2	--	8.5	3,500	5,500
MW-61	Multiunit 1	Downgradient Boundary	3/17/2018	FC-CCR-MW61-31718	--	--	--	--	--	--	--	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	6/1/2018	FC-CCR-MW-61-6118	--	--	--	--	--	--	--	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	6/1/2018	FC-CCR-MW-61-6118	38	--	470	--	330	1.3	--	8.5	3,500	5,600
MW-61	Multiunit 1	Downgradient Boundary	6/1/2018	*DUP* FC-CCR-FD01-6118	--	--	--	--	--	--	--	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	6/1/2018	*DUP* FC-CCR-FD01-6118	39	--	480	--	330	1.3	--	8.5	3,500	5,400
MW-61	Multiunit 1	Downgradient Boundary	11/3/2018	FC-CCR-MW61-11318	37	--	470	--	340	1.3	--	8.6	3,600	5,300
MW-61	Multiunit 1	Downgradient Boundary	11/3/2018	FC-CCR-MW61-11318	--	--	--	--	--	--	--	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	11/3/2018	FC-CCR-MW61-11318	--	--	--	--	--	--	--	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	3/19/2019	FC-CCR-MW61-031919	--	--	--	--	--	1.1	--	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	3/19/2019	FC-CCR-MW61-031919	--	--	--	--	--	--	--	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	5/13/2019	FC-CCR-MW61-51319	39	--	500	--	310	0.56	--	8.6 J	3,500	5,600
MW-61	Multiunit 1	Downgradient Boundary	5/13/2019	FC-CCR-MW61-51319	--	--	--	--	--	--	--	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	11/19/2019	FC-CCR-MW61-111919	39	--	500	--	320	1.4	--	8.6 J	3,500	5,200
MW-61	Multiunit 1	Downgradient Boundary	6/21/2020	FC-CCR-MW61-0620	41	--	540	--	310	1.2	8.21	8.6 J	3,500	5,700
MW-61	Multiunit 1	Downgradient Boundary	11/8/2020	FC-CCR-MW61-1120	41	--	540	--	340 J	1.3	8.63	8.6 J	3,700	5,100
MW-61	Multiunit 1	Downgradient Boundary	4/23/2021	FC-CCR-MW61-0421	40	--	520	--	330	1.1	9.64	8.7 J	3,600	6,500
MW-61	Multiunit 1	Downgradient Boundary	11/13/2021	FC-CCR-MW61-1121	41	--	520	--	420	1.1	8.45	8.3 J	4,000	4,500
MW-61	Multiunit 1	Downgradient Boundary	5/22/2022	FC-CCR-MW61-0522	39	--	480	--	340	1.3	8.34	8.46 J	3,800	5,300
MW-61	Multiunit 1	Downgradient Boundary	11/11/2022	FC-CCR-MW61-1122	41	--	540	--	340	1.3	8.58	8.6 J	3,700	5,900
MW-61	Multiunit 1	Downgradient Boundary	5/4/2023	FC-CCR-MW61-0523	45	--	560	--	380	<4	8.52	8.6 J	3,400	5,800
MW-61	Multiunit 1	Downgradient Boundary	11/09/2023	FC-CCR-MW61-1124	49 J	--	620 J	--	360	1.3	8.51	8.5 J	3,700	6,000
MW-75	Multiunit 1	Downgradient Boundary	4/18/2017	FC-CCR-MW-75-41817	--	--	--	--	--	--	--	--	--	--
MW-75	Multiunit 1	Downgradient Boundary	4/18/2017	FC-CCR-MW75-41817	24	--	410	--	280	<2.0	--	8.3	4,400	6,100
MW-75	Multiunit 1	Downgradient Boundary	4/18/2017	FC-CCR-MW75-41817	--	--	--	--	--	<2.0	--	--	--	--
MW-75	Multiunit 1	Downgradient Boundary	5/3/2017	FC-CCR-MW-75-5317	--	--	--	--	--	--	--	--	--	--
MW-75	Multiunit 1	Downgradient Boundary	5/3/2017	FC-CCR-MW75-5317	--	--	--	--	--	2.8	--	--	--	--
MW-75	Multiunit 1	Downgradient Boundary	5/30/2017	FC-CCR-MW-75-53017	--	--	--	--	--	--	--	--	--	--
MW-75	Multiunit 1	Downgradient Boundary	5/30/2017	FC-CCR-MW75-53017	--	--	--	--	--	<2.0	--	--	--	--
MW-75	Multiunit 1	Downgradient Boundary	6/22/2017	FC-CCR-MW75-62217	25	--	450	--	300	--	--	8.3	4,300	6,500
MW-75	Multiunit 1	Downgradient Boundary	6/22/2017	FC-CCR-MW75-62217	--	--	--	--	--	<2.0	--	--	--	--
MW-75	Multiunit 1	Downgradient Boundary	6/22/2017	FC-CCR-MW-75-62117	--	--	--	--	--	--	--	--	--	--
MW-75	Multiunit 1	Downgradient Boundary	7/22/2017	FC-CCR-MW75-72217	25	--	460	--	300	<2.0	--	8.3	4,500	6,700
MW-75	Multiunit 1	Downgradient Boundary	7/22/2017	FC-CCR-MW75-72217	--	--	--	--	--	--	--	--	--	--
MW-75	Multiunit 1	Downgradient Boundary	7/22/2017	FC-CCR-MW75-72217	--	--	--	--	--	--	--	--	--	--
MW-75	Multiunit 1	Downgradient Boundary	8/10/2017	FC-CCR-MW75-81017	25	--	460	--	300	--	--	8.4	5,200	6,600
MW-75	Multiunit 1	Downgradient Boundary	8/10/2017	FC-CCR-MW75-81017	--	--	--	--	--	<2.0	--	--	--	--
MW-75	Multiunit 1	Downgradient Boundary	8/10/2017	FC-CCR-MW75-81017	--	--	--	--	--	--	--	--	--	--
MW-75	Multiunit 1	Downgradient Boundary	8/17/2017	FC-CCR-MW75-81717	--	--	--	--	--	--	--	--	--	--

Table F-4
Groundwater Sampling Results for the Multiunit 1 Monitoring Wells - Appendix III Constituents

					Appendix III Constituents										
				Constituent:	Boron	Boron	Calcium	Calcium	Chloride	Fluoride	pH (Field Measurement)	pH (Laboratory Measurement)	Sulfate	Total Dissolved Solids
				Filtered:	N	Y	N	Y	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	su	su	mg/L	mg/L
				Multiunit 1 BTV	*3.95*	*3.95*	*454.1*	*454*	*604.7*	*2.1*	*6.52-7.88*	*6.52-7.88*	*22,000*	*34,397*
				Multiunit 1 GWPS	--	--	--	--	--	--	--	--	--	--
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**										
MW-75	Multiunit 1	Downgradient Boundary	8/17/2017	FC-CCR-MW75-81717	**25**	--	**490**	--	**300**	<2.0	--	**8.4**	**4,600**	**6,400**
MW-75	Multiunit 1	Downgradient Boundary	9/10/2017	FC-CCR-MW75-91017	**24**	--	**470**	--	**300**	--	--	**8.4**	**4,500**	**6,500**
MW-75	Multiunit 1	Downgradient Boundary	9/10/2017	FC-CCR-MW75-91017	--	--	--	--	--	<2.0	--	--	--	--
MW-75	Multiunit 1	Downgradient Boundary	9/10/2017	FC-CCR-MW75-91017	--	--	--	--	--	--	--	--	--	--
MW-75	Multiunit 1	Downgradient Boundary	10/12/2017	FC-CCR-MW75-101217	--	--	--	--	--	--	--	--	--	--
MW-75	Multiunit 1	Downgradient Boundary	10/12/2017	FC-CCR-MW75-101217	**24**	--	**430**	--	**310**	<2.0	--	**8.4**	**4,400**	**6,600**
MW-75	Multiunit 1	Downgradient Boundary	11/30/2017	FC-CCR-MW75-113017	**26**	--	**490**	--	**300**	<2.0	--	**8.3**	**4,400**	**6,500**
MW-75	Multiunit 1	Downgradient Boundary	11/30/2017	*DUP* FC-CCR-FD02-113017	**25**	--	**480**	--	**300**	<2.0	--	**8.3**	**4,300**	**6,300**
MW-75	Multiunit 1	Downgradient Boundary	3/17/2018	FC-CCR-MW75-31718	--	--	--	--	--	--	--	--	--	--
MW-75	Multiunit 1	Downgradient Boundary	6/1/2018	FC-CCR-MW-75-6118	--	--	--	--	--	--	--	--	--	--
MW-75	Multiunit 1	Downgradient Boundary	6/1/2018	FC-CCR-MW-75-6118	**24**	--	**430**	--	**290**	**1.2**	--	**8.2**	**4,300**	**6,400**
MW-75	Multiunit 1	Downgradient Boundary	11/3/2018	FC-CCR-MW75-11318	**24**	--	**430**	--	**310**	**1.2**	--	**8.3**	**4,300**	**6,200**
MW-75	Multiunit 1	Downgradient Boundary	11/3/2018	FC-CCR-MW75-11318	--	--	--	--	--	**1.2**	--	--	--	--
MW-75	Multiunit 1	Downgradient Boundary	11/3/2018	FC-CCR-MW75-11318	--	--	--	--	--	--	--	--	--	--
MW-75	Multiunit 1	Downgradient Boundary	3/19/2019	FC-CCR-MW75-031919	--	--	--	--	--	**1.1**	--	--	--	--
MW-75	Multiunit 1	Downgradient Boundary	3/19/2019	FC-CCR-MW75-031919	--	--	--	--	--	--	--	--	--	--
MW-75	Multiunit 1	Downgradient Boundary	5/13/2019	FC-CCR-MW75-51319	**25**	--	**450**	--	**300**	**1.2**	--	**8.4 J**	**4,200**	**6,600**
MW-75	Multiunit 1	Downgradient Boundary	5/13/2019	FC-CCR-MW75-51319	--	--	--	--	--	--	--	--	--	--
MW-75	Multiunit 1	Downgradient Boundary	11/19/2019	FC-CCR-MW75-111919	**24**	--	**450**	--	**290**	**1.2**	--	**8.3 J**	**4,400**	**6,600**
MW-75	Multiunit 1	Downgradient Boundary	6/21/2020	FC-CCR-MW75-0620	**24**	--	**470**	--	**270**	**1.1**	**8.16**	**8.4 J**	**4,300**	**6,700**
MW-75	Multiunit 1	Downgradient Boundary	11/8/2020	FC-CCR-MW75-1120	**25**	--	**470**	--	**290**	**1.3**	**8.39**	**8.4 J**	**4,800**	**6,600**
MW-75	Multiunit 1	Downgradient Boundary	4/23/2021	FC-CCR-MW75-0421	**24**	--	**460**	--	**290**	**1.0**	**9.34**	**8.4 J**	**4,400**	**6,500**
MW-75	Multiunit 1	Downgradient Boundary	11/13/2021	FC-CCR-MW75-1121	**24**	--	**440**	--	**360**	**1.0**	**8.25**	**8.3 J**	**5,100**	**6,200**
MW-75	Multiunit 1	Downgradient Boundary	5/22/2022	FC-CCR-MW75-0522	**24**	--	**440**	--	**310**	**1.2**	**8.16**	**8.20 J**	**4,400**	**6,300**
MW-75	Multiunit 1	Downgradient Boundary	11/11/2022	FC-CCR-MW75-1122	**24**	--	**480**	--	**310**	**1.3**	**8.33**	**8.3 J**	**4,700**	**7,000**
MW-75	Multiunit 1	Downgradient Boundary	5/4/2023	FC-CCR-MW75-0523	**26**	--	**490**	--	**330**	<4	**8.28**	**8.4 J**	**4,500**	**6,800**
MW-75	Multiunit 1	Downgradient Boundary	11/08/2023	FC-CCR-MW75-1124	**27 J**	--	**530 J**	--	<400	**1.2**	**8.39**	**8.3 J**	**4,600**	**7,100**
MW-76	Multiunit 1	Downgradient Boundary	4/26/2021	FC-CCR-MW76-0421	**41**	--	**470**	--	**480**	**0.44 J**	**7.61**	**7.3 J**	**3,400**	**6,000**
MW-87	Multiunit 1	Downgradient	3/19/2019	FC-CCR-MW87-031919	--	--	--	--	--	<0.80	--	--	--	--
MW-87	Multiunit 1	Downgradient	3/19/2019	FC-CCR-MW87-031919	--	--	--	--	--	--	--	--	--	--
MW-87	Multiunit 1	Downgradient	5/14/2019	FC-CCR-MW87-51419	**1.2**	--	**410**	--	**2,100**	<0.80	--	**7.4 J**	**17,000**	**29,000**
MW-87	Multiunit 1	Downgradient	5/14/2019	FC-CCR-MW87-51419	--	--	--	--	--	--	--	--	--	--
MW-87	Multiunit 1	Downgradient	6/22/2019	FC-NIT-MW87-62219	**1.2**	--	**410**	--	**2,000**	<0.80	--	--	**18,000**	**28,000**
MW-87	Multiunit 1	Downgradient	11/19/2019	FC-CCR-MW87-111919	**2.4**	--	**420**	--	**1,600**	<0.80	--	**7.3 J**	**18,000**	**27,000**
MW-87	Multiunit 1	Downgradient	11/19/2019	*DUP* FC-CCR-FD02-111919	**2.4**	--	**440**	--	**1,700**	<0.80	--	**7.4 J**	**18,000**	**26,000**
MW-87	Multiunit 1	Downgradient	6/23/2020	FC-CCR-MW87-0620	**1.4**	--	**440**	--	**2,200**	<0.8	**6.87**	**7.7 J**	**19,000**	**30,000**
MW-87	Multiunit 1	Downgradient	11/6/2020	FC-CCR-MW87-1120	**1.2**	--	**480**	--	**2,400**	**0.56 J**	**7.01**	**7.4 J**	**23,000**	**38,000**
MW-87	Multiunit 1	Downgradient	4/27/2021	FC-CCR-MW87-0421	**1.4**	--	**490**	--	**2,700**	**0.42 J**	**7.92**	**7.6 J**	**25,000**	**34,000**
MW-87	Multiunit 1	Downgradient	11/17/2021	FC-CCR-MW87-1121	**1.6**	--	**520**	--	**4,100**	**0.17 J**	**7.02**	**7.7 J**	**34,000**	**40,000**
MW-87	Multiunit 1	Downgradient	11/17/2021	FC-CCR-FD04-1121	**1.6**	--	**520**	--	**4,100**	**0.16 J**	**7.02**	**7.7 J**	**34,000**	**40,000**
MW-87	Multiunit 1	Downgradient	2/8/2022	FC-CCR-MW87-0222	**1.5**	--	**490**	--	**3,000**	<0.8	**6.97**	**7.6 J**	**31,000**	**190,000**
MW-87	Multiunit 1	Downgradient	5/24/2022	FC-CCR-MW87-0522	**1.5**	--	**450**	--	**3,300**	<0.8	**7.00**	**7.75 J**	**31,000**	**36,000**
MW-87	Multiunit 1	Downgradient	5/24/2022	*DUP* FC-CCR-FD04-0522	**1.5**	--	**470**	--	**3,200**	<0.8	**7.00**	**7.77 J**	**31,000**	**30,000**
MW-87	Multiunit 1	Downgradient	5/24/2022	FC-CCR-SS07-0522	**2.5 J**	--	**472**	--	**3,040**	<125/0.51	**7.00**	**8.0 J**	**31,900**	**50,100**
MW-87	Multiunit 1	Downgradient	8/11/2022	FC-CCR-MW87-0822	**1.4 J**	--	**480**	--	**3,600**	**2.2**	**7.00**	**7.3 J**	**36,000**	**54,000**
MW-87	Multiunit 1	Downgradient	8/11/2022	*DUP* FC-CCR-FD01-0822	**1.4**	--	**480**	--	**3,500**	<2	**7.00**	**7.4 J**	**35,000**	**56,000**
MW-87	Multiunit 1	Downgradient	11/15/2022	FC-CCR-MW87-1122	**1.5**	--	**500**	--	**3,500**	<8	**7.07**	**7.4 J**	**36,000**	**43000 J**
MW-87	Multiunit 1	Downgradient	5/5/2023	FC-CCR-MW87-0523	**2.1**	--	**400**	--	**2,800**	<80	**7.13**	**7.5 J**	**33,000**	**54,000 J**

Table F-4
Groundwater Sampling Results for the Multiunit 1 Monitoring Wells - Appendix III Constituents

					Appendix III Constituents									
				Constituent:	Boron	Boron	Calcium	Calcium	Chloride	Fluoride	pH (Field Measurement)	pH (Laboratory Measurement)	Sulfate	Total Dissolved Solids
				Filtered:	N	Y	N	Y	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	su	su	mg/L	mg/L
				Multiunit 1 BTV	*3.95*	*3.95*	*454.1*	*454*	*604.7*	*2.1*	*6.52-7.88*	*6.52-7.88*	*22,000*	*34,397*
				Multiunit 1 GWPS	--	--	--	--	--	--	--	--	--	--
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**										
EW-14	Multiunit 1	Supplementary	6/23/2020	FC-CCR-EW14-0620	**19**	--	**470**	--	**360**	<0.8	--	**7.6 J**	**4,900**	**7,600**
EW-14	Multiunit 1	Supplementary	11/16/2023	FC-CCR-EW14-1124	**15**	--	--	--	**260**	<0.8	**7.57**	--	**4,300**	**6,600 J**
EW-15	Multiunit 1	Supplementary	11/16/2023	FC-CCR-EW15-1124	**13**	--	--	--	**420**	<0.8	**7.57**	--	**4,800**	**7,700 J**
EW-15	Multiunit 1	Supplementary	6/23/2020	FC-CCR-EW15-0620	**19**	--	**430**	--	**670**	<0.8	--	**7.6 J**	**4,400**	**7,400**
MW-50B	Multiunit 1	--	3/17/2015	FCPP-50B-031715	<5.0	--	**310**	--	**4,400**	<2.0	--	--	**3,900**	**4,900**

Notes:

BTV exceedances are shown in grey shaded cells. GWPS exceedence are shown in red text.

Abbreviations and Data Qualifiers:

* data appears anomalous
< = less than
BTV = Background Threshold Value
CCR = Coal Combustion Residual
degrees C = degrees Celsius
GWPS = Groundwater Protection Standard
ID = Identification
J = The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
mg/L = milligrams per liter
pCi/L = Picocuries per liter
su = standard units
UJ = The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

Table F-5
Groundwater Sampling Results for the Multiunit 1 Monitoring Wells - Appendix IV Constituents

					Appendix IV Constituents																											
				Constituent:	Antimony	Arsenic	Arsenic	Barium	Barium	Beryllium	Beryllium	Cadmium	Cadmium	Chromium	Chromium	Cobalt	Cobalt	Fluoride	Lead	Lead	Lithium	Mercury	Mercury	Molybdenum	Selenium	Selenium	Thallium	Total Radium
				Filtered:	N	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	N	Y	N	N	Y	N	N	Y	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L
				Multiunit 1 BTV	*0.01*	*0.0086*	*0.0086*	*0.042*	*0.042*	*0.001*	*0.001*	*0.002*	*0.002*	*0.02*	*0.02*	*0.01*	*0.01*	*5*	*0.01*	*0.01*	*1.8*	*0.0002*	*0.0002*	*0.12*	*0.092*	--	*0.017*	*4.43*
				Multiunit 1 GWPS	*0.01*	*0.01*	*0.01*	*2*	*2*	*0.004*	*0.004*	*0.005*	*0.005*	*0.1*	*0.1*	*0.01*	*0.01*	*5*	*0.015*	*0.015*	*1.8*	*0.002*	*0.002*	*0.1*	*0.092*	--	*0.017*	*5*
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**																												
MW-43	Multiunit 1	Background	11/18/2013	FC-43-111813	--	**0.0027**	--	--	--	--	--	--	--	**0.0099**	--	--	--	<2.0	--	--	--	--	--	--	**0.0041**	--	--	--
MW-43	Multiunit 1	Background	9/8/2014	FCPP-43-090814	--	**0.0020**	--	--	--	--	--	--	--	**0.0085**	--	--	--	<0.40	--	--	--	--	--	--	<0.0030	--	--	--
MW-43	Multiunit 1	Background	3/16/2015	FCPP-43-031615	--	**0.0030**	--	--	--	--	--	--	--	**0.013**	--	--	--	<0.40	--	--	--	--	--	--	**0.0032**	--	--	--
MW-43	Multiunit 1	Background	12/1/2015	FC-CCR-MW43-120115	**0.00075**	**0.0027**	--	**0.15**	--	**0.00095**	--	**0.00029**	--	**0.0086**	--	**0.0022**	--	<0.25	**0.0059**	--	**0.29**	<0.00020	--	**0.0049**	**0.0045**	--	**0.00019**	--
MW-49A	Multiunit 1	Background	9/10/2014	FCPP-49A-091014	--	**0.0013**	--	--	--	--	--	--	--	<0.0025	--	--	--	<2.0	--	--	--	--	--	--	**0.0041**	--	--	--
MW-49A	Multiunit 1	Background	3/19/2015	FCPP-49A-031915	--	<0.0020	--	--	--	--	--	--	--	<0.0050	--	--	--	<2.0	--	--	--	--	--	--	<0.0060	--	--	--
MW-49A	Multiunit 1	Background	7/1/2015	MW-47A	--	<0.060	--	--	--	--	--	--	--	<0.060	--	--	--	<4.0	--	--	--	--	--	--	<0.060	--	--	--
MW-49A	Multiunit 1	Background	8/29/2015	FCPP-49A-082915	--	<0.030	--	--	--	--	--	<0.010	--	<0.030	--	--	--	<2.0	--	--	--	--	--	--	<0.030	--	--	--
MW-49A	Multiunit 1	Background	12/1/2015	FC-CCR-MW49A-120115	**0.00033**	**0.0016**	--	**0.042**	--	**0.00075**	--	**0.00018**	--	**0.0035**	--	**0.0022**	--	<0.25	<0.010	--	**0.75**	**0.00010**	--	**0.096**	**0.0021**	--	**0.0014**	--
MW-49A	Multiunit 1	Background	12/1/2015	FC-CCR-MW49A-120115	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-49A	Multiunit 1	Background	4/26/2016	FC-CCR-MW-49A-042616	<0.0050	<0.0010	--	**0.025**	--	<0.0010	--	<0.00020	--	<0.0010	--	**0.0023**	--	<2.0	<0.0010	--	**1.4**	<0.00020	--	**0.027**	**0.0020**	--	**0.0013**	**2.3**
MW-49A	Multiunit 1	Background	6/7/2016	FC-CCR-MW49A-616	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.4**
MW-49A	Multiunit 1	Background	6/7/2016	FC-CCR-MW49A-616	**0.00035**	**0.0013**	--	**0.028**	--	<0.0010	--	**0.00012**	--	**0.00091**	--	**0.0019**	--	**1.1**	<0.00050	--	**0.90**	<0.00020	--	**0.069**	**0.0018**	--	**0.0012**	--
MW-49A	Multiunit 1	Background	8/21/2016	FC-CCR-MW49A-816	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.80	--	--	--	--	--	--	--	--	--	--
MW-49A	Multiunit 1	Background	8/21/2016	FC-CCR-MW49A-816	**0.00035**	**0.0011**	--	**0.022**	--	<0.0010	--	**0.00030**	--	**0.00079**	--	**0.0030**	--	<0.80	<0.00050	--	**1.8**	<0.00020	--	**0.028**	**0.0018**	--	**0.0015**	--
MW-49A	Multiunit 1	Background	8/21/2016	FC-CCR-MW49A-816	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**3.5**
MW-49A	Multiunit 1	Background	9/13/2016	FC-CCR-MW49A-916	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.65**	--	--	--	--	--	--	--	--	--	--
MW-49A	Multiunit 1	Background	9/13/2016	FC-CCR-MW49A-916	<0.0050	<0.0040	--	**0.029**	--	<0.0010	--	<0.0020	--	<0.010	--	<0.0040	--	<0.40	<0.0020	--	**1.2**	<0.00020	--	**0.027**	<0.012	--	**0.0020**	--
MW-49A	Multiunit 1	Background	9/13/2016	FC-CCR-MW49A-916	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.3**
MW-49A	Multiunit 1	Background	10/20/2016	FC-CCR-MW49A-1016	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.40	--	--	--	--	--	--	--	--	--	--
MW-49A	Multiunit 1	Background	10/20/2016	FC-CCR-MW49A-1016	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.1**
MW-49A	Multiunit 1	Background	2/2/2017	FC-CCR-MW49A-117	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.40	--	--	--	--	--	--	--	--	--	--
MW-49A	Multiunit 1	Background	2/2/2017	FC-CCR-MW49A-117	<0.0010	**0.00092**	--	**0.020**	--	<0.0010	--	**0.00031**	--	**0.00079**	--	**0.0040**	--	<0.40	<0.00050	--	**1.4**	<0.00020	--	**0.042**	**0.0018**	--	**0.0015**	--
MW-49A	Multiunit 1	Background	2/2/2017	FC-CCR-MW49A-117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**3.4**
MW-49A	Multiunit 1	Background	4/18/2017	FC-CCR-MW49A-41817	--	--	--	--	--	--	--	--	--	--	--	--	--	<2.0	--	--	--	--	--	--	--	--	--	--
MW-49A	Multiunit 1	Background	4/18/2017	FC-CCR-MW49A-41817	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.0**
MW-49A	Multiunit 1	Background	4/18/2017	FC-CCR-MW49A-41817	<0.0040	<0.0020	--	**0.022**	--	<0.0010	--	<0.00040	--	<0.0020	--	**0.0045**	--	<2.0	<0.0020	--	**1.3**	<0.00020	--	**0.028**	<0.0020	--	**0.0017**	--
MW-49A	Multiunit 1	Background	5/3/2017	FC-CCR-MW49A-5317	<0.0010	**0.00088**	--	**0.022**	--	<0.0010	--	**0.00023**	--	**0.00065**	--	**0.0037**	--	<13	<0.00050	--	**1.1**	<0.00020	--	**0.025**	**0.0018**	--	**0.0014**	--
MW-49A	Multiunit 1	Background	5/3/2017	FC-CCR-MW49A-5317	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.9**
MW-49A	Multiunit 1	Background	5/30/2017	FC-CCR-MW49A-53017	<0.0010	**0.0011**	--	**0.022**	--	<0.0010	--	**0.00024**	--	**0.00069**	--	**0.0036**	--	<2.0	<0.00050	--	**1.1**	<0.00020	--	**0.028**	**0.0017**	--	**0.0015**	--
MW-49A	Multiunit 1	Background	5/30/2017	FC-CCR-MW49A-53017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.1**
MW-49A	Multiunit 1	Background	6/22/2017	FC-CCR-MW49A-62217	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-49A	Multiunit 1	Background	6/22/2017	FC-CCR-MW49A-62217	<0.0010	**0.0011**	--	**0.021**	--	<0.0010	--	**0.00024**	--	**0.00088**	--	**0.0039**	--	<2.0	<0.00050	--	**1.1**	<0.00020	--	**0.025**	**0.0017**	--	**0.0014**	--
MW-49A	Multiunit 1	Background	6/22/2017	FC-CCR-MW49A-62217	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.7**
MW-49A	Multiunit 1	Background	7/22/2017	FC-CCR-MW49A-72217	--	--	--	--	--	--	--	--	--	--	--	--	--	<4.0	--	--	--	--	--	--	--	--	--	--
MW-49A	Multiunit 1	Background	7/22/2017	FC-CCR-MW49A-72217	**0.0020**	<0.0049	--	**0.021**	--	<0.0010	--	<0.00023	--	<0.0087	--	**0.0035**	--	--	<0.0022	--	**1.1**	<0.00020	--	**0.025**	**0.0032**	--	**0.0013**	--
MW-49A	Multiunit 1	Background	7/22/2017	FC-CCR-MW49A-72217	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.6**
MW-49A	Multiunit 1	Background	8/10/2017	FC-CCR-MW49A-81017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-49A	Multiunit 1	Background	8/10/2017	FC-CCR-MW49A-81017	<0.010	<0.0020	--	**0.020**	--	<0.0010	--	<0.0010	--	<0.0040	--	**0.0029**	--	<4.0	<0.0050	--	**1.1**	<0.00020	--	**0.029**	<0.0020	--	**0.0014**	--
MW-49A	Multiunit 1	Background	8/10/2017	FC-CCR-MW49A-81017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.7**
MW-49A	Multiunit 1	Background	8/17/2017	FC-CCR-MW49A-81717	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.0**
MW-49A	Multiunit 1	Background	8/17/2017	FC-CCR-MW49A-81717	--	--	--	--	--	--	--	--	--	--	--	--	--	<4.0	--	--	--	--	--	--	--	--	--	--
MW-49A	Multiunit 1	Background	9/10/2017	FC-CCR-MW49A-91017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-49A	Multiunit 1	Background	9/10/2017	FC-CCR-MW49A-91017	<0.0040	<0.0020	--	**0.020**	--	<0.0010	--	<0.00040	--	<0.0040	--	**0.0026**	--	<4.0	<0.0020	--	**0.90**	<0.00020	--	**0.034**	<0.0020	--	**0.0013**	--
MW-49A	Multiunit 1	Background	9/10/2017	FC-CCR-MW49A-91017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.3**
MW-49A	Multiunit 1	Background	10/12/2017	FC-CCR-MW49A-101217	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.5**
MW-49A	Multiunit 1	Background	10/12/2017	FC-CCR-MW49A-101217	<0.0040	<0.0050	--	**0.019**	--	<0.0010	--	<0.00040	--	<0.010	--	<0.0050	--	<4.0	<0.0050	--	**0.92**	<0.00020	--	**0.032**	<0.0020	--	**0.0013**	--
MW-49A	Multiunit 1	Background	11/30/2017	FC-CCR-MW49A-113017	--	--	--	--	--	--	--	--	--	--	--	--	--	<4.0	--	--	--	--	--	--	--	--	--	--
MW-49A	Multiunit 1	Background	3/17/2018	FC-CCR-MW49A-31718	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.8
MW-49A	Multiunit 1	Background	6/1/2018	FC-CCR-MW-49A-6118	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.5**
MW-49A	Multiunit 1	Background	6/1/2018	FC-CCR-MW-49A-6118	--	<0.010	--	**0.022**	--	--	--	<0.0020	--	--	--	<0.010	--	<0.80	<0.010	--	**1.1**	--	--	**0.018**	<0.010	--	<0.0020	--
MW-49A	Multiunit 1	Background	11/4/2018	FC-CCR-MW49A-11418	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.80	--	--	--	--	--	--	--	--	--	--
MW-49A	Multiunit 1	Background	11/4/2018	FC-CCR-MW49A-11418	--	**0.0012**	--	**0.020**	--	--	--	**0.00027**	--	--	--	**0.0020**	--	--	<0.00050	--	**1.2**	--	--	**0.014**	**0.0016**	--	**0.0016**	--
MW-49A	Multiunit 1	Background	11/4/2018	FC-CCR-MW49A-11418	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.4**
MW-49A	Multiunit 1	Background	3/19/2019	FC-CCR-MW49A-031919	<0.0010	**0.0011**	--	**0.027 J**	--	<0.0010	--	<0.00010	--	**0.0036**	--	<0.00050	--	**0.92**	<0.00050	--	**0.56**	<0.00020	--	**0.15**	**0.0018 J**	--	**0.00083**	--
MW-49A	Multiunit 1	Background	3/19/2019	FC-CCR-MW49A-031919	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.8**
MW-49A	Multiunit 1	Background	5/14/2019	FC-CCR-MW49A-51419	--	**0.00068**	--	**0.025**	--	--	--	**0.00011**	--	--	--	<0.00050	--	**1.2**	<0.00050	--	**0.71**	--	--	**0.10**	**0.0015**	--	**0.0011**	--
MW-49A	Multiunit 1	Background	5/14/2019	FC-CCR-MW49A-51419	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.7
MW-49A	Multiunit 1	Background	11/19/2019	FC-CCR-MW49A-111919	<0.0010	**0.0011**	--	**0.022**	--	<0.0010	--	**0.00025**	--	**0.0020**	--	**0.0010**	--	<0.80	<0.00050	--	**0.77**	<0.00020	--	**0.082**	**0.0010 J**	--	**0.0013**	--
MW-49A	Multiunit 1	Background	6/23/2020	FC-CCR-MW49A-0620	<0.001	**0.0012**	--	**0.022**	--	--	--	**0.00015**	--	<0.001	--	**0.00077**	--	<0.8	<0.0005	--	**1.5**	--	--	**0.066**	**0.0017**	--	**0.0013**	**1.8**
MW-49A	Multiunit 1	Background	11/6/2020	FC-CCR-MW49-1120	**0.00064 J**	**0.0025**	--	<0.02 U	--	<0.001	--	**0.00023 J**	--	<0.002	--	**0.0014**	--	**0.66 J**	<0.001	--	**0.83**	<0.0002	--	**0.058**	**0.0056**	--	**0.0013**	<0.8
MW-49A	Multiunit 1	Background	4/27/2021	FC-CCR-MW49A-0421	<0.001 U	<0.002 U	--	**0.023**	--	<0.001	--	<0.0001	--	**0.00082 J**	--	**0.00089**	--	**0.47 J**	<0.0005	--	**0.90**	<0.0002	--	**0.051**	**0.0022**	--	**0.0011**	<0.8
MW-49A	Multiunit 1	Background	11/15/2021	FC-CCR-MW49A-1121	**0.00018 J**	<0.001	--	**0.025**	--	<0.001	--	**0.00027**	--	**0.0038**	--	**0.0014**	--	**0.51 J**	<0.001	--	**1.0**	<0.0002	--	**0.049**	**0.0024**	--	**0.0014**	**1.3**
MW-49A	Multiunit 1	Background	5/26/2022	FC-CCR-MW49A-0522	<0.001	<0.0005	--	**0.023**	--	<0.001	--	**0.00030**	--	**0.0040**	--	**0.0016**	--	<0.8	<0.0005	--	**0.82**	<0.0002	--	**0.037**	<0.001	--	**0.0016**	**0.6 J**
MW-49A	Multiunit 1	Background	11/16/2022	FC-CCR-MW49A-1122	<0.002	**0.0019**	--	**0.025**	--	<0.001	--	<0.0002	--	**0.0038**	--	**0.0014**	--	<4	<0.001	--	**1.0**	<0.0002	--	**0.034**	<0.001	--	**0.0014**	**0.4**
MW-49A	Multiunit 1	Background	5/8/2023	FC-CCR-MW49A-0523	<0.002	<0.005	--	**0.021**	--	<0.001	--	<0.001	--	<0.003	--	**0.0020**	--	<20	<0.001	--	**1.1**	<0.0002	--	**0.029**	<0.005	--	**0.0014**	**0.9**
MW-49A	Multiunit 1	Background	11/15/2023	FC-CCR-MW49A-1124	<0.01	**0.0076**	--	**0.028 J**	--	<0.001	--	<0.001	--	<0.01	--	<0.005	--	<0.8	<0.005	--	**0.96**	<0.0002	--	**0.045**	<0.005	--	**0.0021**	**2.1**
MW-50A	Multiunit 1	Background	3/19/2015	FCPP-50A-031915	--	**0.0010**	--	--	--	--	--	--	--	**0.018**	--	--	--	<0.40	--	--	--	--	--	--	<0.0030	--	--	--
MW-50A	Multiunit 1	Background	12/1/2015	FC-CCR-MW50-120115	**0.0012**	**0.0093**	--	**0.50**	--	**0.0025**	--	**0.00086**	--	**0.11**	--	**0.016**	--	<0.25	**0.026**	--	**0.40**	**0.00017**	--	**0.0078**	**0.013**	--	**0.00054**	--
MW-50A	Multiunit 1	Background	12/1/2015	FC-CCR-MW50-120115	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Table F-5
Groundwater Sampling Results for the Multiunit 1 Monitoring Wells - Appendix IV Constituents

					Appendix IV Constituents																											
				Constituent:	Antimony	Arsenic	Arsenic	Barium	Barium	Beryllium	Beryllium	Cadmium	Cadmium	Chromium	Chromium	Cobalt	Cobalt	Fluoride	Lead	Lead	Lithium	Mercury	Mercury	Molybdenum	Selenium	Selenium	Thallium	Total Radium
				Filtered:	N	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	N	Y	N	N	Y	N	N	Y	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L
				Multiunit 1 BTV	*0.01*	*0.0086*	*0.0086*	*0.042*	*0.042*	*0.001*	*0.001*	*0.002*	*0.002*	*0.02*	*0.02*	*0.01*	*0.01*	*5*	*0.01*	*0.01*	*1.8*	*0.0002*	*0.0002*	*0.12*	*0.092*	--	*0.017*	*4.43*
				Multiunit 1 GWPS	*0.01*	*0.01*	*0.01*	*2*	*2*	*0.004*	*0.004*	*0.005*	*0.005*	*0.1*	*0.1*	*0.01*	*0.01*	*5*	*0.015*	*0.015*	*1.8*	*0.002*	*0.002*	*0.1*	*0.092*	--	*0.017*	*5*
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**																												
MW-50A	Multiunit 1	Background	2/2/2017	FC-CCR-MW50A-117	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.52**	--	--	--	--	--	--	--	--	--	--
MW-50A	Multiunit 1	Background	2/2/2017	FC-CCR-MW50A-117	<0.0010	**0.0020**	--	**0.11**	--	<0.0010	--	**0.00074**	--	**0.014**	--	**0.0060**	--	<0.40	**0.0048**	--	**0.36**	<0.00020	--	**0.0024**	**0.0018**	--	**0.00018**	--
MW-74	Multiunit 1	Background	2/2/2017	FC-CCR-MW74-117	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.6**	--	--	--	--	--	--	--	--	--	--
MW-74	Multiunit 1	Background	2/2/2017	FC-CCR-MW74-117	<0.0020	**0.0035**	--	**0.036**	--	<0.0010	--	<0.00020	--	**0.0026**	--	<0.0010	--	**1.7**	<0.00050	--	**0.39**	<0.00020	--	**0.075**	**0.089**	--	<0.00010	--
MW-74	Multiunit 1	Background	2/2/2017	FC-CCR-MW74-117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.6**
MW-74	Multiunit 1	Background	4/18/2017	FC-CCR-MW74-41817	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.8**	--	--	--	--	--	--	--	--	--	--
MW-74	Multiunit 1	Background	4/18/2017	FC-CCR-MW74-41817	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.7**
MW-74	Multiunit 1	Background	4/18/2017	FC-CCR-MW74-41817	<0.0040	**0.0029**	--	**0.018**	--	<0.0010	--	<0.00040	--	<0.0020	--	<0.0020	--	**1.6**	<0.0020	--	**0.40**	<0.00020	--	**0.013**	**0.069**	--	<0.00040	--
MW-74	Multiunit 1	Background	5/2/2017	FC-CCR-MW74-5217	<0.0020	**0.0028**	--	**0.018**	--	<0.0010	--	<0.00020	--	<0.0010	--	<0.0010	--	<13	<0.0010	--	**0.38**	<0.00020	--	**0.019**	**0.067**	--	<0.00020	--
MW-74	Multiunit 1	Background	5/2/2017	FC-CCR-MW74-5217	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.5**
MW-74	Multiunit 1	Background	5/29/2017	FC-CCR-MW74-52917	<0.010	<0.0050	--	**0.022**	--	<0.0010	--	<0.0010	--	<0.0050	--	<0.0050	--	**1.9**	<0.0050	--	**0.37**	<0.00020	--	**0.028**	**0.062**	--	<0.0010	--
MW-74	Multiunit 1	Background	5/29/2017	FC-CCR-MW74-52917	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.1**
MW-74	Multiunit 1	Background	6/22/2017	FC-CCR-MW74-62217	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-74	Multiunit 1	Background	6/22/2017	FC-CCR-MW74-62217	<0.0040	**0.0032**	--	**0.020**	--	<0.0010	--	<0.00040	--	<0.0020	--	<0.0020	--	**1.9**	<0.0020	--	**0.38**	<0.00020	--	**0.020**	**0.060**	--	<0.00040	--
MW-74	Multiunit 1	Background	6/22/2017	FC-CCR-MW74-62117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.6
MW-74	Multiunit 1	Background	7/22/2017	FC-CCR-MW74-72217	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.9**	--	--	--	--	--	--	--	--	--	--
MW-74	Multiunit 1	Background	7/22/2017	FC-CCR-MW74-72217	<0.0040	**0.0028**	--	**0.018**	--	<0.0010	--	<0.00040	--	<0.0020	--	<0.0010	--	--	<0.0020	--	**0.41**	<0.00020	--	**0.016**	**0.071**	--	<0.00040	--
MW-74	Multiunit 1	Background	7/22/2017	FC-CCR-MW74-72217	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.7
MW-74	Multiunit 1	Background	8/10/2017	FC-CCR-MW74-81017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-74	Multiunit 1	Background	8/10/2017	FC-CCR-MW74-81017	<0.010	**0.0022**	--	**0.019**	--	<0.0010	--	<0.0010	--	<0.0040	--	<0.0020	--	**2.0**	<0.0050	--	**0.43**	<0.00020	--	**0.018**	**0.060**	--	<0.0010	--
MW-74	Multiunit 1	Background	8/10/2017	FC-CCR-MW74-81017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.9**
MW-74	Multiunit 1	Background	9/10/2017	FC-CCR-MW74-91017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-74	Multiunit 1	Background	9/10/2017	FC-CCR-MW74-91017	<0.0040	**0.0043**	--	**0.023**	--	<0.0010	--	<0.00040	--	<0.0040	--	<0.0020	--	**2.0**	<0.0020	--	**0.48**	<0.00020	--	**0.024**	**0.092**	--	<0.00040	--
MW-74	Multiunit 1	Background	9/10/2017	FC-CCR-MW74-91017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.7**
MW-74	Multiunit 1	Background	10/11/2017	FC-CCR-MW74-101117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.6
MW-74	Multiunit 1	Background	10/11/2017	FC-CCR-MW74-101117	<0.010	<0.0050	--	**0.023**	--	<0.0010	--	<0.0010	--	<0.010	--	<0.0050	--	**2.1**	<0.0050	--	**0.48**	<0.00020	--	**0.023**	**0.081**	--	<0.0010	--
MW-74	Multiunit 1	Background	11/30/2017	FC-CCR-MW74-113017	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.9**	--	--	--	--	--	--	--	--	--	--
MW-74	Multiunit 1	Background	3/17/2018	FC-CCR-MW74-31718	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.9
MW-74	Multiunit 1	Background	6/1/2018	FC-CCR-MW-74-6118	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.7
MW-74	Multiunit 1	Background	6/1/2018	FC-CCR-MW-74-6118	--	<0.010	--	**0.019**	--	--	--	<0.0020	--	--	--	<0.010	--	**2.1**	<0.010	--	**0.49**	--	--	**0.015**	**0.089**	--	<0.0020	--
MW-74	Multiunit 1	Background	3/19/2019	FC-CCR-MW74-031919	<0.0010	**0.0049**	--	**0.014**	--	<0.0010	--	<0.00010	--	**0.0063**	--	<0.00050	--	**2.4**	<0.00050	--	**0.65**	<0.00020	--	**0.012**	0.14	--	<0.00010	--
MW-74	Multiunit 1	Background	3/19/2019	FC-CCR-MW74-031919	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.7
MW-74	Multiunit 1	Background	5/13/2019	FC-CCR-MW74-51319	--	**0.0044**	--	**0.016**	--	--	--	<0.00010	--	--	--	<0.00050	--	**1.9**	<0.00050	--	**0.73**	--	--	**0.017**	0.14	--	**0.00017**	--
MW-74	Multiunit 1	Background	5/13/2019	FC-CCR-MW74-51319	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.7
MW-74	Multiunit 1	Background	6/20/2020	FC-CCR-MW74-0620	<0.001	**0.0049**	--	**0.014**	--	--	--	**0.00029**	--	**0.0019**	--	<0.0005	--	**1.1**	<0.0005	--	**1.7**	--	--	**0.012**	**0.049**	--	**0.00022**	<0.6
MW-74	Multiunit 1	Background	4/23/2021	FC-CCR-MW74-0421	<0.002 U	<0.0035 U	--	**0.015**	--	<0.001	--	<0.0002 U	--	**0.0050**	--	**0.00056 J**	--	**1.5**	<0.002	--	**0.9**	<0.0002	--	**0.021**	0.12	--	<0.0004 U	<0.8
DMX-3	Multiunit 1	Supplementary	4/21/1992	DMX-3_4/21/1992	--	--	<0.005	--	**0.013**	--	<0.005	--	<0.005	--	<0.010	--	<0.010	**0.23**	--	<0.010	--	--	<0.0002	--	--	<0.005	--	--
DMX-3	Multiunit 1	Supplementary	3/12/2014	FC-DMX3-031214	--	**0.00020**	--	--	--	--	--	--	--	<0.00050	--	--	--	<0.80	--	--	--	--	--	--	**0.0018**	--	--	--
DMX-3	Multiunit 1	Supplementary	9/11/2014	FCPP-DMX3-91114	--	<0.0020	--	--	--	--	--	--	--	<0.0050	--	--	--	<0.40	--	--	--	--	--	--	<0.0060	--	--	--
DMX-3	Multiunit 1	Supplementary	12/8/2014	FCPP-DUP1-12914	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DMX-3	Multiunit 1	Supplementary	12/8/2014	FCPP-DMX03-12914	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DMX-3	Multiunit 1	Supplementary	3/18/2015	FCPP-DMX3-031815	--	<0.0050	--	--	--	--	--	--	--	<0.013	--	--	--	<0.40	--	--	--	--	--	--	<0.015	--	--	--
DMX-3	Multiunit 1	Supplementary	6/24/2015	DMX-3	--	<0.15	--	--	--	--	--	--	--	<0.15	--	--	--	<8.0	--	--	--	--	--	--	<0.15	--	--	--
DMX-3	Multiunit 1	Supplementary	11/5/2015	FC DMX -3-(051115)	--	**0.00048**	--	--	--	--	--	<0.00020	--	<0.0010	--	--	--	<2.0	--	--	--	--	--	--	**0.0055**	--	--	--
DMX-3	Multiunit 1	Supplementary	6/21/2016	FC-SEEPS-DMX-3-062116	--	<0.005	--	--	--	--	--	--	--	<0.005	--	--	--	<0.40	--	--	--	<0.00020	--	--	--	--	--	--
DMX-3	Multiunit 1	Supplementary	9/15/2016	FC-Seep-DMX3-916	--	<0.0020	--	--	--	--	--	--	--	<0.0050	--	--	--	<0.40	--	--	--	<0.00020	--	--	--	--	--	--
DMX-3	Multiunit 1	Supplementary	6/22/2020	FC-CCR-DMX03-0620	--	--	--	--	--	--	--	--	--	--	--	<0.001	--	--	--	--	--	--	--	**0.0043**	--	--	--	--
DMX-3	Multiunit 1	Supplementary	11/7/2020	FC-CCR-DMX03-1120	**0.000097 J**	**0.0033**	--	**0.018**	--	<0.001	--	**0.000078 J**	--	**0.0019**	--	**0.011**	--	**0.31 J**	<0.001	--	**1.3**	--	--	**0.019**	**0.014**	--	**0.00035**	<0.8
DMX-3	Multiunit 1	Supplementary	4/25/2021	FC-CCR-DMX03-0421	<0.004 U	<0.002	--	**0.018**	--	<0.001	--	**0.00012 J**	--	<0.004	--	**0.0015 J**	--	**0.17 J**	**0.0022**	--	**1.2**	--	--	**0.0011 J**	**0.012**	--	**0.00048**	<0.8
DMX-3	Multiunit 1	Supplementary	11/14/2021	FC-CCR-DMX03	<0.002 U	<0.001	--	**0.018**	--	<0.001	--	**0.00024**	--	**0.0015 J**	--	**0.0013**	--	<0.8	<0.001	--	**1.3**	--	--	**0.00095 J**	**0.0084**	--	**0.00051**	**1.4**
DMX-3	Multiunit 1	Supplementary	2/1/2022	FC-CCR-DMX03-0222	--	--	--	--	--	<0.001	--	--	--	--	--	**0.0012**	--	<0.8	--	--	**1.3**	--	--	**0.00094**	--	--	--	--
DMX-3	Multiunit 1	Supplementary	5/25/2022	FC-CCR-DMX03-0522	<0.002	<0.001	--	**0.016**	--	<0.001	--	**0.00026**	--	<0.002	--	**0.0015**	--	<0.8 UJ	<0.001	--	**1.2**	--	--	<0.001	**0.0075**	--	**0.00048**	**1.4**
DMX-3	Multiunit 1	Supplementary	8/12/2022	FC-CCR-DMX03-0822	--	--	--	--	--	<0.001	--	--	--	--	--	**0.0012**	--	<0.8	--	--	**1.2**	--	--	**0.0011**	--	--	--	--
DMX-3	Multiunit 1	Supplementary	11/11/2022	FC-CCR-DMX03-1122	<0.001	<0.0005	--	**0.017**	--	<0.001	--	**0.00026**	--	<0.001	--	**0.0015**	--	<0.8	<0.0005	--	**1.3**	--	--	**0.00092**	**0.0076**	--	**0.00046**	**1.3**
DMX-3	Multiunit 1	Supplementary	5/3/2023	FC-CCR-DMX03-0523	<0.002	<0.005	--	**0.016**	--	<0.001	--	<0.001	--	<0.003	--	**0.0013**	--	<80	<0.001	--	**1.3**	--	--	<0.002	<0.005	--	<0.001	**1.6**
DMX-3	Multiunit 1	Supplementary	11/13/2023	FC-CCR-DMX03-1124	<0.01	**0.0088**	--	**0.016**	--	<0.005	--	<0.001	--	<0.01	--	<0.005	--	<0.8	<0.005	--	**0.97**	--	--	<0.005	**0.0072**	--	<0.001	<0.8
DMX-4	Multiunit 1	Supplementary	4/21/1992	DMX-4_4/21/1992	--	--	<0.05	--	**0.011**	--	<0.005	--	<0.005	--	<0.010	--	<0.010	**0.93**	--	<0.010	--	--	<0.0002	--	--	<0.005	--	--
DMX-4	Multiunit 1	Supplementary	3/18/2015	FCPP-DMX4-031815	--	<0.0010	--	--	--	--	--	--	--	<0.0025	--	--	--	<0.40	--	--	--	--	--	--	<0.0030	--	--	--
DMX-4	Multiunit 1	Supplementary	6/24/2015	DMX-4	--	<0.030	--	--	--	--	--	--	--	<0.030	--	--	--	**0.58**	--	--	--	--	--	--	<0.030	--	--	--
DMX-4	Multiunit 1	Supplementary	8/29/2015	FCPP-DMX4-082915	--	<0.0030	--	--	--	--	--	<0.0010	--	<0.0030	--	--	--	<2.0	--	--	--	--	--	--	**0.0048**	--	--	--
DMX-4	Multiunit 1	Supplementary	11/7/2015	FC DMX-4-(07115)	--	<0.0010	--	--	--	--	--	<0.00050	--	<0.0025	--	--	--	**0.44**	--	--	--	--	--	--	<0.0030	--	--	--
DMX-4	Multiunit 1	Supplementary	11/7/2015	*DUP* FC FD-3-(071115)	--	<0.0010	--	--	--	--	--	<0.00050	--	<0.0025	--	--	--	--	--	--	--	--	--	--	<0.0030	--	--	--
DMX-4	Multiunit 1	Supplementary	6/21/2016	FC-SEEPS-DMX-4-062116	--	<0.005	--	--	--	--	--	--	--	<0.005	--	--	--	**0.89**	--	--	--	<0.00020	--	--	--	--	--	--
DMX-4	Multiunit 1	Supplementary	9/15/2016	FC-Seep-DMX4-916	--	<0.0020	--	--	--	--	--	--	--	<0.0050	--	--	--	**0.87**	--	--	--	<0.00020	--	--	--	--	--	--
DMX-4	Multiunit 1	Supplementary	3/19/2019	FC-CCR-DMX4-031919	<0.0010	**0.00084**	--	**0.0097**	--	<0.0010	--	<0.00010	--	<0.0010	--	**0.0028**	--	<0.80	<0.00050	--	**0.66**	<0.00020	--	**0.016**	**0.0033**	--	**0.00028**	--
DMX-4	Multiunit 1	Supplementary	3/19/2019	FC-CCR-DMX4-031919	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.7
DMX-4	Multiunit 1	Supplementary	5/14/2019	FC-CCR-DMX4-51419	--	<0.00050	--	**0.0089**	--	--	--	<0.00010	--	--	--	**0.00074**	--	**0.83**	<0.00050	--	**0.65**	--	--	**0.0094**	**0.00069**	--	**0.00018**	--
DMX-4	Multiunit 1	Supplementary	5/14/2019	FC-CCR-DMX4-51419	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.7
DMX-4	Multiunit 1	Supplementary	11/19/2019	FC-CCR-DMX4-111919	<0.0010	**0.00069**	--	**0.0088**	--	<0.0010	--	<0.00010	--	<0.0010	--	**0.00093**	--	<0.80	<0.00050	--	**0.65**	<0.00020	--	**0.0077**	**0.0016**	--	**0.00015**	--
DMX-4	Multiunit 1	Supplementary	6/22/2020	FC-CCR-DMX04-0620	<0.002	<0.001	--	**0.0088**	--	--	--	<0.0002	--	<0.002	--	<0.001	--	<0.8	<0.001	--	**0.89**	--	--	**0.0080**	**0.0036**	--	**0.00023**	**0.6**

Table F-5
Groundwater Sampling Results for the Multiunit 1 Monitoring Wells - Appendix IV Constituents

				Appendix IV Constituents																							
				Constituent:	Antimony	Arsenic	Arsenic	Barium	Barium	Beryllium	Beryllium	Cadmium	Cadmium	Chromium	Chromium	Cobalt	Cobalt	Fluoride	Lead	Lead	Lithium	Mercury	Mercury	Molybdenum	Selenium	Selenium	Thallium	Total Radium
				Filtered:	N	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	N	Y	N	N	Y	N	N	Y	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L
				Multiunit 1 BTV	*0.01*	*0.0086*	*0.0086*	*0.042*	*0.042*	*0.001*	*0.001*	*0.002*	*0.002*	*0.02*	*0.02*	*0.01*	*0.01*	*5*	*0.01*	*0.01*	*1.8*	*0.0002*	*0.0002*	*0.12*	*0.092*	*--*	*0.017*	*4.43*
				Multiunit 1 GWPS	*0.01*	*0.01*	*0.01*	*2*	*2*	*0.004*	*0.004*	*0.005*	*0.005*	*0.1*	*0.1*	*0.01*	*0.01*	*5*	*0.015*	*0.015*	*1.8*	*0.002*	*0.002*	*0.1*	*0.092*	*--*	*0.017*	*5*
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**																								
DMX-4	Multiunit 1	Supplementary	11/7/2020	FC-CCR-DMX04-1120	**0.00028**	**0.0032**	--	**0.0084**	--	<0.001	--	**0.00018**	--	<0.004	--	**0.0070**	--	**0.92**	<0.001	--	**0.67**	--	--	**0.011**	**0.018**	--	**0.00031**	<0.8
DMX-4	Multiunit 1	Supplementary	4/25/2021	FC-CCR-DMX04-0421	<0.004 U	<0.002	--	**0.0078**	--	<0.001	--	**0.0002 J**	--	<0.004	--	**0.00058 J**	--	**0.89**	**0.0019 J**	--	**0.66**	--	--	**0.010**	**0.016**	--	<0.0004 U	<0.8
DMX-4	Multiunit 1	Supplementary	11/16/2021	FC-CCR-DMX04-1121	**0.00034 J**	**0.00099 J**	--	**0.010**	--	<0.001	--	<0.0002	--	**0.0011 J**	--	**0.00055 J**	--	**0.94**	<0.0005	--	**0.62**	--	--	**0.0064**	**0.0035**		**0.00014**	**0.7**
DMX-4	Multiunit 1	Supplementary	2/8/2022	FC-CCR-DMX04-0222	--	--	--	--	--	<0.001	--	--	--	--	--	**0.00083**	--	**0.69**	--	--	**0.67**	--	--	**0.0047**	--	--	--	--
DMX-4	Multiunit 1	Supplementary	5/25/2022	FC-CCR-DMX04-0522	<0.002	<0.001	--	**0.0087**	--	<0.001	--	<0.0002	--	<0.002	--	<0.001	--	**0.88**	<0.001	--	**0.67**	--	--	**0.0061**	<0.001	--	<0.0004	<0.6
DMX-4	Multiunit 1	Supplementary	8/12/2022	FC-CCR-DMX04-0822	--	--	--	--	--	<0.001	--	--	--	--	--	**0.0005**	--	**1.0**	--	--	**0.66**	--	--	**0.0059**	--	--	--	--
DMX-4	Multiunit 1	Supplementary	11/14/2022	FC-CCR-DMX04-1122	<0.001	**0.00059**	--	**0.0086**	--	<0.001	--	<0.0001	--	<0.001	--	**0.0013**	--	<2	<0.0005	--	**0.67**	--	--	**0.0089**	**0.0015**	--	**0.00015**	<0.6
DMX-4	Multiunit 1	Supplementary	5/4/2023	FC-CCR-DMX04-0523	<0.002	<0.005	--	**0.0088**	--	<0.001	--	<0.001	--	<0.003	--	**0.0023**	--	<20	<0.001	--	**0.69**	--	--	**0.009**	<0.005	--	<0.001	<0.6
DMX-4	Multiunit 1	Supplementary	11/14/2023	FC-CCR-DMX04-1124	<0.01	**0.0078**	--	**0.011**	--	<0.005	--	<0.001	--	<0.01	--	<0.005	--	**0.95**	<0.005	--	**0.73**	--	--	**0.0072**	<0.005	--	<0.001	<0.8
DMX-05R	Multiunit 1	Extraction (Inactive)	11/16/2023	FC-CCR-DMX05R-1124	<0.01	<0.01	--	**0.021**	--	<0.001	--	<0.001	--	<0.01	--	<0.005	--	<0.8	<0.005	--	**0.80**	--	--	**0.045**	<0.005	--	<0.001	**5.4**
DMX-6	Multiunit 1	Supplementary	4/21/1992	DMX-6_4/21/1992	--	--	<0.005	--	**0.015**	--	<0.005	--	<0.005	--	<0.010	--	<0.010	**0.26**	--	<0.010	--	--	<0.0002	--	--	<0.005	--	--
DMX-6	Multiunit 1	Supplementary	3/17/2015	FCPP-DMX6-031715	--	**0.00024**	--	--	--	--	--	--	--	<0.00050	--	--	--	<0.80	--	--	--	--	--	--	**0.00063**	--	--	--
DMX-6	Multiunit 1	Supplementary	6/24/2015	DMX-6	--	<0.060	--	--	--	--	--	--	--	<0.060	--	--	--	<8.0	--	--	--	--	--	--	<0.060	--	--	--
DMX-6	Multiunit 1	Supplementary	8/29/2015	FCPP-DMX6-082915	--	<0.0030	--	--	--	--	--	<0.0010	--	<0.0030	--	--	--	<2.0	--	--	--	--	--	--	**0.0042**	--	--	--
DMX-6	Multiunit 1	Supplementary	11/10/2015	FC DMX-6-(101115)	--	<0.0010	--	--	--	--	--	<0.00050	--	<0.0025	--	--	--	--	--	--	--	--	--	--	<0.0030	--	--	--
DMX-6	Multiunit 1	Supplementary	6/22/2016	FC-SEEPS-DMX6-062216	--	<0.005	--	--	--	--	--	--	--	**0.0049**	--	--	--	<0.40	--	--	--	<0.00020	--	--	--	--	--	--
DMX-6	Multiunit 1	Supplementary	9/15/2016	FC-Seep-DMX6-916	--	<0.0010	--	--	--	--	--	--	--	<0.0025	--	--	--	<0.40	--	--	--	<0.00020	--	--	--	--	--	--
DMX-6	Multiunit 1	Supplementary	3/19/2019	FC-CCR-DMX6-031919	<0.0010	<0.00050	--	**0.011**	--	<0.0010	--	**0.00015**	--	<0.0010	--	**0.0011**	--	<0.80	<0.00050	--	**1.0**	<0.00020	--	**0.051**	**0.00050**	--	<0.00010	--
DMX-6	Multiunit 1	Supplementary	3/19/2019	FC-CCR-DMX6-031919	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.7
DMX-6	Multiunit 1	Supplementary	5/14/2019	FC-CCR-DMX6-51419	--	<0.00050	--	**0.0097**	--	--	--	**0.00011**	--	--	--	**0.00088**	--	<0.80	<0.00050	--	**0.90**	--	--	**0.020**	<0.00050	--	<0.00010	--
DMX-6	Multiunit 1	Supplementary	5/14/2019	FC-CCR-DMX6-51419	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.7
DMX-6	Multiunit 1	Supplementary	11/19/2019	FC-CCR-DMX6-111919	<0.0010	<0.0010	--	**0.0090**	--	<0.0010	--	**0.00031**	--	<0.0010	--	**0.00094**	--	<0.80	<0.00050	--	**0.81**	<0.00020	--	**0.017**	<0.00050	--	<0.00010	--
DMX-6	Multiunit 1	Supplementary	6/23/2020	FC-CCR-DMX06-0620	<0.002	<0.001	--	**0.010**	--	--	--	**0.00027**	--	<0.002	--	<0.001	--	<0.8	<0.001	--	**1.2**	--	--	**0.0080**	<0.001	--	<0.0002	**0.6**
DMX-6	Multiunit 1	Supplementary	11/6/2020	FC-CCR-DMX06-1120	**0.0001**	**0.0023**	--	**0.012**	--	<0.001	--	**0.000076**	--	**0.0026**	--	**0.0067**	--	**0.53**	<0.001	--	**1.0**	--	--	**0.0045**	**0.0029**	--	**0.000044**	<0.8
DMX-6	Multiunit 1	Supplementary	4/27/2021	FC-CCR-DMX06-0421	<0.004 U	<0.002	--	**0.013**	--	<0.001	--	**0.00022 J**	--	<0.004	--	**0.00046 J**	--	**0.36 J**	**0.0018 J**	--	**0.76**	--	--	**0.0032**	**0.0029**	--	<0.0004 U	<0.8
DMX-6	Multiunit 1	Supplementary	11/18/2021	FC-CCR-DMX06-1121	<0.002 U	**0.00062 J**	--	**0.011**	--	<0.001	--	**0.00019 J**	--	**0.0019 J**	--	**0.00054 J**	--	**0.27 J**	<0.0005	--	**0.89**	--	--	**0.0047**	**0.0034**	--	**0.000073 J**	<0.6
DMX-6	Multiunit 1	Supplementary	2/8/2022	FC-CCR-DMX06-0222	--	--	--	--	--	<0.001	--	--	--	--	--	**0.00065**	--	**0.29**	--	--	**0.93**	--	--	**0.0035**	--	--	--	--
DMX-6	Multiunit 1	Supplementary	5/24/2022	FC-CCR-DMX06-0522	<0.001	<0.001	--	**0.010**	--	<0.001	--	**0.00015**	--	**0.0021**	--	**0.00062**	--	<0.8	<0.001	--	**0.87**	--	--	**0.0038**	**0.0025**	--	<0.0004	<0.6
DMX-6	Multiunit 1	Supplementary	8/13/2022	FC-CCR-DMX06-0822	--	--	--	--	--	<0.001	--	--	--	--	--	**0.00056**	--	<0.8	--	--	**0.79**	--	--	**0.0028**	--	--	--	--
DMX-6	Multiunit 1	Supplementary	11/16/2022	FC-CCR-DMX06-1122	<0.001	<0.0005	--	**0.011**	--	<0.001	--	<0.0001	--	**0.0030**	--	**0.00063**	--	<4	<0.0005	--	**0.88**	--	--	**0.0042**	**0.0016**	--	<0.0001	**0.8**
DMX-6	Multiunit 1	Supplementary	5/8/2023	FC-CCR-DMX06-0523	<0.002	<0.005	--	**0.012**	--	<0.005	--	<0.001	--	<0.003	--	<0.001	--	<2	<0.001	--	**0.89**	--	--	**0.0038**	<0.005	--	<0.001	<0.6
DMX-6	Multiunit 1	Supplementary	11/15/2023	FC-CCR-DMX06-1124	<0.01	<0.01	--	**0.014**	--	<0.001	--	<0.001	--	<0.01	--	<0.005	--	<0.8	<0.005	--	**1.1**	--	--	<0.005	<0.005	--	<0.001	<0.8
MW-05	Multiunit 1	Supplementary	4/1/1987	MW-5_4/1/1987	--	--	<0.05	--	<0.005	--	--	--	<0.005	--	<0.005	--	--	**0.60**	--	<0.05	--	--	<0.0001	--	--	<0.05	--	--
MW-05	Multiunit 1	Supplementary	10/2/1987	MW-5_10/2/1987	--	--	<0.05	--	**0.29**	--	--	--	<0.005	--	<0.005	--	--	<0.5	--	**0.080**	--	--	<0.0001	--	--	<0.05	--	--
MW-05	Multiunit 1	Supplementary	6/14/1988	MW-5-19880614	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.90**	--	--	--	<0.001	--	--	--	--	--	--
MW-05	Multiunit 1	Supplementary	9/21/1988	MW-5-19880921	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.1**	--	--	--	--	--	--	--	--	--	--
MW-05	Multiunit 1	Supplementary	11/28/1988	MW-5-19881128	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.80**	--	--	--	--	--	--	--	--	--	--
MW-05	Multiunit 1	Supplementary	2/28/1989	MW-5-19890228	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.90**	--	--	--	--	--	--	--	--	--	--
MW-05	Multiunit 1	Supplementary	9/11/1989	MW-5-19890911	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.0**	--	--	--	--	--	--	--	--	--	--
MW-05	Multiunit 1	Supplementary	3/22/1990	MW-5-19900322	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.80**	--	--	--	--	--	--	--	--	--	--
MW-05	Multiunit 1	Supplementary	10/30/1990	MW-5-19901030	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.30**	--	--	--	--	--	--	--	--	--	--
MW-05	Multiunit 1	Supplementary	4/4/1991	MW-5-19910404	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.30**	--	--	--	--	--	--	--	--	--	--
MW-05	Multiunit 1	Supplementary	9/30/1991	MW-5-19910930	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.30**	--	--	--	--	--	--	--	--	--	--
MW-05	Multiunit 1	Supplementary	4/15/1992	MW-5-19920415	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.40**	--	--	--	--	--	--	--	--	--	--
MW-05	Multiunit 1	Supplementary	11/3/1992	MW-5-19921103	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.30**	--	--	--	--	--	--	--	--	--	--
MW-05	Multiunit 1	Supplementary	6/22/1993	MW-5-19930622	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.40**	--	--	--	--	--	--	--	--	--	--
MW-05	Multiunit 1	Supplementary	11/30/1993	MW-5-19931130	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.30**	--	--	--	--	--	--	--	--	--	--
MW-05	Multiunit 1	Supplementary	5/10/1994	MW-5-19940510	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.40**	--	--	--	--	--	--	--	--	--	--
MW-05	Multiunit 1	Supplementary	11/8/1994	MW-5-19941108	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.30**	--	--	--	--	--	--	--	--	--	--
MW-05	Multiunit 1	Supplementary	4/6/1995	MW-5-19950406	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.30**	--	--	--	--	--	--	--	--	--	--
MW-05	Multiunit 1	Supplementary	12/13/1995	MW-5-19951213	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.30**	--	--	--	--	--	--	--	--	--	--
MW-05	Multiunit 1	Supplementary	8/15/1996	MW-5-19960815	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.20**	--	--	--	--	--	--	--	--	--	--
MW-05	Multiunit 1	Supplementary	4/15/1997	MW-5-19970415	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.20**	--	--	--	--	--	--	--	--	--	--
MW-05	Multiunit 1	Supplementary	10/13/1997	MW-5-19971013	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.20**	--	--	--	--	--	--	--	--	--	--
MW-05	Multiunit 1	Supplementary	4/14/1998	MW-5-19980414	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.20**	--	--	--	--	--	--	--	--	--	--
MW-05	Multiunit 1	Supplementary	10/20/1998	MW-5-19981020	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.20**	--	--	--	--	--	--	--	--	--	--
MW-05	Multiunit 1	Supplementary	6/8/1999	MW-5-19990608	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.30**	--	--	--	--	--	--	--	--	--	--
MW-05	Multiunit 1	Supplementary	12/1/1999	MW-5-19991201	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.30**	--	--	--	--	--	--	--	--	--	--
MW-05	Multiunit 1	Supplementary	5/30/2000	MW-5-20000530	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.30**	--	--	--	--	--	--	--	--	--	--
MW-05	Multiunit 1	Supplementary	11/14/2000	MW-5-20001114	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.2972**	--	--	--	--	--	--	--	--	--	--
MW-05	Multiunit 1	Supplementary	8/21/2001	MW-5-20010821	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.30**	--	--	--	--	--	--	--	--	--	--
MW-05	Multiunit 1	Supplementary	12/4/2001	MW-5-20011204	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.30**	--	--	--	--	--	--	--	--	--	--
MW-05	Multiunit 1	Supplementary	6/11/2002	MW-5-20020611	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.40**	--	--	--	--	--	--	--	--	--	--
MW-05	Multiunit 1	Supplementary	12/18/2002	MW-5-20021218	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.30**	--	--	--	--	--	--	--	--	--	--
MW-05	Multiunit 1	Supplementary	5/28/2003	MW-5-20030528	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.20**	--	--	--	--	--	--	--	--	--	--
MW-05	Multiunit 1	Supplementary	12/15/2003	MW-5-20031215	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.29**	--	--	--	--	--	--	--	--	--	--
MW-05	Multiunit 1	Supplementary	6/18/2004	MW-5-20040618	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.30**	--	--	--	--	--	--	--	--	--	--
MW-05	Multiunit 1	Supplementary	11/30/2004	MW-5-20041130	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.30**	--	--	--	--	--	--	--	--	--	--
MW-05	Multiunit 1	Supplementary	5/11/2005	MW-5-20050511	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.20**	--	--	--	--	--	--	--	--	--	--
MW-05	Multiunit 1	Supplementary	12/12/2005	MW-5-20051212	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.30**	--	--	--	--	--	--	--	--	--	--

Table F-5
Groundwater Sampling Results for the Multiunit 1 Monitoring Wells - Appendix IV Constituents

					Appendix IV Constituents																							
				Constituent:	Antimony	Arsenic	Arsenic	Barium	Barium	Beryllium	Beryllium	Cadmium	Cadmium	Chromium	Chromium	Cobalt	Cobalt	Fluoride	Lead	Lead	Lithium	Mercury	Mercury	Molybdenum	Selenium	Selenium	Thallium	Total Radium
				Filtered:	N	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	N	Y	N	N	Y	N	N	Y	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L
				Multiunit 1 BTV	*0.01*	*0.0086*	*0.0086*	*0.042*	*0.042*	*0.001*	*0.001*	*0.002*	*0.002*	*0.02*	*0.02*	*0.01*	*0.01*	*5*	*0.01*	*0.01*	*1.8*	*0.0002*	*0.0002*	*0.12*	*0.092*	--	*0.017*	*4.43*
				Multiunit 1 GWPS	*0.01*	*0.01*	*0.01*	*2*	*2*	*0.004*	*0.004*	*0.005*	*0.005*	*0.1*	*0.1*	*0.01*	*0.01*	*5*	*0.015*	*0.015*	*1.8*	*0.002*	*0.002*	*0.1*	*0.092*	--	*0.017*	*5*
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**																								
MW-05	Multiunit 1	Supplementary	5/15/2006	MW-5-20060515	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.226**	--	--	--	--	--	--	--	--	--	--
MW-05	Multiunit 1	Supplementary	10/13/2006	MW-5-20061013	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.219**	--	--	--	--	--	--	--	--	--	--
MW-05	Multiunit 1	Supplementary	4/19/2007	MW-5-20070419	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.133**	--	--	--	--	--	--	--	--	--	--
MW-05	Multiunit 1	Supplementary	11/20/2007	MW-5-20071120	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.30**	--	--	--	--	--	--	--	--	--	--
MW-05	Multiunit 1	Supplementary	5/8/2008	MW-5-20080508	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.30**	--	--	--	--	--	--	--	--	--	--
MW-05	Multiunit 1	Supplementary	9/27/2012	MW-5-092712-01	--	<0.0010	--	--	--	--	--	--	--	<0.0010	--	--	--	<4.0	--	--	--	--	--	--	**0.0015**	--	--	--
MW-05	Multiunit 1	Supplementary	9/10/2014	FCPP-05-091014	--	<0.00040	--	--	--	--	--	--	--	<0.0010	--	--	--	<0.80	--	--	--	--	--	--	<0.0012	--	--	--
MW-05	Multiunit 1	Supplementary	3/18/2015	FCPP-05-031815	--	<0.0010	--	--	--	--	--	--	--	<0.0025	--	--	--	<0.80	--	--	--	--	--	--	<0.0030	--	--	--
MW-05	Multiunit 1	Supplementary	6/30/2015	MW-5	--	<0.012	--	--	--	--	--	--	--	<0.012	--	--	--	<4.0	--	--	--	--	--	--	<0.012	--	--	--
MW-05	Multiunit 1	Supplementary	8/25/2015	FCPP-5-082515	--	<0.030	--	--	--	--	--	--	--	<0.030	--	--	--	<4.0	--	--	--	--	--	--	<0.030	--	--	--
MW-05	Multiunit 1	Supplementary	11/6/2015	FC MW-5-(061115)	--	<0.0050	--	--	--	--	--	<0.0025	--	<0.013	--	--	--	<4.0	--	--	--	--	--	--	<0.015	--	--	--
MW-05	Multiunit 1	Supplementary	6/17/2016	FC-Seep-MW5-616	--	<0.005	--	--	--	--	--	--	--	<0.005	--	--	--	<0.80	--	--	--	<0.00020	--	--	--	--	--	--
MW-05	Multiunit 1	Supplementary	6/17/2016	FC-Seep-Dup1-616	--	<0.005	--	--	--	--	--	--	--	<0.005	--	--	--	<0.80	--	--	--	<0.00020	--	--	--	--	--	--
MW-05	Multiunit 1	Supplementary	9/15/2016	FC-Seep-MW5-916	--	**0.0022**	--	--	--	--	--	--	--	**0.0034**	--	--	--	<2.0	--	--	--	<0.00020	--	--	--	--	--	--
MW-05	Multiunit 1	Supplementary	6/22/2020	FC-CCR-MW05-0620	--	--	--	--	--	--	--	--	--	--	--	**0.0069**	--	--	--	--	--	--	--	**0.0042**	--	--	--	--
MW-05	Multiunit 1	Supplementary	11/7/2020	FC-CCR-MW05-1120	--	--	--	--	--	--	--	--	--	--	--	**0.0037**	--	--	--	--	--	--	--	**0.0024**	--	--	--	--
MW-05	Multiunit 1	Supplementary	4/25/2021	FC-CCR-MW05-0421	--	--	--	--	--	<0.001	--	--	--	--	--	**0.0094**	--	**0.52 J**	--	--	**2.2**	--	--	**0.0024**	--	--	--	--
MW-05	Multiunit 1	Supplementary	11/16/2021	FC-CCR-MW05-1121	--	--	--	--	--	<0.001	--	--	--	--	--	**0.0082**	--	**0.51 J**	--	--	**2.1**	--	--	**0.0017**	--	--	--	--
MW-05	Multiunit 1	Supplementary	2/1/2022	FC-CCR-MW05-0222	--	--	--	--	--	<0.001	--	--	--	--	--	**0.0071**	--	<0.8	--	--	**2.3**	--	--	**0.0013**	--	--	--	--
MW-05	Multiunit 1	Supplementary	5/25/2022	FC-CCR-MW05-0522	--	--	--	--	--	<0.001	--	--	--	--	--	**0.0068**	--	<0.8	--	--	**2.2**	--	--	**0.0017**	--	--	--	--
MW-05	Multiunit 1	Supplementary	8/12/2022	FC-CCR-MW05-0822	--	--	--	--	--	<0.001	--	--	--	--	--	**0.0058**	--	**0.85**	--	--	**2.2**	--	--	**0.0018**	--	--	--	--
MW-05	Multiunit 1	Supplementary	11/11/2022	FC-CCR-MW05-1122	--	--	--	--	--	<0.001	--	--	--	--	--	**0.0048**	--	<4	--	--	**2.2**	--	--	**0.0018**	--	--	--	--
MW-05	Multiunit 1	Supplementary	5/3/2023	FC-CCR-MW05-0523	--	--	--	--	--	<0.001	--	--	--	--	--	**0.0035**	--	<80	--	--	**2.3**	--	--	<0.002	--	--	--	--
MW-05	Multiunit 1	Supplementary	11/13/2023	FC-CCR-MW05-1124	--	--	--	--	--	<0.005	--	--	--	--	--	<0.005	--	<0.8	--	--	**2.3**	--	--	<0.005	--	--	--	--
MW-06	Multiunit 1	Supplementary	4/1/1987	MW-6_4/1/1987	--	--	<0.05	--	<0.005	--	--	--	<0.005	--	<0.005	--	--	<0.5	--	<0.05	--	--	<0.0001	--	--	<0.05	--	--
MW-06	Multiunit 1	Supplementary	9/30/1987	MW-6_9/30/1987	--	--	<0.05	--	**0.17**	--	--	--	<0.005	--	**0.0060**	--	--	<0.5	--	**0.080**	--	--	<0.0001	--	--	<0.05	--	--
MW-06	Multiunit 1	Supplementary	6/15/1988	MW-6-19880615	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.60**	--	--	--	<0.001	--	--	--	--	--	--
MW-06	Multiunit 1	Supplementary	9/21/1988	MW-6-19880921	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.50**	--	--	--	--	--	--	--	--	--	--
MW-06	Multiunit 1	Supplementary	11/29/1988	MW-6-19881129	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.40**	--	--	--	--	--	--	--	--	--	--
MW-06	Multiunit 1	Supplementary	2/27/1989	MW-6-19890227	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.40**	--	--	--	--	--	--	--	--	--	--
MW-06	Multiunit 1	Supplementary	9/12/1989	MW-6-19890912	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.30**	--	--	--	--	--	--	--	--	--	--
MW-06	Multiunit 1	Supplementary	3/26/1990	MW-6-19900326	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.30**	--	--	--	--	--	--	--	--	--	--
MW-06	Multiunit 1	Supplementary	10/30/1990	MW-6-19901030	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.20**	--	--	--	--	--	--	--	--	--	--
MW-06	Multiunit 1	Supplementary	4/2/1991	MW-6-19910402	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.20**	--	--	--	--	--	--	--	--	--	--
MW-06	Multiunit 1	Supplementary	9/24/1991	MW-6-19910924	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.20**	--	--	--	--	--	--	--	--	--	--
MW-06	Multiunit 1	Supplementary	5/5/1992	MW-6-19920505	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.20**	--	--	--	--	--	--	--	--	--	--
MW-06	Multiunit 1	Supplementary	11/27/1992	MW-6-19921127	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.30**	--	--	--	--	--	--	--	--	--	--
MW-06	Multiunit 1	Supplementary	4/21/1993	MW-6-19930421	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.30**	--	--	--	--	--	--	--	--	--	--
MW-06	Multiunit 1	Supplementary	11/22/1993	MW-6-19931122	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.20**	--	--	--	--	--	--	--	--	--	--
MW-06	Multiunit 1	Supplementary	4/20/1994	MW-6-19940420	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.40**	--	--	--	--	--	--	--	--	--	--
MW-06	Multiunit 1	Supplementary	9/20/1994	MW-6-19940920	--	**0.050**	--	<0.5	--	--	--	<0.005	--	<0.02	--	--	--	**0.20**	<0.1	--	--	--	--	<0.01	<0.1	--	--	--
MW-06	Multiunit 1	Supplementary	12/14/1994	MW-6-19941214	<0.3	<0.05	--	<1	--	<0.025	--	<0.025	--	<0.05	--	<0.25	--	--	<0.015	--	--	<0.0002	--	--	<0.025	--	<0.05	--
MW-06	Multiunit 1	Supplementary	4/5/1995	MW-6-19950405	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.20**	--	--	--	--	--	--	--	--	--	--
MW-06	Multiunit 1	Supplementary	11/21/1995	MW-6-19951121	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.20**	--	--	--	--	--	--	--	--	--	--
MW-06	Multiunit 1	Supplementary	8/14/1996	MW-6-19960814	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.20**	--	--	--	--	--	--	--	--	--	--
MW-06	Multiunit 1	Supplementary	4/23/1997	MW-6-19970423	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.20**	--	--	--	--	--	--	--	--	--	--
MW-06	Multiunit 1	Supplementary	10/14/1997	MW-6-19971014	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.10**	--	--	--	--	--	--	--	--	--	--
MW-06	Multiunit 1	Supplementary	10/21/1998	MW-6-19981021	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.20**	--	--	--	--	--	--	--	--	--	--
MW-06	Multiunit 1	Supplementary	6/9/1999	MW-6-19990609	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.20**	--	--	--	--	--	--	--	--	--	--
MW-06	Multiunit 1	Supplementary	12/1/1999	MW-6-19991201	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.20**	--	--	--	--	--	--	--	--	--	--
MW-06	Multiunit 1	Supplementary	6/8/2000	MW-6-20000608	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.20**	--	--	--	--	--	--	--	--	--	--
MW-06	Multiunit 1	Supplementary	11/28/2000	MW-6-20001128	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.1855**	--	--	--	--	--	--	--	--	--	--
MW-06	Multiunit 1	Supplementary	8/21/2001	MW-6-20010821	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.20**	--	--	--	--	--	--	--	--	--	--
MW-06	Multiunit 1	Supplementary	12/3/2001	MW-6-20011203	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.20**	--	--	--	--	--	--	--	--	--	--
MW-06	Multiunit 1	Supplementary	6/24/2002	MW-6-20020624	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.10**	--	--	--	--	--	--	--	--	--	--
MW-06	Multiunit 1	Supplementary	12/18/2002	MW-6-20021218	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.20**	--	--	--	--	--	--	--	--	--	--
MW-06	Multiunit 1	Supplementary	6/3/2003	MW-6-20030603	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.28**	--	--	--	--	--	--	--	--	--	--
MW-06	Multiunit 1	Supplementary	9/24/2003	MW-6-20030924	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.22**	--	--	--	--	--	--	--	--	--	--
MW-06	Multiunit 1	Supplementary	6/16/2004	MW-6-20040616	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.20**	--	--	--	--	--	--	--	--	--	--
MW-06	Multiunit 1	Supplementary	11/9/2004	MW-6-20041109	--	<0.0005	--	**0.0108**	--	--	--	<0.0005	--	**0.0070**	--	--	--	<0.2	**0.00020**	--	--	--	--	**0.00276**	**0.0060**	--	--	--
MW-06	Multiunit 1	Supplementary	5/12/2005	MW-6-20050512	--	**0.0030**	--	**0.0080**	--	<0.005	--	<0.001	--	<0.01	--	**0.0012**	--	**0.10**	<0.001	--	--	<0.0002	--	--	**0.010**	--	**0.0012**	--
MW-06	Multiunit 1	Supplementary	11/1/2005	MW-6-20051101	--	--	--	**0.011**	--	--	--	--	--	--	--	**0.0030**	--	**0.10**	--	--	--	--	--	--	--	--	--	--
MW-06	Multiunit 1	Supplementary	5/16/2006	MW-6-20060516	--	**0.043**	--	**0.011**	--	**0.0010**	--	<0.006	--	<0.004	--	**0.0040**	--	**0.15**	<0.012	--	--	--	--	<0.006	<0.038	--	**0.012**	--
MW-06	Multiunit 1	Supplementary	10/13/2006	MW-6-20061013	--	<0.024	--	**0.013**	--	<0.003	--	<0.002	--	<0.002	--	<0.008	--	**0.149**	<0.009	--	--	--	--	<0.012	<0.029	--	<0.025	--
MW-06	Multiunit 1	Supplementary	4/18/2007	MW-6-20070418	--	**0.040**	--	**0.015**	--	<0.003	--	<0.002	--	<0.002	--	<0.008	--	**0.112**	<0.009	--	--	<0.0022	--	**0.0040**	**0.020**	--	<0.025	--
MW-06	Multiunit 1	Supplementary	11/20/2007	MW-6-20071120	--	**0.0037**	--	**0.0085**	--	<0.0005	--	<0.05	--	**0.0060**	--	**0.00418**	--	**0.20**	<0.0001	--	--	--	--	**0.00090**	**0.011**	--	<0.0005	--
MW-06	Multiunit 1	Supplementary	8/1/2008	MW-6-20080801	--	**0.0050**	--	**0.0135**	--	<0.0005	--	<0.00005	--	**0.0060**	--	**0.00489**	--	<0.2	**0.00020**	--	--	--	--	<0.0005	**0.023**	--	<0.00005	--
MW-06	Multiunit 1	Supplementary	12/3/2009	MW-6-20091203	--	**0.0024**	--	**0.0114**	--	<0.0005	--	<0.00005	--	**0.0080**	--	**0.00288**	--	**0.30**	**0.00040**	--	--	<0.0002	--	**0.0010**	**0.011**	--	<0.00005	--
MW-06	Multiunit 1	Supplementary	9/28/2012	MW-6-092812-01	--	<0.0010	--	--	--	--	--	--	--	**0.0042**	--	--	--	<2.0	--	--	--	--	--	--	<0.0010	--	--	--
MW-06	Multiunit 1	Supplementary	11/20/2013	FC-06-112013	--	**0.00028**	--	--	--	--	--	--	--	**0.0044**	--	--	--	<2.0	--	--	--	--	--	--	<0.001	--	--	--

Table F-5
Groundwater Sampling Results for the Multiunit 1 Monitoring Wells - Appendix IV Constituents

					Appendix IV Constituents																							
				Constituent:	Antimony	Arsenic	Arsenic	Barium	Barium	Beryllium	Beryllium	Cadmium	Cadmium	Chromium	Chromium	Cobalt	Cobalt	Fluoride	Lead	Lead	Lithium	Mercury	Mercury	Molybdenum	Selenium	Selenium	Thallium	Total Radium
				Filtered:	N	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	N	Y	N	N	Y	N	N	Y	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L
				Multiunit 1 BTV	*0.01*	*0.0086*	*0.0086*	*0.042*	*0.042*	*0.001*	*0.001*	*0.002*	*0.002*	*0.02*	*0.02*	*0.01*	*0.01*	*5*	*0.01*	*0.01*	*1.8*	*0.0002*	*0.0002*	*0.12*	*0.092*	--	*0.017*	*4.43*
				Multiunit 1 GWPS	*0.01*	*0.01*	*0.01*	*2*	*2*	*0.004*	*0.004*	*0.005*	*0.005*	*0.1*	*0.1*	*0.01*	*0.01*	*5*	*0.015*	*0.015*	*1.8*	*0.002*	*0.002*	*0.1*	*0.092*	--	*0.017*	*5*
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**																								
MW-06	Multiunit 1	Supplementary	3/12/2014	FC-06-031214	--	**0.00052**	--	--	--	--	--	--	--	**0.021**	--	--	--	<0.80	--	--	--	--	--	--	**0.00093**	--	--	--
MW-06	Multiunit 1	Supplementary	9/11/2014	FCPP-06-91114	--	<0.0020	--	--	--	--	--	--	--	<0.0050	--	--	--	<0.40	--	--	--	--	--	--	<0.0060	--	--	--
MW-06	Multiunit 1	Supplementary	12/8/2014	FCPP-MW06-12914	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-06	Multiunit 1	Supplementary	3/19/2015	FCPP-06-031915	--	<0.0010	--	--	--	--	--	--	--	<0.0025	--	--	--	<0.40	--	--	--	--	--	--	<0.0030	--	--	--
MW-06	Multiunit 1	Supplementary	6/24/2015	MW-6	--	<0.030	--	--	--	--	--	--	--	<0.030	--	--	--	<0.40	--	--	--	--	--	--	<0.030	--	--	--
MW-06	Multiunit 1	Supplementary	8/29/2015	FCPP-06-082915	--	<0.0030	--	--	--	--	--	<0.0010	--	<0.0030	--	--	--	<2.0	--	--	--	--	--	--	**0.0094**	--	--	--
MW-06	Multiunit 1	Supplementary	11/7/2015	FC MW-6-(07115)	--	<0.0010	--	--	--	--	--	<0.00050	--	**0.0043**	--	--	--	<0.40	--	--	--	--	--	--	<0.0030	--	--	--
MW-06	Multiunit 1	Supplementary	6/20/2016	FC-Seep-MW6-616	--	<0.005	--	--	--	--	--	--	--	<0.005	--	--	--	<0.40	--	--	--	<0.00020	--	--	--	--	--	--
MW-06	Multiunit 1	Supplementary	9/15/2016	FC-Seep-MW6-916	--	<0.0020	--	--	--	--	--	--	--	<0.0050	--	--	--	<0.40	--	--	--	<0.00020	--	--	--	--	--	--
MW-06	Multiunit 1	Supplementary	3/19/2019	FC-CCR-MW6-031919	<0.0010	**0.00069**	--	**0.019**	--	<0.0010	--	<0.00010	--	<0.0010	--	**0.0050**	--	<0.80	**0.0010**	--	**1.2**	<0.00020	--	**0.017**	**0.00054**	--	<0.00010	--
MW-06	Multiunit 1	Supplementary	3/19/2019	FC-CCR-MW6-031919	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.9**
MW-06	Multiunit 1	Supplementary	5/14/2019	FC-CCR-MW6-51419	--	<0.00050	--	**0.016**	--	--	--	<0.00010	--	--	--	**0.0047**	--	<0.80	<0.00050	--	**1.3**	--	--	**0.0074**	**0.00066**	--	<0.00010	--
MW-06	Multiunit 1	Supplementary	5/14/2019	FC-CCR-MW6-51419	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.4**
MW-06	Multiunit 1	Supplementary	11/19/2019	FC-CCR-MW6-111919	<0.0010	**0.0014**	--	**0.015**	--	<0.0010	--	**0.00016**	--	<0.0010	--	**0.0010**	--	<0.80	<0.00050	--	**1.6**	<0.00020	--	**0.0040**	**0.0010**	--	<0.00010	--
MW-06	Multiunit 1	Supplementary	6/23/2020	FC-CCR-MW06-0620	<0.002	**0.0025**	--	**0.019**	--	--	--	<0.0002	--	<0.002	--	**0.0025**	--	<0.8	<0.001	--	**2.7**	--	--	**0.0042**	<0.001	--	<0.0002	**2.8**
MW-06	Multiunit 1	Supplementary	11/7/2020	FC-CCR-MW06-1120	**0.00031**	**0.003**	--	**0.017**	--	<0.001	--	**0.00011**	--	**0.0025**	--	**0.00036 J**	--	--	<0.002	--	**2.2**	--	--	**0.0048**	**0.0049**	--	<0.0004	**2.1**
MW-06	Multiunit 1	Supplementary	4/26/2021	FC-CCR-MW06-0421	<0.004 U	**0.0014 J**	--	**0.028**	--	<0.001	--	<0.0004	--	<0.004	--	**0.0086**	--	**0.58 J**	**0.0019 J**	--	**2.1**	--	--	**0.0036**	**0.0043**	--	<0.0004	<0.8
MW-06	Multiunit 1	Supplementary	11/16/2021	FC-CCR-MW06-1121	**0.00029 J**	**0.0018**	--	**0.017**	--	<0.001	--	**0.00013 J**	--	<0.002	--	**0.00056 J**	--	**0.58 J**	**0.00057 J**	--	**2.4**	--	--	**0.004**	**0.0040**	--	**0.00004 J**	**0.4**
MW-06	Multiunit 1	Supplementary	2/8/2022	FC-CCR-MW06-0222	--	--	--	--	--	<0.001	--	--	--	--	--	**0.0016**	--	**0.34**	--	--	**2.3**	--	--	**0.0035**	--	--	--	--
MW-06	Multiunit 1	Supplementary	5/25/2022	FC-CCR-MW06-0522	<0.002	<0.001	--	**0.014**	--	<0.001	--	<0.0002	--	<0.002	--	<0.001	--	<0.8	<0.001	--	**2.1**	--	--	**0.0035**	**0.0024**	--	<0.0002	<0.6
MW-06	Multiunit 1	Supplementary	9/1/2022	FC-CCR-MW06-0922	--	--	--	--	--	**0.0022**	--	--	--	--	--	**0.0012**	--	<0.8	--	--	**2.3**	--	--	**0.0056**	--	--	--	--
MW-06	Multiunit 1	Supplementary	11/14/2022	FC-CCR-MW06-1122	<0.001	**0.0005**	--	**0.014**	--	<0.001	--	<0.0001	--	<0.001	--	**0.00095**	--	<4	<0.0005	--	**2.4**	--	--	**0.0038**	**0.0021**	--	<0.0001	<0.6
MW-06	Multiunit 1	Supplementary	5/4/2023	FC-CCR-MW06-0523	<0.002	<0.005	--	**0.017**	--	<0.001	--	<0.001	--	<0.003	--	**0.0036**	--	<80	<0.001	--	**2.5**	--	--	**0.0046**	<0.005	--	<0.001	**1.4**
MW-06R	Multiunit 1	Supplementary	11/14/2023	FC-CCR-MW06R-1124	<0.01	**0.0080**	--	**0.026**	--	<0.005	--	<0.001	--	<0.01	--	<0.005	--	<0.8	<0.005	--	**0.90**	--	--	**0.025**	<0.005	--	<0.001	**3.0**
MW-07	Multiunit 1	Downgradient Boundary	4/1/1987	MW-7_4/1/1987	--	--	<0.05	--	<0.005	--	--	--	<0.005	--	<0.005	--	--	<0.5	--	<0.05	--	--	<0.0001	--	--	<0.05	--	--
MW-07	Multiunit 1	Downgradient Boundary	4/1/1987	MW-7 dup_4/1/1987	--	--	<0.1	--	<0.005	--	--	--	<0.005	--	<0.005	--	--	<0.5	--	<0.05	--	--	<0.0001	--	--	<0.05	--	--
MW-07	Multiunit 1	Downgradient Boundary	9/30/1987	MW-7_9/30/1987	--	--	<0.05	--	**0.12**	--	--	--	<0.005	--	<0.005	--	--	<0.5	--	**0.060**	--	--	<0.0001	--	--	<0.05	--	--
MW-07	Multiunit 1	Downgradient Boundary	6/16/1988	MW-7-19880616	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.50**	--	--	--	<0.001	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	9/21/1988	MW-7-19880921	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.50**	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	11/14/1988	MW-7-19881114	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.50**	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	3/6/1989	MW-7-19890306	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.50**	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	9/12/1989	MW-7-19890912	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.40**	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	3/22/1990	MW-7-19900322	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.40**	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	9/24/1990	MW-7-19900924	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.30**	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	3/27/1991	MW-7-19910327	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.30**	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	9/24/1991	MW-7-19910924	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.30**	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	4/30/1992	MW-7-19920430	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.40**	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	10/27/1992	MW-7-19921027	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.40**	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	4/22/1993	MW-7-19930422	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.30**	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	11/22/1993	MW-7-19931122	--	--	--	--	--	--	--	--	--	<0.02	--	--	--	**0.30**	--	--	--	--	--	**0.040**	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	4/20/1994	MW-7-19940420	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.40**	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	9/21/1994	MW-7-19940921	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.30**	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	12/14/1994	MW-7-19941214	<0.3	<0.05	--	<1	--	<0.025	--	<0.025	--	<0.05	--	<0.25	--	--	<0.015	--	--	<0.0002	--	--	<0.025	--	<0.05	--
MW-07	Multiunit 1	Downgradient Boundary	4/4/1995	MW-7-19950404	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.30**	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	11/18/1995	MW-7-19951118	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.30**	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	8/13/1996	MW-7-19960813	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.30**	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	4/15/1997	MW-7-19970415	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.30**	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	10/7/1997	MW-7-19971007	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.30**	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	4/13/1998	MW-7-19980413	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.30**	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	10/20/1998	MW-7-19981020	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.30**	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	5/11/1999	MW-7-19990511	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.40**	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	11/30/1999	MW-7-19991130	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.30**	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	6/8/2000	MW-7-20000608	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.40**	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	11/28/2000	MW-7-20001128	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.4086**	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	8/22/2001	MW-7-20010822	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.40**	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	12/3/2001	MW-7-20011203	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.40**	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	6/24/2002	MW-7-20020624	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.30**	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	12/19/2002	MW-7-20021219	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.40**	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	5/29/2003	MW-7-20030529	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.40**	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	12/24/2003	MW-7-20031224	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.24**	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	6/21/2004	MW-7-20040621	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.40**	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	11/29/2004	MW-7-20041129	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.28**	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	6/13/2005	MW-7-20050613	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.30**	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	12/14/2005	MW-7-20051214	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.30**	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	5/16/2006	MW-7-20060516	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.373**	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	10/11/2006	MW-7-20061011	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.327**	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	4/19/2007	MW-7-20070419	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.259**	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	11/19/2007	MW-7-20071119	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.30**	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	8/7/2008	MW-7-20080807	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.30**	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	7/10/2012	MW-7	--	<0.0030	--	--	--	--	--	--	--	<0.0030	--	--	--	<0.80	--	--	--	--	--	--	**0.0071**	--	--	--

Table F-5
Groundwater Sampling Results for the Multiunit 1 Monitoring Wells - Appendix IV Constituents

					Appendix IV Constituents																									
				Constituent:	Antimony	Arsenic	Arsenic	Barium	Barium	Beryllium	Beryllium	Cadmium	Cadmium	Chromium	Chromium	Cobalt	Cobalt	Fluoride	Lead	Lead	Lithium	Mercury	Mercury	Molybdenum	Selenium	Selenium	Thallium	Total Radium
				Filtered:	N	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	N	Y	N	N	Y	N	N	Y	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L
				Multiunit 1 BTV	*0.01*	*0.0086*	*0.0086*	*0.042*	*0.042*	*0.001*	*0.001*	*0.002*	*0.002*	*0.02*	*0.02*	*0.01*	*0.01*	*5*	*0.01*	*0.01*	*1.8*	*0.0002*	*0.0002*	*0.12*	*0.092*	--	*0.017*	*4.43*
				Multiunit 1 GWPS	*0.01*	*0.01*	*0.01*	*2*	*2*	*0.004*	*0.004*	*0.005*	*0.005*	*0.1*	*0.1*	*0.01*	*0.01*	*5*	*0.015*	*0.015*	*1.8*	*0.002*	*0.002*	*0.1*	*0.092*	--	*0.017*	*5*
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**																										
MW-07	Multiunit 1	Downgradient Boundary	9/27/2012	MW-7-092712-01	--	<0.0050	--	--	--	--	--	--	--	<0.0050	--	--	--	<2.0	--	--	--	--	--	--	**0.031**	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	11/19/2013	FC-07-111913	--	**0.00025**	--	--	--	--	--	--	--	<0.0010	--	--	--	<2.0	--	--	--	--	--	--	**0.011**	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	9/10/2014	FCPP-07-091014	--	**0.00032**	--	--	--	--	--	--	--	<0.00050	--	--	--	<0.40	--	--	--	--	--	--	**0.0052**	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	3/16/2015	FCPP-07-031615	--	**0.00050**	--	--	--	--	--	--	--	<0.00050	--	--	--	<0.40	--	--	--	--	--	--	**0.0032**	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	8/26/2015	FCPP-7-082615	--	<0.0060	--	--	--	--	--	--	--	<0.0060	--	--	--	<0.80	--	--	--	--	--	--	**0.0064**	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	11/7/2015	FC-CCR-MW7-110715	**0.00027**	**0.00060**	--	**0.017**	--	**0.00015**	--	**0.00014**	--	**0.00041**	--	**0.0028**	--	**0.35**	**0.00045**	--	**0.75**	<0.00020	--	**0.0055**	**0.0038**	--	**0.000093**	--
MW-07	Multiunit 1	Downgradient Boundary	11/7/2015	FC-CCR-MW7-110715	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	4/26/2016	FC-CCR-MW-7-042616	<0.0025	**0.00065**	--	**0.014**	--	<0.0010	--	<0.00010	--	<0.00050	--	**0.0015**	--	<2.0	<0.00050	--	**1.0**	<0.00020	--	**0.0039**	**0.0028**	--	<0.00010	**1.9**
MW-07	Multiunit 1	Downgradient Boundary	6/6/2016	FC-CCR-MW7-616	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**3.3**
MW-07	Multiunit 1	Downgradient Boundary	6/6/2016	FC-CCR-MW7-616	**0.00031**	**0.00075**	--	**0.017**	--	<0.0010	--	<0.00010	--	<0.00050	--	**0.0020**	--	**0.41**	**0.00082**	--	**0.94**	<0.00020	--	**0.0046**	**0.0026**	--	**0.00022**	--
MW-07	Multiunit 1	Downgradient Boundary	8/21/2016	FC-CCR-MW7-816	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.40	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	8/21/2016	FC-CCR-MW7-816	**0.00016**	**0.00055**	--	**0.017**	--	<0.0010	--	<0.00010	--	<0.00050	--	**0.0015**	--	<0.40	<0.00050	--	**1.2**	<0.00020	--	**0.033**	**0.011**	--	**0.00016**	--
MW-07	Multiunit 1	Downgradient Boundary	8/21/2016	FC-CCR-MW7-816	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.7**
MW-07	Multiunit 1	Downgradient Boundary	9/13/2016	FC-CCR-MW7-916	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.40	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	9/13/2016	FC-CCR-MW7-916	<0.0025	<0.0010	--	**0.017**	--	<0.0010	--	**0.0014**	--	<0.0025	--	**0.0020**	--	<0.40	<0.00050	--	**0.90**	<0.00020	--	**0.041**	**0.0064**	--	**0.00053**	--
MW-07	Multiunit 1	Downgradient Boundary	9/13/2016	FC-CCR-MW7-916	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.6**
MW-07	Multiunit 1	Downgradient Boundary	10/20/2016	FC-CCR-MW7-1016	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.40	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	10/20/2016	FC-CCR-MW7-1016	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	2/2/2017	FC-CCR-MW7-117	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.40	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	2/2/2017	FC-CCR-MW7-117	<0.0010	<0.00050	--	**0.016**	--	<0.0010	--	<0.00010	--	**0.00093**	--	**0.00065**	--	<0.40	<0.00050	--	**0.92**	<0.00020	--	**0.0048**	**0.0063**	--	**0.00017**	--
MW-07	Multiunit 1	Downgradient Boundary	2/2/2017	FC-CCR-MW7-117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.9**
MW-07	Multiunit 1	Downgradient Boundary	4/18/2017	FC-CCR-MW7-41817	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.80	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	4/18/2017	FC-CCR-MW7-41817	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.5**
MW-07	Multiunit 1	Downgradient Boundary	4/18/2017	FC-CCR-MW7-41817	<0.0010	**0.00072**	--	**0.016**	--	<0.0010	--	<0.00010	--	**0.0023**	--	<0.00050	--	<0.80	<0.00050	--	**0.85**	<0.00020	--	**0.0039**	**0.0080**	--	**0.00011**	--
MW-07	Multiunit 1	Downgradient Boundary	5/3/2017	FC-CCR-MW7-5317	<0.0010	<0.00050	--	**0.015**	--	<0.0010	--	<0.00010	--	**0.0024**	--	<0.00050	--	**5.1**	<0.00050	--	**0.90**	<0.00020	--	**0.0035**	**0.011**	--	**0.00010**	--
MW-07	Multiunit 1	Downgradient Boundary	5/3/2017	FC-CCR-MW7-53117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.6
MW-07	Multiunit 1	Downgradient Boundary	5/29/2017	FC-CCR-MW-72-52917	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.2**
MW-07	Multiunit 1	Downgradient Boundary	5/30/2017	FC-CCR-MW7-53017	<0.0010	**0.00050**	--	**0.015**	--	<0.0010	--	<0.00010	--	**0.0025**	--	<0.00050	--	<0.80	<0.00050	--	**0.79**	<0.00020	--	**0.0041**	**0.0098**	--	**0.00015**	--
MW-07	Multiunit 1	Downgradient Boundary	5/30/2017	FC-CCR-MW7-53017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.6
MW-07	Multiunit 1	Downgradient Boundary	6/22/2017	FC-CCR-MW7-62217	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	6/22/2017	FC-CCR-MW7-62217	--	--	--	--	--	<0.0010	--	--	--	--	--	--	--	<0.80	--	--	**0.86**	<0.00020	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	6/22/2017	FC-CCR-MW7-62217	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.2**
MW-07	Multiunit 1	Downgradient Boundary	7/22/2017	FC-CCR-MW7-72217	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.80	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	7/22/2017	FC-CCR-MW7-72217	<0.0040	<0.0020	--	**0.014**	--	<0.0010	--	<0.00040	--	<0.0020	--	<0.0020	--	--	<0.0020	--	**0.89**	<0.00020	--	**0.0031**	**0.011**	--	<0.00040	--
MW-07	Multiunit 1	Downgradient Boundary	7/22/2017	FC-CCR-MW7-72217	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.9**
MW-07	Multiunit 1	Downgradient Boundary	8/10/2017	FC-CCR-MW7-81017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	8/10/2017	FC-CCR-MW7-81017	<0.010	**0.00066**	--	**0.016**	--	<0.0010	--	<0.0010	--	**0.0017**	--	<0.00050	--	<0.80	<0.0050	--	**0.90**	<0.00020	--	<0.0050	**0.015**	--	<0.0010	--
MW-07	Multiunit 1	Downgradient Boundary	8/10/2017	FC-CCR-MW7-81017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.2**
MW-07	Multiunit 1	Downgradient Boundary	8/17/2017	FC-CCR-MW7-81717	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.2**
MW-07	Multiunit 1	Downgradient Boundary	8/17/2017	FC-CCR-MW7-81717	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.80	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	9/10/2017	FC-CCR-MW7-91017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	9/10/2017	FC-CCR-MW7-91017	<0.0040	**0.0021**	--	**0.014**	--	<0.0010	--	<0.00040	--	<0.0040	--	<0.0020	--	<0.80	<0.0020	--	**0.83**	<0.00020	--	**0.0035**	**0.013**	--	<0.00040	--
MW-07	Multiunit 1	Downgradient Boundary	9/10/2017	FC-CCR-MW7-91017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.3**
MW-07	Multiunit 1	Downgradient Boundary	10/12/2017	FC-CCR-MW7-101217	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.6**
MW-07	Multiunit 1	Downgradient Boundary	10/12/2017	FC-CCR-MW7-101217	<0.0010	**0.00079**	--	**0.013**	--	<0.0010	--	<0.00010	--	<0.0010	--	<0.00050	--	<0.80	<0.00050	--	**0.81**	<0.00020	--	**0.0031**	**0.015**	--	**0.00010**	--
MW-07	Multiunit 1	Downgradient Boundary	11/30/2017	FC-CCR-MW7-113017	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.80	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	3/17/2018	FC-CCR-MW7-31718	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.49**	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	3/17/2018	FC-CCR-MW7-31718	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.9
MW-07	Multiunit 1	Downgradient Boundary	3/17/2018	*DUP* FC-CCR-FD02-31718	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.9
MW-07	Multiunit 1	Downgradient Boundary	6/1/2018	FC-CCR-MW-7-6118	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.3**
MW-07	Multiunit 1	Downgradient Boundary	6/1/2018	FC-CCR-MW-7-6118	--	<0.010	--	**0.017**	--	--	--	<0.0020	--	--	--	<0.010	--	<0.80	<0.010	--	**0.83**	--	--	<0.010	<0.010	--	<0.0020	--
MW-07	Multiunit 1	Downgradient Boundary	11/4/2018	FC-CCR-MW7-11418	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.80	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	11/4/2018	FC-CCR-MW7-11418	--	<0.00050	--	**0.014**	--	--	--	<0.00010	--	--	--	**0.00056**	--	--	<0.00050	--	**0.83**	--	--	**0.0070**	**0.0035**	--	**0.00010**	--
MW-07	Multiunit 1	Downgradient Boundary	11/4/2018	FC-CCR-MW7-11418	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.7
MW-07	Multiunit 1	Downgradient Boundary	3/19/2019	FC-CCR-MW7-031919	<0.0010	**0.00051**	--	**0.016**	--	<0.0010	--	<0.00010	--	<0.0010	--	<0.00050	--	<0.40	<0.00050	--	**0.79**	<0.00020	--	**0.0054**	**0.0054**	--	<0.00010	--
MW-07	Multiunit 1	Downgradient Boundary	3/19/2019	FC-CCR-MW7-031919	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.7
MW-07	Multiunit 1	Downgradient Boundary	5/14/2019	FC-CCR-MW7-51419	--	**0.00054**	--	**0.014**	--	--	--	<0.00010	--	--	--	<0.00050	--	<0.80	<0.00050	--	**0.87**	--	--	**0.0037**	**0.0041**	--	<0.00010	--
MW-07	Multiunit 1	Downgradient Boundary	5/14/2019	FC-CCR-MW7-51419	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.7
MW-07	Multiunit 1	Downgradient Boundary	11/19/2019	FC-CCR-MW7-111919	<0.0010	**0.00086**	--	**0.015**	--	<0.0010	--	**0.00031**	--	<0.0010	--	**0.00062**	--	<0.80	<0.00050	--	**0.85**	<0.00020	--	**0.0057**	**0.0043**	--	**0.00010**	--
MW-07	Multiunit 1	Downgradient Boundary	6/23/2020	FC-CCR-MW07-0620	<0.004	<0.002	--	**0.0072**	--	--	--	<0.0004	--	<0.004	--	<0.002	--	<0.8	<0.002	--	**1.3**	--	--	**0.0073**	**0.0041**	--	<0.0004	**1.5**
MW-07	Multiunit 1	Downgradient Boundary	11/6/2020	FC-CCR-MW07-1120	**0.00024 J**	**0.0017 J**	--	<0.02 U/0.014	--	<0.001	--	**0.000069 J**	--	**0.00055 J**	--	**0.00050**	--	**0.33 J**	<0.0005	--	**0.90**	<0.0002	--	**0.0052**	**0.0076 J**	--	**0.00010**	**1.4**
MW-07	Multiunit 1	Downgradient Boundary	11/6/2020	*DUP* FC-CCR-FD05-1120	<0.001 U	**0.0025 J**	--	**0.0060 J**	--	<0.001	--	**0.000062 J**	--	**0.00062 J**	--	**0.00059**	--	**0.37 J**	<0.001	--	**0.92**	<0.0002	--	**0.0052**	**0.011 J**	--	**0.00012 J**	**1.4**
MW-07	Multiunit 1	Downgradient Boundary	4/27/2021	FC-CCR-MW07-0421	<0.001 U	<0.0013 U	--	**0.019**	--	<0.001	--	<0.0001	--	**0.00073 J**	--	**0.000094 J**	--	**0.25 J**	<0.0005	--	**0.87**	<0.0002	--	**0.0022**	**0.027**	--	<0.0001 U	**2.4 J**
MW-07	Multiunit 1	Downgradient Boundary	4/27/2021	*DUP* FC-CCR-FD04-0421	<0.001 U	<0.0018 U	--	**0.017**	--	<0.001	--	<0.0001	--	**0.00055 J**	--	<0.0005	--	**0.26 J**	<0.0005	--	**0.86**	<0.0002	--	**0.0022**	**0.025**	--	<0.0001	**0.9 J**
MW-07	Multiunit 1	Downgradient Boundary	11/18/2021	FC-CCR-MW07-1121	**0.00031 J**	<0.001	--	**0.015**	--	<0.001	--	**0.00012 J**	--	**0.0011 J**	--	**0.00055 J**	--	**0.25 J**	<0.0005	--	**1.00**	<0.0002	--	**0.0061**	**0.0031**	--	**0.00034**	**1.6**
MW-07	Multiunit 1	Downgradient Boundary	5/26/2022	FC-CCR-MW07-0522	<0.001	**0.00052**	--	**0.015**	--	<0.001	--	<0.0001	--	<0.001	--	<0.0005	--	<0.8	<0.0005	--	**0.95**	<0.0002	--	**0.0046**	**0.0095**	--	<0.0002	**0.7 J**
MW-07	Multiunit 1	Downgradient Boundary	11/16/2022	FC-CCR-MW07-1122	<0.002	<0.001	--	**0.017**	--	<0.001	--	<0.0002	--	<0.002	--	<0.001	--	<2	<0.001	--	**1.0**	<0.0002	--	**0.0034**	**0.0082**	--	<0.0002	**1.5**
MW-07	Multiunit 1	Downgradient Boundary	5/8/2023	FC-CCR-MW07-0523	<0.002	<0.005	--	**0.015**	--	<0.001	--	<0.001	--	<0.003	--	<0.001	--	<2	<0.001	--	**1.1**	<0.0002	--	**0.0024**	**0.023**	--	<0.001	**0.7**
MW-07	Multiunit 1	Downgradient Boundary	11/15/2023	FC-CCR-MW07-1124	<0.01	**0.0092**	--	**0.016 J**	--	<0.001	--	<0.001	--	<0.01	--	<0.005	--	<0.8	<0.005	--	**1.0**	<0.0002	--	<0.005	**0.019**	--	<0.001	**2.1**

Table F-5
Groundwater Sampling Results for the Multiunit 1 Monitoring Wells - Appendix IV Constituents

					Appendix IV Constituents																							
				Constituent:	Antimony	Arsenic	Arsenic	Barium	Barium	Beryllium	Beryllium	Cadmium	Cadmium	Chromium	Chromium	Cobalt	Cobalt	Fluoride	Lead	Lead	Lithium	Mercury	Mercury	Molybdenum	Selenium	Selenium	Thallium	Total Radium
				Filtered:	N	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	N	Y	N	N	Y	N	N	Y	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L
				Multiunit 1 BTV	*0.01*	*0.0086*	*0.0086*	*0.042*	*0.042*	*0.001*	*0.001*	*0.002*	*0.002*	*0.02*	*0.02*	*0.01*	*0.01*	*5*	*0.01*	*0.01*	*1.8*	*0.0002*	*0.0002*	*0.12*	*0.092*	--	*0.017*	*4.43*
				Multiunit 1 GWPS	*0.01*	*0.01*	*0.01*	*2*	*2*	*0.004*	*0.004*	*0.005*	*0.005*	*0.1*	*0.1*	*0.01*	*0.01*	*5*	*0.015*	*0.015*	*1.8*	*0.002*	*0.002*	*0.1*	*0.092*	--	*0.017*	*5*
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**																								
MW-08	Multiunit 1	Downgradient Boundary	10/2/1987	MW-8_10/2/1987	--	--	<0.05	--	**0.20**	--	--	--	<0.005	--	<0.005	--	--	<0.5	--	<0.05	--	--	<0.0001	--	--	<0.05	--	--
MW-08	Multiunit 1	Downgradient Boundary	6/16/1988	MW-8-19880616	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.70**	--	--	--	<0.001	--	--	--	--	--	--
MW-08	Multiunit 1	Downgradient Boundary	9/21/1988	MW-8-19880921	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.70**	--	--	--	--	--	--	--	--	--	--
MW-08	Multiunit 1	Downgradient Boundary	11/14/1988	MW-8-19881114	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.70**	--	--	--	--	--	--	--	--	--	--
MW-08	Multiunit 1	Downgradient Boundary	3/8/1989	MW-8-19890308	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.60**	--	--	--	--	--	--	--	--	--	--
MW-08	Multiunit 1	Downgradient Boundary	9/12/1989	MW-8-19890912	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.60**	--	--	--	--	--	--	--	--	--	--
MW-08	Multiunit 1	Downgradient Boundary	3/22/1990	MW-8-19900322	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.40**	--	--	--	--	--	--	--	--	--	--
MW-08	Multiunit 1	Downgradient Boundary	10/29/1990	MW-8-19901029	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.50**	--	--	--	--	--	--	--	--	--	--
MW-08	Multiunit 1	Downgradient Boundary	3/27/1991	MW-8-19910327	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.40**	--	--	--	--	--	--	--	--	--	--
MW-08	Multiunit 1	Downgradient Boundary	10/1/1991	MW-8-19911001	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.40**	--	--	--	--	--	--	--	--	--	--
MW-08	Multiunit 1	Downgradient Boundary	5/1/1992	MW-8-19920501	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.40**	--	--	--	--	--	--	--	--	--	--
MW-08	Multiunit 1	Downgradient Boundary	11/3/1992	MW-8-19921103	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.50**	--	--	--	--	--	--	--	--	--	--
MW-08	Multiunit 1	Downgradient Boundary	4/28/1993	MW-8-19930428	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.41**	--	--	--	--	--	--	--	--	--	--
MW-08	Multiunit 1	Downgradient Boundary	11/30/1993	MW-8-19931130	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.50**	--	--	--	--	--	--	--	--	--	--
MW-08	Multiunit 1	Downgradient Boundary	4/28/1994	MW-8-19940428	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.60**	--	--	--	--	--	--	--	--	--	--
MW-08	Multiunit 1	Downgradient Boundary	11/16/1994	MW-8-19941116	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.50**	--	--	--	--	--	--	--	--	--	--
MW-08	Multiunit 1	Downgradient Boundary	12/14/1994	MW-8-19941214	<0.3	<0.05	--	<1	--	<0.025	--	<0.025	--	<0.05	--	<0.25	--	--	<0.015	--	--	<0.0002	--	--	<0.025	--	<0.05	--
MW-08	Multiunit 1	Downgradient Boundary	4/5/1995	MW-8-19950405	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.40**	--	--	--	--	--	--	--	--	--	--
MW-08	Multiunit 1	Downgradient Boundary	11/18/1995	MW-8-19951118	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.70**	--	--	--	--	--	--	--	--	--	--
MW-08	Multiunit 1	Downgradient Boundary	8/19/1996	MW-8-19960819	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.50**	--	--	--	--	--	--	--	--	--	--
MW-08	Multiunit 1	Downgradient Boundary	6/24/1997	MW-8-19970624	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.50**	--	--	--	--	--	--	--	--	--	--
MW-08	Multiunit 1	Downgradient Boundary	10/7/1997	MW-8-19971007	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.50**	--	--	--	--	--	--	--	--	--	--
MW-08	Multiunit 1	Downgradient Boundary	4/14/1998	MW-8-19980414	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.50**	--	--	--	--	--	--	--	--	--	--
MW-08	Multiunit 1	Downgradient Boundary	10/21/1998	MW-8-19981021	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.50**	--	--	--	--	--	--	--	--	--	--
MW-08	Multiunit 1	Downgradient Boundary	5/11/1999	MW-8-19990511	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.50**	--	--	--	--	--	--	--	--	--	--
MW-08	Multiunit 1	Downgradient Boundary	12/1/1999	MW-8-19991201	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.50**	--	--	--	--	--	--	--	--	--	--
MW-08	Multiunit 1	Downgradient Boundary	6/7/2000	MW-8-20000607	--	<0.005	--	**0.020**	--	--	--	<0.005	--	<0.01	--	--	--	**0.60**	<0.005	--	--	--	--	**0.060**	<0.005	--	--	--
MW-08	Multiunit 1	Downgradient Boundary	12/12/2000	MW-8-20001212	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.58**	--	--	--	--	--	--	--	--	--	--
MW-08	Multiunit 1	Downgradient Boundary	8/22/2001	MW-8-20010822	--	<0.005	--	**0.020**	--	--	--	<0.001	--	<0.01	--	--	--	**0.60**	<0.005	--	--	--	--	**0.060**	<0.005	--	--	--
MW-08	Multiunit 1	Downgradient Boundary	12/3/2001	MW-8-20011203	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.60**	--	--	--	--	--	--	--	--	--	--
MW-08	Multiunit 1	Downgradient Boundary	6/24/2002	MW-8-20020624	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.50**	--	--	--	--	--	--	--	--	--	--
MW-08	Multiunit 1	Downgradient Boundary	12/18/2002	MW-8-20021218	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.50**	--	--	--	--	--	--	--	--	--	--
MW-08	Multiunit 1	Downgradient Boundary	6/3/2003	MW-8-20030603	--	--	--	**0.010**	--	**0.12**	**0.010**	--	--	--	--	--	--	**0.60**	--	--	--	--	--	--	--	--	--	--
MW-08	Multiunit 1	Downgradient Boundary	9/23/2003	MW-8-20030923	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.66**	--	--	--	--	--	--	--	--	--	--
MW-08	Multiunit 1	Downgradient Boundary	6/16/2004	MW-8-20040616	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.60**	--	--	--	--	--	--	--	--	--	--
MW-08	Multiunit 1	Downgradient Boundary	11/9/2004	MW-8-20041109	--	<0.0005	--	**0.0181**	--	--	--	<0.00005	--	**0.0060**	--	--	--	**0.60**	**0.0013**	--	--	--	--	**0.05259**	**0.0040**	--	--	--
MW-08	Multiunit 1	Downgradient Boundary	5/12/2005	MW-8-20050512	--	**0.0019**	--	**0.0138**	--	<0.0005	--	<0.001	--	**0.0010**	--	**0.00259**	--	**0.50**	**0.0011**	--	--	<0.0002	--	--	**0.0080**	--	<0.00005	--
MW-08	Multiunit 1	Downgradient Boundary	11/1/2005	MW-8-20051101	--	--	--	**0.016**	--	--	--	--	--	<0	--	**0.0030**	--	**0.50**	--	--	--	--	--	**0.045**	--	--	--	--
MW-08	Multiunit 1	Downgradient Boundary	5/16/2006	MW-8-20060516	--	<0.032	--	**0.010**	--	<0.001	--	<0.006	--	<0.004	--	**0.0030**	--	**0.649**	<0.012	--	--	--	--	**0.056**	<0.038	--	<0.005	--
MW-08	Multiunit 1	Downgradient Boundary	10/11/2006	MW-8-20061011	--	<0.024	--	**0.013**	--	<0.003	--	<0.002	--	<0.002	--	<0.008	--	**0.627**	<0.009	--	--	--	--	**0.060**	<0.029	--	<0.025	--
MW-08	Multiunit 1	Downgradient Boundary	4/18/2007	MW-8-20070418	<0.028	<0.024	--	**0.011**	--	<0.003	--	<0.002	--	<0.002	--	<0.008	--	**1.03**	<0.009	--	--	<0.0022	--	**0.068**	**0.022**	--	<0.025	--
MW-08	Multiunit 1	Downgradient Boundary	11/14/2007	MW-8-20071114	**0.0013**	**0.0014**	--	**0.0109**	--	<0.0005	--	<0.00005	--	**0.017**	--	**0.00233**	--	**0.70**	<0.1	--	--	--	--	**0.0652**	**0.022**	--	<0.00005	--
MW-08	Multiunit 1	Downgradient Boundary	5/7/2008	MW-8-20080507	**0.0008**	**0.0030**	--	**0.0101**	--	<0.0005	--	<0.00005	--	**0.0040**	--	**0.0031**	--	**0.70**	**0.00030**	--	--	--	--	**0.0784**	**0.0090**	--	<0.00005	--
MW-08	Multiunit 1	Downgradient Boundary	12/3/2009	MW-8-20091203	<0.0005	**0.0033**	--	**0.0127**	--	<0.0005	--	**0.00013**	--	**0.011**	--	**0.00207**	--	**0.70**	<0.0001	--	--	<0.0002	--	**0.0518**	**0.011**	--	<0.00005	--
MW-08	Multiunit 1	Downgradient Boundary	9/27/2012	MW-8-092712-01	--	**0.0017**	--	--	--	--	--	--	--	<0.0010	--	--	--	<2.0	--	--	--	--	--	--	**0.0012**	--	--	--
MW-08	Multiunit 1	Downgradient Boundary	11/19/2013	FC-08-111913	--	**0.0016**	--	--	--	--	--	--	--	**0.00051**	--	--	--	<4.0	--	--	--	--	--	--	<0.0005	--	--	--
MW-08	Multiunit 1	Downgradient Boundary	9/10/2014	FCPP-08-091014	--	**0.0012**	--	--	--	--	--	--	--	<0.00050	--	--	--	<0.40	--	--	--	--	--	--	<0.00060	--	--	--
MW-08	Multiunit 1	Downgradient Boundary	3/17/2015	FCPP-08-031715	--	**0.00064**	--	--	--	--	--	--	--	<0.00050	--	--	--	<0.40	--	--	--	--	--	--	<0.00060	--	--	--
MW-08	Multiunit 1	Downgradient Boundary	6/29/2015	MW-8	--	<0.0030	--	--	--	--	--	--	--	<0.0030	--	--	--	<0.80	--	--	--	--	--	--	**0.0047**	--	--	--
MW-08	Multiunit 1	Downgradient Boundary	8/26/2015	FCPP-8-082615	--	<0.0060	--	--	--	--	--	--	--	<0.0060	--	--	--	<0.80	--	--	--	--	--	--	<0.0060	--	--	--
MW-08	Multiunit 1	Downgradient Boundary	12/1/2015	FC-CCR-MW8-120115	**0.0014**	**0.0091**	--	**0.15**	--	**0.0020**	--	**0.00096**	--	**0.020**	--	**0.019**	--	<0.25	**0.033**	--	**1.1**	**0.00019**	--	**0.033**	**0.013**	--	**0.00054**	--
MW-08	Multiunit 1	Downgradient Boundary	12/1/2015	FC-CCR-MW8-120115	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-08	Multiunit 1	Downgradient Boundary	4/26/2016	FC-CCR-MW-8-042616	<0.0050	<0.0010	--	**0.014**	--	<0.0010	--	**0.00025**	--	<0.0010	--	**0.0018**	--	<2.0	<0.0010	--	**1.2**	<0.00020	--	**0.018**	**0.0015**	--	<0.00020	**1.4**
MW-08	Multiunit 1	Downgradient Boundary	6/7/2016	FC-CCR-MW8-616	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.3**
MW-08	Multiunit 1	Downgradient Boundary	6/7/2016	FC-CCR-MW8-616	**0.00054**	**0.00058**	--	**0.038**	--	<0.0010	--	**0.00020**	--	**0.0016**	--	**0.0023**	--	**0.70**	**0.0014**	--	**1.1**	<0.00020	--	**0.018**	**0.0013**	--	**0.00014**	--
MW-08	Multiunit 1	Downgradient Boundary	8/21/2016	FC-CCR-MW8-816	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.61**	--	--	--	--	--	--	--	--	--	--
MW-08	Multiunit 1	Downgradient Boundary	8/21/2016	FC-CCR-MW8-816	**0.00048**	<0.00050	--	**0.014**	--	<0.0010	--	**0.00022**	--	**0.00082**	--	**0.00093**	--	<0.40	<0.00050	--	**1.5**	<0.00020	--	**0.049**	**0.0016**	--	<0.00010	--
MW-08	Multiunit 1	Downgradient Boundary	8/21/2016	FC-CCR-MW8-816	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.3**
MW-08	Multiunit 1	Downgradient Boundary	9/13/2016	FC-CCR-MW8-916	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.77**	--	--	--	--	--	--	--	--	--	--
MW-08	Multiunit 1	Downgradient Boundary	9/13/2016	FC-CCR-MW8-916	<0.0025	<0.0010	--	**0.013**	--	<0.0010	--	**0.00074**	--	<0.0025	--	**0.0013**	--	<0.40	<0.00050	--	**1.1**	<0.00020	--	**0.044**	<0.0030	--	<0.00050	--
MW-08	Multiunit 1	Downgradient Boundary	9/13/2016	FC-CCR-MW8-916	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.2**
MW-08	Multiunit 1	Downgradient Boundary	4/18/2017	FC-CCR-MW8-41817	--	--	--	--	--	--	--	--	--	--	--	--	--	<2.0	--	--	--	--	--	--	--	--	--	--
MW-08	Multiunit 1	Downgradient Boundary	4/18/2017	FC-CCR-MW8-41817	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.0**
MW-08	Multiunit 1	Downgradient Boundary	4/18/2017	FC-CCR-MW8-41817	<0.0010	**0.00053**	--	**0.017**	--	<0.0010	--	**0.00018**	--	**0.00075**	--	**0.00053**	--	<0.80	<0.00050	--	**1.1**	<0.00020	--	**0.014**	**0.00084**	--	<0.00010	--
MW-08	Multiunit 1	Downgradient Boundary	5/3/2017	FC-CCR-MW8-5317	<0.0010	<0.00050	--	**0.012**	--	<0.0010	--	**0.00011**	--	**0.00060**	--	<0.00050	--	**5.3**	<0.00050	--	**1.2**	<0.00020	--	**0.014**	**0.0015**	--	<0.00010	--
MW-08	Multiunit 1	Downgradient Boundary	5/3/2017	FC-CCR-MW8-5317	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.9**
MW-08	Multiunit 1	Downgradient Boundary	5/30/2017	FC-CCR-MW8-53017	<0.0010	**0.00070**	--	**0.013**	--	<0.0010	--	**0.00013**	--	**0.00077**	--	<0.00050	--	<2.0	<0.00050	--	**1.1**	<0.00020	--	**0.016**	**0.0016**	--	<0.00010	--
MW-08	Multiunit 1	Downgradient Boundary	5/30/2017	FC-CCR-MW8-53017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.2**
MW-08	Multiunit 1	Downgradient Boundary	6/1/2018	FC-CCR-MW-8-6118	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.7
MW-08	Multiunit 1	Downgradient Boundary	6/1/2018	FC-CCR-MW-8-6118	--	<0.010	--	**0.011**	--	--	--	<0.0020	--	--	--	<0.010	--	**0.91**	<0.010	--	**1.2**	--	--	**0.011**	<0.010	--	<0.0020	--

Table F-5
Groundwater Sampling Results for the Multiunit 1 Monitoring Wells - Appendix IV Constituents

					Appendix IV Constituents																									
				Constituent:	Antimony	Arsenic	Arsenic	Barium	Barium	Beryllium	Beryllium	Cadmium	Cadmium	Chromium	Chromium	Cobalt	Cobalt	Fluoride	Lead	Lead	Lithium	Mercury	Mercury	Molybdenum	Selenium	Selenium	Thallium	Total Radium
				Filtered:	N	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	N	Y	N	N	Y	N	N	Y	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L
				Multiunit 1 BTV	*0.01*	*0.0086*	*0.0086*	*0.042*	*0.042*	*0.001*	*0.001*	*0.002*	*0.002*	*0.02*	*0.02*	*0.01*	*0.01*	*5*	*0.01*	*0.01*	*1.8*	*0.0002*	*0.0002*	*0.12*	*0.092*	--	*0.017*	*4.43*
				Multiunit 1 GWPS	*0.01*	*0.01*	*0.01*	*2*	*2*	*0.004*	*0.004*	*0.005*	*0.005*	*0.1*	*0.1*	*0.01*	*0.01*	*5*	*0.015*	*0.015*	*1.8*	*0.002*	*0.002*	*0.1*	*0.092*	--	*0.017*	*5*
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**																										
MW-08	Multiunit 1	Downgradient Boundary	11/4/2018	FC-CCR-MW8-11418	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.80	--	--	--	--	--	--	--	--	--	--
MW-08	Multiunit 1	Downgradient Boundary	11/4/2018	FC-CCR-MW8-11418	--	**0.00064**	--	**0.0090**	--	--	--	**0.00015**	--	--	--	<0.00050	--	--	<0.00050	--	**1.1**	--	--	**0.011**	**0.0014**	--	<0.00010	--
MW-08	Multiunit 1	Downgradient Boundary	11/4/2018	FC-CCR-MW8-11418	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.7
MW-08	Multiunit 1	Downgradient Boundary	3/19/2019	FC-CCR-MW8-031919	<0.0010	<0.00050	--	**0.011**	--	<0.0010	--	**0.00029**	--	<0.0010	--	<0.00050	--	**0.41**	<0.00050	--	**1.1**	<0.00020	--	**0.011**	**0.0013**	--	<0.00010	--
MW-08	Multiunit 1	Downgradient Boundary	3/19/2019	FC-CCR-MW8-031919	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.3**
MW-08	Multiunit 1	Downgradient Boundary	5/14/2019	FC-CCR-MW8-51419	--	<0.00050	--	**0.010**	--	--	--	<0.00010	--	--	--	<0.00050	--	<0.80	<0.00050	--	**1.2**	--	--	**0.013**	**0.0012**	--	<0.00010	--
MW-08	Multiunit 1	Downgradient Boundary	5/14/2019	FC-CCR-MW8-51419	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.1**
MW-08	Multiunit 1	Downgradient Boundary	11/19/2019	FC-CCR-MW8-111919	<0.0010	<0.0010	--	**0.011**	--	<0.0010	--	**0.00012**	--	<0.0010	--	<0.00050	--	<0.80	<0.00050	--	**1.2**	<0.00020	--	**0.011**	**0.0014**	--	<0.00010	--
MW-08	Multiunit 1	Downgradient Boundary	6/23/2020	FC-CCR-MW08-0620	<0.004	<0.002	--	**0.0050 J**	--	--	--	<0.0004	--	<0.004	--	<0.002	--	<0.8 UJ	<0.002	--	--	--	--	**0.014 J**	<0.002	--	<0.0004	**0.7**
MW-08	Multiunit 1	Downgradient Boundary	6/23/2020	*DUP* FC-CCR-FD04-0620	<0.001	**0.00077**	--	**0.0097 J**	--	--	--	**0.00021**	--	<0.001	--	<0.0005	--	<0.8 UJ	**0.00074**	--	--	--	--	**0.011 J**	**0.00080**	--	<0.0001	--
MW-08	Multiunit 1	Downgradient Boundary	11/6/2020	FC-CCR-MW08-1120	**0.00034 J**	**0.0025**	--	<0.02/0.011	--	<0.001	--	**0.00029**	--	<0.001	--	**0.00070 J**	--	**0.58 J**	<0.001	--	**1.1**	<0.0002	--	**0.013**	**0.0048**	--	**0.00016 J**	<0.8
MW-08	Multiunit 1	Downgradient Boundary	4/27/2021	FC-CCR-MW08-0421	<0.001 U	<0.0015 U	--	**0.011**	--	<0.001	--	<0.0001 U	--	<0.001	--	**0.0012**	--	**0.42 J**	<0.0005	--	**1.1**	<0.0002	--	**0.017**	<0.001 U	--	<0.0001	<0.8
MW-08	Multiunit 1	Downgradient Boundary	11/18/2021	FC-CCR-MW08-1121	**0.00033 J**	<0.001	--	**0.0097**	--	<0.001	--	**0.0012**	--	<0.002	--	**0.00062 J**	--	**0.56 J**	<0.0005	--	**1.2**	<0.0002	--	**0.018**	**0.0005**	--	**0.00014**	**1.3**
MW-08	Multiunit 1	Downgradient Boundary	5/24/2022	FC-CCR-MW08-0522	<0.001	**0.00056**	--	**0.011**	--	<0.001	--	**0.00014**	--	<0.001	--	<0.0005	--	<0.8	<0.0005	--	**1.2**	<0.0002	--	**0.015**	**0.0015**	--	<0.0002	**1.1**
MW-08	Multiunit 1	Downgradient Boundary	5/24/2022	FC-CCR-SS06-0522	<0.02	<0.01	--	**0.0102 J**	--	<0.0025	--	<0.0025	--	<0.02	--	**0.00144 J**	--	<50/0.7	<0.005	--	**1.21**	<0.001	--	**0.0154**	<0.0025	--	<0.005	--
MW-08	Multiunit 1	Downgradient Boundary	11/16/2022	FC-CCR-MW08-1122	<0.002	<0.001	--	**0.011**	--	<0.001	--	<0.0002	--	<0.002	--	<0.001	--	<4	<0.001	--	**1.3**	<0.0002	--	**0.013**	<0.001	--	<0.0002	**3.0**
MW-08	Multiunit 1	Downgradient Boundary	5/8/2023	FC-CCR-MW08-0523	<0.002	<0.005	--	**0.0088**	--	<0.005	--	<0.001	--	<0.003	--	<0.001	--	<2	<0.001	--	**1.3**	<0.0002	--	**0.013**	<0.005	--	<0.001	**1.0**
MW-08	Multiunit 1	Downgradient Boundary	11/15/2023	FC-CCR-MW08-1124	<0.01	**0.0083**	--	**0.010 J**	--	<0.001	--	<0.001	--	<0.01	--	<0.005	--	<0.8	<0.005	--	**1.2**	<0.0002	--	**0.014**	<0.005	--	<0.001	**1.7**
MW-15	Multiunit 1	Supplementary	9/30/1987	MW-15_9/30/1987	--	--	<0.05	--	**0.18**	--	--	--	<0.005	--	<0.005	--	--	<0.5	--	**0.070**	--	--	<0.0001	--	--	<0.05	--	--
MW-15	Multiunit 1	Supplementary	6/20/1988	MW-15-19880620	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.0**	--	--	--	<0.001	--	--	--	--	--	--
MW-15	Multiunit 1	Supplementary	9/22/1988	MW-15-19880922	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.40**	--	--	--	--	--	--	--	--	--	--
MW-15	Multiunit 1	Supplementary	11/14/1988	MW-15-19881114	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.60**	--	--	--	--	--	--	--	--	--	--
MW-15	Multiunit 1	Supplementary	3/8/1989	MW-15-19890308	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.50**	--	--	--	--	--	--	--	--	--	--
MW-15	Multiunit 1	Supplementary	9/13/1989	MW-15-19890913	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.40**	--	--	--	--	--	--	--	--	--	--
MW-15	Multiunit 1	Supplementary	3/22/1990	MW-15-19900322	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.30**	--	--	--	--	--	--	--	--	--	--
MW-15	Multiunit 1	Supplementary	9/24/1990	MW-15-19900924	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.20**	--	--	--	--	--	--	--	--	--	--
MW-15	Multiunit 1	Supplementary	3/27/1991	MW-15-19910327	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.20**	--	--	--	--	--	--	--	--	--	--
MW-15	Multiunit 1	Supplementary	9/27/1991	MW-15-19910927	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.20**	--	--	--	--	--	--	--	--	--	--
MW-15	Multiunit 1	Supplementary	5/1/1992	MW-15-19920501	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.30**	--	--	--	--	--	--	--	--	--	--
MW-15	Multiunit 1	Supplementary	10/28/1992	MW-15-19921028	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.30**	--	--	--	--	--	--	--	--	--	--
MW-15	Multiunit 1	Supplementary	4/23/1993	MW-15-19930423	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.28**	--	--	--	--	--	--	--	--	--	--
MW-15	Multiunit 1	Supplementary	11/22/1993	MW-15-19931122	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.30**	--	--	--	--	--	--	--	--	--	--
MW-15	Multiunit 1	Supplementary	4/20/1994	MW-15-19940420	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.20**	--	--	--	--	--	--	--	--	--	--
MW-15	Multiunit 1	Supplementary	11/8/1994	MW-15-19941108	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.20**	--	--	--	--	--	--	--	--	--	--
MW-15	Multiunit 1	Supplementary	4/5/1995	MW-15-19950405	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.20**	--	--	--	--	--	--	--	--	--	--
MW-15	Multiunit 1	Supplementary	11/18/1995	MW-15-19951118	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.20**	--	--	--	--	--	--	--	--	--	--
MW-15	Multiunit 1	Supplementary	8/14/1996	MW-15-19960814	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.20**	--	--	--	--	--	--	--	--	--	--
MW-15	Multiunit 1	Supplementary	4/23/1997	MW-15-19970423	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.20**	--	--	--	--	--	--	--	--	--	--
MW-15	Multiunit 1	Supplementary	10/8/1997	MW-15-19971008	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.20**	--	--	--	--	--	--	--	--	--	--
MW-15	Multiunit 1	Supplementary	4/14/1998	MW-15-19980414	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.20**	--	--	--	--	--	--	--	--	--	--
MW-15	Multiunit 1	Supplementary	5/11/1999	MW-15-19990511	--	<0.005	--	**0.020**	--	--	--	<0.001	--	<0.01	--	--	--	**0.20**	<0.005	--	--	--	--	<0.01	<0.005	--	--	--
MW-15	Multiunit 1	Supplementary	12/1/1999	MW-15-19991201	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.20**	--	--	--	--	--	--	--	--	--	--
MW-15	Multiunit 1	Supplementary	6/8/2000	MW-15-20000608	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.20**	--	--	--	--	--	--	--	--	--	--
MW-15	Multiunit 1	Supplementary	12/12/2000	MW-15-20001212	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.2524**	--	--	--	--	--	--	--	--	--	--
MW-15	Multiunit 1	Supplementary	8/22/2001	MW-15-20010822	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.20**	--	--	--	--	--	--	--	--	--	--
MW-15	Multiunit 1	Supplementary	12/3/2001	MW-15-20011203	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.20**	--	--	--	--	--	--	--	--	--	--
MW-15	Multiunit 1	Supplementary	6/24/2002	MW-15-20020624	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.20**	--	--	--	--	--	--	--	--	--	--
MW-15	Multiunit 1	Supplementary	12/18/2002	MW-15-20021218	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.20**	--	--	--	--	--	--	--	--	--	--
MW-15	Multiunit 1	Supplementary	5/28/2003	MW-15-20030528	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.20**	--	--	--	--	--	--	--	--	--	--
MW-15	Multiunit 1	Supplementary	12/24/2003	MW-15-20031224	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.30**	--	--	--	--	--	--	--	--	--	--
MW-15	Multiunit 1	Supplementary	6/16/2004	MW-15-20040616	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.20**	--	--	--	--	--	--	--	--	--	--
MW-15	Multiunit 1	Supplementary	11/29/2004	MW-15-20041129	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.30**	--	--	--	--	--	--	--	--	--	--
MW-15	Multiunit 1	Supplementary	5/13/2005	MW-15-20050513	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.30**	--	--	--	--	--	--	--	--	--	--
MW-15	Multiunit 1	Supplementary	12/14/2005	MW-15-20051214	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-15	Multiunit 1	Supplementary	6/17/2006	MW-15-20060617	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.177**	--	--	--	--	--	--	--	--	--	--
MW-15	Multiunit 1	Supplementary	10/11/2006	MW-15-20061011	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.221**	--	--	--	--	--	--	--	--	--	--
MW-15	Multiunit 1	Supplementary	4/18/2007	MW-15-20070418	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.373**	--	--	--	--	--	--	--	--	--	--
MW-15	Multiunit 1	Supplementary	11/14/2007	MW-15-20071114	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.30**	--	--	--	--	--	--	--	--	--	--
MW-15	Multiunit 1	Supplementary	5/7/2008	MW-15-20080507	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.20**	--	--	--	--	--	--	--	--	--	--
MW-15	Multiunit 1	Supplementary	11/19/2013	FC-15MS-111913	--	<0.0020	--	--	--	--	--	--	--	**0.0020**	--	--	--	--	--	--	--	--	--	--	<0.0020	--	--	--
MW-15	Multiunit 1	Supplementary	11/19/2013	FC-15-111913	--	**0.00051**	--	--	--	--	--	--	--	**0.00054**	--	--	--	<4.0	--	--	--	--	--	--	<0.0005	--	--	--
MW-15	Multiunit 1	Supplementary	9/9/2014	FCPP-15-090914	--	**0.00031**	--	--	--	--	--	--	--	<0.00050	--	--	--	<0.40	--	--	--	--	--	--	<0.00060	--	--	--
MW-15	Multiunit 1	Supplementary	3/17/2015	FCPP-15-031715	--	**0.00037**	--	--	--	--	--	--	--	<0.00050	--	--	--	<0.40	--	--	--	--	--	--	<0.00060	--	--	--
MW-15	Multiunit 1	Supplementary	6/29/2015	MW-15	--	<0.0030	--	--	--	--	--	--	--	<0.0030	--	--	--	<0.80	--	--	--	--	--	--	**0.0062**	--	--	--
MW-15	Multiunit 1	Supplementary	8/26/2015	FCPP-15-082615	--	<0.0060	--	--	--	--	--	--	--	<0.0060	--	--	--	<0.80	--	--	--	--	--	--	<0.0060	--	--	--
MW-15	Multiunit 1	Supplementary	6/18/2016	FC-Seep-MW15-616	--	<0.005	--	--	--	--	--	--	--	<0.005	--	--	--	<0.40	--	--	--	<0.00020	--	--	--	--	--	--
MW-15	Multiunit 1	Supplementary	9/15/2016	FC-Seep-MW15-916	--	<0.0010	--	--	--	--	--	--	--	<0.0025	--	--	--	<0.40	--	--	--	<0.00020	--	--	--	--	--	--
MW-15	Multiunit 1	Supplementary	3/20/2019	FC-CCR-MW15-032019	<0.0010	<0.00050	--	**0.020**	--	<0.0010	--	**0.00015**	--	<0.0010	--	**0.0020**	--	<0.80	<0.00050	--	**0.92**	<0.00020	--	**0.036**	**0.00071**	--	**0.00018**	--
MW-15	Multiunit 1	Supplementary	3/20/2019	FC-CCR-MW15-032019	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.7
MW-15	Multiunit 1	Supplementary	5/14/2019	FC-CCR-MW15-51419	--	<0.00050	--	**0.019**	--	--	--	<0.00010	--	--	--	**0.0022**	--	<0.80	**0.00062**	--	**0.91**	--	--	**0.0096**	<0.00050	--	<0.00010	--

Table F-5
Groundwater Sampling Results for the Multiunit 1 Monitoring Wells - Appendix IV Constituents

					Appendix IV Constituents																								
				Constituent:	Antimony	Arsenic	Arsenic	Barium	Barium	Beryllium	Beryllium	Cadmium	Cadmium	Chromium	Chromium	Cobalt	Cobalt	Fluoride	Lead	Lead	Lithium	Mercury	Mercury	Molybdenum	Selenium	Selenium	Thallium	Total Radium
				Filtered:	N	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	N	Y	N	N	Y	N	N	Y	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L
				Multiunit 1 BTV	*0.01*	*0.0086*	*0.0086*	*0.042*	*0.042*	*0.001*	*0.001*	*0.002*	*0.002*	*0.02*	*0.02*	*0.01*	*0.01*	*5*	*0.01*	*0.01*	*1.8*	*0.0002*	*0.0002*	*0.12*	*0.092*	--	*0.017*	*4.43*
				Multiunit 1 GWPS	*0.01*	*0.01*	*0.01*	*2*	*2*	*0.004*	*0.004*	*0.005*	*0.005*	*0.1*	*0.1*	*0.01*	*0.01*	*5*	*0.015*	*0.015*	*1.8*	*0.002*	*0.002*	*0.1*	*0.092*	--	*0.017*	*5*
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**																									
MW-15	Multiunit 1	Supplementary	5/14/2019	FC-CCR-MW15-51419	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.7
MW-15	Multiunit 1	Supplementary	11/19/2019	FC-CCR-MW15-111919	<0.0010	<0.0010	--	**0.018**	--	<0.0010	--	<0.00010	--	<0.0010	--	**0.0022**	--	<0.80	<0.00050	--	**0.91**	<0.00020	--	**0.0034**	<0.00050	--	**0.00012**	--
MW-15	Multiunit 1	Supplementary	6/23/2020	FC-CCR-MW15-0620	<0.002	**0.0010**	--	**0.019**	--	--	--	<0.0002	--	<0.002	--	**0.0016**	--	<0.8	<0.001	--	**1.2**	--	--	**0.0018**	<0.001	--	<0.0002	<0.8
MW-15	Multiunit 1	Supplementary	11/6/2020	FC-CCR-MW15-1120	**0.00041**	**0.0014**	--	**0.019**	--	<0.001	--	**0.000092**	--	**0.0016**	--	**0.0030**	--	<0.4	<0.001	--	**1.0**	--	--	**0.0020**	**0.0030**	--	**0.00014**	<0.8
MW-15	Multiunit 1	Supplementary	4/27/2021	FC-CCR-MW15-0421	<0.004	<0.002	--	**0.021**	--	<0.001	--	<0.0004	--	<0.004	--	**0.0017 J**	--	**0.27 J**	**0.0019 J**	--	**0.96**	--	--	**0.0016 J**	**0.0037**	--	<0.0004 U	<0.8
MW-15	Multiunit 1	Supplementary	11/18/2021	FC-CCR-MW15-1121	<0.002 U	**0.0012**	--	**0.020**	--	<0.001	--	**0.000076 J**	--	<0.002	--	**0.0016**	--	**0.37 J**	<0.0005	--	**0.97**	--	--	**0.0014**	**0.0005**	--	**0.00013**	**0.6**
MW-15	Multiunit 1	Supplementary	2/8/2022	FC-CCR-MW15-0222	--	--	--	--	--	<0.001	--	--	--	--	--	**0.0019**	--	**0.18**	--	--	**1.0**	--	--	**0.0010**	--	--	--	--
MW-15	Multiunit 1	Supplementary	5/24/2022	FC-CCR-MW15-0522	<0.001	<0.001	--	**0.019**	--	<0.001	--	**0.00011**	--	<0.001	--	**0.0018**	--	<0.8	<0.001	--	**1.0**	--	--	**0.0012**	**0.0021**	--	<0.0004	<0.6
MW-15	Multiunit 1	Supplementary	8/13/2022	FC-CCR-MW15-0822	--	--	--	--	--	<0.001	--	--	--	--	--	**0.0015**	--	<0.8	--	--	**0.99**	--	--	**0.0013**	--	--	--	--
MW-15	Multiunit 1	Supplementary	11/16/2022	FC-CCR-MW15-1122	<0.002	<0.001	--	**0.019**	--	<0.001	--	<0.0002	--	<0.002	--	<0.001	--	<2	<0.001	--	**1.0**	--	--	**0.0013**	<0.001	--	<0.0002	<0.7
MW-15	Multiunit 1	Supplementary	5/8/2023	FC-CCR-MW15-0523	<0.002	<0.005	--	**0.022**	--	<0.005	--	<0.001	--	<0.003	--	**0.0021**	--	<2	<0.001	--	**1.0**	--	--	<0.002	<0.005	--	<0.001	**1.5**
MW-15	Multiunit 1	Supplementary	11/15/2023	FC-CCR-MW15-1124	<0.01	<0.01	--	**0.020**	--	<0.001	--	<0.001	--	<0.01	--	<0.005	--	<0.8	<0.005	--	**1.0**	--	--	<0.005	<0.005	--	<0.001	**1.3**
MW-16	Multiunit 1	Supplementary	9/30/1987	MW-16_9/30/1987	--	--	<0.05	--	**0.22**	--	--	--	<0.005	--	<0.005	--	--	<0.5	--	**0.060**	--	--	<0.0001	--	--	<0.05	--	--
MW-16	Multiunit 1	Supplementary	6/20/1988	MW-16-19880620	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.50**	--	--	--	<0.001	--	--	--	--	--	--	--
MW-16	Multiunit 1	Supplementary	9/21/1988	MW-16-19880921	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.60**	--	--	--	--	--	--	--	--	--	--	--
MW-16	Multiunit 1	Supplementary	11/14/1988	MW-16-19881114	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.50**	--	--	--	--	--	--	--	--	--	--	--
MW-16	Multiunit 1	Supplementary	3/8/1989	MW-16-19890308	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.60**	--	--	--	--	--	--	--	--	--	--	--
MW-16	Multiunit 1	Supplementary	9/13/1989	MW-16-19890913	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.60**	--	--	--	--	--	--	--	--	--	--	--
MW-16	Multiunit 1	Supplementary	3/26/1990	MW-16-19900326	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.50**	--	--	--	--	--	--	--	--	--	--	--
MW-16	Multiunit 1	Supplementary	9/24/1990	MW-16-19900924	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.30**	--	--	--	--	--	--	--	--	--	--	--
MW-16	Multiunit 1	Supplementary	4/2/1991	MW-16-19910402	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.30**	--	--	--	--	--	--	--	--	--	--	--
MW-16	Multiunit 1	Supplementary	10/1/1991	MW-16-19911001	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.30**	--	--	--	--	--	--	--	--	--	--	--
MW-16	Multiunit 1	Supplementary	5/7/1992	MW-16-19920507	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.30**	--	--	--	--	--	--	--	--	--	--	--
MW-16	Multiunit 1	Supplementary	11/5/1992	MW-16-19921105	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.30**	--	--	--	--	--	--	--	--	--	--	--
MW-16	Multiunit 1	Supplementary	4/26/1993	MW-16-19930426	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.20**	--	--	--	--	--	--	--	--	--	--	--
MW-16	Multiunit 1	Supplementary	11/23/1993	MW-16-19931123	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.30**	--	--	--	--	--	--	--	--	--	--	--
MW-16	Multiunit 1	Supplementary	4/20/1994	MW-16-19940420	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.30**	--	--	--	--	--	--	--	--	--	--	--
MW-16	Multiunit 1	Supplementary	9/21/1994	MW-16-19940921	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.30**	--	--	--	--	--	--	--	--	--	--	--
MW-16	Multiunit 1	Supplementary	4/4/1995	MW-16-19950404	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.30**	--	--	--	--	--	--	--	--	--	--	--
MW-16	Multiunit 1	Supplementary	11/21/1995	MW-16-19951121	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.30**	--	--	--	--	--	--	--	--	--	--	--
MW-16	Multiunit 1	Supplementary	8/15/1996	MW-16-19960815	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.20**	--	--	--	--	--	--	--	--	--	--	--
MW-16	Multiunit 1	Supplementary	4/15/1997	MW-16-19970415	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.30**	--	--	--	--	--	--	--	--	--	--	--
MW-16	Multiunit 1	Supplementary	10/8/1997	MW-16-19971008	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.20**	--	--	--	--	--	--	--	--	--	--	--
MW-16	Multiunit 1	Supplementary	4/15/1998	MW-16-19980415	--	<0.005	--	**0.020**	--	--	--	<0.001	--	<0.01	--	--	--	**0.20**	<0.005	--	--	--	--	**0.030**	**0.23**	--	--	--
MW-16	Multiunit 1	Supplementary	5/11/1999	MW-16-19990511	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.30**	--	--	--	--	--	--	--	--	--	--	--
MW-16	Multiunit 1	Supplementary	11/30/1999	MW-16-19991130	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.20**	--	--	--	--	--	--	--	--	--	--	--
MW-16	Multiunit 1	Supplementary	6/8/2000	MW-16-20000608	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.30**	--	--	--	--	--	--	--	--	--	--	--
MW-16	Multiunit 1	Supplementary	12/12/2000	MW-16-20001212	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.2809**	--	--	--	--	--	--	--	--	--	--	--
MW-16	Multiunit 1	Supplementary	8/22/2001	MW-16-20010822	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.27**	--	--	--	--	--	--	--	--	--	--	--
MW-16	Multiunit 1	Supplementary	12/3/2001	MW-16-20011203	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.30**	--	--	--	--	--	--	--	--	--	--	--
MW-16	Multiunit 1	Supplementary	6/12/2002	MW-16-20020612	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.40**	--	--	--	--	--	--	--	--	--	--	--
MW-16	Multiunit 1	Supplementary	12/18/2002	MW-16-20021218	--	**0.0070**	--	<0.01	--	--	--	**0.0020**	--	<0.01	--	--	--	**0.20**	<0.005	--	--	--	--	<0.01	**0.036**	--	--	--	--
MW-16	Multiunit 1	Supplementary	5/29/2003	MW-16-20030529	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.70**	--	--	--	--	--	--	--	--	--	--	--
MW-16	Multiunit 1	Supplementary	12/24/2003	MW-16-20031224	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.34**	--	--	--	--	--	--	--	--	--	--	--
MW-16	Multiunit 1	Supplementary	6/16/2004	MW-16-20040616	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.30**	--	--	--	--	--	--	--	--	--	--	--
MW-16	Multiunit 1	Supplementary	11/29/2004	MW-16-20041129	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.40**	--	--	--	--	--	--	--	--	--	--	--
MW-16	Multiunit 1	Supplementary	6/13/2005	MW-16-20050613	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.30**	--	--	--	--	--	--	--	--	--	--	--
MW-16	Multiunit 1	Supplementary	10/31/2005	MW-16-20051031	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.20**	--	--	--	--	--	--	--	--	--	--	--
MW-16	Multiunit 1	Supplementary	5/16/2006	MW-16-20060516	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.267**	--	--	--	--	--	--	--	--	--	--	--
MW-16	Multiunit 1	Supplementary	10/11/2006	MW-16-20061011	--	<0.024	--	**0.017**	--	--	--	<0.002	--	<0.002	--	--	--	**0.287**	<0.009	--	--	--	--	<0.012	<0.029	--	--	--	--
MW-16	Multiunit 1	Supplementary	4/18/2007	MW-16-20070418	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.59**	--	--	--	--	--	--	--	--	--	--	--
MW-16	Multiunit 1	Supplementary	11/14/2007	MW-16-20071114	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.20**	--	--	--	--	--	--	--	--	--	--	--
MW-16	Multiunit 1	Supplementary	5/7/2008	MW-16-20080507	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.30**	--	--	--	--	--	--	--	--	--	--	--
MW-16	Multiunit 1	Supplementary	12/4/2009	MW-16-20091204	--	**0.0037**	--	**0.0164**	--	--	--	<0.00025	--	**0.020**	--	--	--	**0.30**	<0.0005	--	--	<0.0002	--	<0.0025	**0.016**	--	--	--	--
MW-16	Multiunit 1	Supplementary	9/27/2012	MW-16-092712-01	--	<0.0010	--	--	--	--	--	--	--	<0.0010	--	--	--	<2.0	--	--	--	--	--	--	**0.0016**	--	--	--	--
MW-16	Multiunit 1	Supplementary	11/19/2013	FC-16-111913	--	**0.00031**	--	--	--	--	--	--	--	<0.00050	--	--	--	<4.0	--	--	--	--	--	--	**0.0050**	--	--	--	--
MW-16	Multiunit 1	Supplementary	3/12/2014	FC-16-031214	--	**0.00077**	--	--	--	--	--	--	--	**0.0018**	--	--	--	<0.80	--	--	--	--	--	--	**0.0030**	--	--	--	--
MW-16	Multiunit 1	Supplementary	9/9/2014	FCPP-16-090914	--	**0.00065**	--	--	--	--	--	--	--	**0.00083**	--	--	--	<0.40	--	--	--	--	--	--	**0.0021**	--	--	--	--
MW-16	Multiunit 1	Supplementary	3/17/2015	FCPP-16-031715	--	**0.00027**	--	--	--	--	--	--	--	<0.00050	--	--	--	<0.40	--	--	--	--	--	--	**0.014**	--	--	--	--
MW-16	Multiunit 1	Supplementary	6/29/2015	MW-16	--	<0.0030	--	--	--	--	--	--	--	<0.0030	--	--	--	<0.80	--	--	--	--	--	--	**0.034**	--	--	--	--
MW-16	Multiunit 1	Supplementary	8/26/2015	FCPP-16-082615	--	<0.0060	--	--	--	--	--	--	--	<0.0060	--	--	--	**2.7**	--	--	--	--	--	--	**0.038**	--	--	--	--
MW-16	Multiunit 1	Supplementary	11/10/2015	FC MW-16-(111115)	--	**0.0039**	--	--	--	--	--	<0.00050	--	**0.014**	--	--	--	<4.0	--	--	--	--	--	--	**0.049**	--	--	--	--
MW-16	Multiunit 1	Supplementary	6/18/2016	FC-Seep-MW16-616	--	<0.005	--	--	--	--	--	--	--	<0.005	--	--	--	<0.40	--	--	--	<0.00020	--	--	--	--	--	--	--
MW-16	Multiunit 1	Supplementary	9/15/2016	FC-Seep-MW16-916	--	<0.0010	--	--	--	--	--	--	--	<0.0025	--	--	--	<0.40	--	--	--	<0.00020	--	--	--	--	--	--	--
MW-16	Multiunit 1	Supplementary	3/20/2019	FC-CCR-MW16-032019	<0.0010	**0.0018**	--	**0.021**	--	<0.0010	--	**0.00015**	--	<0.0010	--	**0.0062**	--	<0.80	<0.00050	--	**1.2**	<0.00020	--	**0.0033**	**0.045**	--	**0.00041**	--
MW-16	Multiunit 1	Supplementary	3/20/2019	FC-CCR-MW16-032019	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.9**
MW-16	Multiunit 1	Supplementary	5/14/2019	FC-CCR-MW16-51419	--	**0.0017**	--	**0.021**	--	--	--	**0.00013**	--	--	--	**0.0054**	--	<0.80	<0.00050	--	**1.3**	--	--	**0.0018**	**0.050**	--	**0.00040**	--
MW-16	Multiunit 1	Supplementary	5/14/2019	FC-CCR-MW16-51419	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.9**
MW-16	Multiunit 1	Supplementary	5/14/2019	*DUP* FC-CCR-FD02-51419	--	**0.0012**	--	**0.021**	--	--	--	**0.00015**	--	--	--	**0.0052**	--	<0.80	<0.00050	--	**1.3**	--	--	**0.0018**	**0.048**	--	**0.00041**	--
MW-16	Multiunit 1	Supplementary	5/14/2019	*DUP* FC-CCR-FD02-51419	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.7**

Table F-5
Groundwater Sampling Results for the Multiunit 1 Monitoring Wells - Appendix IV Constituents

Well ID	CCR Unit	Well Designation	Sample Date	Sample ID	Antimony	Arsenic	Arsenic	Barium	Barium	Beryllium	Beryllium	Cadmium	Cadmium	Chromium	Chromium	Cobalt	Cobalt	Fluoride	Lead	Lead	Lithium	Mercury	Mercury	Molybdenum	Selenium	Selenium	Thallium	Total Radium
				Appendix IV Constituents																								
				Filtered:	N	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	N	Y	N	N	Y	N	N	Y	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L
				Multiunit 1 BTV	*0.01*	*0.0086*	*0.0086*	*0.042*	*0.042*	*0.001*	*0.001*	*0.002*	*0.002*	*0.02*	*0.02*	*0.01*	*0.01*	*5*	*0.01*	*0.01*	*1.8*	*0.0002*	*0.0002*	*0.12*	*0.092*	--	*0.017*	*4.43*
				Multiunit 1 GWPS	*0.01*	*0.01*	*0.01*	*2*	*2*	*0.004*	*0.004*	*0.005*	*0.005*	*0.1*	*0.1*	*0.01*	*0.01*	*5*	*0.015*	*0.015*	*1.8*	*0.002*	*0.002*	*0.1*	*0.092*	--	*0.017*	*5*
MW-16	Multiunit 1	Supplementary	11/19/2019	FC-CCR-MW16-111919	<0.0010	0.0011	--	0.020	--	<0.0010	--	0.00015	--	<0.0010	--	0.0072	--	<0.80	<0.00050	--	1.2	<0.00020	--	0.00073	0.032	--	0.00041	--
MW-16	Multiunit 1	Supplementary	6/23/2020	FC-CCR-MW16-0620	<0.002	0.0026	--	0.019	--	--	--	<0.0002	--	<0.002	--	0.0068	--	<0.8	<0.001	--	1.8	--	--	<0.001	0.037	--	0.00051	3.1
MW-16	Multiunit 1	Supplementary	11/6/2020	FC-CCR-MW16-1120	0.00022	<0.002	--	0.023	--	<0.001	--	0.00018	--	0.0016	--	0.0058	--	<0.4	<0.002	--	1.3	--	--	<0.002	0.034	--	0.00054	3.6
MW-16	Multiunit 1	Supplementary	4/27/2021	FC-CCR-MW16-0421	<0.004	<0.002	--	0.022	--	<0.001	--	0.0002 J	--	<0.004	--	0.0071	--	0.19 J	0.0021	--	1.3	--	--	0.00088 J	0.033	--	0.00051	2.0
MW-16	Multiunit 1	Supplementary	11/18/2021	FC-CCR-MW16-1121	<0.002 U	0.00085 J	--	0.021	--	<0.001	--	0.00018 J	--	<0.002	--	0.0074	--	0.39 J	<0.0005	--	1.4	--	--	0.00079 J	0.0041	--	0.00045	2.5
MW-16	Multiunit 1	Supplementary	2/8/2022	FC-CCR-MW16-0222	--	--	--	--	--	<0.001	--	--	--	--	--	0.0062	--	0.13	--	--	1.4	--	--	0.00057	--	--	--	--
MW-16	Multiunit 1	Supplementary	5/26/2022	FC-CCR-MW16-0522	<0.002	<0.001	--	0.019	--	<0.001	--	<0.0002	--	<0.002	--	0.0067	--	<0.8	<0.002	--	1.2	--	--	<0.001	0.032	--	0.00041	3.4 J
MW-16	Multiunit 1	Supplementary	8/13/2022	FC-CCR-MW16-0822	--	--	--	--	--	<0.001	--	--	--	--	--	0.0062	--	<0.8	--	--	1.4	--	--	0.00056	--	--	--	--
MW-16	Multiunit 1	Supplementary	11/16/2022	FC-CCR-MW16-1122	<0.002	<0.001	--	0.022	--	<0.001	--	<0.0002	--	<0.002	--	0.0069	--	<8	<0.001	--	1.4	--	--	<0.001	0.031	--	0.00048	5.1
MW-16	Multiunit 1	Supplementary	5/8/2023	FC-CCR-MW16-0523	<0.002	<0.005	--	0.021	--	<0.005	--	<0.001	--	<0.003	--	0.0075	--	<2	<0.001	--	1.5	--	--	<0.002	0.028	--	<0.001	4.3
MW-16	Multiunit 1	Supplementary	11/15/2023	FC-CCR-MW16-1124	<0.01	<0.01	--	0.021	--	<0.001	--	<0.001	--	<0.01	--	0.010	--	<0.8	<0.005	--	1.6	--	--	<0.005	0.03	--	<0.001	3.5
MW-17R	Multiunit 1	Supplementary	3/12/2014	FC-17R-031214	--	0.00027	--	--	--	--	--	--	--	0.00071	--	--	--	0.43	--	--	--	--	--	--	0.00067	--	--	--
MW-17R	Multiunit 1	Supplementary	9/9/2014	FCPP-17R-090914	--	0.00027	--	--	--	--	--	--	--	<0.00050	--	--	--	<0.40	--	--	--	--	--	--	<0.00060	--	--	--
MW-17R	Multiunit 1	Supplementary	3/17/2015	FCPP-17R-031715	--	0.00029	--	--	--	--	--	--	--	<0.00050	--	--	--	0.40	--	--	--	--	--	--	<0.00060	--	--	--
MW-17R	Multiunit 1	Supplementary	6/30/2015	MW-17R	--	<0.0030	--	--	--	--	--	--	--	<0.0030	--	--	--	<0.80	--	--	--	--	--	--	0.0038	--	--	--
MW-17R	Multiunit 1	Supplementary	8/25/2015	FCPP-17R-082515	--	<0.0060	--	--	--	--	--	--	--	<0.0060	--	--	--	<0.40	--	--	--	--	--	--	<0.0060	--	--	--
MW-17R	Multiunit 1	Supplementary	11/4/2015	FC MW-17R-(041115)	--	0.0057	--	--	--	--	--	<0.0025	--	<0.013	--	--	--	--	--	--	--	--	--	--	<0.015	--	--	--
MW-17R	Multiunit 1	Supplementary	11/13/2015	FC MW-17R-(131115)	--	0.00051	--	--	--	--	--	--	--	<0.0010	--	--	--	<2.0	--	--	--	--	--	--	<0.0012	--	--	--
MW-17R	Multiunit 1	Supplementary	6/18/2016	FC-Seep-MW17B-616	--	<0.005	--	--	--	--	--	--	--	<0.005	--	--	--	0.45	--	--	--	<0.00020	--	--	--	--	--	--
MW-17R	Multiunit 1	Supplementary	9/15/2016	FC-Seep-MW17R-916	--	<0.0010	--	--	--	--	--	--	--	<0.0025	--	--	--	0.49	--	--	--	<0.00020	--	--	--	--	--	--
MW-17R	Multiunit 1	Supplementary	3/19/2019	FC-CCR-MW17R-031919	<0.0010	<0.00050	--	0.017	--	<0.0010	--	0.0013	--	0.0017	--	0.065	--	<0.40	0.0027	--	0.41	<0.00020	--	0.0014	0.00055	--	0.00021	--
MW-17R	Multiunit 1	Supplementary	3/19/2019	FC-CCR-MW17R-031919	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2.4
MW-17R	Multiunit 1	Supplementary	5/14/2019	FC-CCR-MW17R-51419	--	<0.00050	--	0.017	--	--	--	0.0013	--	--	--	0.064	--	<0.80	0.0022	--	0.42	--	--	0.0014	<0.00050	--	0.00022	--
MW-17R	Multiunit 1	Supplementary	5/14/2019	FC-CCR-MW17R-51419	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.7
MW-17R	Multiunit 1	Supplementary	5/14/2019	*DUP* FC-CCR-FD01-51419	--	<0.00050	--	0.018	--	--	--	0.0014	--	--	--	0.064	--	<0.80	0.0022	--	0.41	--	--	0.0013	<0.00050	--	0.00022	--
MW-17R	Multiunit 1	Supplementary	5/14/2019	*DUP* FC-CCR-FD01-51419	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.2
MW-17R	Multiunit 1	Supplementary	11/19/2019	FC-CCR-MW17R-111919	<0.0010	<0.0010	--	0.019	--	<0.0010	--	0.0015	--	<0.0010	--	0.071	--	<0.80	0.0024	--	0.42	<0.00020	--	0.0014	0.00055	--	0.00026	--
MW-17R	Multiunit 1	Supplementary	6/22/2020	FC-CCR-MW17R-0620	<0.002	<0.001	--	0.016	--	--	--	0.0014	--	<0.002	--	0.062	--	<0.8	0.0025	--	0.55	--	--	0.0069	<0.001	--	0.00036	1.9
MW-17R	Multiunit 1	Supplementary	11/7/2020	FC-CCR-MW17R-1120	<0.004	0.002	--	0.017	--	<0.001	--	0.0011	--	0.0029	--	0.072	--	0.40	0.0019	--	0.47	--	--	0.034	0.0025	--	0.00029	2.0
MW-17R	Multiunit 1	Supplementary	4/25/2021	FC-CCR-MW17R-0421	<0.004 U	<0.002	--	0.019	--	<0.001	--	0.0017	--	<0.004	--	0.066	--	0.45	0.0043	--	0.42	--	--	0.0014 J	0.0012 J	--	<0.0004 U	2.2
MW-17R	Multiunit 1	Supplementary	11/16/2021	FC-CCR-MW17R-1121	<0.002 U	0.00051 J	--	0.019	--	<0.001	--	0.0016	--	<0.002	--	0.072	--	0.62 J	0.0025	--	0.47	--	--	0.0013	0.026	--	0.00026	3.2
MW-17R	Multiunit 1	Supplementary	2/9/2022	FC-CCR-MW17R-0222	--	--	--	--	--	<0.001 U	--	--	--	--	--	0.061	--	0.48	--	--	0.47	--	--	0.0012	--	--	--	--
MW-17R	Multiunit 1	Supplementary	2/9/2022	*DUP* FC-CCR-FD01-0222	--	--	--	--	--	<0.001	--	--	--	--	--	0.061	--	0.50	--	--	0.47	--	--	0.0011	--	--	--	--
MW-17R	Multiunit 1	Supplementary	5/25/2022	FC-CCR-MW17R-0522	<0.002	<0.001	--	0.016	--	<0.001	--	0.0014	--	<0.002	--	0.057	--	<0.8	0.0014	--	0.42	--	--	0.0011	<0.001	--	<0.0002	2.0
MW-17R	Multiunit 1	Supplementary	8/11/2022	FC-CCR-MW17R-0822	--	--	--	--	--	<0.001	--	--	--	--	--	0.063	--	<0.8	--	--	0.45	--	--	0.00095	--	--	--	--
MW-17R	Multiunit 1	Supplementary	11/15/2022	FC-CCR-MW17R-1122	<0.001	<0.0005	--	0.018	--	<0.001	--	0.0014	--	<0.001	--	0.065	--	<2	0.0026	--	0.47	--	--	0.0013	0.0012	--	0.00031	2.4
MW-17R	Multiunit 1	Supplementary	5/4/2023	FC-CCR-MW17R-0523	<0.002	<0.005	--	0.017	--	<0.001	--	0.0012	--	<0.003	--	0.059	--	<8	0.0023	--	0.46	--	--	<0.002	<0.005	--	<0.001	2.0
MW-17R	Multiunit 1	Supplementary	11/14/2023	FC-CCR-MW17R-1124	<0.01	0.0080	--	0.019	--	<0.005	--	0.0014	--	<0.01	--	0.068	--	<0.8	<0.005	--	0.49	--	--	<0.005	<0.005	--	<0.001	1.6
MW-18	Multiunit 1	Supplementary	9/29/1987	MW-18_9/29/1987	--	--	<0.05	--	0.23	--	--	--	<0.005	--	<0.005	--	--	<0.5	--	0.070	--	--	<0.0001	--	--	<0.05	--	--
MW-18	Multiunit 1	Supplementary	6/15/1988	MW-18-19880615	--	--	--	--	--	--	--	--	--	--	--	--	--	0.50	--	--	--	<0.001	--	--	--	--	--	--
MW-18	Multiunit 1	Supplementary	9/21/1988	MW-18-19880921	--	--	--	--	--	--	--	--	--	--	--	--	--	0.50	--	--	--	--	--	--	--	--	--	--
MW-18	Multiunit 1	Supplementary	11/28/1988	MW-18-19881128	--	--	--	--	--	--	--	--	--	--	--	--	--	0.40	--	--	--	--	--	--	--	--	--	--
MW-18	Multiunit 1	Supplementary	2/27/1989	MW-18-19890227	--	--	--	--	--	--	--	--	--	--	--	--	--	0.40	--	--	--	--	--	--	--	--	--	--
MW-18	Multiunit 1	Supplementary	9/11/1989	MW-18-19890911	--	--	--	--	--	--	--	--	--	--	--	--	--	0.40	--	--	--	--	--	--	--	--	--	--
MW-18	Multiunit 1	Supplementary	3/26/1990	MW-18-19900326	--	--	--	--	--	--	--	--	--	--	--	--	--	0.30	--	--	--	--	--	--	--	--	--	--
MW-18	Multiunit 1	Supplementary	9/18/1990	MW-18-19900918	--	--	--	--	--	--	--	--	--	--	--	--	--	0.20	--	--	--	--	--	--	--	--	--	--
MW-18	Multiunit 1	Supplementary	5/30/1991	MW-18-19910530	--	--	--	--	--	--	--	--	--	--	--	--	--	0.30	--	--	--	--	--	--	--	--	--	--
MW-18	Multiunit 1	Supplementary	9/11/1991	MW-18-19910911	--	--	--	--	--	--	--	--	--	--	--	--	--	0.20	--	--	--	--	--	--	--	--	--	--
MW-18	Multiunit 1	Supplementary	5/5/1992	MW-18-19920505	--	--	--	--	--	--	--	--	--	--	--	--	--	0.20	--	--	--	--	--	--	--	--	--	--
MW-18	Multiunit 1	Supplementary	10/27/1992	MW-18-19921027	--	--	--	--	--	--	--	--	--	--	--	--	--	0.30	--	--	--	--	--	--	--	--	--	--
MW-18	Multiunit 1	Supplementary	4/26/1993	MW-18-19930426	--	--	--	--	--	--	--	--	--	--	--	--	--	0.20	--	--	--	--	--	--	--	--	--	--
MW-18	Multiunit 1	Supplementary	11/23/1993	MW-18-19931123	--	--	--	--	--	--	--	--	--	--	--	--	--	0.20	--	--	--	--	--	--	--	--	--	--
MW-18	Multiunit 1	Supplementary	4/21/1994	MW-18-19940421	--	--	--	--	--	--	--	--	--	--	--	--	--	0.20	--	--	--	--	--	--	--	--	--	--
MW-18	Multiunit 1	Supplementary	9/20/1994	MW-18-19940920	--	<0.05	--	<0.5	--	--	--	<0.005	--	--	--	<0.02	--	0.20	<0.1	--	--	--	--	<0.01	<0.1	--	<0.01	--
MW-18	Multiunit 1	Supplementary	12/14/1994	MW-18-19941214	<0.3	<0.05	--	<1	--	<0.025	--	<0.025	--	<0.05	--	<0.25	--	--	<0.015	--	--	<0.0002	--	--	<0.025	--	<0.05	--
MW-18	Multiunit 1	Supplementary	4/5/1995	MW-18-19950405	--	--	--	--	--	--	--	--	--	--	--	--	--	0.20	--	--	--	--	--	--	--	--	--	--
MW-18	Multiunit 1	Supplementary	12/13/1995	MW-18-19951213	--	--	--	--	--	--	--	--	--	--	--	--	--	0.20	--	--	--	--	--	--	--	--	--	--
MW-18	Multiunit 1	Supplementary	8/12/1996	MW-18-19960812	--	<0.005	--	0.010	--	--	--	<0.001	--	--	--	0.050	--	0.20	<0.005	--	--	--	--	<0.01	0.090	--	<0.01	--
MW-18	Multiunit 1	Supplementary	4/23/1997	MW-18-19970423	--	--	--	--	--	--	--	--	--	--	--	--	--	0.20	--	--	--	--	--	--	--	--	--	--
MW-18	Multiunit 1	Supplementary	10/20/1997	MW-18-19971020	--	--	--	--	--	--	--	--	--	--	--	--	--	0.20	--	--	--	--	--	--	--	--	--	--
MW-18	Multiunit 1	Supplementary	4/14/1998	MW-18-19980414	--	--	--	--	--	--	--	--	--	--	--	--	--	0.20	--	--	--	--	--	--	--	--	--	--
MW-18	Multiunit 1	Supplementary	6/8/1999	MW-18-19990608	--	--	--	--	--	--	--	--	--	--	--	--	--	0.20	--	--	--	--	--	--	--	--	--	--
MW-18	Multiunit 1	Supplementary	12/8/1999	MW-18-19991208	--	--	--	--	--	--	--	--	--	--	--	--	--	0.20	--	--	--	--	--	--	--	--	--	--
MW-18	Multiunit 1	Supplementary	6/8/2000	MW-18-20000608	--	--	--	--	--	--	--	--	--	--	--	--	--	0.20	--	--	--	--	--	--	--	--	--	--
MW-18	Multiunit 1	Supplementary	11/28/2000	MW-18-20001128	--	--	--	--	--	--	--	--	--	--	--	--	--	0.2462	--	--	--	--	--	--	--	--	--	--
MW-18	Multiunit 1	Supplementary	8/21/2001	MW-18-20010821	--	--	--	--	--	--	--	--	--	--	--	--	--	0.23	--	--	--	--	--	--	--	--	--	--
MW-18	Multiunit 1	Supplementary	12/5/2001	MW-18-20011205	--	--	--	--	--	--	--	--	--	--	--	--	--	0.30	--	--	--	--	--	--	--	--	--	--
MW-18	Multiunit 1	Supplementary	6/12/2002	MW-18-20020612	--	--	--	--	--	--	--	--	--	--	--	--	--	0.40	--	--	--	--	--	--	--	--	--	--
MW-18	Multiunit 1	Supplementary	12/18/2002	MW-18-20021218	--	--	--	--	--	--	--	--	--	--	--	--	--	0.20	--	--	--	--	--	--	--	--	--	--
MW-18	Multiunit 1	Supplementary	6/3/2003	MW-18-20030603	--	--	--	--	--	0.010	--	--	--	--	--	--	--	0.30	--	--	--	--	--	--	0.071	0.067	--	--

Table F-5
Groundwater Sampling Results for the Multiunit 1 Monitoring Wells - Appendix IV Constituents

					Appendix IV Constituents																									
				Constituent:	Antimony	Arsenic	Arsenic	Barium	Barium	Beryllium	Beryllium	Cadmium	Cadmium	Chromium	Chromium	Cobalt	Cobalt	Fluoride	Lead	Lead	Lithium	Mercury	Mercury	Molybdenum	Selenium	Selenium	Thallium	Total Radium
				Filtered:	N	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	N	Y	N	N	Y	N	N	Y	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L
				Multiunit 1 BTV	*0.01*	*0.0086*	*0.0086*	*0.042*	*0.042*	*0.001*	*0.001*	*0.002*	*0.002*	*0.02*	*0.02*	*0.01*	*0.01*	*5*	*0.01*	*0.01*	*1.8*	*0.0002*	*0.0002*	*0.12*	*0.092*	--	*0.017*	*4.43*
				Multiunit 1 GWPS	*0.01*	*0.01*	*0.01*	*2*	*2*	*0.004*	*0.004*	*0.005*	*0.005*	*0.1*	*0.1*	*0.01*	*0.01*	*5*	*0.015*	*0.015*	*1.8*	*0.002*	*0.002*	*0.1*	*0.092*	--	*0.017*	*5*
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**																										
MW-18	Multiunit 1	Supplementary	9/24/2003	MW-18-20030924	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.36**	--	--	--	--	--	--	--	--	--	--
MW-18	Multiunit 1	Supplementary	6/16/2004	MW-18-20040616	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.30**	--	--	--	--	--	--	--	--	--	--
MW-18	Multiunit 1	Supplementary	11/9/2004	MW-18-20041109	--	<0.0005	--	**0.0124**	--	--	--	<0.00005	--	--	--	**0.0060**	--	**0.30**	**0.00050**	--	--	--	--	**0.00122**	**0.021**	--	<0.00005	--
MW-18	Multiunit 1	Supplementary	5/12/2005	MW-18-20050512	--	**0.0033**	--	**0.0115**	--	<0.0005	--	<0.001	--	**0.00188**	--	**0.0020**	--	**0.30**	<0.0001	--	--	<0.0002	--	--	**0.049**	--	**0.00014**	--
MW-18	Multiunit 1	Supplementary	11/1/2005	MW-18-20051101	--	**0.010**	--	**0.017**	--	--	--	--	--	**0.0030**	--	--	--	**0.30**	--	--	--	--	--	--	**0.032**	--	--	--
MW-18	Multiunit 1	Supplementary	5/15/2006	MW-18-20060515	--	0.037	--	**0.011**	--	<0.001	--	<0.006	--	<0.003	--	<0.004	--	**0.213**	<0.12	--	--	--	--	<0.006	<0.038	--	0.023	--
MW-18	Multiunit 1	Supplementary	10/13/2006	MW-18-20061013	--	<0.024	--	**0.028**	--	<0.003	--	<0.002	--	<0.008	--	<0.002	--	**0.21**	<0.009	--	--	--	--	<0.012	<0.029	--	<0.025	--
MW-18	Multiunit 1	Supplementary	4/18/2007	MW-18-20070418	<0.028	<0.024	--	**0.017**	--	<0.003	--	<0.002	--	<0.002	--	<0.008	--	**0.629**	<0.009	--	--	<0.0022	--	<0.12	**0.051**	--	<0.025	--
MW-18	Multiunit 1	Supplementary	11/20/2007	MW-18-20071120	**0.0010**	**0.0038**	--	**0.0127**	--	<0.005	--	<0.0005	--	**0.014**	--	**0.00138**	--	**0.20**	<0.001	--	--	--	--	**0.0012**	**0.042**	--	<0.00005	--
MW-18	Multiunit 1	Supplementary	4/30/2008	MW-18-20080430	<0.0005	**0.0035**	--	**0.0117**	--	<0.0005	--	<0.00005	--	**0.0012**	--	**0.00247**	--	**0.20**	**0.00080**	--	--	--	--	<0.0005	**0.027**	--	<0.00005	--
MW-18	Multiunit 1	Supplementary	12/3/2009	MW-18-20091203	<0.0005	**0.0051**	--	**0.0106**	--	<0.0005	--	**0.00013**	--	**0.015**	--	**0.00247**	--	**0.30**	<0.0001	--	--	<0.0002	--	**0.0012**	**0.057**	--	**0.00012**	--
MW-18	Multiunit 1	Supplementary	9/27/2012	MW-18-092712-01	--	<0.0010	--	--	--	--	--	--	--	<0.0010	--	--	--	<4.0	--	--	--	--	--	--	**0.0033**	--	--	--
MW-18	Multiunit 1	Supplementary	11/19/2013	FC-18-111913	--	**0.00057**	--	--	--	--	--	--	--	<0.00050	--	--	--	<4.0	--	--	--	--	--	--	**0.0018**	--	--	--
MW-18	Multiunit 1	Supplementary	3/12/2014	FC-18-031214	--	**0.00058**	--	--	--	--	--	--	--	**0.00059**	--	--	--	<2.0	--	--	--	--	--	--	**0.0020**	--	--	--
MW-18	Multiunit 1	Supplementary	9/10/2014	FCPP-18-091014	--	<0.00040	--	--	--	--	--	--	--	<0.0010	--	--	--	<0.80	--	--	--	--	--	--	<0.0012	--	--	--
MW-18	Multiunit 1	Supplementary	3/18/2015	FCPP-18-031815	--	<0.0010	--	--	--	--	--	--	--	<0.0025	--	--	--	<0.80	--	--	--	--	--	--	<0.0030	--	--	--
MW-18	Multiunit 1	Supplementary	6/30/2015	MW-18	--	<0.012	--	--	--	--	--	--	--	<0.012	--	--	--	<4.0	--	--	--	--	--	--	<0.012	--	--	--
MW-18	Multiunit 1	Supplementary	8/25/2015	FCPP-18-082515	--	<0.030	--	--	--	--	--	--	--	<0.030	--	--	--	<2.0	--	--	--	--	--	--	<0.030	--	--	--
MW-18	Multiunit 1	Supplementary	11/6/2015	FC MW-18-(061115)	--	<0.0010	--	--	--	--	--	<0.00050	--	<0.0025	--	--	--	<4.0	--	--	--	--	--	--	<0.0030	--	--	--
MW-18	Multiunit 1	Supplementary	6/17/2016	FC-Seep-MW18-616	--	<0.005	--	--	--	--	--	--	--	<0.005	--	--	--	<0.80	--	--	--	<0.00020	--	--	--	--	--	--
MW-18	Multiunit 1	Supplementary	9/15/2016	FC-Seep-MW18-916	--	**0.0015**	--	--	--	--	--	--	--	**0.0038**	--	--	--	<0.40	--	--	--	<0.00020	--	--	--	--	--	--
MW-18	Multiunit 1	Supplementary	6/22/2020	FC-CCR-MW18-0620	--	--	--	--	--	--	--	--	--	--	--	0.011	--	--	--	--	--	--	--	**0.0022**	--	--	--	--
MW-18	Multiunit 1	Supplementary	11/7/2020	FC-CCR-MW18-1120	--	--	--	--	--	--	--	--	--	--	--	0.076	--	--	--	--	--	--	--	**0.0024**	--	--	--	--
MW-18	Multiunit 1	Supplementary	4/25/2021	FC-CCR-MW18-0421	--	--	--	--	--	<0.001	--	--	--	--	--	0.012	--	<0.8	--	--	2.2	--	--	**0.0023**	--	--	--	--
MW-18	Multiunit 1	Supplementary	11/16/2021	FC-CCR-MW18-1121	--	--	--	--	--	<0.001	--	--	--	--	--	0.012	--	<0.8	--	--	2.4	--	--	**0.0017**	--	--	--	--
MW-18	Multiunit 1	Supplementary	2/8/2022	FC-CCR-MW18-0222	--	--	--	--	--	<0.001	--	--	--	--	--	**0.010**	--	**0.58**	--	--	2.3	--	--	**0.0014**	--	--	--	--
MW-18	Multiunit 1	Supplementary	5/25/2022	FC-CCR-MW18-0522	--	--	--	--	--	<0.001	--	--	--	--	--	**0.0098**	--	<0.8	--	--	2.3	--	--	**0.0017**	--	--	--	--
MW-18	Multiunit 1	Supplementary	8/12/2022	FC-CCR-MW18-0822	--	--	--	--	--	<0.001	--	--	--	--	--	**0.0094**	--	<0.8	--	--	2.3	--	--	**0.0016**	--	--	--	--
MW-18	Multiunit 1	Supplementary	11/14/2022	FC-CCR-MW18-1122	--	--	--	--	--	<0.001	--	--	--	--	--	**0.0095**	--	<4	--	--	2.4	--	--	**0.0015**	--	--	--	--
MW-18	Multiunit 1	Supplementary	5/4/2023	FC-CCR-MW18-0523	--	--	--	--	--	<0.001	--	--	--	--	--	**0.0094**	--	<80	--	--	2.5	--	--	**0.0023**	--	--	--	--
MW-18	Multiunit 1	Supplementary	11/14/2023	FC-CCR-MW18-1124	--	--	--	--	--	<0.005	--	--	--	--	--	**0.0098**	--	<0.8	--	--	2.5	--	--	<0.005	--	--	--	--
MW-23R	Multiunit 1	Supplementary	3/11/2014	FC-23RMS-031114	--	**0.00065**	--	--	--	--	--	--	--	**0.0038**	--	--	--	--	--	--	--	--	--	--	**0.0017**	--	--	--
MW-23R	Multiunit 1	Supplementary	3/11/2014	FC-23R-031114	--	**0.00079**	--	--	--	--	--	--	--	**0.0035**	--	--	--	<0.80	--	--	--	--	--	--	**0.0015**	--	--	--
MW-23R	Multiunit 1	Supplementary	9/11/2014	FCPP-23R-91114	--	<0.0040	--	--	--	--	--	--	--	**0.015**	--	--	--	<0.40	--	--	--	--	--	--	<0.012	--	--	--
MW-23R	Multiunit 1	Supplementary	12/8/2014	FCPP-MW23R-12914	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-23R	Multiunit 1	Supplementary	3/18/2015	FCPP-23R-031815	--	<0.0050	--	--	--	--	--	--	--	<0.013	--	--	--	<0.40	--	--	--	--	--	--	<0.015	--	--	--
MW-23R	Multiunit 1	Supplementary	6/30/2015	MW-23R	--	<0.012	--	--	--	--	--	--	--	<0.012	--	--	--	<2.0	--	--	--	--	--	--	<0.012	--	--	--
MW-23R	Multiunit 1	Supplementary	11/3/2015	FC MW-23R-(031115)	--	<0.0010	--	--	--	--	--	<0.00050	--	<0.0025	--	--	--	--	--	--	--	--	--	--	<0.0030	--	--	--
MW-23R	Multiunit 1	Supplementary	11/13/2015	FC MW-23R-(131115)	--	**0.0020**	--	--	--	--	--	--	--	**0.0047**	--	--	--	<2.0	--	--	--	--	--	--	<0.0012	--	--	--
MW-23R	Multiunit 1	Supplementary	6/21/2016	FC-SEEPS-MW-23R-062116	--	<0.005	--	--	--	--	--	--	--	<0.005	--	--	--	<0.40	--	--	--	<0.00020	--	--	--	--	--	--
MW-23R	Multiunit 1	Supplementary	9/15/2016	FC-Seep-MW23R-916	--	<0.0010	--	--	--	--	--	--	--	<0.0025	--	--	--	**0.45**	--	--	--	<0.00020	--	--	--	--	--	--
MW-23R	Multiunit 1	Supplementary	6/21/2020	FC-CCR-MW23R-0620	--	--	--	--	--	--	--	--	--	--	--	<0.001	--	--	--	--	--	--	--	**0.019**	--	--	--	--
MW-23R	Multiunit 1	Supplementary	11/7/2020	FC-CCR-MW23R-1120	--	--	--	--	--	--	--	--	--	--	--	**0.00068**	--	--	--	--	--	--	--	**0.0075**	--	--	--	--
MW-23R	Multiunit 1	Supplementary	4/25/2021	FC-CCR-MW23R-0421	--	--	--	--	--	<0.001	--	--	--	--	--	**0.00092 J**	--	**0.27 J**	--	--	**0.91**	--	--	**0.0052**	--	--	--	--
MW-23R	Multiunit 1	Supplementary	11/14/2021	FC-CCR-MW23R	--	--	--	--	--	<0.001	--	--	--	--	--	**0.00068 J**	--	**0.28 J**	--	--	**1.1**	--	--	**0.0035**	--	--	--	--
MW-23R	Multiunit 1	Supplementary	2/9/2022	FC-CCR-MW23R-0222	--	--	--	--	--	<0.001	--	--	--	--	--	**0.0012**	--	**0.30**	--	--	**1.0**	--	--	**0.0039**	--	--	--	--
MW-23R	Multiunit 1	Supplementary	5/25/2022	FC-CCR-MW23R-0522	--	--	--	--	--	<0.001	--	--	--	--	--	<0.001	--	<0.8	--	--	**1.0**	--	--	**0.0036**	--	--	--	--
MW-23R	Multiunit 1	Supplementary	8/12/2022	FC-CCR-MW23R-0822	--	--	--	--	--	<0.001	--	--	--	--	--	**0.00056**	--	<0.8	--	--	**1.1**	--	--	**0.003**	--	--	--	--
MW-23R	Multiunit 1	Supplementary	11/11/2022	FC-CCR-MW23R-1122	--	--	--	--	--	<0.001	--	--	--	--	--	**0.00059**	--	<4	--	--	**1.1**	--	--	**0.0033**	--	--	--	--
MW-23R	Multiunit 1	Supplementary	5/3/2023	FC-CCR-MW23R-0523	--	--	--	--	--	<0.001	--	--	--	--	--	<0.001	--	<80	--	--	**1.2**	--	--	**0.0035**	--	--	--	--
MW-23R	Multiunit 1	Supplementary	11/14/2023	FC-CCR-MW23R-1124	--	--	--	--	--	<0.005	--	--	--	--	--	<0.005	--	<0.8	--	--	**1.3**	--	--	<0.005	--	--	--	--
MW-24	Multiunit 1	Supplementary	3/19/2015	FCPP-24-031915	--	**0.0011**	--	--	--	--	--	--	--	<0.0025	--	--	--	<0.80	--	--	--	--	--	--	<0.0030	--	--	--
MW-24	Multiunit 1	Supplementary	6/29/2015	MW-24	--	**0.0036**	--	--	--	--	--	--	--	<0.0030	--	--	--	<4.0	--	--	--	--	--	--	**0.013**	--	--	--
MW-24	Multiunit 1	Supplementary	8/26/2015	FCPP-24-082615	--	<0.0060	--	--	--	--	--	--	--	<0.0060	--	--	--	<4.0	--	--	--	--	--	--	**0.0095**	--	--	--
MW-24	Multiunit 1	Supplementary	6/20/2016	FC-Seep-MW24-616	--	<0.005	--	--	--	--	--	--	--	<0.005	--	--	--	<0.80	--	--	--	<0.00020	--	--	--	--	--	--
MW-24	Multiunit 1	Supplementary	9/15/2016	FC-Seep-MW24-916	--	**0.0010**	--	--	--	--	--	--	--	<0.0025	--	--	--	<2.0	--	--	--	<0.00020	--	--	--	--	--	--
MW-24	Multiunit 1	Supplementary	4/26/2021	FC-CCR-MW24-0421	--	--	--	--	--	<0.001	--	--	--	--	--	**0.0021**	--	**0.66 J**	--	--	**1.5**	--	--	0.15	--	--	--	--
MW-24	Multiunit 1	Supplementary	11/16/2021	FC-CCR-MW24-1121	--	--	--	--	--	<0.001	--	--	--	--	--	**0.0042**	--	**0.21 J**	--	--	**1.5**	--	--	**0.034**	--	--	--	--
MW-24	Multiunit 1	Supplementary	2/8/2022	FC-CCR-MW24-0222	--	--	--	--	--	<0.001	--	--	--	--	--	**0.0026**	--	**0.23**	--	--	**1.5**	--	--	**0.029**	--	--	--	--
MW-24	Multiunit 1	Supplementary	5/25/2022	FC-CCR-MW24-0522	--	--	--	--	--	<0.001	--	--	--	--	--	**0.0023**	--	<0.8	--	--	**1.5**	--	--	**0.028**	--	--	--	--
MW-24	Multiunit 1	Supplementary	8/12/2022	FC-CCR-MW24-0822	--	--	--	--	--	<0.001	--	--	--	--	--	**0.0029**	--	<0.8	--	--	**1.5**	--	--	**0.026**	--	--	--	--
MW-24	Multiunit 1	Supplementary	11/14/2022	FC-CCR-MW24-1122	--	--	--	--	--	<0.001	--	--	--	--	--	**0.0035**	--	<2	--	--	**1.5**	--	--	**0.030**	--	--	--	--
MW-24	Multiunit 1	Supplementary	5/4/2023	FC-CCR-MW24-0523	--	--	--	--	--	<0.001	--	--	--	--	--	**0.0027**	--	<4	--	--	**1.5**	--	--	**0.030**	--	--	--	--
MW-24	Multiunit 1	Supplementary	11/14/2023	FC-CCR-MW24-1124	--	--	--	--	--	<0.005	--	--	--	--	--	<0.005	--	<0.8	--	--	**1.6**	--	--	**0.029**	--	--	--	--
MW-34	Multiunit 1	Supplementary	6/23/2020	FC-CCR-MW34-0620	<0.001	**0.00065**	--	**0.018**	--	--	--	**0.00029**	--	**0.0022**	--	0.029	--	<0.8	<0.0005	--	--	--	--	**0.0084**	**0.00086**	--	**0.00022**	**0.6**
MW-34	Multiunit 1	Supplementary	11/16/2023	FC-CCR-MW34-1124	--	--	--	--	--	--	--	--	--	--	--	<0.005	--	<0.8	--	--	--	--	--	**0.064**	--	--	--	--
MW-36R	Multiunit 1	Supplementary	9/9/2014	FCPP-36R-090914	--	**0.00022**	--	--	--	--	--	--	--	<0.00050	--	--	--	<0.40	--	--	--	--	--	--	**0.00069**	--	--	--
MW-36R	Multiunit 1	Supplementary	3/19/2015	FCPP-36R-031915	--	<0.0010	--	--	--	--	--	--	--	<0.0025	--	--	--	<0.40	--	--	--	--	--	--	<0.0030	--	--	--
MW-36R	Multiunit 1	Supplementary	6/30/2015	MW-36R	--	<0.0030	--	--	--	--	--	--	--	<0.0030	--	--	--	<0.80	--	--	--	--	--	--	**0.0047**	--	--	--
MW-36R	Multiunit 1	Supplementary	8/25/2015	FCPP-36R-082515	--	<0.0030	--	--	--	--	--	--	--	<0.0030	--	--	--	<0.80	--	--	--	--	--	--	**0.0082**	--	--	--

Table F-5
Groundwater Sampling Results for the Multiunit 1 Monitoring Wells - Appendix IV Constituents

Well ID	CCR Unit	Well Designation	Sample Date	Sample ID	Antimony	Arsenic	Arsenic	Barium	Barium	Beryllium	Beryllium	Cadmium	Cadmium	Chromium	Chromium	Cobalt	Cobalt	Fluoride	Lead	Lead	Lithium	Mercury	Mercury	Molybdenum	Selenium	Selenium	Thallium	Total Radium
				Filtered:	N	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	N	Y	N	N	Y	N	N	Y	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L
				Multiunit 1 BTV	*0.01*	*0.0086*	*0.0086*	*0.042*	*0.042*	*0.001*	*0.001*	*0.002*	*0.002*	*0.02*	*0.02*	*0.01*	*0.01*	*5*	*0.01*	*0.01*	*1.8*	*0.0002*	*0.0002*	*0.12*	*0.092*	--	*0.017*	*4.43*
				Multiunit 1 GWPS	*0.01*	*0.01*	*0.01*	*2*	*2*	*0.004*	*0.004*	*0.005*	*0.005*	*0.1*	*0.1*	*0.01*	*0.01*	*5*	*0.015*	*0.015*	*1.8*	*0.002*	*0.002*	*0.1*	*0.092*	--	*0.017*	*5*
MW-36R	Multiunit 1	Supplementary	11/3/2015	FC MW-36R-(031115)	--	<0.0010	--	--	--	--	--	0.0031	--	<0.0025	--	--	--	--	--	--	--	--	--	--	<0.0030	--	--	--
MW-36R	Multiunit 1	Supplementary	11/13/2015	FC MW-36R-(131115)	--	<0.00040	--	--	--	--	--	--	--	<0.0010	--	--	--	<2.0	--	--	--	--	--	--	<0.0012	--	--	--
MW-36R	Multiunit 1	Supplementary	6/17/2016	FC-Seep-MW36R-616	--	<0.005	--	--	--	--	--	--	--	<0.005	--	--	--	<0.40	--	--	--	<0.00020	--	--	--	--	--	--
MW-36R	Multiunit 1	Supplementary	9/15/2016	FC-Seep-MW36R-916	--	<0.0010	--	--	--	--	--	--	--	<0.0025	--	--	--	<0.40	--	--	--	<0.00020	--	--	--	--	--	--
MW-36R	Multiunit 1	Supplementary	6/21/2020	FC-CCR-MW36R-0620	--	--	--	--	--	--	--	--	--	--	--	0.26	--	--	--	--	--	--	--	0.0013	--	--	--	--
MW-36R	Multiunit 1	Supplementary	11/7/2020	FC-CCR-MW36R-1120	--	--	--	--	--	--	--	--	--	--	--	0.26	--	--	--	--	--	--	--	0.0010	--	--	--	--
MW-36R	Multiunit 1	Supplementary	11/7/2020	*DUP* FC-CCR-FD04-1120	--	--	--	--	--	--	--	--	--	--	--	0.29	--	--	--	--	--	--	--	0.0018	--	--	--	--
MW-36R	Multiunit 1	Supplementary	4/25/2021	FC-CCR-MW36R-0421	--	--	--	--	--	<0.001	--	--	--	--	--	0.26	--	0.29 J	--	--	0.61	--	--	0.0012 J	--	--	--	--
MW-36R	Multiunit 1	Supplementary	11/14/2021	FC-CCR-MW36R	--	--	--	--	--	--	--	--	--	--	--	0.26	--	--	--	--	--	--	--	0.00056 J	--	--	--	--
MW-36R	Multiunit 1	Supplementary	2/9/2022	FC-CCR-MW36R-0222	--	--	--	--	--	<0.001	--	--	--	--	--	0.00059	--	0.32	--	--	1.8	--	--	0.0049	--	--	--	--
MW-36R	Multiunit 1	Supplementary	5/25/2022	FC-CCR-MW36R-0522	--	--	--	--	--	<0.001	--	--	--	--	--	0.21	--	<0.8	--	--	0.62	--	--	<0.001	--	--	--	--
MW-36R	Multiunit 1	Supplementary	8/11/2022	FC-CCR-MW36R-0822	--	--	--	--	--	<0.001	--	--	--	--	--	0.21	--	<0.8	--	--	0.63	--	--	0.00074	--	--	--	--
MW-36R	Multiunit 1	Supplementary	11/11/2022	FC-CCR-MW36R-1122	--	--	--	--	--	<0.001	--	--	--	--	--	0.23	--	<2	--	--	0.66	--	--	0.00084	--	--	--	--
MW-36R	Multiunit 1	Supplementary	5/4/2023	FC-CCR-MW36R-0523	--	--	--	--	--	<0.001	--	--	--	--	--	0.21	--	<8	--	--	0.69	--	--	<0.002	--	--	--	--
MW-36R	Multiunit 1	Supplementary	11/14/2023	FC-CCR-MW36R-1124	--	--	--	--	--	<0.005	--	--	--	--	--	0.22	--	<0.8	--	--	0.70	--	--	<0.005	--	--	--	--
MW-38R	Multiunit 1	Supplementary	3/12/2014	FC-38R-031214	--	0.0016	--	--	--	--	--	--	--	0.0015	--	--	--	<0.80	--	--	--	--	--	--	0.0023	--	--	--
MW-38R	Multiunit 1	Supplementary	9/11/2014	FCPP-38R-91114	--	<0.0040	--	--	--	--	--	--	--	<0.010	--	--	--	<0.80	--	--	--	--	--	--	<0.012	--	--	--
MW-38R	Multiunit 1	Supplementary	3/19/2015	FCPP-38R-031915	--	0.0010	--	--	--	--	--	--	--	<0.0025	--	--	--	<0.80	--	--	--	--	--	--	0.0044	--	--	--
MW-38R	Multiunit 1	Supplementary	6/30/2015	MW-38R	--	<0.012	--	--	--	--	--	--	--	<0.012	--	--	--	<2.0	--	--	--	--	--	--	<0.012	--	--	--
MW-38R	Multiunit 1	Supplementary	8/29/2015	FCPP-38R-082915	--	<0.0030	--	--	--	--	--	<0.0010	--	<0.0030	--	--	--	<2.0	--	--	--	--	--	--	0.015	--	--	--
MW-38R	Multiunit 1	Supplementary	11/10/2015	FC MW-38R-(101115)	--	0.0020	--	--	--	--	--	<0.00050	--	0.0071	--	--	--	<2.0	--	--	--	--	--	--	0.011	--	--	--
MW-38R	Multiunit 1	Supplementary	6/21/2016	FC-SEEPS-MW-38R-DUP 06211	--	<0.005	--	--	--	--	--	--	--	<0.005	--	--	--	<0.40	--	--	--	<0.00020	--	--	--	--	--	--
MW-38R	Multiunit 1	Supplementary	6/21/2016	FC-SEEPS-MW-38R-062116	--	<0.005	--	--	--	--	--	--	--	<0.005	--	--	--	<0.40	--	--	--	<0.00020	--	--	--	--	--	--
MW-38R	Multiunit 1	Supplementary	9/15/2016	FC-Seep-MW38R-916	--	<0.0010	--	--	--	--	--	--	--	<0.0025	--	--	--	<0.40	--	--	--	<0.00020	--	--	--	--	--	--
MW-38R	Multiunit 1	Supplementary	9/15/2016	FC-Seep-MW106-916	--	<0.0010	--	--	--	--	--	--	--	<0.0025	--	--	--	<0.40	--	--	--	<0.00020	--	--	--	--	--	--
MW-38R	Multiunit 1	Supplementary	3/19/2019	FC-CCR-MW38R-031919	<0.0010	0.00051	--	0.018	--	<0.0010	--	0.00011	--	<0.0010	--	0.17	--	<0.40	0.00053	--	0.45	<0.00020	--	0.016	0.0037	--	<0.00010	--
MW-38R	Multiunit 1	Supplementary	3/19/2019	FC-CCR-MW38R-031919	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.8
MW-38R	Multiunit 1	Supplementary	5/14/2019	FC-CCR-MW38R-51419	--	0.00060	--	0.017	--	--	--	0.00013	--	--	--	0.16	--	<0.80	0.00085	--	0.50	--	--	0.083	0.0033	--	<0.00010	--
MW-38R	Multiunit 1	Supplementary	5/14/2019	FC-CCR-MW38R-51419	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.7
MW-38R	Multiunit 1	Supplementary	11/19/2019	FC-CCR-MW38R-111919	<0.0010	<0.00050	--	0.020	--	<0.0010	--	0.00013	--	0.0011	--	0.23	--	<0.80	<0.00050	--	0.37	<0.00020	--	0.0050	0.0010	--	<0.00010	--
MW-38R	Multiunit 1	Supplementary	11/19/2019	*DUP* FC-CCR-FD01-111919	<0.0010	0.00064	--	0.019	--	<0.0010	--	0.00015	--	0.0011	--	0.23	--	<0.80	<0.00050	--	0.37	<0.00020	--	0.0049	0.00080	--	<0.00010	--
MW-38R	Multiunit 1	Supplementary	6/22/2020	FC-CCR-MW38R-0620	<0.002	<0.001	--	0.014	--	--	--	<0.0002	--	<0.002	--	0.24	--	<0.8	<0.001	--	0.49	--	--	0.0057	<0.001	--	<0.0002	0.4
MW-38R	Multiunit 1	Supplementary	6/22/2020	*DUP* FC-CCR-FD05-0620	<0.004	<0.002	--	0.016	--	--	--	<0.0004	--	<0.004	--	0.28	--	<0.8	<0.002	--	0.49	--	--	0.0063	<0.002	--	<0.0004	1.1
MW-38R	Multiunit 1	Supplementary	11/6/2020	FC-CCR-MW38R-1120	<0.004	0.0013	--	0.014	--	<0.001	--	0.00032	--	0.0022	--	0.28	--	0.36 J	<0.002	--	0.41	--	--	0.0073	0.0026	--	<0.0004	<0.8
MW-38R	Multiunit 1	Supplementary	4/27/2021	FC-CCR-MW384R-0421	<0.004	<0.002	--	0.013	--	<0.001	--	0.00013 J	--	<0.004	--	0.25	--	0.33 J	0.0020	--	0.39	--	--	0.0065	0.0016 J	--	<0.0004	<0.8
MW-38R	Multiunit 1	Supplementary	11/16/2021	FC-CCR-MW38R-1121	<0.002 U	0.00072 J	--	0.013	--	<0.001	--	<0.0002	--	0.0012 J	--	0.25	--	0.4 J	<0.0005	--	0.40	--	--	0.0060	0.0012 J	--	0.000049 J	0.4
MW-38R	Multiunit 1	Supplementary	2/9/2022	FC-CCR-MW38R-0222	--	--	--	--	--	<0.001	--	--	--	--	--	0.22	--	0.45	--	--	0.42	--	--	0.0048	--	--	--	--
MW-38R	Multiunit 1	Supplementary	5/25/2022	FC-CCR-MW38R-0522	<0.002	<0.001	--	0.016	--	<0.001	--	<0.0002	--	<0.002	--	0.26	--	<0.8	<0.001	--	0.39	--	--	0.019	0.0027	--	<0.0002	<0.6
MW-38R	Multiunit 1	Supplementary	8/11/2022	FC-CCR-MW38R-0822	--	--	--	--	--	<0.001	--	--	--	--	--	0.20	--	<0.8	--	--	0.44	--	--	0.028	--	--	--	--
MW-38R	Multiunit 1	Supplementary	11/15/2022	FC-CCR-MW38R-1122	<0.001	<0.0005	--	0.014	--	<0.001	--	<0.0001	--	<0.001	--	0.17	--	<2	<0.0005	--	0.55	--	--	0.0044	0.011	--	<0.0001	<0.6
MW-38R	Multiunit 1	Supplementary	5/5/2023	FC-CCR-MW38R-0523	<0.002	<0.005	--	0.014	--	<0.001	--	<0.001	--	<0.003	--	0.17	--	<8	<0.001	--	0.60	--	--	0.0037	0.0096	--	<0.001	1.9
MW-38R	Multiunit 1	Supplementary	11/14/2023	FC-CCR-MW38R-1124	<0.01	0.0078	--	0.018	--	<0.005	--	<0.001	--	<0.01	--	0.062	--	<0.8	<0.005	--	1.3	--	--	<0.005	0.058	--	<0.001	1.2
MW-40R	Multiunit 1	Downgradient Boundary	2/2/2017	FC-CCR-MW40R-117	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.40	--	--	--	--	--	--	--	--	--	--
MW-40R	Multiunit 1	Downgradient Boundary	2/2/2017	FC-CCR-MW40R-117	<0.0020	<0.0010	--	0.023	--	<0.0010	--	0.00058	--	0.028	--	0.034	--	<0.40	<0.00050	--	1.1	<0.00020	--	0.026	0.0018	--	0.00021	--
MW-40R	Multiunit 1	Downgradient Boundary	2/2/2017	FC-CCR-MW40R-117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.6
MW-40R	Multiunit 1	Downgradient Boundary	4/26/2021	FC-CCR-MW40R-0421	<0.001 U	0.0030		0.019		<0.001		<0.0001		0.012		0.012		0.28 J	<0.0005		1.9	<0.0002		0.062	0.0016		<0.0001 U	2.2
MW-46	Multiunit 1	Supplementary	6/30/2015	MW-46	--	<0.012	--	--	--	--	--	--	--	<0.012	--	--	--	<4.0	--	--	--	--	--	--	0.012	--	--	--
MW-46	Multiunit 1	Supplementary	11/7/2015	FC MW-46-(07115)	--	0.0062	--	--	--	--	--	<0.00050	--	0.048	--	--	--	<4.0	--	--	--	--	--	--	<0.0030	--	--	--
MW-52	Multiunit 1	Supplementary	3/17/2015	FCPP-MSD02-031715	--	<0.0010	--	--	--	--	--	--	--	<0.0020	--	--	--	<0.40	--	--	--	--	--	--	0.0029	--	--	--
MW-52	Multiunit 1	Supplementary	3/17/2015	FCPP-52-031715	--	0.00030	--	--	--	--	--	--	--	<0.00050	--	--	--	<0.40	--	--	--	--	--	--	0.00074	--	--	--
MW-52	Multiunit 1	Supplementary	8/26/2015	FCPP-52-082615	--	<0.0060	--	--	--	--	--	--	--	<0.0060	--	--	--	<0.80	--	--	--	--	--	--	<0.0060	--	--	--
MW-52	Multiunit 1	Supplementary	11/3/2015	FC MW-52-(031115)	<0.0050	<0.0010	--	0.018	--	<0.0010	--	<0.00050	--	<0.0025	--	0.068	--	<0.80	0.00070	--	<5.0	<0.00020	--	0.0040	<0.0030	--	<0.00050	--
MW-52	Multiunit 1	Supplementary	6/18/2016	FC-Seep-MW52-616	--	<0.005	--	--	--	--	--	--	--	<0.005	--	--	--	<0.40	--	--	--	<0.00020	--	--	--	--	--	--
MW-52	Multiunit 1	Supplementary	9/16/2016	FC-Seep-MW52-916	--	<0.0020	--	--	--	--	--	--	--	<0.0050	--	--	--	<0.40	--	--	--	<0.00020	--	--	--	--	--	--
MW-52	Multiunit 1	Supplementary	6/20/2020	FC-CCR-MW52-0620	--	--	--	--	--	--	--	--	--	--	--	0.12	--	--	--	--	--	--	--	0.0035	--	--	--	--
MW-52	Multiunit 1	Supplementary	11/8/2020	FC-CCR-MW52-1120	--	--	--	--	--	--	--	--	--	--	--	0.11	--	--	--	--	--	--	--	0.0024	--	--	--	--
MW-52	Multiunit 1	Supplementary	4/23/2021	FC-CCR-MW52-0421	--	--	--	--	--	--	--	--	--	--	--	0.089	--	--	--	--	--	--	--	0.0026	--	--	--	--
MW-52	Multiunit 1	Supplementary	11/13/2021	FC-CCR-MW52-1121	--	--	--	--	--	<0.001	--	--	--	--	--	0.12	--	--	--	--	0.65	--	--	0.0031	--	--	--	--
MW-52	Multiunit 1	Supplementary	11/13/2021	FC-CCR-FD03-1121	--	--	--	--	--	<0.001	--	--	--	--	--	0.12	--	--	--	--	0.65	--	--	0.0031	--	--	--	--
MW-52	Multiunit 1	Supplementary	5/22/2022	FC-CCR-MW52-0522	--	--	--	--	--	--	--	--	--	--	--	0.088	--	--	--	--	--	--	--	0.0047	--	--	--	--
MW-52	Multiunit 1	Supplementary	5/22/2022	*DUP* FC-CCR-FD03-0522	--	--	--	--	--	--	--	--	--	--	--	0.092	--	--	--	--	--	--	--	0.0053	--	--	--	--
MW-52	Multiunit 1	Supplementary	11/10/2022	FC-CCR-MW52-1122	--	--	--	--	--	--	--	--	--	--	--	0.13	--	--	--	--	--	--	--	0.0030	--	--	--	--
MW-52	Multiunit 1	Supplementary	11/10/2022	*DUP* FC-CCR-FD03-1122	--	--	--	--	--	--	--	--	--	--	--	0.13	--	--	--	--	--	--	--	0.0028	--	--	--	--
MW-52	Multiunit 1	Supplementary	5/2/2023	FC-CCR-MW52-0523	--	--	--	--	--	--	--	--	--	--	--	0.11	--	--	--	--	--	--	--	0.0021	--	--	--	--
MW-52	Multiunit 1	Supplementary	5/2/2023	*DUP* FC-CCR-FD03-0523	--	--	--	--	--	--	--	--	--	--	--	0.096	--	--	--	--	--	--	--	0.0027	--	--	--	--
MW-52	Multiunit 1	Supplementary	11/08/2023	FC-CCR-MW52-1124	--	--	--	--	--	--	--	--	--	--	--	0.10	--	--	--	--	--	--	--	0.0022	--	--	--	--
MW-52	Multiunit 1	Supplementary	11/08/2023	*DUP* FC-CCR-FD03-1124	--	--	--	--	--	--	--	--	--	--	--	0.099	--	--	--	--	--	--	--	0.0027	--	--	--	--
MW-54	Multiunit 1	Supplementary	9/10/2014	FCPP-54-091014	--	0.0078	--	--	--	--	--	--	--	0.0082	--	--	--	<4.0	--	--	--	--	--	--	0.0068	--	--	--
MW-54	Multiunit 1	Supplementary	3/17/2015	FCPP-54-031715	--	0.0041	--	--	--	--	--	--	--	0.0032	--	--	--	<4.0	--	--	--	--	--	--	0.0041	--	--	--
MW-54	Multiunit 1	Supplementary	8/26/2015	FCPP-54-082615	--	<0.0060	--	--	--	--	--	--	--	<0.0060	--	--	--	<0.80	--	--	--	--	--	--	0.018	--	--	--

Table F-5
Groundwater Sampling Results for the Multiunit 1 Monitoring Wells - Appendix IV Constituents

					Appendix IV Constituents																							
				Constituent:	Antimony	Arsenic	Arsenic	Barium	Barium	Beryllium	Beryllium	Cadmium	Cadmium	Chromium	Chromium	Cobalt	Cobalt	Fluoride	Lead	Lead	Lithium	Mercury	Mercury	Molybdenum	Selenium	Selenium	Thallium	Total Radium
				Filtered:	N	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	N	Y	N	N	Y	N	N	Y	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L
				Multiunit 1 BTV	*0.01*	*0.0086*	*0.0086*	*0.042*	*0.042*	*0.001*	*0.001*	*0.002*	*0.002*	*0.02*	*0.02*	*0.01*	*0.01*	*5*	*0.01*	*0.01*	*1.8*	*0.0002*	*0.0002*	*0.12*	*0.092*	*--*	*0.017*	*4.43*
				Multiunit 1 GWPS	*0.01*	*0.01*	*0.01*	*2*	*2*	*0.004*	*0.004*	*0.005*	*0.005*	*0.1*	*0.1*	*0.01*	*0.01*	*5*	*0.015*	*0.015*	*1.8*	*0.002*	*0.002*	*0.1*	*0.092*	*--*	*0.017*	*5*
Well ID	CCR Unit	Well Designation	Sample Date	Sample ID																								
MW-54	Multiunit 1	Supplementary	11/3/2015	FC MW-54-(031115)	0.0030	0.0041	--	0.27	--	0.00087	--	0.00029	--	0.0027	--	0.0055	--	<0.80	0.012	--	<10	<0.00020	--	0.039	0.0055	--	0.00083	--
MW-54	Multiunit 1	Supplementary	6/20/2016	FC-Seep-MW54-616	--	<0.005	--	--	--	--	--	--	--	0.0054	--	--	--	0.86	--	--	--	<0.00020	--	--	--	--	--	--
MW-54	Multiunit 1	Supplementary	9/16/2016	FC-Seep-MW54-916	--	0.0025	--	--	--	--	--	--	--	<0.0050	--	--	--	0.85	--	--	--	<0.00020	--	--	--	--	--	--
MW-56	Multiunit 1	Supplementary	3/12/2014	FC-56-031214	--	0.00060	--	--	--	--	--	--	--	0.00067	--	--	--	<0.80	--	--	--	--	--	--	0.19	--	--	--
MW-56	Multiunit 1	Supplementary	9/10/2014	FCPP-56-091014	--	0.00054	--	--	--	--	--	--	--	<0.00050	--	--	--	<0.40	--	--	--	--	--	--	0.10	--	--	--
MW-56	Multiunit 1	Supplementary	3/19/2015	FCPP-56-031915	--	<0.0040	--	--	--	--	--	--	--	<0.010	--	--	--	<0.40	--	--	--	--	--	--	0.63	--	--	--
MW-56	Multiunit 1	Supplementary	6/30/2015	MW-56	--	<0.012	--	--	--	--	--	--	--	<0.012	--	--	--	<4.0	--	--	--	--	--	--	0.20	--	--	--
MW-56	Multiunit 1	Supplementary	8/25/2015	FCPP-56-082515	--	<0.030	--	--	--	--	--	--	--	<0.030	--	--	--	<2.0	--	--	--	--	--	--	0.19	--	--	--
MW-56	Multiunit 1	Supplementary	11/5/2015	FC MW-56-(051115)	<0.0025	<0.0010	--	0.021	--	<0.0010	--	<0.00050	--	<0.0025	--	0.0041	--	<2.0	<0.00050	--	<5.0	<0.00020	--	0.0046	0.16	--	0.0012	--
MW-56	Multiunit 1	Supplementary	6/18/2016	FC-Seep-MW56-616	--	<0.005	--	--	--	--	--	--	--	<0.005	--	--	--	<0.40	--	--	--	<0.00020	--	--	--	--	--	--
MW-56	Multiunit 1	Supplementary	9/15/2016	FC-Seep-MW56-916	--	<0.0010	--	--	--	--	--	--	--	<0.0025	--	--	--	<0.40	--	--	--	<0.00020	--	--	--	--	--	--
MW-56	Multiunit 1	Supplementary	3/20/2019	FC-CCR-MW56-032019	<0.0010	0.0084	--	0.021	--	<0.0010	--	0.00011	--	<0.0010	--	0.00075	--	<0.80	<0.00050	--	1.2	<0.00020	--	0.089	0.21	--	0.00075	--
MW-56	Multiunit 1	Supplementary	3/20/2019	FC-CCR-MW56-032019	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2.3
MW-56	Multiunit 1	Supplementary	5/14/2019	FC-CCR-MW56-51419	--	0.0043	--	0.020	--	--	--	<0.00010	--	--	--	0.00054	--	<0.80	<0.00050	--	1.4	--	--	0.019	0.26	--	0.00080	--
MW-56	Multiunit 1	Supplementary	5/14/2019	FC-CCR-MW56-51419	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2.7
MW-56	Multiunit 1	Supplementary	11/19/2019	FC-CCR-MW56-111919	<0.0010	0.0096	--	0.018	--	<0.0010	--	0.00016	--	<0.0010	--	0.00056	--	<0.80	<0.00050	--	1.5	<0.00020	--	0.0053	0.26	--	0.00085	--
MW-56	Multiunit 1	Supplementary	6/22/2020	FC-CCR-MW56-0620	<0.004	0.0053	--	0.017	--	--	--	<0.0004	--	<0.004	--	<0.002	--	<0.8	<0.002	--	<2	--	--	0.0045	0.30	--	0.0011	3.4
MW-56	Multiunit 1	Supplementary	11/7/2020	FC-CCR-MW56-1120	0.0002	0.015	--	0.02	--	<0.001	--	0.00068	--	0.0023	--	0.00074	--	<0.8	<0.002	--	1.7	--	--	0.0047	0.31	--	0.0011	2.2
MW-56	Multiunit 1	Supplementary	4/26/2021	FC-CCR-MW56-0421	<0.004 U	0.0013 J	--	0.02	--	<0.001	--	0.00029 J	--	<0.004	--	0.00051 J	--	<0.8	0.0019 J	--	1.7	--	--	0.0043	0.28	--	0.0011	2.2
MW-56	Multiunit 1	Supplementary	11/16/2021	FC-CCR-MW56-1121	<0.002 U	0.0018	--	0.018	--	<0.001	--	0.00020	--	0.0017 J	--	0.00062 J	--	<0.8	<0.001	--	1.8	--	--	0.0045	0.39	--	0.0011	3.1
MW-56	Multiunit 1	Supplementary	2/8/2022	FC-CCR-MW56-0222	--	--	--	--	--	<0.001	--	--	--	--	--	0.25	--	<0.8	--	--	0.67	--	--	0.00097	--	--	--	--
MW-56	Multiunit 1	Supplementary	8/11/2022	FC-CCR-MW56-0822	--	--	--	--	--	<0.001	--	--	--	--	--	0.00081	--	<0.8	--	--	1.8	--	--	0.0043	--	--	--	--
MW-56	Multiunit 1	Supplementary	11/15/2022	FC-CCR-MW56-1122	<0.001	<0.001	--	0.019	--	<0.001	--	0.00022	--	<0.002	--	<0.001	--	<8	<0.0005	--	1.9	--	--	0.0050	0.30	--	0.0011	3.7
MW-56	Multiunit 1	Supplementary	5/4/2023	FC-CCR-MW56-0523	<0.002	<0.005	--	0.016	--	<0.001	--	<0.001	--	<0.003	--	<0.001	--	<80	<0.001	--	2.0	--	--	0.0048	0.22	--	0.0011	4.4
MW-56	Multiunit 1	Supplementary	11/14/2023	FC-CCR-MW56-1124	<0.01	0.0074	--	0.017	--	<0.005	--	<0.001	--	<0.01	--	<0.005	--	<0.8	<0.005	--	2.0	--	--	<0.005	0.24	--	0.0011	6.4
MW-57	Multiunit 1	Supplementary	3/12/2014	FC-57-031214	--	0.0010	--	--	--	--	--	--	--	0.0016	--	--	--	<0.80	--	--	--	--	--	--	0.0010	--	--	--
MW-57	Multiunit 1	Supplementary	9/9/2014	FCPP-57MS-090914	--	0.0012	--	--	--	--	--	--	--	<0.00050	--	--	--	--	--	--	--	--	--	--	0.00060	--	--	--
MW-57	Multiunit 1	Supplementary	9/9/2014	FCPP-57-090914	--	0.0012	--	--	--	--	--	--	--	<0.00050	--	--	--	<0.40	--	--	--	--	--	--	0.00061	--	--	--
MW-57	Multiunit 1	Supplementary	3/17/2015	FCPP-57-031715	--	0.0011	--	--	--	--	--	--	--	<0.00050	--	--	--	<0.40	--	--	--	--	--	--	0.00072	--	--	--
MW-57	Multiunit 1	Supplementary	6/29/2015	MW-57	--	<0.0030	--	--	--	--	--	--	--	<0.0030	--	--	--	<0.80	--	--	--	--	--	--	<0.0030	--	--	--
MW-57	Multiunit 1	Supplementary	8/26/2015	FCPP-57-082615	--	<0.0060	--	--	--	--	--	--	--	<0.0060	--	--	--	<0.80	--	--	--	--	--	--	<0.0060	--	--	--
MW-57	Multiunit 1	Supplementary	11/10/2015	FC MW-57-(101115)-MSD	<0.0025	<0.0010	--	0.021	--	<0.0010	--	<0.00050	--	0.023	--	0.0038	--	--	<0.00050	--	<0.50	<0.00020	--	0.0044	<0.0030	--	<0.00050	--
MW-57	Multiunit 1	Supplementary	11/10/2015	FC MW-57-(101115)-MS	<0.0025	<0.0010	--	0.021	--	<0.0010	--	<0.00050	--	<0.0025	--	0.0046	--	--	<0.00050	--	0.51	<0.00020	--	0.0050	<0.0030	--	<0.00050	--
MW-57	Multiunit 1	Supplementary	11/10/2015	FC MW-57-(101115)	<0.0025	0.0010	--	0.022	--	<0.0010	--	<0.00050	--	0.0041	--	0.0051	--	<0.80	0.00053	--	0.54	<0.00020	--	0.0059	<0.0030	--	0.00060	--
MW-57	Multiunit 1	Supplementary	11/11/2015	*DUP* FC FD-4-(101115)	<0.0025	<0.0010	--	0.021	--	<0.0010	--	<0.00050	--	<0.0025	--	0.0043	--	--	<0.00050	--	<0.50	<0.00020	--	0.0046	<0.0030	--	<0.00050	--
MW-57	Multiunit 1	Supplementary	6/18/2016	FC-Seep-MW57-616	--	0.00050	--	--	--	--	--	--	--	<0.0005	--	--	--	<0.40	--	--	--	<0.00020	--	--	--	--	--	--
MW-57	Multiunit 1	Supplementary	9/15/2016	FC-Seep-MW57-916	--	<0.0010	--	--	--	--	--	--	--	<0.0025	--	--	--	<0.40	--	--	--	<0.00020	--	--	--	--	--	--
MW-57	Multiunit 1	Supplementary	3/19/2019	FC-CCR-MW57-031919	<0.0010	<0.00050	--	0.018	--	<0.0010	--	<0.00010	--	<0.0010	--	0.0021	--	<0.40	<0.00050	--	0.66	<0.00020	--	0.011	<0.00050	--	<0.00010	--
MW-57	Multiunit 1	Supplementary	3/19/2019	FC-CCR-MW57-031919	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.3
MW-57	Multiunit 1	Supplementary	5/14/2019	FC-CCR-MW57-51419	--	0.0017	--	0.018	--	--	--	<0.00010	--	--	--	0.0039	--	<0.80	<0.00050	--	0.76	--	--	0.15	0.00054	--	<0.00010	--
MW-57	Multiunit 1	Supplementary	5/14/2019	FC-CCR-MW57-51419	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.7
MW-57	Multiunit 1	Supplementary	11/19/2019	FC-CCR-MW57-111919	<0.0010	<0.0010	--	0.017	--	<0.0010	--	0.00020	--	<0.0010	--	0.0024	--	<0.80	<0.00050	--	0.70	<0.00020	--	0.0067	<0.00050	--	<0.00010	--
MW-57	Multiunit 1	Supplementary	6/22/2020	FC-CCR-MW57-0620	<0.004	<0.002	--	0.016	--	--	--	<0.0004	--	<0.004	--	0.0020	--	<0.8	<0.002	--	0.97	--	--	0.0064	<0.002	--	<0.0004	2.4
MW-57	Multiunit 1	Supplementary	11/6/2020	FC-CCR-MW57-1120	0.00022	0.0012	--	0.02	--	<0.001	--	0.00081	--	0.0020	--	0.0043	--	<0.4	<0.002	--	0.87	--	--	0.027	0.0030	--	0.00018	2.2
MW-57	Multiunit 1	Supplementary	4/27/2021	FC-CCR-MW57-0421	<0.004 U	<0.002	--	0.018	--	0.00013 J	--	0.00012 J	--	<0.004	--	0.0019 J	--	<0.4	0.0019 J	--	0.77	--	--	0.006	0.0033	--	<0.0004 U	2.7
MW-57	Multiunit 1	Supplementary	11/17/2021	FC-CCR-MW57-1121	0.00041 J	0.0014	--	0.018	--	<0.001	--	0.000078 J	--	0.0015 J	--	0.0035	--	0.19 J	<0.0005	--	0.81	--	--	0.0028	0.0015	--	0.000068 J	1.4
MW-57	Multiunit 1	Supplementary	2/8/2022	FC-CCR-MW57-0222	--	--	--	--	--	<0.001	--	--	--	--	--	0.0038	--	0.25	--	--	0.90	--	--	0.012	--	--	--	--
MW-57	Multiunit 1	Supplementary	5/24/2022	FC-CCR-MW57-0522	<0.002	<0.001	--	0.017	--	<0.001	--	<0.0002	--	<0.002	--	0.0029	--	<0.8	<0.001	--	0.8	--	--	0.0058	0.0020	--	<0.0004	1.5
MW-57	Multiunit 1	Supplementary	5/24/2022	FC-CCR-SS09-0522	<0.02	<0.01	--	0.0164 J	--	<0.0025	--	<0.0025	--	<0.02	--	0.00362	--	<50/0.19 J	<0.005	--	0.809	--	--	0.00544	<0.0025	--	<0.005	--
MW-57	Multiunit 1	Supplementary	8/11/2022	FC-CCR-MW57-0822	--	--	--	--	--	<0.001	--	--	--	--	--	<0.0005	--	<0.8	--	--	0.94	--	--	0.0015	--	--	--	--
MW-57	Multiunit 1	Supplementary	11/15/2022	FC-CCR-MW571122	<0.002	0.006	--	0.018	--	<0.001	--	<0.0002	--	<0.002	--	<0.001	--	<4	<0.0005	--	0.51 J	--	--	0.0024	0.0018	--	<0.0001	1.4
MW-57	Multiunit 1	Supplementary	5/5/2023	FC-CCR-MW57-0523	<0.002	<0.005	--	0.016	--	<0.001	--	<0.001	--	<0.003	--	0.0015	--	<40	<0.001	--	1.1	--	--	<0.002	<0.005	--	<0.001	3.1
MW-57	Multiunit 1	Supplementary	11/14/2023	FC-CCR-MW57-1124	<0.01	0.0093	--	0.032	--	<0.005	--	<0.001	--	<0.01	--	0.019	--	<0.8	<0.005	--	2.8	--	--	0.0064	0.006	--	<0.001	1.2
MW-60	Multiunit 1	Supplementary	11/8/2015	FC-CCR-MW60-110815	0.00043	0.0011	--	0.037	--	0.00021	--	0.0012	--	0.0033	--	0.24	--	4.5	0.0038	--	0.60	<0.00020	--	0.078	0.0028	--	0.00011	--
MW-60	Multiunit 1	Supplementary	11/8/2015	FC-CCR-MW60-110815	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-60	Multiunit 1	Supplementary	4/26/2016	FC-CCR-MW-60-042616	<0.0025	0.0011	--	0.021	--	<0.0010	--	0.0018	--	0.0011	--	0.16	--	2.7	0.0018	--	0.78	<0.00020	--	0.049	0.0011	--	0.00020	<0.8
MW-60	Multiunit 1	Supplementary	6/6/2016	FC-CCR-MW60-616	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.8
MW-60	Multiunit 1	Supplementary	6/6/2016	FC-CCR-MW60-616	0.00016	0.00099	--	0.024	--	<0.0010	--	0.00055	--	0.0014	--	0.14	--	2.4	0.0021	--	0.76	<0.00020	--	0.041	0.00067	--	0.00012	--
MW-60	Multiunit 1	Supplementary	8/21/2016	FC-CCR-MW60-816	--	--	--	--	--	--	--	--	--	--	--	--	--	6.5	--	--	--	--	--	--	--	--	--	--
MW-60	Multiunit 1	Supplementary	8/21/2016	FC-CCR-MW60-816	0.00023	0.00072	--	0.018	--	<0.0010	--	0.0016	--	0.0023	--	0.29	--	15	0.00060	--	0.90	<0.00020	--	0.16	0.0011	--	0.00025	--
MW-60	Multiunit 1	Supplementary	8/21/2016	FC-CCR-MW60-816	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.7
MW-60	Multiunit 1	Supplementary	9/13/2016	FC-CCR-MW60-916	--	--	--	--	--	--	--	--	--	--	--	--	--	7.2	--	--	--	--	--	--	--	--	--	--
MW-60	Multiunit 1	Supplementary	9/13/2016	FC-CCR-MW60-916	<0.0025	<0.0010	--	0.019	--	<0.0010	--	0.0021	--	<0.0025	--	0.32	--	6.2	0.0014	--	0.76	<0.00020	--	0.16	<0.0030	--	<0.00050	--
MW-60	Multiunit 1	Supplementary	9/13/2016	FC-CCR-MW60-916	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.0
MW-60	Multiunit 1	Supplementary	9/13/2016	FC-CCR-MW100-916	--	--	--	--	--	--	--	--	--	--	--	--	--	6.0	--	--	--	--	--	--	--	--	--	--
MW-60	Multiunit 1	Supplementary	9/13/2016	FC-CCR-MW100-916	<0.0025	<0.0010	--	0.020	--	<0.0010	--	0.0022	--	<0.0025	--	0.33	--	6.4	0.0015	--	0.77	<0.00020	--	0.17	<0.0030	--	<0.00050	--
MW-60	Multiunit 1	Supplementary	9/13/2016	FC-CCR-MW100-916	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.6
MW-60	Multiunit 1	Supplementary	10/20/2016	FC-CCR-MW60-1016	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-60	Multiunit 1	Supplementary	10/20/2016	FC-CCR-MW60-1016	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.0
MW-60	Multiunit 1	Supplementary	10/20/2016	FC-CCR-MW60-1016	--	--	--	--	--	--	--	--	--	--	--	--	--	5.5	--	--	--	--	--	--	--	--	--	--

Table F-5
Groundwater Sampling Results for the Multiunit 1 Monitoring Wells - Appendix IV Constituents

Appendix IV Constituents

Well ID	CCR Unit	Well Designation	Sample Date	Sample ID	Antimony	Arsenic	Arsenic	Barium	Barium	Beryllium	Beryllium	Cadmium	Cadmium	Chromium	Chromium	Cobalt	Cobalt	Fluoride	Lead	Lead	Lithium	Mercury	Mercury	Molybdenum	Selenium	Selenium	Thallium	Total Radium
				Filtered:	N	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	N	Y	N	N	Y	N	N	Y	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L
				Multiunit 1 BTV	*0.01*	*0.0086*	*0.0086*	*0.042*	*0.042*	*0.001*	*0.001*	*0.002*	*0.002*	*0.02*	*0.02*	*0.01*	*0.01*	*5*	*0.01*	*0.01*	*1.8*	*0.0002*	*0.0002*	*0.12*	*0.092*	*--*	*0.017*	*4.43*
				Multiunit 1 GWPS	*0.01*	*0.01*	*0.01*	*2*	*2*	*0.004*	*0.004*	*0.005*	*0.005*	*0.1*	*0.1*	*0.01*	*0.01*	*5*	*0.015*	*0.015*	*1.8*	*0.002*	*0.002*	*0.1*	*0.092*	*--*	*0.017*	*5*
MW-60	Multiunit 1	Supplementary	2/2/2017	FC-CCR-MW60-117	--	--	--	--	--	--	--	--	--	--	--	--	--	7.2	--	--	--	--	--	--	--	--	--	--
MW-60	Multiunit 1	Supplementary	2/2/2017	FC-CCR-MW60-117	<0.0010	**0.00060**	--	**0.018**	--	<0.0010	--	**0.0016**	--	**0.0021**	--	0.29	--	7.2	**0.00086**	--	**0.82**	<0.00020	--	0.18	**0.00084**	--	**0.00025**	--
MW-60	Multiunit 1	Supplementary	2/2/2017	FC-CCR-MW60-117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.4**
MW-60	Multiunit 1	Supplementary	4/18/2017	FC-CCR-MW60-41817	--	--	--	--	--	--	--	--	--	--	--	--	--	6.4	--	--	--	--	--	--	--	--	--	--
MW-60	Multiunit 1	Supplementary	4/18/2017	FC-CCR-MW60-41817	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.2**
MW-60	Multiunit 1	Supplementary	4/18/2017	FC-CCR-MW60-41817	<0.0040	<0.0020	--	**0.017**	--	<0.0010	--	**0.00086**	--	**0.0040**	--	0.28	--	6.5	<0.0020	--	**0.84**	<0.00020	--	0.17	<0.0020	--	<0.00040	--
MW-60	Multiunit 1	Supplementary	5/3/2017	FC-CCR-MW60-5317	<0.0010	**0.00056**	--	**0.017**	--	<0.0010	--	**0.00070**	--	**0.0025**	--	0.27	--	10	<0.00050	--	**0.75**	<0.00020	--	0.17	**0.00078**	--	**0.00024**	--
MW-60	Multiunit 1	Supplementary	5/3/2017	FC-CCR-MW60-5317	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.6
MW-60	Multiunit 1	Supplementary	5/30/2017	FC-CCR-MW60-53017	<0.0010	**0.00076**	--	**0.017**	--	<0.0010	--	**0.00070**	--	**0.0023**	--	0.28	--	7.0	<0.00050	--	**0.74**	<0.00020	--	0.17	**0.00051**	--	**0.00024**	--
MW-60	Multiunit 1	Supplementary	5/30/2017	FC-CCR-MW60-53017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.2**
MW-60	Multiunit 1	Supplementary	6/22/2017	FC-CCR-MW60-62217	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-60	Multiunit 1	Supplementary	6/22/2017	FC-CCR-MW60-62217	<0.0010	**0.00072**	--	**0.017**	--	<0.0010	--	**0.00060**	--	**0.0027**	--	0.29	--	7.1	<0.00050	--	**0.78**	<0.00020	--	0.17	**0.00084**	--	**0.00025**	--
MW-60	Multiunit 1	Supplementary	6/22/2017	FC-CCR-MW60-62217	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.4**
MW-60	Multiunit 1	Supplementary	7/22/2017	FC-CCR-MW60-72217	--	--	--	--	--	--	--	--	--	--	--	--	--	7.0	--	--	--	--	--	--	--	--	--	--
MW-60	Multiunit 1	Supplementary	7/22/2017	FC-CCR-MW60-72217	<0.0040	<0.0020	--	**0.016**	--	<0.0010	--	<0.00040	--	<0.0020	--	0.24	--	--	<0.0020	--	**0.82**	<0.00020	--	0.15	<0.0020	--	<0.00040	--
MW-60	Multiunit 1	Supplementary	7/22/2017	FC-CCR-MW60-72217	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.8**
MW-60	Multiunit 1	Supplementary	8/10/2017	FC-CCR-MW60-81017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-60	Multiunit 1	Supplementary	8/10/2017	FC-CCR-MW60-81017	<0.0010	**0.00055**	--	**0.018**	--	<0.0010	--	**0.00064**	--	**0.0026**	--	0.28	--	7.1	<0.00050	--	**0.85**	<0.00020	--	0.17	**0.00082**	--	**0.00021**	--
MW-60	Multiunit 1	Supplementary	8/10/2017	FC-CCR-MW60-81017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.7
MW-60	Multiunit 1	Supplementary	8/17/2017	FC-CCR-MW60-81717	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.7
MW-60	Multiunit 1	Supplementary	8/17/2017	FC-CCR-MW60-81717	--	--	--	--	--	--	--	--	--	--	--	--	--	7.4	--	--	--	--	--	--	--	--	--	--
MW-60	Multiunit 1	Supplementary	9/10/2017	FC-CCR-MW60-91017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-60	Multiunit 1	Supplementary	9/10/2017	FC-CCR-MW60-91017	<0.0040	<0.0020	--	**0.017**	--	<0.0010	--	**0.00097**	--	<0.0040	--	0.29	--	7.4	<0.0020	--	**0.76**	<0.00020	--	0.16	<0.0020	--	<0.00040	--
MW-60	Multiunit 1	Supplementary	9/10/2017	FC-CCR-MW60-91017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.5**
MW-60	Multiunit 1	Supplementary	10/12/2017	FC-CCR-MW60-101217	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.6**
MW-60	Multiunit 1	Supplementary	10/12/2017	FC-CCR-MW60-101217	<0.0040	<0.0050	--	**0.017**	--	<0.0010	--	**0.0016**	--	<0.010	--	0.36	--	7.0	<0.0050	--	**0.75**	<0.00020	--	0.15	<0.0020	--	<0.00040	--
MW-60	Multiunit 1	Supplementary	6/21/2020	FC-CCR-MW60-0620	--	--	--	--	--	--	--	--	--	--	--	0.24	--	--	--	--	--	--	--	0.18	--	--	--	--
MW-60	Multiunit 1	Supplementary	11/8/2020	FC-CCR-MW60-1120	--	--	--	--	--	--	--	--	--	--	--	0.26	--	--	--	--	--	--	--	0.20	--	--	--	--
MW-60	Multiunit 1	Supplementary	4/24/2021	FC-CCR-MW60-0421	--	--	--	--	--	--	--	--	--	--	--	0.21	--	--	--	--	--	--	--	0.16	--	--	--	--
MW-60	Multiunit 1	Supplementary	11/13/2021	FC-CCR-MW60	--	--	--	--	--	--	--	--	--	--	--	0.25	--	--	--	--	--	--	--	0.19	--	--	--	--
MW-60	Multiunit 1	Supplementary	5/23/2022	FC-CCR-MW60-0522	--	--	--	--	--	--	--	--	--	--	--	0.20	--	--	--	--	--	--	--	0.15	--	--	--	--
MW-60	Multiunit 1	Supplementary	11/10/2022	FC-CCR-MW60-1122	--	--	--	--	--	--	--	--	--	--	--	0.23	--	--	--	--	--	--	--	0.19	--	--	--	--
MW-60	Multiunit 1	Supplementary	5/2/2023	FC-CCR-MW60-0523	--	--	--	--	--	--	--	--	--	--	--	0.18	--	--	--	--	--	--	--	0.15	--	--	--	--
MW-60	Multiunit 1	Supplementary	11/09/2023	FC-CCR-MW60-1124	--	--	--	--	--	--	--	--	--	--	--	0.19	--	--	--	--	--	--	--	0.18	--	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	11/6/2015	FC-CCR-MW61-110615	**0.00029**	**0.00056**	--	**0.016**	--	**0.00016**	--	**0.0010**	--	**0.00075**	--	0.011	--	**1.2**	**0.00082**	--	**0.36**	<0.00020	--	**0.076**	**0.0016**	--	**0.00018**	--
MW-61	Multiunit 1	Downgradient Boundary	11/6/2015	FC-CCR-MW61-110615	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	11/6/2015	*DUP* FC-CCR-FD-1-110615	**0.00032**	**0.00062**	--	**0.016**	--	**0.00023**	--	**0.00099**	--	**0.00028**	--	0.011	--	**1.2**	**0.00085**	--	**0.37**	<0.00020	--	**0.084**	**0.0017**	--	**0.00019**	--
MW-61	Multiunit 1	Downgradient Boundary	11/6/2015	*DUP* FC-CCR-FD-1-110615	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	4/26/2016	FC-CCR-MW-61-042616	<0.0025	<0.00050	--	**0.014**	--	<0.0010	--	**0.00082**	--	<0.00050	--	**0.010**	--	**1.3**	**0.00078**	--	**0.40**	<0.00020	--	**0.076**	**0.00088**	--	**0.00013**	**1.7**
MW-61	Multiunit 1	Downgradient Boundary	6/6/2016	FC-CCR-MW61-616	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.8
MW-61	Multiunit 1	Downgradient Boundary	6/6/2016	FC-CCR-MW61-616	**0.00023**	<0.00050	--	**0.015**	--	<0.0010	--	**0.00094**	--	<0.00050	--	0.012	--	**1.2**	**0.00080**	--	**0.39**	<0.00020	--	**0.077**	**0.00096**	--	**0.00014**	--
MW-61	Multiunit 1	Downgradient Boundary	8/21/2016	FC-CCR-MW61-816	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.2**	--	--	--	--	--	--	--	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	8/21/2016	FC-CCR-MW61-816	**0.00023**	**0.00058**	--	**0.015**	--	<0.0010	--	**0.00091**	--	**0.00052**	--	0.013	--	**0.91**	**0.0010**	--	**0.44**	<0.00020	--	**0.083**	**0.00091**	--	**0.00016**	--
MW-61	Multiunit 1	Downgradient Boundary	8/21/2016	FC-CCR-MW61-816	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<1.4
MW-61	Multiunit 1	Downgradient Boundary	9/13/2016	FC-CCR-MW61-916	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.3**	--	--	--	--	--	--	--	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	9/13/2016	FC-CCR-MW61-916	<0.0025	<0.0010	--	**0.014**	--	<0.0010	--	**0.00094**	--	<0.0025	--	0.013	--	**1.1**	**0.00089**	--	**0.37**	<0.00020	--	**0.069**	<0.0030	--	<0.00050	--
MW-61	Multiunit 1	Downgradient Boundary	9/13/2016	FC-CCR-MW61-916	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.3**
MW-61	Multiunit 1	Downgradient Boundary	10/19/2016	FC-CCR-MW101-1016	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.84**	--	--	--	--	--	--	--	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	10/19/2016	FC-CCR-MW101-1016	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.4
MW-61	Multiunit 1	Downgradient Boundary	10/20/2016	FC-CCR-MW61-1016	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.95**	--	--	--	--	--	--	--	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	10/20/2016	FC-CCR-MW61-1016	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.7**
MW-61	Multiunit 1	Downgradient Boundary	2/2/2017	FC-CCR-MW61-117	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.2**	--	--	--	--	--	--	--	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	2/2/2017	FC-CCR-MW61-117	<0.0010	**0.00050**	--	**0.013**	--	<0.0010	--	**0.0011**	--	<0.00050	--	0.013	--	**1.1**	**0.00079**	--	**0.36**	<0.00020	--	**0.072**	**0.00070**	--	**0.00015**	--
MW-61	Multiunit 1	Downgradient Boundary	2/2/2017	FC-CCR-MW61-117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.2**
MW-61	Multiunit 1	Downgradient Boundary	4/18/2017	FC-CCR-MW61-41817	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.1**	--	--	--	--	--	--	--	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	4/18/2017	FC-CCR-MW61-41817	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.6
MW-61	Multiunit 1	Downgradient Boundary	4/18/2017	FC-CCR-MW61-41817	<0.0040	<0.0020	--	**0.014**	--	<0.0010	--	**0.00093**	--	<0.0020	--	0.014	--	**1.1**	<0.0020	--	**0.37**	<0.00020	--	**0.078**	<0.0020	--	<0.00040	--
MW-61	Multiunit 1	Downgradient Boundary	5/3/2017	FC-CCR-MW61-5317	<0.0010	<0.00050	--	**0.014**	--	<0.0010	--	**0.00094**	--	**0.00062**	--	0.014	--	**2.8**	**0.00082**	--	**0.38**	<0.00020	--	**0.075**	**0.00067**	--	**0.00015**	--
MW-61	Multiunit 1	Downgradient Boundary	5/3/2017	FC-CCR-MW61-5317	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.7**
MW-61	Multiunit 1	Downgradient Boundary	5/30/2017	FC-CCR-MW61-53017	<0.0010	<0.00050	--	**0.014**	--	<0.0010	--	**0.00092**	--	<0.00050	--	0.015	--	**1.2**	**0.00089**	--	**0.36**	<0.00020	--	**0.079**	<0.00050	--	**0.00016**	--
MW-61	Multiunit 1	Downgradient Boundary	5/30/2017	FC-CCR-MW61-53017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.6
MW-61	Multiunit 1	Downgradient Boundary	6/22/2017	FC-CCR-MW61-62217	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	6/22/2017	FC-CCR-MW61-62217	<0.0010	**0.00063**	--	**0.014**	--	<0.0010	--	**0.00098**	--	**0.00052**	--	0.015	--	**1.3**	**0.00086**	--	**0.37**	<0.00020	--	**0.079**	**0.00076**	--	**0.00016**	--
MW-61	Multiunit 1	Downgradient Boundary	6/22/2017	FC-CCR-MW61-62217	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.6
MW-61	Multiunit 1	Downgradient Boundary	7/22/2017	FC-CCR-MW61-72217	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.3**	--	--	--	--	--	--	--	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	7/22/2017	FC-CCR-MW61-72217	<0.0040	<0.0020	--	**0.013**	--	<0.0010	--	**0.00082**	--	<0.0020	--	0.013	--	--	<0.0020	--	**0.38**	<0.00020	--	**0.070**	<0.0020	--	<0.00040	--
MW-61	Multiunit 1	Downgradient Boundary	7/22/2017	FC-CCR-MW61-72217	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.5**
MW-61	Multiunit 1	Downgradient Boundary	8/10/2017	FC-CCR-MW61-81017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	8/10/2017	FC-CCR-MW61-81017	<0.0010	<0.00050	--	**0.014**	--	<0.0010	--	**0.00092**	--	<0.0010	--	0.015	--	**1.2**	**0.00083**	--	**0.40**	<0.00020	--	**0.079**	**0.00066**	--	**0.00011**	--
MW-61	Multiunit 1	Downgradient Boundary	8/10/2017	FC-CCR-MW61-81017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.7

Table F-5
Groundwater Sampling Results for the Multiunit 1 Monitoring Wells - Appendix IV Constituents

					Appendix IV Constituents																							
				Constituent:	Antimony	Arsenic	Arsenic	Barium	Barium	Beryllium	Beryllium	Cadmium	Cadmium	Chromium	Chromium	Cobalt	Cobalt	Fluoride	Lead	Lead	Lithium	Mercury	Mercury	Molybdenum	Selenium	Selenium	Thallium	Total Radium
				Filtered:	N	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	N	Y	N	N	Y	N	N	Y	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L
				Multiunit 1 BTV	*0.01*	*0.0086*	*0.0086*	*0.042*	*0.042*	*0.001*	*0.001*	*0.002*	*0.002*	*0.02*	*0.02*	*0.01*	*0.01*	*5*	*0.01*	*0.01*	*1.8*	*0.0002*	*0.0002*	*0.12*	*0.092*	--	*0.017*	*4.43*
				Multiunit 1 GWPS	*0.01*	*0.01*	*0.01*	*2*	*2*	*0.004*	*0.004*	*0.005*	*0.005*	*0.1*	*0.1*	*0.01*	*0.01*	*5*	*0.015*	*0.015*	*1.8*	*0.002*	*0.002*	*0.1*	*0.092*	--	*0.017*	*5*
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**																								
MW-61	Multiunit 1	Downgradient Boundary	8/17/2017	FC-CCR-MW61-81717	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.7
MW-61	Multiunit 1	Downgradient Boundary	8/17/2017	FC-CCR-MW61-81717	--	--	--	--	--	--	--	--	--	--	--	--	--	1.4	--	--	--	--	--	--	--	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	9/10/2017	FC-CCR-MW61-91017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	9/10/2017	FC-CCR-MW61-91017	<0.0040	<0.0020	--	0.013	--	<0.0010	--	0.00087	--	<0.0040	--	0.014	--	1.2	<0.0020	--	0.37	<0.00020	--	0.073	<0.0020	--	<0.00040	--
MW-61	Multiunit 1	Downgradient Boundary	9/10/2017	FC-CCR-MW61-91017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.7
MW-61	Multiunit 1	Downgradient Boundary	10/12/2017	FC-CCR-MW61-101217	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2.0
MW-61	Multiunit 1	Downgradient Boundary	10/12/2017	FC-CCR-MW61-101217	<0.0040	<0.0050	--	0.013	--	<0.0010	--	0.00097	--	<0.010	--	0.016	--	1.2	<0.0050	--	0.35	<0.00020	--	0.070	<0.0020	--	<0.0010	--
MW-61	Multiunit 1	Downgradient Boundary	11/30/2017	FC-CCR-MW61-113017	--	--	--	--	--	--	--	--	--	--	--	--	--	1.2	--	--	--	--	--	--	--	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	3/17/2018	FC-CCR-MW61-31718	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.9
MW-61	Multiunit 1	Downgradient Boundary	6/1/2018	FC-CCR-MW-61-6118	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.7
MW-61	Multiunit 1	Downgradient Boundary	6/1/2018	FC-CCR-MW-61-6118	--	<0.010	--	0.014	--	--	--	<0.0020	--	--	--	0.017	--	1.3	<0.010	--	0.36	--	--	0.085	<0.010	--	<0.0020	--
MW-61	Multiunit 1	Downgradient Boundary	6/1/2018	*DUP* FC-CCR-FD01-6118	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.7
MW-61	Multiunit 1	Downgradient Boundary	6/1/2018	*DUP* FC-CCR-FD01-6118	--	<0.010	--	0.014	--	--	--	<0.0020	--	--	--	0.017	--	1.3	<0.010	--	0.36	--	--	0.082	<0.010	--	<0.0020	--
MW-61	Multiunit 1	Downgradient Boundary	11/3/2018	FC-CCR-MW61-11318	--	--	--	--	--	--	--	--	--	--	--	--	--	1.3	--	--	--	--	--	--	--	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	11/3/2018	FC-CCR-MW61-11318	--	0.00084	--	0.015	--	--	--	0.00088	--	--	--	0.018	--	--	0.00086	--	0.35	--	--	0.090	0.00061	--	0.00016	--
MW-61	Multiunit 1	Downgradient Boundary	11/3/2018	FC-CCR-MW61-11318	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.7
MW-61	Multiunit 1	Downgradient Boundary	3/19/2019	FC-CCR-MW61-031919	<0.0010	0.00054	--	0.016	--	<0.0010	--	0.00093	--	<0.0010	--	0.019	--	1.1	0.0012	--	0.37	<0.00020	--	0.092	0.00072	--	0.00016	--
MW-61	Multiunit 1	Downgradient Boundary	3/19/2019	FC-CCR-MW61-031919	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.7
MW-61	Multiunit 1	Downgradient Boundary	5/13/2019	FC-CCR-MW61-51319	--	<0.00050	--	0.015	--	--	--	0.0010	--	--	--	0.019	--	0.56	0.0012	--	0.39	--	--	0.089	0.00067	--	0.00016	--
MW-61	Multiunit 1	Downgradient Boundary	5/13/2019	FC-CCR-MW61-51319	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.7
MW-61	Multiunit 1	Downgradient Boundary	11/19/2019	FC-CCR-MW61-111919	<0.0010	<0.00050	--	0.015	--	<0.0010	--	0.00097	--	<0.0010	--	0.021	--	1.4	0.00095	--	0.38	<0.00020	--	0.098	0.00082	--	0.00020	--
MW-61	Multiunit 1	Downgradient Boundary	6/21/2020	FC-CCR-MW61-0620	<0.001	0.00087	--	0.017	--	--	--	0.00089	--	<0.001	--	0.021	--	1.2	0.00060	--	0.68	--	--	0.10	0.00056	--	0.00019	0.7
MW-61	Multiunit 1	Downgradient Boundary	11/8/2020	FC-CCR-MW61-1120	<0.001 U	0.0018	--	0.012 J/0.017	--	<0.001	--	0.0011	--	0.00049 J	--	0.024	--	1.3	0.00093	--	0.42	<0.0002	--	0.11	0.0028	--	0.00017	<0.8
MW-61	Multiunit 1	Downgradient Boundary	4/23/2021	FC-CCR-MW61-0421	<0.001 U	<0.0016 U	--	0.017	--	<0.001	--	0.00082	--	<0.001	--	0.023	--	1.1	0.00084	--	0.42	<0.0002	--	0.10	<0.00097 U	--	<0.0001	0.9
MW-61	Multiunit 1	Downgradient Boundary	11/13/2021	FC-CCR-MW61-1121	0.00026 J	<0.001	--	0.020	--	<0.001	--	0.0012	--	<0.002	--	0.028	--	1.1	0.0013	--	0.48	<0.0002	--	0.11	0.0020	--	0.00022	0.6
MW-61	Multiunit 1	Downgradient Boundary	5/22/2022	FC-CCR-MW61-0522	<0.001	0.0011	--	0.018	--	<0.001	--	0.0011	--	<0.001	--	0.028	--	1.3	0.0010	--	0.46	<0.0002	--	0.11	<0.001	--	<0.0002	0.4
MW-61	Multiunit 1	Downgradient Boundary	11/11/2022	FC-CCR-MW61-1122	<0.001	0.00059	--	0.019	--	<0.001	--	0.0011	--	<0.001	--	0.030	--	1.3	0.0011	--	0.42	<0.0002	--	0.11	0.00093	--	0.00022	<0.6
MW-61	Multiunit 1	Downgradient Boundary	5/4/2023	FC-CCR-MW61-0523	<0.002	<0.005	--	0.018	--	<0.001	--	0.0011	--	<0.003	--	0.030	--	<4	0.0012	--	0.48	<0.0002	--	0.11	<0.005	--	<0.001	2.8
MW-61	Multiunit 1	Downgradient Boundary	11/09/2023	FC-CCR-MW61-1124	<0.001	0.0016	--	0.023	--	<0.001	--	0.0011	--	0.0018	--	0.027	--	1.3	0.0015	--	0.50	<0.0002	--	0.11	0.002	--	0.00028	<0.8
MW-75	Multiunit 1	Downgradient Boundary	4/18/2017	FC-CCR-MW-75-41817	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.6
MW-75	Multiunit 1	Downgradient Boundary	4/18/2017	FC-CCR-MW75-41817	--	--	--	--	--	--	--	--	--	--	--	--	--	<2.0	--	--	--	--	--	--	--	--	--	--
MW-75	Multiunit 1	Downgradient Boundary	4/18/2017	FC-CCR-MW75-41817	<0.0040	<0.0020	--	0.020	--	<0.0010	--	0.0022	--	<0.0020	--	0.043	--	<2.0	0.0031	--	0.43	<0.00020	--	0.17	0.0021	--	<0.00040	--
MW-75	Multiunit 1	Downgradient Boundary	5/3/2017	FC-CCR-MW-75-5317	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.4
MW-75	Multiunit 1	Downgradient Boundary	5/3/2017	FC-CCR-MW75-5317	<0.0010	<0.0010	--	0.018	--	<0.0010	--	0.0019	--	<0.0010	--	0.042	--	2.8	0.0031	--	0.43	0.00028	--	0.17	0.0022	--	0.00018	--
MW-75	Multiunit 1	Downgradient Boundary	5/30/2017	FC-CCR-MW-75-53017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.9
MW-75	Multiunit 1	Downgradient Boundary	5/30/2017	FC-CCR-MW75-53017	<0.0010	<0.00050	--	0.017	--	<0.0010	--	0.0019	--	<0.00050	--	0.039	--	<2.0	0.0028	--	0.43	<0.00020	--	0.16	0.0025	--	0.00017	--
MW-75	Multiunit 1	Downgradient Boundary	6/22/2017	FC-CCR-MW75-62217	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-75	Multiunit 1	Downgradient Boundary	6/22/2017	FC-CCR-MW75-62217	<0.0040	<0.0020	--	0.020	--	<0.0010	--	0.0024	--	<0.0020	--	0.048	--	<2.0	0.0041	--	0.43	<0.00020	--	0.18	0.0022	--	<0.00040	--
MW-75	Multiunit 1	Downgradient Boundary	6/22/2017	FC-CCR-MW-75-62117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.6
MW-75	Multiunit 1	Downgradient Boundary	7/22/2017	FC-CCR-MW75-72217	--	--	--	--	--	--	--	--	--	--	--	--	--	<2.0	--	--	--	--	--	--	--	--	--	--
MW-75	Multiunit 1	Downgradient Boundary	7/22/2017	FC-CCR-MW75-72217	<0.0040	<0.0020	--	0.018	--	<0.0010	--	0.0020	--	<0.0020	--	0.043	--	--	0.0030	--	0.44	<0.00020	--	0.16	0.0026	--	<0.00040	--
MW-75	Multiunit 1	Downgradient Boundary	7/22/2017	FC-CCR-MW75-72217	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.7
MW-75	Multiunit 1	Downgradient Boundary	8/10/2017	FC-CCR-MW75-81017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-75	Multiunit 1	Downgradient Boundary	8/10/2017	FC-CCR-MW75-81017	<0.010	<0.0020	--	0.019	--	<0.0010	--	0.0023	--	<0.0040	--	0.046	--	<2.0	<0.0050	--	0.45	<0.00020	--	0.18	0.0025	--	<0.0010	--
MW-75	Multiunit 1	Downgradient Boundary	8/10/2017	FC-CCR-MW75-81017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.0
MW-75	Multiunit 1	Downgradient Boundary	8/17/2017	FC-CCR-MW75-81717	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.7
MW-75	Multiunit 1	Downgradient Boundary	8/17/2017	FC-CCR-MW75-81717	--	--	--	--	--	--	--	--	--	--	--	--	--	<2.0	--	--	--	--	--	--	--	--	--	--
MW-75	Multiunit 1	Downgradient Boundary	9/10/2017	FC-CCR-MW75-91017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-75	Multiunit 1	Downgradient Boundary	9/10/2017	FC-CCR-MW75-91017	<0.0040	<0.0020	--	0.018	--	<0.0010	--	0.0020	--	<0.0040	--	0.044	--	<2.0	0.0032	--	0.42	<0.00020	--	0.16	0.0023	--	<0.00040	--
MW-75	Multiunit 1	Downgradient Boundary	9/10/2017	FC-CCR-MW75-91017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.8
MW-75	Multiunit 1	Downgradient Boundary	10/12/2017	FC-CCR-MW75-101217	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.8
MW-75	Multiunit 1	Downgradient Boundary	10/12/2017	FC-CCR-MW75-101217	<0.010	<0.0050	--	0.020	--	<0.0010	--	0.0023	--	<0.010	--	0.049	--	<2.0	<0.0050	--	0.41	<0.00020	--	0.18	<0.0050	--	<0.0010	--
MW-75	Multiunit 1	Downgradient Boundary	11/30/2017	FC-CCR-MW75-113017	--	--	--	--	--	--	--	--	--	--	--	--	--	<2.0	--	--	--	--	--	--	--	--	--	--
MW-75	Multiunit 1	Downgradient Boundary	11/30/2017	*DUP* FC-CCR-FD02-113017	--	--	--	--	--	--	--	--	--	--	--	--	--	<2.0	--	--	--	--	--	--	--	--	--	--
MW-75	Multiunit 1	Downgradient Boundary	3/17/2018	FC-CCR-MW75-31718	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.8
MW-75	Multiunit 1	Downgradient Boundary	6/1/2018	FC-CCR-MW-75-6118	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.4
MW-75	Multiunit 1	Downgradient Boundary	6/1/2018	FC-CCR-MW-75-6118	--	<0.010	--	0.020	--	--	--	0.0024	--	--	--	0.048	--	1.2	<0.010	--	0.40	--	--	0.17	<0.010	--	<0.0020	--
MW-75	Multiunit 1	Downgradient Boundary	11/3/2018	FC-CCR-MW75-11318	--	--	--	--	--	--	--	--	--	--	--	--	--	1.2	--	--	--	--	--	--	--	--	--	--
MW-75	Multiunit 1	Downgradient Boundary	11/3/2018	FC-CCR-MW75-11318	--	0.00060	--	0.017	--	--	--	0.0018	--	--	--	0.045	--	1.2	0.0030	--	0.39	--	--	0.18	0.0026	--	0.00018	--
MW-75	Multiunit 1	Downgradient Boundary	11/3/2018	FC-CCR-MW75-11318	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.7
MW-75	Multiunit 1	Downgradient Boundary	3/19/2019	FC-CCR-MW75-031919	<0.0010	<0.00050	--	0.019 J	--	<0.0010	--	0.0018	--	<0.0010	--	0.045	--	1.1	0.0030	--	0.40	<0.00020	--	0.17	0.0026	--	0.00017	--
MW-75	Multiunit 1	Downgradient Boundary	3/19/2019	FC-CCR-MW75-031919	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.7
MW-75	Multiunit 1	Downgradient Boundary	5/13/2019	FC-CCR-MW75-51319	--	<0.00050	--	0.019	--	--	--	0.0019	--	--	--	0.045	--	1.2	0.0030	--	0.43	--	--	0.18	0.0023	--	0.00018	--
MW-75	Multiunit 1	Downgradient Boundary	5/13/2019	FC-CCR-MW75-51319	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.7
MW-75	Multiunit 1	Downgradient Boundary	11/19/2019	FC-CCR-MW75-111919	<0.0010	0.00056	--	0.019	--	<0.0010	--	0.0020	--	<0.0010	--	0.045	--	1.2	0.0030	--	0.41	<0.00020	--	0.19	0.0029	--	0.00022	--
MW-75	Multiunit 1	Downgradient Boundary	6/21/2020	FC-CCR-MW75-0620	<0.001	0.00071	--	0.018	--	--	--	0.0017	--	<0.001	--	0.047	--	1.1	0.0028	--	0.77	--	--	0.18	0.0030	--	0.00021	0.8
MW-75	Multiunit 1	Downgradient Boundary	11/8/2020	FC-CCR-MW75-1120	<0.001 U	<0.0013 U	--	0.013 J	--	<0.001	--	0.0019	--	0.00072 J	--	0.047	--	1.3	0.0029	--	0.43	<0.0002	--	0.19	0.0060	--	0.00020	<0.8
MW-75	Multiunit 1	Downgradient Boundary	4/23/2021	FC-CCR-MW75-0421	<0.001 U	<0.0016 U	--	0.02	--	<0.001	--	0.0018	--	<0.001	--	0.045	--	1.0	0.0029	--	0.44	<0.0002	--	0.18	0.0037	--	<0.0001 U	<0.8
MW-75	Multiunit 1	Downgradient Boundary	11/13/2021	FC-CCR-MW75-1121	0.00013 J	<0.001	--	0.028	--	<0.001	--	0.0020	--	<0.002	--	0.054	--	1.0	0.0036	--	0.47	<0.0002	--	0.20	0.0042	--	0.00024	0.8
MW-75	Multiunit 1	Downgradient Boundary	5/22/2022	FC-CCR-MW75-0522	<0.001	0.00075	--	0.020	--	<0.001	--	0.0016	--	<0.001	--	0.050	--	1.2	0.0026	--	0.47	<0.0002	--	0.17	0.0030	--	0.00021	1.4

Table F-5
Groundwater Sampling Results for the Multiunit 1 Monitoring Wells - Appendix IV Constituents

					Appendix IV Constituents																										
				Constituent:	Antimony	Arsenic	Arsenic	Barium	Barium	Beryllium	Beryllium	Cadmium	Cadmium	Chromium	Chromium	Cobalt	Cobalt	Fluoride	Lead	Lead	Lithium	Mercury	Mercury	Molybdenum	Selenium	Selenium	Thallium	Total Radium
				Filtered:	N	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	N	Y	N	N	Y	N	N	Y	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L
				Multiunit 1 BTV	*0.01*	*0.0086*	*0.0086*	*0.042*	*0.042*	*0.001*	*0.001*	*0.002*	*0.002*	*0.02*	*0.02*	*0.01*	*0.01*	*5*	*0.01*	*0.01*	*1.8*	*0.0002*	*0.0002*	*0.12*	*0.092*	--	*0.017*	*4.43*
				Multiunit 1 GWPS	*0.01*	*0.01*	*0.01*	*2*	*2*	*0.004*	*0.004*	*0.005*	*0.005*	*0.1*	*0.1*	*0.01*	*0.01*	*5*	*0.015*	*0.015*	*1.8*	*0.002*	*0.002*	*0.1*	*0.092*	--	*0.017*	*5*
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**																											
MW-75	Multiunit 1	Downgradient Boundary	11/11/2022	FC-CCR-MW75-1122	<0.001	**0.00051**	--	**0.021**	--	<0.001	--	**0.0016**	--	<0.001	--	**0.057**	--	**1.3**	**0.0031**	--	**0.42**	<0.0002	--	**0.18**	**0.0044**	--	**0.00022**	**0.7**
MW-75	Multiunit 1	Downgradient Boundary	5/4/2023	FC-CCR-MW75-0523	<0.002	<0.005	--	**0.019**	--	<0.001	--	**0.0017**	--	<0.003	--	**0.056**	--	<4	**0.0034**	--	**0.47**	<0.0002	--	**0.17**	<0.005	--	<0.001	**0.7**
MW-75	Multiunit 1	Downgradient Boundary	11/08/2023	FC-CCR-MW75-1124	<0.001	**0.0012**	--	**0.020**	--	<0.001	--	**0.0018**	--	<0.001	--	**0.058**	--	**1.2**	**0.0035**	--	**0.50**	<0.0002	--	**0.18**	**0.0045**	--	**0.00025**	<0.8
MW-76	Multiunit 1	Downgradient Boundary	4/26/2021	FC-CCR-MW76-0421	<0.001 U	<0.0018 U	--	**0.021**	--	<0.001	--	<0.0001 U	--	**0.0017**	--	**0.015**	--	**0.44 J**	<0.0005	--	**0.63**	<0.0002	--	**0.095**	**0.0036**	--	<0.0001 U	<0.8
MW-87	Multiunit 1	Downgradient	3/19/2019	FC-CCR-MW87-031919	**0.0037**	**0.0023**	--	**0.023**	--	<0.0010	--	**0.00013**	--	<0.0010	--	**0.032**	--	<0.80	**0.00062**	--	**1.1**	<0.00020	--	**0.12**	**0.090**	--	<0.00010	--
MW-87	Multiunit 1	Downgradient	3/19/2019	FC-CCR-MW87-031919	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.5**
MW-87	Multiunit 1	Downgradient	5/14/2019	FC-CCR-MW87-51419	--	**0.0026**	--	**0.015**	--	--	--	<0.00010	--	--	--	**0.018**	--	<0.80	<0.00050	--	**1.3**	--	--	**0.10**	**0.033**	--	<0.00010	--
MW-87	Multiunit 1	Downgradient	5/14/2019	FC-CCR-MW87-51419	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.4**
MW-87	Multiunit 1	Downgradient	6/22/2019	FC-NIT-MW87-62219	**0.0033**	**0.0042**	--	**0.016**	--	<0.0010	--	<0.00010	--	<0.0020	--	**0.018**	--	<0.80	<0.0020	--	**1.3**	<0.00020	--	**0.13**	**0.0059**	--	<0.00040	--
MW-87	Multiunit 1	Downgradient	11/19/2019	FC-CCR-MW87-111919	<0.0010	**0.0028 J**	--	**0.015**	--	<0.0010	--	**0.00024**	--	<0.0010	--	**0.0037**	--	<0.80	<0.00050	--	**1.2**	<0.00020	--	**0.030**	**0.015**	--	**0.00018**	--
MW-87	Multiunit 1	Downgradient	11/19/2019	*DUP* FC-CCR-FD02-111919	<0.0010	**0.0014 J**	--	**0.015**	--	<0.0010	--	**0.00024**	--	<0.0010	--	**0.0036**	--	<0.80	<0.00050	--	**1.3**	<0.00020	--	**0.028**	**0.018**	--	**0.00017**	--
MW-87	Multiunit 1	Downgradient	6/23/2020	FC-CCR-MW87-0620	**0.0021**	**0.0030**	--	**0.012**	--	--	--	**0.00032**	--	<0.002	--	**0.010**	--	<0.8	<0.001	--	--	--	--	**0.069**	**0.0067**	--	<0.0002	**2.8**
MW-87	Multiunit 1	Downgradient	11/6/2020	FC-CCR-MW87-1120	**0.0016 J**	**0.0048**	--	<0.02/0.016	--	<0.001	--	**0.00023**	--	**0.012**	--	**0.014**	--	**0.56 J**	<0.001	--	**1.7**	<0.0002	--	**0.051**	**0.019**	--	**0.00014 J**	**3.7**
MW-87	Multiunit 1	Downgradient	4/27/2021	FC-CCR-MW87-0421	<0.002 U	<0.0024 U	--	**0.014**	--	<0.001	--	<0.0002 U	--	<0.002	--	**0.0081**	--	**0.42 J**	<0.002	--	**1.8**	<0.0002	--	**0.056**	**0.011**	--	<0.0004 U	<0.8
MW-87	Multiunit 1	Downgradient	11/17/2021	FC-CCR-MW87-1121	**0.0016 J**	**0.0024**	--	**0.014**	--	<0.002	--	**0.00017 J**	--	**0.0021**	--	**0.0078**	--	**0.17 J**	**0.00080**	--	**2.7**	<0.0002	--	**0.065**	**0.029**	--	**0.00016**	**0.6**
MW-87	Multiunit 1	Downgradient	11/17/2021	FC-CCR-FD04-1121	**0.0016 J**	**0.0032**	--	**0.014**	--	<0.002	--	**0.00017 J**	--	**0.0023**	--	**0.0082**	--	**0.16 J**	**0.00081**	--	**2.7**	<0.0002	--	**0.067**	**0.027**	--	**0.00016**	**0.7**
MW-87	Multiunit 1	Downgradient	2/8/2022	FC-CCR-MW87-0222	--	--	--	--	--	<0.005	--	--	--	--	--	**0.0036**	--	<0.8	--	--	**2.3**	--	--	**0.037**	--	--	--	--
MW-87	Multiunit 1	Downgradient	5/24/2022	FC-CCR-MW87-0522	**0.0014**	**0.0017**	--	**0.010**	--	<0.002	--	**0.00017**	--	<0.001	--	**0.0077**	--	<0.8	<0.0005	--	**2.5**	<0.0002	--	**0.053**	**0.012**	--	<0.0004	**3.9**
MW-87	Multiunit 1	Downgradient	5/24/2022	*DUP* FC-CCR-FD04-0522	**0.0014**	**0.0016**	--	**0.0097**	--	<0.002	--	**0.00013**	--	**0.0011**	--	**0.0077**	--	<0.8	<0.0005	--	**2.5**	<0.0002	--	**0.055**	**0.013**	--	<0.0004	**3.9**
MW-87	Multiunit 1	Downgradient	5/24/2022	FC-CCR-SS07-0522	<0.1	<0.05	--	<0.125	--	<0.0125	--	<0.0125	--	<0.1	--	**0.00856 J**	--	<125/0.51	<0.025	--	**2.34**	<0.001	--	**0.0548**	**0.0072 J**	--	<0.025	--
MW-87	Multiunit 1	Downgradient	8/11/2022	FC-CCR-MW87-0822	--	--	--	--	--	<0.01	--	--	--	--	--	**0.0069**	--	**2.2**	--	--	**2.7 J**	--	--	**0.052**	--	--	--	--
MW-87	Multiunit 1	Downgradient	8/11/2022	*DUP* FC-CCR-FD01-0822	--	--	--	--	--	<0.01	--	--	--	--	--	**0.0065**	--	<2	--	--	**2.7**	--	--	**0.056**	--	--	--	--
MW-87	Multiunit 1	Downgradient	11/15/2022	FC-CCR-MW87-1122	<0.002	**0.0014**	--	**0.0086**	--	<0.002	--	**0.00021**	--	<0.002	--	**0.0059**	--	<8	<0.001	--	**2.8**	<0.0002	--	**0.057**	**0.022**	--	**0.00020**	**4.8**
MW-87	Multiunit 1	Downgradient	5/5/2023	FC-CCR-MW87-0523	<0.002	<0.005	--	**0.0076**	--	<0.001	--	<0.001	--	<0.003	--	**0.0030**	--	<80	<0.001	--	**2.6**	<0.0002	--	**0.036**	**0.0053**	--	<0.001	**2.3**
EW-14	Multiunit 1	Supplementary	6/23/2020	FC-CCR-EW14-0620	<0.001	**0.00082**	--	**0.018**	--	--	--	**0.00077**	--	<0.001	--	**0.023**	--	<0.8	<0.0005	--	--	--	--	**0.012**	**0.00063**	--	**0.00026**	<0.6
EW-14	Multiunit 1	Supplementary	11/16/2023	FC-CCR-EW14-1124	--	--	--	--	--	--	--	--	--	--	--	**0.0070**	--	<0.8	--	--	--	--	--	**0.057**	--	--	--	--
EW-15	Multiunit 1	Supplementary	11/16/2023	FC-CCR-EW15-1124	--	--	--	--	--	--	--	--	--	--	--	<0.005	--	<0.8	--	--	--	--	--	**0.040**	--	--	--	--
EW-15	Multiunit 1	Supplementary	6/23/2020	FC-CCR-EW15-0620	**0.0010**	**0.00099**	--	**0.0089**	--	--	--	**0.00048**	--	**0.0032**	--	**0.017**	--	<0.8	<0.0005	--	--	--	--	**0.0039**	<0.001	--	**0.00012**	**0.8**
MW-50B	Multiunit 1	--	3/17/2015	FCPP-50B-031715	--	**0.0790**	--	--	--	--	--	--	--	**0.35**	--	--	--	<2.0	--	--	--	--	--	--	**0.020**	--	--	--

Notes:

BTV exceedances are shown in grey shaded cells. GWPS exceedence are shown in red text.

Abbreviations and Data Qualifiers:

* data appears anomalous
< = less than
BTV = Background Threshold Value
CCR = Coal Combustion Residual
degrees C = degrees Celsius
GWPS = Groundwater Protection Standard
ID = Identification
J = The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
mg/L = milligrams per liter
pCi/L = Picocuries per liter
su = standard units
UJ = The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

Table F-6
Groundwater Sampling Results for the Multiunit 1 Monitoring Wells - Additional Analyses

					Additional Analyses																	
				Constituent:	Alkalinity Bicarbonate	Alkalinity Carbonate	Alkalinity Hydroxide	Alkalinity(as CaCO3)	Alkalinity, Phenolphthalein, as CaCO3	Iron	Magnesium	Magnesium	Manganese	Nickel	Potassium	Potassium	Radium 226	Radium 228	Sodium	Sodium	Zinc
				Filtered:	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N	N	Y	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L	pCi/L	mg/L	mg/L	mh/L
				Multiunit 1 BTV	--	--	--	--	--		--	--	--	--	--	--	--	--	--	--	--
				Multiunit 1 GWPS	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**																	
MW-43	Multiunit 1	Background	11/18/2013	FC-43-111813	**590**	<6.0	<6.0	**590**	<6.0	--	**550**	--	--	--	**32**	--	--	--	**1,900**	--	--
MW-43	Multiunit 1	Background	9/8/2014	FCPP-43-090814	**570**	<6.0	<6.0	**570**	<6.0	--	**580**	--	--	--	**30**	--	--	--	**2,100**	--	--
MW-43	Multiunit 1	Background	3/16/2015	FCPP-43-031615	**580**	<6.0	<6.0	**580**	<6.0	--	**560**	--	--	--	**35**	--	--	--	**2,000**	--	--
MW-43	Multiunit 1	Background	12/1/2015	FC-CCR-MW43-120115	**680**	<5.0	--	**680**	--	--	**560**	--	--	--	**31**	--	**1.81**	**2.73**	**1,900**	--	--
MW-49A	Multiunit 1	Background	9/10/2014	FCPP-49A-091014	**930**	<6.0	<6.0	**930**	<6.0	--	**2,200**	--	--	--	**100**	--	--	--	**11,000**	--	--
MW-49A	Multiunit 1	Background	3/19/2015	FCPP-49A-031915	**1,100**	<6.0	<6.0	**1,100**	<6.0	--	**1,800**	--	--	--	**82**	--	--	--	**11,000**	--	--
MW-49A	Multiunit 1	Background	7/1/2015	MW-47A	**1,100**	<6.0	<6.0	**1,100**	<6.0	--	**2,000**	--	--	--	**93**	--	--	--	**12,000**	--	--
MW-49A	Multiunit 1	Background	8/29/2015	FCPP-49A-082915	**1,100**	<6.0	<6.0	**1,100**	<6.0	--	**1,800**	--	--	--	**90**	--	--	--	**8,700**	--	--
MW-49A	Multiunit 1	Background	12/1/2015	FC-CCR-MW49A-120115	**870**	<5.0	--	**870**	--	--	**750**	--	--	--	**54**	--	--	--	**4,600**	--	--
MW-49A	Multiunit 1	Background	12/1/2015	FC-CCR-MW49A-120115	--	--	--	--	--	--	--	--	--	--	--	--	**0.528**	**1.34**	--	--	--
MW-49A	Multiunit 1	Background	4/26/2016	FC-CCR-MW-49A-042616	--	--	--	--	--	--	--	--	--	--	--	--	**0.4**	**1.9**	--	--	--
MW-49A	Multiunit 1	Background	6/7/2016	FC-CCR-MW49A-616	--	--	--	--	--	--	--	--	--	--	--	--	**0.6**	**1.8**	--	--	--
MW-49A	Multiunit 1	Background	6/7/2016	FC-CCR-MW49A-616	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-49A	Multiunit 1	Background	8/21/2016	FC-CCR-MW49A-816	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-49A	Multiunit 1	Background	8/21/2016	FC-CCR-MW49A-816	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-49A	Multiunit 1	Background	8/21/2016	FC-CCR-MW49A-816	--	--	--	--	--	--	--	--	--	--	--	--	**0.4**	**3.1**	--	--	--
MW-49A	Multiunit 1	Background	9/13/2016	FC-CCR-MW49A-916	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-49A	Multiunit 1	Background	9/13/2016	FC-CCR-MW49A-916	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-49A	Multiunit 1	Background	9/13/2016	FC-CCR-MW49A-916	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	**1.3**	--	--	--
MW-49A	Multiunit 1	Background	10/20/2016	FC-CCR-MW49A-1016	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-49A	Multiunit 1	Background	10/20/2016	FC-CCR-MW49A-1016	--	--	--	--	--	--	--	--	--	--	--	--	**0.4**	**1.7**	--	--	--
MW-49A	Multiunit 1	Background	2/2/2017	FC-CCR-MW49A-117	**890**	<6.0	<6.0	**890**	<6.0	--	**1,300**	--	--	--	**77**	--	--	--	**6,700**	--	--
MW-49A	Multiunit 1	Background	2/2/2017	FC-CCR-MW49A-117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-49A	Multiunit 1	Background	2/2/2017	FC-CCR-MW49A-117	--	--	--	--	--	--	--	--	--	--	--	--	**0.5**	**2.9**	--	--	--
MW-49A	Multiunit 1	Background	4/18/2017	FC-CCR-MW49A-41817	**900**	<6.0	<6.0	**900**	<6.0	--	**1,400**	--	--	--	**71**	--	--	--	**6,600**	--	--
MW-49A	Multiunit 1	Background	4/18/2017	FC-CCR-MW49A-41817	--	--	--	--	--	--	--	--	--	--	--	--	**0.6**	**1.4**	--	--	--
MW-49A	Multiunit 1	Background	4/18/2017	FC-CCR-MW49A-41817	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-49A	Multiunit 1	Background	5/3/2017	FC-CCR-MW49A-5317	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-49A	Multiunit 1	Background	5/3/2017	FC-CCR-MW49A-5317	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	**1.9**	--	--	--
MW-49A	Multiunit 1	Background	5/30/2017	FC-CCR-MW49A-53017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-49A	Multiunit 1	Background	5/30/2017	FC-CCR-MW49A-53017	--	--	--	--	--	--	--	--	--	--	--	--	<0.5	**2.1**	--	--	--
MW-49A	Multiunit 1	Background	6/22/2017	FC-CCR-MW49A-62217	**850**	<6.0	<6.0	**850**	<6.0	--	**1,200**	--	--	--	**70**	--	--	--	**5,700**	--	--
MW-49A	Multiunit 1	Background	6/22/2017	FC-CCR-MW49A-62217	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-49A	Multiunit 1	Background	6/22/2017	FC-CCR-MW49A-62217	--	--	--	--	--	--	--	--	--	--	--	--	**0.5**	**2.2**	--	--	--
MW-49A	Multiunit 1	Background	7/22/2017	FC-CCR-MW49A-72217	**850**	<6.0	<6.0	**850**	<6.0	--	**1,100**	--	--	--	**69**	--	--	--	**5,700**	--	--
MW-49A	Multiunit 1	Background	7/22/2017	FC-CCR-MW49A-72217	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-49A	Multiunit 1	Background	7/22/2017	FC-CCR-MW49A-72217	--	--	--	--	--	--	--	--	--	--	--	--	**0.5**	**2.1**	--	--	--
MW-49A	Multiunit 1	Background	8/10/2017	FC-CCR-MW49A-81017	**790**	<6.0	<6.0	**790**	<6.0	--	**1,100**	--	--	--	**70**	--	--	--	**5,700**	--	--
MW-49A	Multiunit 1	Background	8/10/2017	FC-CCR-MW49A-81017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-49A	Multiunit 1	Background	8/10/2017	FC-CCR-MW49A-81017	--	--	--	--	--	--	--	--	--	--	--	--	<0.5	**1.7**	--	--	--
MW-49A	Multiunit 1	Background	8/17/2017	FC-CCR-MW49A-81717	--	--	--	--	--	--	--	--	--	--	--	--	<0.5	**2.0**	--	--	--
MW-49A	Multiunit 1	Background	8/17/2017	FC-CCR-MW49A-81717	**750**	<6.0	<6.0	**750**	<6.0	--	**980**	--	--	--	**84**	--	--	--	**5,400**	--	--
MW-49A	Multiunit 1	Background	9/10/2017	FC-CCR-MW49A-91017	**720**	<6.0	<6.0	**720**	<6.0	--	**880**	--	--	--	**62**	--	--	--	**4,900**	--	--
MW-49A	Multiunit 1	Background	9/10/2017	FC-CCR-MW49A-91017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-49A	Multiunit 1	Background	9/10/2017	FC-CCR-MW49A-91017	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	**2.3**	--	--	--
MW-49A	Multiunit 1	Background	10/12/2017	FC-CCR-MW49A-101217	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	**2.5**	--	--	--
MW-49A	Multiunit 1	Background	10/12/2017	FC-CCR-MW49A-101217	**710**	<6.0	<6.0	**710**	<6.0	--	**790**	--	--	--	**62**	--	--	--	**4,900**	--	--
MW-49A	Multiunit 1	Background	11/30/2017	FC-CCR-MW49A-113017	**780**	<6.0	<6.0	**780**	<6.0	--	**1,000**	--	--	--	**79**	--	--	--	**6,100**	--	--
MW-49A	Multiunit 1	Background	3/17/2018	FC-CCR-MW49A-31718	--	--	--	--	--	--	--	--	--	--	--	--	<0.8	<0.8	--	--	--
MW-49A	Multiunit 1	Background	6/1/2018	FC-CCR-MW-49A-6118	--	--	--	--	--	--	--	--	--	--	--	--	<0.5	**1.5**	--	--	--
MW-49A	Multiunit 1	Background	6/1/2018	FC-CCR-MW-49A-6118	**750**	<6.0	<6.0	**750**	<6.0	--	**2,800**	--	--	--	**70**	--	--	--	**6,400**	--	--
MW-49A	Multiunit 1	Background	11/4/2018	FC-CCR-MW49A-11418	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Table F-6
Groundwater Sampling Results for the Multiunit 1 Monitoring Wells - Additional Analyses

					Additional Analyses																
				Constituent:	Alkalinity Bicarbonate	Alkalinity Carbonate	Alkalinity Hydroxide	Alkalinity(as CaCO3)	Alkalinity, Phenolphthalein, as CaCO3	Iron	Magnesium	Magnesium	Manganese	Nickel	Potassium	Potassium	Radium 226	Radium 228	Sodium	Sodium	Zinc
				Filtered:	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N	N	Y	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L	pCi/L	mg/L	mg/L	mh/L
				Multiunit 1 BTV	--	--	--	--	--		--	--	--	--	--	--	--	--	--	--	--
				Multiunit 1 GWPS	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**																	
MW-49A	Multiunit 1	Background	11/4/2018	FC-CCR-MW49A-11418	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-49A	Multiunit 1	Background	11/4/2018	FC-CCR-MW49A-11418	--	--	--	--	--	--	--	--	--	--	--	--	<0.5	**1.4**	--	--	--
MW-49A	Multiunit 1	Background	3/19/2019	FC-CCR-MW49A-031919	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-49A	Multiunit 1	Background	3/19/2019	FC-CCR-MW49A-031919	--	--	--	--	--	--	--	--	--	--	--	--	<0.5	**0.8**	--	--	--
MW-49A	Multiunit 1	Background	5/14/2019	FC-CCR-MW49A-51419	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-49A	Multiunit 1	Background	5/14/2019	FC-CCR-MW49A-51419	--	--	--	--	--	--	--	--	--	--	--	--	<0.6	<0.7	--	--	--
MW-49A	Multiunit 1	Background	11/19/2019	FC-CCR-MW49A-111919	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-49A	Multiunit 1	Background	6/23/2020	FC-CCR-MW49A-0620	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	**1.8**	--	--	--
MW-49A	Multiunit 1	Background	11/6/2020	FC-CCR-MW49-1120	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	<0.8	**--**	--	--
MW-49A	Multiunit 1	Background	4/27/2021	FC-CCR-MW49A-0421	--	--	--	--	--	--	--	--	--	--	--	--	<0.5	<0.8	--	--	--
MW-49A	Multiunit 1	Background	11/15/2021	FC-CCR-MW49A-1121	--	--	--	--	--	--	--	--	--	--	--	--	<0.3	**1.3**	--	--	--
MW-49A	Multiunit 1	Background	5/26/2022	FC-CCR-MW49A-0522	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	**0.6 J**	--	--	--
MW-49A	Multiunit 1	Background	11/16/2022	FC-CCR-MW49A-1122	--	--	--	--	--	--	--	--	--	--	--	--	**0.4**	<0.7	--	--	--
MW-49A	Multiunit 1	Background	5/8/2023	FC-CCR-MW49A-0523	--	--	--	--	--	--	--	--	--	**0.078**	--	--	<0.39	**0.9**	--	--	--
MW-49A	Multiunit 1	Background	11/15/2023	FC-CCR-MW49A-1124	--	--	--	--	--	--	--	--	--	--	--	--	<0.48	**2.1**	--	--	--
MW-50A	Multiunit 1	Background	3/19/2015	FCPP-50A-031915	**320**	<6.0	<6.0	**320**	<6.0	--	**380**	--	--	--	**33**	--	--	--	**1,500**	--	--
MW-50A	Multiunit 1	Background	12/1/2015	FC-CCR-MW50-120115	**350**	<5.0	--	**350**	--	--	**340**	--	--	--	**37**	--	--	--	**1,300**	--	--
MW-50A	Multiunit 1	Background	12/1/2015	FC-CCR-MW50-120115	--	--	--	--	--	--	--	--	--	--	--	--	**6.69**	**17.3**	--	--	--
MW-50A	Multiunit 1	Background	2/2/2017	FC-CCR-MW50A-117	**290**	<6.0	<6.0	**290**	<6.0	--	**320**	--	--	--	**32**	--	--	--	**1,100**	--	--
MW-50A	Multiunit 1	Background	2/2/2017	FC-CCR-MW50A-117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-74	Multiunit 1	Background	2/2/2017	FC-CCR-MW74-117	**380**	<6.0	<6.0	**380**	<6.0	--	**600**	--	--	--	**26**	--	--	--	**2,200**	--	--
MW-74	Multiunit 1	Background	2/2/2017	FC-CCR-MW74-117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-74	Multiunit 1	Background	2/2/2017	FC-CCR-MW74-117	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	**1.6**	--	--	--
MW-74	Multiunit 1	Background	4/18/2017	FC-CCR-MW74-41817	**410**	<6.0	<6.0	**410**	<6.0	--	**570**	--	--	--	**20**	--	--	--	**2,100**	--	--
MW-74	Multiunit 1	Background	4/18/2017	FC-CCR-MW74-41817	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	**0.7**	--	--	--
MW-74	Multiunit 1	Background	4/18/2017	FC-CCR-MW74-41817	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-74	Multiunit 1	Background	5/2/2017	FC-CCR-MW74-5217	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-74	Multiunit 1	Background	5/2/2017	FC-CCR-MW74-5217	--	--	--	--	--	--	--	--	--	--	--	--	**0.5**	<0.6	--	--	--
MW-74	Multiunit 1	Background	5/29/2017	FC-CCR-MW74-52917	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-74	Multiunit 1	Background	5/29/2017	FC-CCR-MW74-52917	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	**1.1**	--	--	--
MW-74	Multiunit 1	Background	6/22/2017	FC-CCR-MW74-62217	**440**	<6.0	<6.0	**440**	<6.0	--	**640**	--	--	--	**22**	--	--	--	**2,200**	--	--
MW-74	Multiunit 1	Background	6/22/2017	FC-CCR-MW74-62217	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-74	Multiunit 1	Background	6/22/2017	FC-CCR-MW74-62117	--	--	--	--	--	--	--	--	--	--	--	--	<0.3	<0.6	--	--	--
MW-74	Multiunit 1	Background	7/22/2017	FC-CCR-MW74-72217	**430**	<6.0	<6.0	**430**	<6.0	--	**710**	--	--	--	**22**	--	--	--	**2,400**	--	--
MW-74	Multiunit 1	Background	7/22/2017	FC-CCR-MW74-72217	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-74	Multiunit 1	Background	7/22/2017	FC-CCR-MW74-72217	--	--	--	--	--	--	--	--	--	--	--	--	<0.5	<0.7	--	--	--
MW-74	Multiunit 1	Background	8/10/2017	FC-CCR-MW74-81017	**420**	<6.0	<6.0	**420**	<6.0	--	**730**	--	--	--	**22**	--	--	--	**2,400**	--	--
MW-74	Multiunit 1	Background	8/10/2017	FC-CCR-MW74-81017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-74	Multiunit 1	Background	8/10/2017	FC-CCR-MW74-81017	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	**0.9**	--	--	--
MW-74	Multiunit 1	Background	9/10/2017	FC-CCR-MW74-91017	**410**	<6.0	<6.0	**410**	<6.0	--	**1,100**	--	--	--	**23**	--	--	--	**3,200**	--	--
MW-74	Multiunit 1	Background	9/10/2017	FC-CCR-MW74-91017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-74	Multiunit 1	Background	9/10/2017	FC-CCR-MW74-91017	--	--	--	--	--	--	--	--	--	--	--	--	**0.5**	**1.2**	--	--	--
MW-74	Multiunit 1	Background	10/11/2017	FC-CCR-MW74-101117	--	--	--	--	--	--	--	--	--	--	--	--	<0.3	<0.6	--	--	--
MW-74	Multiunit 1	Background	10/11/2017	FC-CCR-MW74-101117	**390**	<6.0	<6.0	**390**	<6.0	--	**1,000**	--	--	--	**22**	--	--	--	**2,900**	--	--
MW-74	Multiunit 1	Background	11/30/2017	FC-CCR-MW74-113017	**380**	<6.0	<6.0	**380**	<6.0	--	**1,200**	--	--	--	**28**	--	--	--	**3,500**	--	--
MW-74	Multiunit 1	Background	3/17/2018	FC-CCR-MW74-31718	--	--	--	--	--	--	--	--	--	--	--	--	<0.9	<0.8	--	--	--
MW-74	Multiunit 1	Background	6/1/2018	FC-CCR-MW-74-6118	--	--	--	--	--	--	--	--	--	--	--	--	<0.5	<0.7	--	--	--
MW-74	Multiunit 1	Background	6/1/2018	FC-CCR-MW-74-6118	**450**	<6.0	<6.0	**450**	<6.0	--	**870**	--	--	--	**22**	--	--	--	**3,100**	--	--
MW-74	Multiunit 1	Background	3/19/2019	FC-CCR-MW74-031919	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-74	Multiunit 1	Background	3/19/2019	FC-CCR-MW74-031919	--	--	--	--	--	--	--	--	--	--	--	--	<0.5	<0.7	--	--	--
MW-74	Multiunit 1	Background	5/13/2019	FC-CCR-MW74-51319	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-74	Multiunit 1	Background	5/13/2019	FC-CCR-MW74-51319	--	--	--	--	--	--	--	--	--	--	--	--	<0.6	<0.7	--	--	--

Table F-6
Groundwater Sampling Results for the Multiunit 1 Monitoring Wells - Additional Analyses

					Additional Analyses																
				Constituent:	Alkalinity Bicarbonate	Alkalinity Carbonate	Alkalinity Hydroxide	Alkalinity(as CaCO3)	Alkalinity, Phenolphthalein, as CaCO3	Iron	Magnesium	Magnesium	Manganese	Nickel	Potassium	Potassium	Radium 226	Radium 228	Sodium	Sodium	Zinc
				Filtered:	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N	N	Y	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L	pCi/L	mg/L	mg/L	mh/L
				Multiunit 1 BTV	--	--	--	--	--		--	--	--	--	--	--	--	--	--	--	--
				Multiunit 1 GWPS	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**																	
MW-74	Multiunit 1	Background	6/20/2020	FC-CCR-MW74-0620	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	<0.6	--	--	--
MW-74	Multiunit 1	Background	4/23/2021	FC-CCR-MW74-0421	--	--	--	--	--	--	--	--	--	--	--	--	<0.5	<0.8	--	--	--
DMX-3	Multiunit 1	Supplementary	4/21/1992	DMX-3_4/21/1992	--	--	--	**361**	--	--	--	**1,320**	--	--	--	**36**	--	--	--	**2,180**	--
DMX-3	Multiunit 1	Supplementary	3/12/2014	FC-DMX3-031214	**410**	<6.0	<6.0	**410**	<6.0	--	**890**	--	--	--	**37**	--	--	--	**1,500**	--	--
DMX-3	Multiunit 1	Supplementary	9/11/2014	FCPP-DMX3-91114	**480**	<6.0	<6.0	**480**	<6.0	--	**1,100**	--	--	--	**43**	--	--	--	**1,900**	--	--
DMX-3	Multiunit 1	Supplementary	12/8/2014	FCPP-DUP1-12914	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DMX-3	Multiunit 1	Supplementary	12/8/2014	FCPP-DMX03-12914	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DMX-3	Multiunit 1	Supplementary	3/18/2015	FCPP-DMX3-031815	**580**	<6.0	<6.0	**580**	<6.0	--	**1,300**	--	--	--	**42**	--	--	--	**2,100**	--	--
DMX-3	Multiunit 1	Supplementary	6/24/2015	DMX-3	**640**	<6.0	<6.0	**640**	<6.0	--	**1,400**	--	--	--	**46**	--	--	--	**2,100**	--	--
DMX-3	Multiunit 1	Supplementary	11/5/2015	FC DMX -3-(051115)	**690**	<6.0	<6.0	**690**	<6.0	--	**1,600**	--	--	--	**45**	--	--	--	**2,400**	--	--
DMX-3	Multiunit 1	Supplementary	6/21/2016	FC-SEEPS-DMX-3-062116	**780**	<6.0	<6.0	**780**	<6.0	--	**1,600**	--	--	--	**55**	--	--	--	**2,600**	--	--
DMX-3	Multiunit 1	Supplementary	9/15/2016	FC-Seep-DMX3-916	**600**	<6.0	<6.0	**600**	<6.0	--	**1,700**	--	--	--	**55**	--	--	--	**2,800**	--	--
DMX-3	Multiunit 1	Supplementary	6/22/2020	FC-CCR-DMX03-0620	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DMX-3	Multiunit 1	Supplementary	11/7/2020	FC-CCR-DMX03-1120	**750**	<6	<6	**750**	<6	--	**1,900**	--	--	--	**66**	--	<0.4	<0.8	**2,800**	--	--
DMX-3	Multiunit 1	Supplementary	4/25/2021	FC-CCR-DMX03-0421	**750**	<6	<6	**750**	<6	**0.44**	**2,000**	--	**0.30**	--	**72**	--	<0.4	<0.8	**3,100**	--	--
DMX-3	Multiunit 1	Supplementary	11/14/2021	FC-CCR-DMX03	**950 J**	<6	<6	**950 J**	<6	**0.35**	**2,300**	--	**0.32**	--	**58**	--	**0.6**	**0.8**	**3,600**	--	--
DMX-3	Multiunit 1	Supplementary	2/1/2022	FC-CCR-DMX03-0222	**880**	<6	<6	**880**	<6	**0.32**	**1,800**	--	--	--	**56**	--	--	--	**2,800**	--	--
DMX-3	Multiunit 1	Supplementary	5/25/2022	FC-CCR-DMX03-0522	**860**	<6	<6	**860**	<6	**0.24**	**2,000**	--	**0.53**	--	**66**	--	**0.4**	**1.0**	**3,200**	--	--
DMX-3	Multiunit 1	Supplementary	8/12/2022	FC-CCR-DMX03-0822	**860**	<6	<6	**860**	<6	**0.22**	**1,900**	--	--	--	**59**	--	--	--	**2,800**	--	--
DMX-3	Multiunit 1	Supplementary	11/11/2022	FC-CCR-DMX03-1122	**880**	<6	<6	**880**	<6	**0.41**	**2,000**	--	**0.54**	--	**62**	--	**0.6**	**0.7**	**3,100**	--	--
DMX-3	Multiunit 1	Supplementary	5/3/2023	FC-CCR-DMX03-0523	**870**	<6	<6	**870**	<6	**0.16**	**2,300**	--	**0.44**	**0.026**	**67**	--	<0.46	**1.6**	**2,900**	--	--
DMX-3	Multiunit 1	Supplementary	11/13/2023	FC-CCR-DMX03-1124	**850**	<6	<6	**850**	<6	<0.5	**2,300**	--	**0.44**	--	**62**	--	<0.52	<0.82	**3,600 J**	--	--
DMX-4	Multiunit 1	Supplementary	4/21/1992	DMX-4_4/21/1992	--	--	--	**396**	--	--	--	**982**	--	--	--	**32.6**	--	--	--	**3,440**	--
DMX-4	Multiunit 1	Supplementary	3/18/2015	FCPP-DMX4-031815	**350**	<6.0	<6.0	**350**	<6.0	--	**680**	--	--	--	**32**	--	--	--	**1,900**	--	--
DMX-4	Multiunit 1	Supplementary	6/24/2015	DMX-4	**340**	<6.0	<6.0	**340**	<6.0	--	**630**	--	--	--	**32**	--	--	--	**1,600**	--	--
DMX-4	Multiunit 1	Supplementary	8/29/2015	FCPP-DMX4-082915	**330**	<6.0	<6.0	**330**	<6.0	--	**620**	--	--	--	**34**	--	--	--	**1,500**	--	--
DMX-4	Multiunit 1	Supplementary	11/7/2015	FC DMX-4-(07115)	**330**	<6.0	<6.0	**330**	<6.0	--	**790**	--	--	--	**34**	--	--	--	**1,800**	--	--
DMX-4	Multiunit 1	Supplementary	11/7/2015	*DUP* FC FD-3-(071115)	**330**	<6.0	<6.0	**330**	<6.0	--	**900**	--	--	--	**37**	--	--	--	**1,900**	--	--
DMX-4	Multiunit 1	Supplementary	6/21/2016	FC-SEEPS-DMX-4-062116	**340**	<6.0	<6.0	**340**	<6.0	--	**640**	--	--	--	**35**	--	--	--	**1,600**	--	--
DMX-4	Multiunit 1	Supplementary	9/15/2016	FC-Seep-DMX4-916	**320**	<6.0	<6.0	**320**	<6.0	--	**610**	--	--	--	**34**	--	--	--	**1,600**	--	--
DMX-4	Multiunit 1	Supplementary	3/19/2019	FC-CCR-DMX4-031919	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DMX-4	Multiunit 1	Supplementary	3/19/2019	FC-CCR-DMX4-031919	--	--	--	--	--	--	--	--	--	--	--	--	<0.5	<0.7	--	--	--
DMX-4	Multiunit 1	Supplementary	5/14/2019	FC-CCR-DMX4-51419	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DMX-4	Multiunit 1	Supplementary	5/14/2019	FC-CCR-DMX4-51419	--	--	--	--	--	--	--	--	--	--	--	--	<0.5	<0.7	--	--	--
DMX-4	Multiunit 1	Supplementary	11/19/2019	FC-CCR-DMX4-111919	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DMX-4	Multiunit 1	Supplementary	6/22/2020	FC-CCR-DMX04-0620	--	--	--	--	--	--	--	--	--	--	--	--	**0.6**	<0.8	--	--	--
DMX-4	Multiunit 1	Supplementary	11/7/2020	FC-CCR-DMX04-1120	**410**	<6	<6	**410**	<6	--	**800**	--	--	--	**42**	--	<0.4	<0.8	**3,000**	--	--
DMX-4	Multiunit 1	Supplementary	4/25/2021	FC-CCR-DMX04-0421	**410**	<6	<6	**410**	<6	**0.12**	**840**	--	**0.32**	--	**47**	--	<0.4	<0.8	**2,800**	--	--
DMX-4	Multiunit 1	Supplementary	11/16/2021	FC-CCR-DMX04-1121	**340**	<6	<6	**340**	<6	**0.089 J**	**750**	--	**0.14**	--	**35**	--	<0.4	**0.7**	**1,800**		--
DMX-4	Multiunit 1	Supplementary	2/8/2022	FC-CCR-DMX04-0222	**360**	<6	<6	**360**	<6	**0.11**	**760**	--	--	--	**36**	--	--	--	**1,700**	--	--
DMX-4	Multiunit 1	Supplementary	5/25/2022	FC-CCR-DMX04-0522	**340**	<6	<6	**340**	<6	<0.1	**780**	--	**0.25**	--	**37**	--	<0.3	<0.6	**1,800**	--	--
DMX-4	Multiunit 1	Supplementary	8/12/2022	FC-CCR-DMX04-0822	**350**	<6	<6	**350**	<6	**0.11**	**760**	--	--	--	**34**	--	--	--	**1,600**	--	--
DMX-4	Multiunit 1	Supplementary	11/14/2022	FC-CCR-DMX04-1122	**370**	<6	<6	**370**	<6	**0.10**	**780**	--	**0.64**	--	**37**	--	<0.4	<0.6	**2,000**	--	--
DMX-4	Multiunit 1	Supplementary	5/4/2023	FC-CCR-DMX04-0523	**370**	<6	<6	**370**	<6	<1	**700**	--	**0.97**	**0.028**	**39**	--	<0.45	<0.6	**1,700**	--	--
DMX-4	Multiunit 1	Supplementary	11/14/2023	FC-CCR-DMX04-1124	**350**	<6	<6	**350**	<6	<0.5	**750**	--	**0.53**	--	**33**	--	<0.52	<0.82	**1,800**	--	--
DMX-05R	Multiunit 1	Extraction (Inactive)	11/16/2023	FC-CCR-DMX05R-1124	**450**	<6	<6	**450**	<6	**3.9**	**630**	--	**0.87**	--	**54**	--	**1.3**	**4.1**	**4,400**	--	<0.13
DMX-6	Multiunit 1	Supplementary	4/21/1992	DMX-6_4/21/1992	--	--	--	**201**	--	--	--	**565**	--	--	--	**27.1**	--	--	--	**1,420**	--
DMX-6	Multiunit 1	Supplementary	3/17/2015	FCPP-DMX6-031715	**250**	<6.0	<6.0	**250**	<6.0	--	**490**	--	--	--	**31**	--	--	--	**1,400**	--	--
DMX-6	Multiunit 1	Supplementary	6/24/2015	DMX-6	**710**	<6.0	<6.0	**710**	<6.0	--	**580**	--	--	--	**53**	--	--	--	**5,000**	--	--
DMX-6	Multiunit 1	Supplementary	8/29/2015	FCPP-DMX6-082915	**290**	<6.0	<6.0	**290**	<6.0	--	**500**	--	--	--	**39**	--	--	--	**1,700**	--	--
DMX-6	Multiunit 1	Supplementary	11/10/2015	FC DMX-6-(101115)	**310**	<6.0	<6.0	**310**	<6.0	--	**570**	--	--	--	**36**	--	--	--	**2,000**	--	--
DMX-6	Multiunit 1	Supplementary	6/22/2016	FC-SEEPS-DMX6-062216	**310**	<6.0	<6.0	**310**	<6.0	--	**500**	--	--	--	**36**	--	--	--	**1,700**	--	--

Table F-6
Groundwater Sampling Results for the Multiunit 1 Monitoring Wells - Additional Analyses

					Additional Analyses																
				Constituent:	Alkalinity Bicarbonate	Alkalinity Carbonate	Alkalinity Hydroxide	Alkalinity(as CaCO3)	Alkalinity, Phenolphthalein, as CaCO3	Iron	Magnesium	Magnesium	Manganese	Nickel	Potassium	Potassium	Radium 226	Radium 228	Sodium	Sodium	Zinc
				Filtered:	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N	N	Y	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L	pCi/L	mg/L	mg/L	mh/L
				Multiunit 1 BTV	--	--	--	--	--		--	--	--	--	--	--	--	--	--	--	--
				Multiunit 1 GWPS	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**																	
DMX-6	Multiunit 1	Supplementary	9/15/2016	FC-Seep-DMX6-916	370	<6.0	<6.0	370	<6.0	--	490	--	--	--	39	--	--	--	2,100	--	--
DMX-6	Multiunit 1	Supplementary	3/19/2019	FC-CCR-DMX6-031919	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DMX-6	Multiunit 1	Supplementary	3/19/2019	FC-CCR-DMX6-031919	--	--	--	--	--	--	--	--	--	--	--	--	<0.6	<0.7	--	--	--
DMX-6	Multiunit 1	Supplementary	5/14/2019	FC-CCR-DMX6-51419	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DMX-6	Multiunit 1	Supplementary	5/14/2019	FC-CCR-DMX6-51419	--	--	--	--	--	--	--	--	--	--	--	--	<0.5	<0.7	--	--	--
DMX-6	Multiunit 1	Supplementary	11/19/2019	FC-CCR-DMX6-111919	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DMX-6	Multiunit 1	Supplementary	6/23/2020	FC-CCR-DMX06-0620	480	<6	<6	480	<6	--	510	--	--	--	48	--	0.6	<0.8	3,100	--	--
DMX-6	Multiunit 1	Supplementary	11/6/2020	FC-CCR-DMX06-1120	570	<6	<6	570	<6	--	490	--	--	--	46	--	<0.4	<0.8	3,700	--	--
DMX-6	Multiunit 1	Supplementary	4/27/2021	FC-CCR-DMX06-0421	430	<6	<6	430	<6	0.10	610	--	0.76	--	46	--	<0.4	<0.8	2,300	--	--
DMX-6	Multiunit 1	Supplementary	11/18/2021	FC-CCR-DMX06-1121	440	<6	<6	440	<6	0.085 J	560	--	0.84	--	42	--	<0.4	<0.6	2,700	--	--
DMX-6	Multiunit 1	Supplementary	2/8/2022	FC-CCR-DMX06-0222	460	<6	<6	460	<6	0.11	580	--	--	--	44	--	--	--	2,700	--	--
DMX-6	Multiunit 1	Supplementary	5/24/2022	FC-CCR-DMX06-0522	440	<6	<6	440	<6	<0.1	540/560	--	0.79	--	41	--	<0.3	<0.6	2,600	--	--
DMX-6	Multiunit 1	Supplementary	8/13/2022	FC-CCR-DMX06-0822	400	<6	<6	400	<6	<0.1	600	--	--	--	38	--	--	--	2,300	--	--
DMX-6	Multiunit 1	Supplementary	11/16/2022	FC-CCR-DMX06-1122	430	<6	<6	430	<6	<0.1	580	--	0.76	--	40	--	0.8	<0.7	2,800	--	--
DMX-6	Multiunit 1	Supplementary	5/8/2023	FC-CCR-DMX06-0523	440	<6	<6	440	<6	<0.1	550	--	0.80	0.11	39	--	<0.4	<0.6	2,900	--	--
DMX-6	Multiunit 1	Supplementary	11/15/2023	FC-CCR-DMX06-1124	520	<6	<6	520	<6	<0.1	660	--	1.2	--	55	--	<0.52	<0.82	3,900	--	<0.13
MW-05	Multiunit 1	Supplementary	4/1/1987	MW-5_4/1/1987	--	--	--	830	--	--	--	1,600	--	--	--	55	--	--	--	4,600	--
MW-05	Multiunit 1	Supplementary	10/2/1987	MW-5_10/2/1987	--	--	--	880	--	--	--	1,900	--	--	--	90	--	--	--	5,200	--
MW-05	Multiunit 1	Supplementary	6/14/1988	MW-5-19880614	817.4	--	--	670	<0	--	1,540	--	--	--	76	--	--	--	4,575	--	--
MW-05	Multiunit 1	Supplementary	9/21/1988	MW-5-19880921	915	--	--	750	<0	--	1,780	--	--	--	77	--	--	--	3,720	--	--
MW-05	Multiunit 1	Supplementary	11/28/1988	MW-5-19881128	902.8	--	--	740	<0	--	1,970	--	--	--	92	--	--	--	4,170	--	--
MW-05	Multiunit 1	Supplementary	2/28/1989	MW-5-19890228	976	--	--	800	<0	--	1,650	--	--	--	80	--	--	--	3,830	--	--
MW-05	Multiunit 1	Supplementary	9/11/1989	MW-5-19890911	893	--	--	732	<0	--	1,908	--	--	--	76	--	--	--	4,100	--	--
MW-05	Multiunit 1	Supplementary	3/22/1990	MW-5-19900322	915	--	--	750	<0	--	1,450	--	--	--	74	--	--	--	3,900	--	--
MW-05	Multiunit 1	Supplementary	10/30/1990	MW-5-19901030	793	--	--	650	<0	--	1,400	--	--	--	60	--	--	--	3,100	--	--
MW-05	Multiunit 1	Supplementary	4/4/1991	MW-5-19910404	823.5	--	--	675	<0	--	1,500	--	--	--	65	--	--	--	3,400	--	--
MW-05	Multiunit 1	Supplementary	9/30/1991	MW-5-19910930	762.5	--	--	625	<0	--	1,390	--	--	--	66	--	--	--	3,140	--	--
MW-05	Multiunit 1	Supplementary	4/15/1992	MW-5-19920415	701.5	--	--	575	<0	--	1,400	--	--	--	76	--	--	--	3,900	--	--
MW-05	Multiunit 1	Supplementary	11/3/1992	MW-5-19921103	976	--	--	800	<0	--	1,600	--	--	--	62	--	--	--	4,600	--	--
MW-05	Multiunit 1	Supplementary	6/22/1993	MW-5-19930622	732	--	--	600	<0	--	1,300	--	--	--	75	--	--	--	3,300	--	--
MW-05	Multiunit 1	Supplementary	11/30/1993	MW-5-19931130	732	--	--	600	<0	--	1,400	--	--	--	62	--	--	--	3,300	--	--
MW-05	Multiunit 1	Supplementary	5/10/1994	MW-5-19940510	945.5	--	--	775	<0	--	1,400	--	--	--	71	--	--	--	3,400	--	--
MW-05	Multiunit 1	Supplementary	11/8/1994	MW-5-19941108	762.5	--	--	625	<0	--	1,300	--	--	--	70	--	--	--	3,700	--	--
MW-05	Multiunit 1	Supplementary	4/6/1995	MW-5-19950406	823.5	--	--	675	<0	--	1,400	--	--	--	63	--	--	--	3,300	--	--
MW-05	Multiunit 1	Supplementary	12/13/1995	MW-5-19951213	732	--	--	600	<0	--	1,500	--	--	--	65	--	--	--	3,400	--	--
MW-05	Multiunit 1	Supplementary	8/15/1996	MW-5-19960815	762.5	--	--	625	<0	--	1,200	--	--	--	62	--	--	--	3,000	--	--
MW-05	Multiunit 1	Supplementary	4/15/1997	MW-5-19970415	823.5	--	--	675	<0	--	1,100	--	--	--	58	--	--	--	3,000	--	--
MW-05	Multiunit 1	Supplementary	10/13/1997	MW-5-19971013	762.5	--	--	625	<0	--	1,000	--	--	--	56	--	--	--	2,700	--	--
MW-05	Multiunit 1	Supplementary	4/14/1998	MW-5-19980414	640.5	--	--	525	<0	--	1,200	--	--	--	51	--	--	--	2,900	--	--
MW-05	Multiunit 1	Supplementary	10/20/1998	MW-5-19981020	793	--	--	650	<0	--	1,100	--	--	--	50	--	--	--	2,600	--	--
MW-05	Multiunit 1	Supplementary	6/8/1999	MW-5-19990608	762.5	--	--	625	<0	--	1,200	--	--	--	49	--	--	--	2,000	--	--
MW-05	Multiunit 1	Supplementary	12/1/1999	MW-5-19991201	671	--	--	550	<0	--	1,000	--	--	--	50	--	--	--	3,500	--	--
MW-05	Multiunit 1	Supplementary	5/30/2000	MW-5-20000530	762.5	--	--	625	<0	--	1,230	--	--	--	52.1	--	--	--	2,940	--	--
MW-05	Multiunit 1	Supplementary	11/14/2000	MW-5-20001114	640.5	--	--	525	<0	--	1,000	--	--	--	57	--	--	--	3,000	--	--
MW-05	Multiunit 1	Supplementary	8/21/2001	MW-5-20010821	640.5	--	--	525	<0	--	1,100	--	--	--	51	--	--	--	3,500	--	--
MW-05	Multiunit 1	Supplementary	12/4/2001	MW-5-20011204	701.5	--	--	575	<0	--	1,000	--	--	--	50	--	--	--	2,900	--	--
MW-05	Multiunit 1	Supplementary	6/11/2002	MW-5-20020611	1,037	--	--	850	<0	--	1,100	--	--	--	52	--	--	--	2,800	--	--
MW-05	Multiunit 1	Supplementary	12/18/2002	MW-5-20021218	793	--	--	650	<0	--	1,000	--	--	--	42	--	--	--	2,500	--	--
MW-05	Multiunit 1	Supplementary	5/28/2003	MW-5-20030528	701.5	--	--	575	<0	--	1,000	--	--	--	44	--	--	--	2,300	--	--
MW-05	Multiunit 1	Supplementary	12/15/2003	MW-5-20031215	2,867	--	--	2,350	<0	--	1,000	--	--	--	56	--	--	--	2,500	--	--
MW-05	Multiunit 1	Supplementary	6/18/2004	MW-5-20040618	5,307	--	--	4,350	<0	--	1,100	--	--	--	59	--	--	--	3,100	--	--
MW-05	Multiunit 1	Supplementary	11/30/2004	MW-5-20041130	732	--	--	600	<0	--	1,200	--	--	--	60	--	--	--	3,450	--	--

Table F-6
Groundwater Sampling Results for the Multiunit 1 Monitoring Wells - Additional Analyses

					Additional Analyses																	
				Constituent:	Alkalinity Bicarbonate	Alkalinity Carbonate	Alkalinity Hydroxide	Alkalinity(as CaCO3)	Alkalinity, Phenolphthalein, as CaCO3	Iron	Magnesium	Magnesium	Manganese	Nickel	Potassium	Potassium	Radium 226	Radium 228	Sodium	Sodium	Zinc
				Filtered:	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N	N	Y	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L	pCi/L	mg/L	mg/L	mh/L
				Multiunit 1 BTV	--	--	--	--	--		--	--	--	--	--	--	--	--	--	--	--
				Multiunit 1 GWPS	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**																	
MW-05	Multiunit 1	Supplementary	5/11/2005	MW-5-20050511	732	--	--	600	<0	--	1,200	--	--	--	59	--	--	--	2,300	--	--
MW-05	Multiunit 1	Supplementary	12/12/2005	MW-5-20051212	732	--	--	600	<0	--	1,220	--	--	--	49	--	--	--	3,050	--	--
MW-05	Multiunit 1	Supplementary	5/15/2006	MW-5-20060515	705.2	--	--	578	<0	--	1,190	--	--	--	47.7	--	--	--	2,890	--	--
MW-05	Multiunit 1	Supplementary	10/13/2006	MW-5-20061013	716.1	--	--	587	<0	--	1,230	--	--	--	41.2	--	--	--	2,820	--	--
MW-05	Multiunit 1	Supplementary	4/19/2007	MW-5-20070419	686.9	--	--	563	<0	--	1,090	--	--	--	47.2	--	--	--	2,480	--	--
MW-05	Multiunit 1	Supplementary	11/20/2007	MW-5-20071120	768.6	--	--	630	<0	--	859	--	--	--	41.5	--	--	--	2,220	--	--
MW-05	Multiunit 1	Supplementary	5/8/2008	MW-5-20080508	744.2	--	--	610	<0	--	1,060	--	--	--	53.7	--	--	--	3,070	--	--
MW-05	Multiunit 1	Supplementary	9/27/2012	MW-5-092712-01	880	<6.0	<6.0	880	<6.0	--	1,200	--	--	--	66	--	--	--	5,500	--	--
MW-05	Multiunit 1	Supplementary	9/10/2014	FCPP-05-091014	980	<6.0	<6.0	980	<6.0	--	1,300	--	--	--	68	--	--	--	5,600	--	--
MW-05	Multiunit 1	Supplementary	3/18/2015	FCPP-05-031815	900	<6.0	<6.0	900	<6.0	--	1,200	--	--	--	60	--	--	--	5,500	--	--
MW-05	Multiunit 1	Supplementary	6/30/2015	MW-5	850	<6.0	<6.0	850	<6.0	--	1,300	--	--	--	68	--	--	--	5,600	--	--
MW-05	Multiunit 1	Supplementary	8/25/2015	FCPP-5-082515	950	<6.0	<6.0	950	<6.0	--	1,200	--	--	--	76	--	--	--	5,900	--	--
MW-05	Multiunit 1	Supplementary	11/6/2015	FC MW-5-(061115)	790	<6.0	<6.0	790	<6.0	--	1,400	--	--	--	62	--	--	--	4,600	--	--
MW-05	Multiunit 1	Supplementary	6/17/2016	FC-Seep-MW5-616	740	<6.0	<6.0	740	<6.0	--	1,400	--	--	--	70	--	--	--	6,000	--	--
MW-05	Multiunit 1	Supplementary	6/17/2016	FC-Seep-Dup1-616	740	<6.0	<6.0	740	<6.0	--	1,400	--	--	--	69	--	--	--	5,700	--	--
MW-05	Multiunit 1	Supplementary	9/15/2016	FC-Seep-MW5-916	1,000	<6.0	<6.0	1,000	<6.0	--	1,400	--	--	--	75	--	--	--	5,700	--	--
MW-05	Multiunit 1	Supplementary	6/22/2020	FC-CCR-MW05-0620	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-05	Multiunit 1	Supplementary	11/7/2020	FC-CCR-MW05-1120	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-05	Multiunit 1	Supplementary	4/25/2021	FC-CCR-MW05-0421	900	<6	<6	900	<6	0.26	1,500	--	1.6	--	100	--	--	--	6,500	--	--
MW-05	Multiunit 1	Supplementary	11/16/2021	FC-CCR-MW05-1121	850	<6	<6	850	<6	0.30	1,400	--	1.6	--	89	--	--	--	6,500	--	--
MW-05	Multiunit 1	Supplementary	2/1/2022	FC-CCR-MW05-0222	930	<6	<6	930	<6	0.28	1,300	--	--	--	72	--	--	--	6,400	--	--
MW-05	Multiunit 1	Supplementary	5/25/2022	FC-CCR-MW05-0522	890	<6	<6	890	<6	0.24	1,300	--	1.6	--	94	--	--	--	6,700	--	--
MW-05	Multiunit 1	Supplementary	8/12/2022	FC-CCR-MW05-0822	880	<6	<6	880	<6	0.25	1,400	--	--	--	87	--	--	--	6,300	--	--
MW-05	Multiunit 1	Supplementary	11/11/2022	FC-CCR-MW05-1122	870	<6	<6	870	<6	0.25	1,300	--	1.1	--	95	--	--	--	6,700	--	--
MW-05	Multiunit 1	Supplementary	5/3/2023	FC-CCR-MW05-0523	830	<6	<6	830	<6	<0.1	1,500	--	0.83	--	78	--	--	--	8,000	--	--
MW-05	Multiunit 1	Supplementary	11/13/2023	FC-CCR-MW05-1124	780	<6	<6	780	<6	<0.5	1,400	--	0.73	--	65	--	--	--	8,400	--	--
MW-06	Multiunit 1	Supplementary	4/1/1987	MW-6_4/1/1987	--	--	--	280	--	--	--	810	--	--	--	32	--	--	--	2,300	--
MW-06	Multiunit 1	Supplementary	9/30/1987	MW-6_9/30/1987	--	--	--	280	--	--	--	760	--	--	--	46	--	--	--	2,300	--
MW-06	Multiunit 1	Supplementary	6/15/1988	MW-6-19880615	414.8	--	--	340	<0	--	812	--	--	--	49	--	--	--	2,690	--	--
MW-06	Multiunit 1	Supplementary	9/21/1988	MW-6-19880921	329.4	--	--	270	<0	--	789	--	--	--	45	--	--	--	2,430	--	--
MW-06	Multiunit 1	Supplementary	11/29/1988	MW-6-19881129	244	--	--	200	<0	--	1,000	--	--	--	49	--	--	--	2,270	--	--
MW-06	Multiunit 1	Supplementary	2/27/1989	MW-6-19890227	488	--	--	400	<0	--	757	--	--	--	48	--	--	--	2,200	--	--
MW-06	Multiunit 1	Supplementary	9/12/1989	MW-6-19890912	427	--	--	350	<0	--	850	--	--	--	44	--	--	--	2,100	--	--
MW-06	Multiunit 1	Supplementary	3/26/1990	MW-6-19900326	366	--	--	300	<0	--	650	--	--	--	56	--	--	--	2,100	--	--
MW-06	Multiunit 1	Supplementary	10/30/1990	MW-6-19901030	335.5	--	--	275	<0	--	700	--	--	--	40	--	--	--	2,050	--	--
MW-06	Multiunit 1	Supplementary	4/2/1991	MW-6-19910402	396.5	--	--	325	<0	--	700	--	--	--	42	--	--	--	2,050	--	--
MW-06	Multiunit 1	Supplementary	9/24/1991	MW-6-19910924	366	--	--	300	<0	--	720	--	--	--	40.5	--	--	--	2,085	--	--
MW-06	Multiunit 1	Supplementary	5/5/1992	MW-6-19920505	366	--	--	300	<0	--	700	--	--	--	42	--	--	--	2,150	--	--
MW-06	Multiunit 1	Supplementary	11/27/1992	MW-6-19921127	396.5	--	--	325	<0	--	650	--	--	--	46	--	--	--	2,250	--	--
MW-06	Multiunit 1	Supplementary	4/21/1993	MW-6-19930421	488	--	--	400	<0	--	650	--	--	--	47.5	--	--	--	2,450	--	--
MW-06	Multiunit 1	Supplementary	11/22/1993	MW-6-19931122	335.5	--	--	275	<0	--	650	--	--	--	40	--	--	--	1,950	--	--
MW-06	Multiunit 1	Supplementary	4/20/1994	MW-6-19940420	457.5	--	--	375	<0	--	650	--	--	--	45	--	--	--	2,000	--	--
MW-06	Multiunit 1	Supplementary	9/20/1994	MW-6-19940920	396.5	--	--	325	<0	--	650	--	--	--	46	--	--	--	1,900	--	--
MW-06	Multiunit 1	Supplementary	12/14/1994	MW-6-19941214	--	--	--	--	--	--	630	--	--	--	34	--	--	--	1,700	--	--
MW-06	Multiunit 1	Supplementary	4/5/1995	MW-6-19950405	457.5	--	--	375	<0	--	600	--	--	--	42	--	--	--	2,000	--	--
MW-06	Multiunit 1	Supplementary	11/21/1995	MW-6-19951121	366	--	--	300	<0	--	600	--	--	--	46	--	--	--	1,900	--	--
MW-06	Multiunit 1	Supplementary	8/14/1996	MW-6-19960814	396.5	--	--	325	<0	--	650	--	--	--	38	--	--	--	1,900	--	--
MW-06	Multiunit 1	Supplementary	4/23/1997	MW-6-19970423	396.5	--	--	325	<0	--	600	--	--	--	41	--	--	--	2,050	--	--
MW-06	Multiunit 1	Supplementary	10/14/1997	MW-6-19971014	762.5	--	--	625	<0	--	550	--	--	--	38	--	--	--	1,700	--	--
MW-06	Multiunit 1	Supplementary	10/21/1998	MW-6-19981021	396.5	--	--	325	<0	--	600	--	--	--	30	--	--	--	1,500	--	--
MW-06	Multiunit 1	Supplementary	6/9/1999	MW-6-19990609	457.5	--	--	375	<0	--	550	--	--	--	30.5	--	--	--	1,250	--	--
MW-06	Multiunit 1	Supplementary	12/1/1999	MW-6-19991201	305	--	--	250	<0	--	550	--	--	--	32.5	--	--	--	2,000	--	--

Table F-6
Groundwater Sampling Results for the Multiunit 1 Monitoring Wells - Additional Analyses

					Additional Analyses																	
				Constituent:	Alkalinity Bicarbonate	Alkalinity Carbonate	Alkalinity Hydroxide	Alkalinity(as CaCO3)	Alkalinity, Phenolphthalein, as CaCO3	Iron	Magnesium	Magnesium	Manganese	Nickel	Potassium	Potassium	Radium 226	Radium 228	Sodium	Sodium	Zinc
				Filtered:	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N	N	Y	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L	pCi/L	mg/L	mg/L	mh/L
				Multiunit 1 BTV	--	--	--	--	--		--	--	--	--	--	--	--	--	--	--	--
				Multiunit 1 GWPS	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**																	
MW-06	Multiunit 1	Supplementary	6/8/2000	MW-6-20000608	488	--	--	400	<0	--	618	--	--	--	34.7	--	--	--	1,630	--	--
MW-06	Multiunit 1	Supplementary	11/28/2000	MW-6-20001128	457.5	--	--	375	<0	--	550	--	--	--	37	--	--	--	2,050	--	--
MW-06	Multiunit 1	Supplementary	8/21/2001	MW-6-20010821	701.5	--	--	575	<0	--	600	--	--	--	33	--	--	--	1,850	--	--
MW-06	Multiunit 1	Supplementary	12/3/2001	MW-6-20011203	396.5	--	--	325	<0	--	500	--	--	--	29.5	--	--	--	1,900	--	--
MW-06	Multiunit 1	Supplementary	6/24/2002	MW-6-20020624	427	--	--	350	<0	--	550	--	--	--	40.5	--	--	--	1,500	--	--
MW-06	Multiunit 1	Supplementary	12/18/2002	MW-6-20021218	335.5	--	--	275	<0	--	450	--	--	--	34.5	--	--	--	1,550	--	--
MW-06	Multiunit 1	Supplementary	6/3/2003	MW-6-20030603	366	--	--	300	<0	--	500	--	--	--	36	--	--	--	1,550	--	--
MW-06	Multiunit 1	Supplementary	9/24/2003	MW-6-20030924	396.5	--	--	325	<0	--	500	--	--	--	37.5	--	--	--	1,450	--	--
MW-06	Multiunit 1	Supplementary	6/16/2004	MW-6-20040616	2,501	--	--	2,050	<0	--	550	--	--	--	34	--	--	--	1,650	--	--
MW-06	Multiunit 1	Supplementary	11/9/2004	MW-6-20041109	2,349	--	--	1,925	<0	--	499	--	--	--	29.8	--	--	--	1,320	--	--
MW-06	Multiunit 1	Supplementary	5/12/2005	MW-6-20050512	305	--	--	250	<0	--	550	--	--	--	35.5	--	--	--	1,250	--	--
MW-06	Multiunit 1	Supplementary	11/1/2005	MW-6-20051101	396.5	--	--	325	<0	--	494	--	--	--	29.6	--	--	--	1,420	--	--
MW-06	Multiunit 1	Supplementary	5/16/2006	MW-6-20060516	259.9	--	--	213	<0	--	468	--	--	--	27.3	--	--	--	1,360	--	--
MW-06	Multiunit 1	Supplementary	10/13/2006	MW-6-20061013	233	--	--	191	<0	--	471	--	--	--	26.6	--	--	--	1,320	--	--
MW-06	Multiunit 1	Supplementary	4/18/2007	MW-6-20070418	235.5	--	--	193	<0	--	417	--	--	--	25.2	--	--	--	1,180	--	--
MW-06	Multiunit 1	Supplementary	11/20/2007	MW-6-20071120	239.1	--	--	196	<0	--	373	--	--	--	22.7	--	--	--	1,100	--	--
MW-06	Multiunit 1	Supplementary	8/1/2008	MW-6-20080801	244	--	--	200	<0	--	418	--	--	--	25.9	--	--	--	1,130	--	--
MW-06	Multiunit 1	Supplementary	12/3/2009	MW-6-20091203	431.9	--	--	354	<0	--	467	--	--	--	32.1	--	--	--	2,560	--	--
MW-06	Multiunit 1	Supplementary	9/28/2012	MW-6-092812-01	140	<6.0	<6.0	140	<6.0	--	360	--	--	--	22	--	--	--	960	--	--
MW-06	Multiunit 1	Supplementary	11/20/2013	FC-06-112013	460	<6.0	<6.0	460	<6.0	--	630	--	--	--	41	--	--	--	3,300	--	--
MW-06	Multiunit 1	Supplementary	3/12/2014	FC-06-031214	440	<6.0	<6.0	440	<6.0	--	580	--	--	--	41	--	--	--	3,300	--	--
MW-06	Multiunit 1	Supplementary	9/11/2014	FCPP-06-91114	410	<6.0	<6.0	410	<6.0	--	580	--	--	--	41	--	--	--	3,300	--	--
MW-06	Multiunit 1	Supplementary	12/8/2014	FCPP-MW06-12914	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-06	Multiunit 1	Supplementary	3/19/2015	FCPP-06-031915	430	<6.0	<6.0	430	<6.0	--	640	--	--	--	38	--	--	--	3,400	--	--
MW-06	Multiunit 1	Supplementary	6/24/2015	MW-6	430	<6.0	<6.0	430	<6.0	--	620	--	--	--	44	--	--	--	3,500	--	--
MW-06	Multiunit 1	Supplementary	8/29/2015	FCPP-06-082915	380	<6.0	<6.0	380	<6.0	--	580	--	--	--	42	--	--	--	3,000	--	--
MW-06	Multiunit 1	Supplementary	11/7/2015	FC MW-6-(07115)	430	<6.0	<6.0	430	<6.0	--	770	--	--	--	46	--	--	--	4,000	--	--
MW-06	Multiunit 1	Supplementary	6/20/2016	FC-Seep-MW6-616	460	<6.0	<6.0	460	<6.0	--	670	--	--	--	47	--	--	--	3,900	--	--
MW-06	Multiunit 1	Supplementary	9/15/2016	FC-Seep-MW6-916	470	<6.0	<6.0	470	<6.0	--	630	--	--	--	48	--	--	--	4,000	--	--
MW-06	Multiunit 1	Supplementary	3/19/2019	FC-CCR-MW6-031919	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-06	Multiunit 1	Supplementary	3/19/2019	FC-CCR-MW6-031919	--	--	--	--	--	--	--	--	--	--	--	--	<0.5	1.9	--	--	--
MW-06	Multiunit 1	Supplementary	5/14/2019	FC-CCR-MW6-51419	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-06	Multiunit 1	Supplementary	5/14/2019	FC-CCR-MW6-51419	--	--	--	--	--	--	--	--	--	--	--	--	<0.5	1.4	--	--	--
MW-06	Multiunit 1	Supplementary	11/19/2019	FC-CCR-MW6-111919	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-06	Multiunit 1	Supplementary	6/23/2020	FC-CCR-MW06-0620	--	--	--	--	--	--	--	--	--	--	--	--	1.0	1.8	--	--	--
MW-06	Multiunit 1	Supplementary	11/7/2020	FC-CCR-MW06-1120	720	<6	<6	720	<6	--	1,500	--	--	--	88	--	1.0	1.1	7,300	--	--
MW-06	Multiunit 1	Supplementary	4/26/2021	FC-CCR-MW06-0421	710	<6	<6	710	<6	4.7	1,600	--	4.1	--	100	--	<0.4	<0.8	7,400	--	--
MW-06	Multiunit 1	Supplementary	11/16/2021	FC-CCR-MW06-1121	660	<6	<6	660	<6	0.33	1,700	--	0.022	--	95	--	0.4	<0.6	8,000	--	--
MW-06	Multiunit 1	Supplementary	2/8/2022	FC-CCR-MW06-0222	670	<6	<6	670	<6	0.32	1,500	--	--	--	100	--	--	--	7,200	--	--
MW-06	Multiunit 1	Supplementary	5/25/2022	FC-CCR-MW06-0522	660	<6	<6	660	<6	<1	1,800	--	<0.1	--	65	--	<0.3	<0.6	8,800	--	--
MW-06	Multiunit 1	Supplementary	9/1/2022	FC-CCR-MW06-0922	660	<6	<6	660	<6	0.43	1,800	--	--	--	89	--	--	--	7,200		--
MW-06	Multiunit 1	Supplementary	11/14/2022	FC-CCR-MW06-1122	660	<6	<6	660	<6	0.30	1,600	--	<0.071 U	--	100	--	<0.3	<0.6	8,100	--	--
MW-06	Multiunit 1	Supplementary	5/4/2023	FC-CCR-MW06-0523	610	<6	<6	610	<6	2.9	1,900	--	0.50	0.045	81	--	<0.45	1.4	6,800	--	--
MW-06R	Multiunit 1	Supplementary	11/14/2023	FC-CCR-MW06R-1124	470	<6	<6	470	<6	1.1 J	360	--	0.42	--	43	--	<0.51	3.0	4,300	--	--
MW-07	Multiunit 1	Downgradient Boundary	4/1/1987	MW-7_4/1/1987	--	--	--	140	--	--	--	400	--	--	--	21	--	--	--	770	--
MW-07	Multiunit 1	Downgradient Boundary	4/1/1987	MW-7 dup_4/1/1987	--	--	--	140	--	--	--	410	--	--	--	21	--	--	--	780	--
MW-07	Multiunit 1	Downgradient Boundary	9/30/1987	MW-7_9/30/1987	--	--	--	220	--	--	--	380	--	--	--	30	--	--	--	1,100	--
MW-07	Multiunit 1	Downgradient Boundary	6/16/1988	MW-7-19880616	231.8	--	--	190	<0	--	352	--	--	--	30	--	--	--	980	--	--
MW-07	Multiunit 1	Downgradient Boundary	9/21/1988	MW-7-19880921	170.8	--	--	140	<0	--	326	--	--	--	28	--	--	--	752	--	--
MW-07	Multiunit 1	Downgradient Boundary	11/14/1988	MW-7-19881114	244	--	--	200	<0	--	397	--	--	--	39	--	--	--	872	--	--
MW-07	Multiunit 1	Downgradient Boundary	3/6/1989	MW-7-19890306	366	--	--	300	<0	--	309	--	--	--	29	--	--	--	806	--	--
MW-07	Multiunit 1	Downgradient Boundary	9/12/1989	MW-7-19890912	305	--	--	250	<0	--	285	--	--	--	29	--	--	--	800	--	--

Table F-6
Groundwater Sampling Results for the Multiunit 1 Monitoring Wells - Additional Analyses

					Additional Analyses																	
				Constituent:	Alkalinity Bicarbonate	Alkalinity Carbonate	Alkalinity Hydroxide	Alkalinity(as CaCO3)	Alkalinity, Phenolphthalein, as CaCO3	Iron	Magnesium	Magnesium	Manganese	Nickel	Potassium	Potassium	Radium 226	Radium 228	Sodium	Sodium	Zinc
				Filtered:	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N	N	Y	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L	pCi/L	mg/L	mg/L	mh/L
				Multiunit 1 BTV	--	--	--	--	--		--	--	--	--	--	--	--	--	--	--	--
				Multiunit 1 GWPS	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**																	
MW-07	Multiunit 1	Downgradient Boundary	3/22/1990	MW-7-19900322	**244**	--	--	**200**	<0	--	**240**	--	--	--	**37**	--	--	--	**800**	--	--
MW-07	Multiunit 1	Downgradient Boundary	9/24/1990	MW-7-19900924	**183**	--	--	**150**	<0	--	**200**	--	--	--	**30**	--	--	--	**820**	--	--
MW-07	Multiunit 1	Downgradient Boundary	3/27/1991	MW-7-19910327	**222**	--	--	**182**	<0	--	**200**	--	--	--	**31**	--	--	--	**828**	--	--
MW-07	Multiunit 1	Downgradient Boundary	9/24/1991	MW-7-19910924	**305**	--	--	**250**	<0	--	**260**	--	--	--	**36**	--	--	--	**812**	--	--
MW-07	Multiunit 1	Downgradient Boundary	4/30/1992	MW-7-19920430	**274.5**	--	--	**225**	<0	--	**200**	--	--	--	**43**	--	--	--	**860**	--	--
MW-07	Multiunit 1	Downgradient Boundary	10/27/1992	MW-7-19921027	**244**	--	--	**200**	<0	--	**200**	--	--	--	**36**	--	--	--	**720**	--	--
MW-07	Multiunit 1	Downgradient Boundary	4/22/1993	MW-7-19930422	**427**	--	--	**350**	<0	--	**240**	--	--	--	**37**	--	--	--	**820**	--	--
MW-07	Multiunit 1	Downgradient Boundary	11/22/1993	MW-7-19931122	**275**	--	--	**225**	<0	--	**260**	--	--	--	**34**	--	--	--	**780**	--	--
MW-07	Multiunit 1	Downgradient Boundary	4/20/1994	MW-7-19940420	**397**	--	--	**325**	<0	--	**300**	--	--	--	**34**	--	--	--	**940**	--	--
MW-07	Multiunit 1	Downgradient Boundary	9/21/1994	MW-7-19940921	**366**	--	--	**300**	<0	--	**260**	--	--	--	**42**	--	--	--	**940**	--	--
MW-07	Multiunit 1	Downgradient Boundary	12/14/1994	MW-7-19941214	--	--	--	--	--	--	**260**	--	--	--	<25	--	--	--	**860**	--	--
MW-07	Multiunit 1	Downgradient Boundary	4/4/1995	MW-7-19950404	**305**	--	--	**250**	<0	--	**280**	--	--	--	**38**	--	--	--	**880**	--	--
MW-07	Multiunit 1	Downgradient Boundary	11/18/1995	MW-7-19951118	**274.5**	--	--	**225**	<0	--	**240**	--	--	--	**39**	--	--	--	**820**	--	--
MW-07	Multiunit 1	Downgradient Boundary	8/13/1996	MW-7-19960813	**366**	--	--	**300**	<0	--	**240**	--	--	--	**33**	--	--	--	**760**	--	--
MW-07	Multiunit 1	Downgradient Boundary	4/15/1997	MW-7-19970415	**335.5**	--	--	**275**	<0	--	**220**	--	--	--	**30**	--	--	--	**820**	--	--
MW-07	Multiunit 1	Downgradient Boundary	10/7/1997	MW-7-19971007	**305**	--	--	**250**	<0	--	**240**	--	--	--	**25.8**	--	--	--	**880**	--	--
MW-07	Multiunit 1	Downgradient Boundary	4/13/1998	MW-7-19980413	**213.5**	--	--	**175**	<0	--	**280**	--	--	--	**24.2**	--	--	--	**860**	--	--
MW-07	Multiunit 1	Downgradient Boundary	10/20/1998	MW-7-19981020	**366**	--	--	**300**	<0	--	**260**	--	--	--	**22**	--	--	--	**700**	--	--
MW-07	Multiunit 1	Downgradient Boundary	5/11/1999	MW-7-19990511	**305**	--	--	**250**	<0	--	**260**	--	--	--	**26.2**	--	--	--	**800**	--	--
MW-07	Multiunit 1	Downgradient Boundary	11/30/1999	MW-7-19991130	**366**	--	--	**300**	<0	--	**280**	--	--	--	**24.8**	--	--	--	**1,140**	--	--
MW-07	Multiunit 1	Downgradient Boundary	6/8/2000	MW-7-20000608	**488**	--	--	**400**	<0	--	**267**	--	--	--	**25.3**	--	--	--	**863**	--	--
MW-07	Multiunit 1	Downgradient Boundary	11/28/2000	MW-7-20001128	**488**	--	--	**400**	<0	--	**144**	--	--	--	**24.8**	--	--	--	**1,020**	--	--
MW-07	Multiunit 1	Downgradient Boundary	8/22/2001	MW-7-20010822	**335.5**	--	--	**275**	<0	--	**280**	--	--	--	**22**	--	--	--	**800**	--	--
MW-07	Multiunit 1	Downgradient Boundary	12/3/2001	MW-7-20011203	**366**	--	--	**300**	<0	--	**260**	--	--	--	**22**	--	--	--	**1,060**	--	--
MW-07	Multiunit 1	Downgradient Boundary	6/24/2002	MW-7-20020624	**366**	--	--	**300**	<0	--	**260**	--	--	--	**26.6**	--	--	--	**860**	--	--
MW-07	Multiunit 1	Downgradient Boundary	12/19/2002	MW-7-20021219	**244**	--	--	**200**	<0	--	**280**	--	--	--	**24.6**	--	--	--	**920**	--	--
MW-07	Multiunit 1	Downgradient Boundary	5/29/2003	MW-7-20030529	**762.5**	--	--	**625**	<0	--	**360**	--	--	--	**26.8**	--	--	--	**1,100**	--	--
MW-07	Multiunit 1	Downgradient Boundary	12/24/2003	MW-7-20031224	**1,617**	--	--	**1,325**	<0	--	**300**	--	--	--	**30.2**	--	--	--	**1,120**	--	--
MW-07	Multiunit 1	Downgradient Boundary	6/21/2004	MW-7-20040621	**2,776**	--	--	**2,275**	<0	--	**320**	--	--	--	**30.4**	--	--	--	**1,180**	--	--
MW-07	Multiunit 1	Downgradient Boundary	11/29/2004	MW-7-20041129	**2,867**	--	--	**2,350**	<0	--	**280**	--	--	--	**28.6**	--	--	--	**1,210**	--	--
MW-07	Multiunit 1	Downgradient Boundary	6/13/2005	MW-7-20050613	**335.5**	--	--	**275**	<0	--	**300**	--	--	--	**29.6**	--	--	--	**1,180**	--	--
MW-07	Multiunit 1	Downgradient Boundary	12/14/2005	MW-7-20051214	**488**	--	--	**400**	<0	--	**366**	--	--	--	**26.6**	--	--	--	**1,710**	--	--
MW-07	Multiunit 1	Downgradient Boundary	5/16/2006	MW-7-20060516	**340.4**	--	--	**279**	<0	--	**274**	--	--	--	**26.3**	--	--	--	**1,260**	--	--
MW-07	Multiunit 1	Downgradient Boundary	10/11/2006	MW-7-20061011	**370.9**	--	--	**304**	<0	--	**330**	--	--	--	**33.8**	--	--	--	**1,550**	--	--
MW-07	Multiunit 1	Downgradient Boundary	4/19/2007	MW-7-20070419	**337.9**	--	--	**277**	<0	--	**269**	--	--	--	**27.1**	--	--	--	**1,280**	--	--
MW-07	Multiunit 1	Downgradient Boundary	11/19/2007	MW-7-20071119	**434.3**	--	--	**356**	<0	--	**258**	--	--	--	**25.1**	--	--	--	**1,490**	--	--
MW-07	Multiunit 1	Downgradient Boundary	8/7/2008	MW-7-20080807	**414.8**	--	--	**340**	<0	--	**321**	--	--	--	**30.1**	--	--	--	**1,590**	--	--
MW-07	Multiunit 1	Downgradient Boundary	7/10/2012	MW-7	**470**	<6.0	<6.0	**470**	<6.0	--	**440**	--	--	--	**36**	--	--	--	**2,000**	--	--
MW-07	Multiunit 1	Downgradient Boundary	9/27/2012	MW-7-092712-01	**390**	<6.0	<6.0	**390**	<6.0	--	**800**	--	--	--	**39**	--	--	--	**2,600**	--	--
MW-07	Multiunit 1	Downgradient Boundary	11/19/2013	FC-07-111913	**420**	<6.0	<6.0	**420**	<6.0	--	**580**	--	--	--	**38**	--	--	--	**1,500**	--	--
MW-07	Multiunit 1	Downgradient Boundary	9/10/2014	FCPP-07-091014	**440**	<6.0	<6.0	**440**	<6.0	--	**530**	--	--	--	**37**	--	--	--	**2,100**	--	--
MW-07	Multiunit 1	Downgradient Boundary	3/16/2015	FCPP-07-031615	**470**	<6.0	<6.0	**470**	<6.0	--	**480**	--	--	--	**37**	--	--	--	**2,400**	--	--
MW-07	Multiunit 1	Downgradient Boundary	8/26/2015	FCPP-7-082615	**470**	<6.0	<6.0	**470**	<6.0	--	**400**	--	--	--	**40**	--	--	--	**2,300**	--	--
MW-07	Multiunit 1	Downgradient Boundary	11/7/2015	FC-CCR-MW7-110715	**560**	<5.0	--	**560**	--	--	**390**	--	--	--	**30**	--	--	--	**1,900**	--	--
MW-07	Multiunit 1	Downgradient Boundary	11/7/2015	FC-CCR-MW7-110715	--	--	--	--	--	--	--	--	--	--	--	--	**0.611**	**1.19**	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	4/26/2016	FC-CCR-MW-7-042616	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	**1.9**	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	6/6/2016	FC-CCR-MW7-616	--	--	--	--	--	--	--	--	--	--	--	--	**0.9**	**2.4**	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	6/6/2016	FC-CCR-MW7-616	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	8/21/2016	FC-CCR-MW7-816	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	8/21/2016	FC-CCR-MW7-816	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	8/21/2016	FC-CCR-MW7-816	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	**0.7**	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	9/13/2016	FC-CCR-MW7-916	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Table F-6
Groundwater Sampling Results for the Multiunit 1 Monitoring Wells - Additional Analyses

					Additional Analyses																
				Constituent:	Alkalinity Bicarbonate	Alkalinity Carbonate	Alkalinity Hydroxide	Alkalinity(as CaCO3)	Alkalinity, Phenolphthalein, as CaCO3	Iron	Magnesium	Magnesium	Manganese	Nickel	Potassium	Potassium	Radium 226	Radium 228	Sodium	Sodium	Zinc
				Filtered:	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N	N	Y	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L	pCi/L	mg/L	mg/L	mh/L
				Multiunit 1 BTV	--	--	--	--	--		--	--	--	--	--	--	--	--	--	--	--
				Multiunit 1 GWPS	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**																	
MW-07	Multiunit 1	Downgradient Boundary	9/13/2016	FC-CCR-MW7-916	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	9/13/2016	FC-CCR-MW7-916	--	--	--	--	--	--	--	--	--	--	--	--	**0.7**	**1.9**	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	10/20/2016	FC-CCR-MW7-1016	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	10/20/2016	FC-CCR-MW7-1016	--	--	--	--	--	--	--	--	--	--	--	--	**0.4**	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	2/2/2017	FC-CCR-MW7-117	**450**	<6.0	<6.0	**450**	<6.0	--	**500**	--	--	--	**36**	--	--	--	**1,800**	--	--
MW-07	Multiunit 1	Downgradient Boundary	2/2/2017	FC-CCR-MW7-117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	2/2/2017	FC-CCR-MW7-117	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	**1.9**	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	4/18/2017	FC-CCR-MW7-41817	**490**	<6.0	<6.0	**490**	<6.0	--	**600**	--	--	--	**38**	--	--	--	**2,000**	--	--
MW-07	Multiunit 1	Downgradient Boundary	4/18/2017	FC-CCR-MW7-41817	--	--	--	--	--	--	--	--	--	--	--	--	<0.5	**1.5**	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	4/18/2017	FC-CCR-MW7-41817	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	5/3/2017	FC-CCR-MW7-5317	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	5/3/2017	FC-CCR-MW7-53117	--	--	--	--	--	--	--	--	--	--	--	--	<0.3	<0.6	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	5/29/2017	FC-CCR-MW-72-52917	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	**2.2**	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	5/30/2017	FC-CCR-MW7-53017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	5/30/2017	FC-CCR-MW7-53017	--	--	--	--	--	--	--	--	--	--	--	--	<0.5	<0.6	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	6/22/2017	FC-CCR-MW7-62217	**500**	<6.0	<6.0	**500**	<6.0	--	**620**	--	--	--	**36**	--	--	--	**1,700**	--	--
MW-07	Multiunit 1	Downgradient Boundary	6/22/2017	FC-CCR-MW7-62217	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	6/22/2017	FC-CCR-MW7-62217	--	--	--	--	--	--	--	--	--	--	--	--	<0.3	**1.2**	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	7/22/2017	FC-CCR-MW7-72217	**500**	<6.0	<6.0	**500**	<6.0	--	**620**	--	--	--	**36**	--	--	--	**1,700**	--	--
MW-07	Multiunit 1	Downgradient Boundary	7/22/2017	FC-CCR-MW7-72217	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	7/22/2017	FC-CCR-MW7-72217	--	--	--	--	--	--	--	--	--	--	--	--	<0.5	**1.9**	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	8/10/2017	FC-CCR-MW7-81017	**510**	<6.0	<6.0	**510**	<6.0	--	**630**	--	--	--	**36**	--	--	--	**1,700**	--	--
MW-07	Multiunit 1	Downgradient Boundary	8/10/2017	FC-CCR-MW7-81017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	8/10/2017	FC-CCR-MW7-81017	--	--	--	--	--	--	--	--	--	--	--	--	<0.5	**1.2**	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	8/17/2017	FC-CCR-MW7-81717	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	**1.2**	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	8/17/2017	FC-CCR-MW7-81717	**520**	<6.0	<6.0	**520**	<6.0	--	**670**	--	--	--	**43**	--	--	--	**1,700**	--	--
MW-07	Multiunit 1	Downgradient Boundary	9/10/2017	FC-CCR-MW7-91017	**510**	<6.0	<6.0	**510**	<6.0	--	**610**	--	--	--	**35**	--	--	--	**1,600**	--	--
MW-07	Multiunit 1	Downgradient Boundary	9/10/2017	FC-CCR-MW7-91017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	9/10/2017	FC-CCR-MW7-91017	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	**1.3**	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	10/12/2017	FC-CCR-MW7-101217	--	--	--	--	--	--	--	--	--	--	--	--	**1.4**	**1.2**	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	10/12/2017	FC-CCR-MW7-101217	**510**	<6.0	<6.0	**510**	<6.0	--	**550**	--	--	--	**34**	--	--	--	**1,600**	--	--
MW-07	Multiunit 1	Downgradient Boundary	11/30/2017	FC-CCR-MW7-113017	**500**	<6.0	<6.0	**500**	<6.0	--	**560**	--	--	--	**38**	--	--	--	**1,900**	--	--
MW-07	Multiunit 1	Downgradient Boundary	3/17/2018	FC-CCR-MW7-31718	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	3/17/2018	FC-CCR-MW7-31718	--	--	--	--	--	--	--	--	--	--	--	--	<0.9	<0.8	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	3/17/2018	31718	--	--	--	--	--	--	--	--	--	--	--	--	<0.9	<0.8	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	6/1/2018	FC-CCR-MW-7-6118	--	--	--	--	--	--	--	--	--	--	--	--	**0.5**	**0.8**	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	6/1/2018	FC-CCR-MW-7-6118	**510**	<6.0	<6.0	**510**	<6.0	--	**470**	--	--	--	**34**	--	--	--	**1,700**	--	--
MW-07	Multiunit 1	Downgradient Boundary	11/4/2018	FC-CCR-MW7-11418	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	11/4/2018	FC-CCR-MW7-11418	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	11/4/2018	FC-CCR-MW7-11418	--	--	--	--	--	--	--	--	--	--	--	--	<0.5	<0.7	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	3/19/2019	FC-CCR-MW7-031919	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	3/19/2019	FC-CCR-MW7-031919	--	--	--	--	--	--	--	--	--	--	--	--	<0.5	<0.7	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	5/14/2019	FC-CCR-MW7-51419	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	5/14/2019	FC-CCR-MW7-51419	--	--	--	--	--	--	--	--	--	--	--	--	<0.6	<0.7	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	11/19/2019	FC-CCR-MW7-111919	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	6/23/2020	FC-CCR-MW07-0620	--	--	--	--	--	--	--	--	--	--	--	--	<0.5	**1.8**	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	11/6/2020	FC-CCR-MW07-1120	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	**1.4**	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	11/6/2020	1120	--	--	--	--	--	--	--	--	--	--	--	--	**0.4**	**1.0**	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	4/27/2021	FC-CCR-MW07-0421	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	**2.4 J**	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	4/27/2021	0421	**480**	<6	<6	**480**	<6	**0.11**	**560**	--	**0.022**	--	**42**	--	<0.4	**0.9 J**	**1,500**	--	--
MW-07	Multiunit 1	Downgradient Boundary	11/18/2021	FC-CCR-MW07-1121	--	--	--	--	--	--	--	--	--	--	--	--	<0.3	**1.6**	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	5/26/2022	FC-CCR-MW07-0522	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	**0.7 J**	--	--	--

Table F-6
Groundwater Sampling Results for the Multiunit 1 Monitoring Wells - Additional Analyses

					Additional Analyses																	
				Constituent:	Alkalinity Bicarbonate	Alkalinity Carbonate	Alkalinity Hydroxide	Alkalinity(as CaCO3)	Alkalinity, Phenolphthalein, as CaCO3	Iron	Magnesium	Magnesium	Manganese	Nickel	Potassium	Potassium	Radium 226	Radium 228	Sodium	Sodium	Zinc
				Filtered:	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N	N	Y	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L	pCi/L	mg/L	mg/L	mh/L
				Multiunit 1 BTV	--	--	--	--	--		--	--	--	--	--	--	--	--	--	--	--
				Multiunit 1 GWPS	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**																	
MW-07	Multiunit 1	Downgradient Boundary	11/16/2022	FC-CCR-MW07-1122	--	--	--	--	--	--	--	--	--	--	--	--	**0.6**	**0.9**	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	5/8/2023	FC-CCR-MW07-0523	--	--	--	--	--	--	--	--	--	**0.030**	--	--	<0.39	**0.7**	--	--	--
MW-07	Multiunit 1	Downgradient Boundary	11/15/2023	FC-CCR-MW07-1124	--	--	--	--	--	--	--	--	--	--	--	--	<0.49	**2.1**	--	--	--
MW-08	Multiunit 1	Downgradient Boundary	10/2/1987	MW-8_10/2/1987	--	--	--	**200**	--	--	--	**680**	--	--	--	**40**	--	--	--	**1,600**	--
MW-08	Multiunit 1	Downgradient Boundary	6/16/1988	MW-8-19880616	**414.8**	--	--	**340**	<0	--	**578**	--	--	--	**43**	--	--	--	**1,920**	--	--
MW-08	Multiunit 1	Downgradient Boundary	9/21/1988	MW-8-19880921	**378.2**	--	--	**310**	<0	--	**597**	--	--	--	**36**	--	--	--	**1,660**	--	--
MW-08	Multiunit 1	Downgradient Boundary	11/14/1988	MW-8-19881114	**366**	--	--	**300**	<0	--	**648**	--	--	--	**39**	--	--	--	**1,030**	--	--
MW-08	Multiunit 1	Downgradient Boundary	3/8/1989	MW-8-19890308	**366**	--	--	**300**	<0	--	**608**	--	--	--	**38**	--	--	--	**1,450**	--	--
MW-08	Multiunit 1	Downgradient Boundary	9/12/1989	MW-8-19890912	**366**	--	--	**300**	<0	--	**470**	--	--	--	**32**	--	--	--	**1,300**	--	--
MW-08	Multiunit 1	Downgradient Boundary	3/22/1990	MW-8-19900322	**305**	--	--	**250**	<0	--	**400**	--	--	--	**42**	--	--	--	**1,250**	--	--
MW-08	Multiunit 1	Downgradient Boundary	10/29/1990	MW-8-19901029	**274.5**	--	--	**225**	<0	--	**400**	--	--	--	**28**	--	--	--	**1,300**	--	--
MW-08	Multiunit 1	Downgradient Boundary	3/27/1991	MW-8-19910327	**335.5**	--	--	**275**	<0	--	**360**	--	--	--	**30**	--	--	--	**1,340**	--	--
MW-08	Multiunit 1	Downgradient Boundary	10/1/1991	MW-8-19911001	**305**	--	--	**250**	<0	--	**365**	--	--	--	**30**	--	--	--	**1,210**	--	--
MW-08	Multiunit 1	Downgradient Boundary	5/1/1992	MW-8-19920501	**305**	--	--	**250**	<0	--	**300**	--	--	--	**29**	--	--	--	**1,200**	--	--
MW-08	Multiunit 1	Downgradient Boundary	11/3/1992	MW-8-19921103	**366**	--	--	**300**	<0	--	**250**	--	--	--	**31**	--	--	--	**1,375**	--	--
MW-08	Multiunit 1	Downgradient Boundary	4/28/1993	MW-8-19930428	**366**	--	--	**300**	<0	--	**220**	--	--	--	**36**	--	--	--	**1,300**	--	--
MW-08	Multiunit 1	Downgradient Boundary	11/30/1993	MW-8-19931130	**305**	--	--	**250**	<0	--	**260**	--	--	--	**40**	--	--	--	**1,300**	--	--
MW-08	Multiunit 1	Downgradient Boundary	4/28/1994	MW-8-19940428	**305**	--	--	**250**	<0	--	**260**	--	--	--	**46**	--	--	--	**1,400**	--	--
MW-08	Multiunit 1	Downgradient Boundary	11/16/1994	MW-8-19941116	**305**	--	--	**250**	<0	--	**240**	--	--	--	**40**	--	--	--	**1,500**	--	--
MW-08	Multiunit 1	Downgradient Boundary	12/14/1994	MW-8-19941214	--	--	--	--	--	--	**290**	--	--	--	<25	--	--	--	**1,000**	--	--
MW-08	Multiunit 1	Downgradient Boundary	4/5/1995	MW-8-19950405	**305**	--	--	**250**	<0	--	**240**	--	--	--	**35**	--	--	--	**1,100**	--	--
MW-08	Multiunit 1	Downgradient Boundary	11/18/1995	MW-8-19951118	**305**	--	--	**250**	<0	--	**240**	--	--	--	**41**	--	--	--	**1,200**	--	--
MW-08	Multiunit 1	Downgradient Boundary	8/19/1996	MW-8-19960819	**488**	--	--	**400**	<0	--	**200**	--	--	--	**30**	--	--	--	**1,600**	--	--
MW-08	Multiunit 1	Downgradient Boundary	6/24/1997	MW-8-19970624	**549**	--	--	**450**	<0	--	**220**	--	--	--	**23**	--	--	--	**1,000**	--	--
MW-08	Multiunit 1	Downgradient Boundary	10/7/1997	MW-8-19971007	**366**	--	--	**300**	<0	--	**220**	--	--	--	**30**	--	--	--	**1,100**	--	--
MW-08	Multiunit 1	Downgradient Boundary	4/14/1998	MW-8-19980414	**366**	--	--	**300**	<0	--	**240**	--	--	--	**24**	--	--	--	**1,300**	--	--
MW-08	Multiunit 1	Downgradient Boundary	10/21/1998	MW-8-19981021	**457.5**	--	--	**375**	<0	--	**220**	--	--	--	**27**	--	--	--	**1,300**	--	--
MW-08	Multiunit 1	Downgradient Boundary	5/11/1999	MW-8-19990511	**396.5**	--	--	**325**	<0	--	--	--	--	--	--	--	--	--	--	--	--
MW-08	Multiunit 1	Downgradient Boundary	12/1/1999	MW-8-19991201	**335.5**	--	--	**275**	<0	--	**220**	--	--	--	**26**	--	--	--	**1,500**	--	--
MW-08	Multiunit 1	Downgradient Boundary	6/7/2000	MW-8-20000607	**427**	--	--	**350**	<0	--	**257**	--	--	--	**23.4**	--	--	--	**1,200**	--	--
MW-08	Multiunit 1	Downgradient Boundary	12/12/2000	MW-8-20001212	**488**	--	--	**400**	<0	--	**260**	--	--	--	**31**	--	--	--	**1,700**	--	--
MW-08	Multiunit 1	Downgradient Boundary	8/22/2001	MW-8-20010822	**488**	--	--	**400**	<0	--	**235**	--	--	--	**22**	--	--	--	**1,400**	--	--
MW-08	Multiunit 1	Downgradient Boundary	12/3/2001	MW-8-20011203	**518.5**	--	--	**425**	<0	--	**220**	--	--	--	**22**	--	--	--	**1,700**	--	--
MW-08	Multiunit 1	Downgradient Boundary	6/24/2002	MW-8-20020624	**518.5**	--	--	**425**	<0	--	**260**	--	--	--	**30**	--	--	--	**1,400**	--	--
MW-08	Multiunit 1	Downgradient Boundary	12/18/2002	MW-8-20021218	**457.5**	--	--	**375**	<0	--	**260**	--	--	--	**30**	--	--	--	**1,400**	--	--
MW-08	Multiunit 1	Downgradient Boundary	6/3/2003	MW-8-20030603	**305**	--	--	**250**	<0	--	**240**	--	--	--	**34**	--	--	--	**1,800**	--	--
MW-08	Multiunit 1	Downgradient Boundary	9/23/2003	MW-8-20030923	**366**	--	--	**300**	<0	--	**320**	--	--	--	**33**	--	--	--	**1,300**	--	--
MW-08	Multiunit 1	Downgradient Boundary	6/16/2004	MW-8-20040616	**2,532**	--	--	**2,075**	<0	--	**260**	--	--	--	**31**	--	--	--	**1,100**	--	--
MW-08	Multiunit 1	Downgradient Boundary	11/9/2004	MW-8-20041109	**2,898**	--	--	**2,375**	<0	--	**317**	--	--	--	**24**	--	--	--	**1,280**	--	--
MW-08	Multiunit 1	Downgradient Boundary	5/12/2005	MW-8-20050512	**488**	--	--	**400**	<0	--	**340**	--	--	--	**32**	--	--	--	**1,100**	--	--
MW-08	Multiunit 1	Downgradient Boundary	11/1/2005	MW-8-20051101	**427**	--	--	**350**	<0	--	**371**	--	--	--	**26.7**	--	--	--	**1,540**	--	--
MW-08	Multiunit 1	Downgradient Boundary	5/16/2006	MW-8-20060516	**412.4**	--	--	**338**	<0	--	**355**	--	--	--	**24.7**	--	--	--	**1,480**	--	--
MW-08	Multiunit 1	Downgradient Boundary	10/11/2006	MW-8-20061011	**398.9**	--	--	**327**	<0	--	**403**	--	--	--	**30.5**	--	--	--	**1,480**	--	--
MW-08	Multiunit 1	Downgradient Boundary	4/18/2007	MW-8-20070418	**428.2**	--	--	**351**	<0	--	**344**	--	--	--	**25.2**	--	--	--	**1,430**	--	--
MW-08	Multiunit 1	Downgradient Boundary	11/14/2007	MW-8-20071114	**456.3**	--	--	**374**	<0	--	**365**	--	--	--	**23.9**	--	--	--	**1,520**	--	--
MW-08	Multiunit 1	Downgradient Boundary	5/7/2008	MW-8-20080507	**512.4**	--	--	**420**	<0	--	**406**	--	--	--	**27**	--	--	--	**1,570**	--	--
MW-08	Multiunit 1	Downgradient Boundary	12/3/2009	MW-8-20091203	**695.4**	--	--	**570**	<0	--	**508**	--	--	--	**28.2**	--	--	--	**2,580**	--	--
MW-08	Multiunit 1	Downgradient Boundary	9/27/2012	MW-8-092712-01	**420**	<6.0	<6.0	**420**	<6.0	--	**400**	--	--	--	**29**	--	--	--	**2,100**	--	--
MW-08	Multiunit 1	Downgradient Boundary	11/19/2013	FC-08-111913	**430**	<6.0	<6.0	**430**	<6.0	--	**470**	--	--	--	**28**	--	--	--	**1,900**	--	--
MW-08	Multiunit 1	Downgradient Boundary	9/10/2014	FCPP-08-091014	**430**	<6.0	<6.0	**430**	<6.0	--	**520**	--	--	--	**30**	--	--	--	**2,000**	--	--
MW-08	Multiunit 1	Downgradient Boundary	3/17/2015	FCPP-08-031715	**420**	<6.0	<6.0	**420**	<6.0	--	**630**	--	--	--	**32**	--	--	--	**2,300**	--	--
MW-08	Multiunit 1	Downgradient Boundary	6/29/2015	MW-8	**430**	<6.0	<6.0	**430**	<6.0	--	**680**	--	--	--	**34**	--	--	--	**2,300**	--	--

Table F-6
Groundwater Sampling Results for the Multiunit 1 Monitoring Wells - Additional Analyses

					Additional Analyses																
				Constituent:	Alkalinity Bicarbonate	Alkalinity Carbonate	Alkalinity Hydroxide	Alkalinity(as CaCO3)	Alkalinity, Phenolphthalein, as CaCO3	Iron	Magnesium	Magnesium	Manganese	Nickel	Potassium	Potassium	Radium 226	Radium 228	Sodium	Sodium	Zinc
				Filtered:	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N	N	Y	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L	pCi/L	mg/L	mg/L	mh/L
				Multiunit 1 BTV	--	--	--	--	--		--	--	--	--	--	--	--	--	--	--	--
				Multiunit 1 GWPS	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**																	
MW-08	Multiunit 1	Downgradient Boundary	8/26/2015	FCPP-8-082615	**420**	<6.0	<6.0	**420**	<6.0	--	**660**	--	--	--	**40**	--	--	--	**2,500**	--	--
MW-08	Multiunit 1	Downgradient Boundary	12/1/2015	FC-CCR-MW8-120115	**540**	<5.0	--	**540**	--	--	**760**	--	--	--	**34**	--	--	--	**2,600**	--	--
MW-08	Multiunit 1	Downgradient Boundary	12/1/2015	FC-CCR-MW8-120115	--	--	--	--	--	--	--	--	--	--	--	--	**2.78**	**1.88**	--	--	--
MW-08	Multiunit 1	Downgradient Boundary	4/26/2016	FC-CCR-MW-8-042616	--	--	--	--	--	--	--	--	--	--	--	--	**0.5**	**0.9**	--	--	--
MW-08	Multiunit 1	Downgradient Boundary	6/7/2016	FC-CCR-MW8-616	--	--	--	--	--	--	--	--	--	--	--	--	<0.5	**1.3**	--	--	--
MW-08	Multiunit 1	Downgradient Boundary	6/7/2016	FC-CCR-MW8-616	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-08	Multiunit 1	Downgradient Boundary	8/21/2016	FC-CCR-MW8-816	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-08	Multiunit 1	Downgradient Boundary	8/21/2016	FC-CCR-MW8-816	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-08	Multiunit 1	Downgradient Boundary	8/21/2016	FC-CCR-MW8-816	--	--	--	--	--	--	--	--	--	--	--	--	<0.3	**1.3**	--	--	--
MW-08	Multiunit 1	Downgradient Boundary	9/13/2016	FC-CCR-MW8-916	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-08	Multiunit 1	Downgradient Boundary	9/13/2016	FC-CCR-MW8-916	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-08	Multiunit 1	Downgradient Boundary	9/13/2016	FC-CCR-MW8-916	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	**1.2**	--	--	--
MW-08	Multiunit 1	Downgradient Boundary	4/18/2017	FC-CCR-MW8-41817	**510**	<6.0	<6.0	**510**	<6.0	--	**780**	--	--	--	**37**	--	--	--	**3,200**	--	--
MW-08	Multiunit 1	Downgradient Boundary	4/18/2017	FC-CCR-MW8-41817	--	--	--	--	--	--	--	--	--	--	--	--	<0.5	**1.0**	--	--	--
MW-08	Multiunit 1	Downgradient Boundary	4/18/2017	FC-CCR-MW8-41817	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-08	Multiunit 1	Downgradient Boundary	5/3/2017	FC-CCR-MW8-5317	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-08	Multiunit 1	Downgradient Boundary	5/3/2017	FC-CCR-MW8-5317	--	--	--	--	--	--	--	--	--	--	--	--	**0.5**	**1.4**	--	--	--
MW-08	Multiunit 1	Downgradient Boundary	5/30/2017	FC-CCR-MW8-53017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-08	Multiunit 1	Downgradient Boundary	5/30/2017	FC-CCR-MW8-53017	--	--	--	--	--	--	--	--	--	--	--	--	<0.5	**1.2**	--	--	--
MW-08	Multiunit 1	Downgradient Boundary	6/1/2018	FC-CCR-MW-8-6118	--	--	--	--	--	--	--	--	--	--	--	--	<0.5	<0.7	--	--	--
MW-08	Multiunit 1	Downgradient Boundary	6/1/2018	FC-CCR-MW-8-6118	**510**	<6.0	<6.0	**510**	<6.0	--	**750**	--	--	--	**37**	--	--	--	**1,300**	--	--
MW-08	Multiunit 1	Downgradient Boundary	11/4/2018	FC-CCR-MW8-11418	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-08	Multiunit 1	Downgradient Boundary	11/4/2018	FC-CCR-MW8-11418	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-08	Multiunit 1	Downgradient Boundary	11/4/2018	FC-CCR-MW8-11418	--	--	--	--	--	--	--	--	--	--	--	--	<0.5	<0.7	--	--	--
MW-08	Multiunit 1	Downgradient Boundary	3/19/2019	FC-CCR-MW8-031919	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-08	Multiunit 1	Downgradient Boundary	3/19/2019	FC-CCR-MW8-031919	--	--	--	--	--	--	--	--	--	--	--	--	<0.5	**1.3**	--	--	--
MW-08	Multiunit 1	Downgradient Boundary	5/14/2019	FC-CCR-MW8-51419	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-08	Multiunit 1	Downgradient Boundary	5/14/2019	FC-CCR-MW8-51419	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	**1.1**	--	--	--
MW-08	Multiunit 1	Downgradient Boundary	11/19/2019	FC-CCR-MW8-111919	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-08	Multiunit 1	Downgradient Boundary	6/23/2020	FC-CCR-MW08-0620	**490**	<6	<6	**490**	<6	--	**830**	--	--	--	**35**	--	<0.4	**0.7**	**3,100**	--	--
MW-08	Multiunit 1	Downgradient Boundary	6/23/2020	0620	**490**	<6	<6	**490**	<6	--	**830**	--	--	--	**37**	--	--	--	**3,100**	--	--
MW-08	Multiunit 1	Downgradient Boundary	11/6/2020	FC-CCR-MW08-1120	**540**	<6	<6	**540**	<6	--	**940**	**--**	**--**	--	**47**	**--**	<0.4	<0.8	**2,700**	--	--
MW-08	Multiunit 1	Downgradient Boundary	4/27/2021	FC-CCR-MW08-0421	**570**	<6	<6	**570**	<6	--	**920**	--	--	--	**44**	--	<0.5	<0.8	**2,600**	--	--
MW-08	Multiunit 1	Downgradient Boundary	11/18/2021	FC-CCR-MW08-1121	**490**	<6	<6	**490**	<6	--	**910**	--	--	--	**35**	--	**0.4**	**0.9**	**2,800**	--	--
MW-08	Multiunit 1	Downgradient Boundary	5/24/2022	FC-CCR-MW08-0522	**490**	<6	<6	**490**	<6	--	**970**	--	--	--	**38**	--	<0.4	**1.1**	**3,000**	--	--
MW-08	Multiunit 1	Downgradient Boundary	5/24/2022	FC-CCR-SS06-0522	--	--	--	--	--	<1.5	**901**	--	<0.5	--	**37.1**	--	--	--	**2,940**	--	--
MW-08	Multiunit 1	Downgradient Boundary	11/16/2022	FC-CCR-MW08-1122	**490**	<6	<6	**490**	<6	--	**1,000**	--	--	--	**39**	--	**1.1**	**1.9**	**3,300**	--	--
MW-08	Multiunit 1	Downgradient Boundary	5/8/2023	FC-CCR-MW08-0523	**510**	<6	<6	**510**	<6	--	**980**	--	--	**0.051**	**38**	--	<0.39	**1.0**	**3,300**	--	--
MW-08	Multiunit 1	Downgradient Boundary	11/15/2023	FC-CCR-MW08-1124	**500**	<6	<6	**500**	<6	--	**1,100**	--	--	--	**46**	--	<0.48	**1.7**	**3,900**	--	--
MW-15	Multiunit 1	Supplementary	9/30/1987	MW-15_9/30/1987	--	--	--	**320**	--	--	--	**680**	**--**	--	--	**37**	--	--	--	**1,400**	--
MW-15	Multiunit 1	Supplementary	6/20/1988	MW-15-19880620	**388**	--	--	**318**	<0	--	**614**	--	--	--	**41**	--	--	--	**1,250**	--	--
MW-15	Multiunit 1	Supplementary	9/22/1988	MW-15-19880922	**414.8**	--	--	**340**	<0	--	**582**	--	--	--	**34**	--	--	--	**1,180**	--	--
MW-15	Multiunit 1	Supplementary	11/14/1988	MW-15-19881114	**402.6**	--	--	**330**	<0	--	**677**	--	--	--	**39**	--	--	--	**1,160**	--	--
MW-15	Multiunit 1	Supplementary	3/8/1989	MW-15-19890308	**488**	--	--	**400**	<0	--	**514**	--	--	--	**33**	--	--	--	**1,260**	--	--
MW-15	Multiunit 1	Supplementary	9/13/1989	MW-15-19890913	**488**	--	--	**400**	<0	--	**580**	--	--	--	**40**	--	--	--	**1,100**	--	--
MW-15	Multiunit 1	Supplementary	3/22/1990	MW-15-19900322	**366**	--	--	**300**	<0	--	**520**	--	--	--	**41**	--	--	--	**1,050**	--	--
MW-15	Multiunit 1	Supplementary	9/24/1990	MW-15-19900924	**396.5**	--	--	**325**	<0	--	**600**	--	--	--	**40**	--	--	--	**1,200**	--	--
MW-15	Multiunit 1	Supplementary	3/27/1991	MW-15-19910327	**427**	--	--	**350**	<0	--	**480**	--	--	--	**40**	--	--	--	**925**	--	--
MW-15	Multiunit 1	Supplementary	9/27/1991	MW-15-19910927	**396.5**	--	--	**325**	<0	--	**600**	--	--	--	**45**	--	--	--	**935**	--	--
MW-15	Multiunit 1	Supplementary	5/1/1992	MW-15-19920501	**366**	--	--	**300**	<0	--	**500**	--	--	--	**39**	--	--	--	**900**	--	--
MW-15	Multiunit 1	Supplementary	10/28/1992	MW-15-19921028	**396.5**	--	--	**325**	<0	--	**600**	--	--	--	**40**	--	--	--	**900**	--	--
MW-15	Multiunit 1	Supplementary	4/23/1993	MW-15-19930423	**518.5**	--	--	**425**	<0	--	**400**	--	--	--	**41**	--	--	--	**1,220**	--	--

Table F-6
Groundwater Sampling Results for the Multiunit 1 Monitoring Wells - Additional Analyses

					Additional Analyses																	
				Constituent:	Alkalinity Bicarbonate	Alkalinity Carbonate	Alkalinity Hydroxide	Alkalinity(as CaCO3)	Alkalinity, Phenolphthalein, as CaCO3	Iron	Magnesium	Magnesium	Manganese	Nickel	Potassium	Potassium	Radium 226	Radium 228	Sodium	Sodium	Zinc
				Filtered:	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N	N	Y	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L	pCi/L	mg/L	mg/L	mh/L
				Multiunit 1 BTV	--	--	--	--	--		--	--	--	--	--	--	--	--	--	--	--
				Multiunit 1 GWPS	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**																	
MW-15	Multiunit 1	Supplementary	11/22/1993	MW-15-19931122	**396.5**	--	--	**325**	<0	--	**500**	--	--	--	**51**	--	--	--	**1,000**	--	--
MW-15	Multiunit 1	Supplementary	4/20/1994	MW-15-19940420	**488**	--	--	**400**	<0	--	**500**	--	--	--	**54**	--	--	--	**920**	--	--
MW-15	Multiunit 1	Supplementary	11/8/1994	MW-15-19941108	**610**	--	--	**500**	<0	--	**500**	--	--	--	**50**	--	--	--	**1,120**	--	--
MW-15	Multiunit 1	Supplementary	4/5/1995	MW-15-19950405	**457.5**	--	--	**375**	<0	--	**500**	--	--	--	**43**	--	--	--	**840**	--	--
MW-15	Multiunit 1	Supplementary	11/18/1995	MW-15-19951118	**396.5**	--	--	**325**	<0	--	**500**	--	--	--	**47**	--	--	--	**1,000**	--	--
MW-15	Multiunit 1	Supplementary	8/14/1996	MW-15-19960814	**427**	--	--	**350**	<0	--	**500**	--	--	--	**37**	--	--	--	**960**	--	--
MW-15	Multiunit 1	Supplementary	4/23/1997	MW-15-19970423	**518.5**	--	--	**425**	<0	--	**400**	--	--	--	**35**	--	--	--	**900**	--	--
MW-15	Multiunit 1	Supplementary	10/8/1997	MW-15-19971008	**457.5**	--	--	**375**	<0	--	**400**	--	--	--	**36**	--	--	--	**1,120**	--	--
MW-15	Multiunit 1	Supplementary	4/14/1998	MW-15-19980414	**335.5**	--	--	**275**	<0	--	**400**	--	--	--	**32**	--	--	--	**1,150**	--	--
MW-15	Multiunit 1	Supplementary	5/11/1999	MW-15-19990511	**457.5**	--	--	**375**	<0	--	**400**	--	--	--	**32**	--	--	--	**820**	--	--
MW-15	Multiunit 1	Supplementary	12/1/1999	MW-15-19991201	**366**	--	--	**300**	<0	--	**400**	--	--	--	**31**	--	--	--	**1,180**	--	--
MW-15	Multiunit 1	Supplementary	6/8/2000	MW-15-20000608	**549**	--	--	**450**	<0	--	**573**	--	--	--	**31.3**	--	--	--	**1,260**	--	--
MW-15	Multiunit 1	Supplementary	12/12/2000	MW-15-20001212	**549**	--	--	**450**	<0	--	**400**	--	--	--	**40**	--	--	--	**1,600**	--	--
MW-15	Multiunit 1	Supplementary	8/22/2001	MW-15-20010822	**488**	--	--	**400**	<0	--	**460**	--	--	--	**32**	--	--	--	**1,310**	--	--
MW-15	Multiunit 1	Supplementary	12/3/2001	MW-15-20011203	**457.5**	--	--	**375**	<0	--	**350**	--	--	--	**38**	--	--	--	**1,040**	--	--
MW-15	Multiunit 1	Supplementary	6/24/2002	MW-15-20020624	**579.5**	--	--	**475**	<0	--	**400**	--	--	--	**33**	--	--	--	**1,060**	--	--
MW-15	Multiunit 1	Supplementary	12/18/2002	MW-15-20021218	**488**	--	--	**400**	<0	--	**400**	--	--	--	**41**	--	--	--	**1,060**	--	--
MW-15	Multiunit 1	Supplementary	5/28/2003	MW-15-20030528	**457.5**	--	--	**375**	<0	--	**400**	--	--	--	**36**	--	--	--	**800**	--	--
MW-15	Multiunit 1	Supplementary	12/24/2003	MW-15-20031224	**1,922**	--	--	**1,575**	<0	--	**500**	--	--	--	**42**	--	--	--	**9,000**	--	--
MW-15	Multiunit 1	Supplementary	6/16/2004	MW-15-20040616	**1,678**	--	--	**1,375**	<0	--	**500**	--	--	--	**40**	--	--	--	**220**	--	--
MW-15	Multiunit 1	Supplementary	11/29/2004	MW-15-20041129	**3,874**	--	--	**3,175**	<0	--	**480**	--	--	--	**34**	--	--	--	**980**	--	--
MW-15	Multiunit 1	Supplementary	5/13/2005	MW-15-20050513	**488**	--	--	**400**	<0	--	**400**	--	--	--	**51**	--	--	--	**960**	--	--
MW-15	Multiunit 1	Supplementary	12/14/2005	MW-15-20051214	**549**	--	--	**450**	<0	--	**526**	--	--	--	**26.6**	--	--	--	**1,250**	--	--
MW-15	Multiunit 1	Supplementary	6/17/2006	MW-15-20060617	**439.2**	--	--	**360**	<0	--	**450**	--	--	--	**25.4**	--	--	--	**1,080**	--	--
MW-15	Multiunit 1	Supplementary	10/11/2006	MW-15-20061011	**442.9**	--	--	**363**	<0	--	**456**	--	--	--	**33.5**	--	--	--	**1,150**	--	--
MW-15	Multiunit 1	Supplementary	4/18/2007	MW-15-20070418	**450.2**	--	--	**369**	<0	--	**432**	--	--	--	**29.5**	--	--	--	**1,080**	--	--
MW-15	Multiunit 1	Supplementary	11/14/2007	MW-15-20071114	**512.4**	--	--	**420**	<0	--	**367**	--	--	--	**27**	--	--	--	**1,240**	--	--
MW-15	Multiunit 1	Supplementary	5/7/2008	MW-15-20080507	**549**	--	--	**450**	<0	--	**414**	--	--	--	**29.5**	--	--	--	**1,180**	--	--
MW-15	Multiunit 1	Supplementary	11/19/2013	FC-15MS-111913	--	--	--	--	--	--	**520**	--	--	--	**30**	--	--	--	**1,900**	--	--
MW-15	Multiunit 1	Supplementary	11/19/2013	FC-15-111913	**530**	<6.0	<6.0	**530**	<6.0	--	**510**	--	--	--	**33**	--	--	--	**1,900**	--	--
MW-15	Multiunit 1	Supplementary	9/9/2014	FCPP-15-090914	**560**	<6.0	<6.0	**560**	<6.0	--	**520**	--	--	--	**38**	--	--	--	**2,100**	--	--
MW-15	Multiunit 1	Supplementary	3/17/2015	FCPP-15-031715	**560**	<6.0	<6.0	**560**	<6.0	--	**510**	--	--	--	**34**	--	--	--	**2,000**	--	--
MW-15	Multiunit 1	Supplementary	6/29/2015	MW-15	**560**	<6.0	<6.0	**560**	<6.0	--	**500**	--	--	--	**34**	--	--	--	**2,000**	--	--
MW-15	Multiunit 1	Supplementary	8/26/2015	FCPP-15-082615	**570**	<6.0	<6.0	**570**	<6.0	--	**450**	--	--	--	**38**	--	--	--	**2,300**	--	--
MW-15	Multiunit 1	Supplementary	6/18/2016	FC-Seep-MW15-616	**600**	<6.0	<6.0	**600**	<6.0	--	**580**	--	--	--	**38**	--	--	--	**2,100**	--	--
MW-15	Multiunit 1	Supplementary	9/15/2016	FC-Seep-MW15-916	**150**	<6.0	<6.0	**150**	<6.0	--	**510**	--	--	--	**38**	--	--	--	**2,200**	--	--
MW-15	Multiunit 1	Supplementary	3/20/2019	FC-CCR-MW15-032019	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-15	Multiunit 1	Supplementary	3/20/2019	FC-CCR-MW15-032019	--	--	--	--	--	--	--	--	--	--	--	--	<0.6	<0.7	--	--	--
MW-15	Multiunit 1	Supplementary	5/14/2019	FC-CCR-MW15-51419	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-15	Multiunit 1	Supplementary	5/14/2019	FC-CCR-MW15-51419	--	--	--	--	--	--	--	--	--	--	--	--	<0.5	<0.7	--	--	--
MW-15	Multiunit 1	Supplementary	11/19/2019	FC-CCR-MW15-111919	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-15	Multiunit 1	Supplementary	6/23/2020	FC-CCR-MW15-0620	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	<0.8	--	--	--
MW-15	Multiunit 1	Supplementary	11/6/2020	FC-CCR-MW15-1120	**660**	<6	<6	**660**	<6	--	**640**	--	--	--	**41**	--	<0.4	<0.8	**2,200**	--	--
MW-15	Multiunit 1	Supplementary	4/27/2021	FC-CCR-MW15-0421	**700**	<6	<6	**700**	<6	**0.17**	**710**	--	**1.0**	--	**47**	--	<0.4	<0.8	**2,100**	--	--
MW-15	Multiunit 1	Supplementary	11/18/2021	FC-CCR-MW15-1121	**630**	<6	<6	**630**	<6	**0.11**	**630**	--	**0.72**	--	**37**	--	**0.6**	<0.6	**2,100**	--	--
MW-15	Multiunit 1	Supplementary	2/8/2022	FC-CCR-MW15-0222	**680**	<6	<6	**680**	<6	**0.13**	**730**	--	--	--	**43**	--	--	--	**2,100**	--	--
MW-15	Multiunit 1	Supplementary	5/24/2022	FC-CCR-MW15-0522	**680**	<6	<6	**680**	<6	**0.12**	**680**	--	**1.1**	--	**42**	--	<0.3	<0.6	**2,300**	--	--
MW-15	Multiunit 1	Supplementary	8/13/2022	FC-CCR-MW15-0822	**660**	<6	<6	**660**	<6	**0.11**	**720**	--	--	--	**39**	--	--	--	**2,100**	--	--
MW-15	Multiunit 1	Supplementary	11/16/2022	FC-CCR-MW15-1122	**880**	<6	<6	**880**	<6	<0.1	**710**	--	**0.56**	--	**40**	--	<0.3	<0.7	**2,300**	--	--
MW-15	Multiunit 1	Supplementary	5/8/2023	FC-CCR-MW15-0523	**660**	<6	<6	**660**	<6	**0.11**	**690**	--	**1.2**	**0.04**	**41**	--	**0.6**	**0.9**	**2,400**	--	--
MW-15	Multiunit 1	Supplementary	11/15/2023	FC-CCR-MW15-1124	**660**	<6	<6	**660**	<6	**0.26**	**780**	--	**1.1**	--	**48**	--	<0.51	**1.3**	**2,600**	--	<0.13
MW-16	Multiunit 1	Supplementary	9/30/1987	MW-16_9/30/1987	--	--	--	**330**	--	--	--	**1,200**	--	--	--	**58**	--	--	--	**4,400**	--

Table F-6
Groundwater Sampling Results for the Multiunit 1 Monitoring Wells - Additional Analyses

					Additional Analyses																
				Constituent:	Alkalinity Bicarbonate	Alkalinity Carbonate	Alkalinity Hydroxide	Alkalinity(as CaCO3)	Alkalinity, Phenolphthalein, as CaCO3	Iron	Magnesium	Magnesium	Manganese	Nickel	Potassium	Potassium	Radium 226	Radium 228	Sodium	Sodium	Zinc
				Filtered:	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N	N	Y	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L	pCi/L	mg/L	mg/L	mh/L
				Multiunit 1 BTV	--	--	--	--	--		--	--	--	--	--	--	--	--	--	--	--
				Multiunit 1 GWPS	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**																	
MW-16	Multiunit 1	Supplementary	6/20/1988	MW-16-19880620	407.5	--	--	334	<0	--	1,150	--	--	--	59	--	--	--	4,250	--	--
MW-16	Multiunit 1	Supplementary	9/21/1988	MW-16-19880921	488	--	--	400	<0	--	1,200	--	--	--	53	--	--	--	3,870	--	--
MW-16	Multiunit 1	Supplementary	11/14/1988	MW-16-19881114	463.6	--	--	380	<0	--	1,510	--	--	--	73	--	--	--	3,420	--	--
MW-16	Multiunit 1	Supplementary	3/8/1989	MW-16-19890308	488	--	--	400	<0	--	1,130	--	--	--	59	--	--	--	3,740	--	--
MW-16	Multiunit 1	Supplementary	9/13/1989	MW-16-19890913	366	--	--	300	<0	--	1,173	--	--	--	56	--	--	--	3,500	--	--
MW-16	Multiunit 1	Supplementary	3/26/1990	MW-16-19900326	366	--	--	300	<0	--	950	--	--	--	52	--	--	--	3,800	--	--
MW-16	Multiunit 1	Supplementary	9/24/1990	MW-16-19900924	427	--	--	350	<0	--	1,000	--	--	--	60	--	--	--	3,700	--	--
MW-16	Multiunit 1	Supplementary	4/2/1991	MW-16-19910402	457.5	--	--	375	<0	--	1,000	--	--	--	47	--	--	--	3,400	--	--
MW-16	Multiunit 1	Supplementary	10/1/1991	MW-16-19911001	366	--	--	300	<0	--	1,000	--	--	--	55	--	--	--	3,090	--	--
MW-16	Multiunit 1	Supplementary	5/7/1992	MW-16-19920507	457.5	--	--	375	<0	--	1,100	--	--	--	46	--	--	--	3,200	--	--
MW-16	Multiunit 1	Supplementary	11/5/1992	MW-16-19921105	427	--	--	350	<0	--	800	--	--	--	48	--	--	--	2,900	--	--
MW-16	Multiunit 1	Supplementary	4/26/1993	MW-16-19930426	457.5	--	--	375	<0	--	700	--	--	--	56	--	--	--	2,800	--	--
MW-16	Multiunit 1	Supplementary	11/23/1993	MW-16-19931123	396.5	--	--	325	<0	--	800	--	--	--	54	--	--	--	3,000	--	--
MW-16	Multiunit 1	Supplementary	4/20/1994	MW-16-19940420	457.5	--	--	375	<0	--	900	--	--	--	64	--	--	--	2,900	--	--
MW-16	Multiunit 1	Supplementary	9/21/1994	MW-16-19940921	427	--	--	350	<0	--	800	--	--	--	55	--	--	--	2,700	--	--
MW-16	Multiunit 1	Supplementary	4/4/1995	MW-16-19950404	457.5	--	--	375	<0	--	800	--	--	--	50	--	--	--	2,700	--	--
MW-16	Multiunit 1	Supplementary	11/21/1995	MW-16-19951121	274.5	--	--	225	<0	--	700	--	--	--	51	--	--	--	2,000	--	--
MW-16	Multiunit 1	Supplementary	8/15/1996	MW-16-19960815	457.5	--	--	375	<0	--	700	--	--	--	44	--	--	--	2,300	--	--
MW-16	Multiunit 1	Supplementary	4/15/1997	MW-16-19970415	488	--	--	400	<0	--	600	--	--	--	41	--	--	--	1,900	--	--
MW-16	Multiunit 1	Supplementary	10/8/1997	MW-16-19971008	488	--	--	400	<0	--	600	--	--	--	43	--	--	--	1,900	--	--
MW-16	Multiunit 1	Supplementary	4/15/1998	MW-16-19980415	732	--	--	600	<0	--	700	--	--	--	41	--	--	--	1,800	--	--
MW-16	Multiunit 1	Supplementary	5/11/1999	MW-16-19990511	488	--	--	400	<0	--	700	--	--	--	44	--	--	--	1,700	--	--
MW-16	Multiunit 1	Supplementary	11/30/1999	MW-16-19991130	457.5	--	--	375	<0	--	700	--	--	--	36	--	--	--	2,400	--	--
MW-16	Multiunit 1	Supplementary	6/8/2000	MW-16-20000608	701.5	--	--	575	<0	--	819	--	--	--	40	--	--	--	1,930	--	--
MW-16	Multiunit 1	Supplementary	12/12/2000	MW-16-20001212	610	--	--	500	<0	--	700	--	--	--	48	--	--	--	2,300	--	--
MW-16	Multiunit 1	Supplementary	8/22/2001	MW-16-20010822	427	--	--	350	<0	--	820	--	--	--	46	--	--	--	2,200	--	--
MW-16	Multiunit 1	Supplementary	12/3/2001	MW-16-20011203	518.5	--	--	425	<0	--	600	--	--	--	38	--	--	--	2,600	--	--
MW-16	Multiunit 1	Supplementary	6/12/2002	MW-16-20020612	610	--	--	500	<0	--	800	--	--	--	42	--	--	--	2,000	--	--
MW-16	Multiunit 1	Supplementary	12/18/2002	MW-16-20021218	457.5	--	--	375	<0	--	600	--	--	--	43	--	--	--	1,600	--	--
MW-16	Multiunit 1	Supplementary	5/29/2003	MW-16-20030529	579.5	--	--	475	<0	--	700	--	--	--	46	--	--	--	240	--	--
MW-16	Multiunit 1	Supplementary	12/24/2003	MW-16-20031224	1,464	--	--	1,200	<0	--	700	--	--	--	44	--	--	--	1,300	--	--
MW-16	Multiunit 1	Supplementary	6/16/2004	MW-16-20040616	3,142	--	--	2,575	<0	--	700	--	--	--	43	--	--	--	1,800	--	--
MW-16	Multiunit 1	Supplementary	11/29/2004	MW-16-20041129	3,233	--	--	2,650	<0	--	650	--	--	--	50	--	--	--	1,600	--	--
MW-16	Multiunit 1	Supplementary	6/13/2005	MW-16-20050613	396.5	--	--	325	<0	--	500	--	--	--	40	--	--	--	960	--	--
MW-16	Multiunit 1	Supplementary	10/31/2005	MW-16-20051031	335.5	--	--	275	<0	--	--	--	--	--	--	--	--	--	--	--	--
MW-16	Multiunit 1	Supplementary	5/16/2006	MW-16-20060516	340.4	--	--	279	<0	--	613	--	--	--	32.5	--	--	--	1,190	--	--
MW-16	Multiunit 1	Supplementary	10/11/2006	MW-16-20061011	340.4	--	--	279	<0	--	624	--	--	--	36.2	--	--	--	1,160	--	--
MW-16	Multiunit 1	Supplementary	4/18/2007	MW-16-20070418	347.7	--	--	285	<0	--	579	--	--	--	31.9	--	--	--	1,170	--	--
MW-16	Multiunit 1	Supplementary	11/14/2007	MW-16-20071114	375.8	--	--	308	<0	--	478	--	--	--	30	--	--	--	1,120	--	--
MW-16	Multiunit 1	Supplementary	5/7/2008	MW-16-20080507	378.2	--	--	310	<0	--	536	--	--	--	32.6	--	--	--	1,120	--	--
MW-16	Multiunit 1	Supplementary	12/4/2009	MW-16-20091204	327	--	--	268	<0	--	475	--	--	--	28.1	--	--	--	1,020	--	--
MW-16	Multiunit 1	Supplementary	9/27/2012	MW-16-092712-01	320	<6.0	<6.0	320	<6.0	--	510	--	--	--	33	--	--	--	1,300	--	--
MW-16	Multiunit 1	Supplementary	11/19/2013	FC-16-111913	490	<6.0	<6.0	490	<6.0	--	700	--	--	--	36	--	--	--	1,600	--	--
MW-16	Multiunit 1	Supplementary	3/12/2014	FC-16-031214	490	<6.0	<6.0	490	<6.0	--	660	--	--	--	37	--	--	--	1,700	--	--
MW-16	Multiunit 1	Supplementary	9/9/2014	FCPP-16-090914	490	<6.0	<6.0	490	<6.0	--	660	--	--	--	39	--	--	--	1,700	--	--
MW-16	Multiunit 1	Supplementary	3/17/2015	FCPP-16-031715	510	<6.0	<6.0	510	<6.0	--	680	--	--	--	37	--	--	--	1,600	--	--
MW-16	Multiunit 1	Supplementary	6/29/2015	MW-16	520	<6.0	<6.0	520	<6.0	--	710	--	--	--	39	--	--	--	1,600	--	--
MW-16	Multiunit 1	Supplementary	8/26/2015	FCPP-16-082615	520	<6.0	<6.0	520	<6.0	--	690	--	--	--	44	--	--	--	1,800	--	--
MW-16	Multiunit 1	Supplementary	11/10/2015	FC MW-16-(111115)	480	<6.0	<6.0	480	<6.0	--	1,200	--	--	--	48	--	--	--	2,500	--	--
MW-16	Multiunit 1	Supplementary	6/18/2016	FC-Seep-MW16-616	540	<6.0	<6.0	540	<6.0	--	1,100	--	--	--	48	--	--	--	2,600	--	--
MW-16	Multiunit 1	Supplementary	9/15/2016	FC-Seep-MW16-916	530	<6.0	<6.0	530	<6.0	--	1,100	--	--	--	49	--	--	--	2,600	--	--
MW-16	Multiunit 1	Supplementary	3/20/2019	FC-CCR-MW16-032019	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Table F-6
Groundwater Sampling Results for the Multiunit 1 Monitoring Wells - Additional Analyses

					Additional Analyses																
				Constituent:	Alkalinity Bicarbonate	Alkalinity Carbonate	Alkalinity Hydroxide	Alkalinity(as CaCO3)	Alkalinity, Phenolphthalein, as CaCO3	Iron	Magnesium	Magnesium	Manganese	Nickel	Potassium	Potassium	Radium 226	Radium 228	Sodium	Sodium	Zinc
				Filtered:	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N	N	Y	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L	pCi/L	mg/L	mg/L	mh/L
				Multiunit 1 BTV	--	--	--	--	--		--	--	--	--	--	--	--	--	--	--	--
				Multiunit 1 GWPS	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**																	
MW-16	Multiunit 1	Supplementary	3/20/2019	FC-CCR-MW16-032019	--	--	--	--	--	--	--	--	--	--	--	--	<0.6	**2.9**	--	--	--
MW-16	Multiunit 1	Supplementary	5/14/2019	FC-CCR-MW16-51419	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-16	Multiunit 1	Supplementary	5/14/2019	FC-CCR-MW16-51419	--	--	--	--	--	--	--	--	--	--	--	--	<0.5	**1.9**	--	--	--
MW-16	Multiunit 1	Supplementary	5/14/2019	51419	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-16	Multiunit 1	Supplementary	5/14/2019	51419	--	--	--	--	--	--	--	--	--	--	--	--	<0.5	**1.7**	--	--	--
MW-16	Multiunit 1	Supplementary	11/19/2019	FC-CCR-MW16-111919	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-16	Multiunit 1	Supplementary	6/23/2020	FC-CCR-MW16-0620	--	--	--	--	--	--	--	--	--	--	--	--	**0.9**	**2.2**	--	--	--
MW-16	Multiunit 1	Supplementary	11/6/2020	FC-CCR-MW16-1120	**610**	<6	<6	**610**	<6	--	**1,300**	--	--	--	**54**	--	**0.9**	**2.7**	**3,000**	--	--
MW-16	Multiunit 1	Supplementary	4/27/2021	FC-CCR-MW16-0421	**650**	<6	<6	**650**	<6	--	**1,400**	--	--	--	**58**	--	**0.9**	**1.1**	**3,100**	--	--
MW-16	Multiunit 1	Supplementary	11/18/2021	FC-CCR-MW16-1121	**580**	<6	<6	**580**	<6	**0.14**	**1,300**	--	**1.2**	--	**50**	--	**0.6**	**1.9**	**3,100**	--	--
MW-16	Multiunit 1	Supplementary	2/8/2022	FC-CCR-MW16-0222	**620**	<6	<6	**620**	<6	**0.18**	**1,400**	--	--	--	**59**	--	--	--	**3,000**	--	--
MW-16	Multiunit 1	Supplementary	5/26/2022	FC-CCR-MW16-0522	**600**	<6	<6	**600**	<6	**0.15**	**1,500**	--	--	--	**60**	--	**1.0**	**2.4 J**	**3,500**	--	--
MW-16	Multiunit 1	Supplementary	8/13/2022	FC-CCR-MW16-0822	**600**	<6	<6	**600**	<6	**0.15**	**1,400**	--	--	--	**52**	--	--	--	**3,100**	--	--
MW-16	Multiunit 1	Supplementary	11/16/2022	FC-CCR-MW16-1122	**610**	<6	<6	**610**	<6	**0.16**	**1,500**	--	--	--	**51**	--	**1.9**	**3.2**	**3,300**	--	--
MW-16	Multiunit 1	Supplementary	5/8/2023	FC-CCR-MW16-0523	**600**	<6	<6	**600**	<6	**0.15**	**1,700**	--	--	**0.099**	**63**	--	**1.3**	**3.0**	**3,800**	--	--
MW-16	Multiunit 1	Supplementary	11/15/2023	FC-CCR-MW16-1124	**590**	<6	<6	**590**	<6	**0.16**	**1,700**	--	**1.6**	--	**74**	--	<0.51	**3.5**	**4,100**	--	<0.13
MW-17R	Multiunit 1	Supplementary	3/12/2014	FC-17R-031214	**120**	<6.0	<6.0	**120**	<6.0	--	**280**	--	--	--	**19**	--	--	--	**960**	--	--
MW-17R	Multiunit 1	Supplementary	9/9/2014	FCPP-17R-090914	**120**	<6.0	<6.0	**120**	<6.0	--	**270**	--	--	--	**21**	--	--	--	**990**	--	--
MW-17R	Multiunit 1	Supplementary	3/17/2015	FCPP-17R-031715	**120**	<6.0	<6.0	**120**	<6.0	--	**270**	--	--	--	**19**	--	--	--	**980**	--	--
MW-17R	Multiunit 1	Supplementary	6/30/2015	MW-17R	**120**	<6.0	<6.0	**120**	<6.0	--	**280**	--	--	--	**20**	--	--	--	**980**	--	--
MW-17R	Multiunit 1	Supplementary	8/25/2015	FCPP-17R-082515	**130**	<6.0	<6.0	**130**	<6.0	--	**290**	--	--	--	**23**	--	--	--	**1,000**	--	--
MW-17R	Multiunit 1	Supplementary	11/4/2015	FC MW-17R-(041115)	--	--	--	--	--	--	**420**	--	--	--	**29**	--	--	--	**1,300**	--	--
MW-17R	Multiunit 1	Supplementary	11/13/2015	FC MW-17R-(131115)	**130**	<6.0	<6.0	**130**	<6.0	--	**280**	--	--	--	**21**	--	--	--	**1,100**	--	--
MW-17R	Multiunit 1	Supplementary	6/18/2016	FC-Seep-MW17B-616	**130**	<6.0	<6.0	**130**	<6.0	--	**290**	--	--	--	**20**	--	--	--	**1,100**	--	--
MW-17R	Multiunit 1	Supplementary	9/15/2016	FC-Seep-MW17R-916	**120**	<6.0	<6.0	**120**	<6.0	--	**260**	--	--	--	**21**	--	--	--	**1,000**	--	--
MW-17R	Multiunit 1	Supplementary	3/19/2019	FC-CCR-MW17R-031919	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-17R	Multiunit 1	Supplementary	3/19/2019	FC-CCR-MW17R-031919	--	--	--	--	--	--	--	--	--	--	--	--	<0.6	**2.4**	--	--	--
MW-17R	Multiunit 1	Supplementary	5/14/2019	FC-CCR-MW17R-51419	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-17R	Multiunit 1	Supplementary	5/14/2019	FC-CCR-MW17R-51419	--	--	--	--	--	--	--	--	--	--	--	--	<0.5	**1.7**	--	--	--
MW-17R	Multiunit 1	Supplementary	5/14/2019	51419	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-17R	Multiunit 1	Supplementary	5/14/2019	51419	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	**1.2**	--	--	--
MW-17R	Multiunit 1	Supplementary	11/19/2019	FC-CCR-MW17R-111919	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-17R	Multiunit 1	Supplementary	6/22/2020	FC-CCR-MW17R-0620	--	--	--	--	--	--	--	--	--	--	--	--	**0.8**	**1.1**	--	--	--
MW-17R	Multiunit 1	Supplementary	11/7/2020	FC-CCR-MW17R-1120	**140**	<6	<6	**140**	<6	--	**260**	--	--	--	**20**	--	**0.8**	**1.2**	**1,100**	--	--
MW-17R	Multiunit 1	Supplementary	4/25/2021	FC-CCR-MW17R-0421	**140**	<6	<6	**140**	<6	**0.094 J**	**290**	--	**0.83**	--	**22**	--	**0.9**	**1.3**	**1,100**	--	--
MW-17R	Multiunit 1	Supplementary	11/16/2021	FC-CCR-MW17R-1121	**130**	<6	<6	**130**	<6	**0.048 J**	**290**	--	**0.83**	--	**21**	--	**1.4**	**1.8**	**1,100**	--	--
MW-17R	Multiunit 1	Supplementary	2/9/2022	FC-CCR-MW17R-0222	**140**	<6	<6	**140**	<6	<0.1 U	**300**	--	--	--	**20**	--	--	--	**1,100**	--	--
MW-17R	Multiunit 1	Supplementary	2/9/2022	0222	**140**	<6	<6	**140**	<6	<0.1 U	**280**	--	--	--	**20**	--	--	--	**1,000**	--	--
MW-17R	Multiunit 1	Supplementary	5/25/2022	FC-CCR-MW17R-0522	**130**	<6	<6	**130**	<6	<0.1	**280**	--	**0.84**	--	**20**	--	**0.7**	**1.3**	**1,200**	--	--
MW-17R	Multiunit 1	Supplementary	8/11/2022	FC-CCR-MW17R-0822	**130**	<6	<6	**130**	<6	<0.1	**280**	--	--	--	**18**	--	--	--	**1,000**	--	--
MW-17R	Multiunit 1	Supplementary	11/15/2022	FC-CCR-MW17R-1122	**140**	<6	<6	**140**	<6	<0.1	**290**	--	**0.87**	--	**21**	--	**1.5**	**0.9**	**1,100**	--	--
MW-17R	Multiunit 1	Supplementary	5/4/2023	FC-CCR-MW17R-0523	**140**	<6	<6	**140**	<6	<0.1	**300**	--	**0.93**	**0.52**	**22**	--	**1.2**	**0.8**	**970**	--	--
MW-17R	Multiunit 1	Supplementary	11/14/2023	FC-CCR-MW17R-1124	**130**	<6	<6	**130**	<6	<0.5	**290**	--	**1.1**	--	**19**	--	<0.5	**1.6**	**1,200**	--	--
MW-18	Multiunit 1	Supplementary	9/29/1987	MW-18_9/29/1987	--	--	--	**310**	--	--	--	**1,300**	--	--	--	**41**	--	--	--	**2,200**	--
MW-18	Multiunit 1	Supplementary	6/15/1988	MW-18-19880615	**524.6**	--	--	**430**	<0	--	**1,475**	--	--	--	**56**	--	--	--	**3,600**	--	--
MW-18	Multiunit 1	Supplementary	9/21/1988	MW-18-19880921	**488**	--	--	**400**	<0	--	**1,220**	--	--	--	**49**	--	--	--	**2,530**	--	--
MW-18	Multiunit 1	Supplementary	11/28/1988	MW-18-19881128	**451.4**	--	--	**370**	<0	--	**1,520**	--	--	--	**53**	--	--	--	**1,830**	--	--
MW-18	Multiunit 1	Supplementary	2/27/1989	MW-18-19890227	**488**	--	--	**400**	<0	--	**1,230**	--	--	--	**53**	--	--	--	**2,550**	--	--
MW-18	Multiunit 1	Supplementary	9/11/1989	MW-18-19890911	**395.3**	--	--	**324**	<0	--	**1,275**	--	--	--	**46**	--	--	--	**2,300**	--	--
MW-18	Multiunit 1	Supplementary	3/26/1990	MW-18-19900326	**427**	--	--	**350**	<0	--	**1,100**	--	--	--	**48**	--	--	--	**2,700**	--	--
MW-18	Multiunit 1	Supplementary	9/18/1990	MW-18-19900918	**396.5**	--	--	**325**	<0	--	**1,000**	--	--	--	**50**	--	--	--	**2,400**	--	--
MW-18	Multiunit 1	Supplementary	5/30/1991	MW-18-19910530	**732**	--	--	**600**	<0	--	**1,440**	--	--	--	**56**	--	--	--	**4,310**	--	--

Table F-6
Groundwater Sampling Results for the Multiunit 1 Monitoring Wells - Additional Analyses

					Additional Analyses																	
				Constituent:	Alkalinity Bicarbonate	Alkalinity Carbonate	Alkalinity Hydroxide	Alkalinity(as CaCO3)	Alkalinity, Phenolphthalein, as CaCO3	Iron	Magnesium	Magnesium	Manganese	Nickel	Potassium	Potassium	Radium 226	Radium 228	Sodium	Sodium	Zinc
				Filtered:	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N	N	Y	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L	pCi/L	mg/L	mg/L	mh/L
				Multiunit 1 BTV	--	--	--	--	--		--	--	--	--	--	--	--	--	--	--	--
				Multiunit 1 GWPS	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**																	
MW-18	Multiunit 1	Supplementary	9/11/1991	MW-18-19910911	488	--	--	400	<0	--	1,440	--	--	--	56	--	--	--	2,820	--	--
MW-18	Multiunit 1	Supplementary	5/5/1992	MW-18-19920505	915	--	--	750	<0	--	1,600	--	--	--	69	--	--	--	6,400	--	--
MW-18	Multiunit 1	Supplementary	10/27/1992	MW-18-19921027	976	--	--	800	<0	--	1,400	--	--	--	81	--	--	--	6,600	--	--
MW-18	Multiunit 1	Supplementary	4/26/1993	MW-18-19930426	854	--	--	700	<0	--	1,300	--	--	--	77	--	--	--	5,000	--	--
MW-18	Multiunit 1	Supplementary	11/23/1993	MW-18-19931123	579.5	--	--	475	<0	--	1,200	--	--	--	63	--	--	--	3,600	--	--
MW-18	Multiunit 1	Supplementary	4/21/1994	MW-18-19940421	579.5	--	--	475	<0	--	1,400	--	--	--	71	--	--	--	3,600	--	--
MW-18	Multiunit 1	Supplementary	9/20/1994	MW-18-19940920	549	--	--	450	<0	--	1,200	--	--	--	73	--	--	--	3,600	--	--
MW-18	Multiunit 1	Supplementary	12/14/1994	MW-18-19941214	--	--	--	--	--	--	1,000	--	--	--	38	--	--	--	2,100	--	--
MW-18	Multiunit 1	Supplementary	4/5/1995	MW-18-19950405	854	--	--	700	<0	--	1,400	--	--	--	71	--	--	--	5,000	--	--
MW-18	Multiunit 1	Supplementary	12/13/1995	MW-18-19951213	610	--	--	500	<0	--	1,400	--	--	--	70	--	--	--	5,000	--	--
MW-18	Multiunit 1	Supplementary	8/12/1996	MW-18-19960812	640.5	--	--	525	<0	--	1,200	--	--	--	56	--	--	--	3,800	--	--
MW-18	Multiunit 1	Supplementary	4/23/1997	MW-18-19970423	396.5	--	--	325	<0	--	1,200	--	--	--	70	--	--	--	6,200	--	--
MW-18	Multiunit 1	Supplementary	10/20/1997	MW-18-19971020	579.5	--	--	475	<0	--	1,000	--	--	--	47	--	--	--	2,400	--	--
MW-18	Multiunit 1	Supplementary	4/14/1998	MW-18-19980414	549	--	--	450	<0	--	1,100	--	--	--	47	--	--	--	3,000	--	--
MW-18	Multiunit 1	Supplementary	6/8/1999	MW-18-19990608	488	--	--	400	<0	--	1,100	--	--	--	43	--	--	--	2,600	--	--
MW-18	Multiunit 1	Supplementary	12/8/1999	MW-18-19991208	366	--	--	300	<0	--	1,000	--	--	--	45	--	--	--	3,600	--	--
MW-18	Multiunit 1	Supplementary	6/8/2000	MW-18-20000608	579.5	--	--	475	<0	--	990	--	--	--	38	--	--	--	2,040	--	--
MW-18	Multiunit 1	Supplementary	11/28/2000	MW-18-20001128	518.5	--	--	425	<0	--	800	--	--	--	43	--	--	--	2,400	--	--
MW-18	Multiunit 1	Supplementary	8/21/2001	MW-18-20010821	579.5	--	--	475	<0	--	1,240	--	--	--	49	--	--	--	2,800	--	--
MW-18	Multiunit 1	Supplementary	12/5/2001	MW-18-20011205	610	--	--	500	<0	--	1,000	--	--	--	43	--	--	--	3,800	--	--
MW-18	Multiunit 1	Supplementary	6/12/2002	MW-18-20020612	671	--	--	550	<0	--	800	--	--	--	40	--	--	--	2,200	--	--
MW-18	Multiunit 1	Supplementary	12/18/2002	MW-18-20021218	488	--	--	400	<0	--	900	--	--	--	39	--	--	--	2,600	--	--
MW-18	Multiunit 1	Supplementary	6/3/2003	MW-18-20030603	457.5	--	--	375	<0	--	800	--	--	--	47	--	--	--	4,600	--	--
MW-18	Multiunit 1	Supplementary	9/24/2003	MW-18-20030924	579.5	--	--	475	<0	--	500	--	--	--	22.5	--	--	--	1,800	--	--
MW-18	Multiunit 1	Supplementary	6/16/2004	MW-18-20040616	2,959	--	--	2,425	<0	--	900	--	--	--	43	--	--	--	2,600	--	--
MW-18	Multiunit 1	Supplementary	11/9/2004	MW-18-20041109	3,233	--	--	2,650	<0	--	860	--	--	--	35.7	--	--	--	1,750	--	--
MW-18	Multiunit 1	Supplementary	5/12/2005	MW-18-20050512	366	--	--	300	<0	--	900	--	--	--	47	--	--	--	2,400	--	--
MW-18	Multiunit 1	Supplementary	11/1/2005	MW-18-20051101	579.5	--	--	475	<0	--	962	--	--	--	44.3	--	--	--	2,770	--	--
MW-18	Multiunit 1	Supplementary	5/15/2006	MW-18-20060515	457.5	--	--	375	<0	--	908	--	--	--	41.9	--	--	--	2,420	--	--
MW-18	Multiunit 1	Supplementary	10/13/2006	MW-18-20061013	386.7	--	--	317	<0	--	880	--	--	--	37.6	--	--	--	2,020	--	--
MW-18	Multiunit 1	Supplementary	4/18/2007	MW-18-20070418	475.8	--	--	390	<0	--	864	--	--	--	41.4	--	--	--	2,300	--	--
MW-18	Multiunit 1	Supplementary	11/20/2007	MW-18-20071120	444.1	--	--	364	<0	--	692	--	--	--	32.9	--	--	--	1,740	--	--
MW-18	Multiunit 1	Supplementary	4/30/2008	MW-18-20080430	524.6	--	--	430	<0	--	827	--	--	--	41.5	--	--	--	1,850	--	--
MW-18	Multiunit 1	Supplementary	12/3/2009	MW-18-20091203	915	--	--	750	<0	--	848	--	--	--	49.1	--	--	--	4,540	--	--
MW-18	Multiunit 1	Supplementary	9/27/2012	MW-18-092712-01	730	<6.0	<6.0	730	<6.0	--	1,000	--	--	--	57	--	--	--	5,400	--	--
MW-18	Multiunit 1	Supplementary	11/19/2013	FC-18-111913	720	<6.0	<6.0	720	<6.0	--	930	--	--	--	57	--	--	--	4,800	--	--
MW-18	Multiunit 1	Supplementary	3/12/2014	FC-18-031214	720	<6.0	<6.0	720	<6.0	--	800	--	--	--	58	--	--	--	4,900	--	--
MW-18	Multiunit 1	Supplementary	9/10/2014	FCPP-18-091014	740	<6.0	<6.0	740	<6.0	--	920	--	--	--	59	--	--	--	5,200	--	--
MW-18	Multiunit 1	Supplementary	3/18/2015	FCPP-18-031815	750	<6.0	<6.0	750	<6.0	--	890	--	--	--	55	--	--	--	5,500	--	--
MW-18	Multiunit 1	Supplementary	6/30/2015	MW-18	740	<6.0	<6.0	740	<6.0	--	790	--	--	--	60	--	--	--	5,200	--	--
MW-18	Multiunit 1	Supplementary	8/25/2015	FCPP-18-082515	740	<6.0	<6.0	740	<6.0	--	760	--	--	--	68	--	--	--	5,300	--	--
MW-18	Multiunit 1	Supplementary	11/6/2015	FC MW-18-(061115)	750	<6.0	<6.0	750	<6.0	--	940	--	--	--	56	--	--	--	5,900	--	--
MW-18	Multiunit 1	Supplementary	6/17/2016	FC-Seep-MW18-616	820	<6.0	<6.0	820	<6.0	--	840	--	--	--	65	--	--	--	6,600	--	--
MW-18	Multiunit 1	Supplementary	9/15/2016	FC-Seep-MW18-916	450	<6.0	<6.0	450	<6.0	--	790	--	--	--	45	--	--	--	2,100	--	--
MW-18	Multiunit 1	Supplementary	6/22/2020	FC-CCR-MW18-0620	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-18	Multiunit 1	Supplementary	11/7/2020	FC-CCR-MW18-1120	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-18	Multiunit 1	Supplementary	4/25/2021	FC-CCR-MW18-0421	900	<6	<6	900	<6	0.41	1,100	--	2.6	--	110	--	--	--	7,100	--	--
MW-18	Multiunit 1	Supplementary	11/16/2021	FC-CCR-MW18-1121	850	<6	<6	850	<6	0.54	1,100	--	2.5	--	93	--	--	--	7,400	--	--
MW-18	Multiunit 1	Supplementary	2/8/2022	FC-CCR-MW18-0222	970	<6	<6	970	<6	0.41	990	--	--	--	110	--	--	--	6,800	--	--
MW-18	Multiunit 1	Supplementary	5/25/2022	FC-CCR-MW18-0522	950	<6	<6	950	<6	0.35	1,100	--	2.7	--	96	--	--	--	7,600	--	--
MW-18	Multiunit 1	Supplementary	8/12/2022	FC-CCR-MW18-0822	950	<6	<6	950	<6	0.43	1,100	--	--	--	93	--	--	--	7,200	--	--
MW-18	Multiunit 1	Supplementary	11/14/2022	FC-CCR-MW18-1122	970	<6	<6	970	<6	0.30	1,000	--	2.5	--	95	--	--	--	7,500	--	--

Table F-6
Groundwater Sampling Results for the Multiunit 1 Monitoring Wells - Additional Analyses

					Additional Analyses																	
				Constituent:	Alkalinity Bicarbonate	Alkalinity Carbonate	Alkalinity Hydroxide	Alkalinity(as CaCO3)	Alkalinity, Phenolphthalein, as CaCO3	Iron	Magnesium	Magnesium	Manganese	Nickel	Potassium	Potassium	Radium 226	Radium 228	Sodium	Sodium	Zinc
				Filtered:	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N	N	Y	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L	pCi/L	mg/L	mg/L	mh/L
				Multiunit 1 BTV	--	--	--	--	--		--	--	--	--	--	--	--	--	--	--	--
				Multiunit 1 GWPS	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**																	
MW-18	Multiunit 1	Supplementary	5/4/2023	FC-CCR-MW18-0523	**950**	<6	<6	**950**	<6	**0.14**	**890**	--	**2.5**	--	**81**	--	--	--	**6,800**	--	--
MW-18	Multiunit 1	Supplementary	11/14/2023	FC-CCR-MW18-1124	**930**	<6	<6	**930**	<6	<0.5	**1,200**	--	**2.9**	--	**78**	--	--	--	**9,000 J**	--	--
MW-23R	Multiunit 1	Supplementary	3/11/2014	FC-23RMS-031114	--	--	--	--	--	--	**810**	--	--	--	**36**	--	--	--	**1,500**	--	--
MW-23R	Multiunit 1	Supplementary	3/11/2014	FC-23R-031114	**400**	<6.0	<6.0	**400**	<6.0	--	**830**	--	--	--	**39**	--	--	--	**1,600**	--	--
MW-23R	Multiunit 1	Supplementary	9/11/2014	FCPP-23R-91114	**410**	<6.0	<6.0	**410**	<6.0	--	**3,700**	--	--	--	**130**	--	--	--	**6,400**	--	--
MW-23R	Multiunit 1	Supplementary	12/8/2014	FCPP-MW23R-12914	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-23R	Multiunit 1	Supplementary	3/18/2015	FCPP-23R-031815	**370**	<6.0	<6.0	**370**	<6.0	--	**890**	--	--	--	**32**	--	--	--	**1,500**	--	--
MW-23R	Multiunit 1	Supplementary	6/30/2015	MW-23R	**360**	<6.0	<6.0	**360**	<6.0	--	**800**	--	--	--	**33**	--	--	--	**1,400**	--	--
MW-23R	Multiunit 1	Supplementary	11/3/2015	FC MW-23R-(031115)	--	--	--	--	--	--	**890**	--	--	--	**36**	--	--	--	**1,500**	--	--
MW-23R	Multiunit 1	Supplementary	11/13/2015	FC MW-23R-(131115)	**370**	<6.0	<6.0	**370**	<6.0	--	**830**	--	--	--	**33**	--	--	--	**1,500**	--	--
MW-23R	Multiunit 1	Supplementary	6/21/2016	062116	**380**	<6.0	<6.0	**380**	<6.0	--	**750**	--	--	--	**32**	--	--	--	**1,400**	--	--
MW-23R	Multiunit 1	Supplementary	9/15/2016	FC-Seep-MW23R-916	**400**	<6.0	<6.0	**400**	<6.0	--	**790**	--	--	--	**34**	--	--	--	**1,500**	--	--
MW-23R	Multiunit 1	Supplementary	6/21/2020	FC-CCR-MW23R-0620	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-23R	Multiunit 1	Supplementary	11/7/2020	FC-CCR-MW23R-1120	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-23R	Multiunit 1	Supplementary	4/25/2021	FC-CCR-MW23R-0421	**490**	<6	<6	**490**	<6	**0.18**	**1,100**	--	**0.038**	--	**41**	--	--	--	**1,700**	--	--
MW-23R	Multiunit 1	Supplementary	11/14/2021	FC-CCR-MW23R	**500**	<6	<6	**500**	<6	**0.19**	**1,600**	--	<0.01	--	**38**	--	--	--	**2,500**	--	--
MW-23R	Multiunit 1	Supplementary	2/9/2022	FC-CCR-MW23R-0222	**500**	<6	<6	**500**	<6	**0.17**	**1,200**	--	--	--	**40**	--	--	--	**1,900**	--	--
MW-23R	Multiunit 1	Supplementary	5/25/2022	FC-CCR-MW23R-0522	**500**	<6	<6	**500**	<6	**0.14**	**1,300**	--	<0.01	--	**40**	--	--	--	**2,100**	--	--
MW-23R	Multiunit 1	Supplementary	8/12/2022	FC-CCR-MW23R-0822	**500**	<6	<6	**500**	<6	**0.15**	**1,200**	--	--	--	**38**	--	--	--	**1,900**	--	--
MW-23R	Multiunit 1	Supplementary	11/11/2022	FC-CCR-MW23R-1122	**500**	<6	<6	**500**	<6	**0.31**	**1,300**	--	<0.014 U	--	**41**	--	--	--	**2,000**	--	--
MW-23R	Multiunit 1	Supplementary	5/3/2023	FC-CCR-MW23R-0523	**470**	<6	<6	**470**	<6	<0.1	**1,300**	--	**0.055**	--	**46**	--	--	--	**1,900**	--	--
MW-23R	Multiunit 1	Supplementary	11/14/2023	FC-CCR-MW23R-1124	**570**	<6	<6	**570**	<6	<0.5	**1,700**	--	**0.23**	--	**46**	--	--	--	**2,800 J**	--	--
MW-24	Multiunit 1	Supplementary	3/19/2015	FCPP-24-031915	**170**	<6.0	<6.0	**170**	<6.0	--	**210**	--	--	--	**36**	--	--	--	**6,200**	--	--
MW-24	Multiunit 1	Supplementary	6/29/2015	MW-24	**160**	<6.0	<6.0	**160**	<6.0	--	**220**	--	--	--	**68**	--	--	--	**6,000**	--	--
MW-24	Multiunit 1	Supplementary	8/26/2015	FCPP-24-082615	**230**	<6.0	<6.0	**230**	<6.0	--	**190**	--	--	--	**59**	--	--	--	**6,800**	--	--
MW-24	Multiunit 1	Supplementary	6/20/2016	FC-Seep-MW24-616	**320**	<6.0	<6.0	**320**	<6.0	--	**210**	--	--	--	**45**	--	--	--	**7,800**	--	--
MW-24	Multiunit 1	Supplementary	9/15/2016	FC-Seep-MW24-916	**340**	<6.0	<6.0	**340**	<6.0	--	**180**	--	--	--	**42**	--	--	--	**7,800**	--	--
MW-24	Multiunit 1	Supplementary	4/26/2021	FC-CCR-MW24-0421	**320**	<6	<6	**320**	<6	**0.16**	**220**	--	**1.9**	--	**62**	--	--	--	**7,700**	--	--
MW-24	Multiunit 1	Supplementary	11/16/2021	FC-CCR-MW24-1121	**290**	<6	<6	**290**	<6	**0.22**	**210**	--	**1.8**	--	**49**	--	--	--	**6,900**	--	--
MW-24	Multiunit 1	Supplementary	2/8/2022	FC-CCR-MW24-0222	**300**	<6	<6	**300**	<6	**0.37**	**210**	--	--	--	**60**	--	--	--	**6,600**	--	--
MW-24	Multiunit 1	Supplementary	5/25/2022	FC-CCR-MW24-0522	**290**	<6	<6	**290**	<6	**0.11**	**190**	--	**1.8**	--	**46**	--	--	--	**7,300**	--	--
MW-24	Multiunit 1	Supplementary	8/12/2022	FC-CCR-MW24-0822	**290**	<6	<6	**290**	<6	**0.17**	**210**	--	--	--	**50**	--	--	--	**7,300**	--	--
MW-24	Multiunit 1	Supplementary	11/14/2022	FC-CCR-MW24-1122	**290**	<6	<6	**290**	<6	**0.12**	**200**	--	**1.8**	--	**51**	--	--	--	**7,400**	--	--
MW-24	Multiunit 1	Supplementary	5/4/2023	FC-CCR-MW24-0523	**290**	<6	<6	**290**	<6	**0.57**	**180**	--	**1.9**	--	**46**	--	--	--	**6,600**	--	--
MW-24	Multiunit 1	Supplementary	11/14/2023	FC-CCR-MW24-1124	**280**	<6	<6	**280**	<6	<0.5	**210**	--	**1.9**	--	**36**	--	--	--	**7,800 J**	--	--
MW-34	Multiunit 1	Supplementary	6/23/2020	FC-CCR-MW34-0620	**210**	<6	<6	**210**	<6	--	**480**	--	--	--	**28**	--	<0.4	**0.6**	**1,100**	--	--
MW-34	Multiunit 1	Supplementary	11/16/2023	FC-CCR-MW34-1124	--	--	--	--	--	**0.12**	**590**	--	**2.6**	--	--	--	--	--	--	--	--
MW-36R	Multiunit 1	Supplementary	9/9/2014	FCPP-36R-090914	**190**	<6.0	<6.0	**190**	<6.0	--	**470**	--	--	--	**27**	--	--	--	**1,000**	--	--
MW-36R	Multiunit 1	Supplementary	3/19/2015	FCPP-36R-031915	**240**	<6.0	<6.0	**240**	<6.0	--	**560**	--	--	--	**26**	--	--	--	**1,100**	--	--
MW-36R	Multiunit 1	Supplementary	6/30/2015	MW-36R	**190**	<6.0	<6.0	**190**	<6.0	--	**460**	--	--	--	**25**	--	--	--	**980**	--	--
MW-36R	Multiunit 1	Supplementary	8/25/2015	FCPP-36R-082515	**250**	<6.0	<6.0	**250**	<6.0	--	**560**	--	--	--	**30**	--	--	--	**1,100**	--	--
MW-36R	Multiunit 1	Supplementary	11/3/2015	FC MW-36R-(031115)	--	--	--	--	--	--	**570**	--	--	--	**26**	--	--	--	**1,100**	--	--
MW-36R	Multiunit 1	Supplementary	11/13/2015	FC MW-36R-(131115)	**220**	<6.0	<6.0	**220**	<6.0	--	**530**	--	--	--	**24**	--	--	--	**1,000**	--	--
MW-36R	Multiunit 1	Supplementary	6/17/2016	FC-Seep-MW36R-616	**230**	<6.0	<6.0	**230**	<6.0	--	**520**	--	--	--	**27**	--	--	--	**1,100**	--	--
MW-36R	Multiunit 1	Supplementary	9/15/2016	FC-Seep-MW36R-916	**160**	<6.0	<6.0	**160**	<6.0	--	**340**	--	--	--	**25**	--	--	--	**960**	--	--
MW-36R	Multiunit 1	Supplementary	6/21/2020	FC-CCR-MW36R-0620	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-36R	Multiunit 1	Supplementary	11/7/2020	FC-CCR-MW36R-1120	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-36R	Multiunit 1	Supplementary	11/7/2020	1120	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-36R	Multiunit 1	Supplementary	4/25/2021	FC-CCR-MW36R-0421	**230**	<6	<6	**230**	<6	**0.072** J	**430**	--	**0.25**	--	**29**	--	--	--	**990**	--	--
MW-36R	Multiunit 1	Supplementary	11/14/2021	FC-CCR-MW36R	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-36R	Multiunit 1	Supplementary	2/9/2022	FC-CCR-MW36R-0222	**230**	<6	<6	**230**	<6	**0.27**	**2,500**	--	--	--	**90**	--	--	--	**6,200**	--	--
MW-36R	Multiunit 1	Supplementary	5/25/2022	FC-CCR-MW36R-0522	**220**	<6	<6	**220**	<6	<0.1	**400**	--	**0.15**	--	**25**	--	--	--	**1,100**	--	--

Table F-6
Groundwater Sampling Results for the Multiunit 1 Monitoring Wells - Additional Analyses

					Additional Analyses																	
				Constituent:	Alkalinity Bicarbonate	Alkalinity Carbonate	Alkalinity Hydroxide	Alkalinity(as CaCO3)	Alkalinity, Phenolphthalein, as CaCO3	Iron	Magnesium	Magnesium	Manganese	Nickel	Potassium	Potassium	Radium 226	Radium 228	Sodium	Sodium	Zinc
				Filtered:	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N	N	Y	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L	pCi/L	mg/L	mg/L	mh/L
				Multiunit 1 BTV	--	--	--	--	--		--	--	--	--	--	--	--	--	--	--	--
				Multiunit 1 GWPS	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**																	
MW-36R	Multiunit 1	Supplementary	8/11/2022	FC-CCR-MW36R-0822	**220**	<6	<6	**220**	<6	**0.14**	**400**	--	--	--	**23**	--	--	--	**960**	--	--
MW-36R	Multiunit 1	Supplementary	11/11/2022	FC-CCR-MW36R-1122	**220**	<6	<6	**220**	<6	<0.1	**420**	--	<0.26 U	--	**26**	--	--	--	**1,000**	--	--
MW-36R	Multiunit 1	Supplementary	5/4/2023	FC-CCR-MW36R-0523	**220**	<6	<6	**220**	<6	<0.1	**440**	--	**0.18**	--	**29**	--	--	--	**1,100**	--	--
MW-36R	Multiunit 1	Supplementary	11/14/2023	FC-CCR-MW36R-1124	**210**	<6	<6	**210**	<6	<0.5	**420**	--	**0.28**	--	**25**	--	--	--	**1,100 J**	--	--
MW-38R	Multiunit 1	Supplementary	3/12/2014	FC-38R-031214	**430**	<6.0	<6.0	**430**	<6.0	--	**1,200**	--	--	--	**35**	--	--	--	**3,200**	--	--
MW-38R	Multiunit 1	Supplementary	9/11/2014	FCPP-38R-91114	**540**	<6.0	<6.0	**540**	<6.0	--	**2,000**	--	--	--	**50**	--	--	--	**5,600**	--	--
MW-38R	Multiunit 1	Supplementary	3/19/2015	FCPP-38R-031915	**490**	<6.0	<6.0	**490**	<6.0	--	**1,700**	--	--	--	**51**	--	--	--	**4,900**	--	--
MW-38R	Multiunit 1	Supplementary	6/30/2015	MW-38R	**270**	<6.0	<6.0	**270**	<6.0	--	**770**	--	--	--	**30**	--	--	--	**3,000**	--	--
MW-38R	Multiunit 1	Supplementary	8/29/2015	FCPP-38R-082915	**240**	<6.0	<6.0	**240**	<6.0	--	**650**	--	--	--	**26**	--	--	--	**2,500**	--	--
MW-38R	Multiunit 1	Supplementary	11/10/2015	FC MW-38R-(101115)	**370**	<6.0	<6.0	**370**	<6.0	--	**1,400**	--	--	--	**51**	--	--	--	**4,300**	--	--
MW-38R	Multiunit 1	Supplementary	6/21/2016	06211	**270**	<6.0	<6.0	**270**	<6.0	--	**690**	--	--	--	**33**	--	--	--	**2,500**	--	--
MW-38R	Multiunit 1	Supplementary	6/21/2016	062116	**310**	<6.0	<6.0	**310**	<6.0	--	**760**	--	--	--	**39**	--	--	--	**2,700**	--	--
MW-38R	Multiunit 1	Supplementary	9/15/2016	FC-Seep-MW38R-916	**240**	<6.0	<6.0	**240**	<6.0	--	**690**	--	--	--	**36**	--	--	--	**2,800**	--	--
MW-38R	Multiunit 1	Supplementary	9/15/2016	FC-Seep-MW106-916	**260**	<6.0	<6.0	**260**	<6.0	--	**670**	--	--	--	**34**	--	--	--	**2,500**	--	--
MW-38R	Multiunit 1	Supplementary	3/19/2019	FC-CCR-MW38R-031919	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-38R	Multiunit 1	Supplementary	3/19/2019	FC-CCR-MW38R-031919	--	--	--	--	--	--	--	--	--	--	--	--	<0.5	**0.8**	--	--	--
MW-38R	Multiunit 1	Supplementary	5/14/2019	FC-CCR-MW38R-51419	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-38R	Multiunit 1	Supplementary	5/14/2019	FC-CCR-MW38R-51419	--	--	--	--	--	--	--	--	--	--	--	--	<0.5	<0.7	--	--	--
MW-38R	Multiunit 1	Supplementary	11/19/2019	FC-CCR-MW38R-111919	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-38R	Multiunit 1	Supplementary	11/19/2019	111919	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-38R	Multiunit 1	Supplementary	6/22/2020	FC-CCR-MW38R-0620	**120**	<6	<6	**120**	<6	--	**290**	--	--	--	**20**	--	**0.4**	<0.8	**920**	--	--
MW-38R	Multiunit 1	Supplementary	6/22/2020	0620	**130**	<6	<6	**130**	<6	--	**300**	--	--	--	**19**	--	<0.4	**1.1**	**910**	--	--
MW-38R	Multiunit 1	Supplementary	11/6/2020	FC-CCR-MW38R-1120	**120**	<6	<6	**120**	<6	--	**300**	--	--	--	**16/18**	--	<0.4	<0.8	**970**	--	--
MW-38R	Multiunit 1	Supplementary	4/27/2021	FC-CCR-MW384R-0421	**130**	<6	<6	**130**	<6	**0.08 J**	**310**	--	<0.01	--	**20**	--	<0.4	<0.8	**970**	--	--
MW-38R	Multiunit 1	Supplementary	11/16/2021	FC-CCR-MW38R-1121	**120**	<6	<6	**120**	<6	**0.078 J**	**280**	--	**0.0027 J**	--	**17**	--	**0.4**	<0.6	**920**	--	--
MW-38R	Multiunit 1	Supplementary	2/9/2022	FC-CCR-MW38R-0222	**130**	<6	<6	**130**	<6	**0.09**	**290**	--	--	--	**17**	--	--	--	**920**	--	--
MW-38R	Multiunit 1	Supplementary	5/25/2022	FC-CCR-MW38R-0522	**130**	<6	<6	**130**	<6	**0.64**	**270**	--	**0.02**	--	**18**	--	<0.3	<0.6	**1,000**	--	--
MW-38R	Multiunit 1	Supplementary	8/11/2022	FC-CCR-MW38R-0822	**140**	<6	<6	**140**	<6	**0.23**	**330**	--	--	--	**18**	--	--	--	**1,100**	--	--
MW-38R	Multiunit 1	Supplementary	11/15/2022	FC-CCR-MW38R-1122	**180**	<6	<6	**180**	<6	**0.24**	**500**	--	<0.01	--	**23**	--	<0.3	<0.6	**1,500**	--	--
MW-38R	Multiunit 1	Supplementary	5/5/2023	FC-CCR-MW38R-0523	**180**	<6	<6	**180**	<6	**0.26**	**530**	--	<0.01	**0.32**	**28**	--	**0.9**	**1.0**	**1,500**	--	--
MW-38R	Multiunit 1	Supplementary	11/14/2023	FC-CCR-MW38R-1124	**380**	<6	<6	**380**	<6	<0.5	**1,500**	--	<0.05	--	**43**	--	<0.5	**1.2**	**3,700 J**	--	--
MW-40R	Multiunit 1	Downgradient Boundary	2/2/2017	FC-CCR-MW40R-117	**360**	<6.0	<6.0	**360**	<6.0	--	**1,100**	--	--	--	**60**	--	--	--	**3,400**	--	--
MW-40R	Multiunit 1	Downgradient Boundary	2/2/2017	FC-CCR-MW40R-117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-40R	Multiunit 1	Downgradient Boundary	2/2/2017	FC-CCR-MW40R-117	--	--	--	--	--	--	--	--	--	--	--	--	<0.2	**0.6**	--	--	--
MW-40R	Multiunit 1	Downgradient Boundary	4/26/2021	FC-CCR-MW40R-0421	--	--	--	--	--	10	2,000		3.0	--	97		<0.4	2.2	5,600	--	--
MW-46	Multiunit 1	Supplementary	6/30/2015	MW-46	**600**	<6.0	<6.0	**600**	<6.0	--	**720**	--	--	--	**37**	--	--	--	**8,000**	--	--
MW-46	Multiunit 1	Supplementary	11/7/2015	FC MW-46-(07115)	**590**	<6.0	<6.0	**590**	<6.0	--	**850**	--	--	--	**38**	--	--	--	**8,500**	--	--
MW-52	Multiunit 1	Supplementary	3/17/2015	FCPP-MSD02-031715	**130**	<6.0	<6.0	**130**	<6.0	--	**600**	--	--	--	**27**	--	--	--	**1,100**	--	--
MW-52	Multiunit 1	Supplementary	3/17/2015	FCPP-52-031715	**120**	<6.0	<6.0	**120**	<6.0	--	**590**	--	--	--	**28**	--	--	--	**1,100**	--	--
MW-52	Multiunit 1	Supplementary	8/26/2015	FCPP-52-082615	**130**	<6.0	<6.0	**130**	<6.0	--	**540**	--	--	--	**31**	--	--	--	**1,100**	--	--
MW-52	Multiunit 1	Supplementary	11/3/2015	FC MW-52-(031115)	**130**	<6.0	<6.0	**130**	<6.0	--	**620**	--	--	--	**28**	--	--	--	**1,100**	--	--
MW-52	Multiunit 1	Supplementary	6/18/2016	FC-Seep-MW52-616	**130**	<6.0	<6.0	**130**	<6.0	--	**580**	--	--	--	**29**	--	--	--	**1,100**	--	--
MW-52	Multiunit 1	Supplementary	9/16/2016	FC-Seep-MW52-916	**120**	<6.0	<6.0	**120**	<6.0	--	**540**	--	--	--	**28**	--	--	--	**1,000**	--	--
MW-52	Multiunit 1	Supplementary	6/20/2020	FC-CCR-MW52-0620	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-52	Multiunit 1	Supplementary	11/8/2020	FC-CCR-MW52-1120	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-52	Multiunit 1	Supplementary	4/23/2021	FC-CCR-MW52-0421	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-52	Multiunit 1	Supplementary	11/13/2021	FC-CCR-MW52-1121	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-52	Multiunit 1	Supplementary	11/13/2021	FC-CCR-FD03-1121	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-52	Multiunit 1	Supplementary	5/22/2022	FC-CCR-MW52-0522	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-52	Multiunit 1	Supplementary	5/22/2022	0522	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-52	Multiunit 1	Supplementary	11/10/2022	FC-CCR-MW52-1122	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-52	Multiunit 1	Supplementary	11/10/2022	1122	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Table F-6
Groundwater Sampling Results for the Multiunit 1 Monitoring Wells - Additional Analyses

					Additional Analyses																
				Constituent:	Alkalinity Bicarbonate	Alkalinity Carbonate	Alkalinity Hydroxide	Alkalinity(as CaCO3)	Alkalinity, Phenolphthalein, as CaCO3	Iron	Magnesium	Magnesium	Manganese	Nickel	Potassium	Potassium	Radium 226	Radium 228	Sodium	Sodium	Zinc
				Filtered:	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N	N	Y	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L	pCi/L	mg/L	mg/L	mh/L
				Multiunit 1 BTV	--	--	--	--	--		--	--	--	--	--	--	--	--	--	--	--
				Multiunit 1 GWPS	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**																	
MW-52	Multiunit 1	Supplementary	5/2/2023	FC-CCR-MW52-0523	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-52	Multiunit 1	Supplementary	5/2/2023	0523	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-52	Multiunit 1	Supplementary	11/08/2023	FC-CCR-MW52-1124	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-52	Multiunit 1	Supplementary	11/08/2023	1124	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-54	Multiunit 1	Supplementary	9/10/2014	FCPP-54-091014	**590**	<6.0	<6.0	**590**	<6.0	--	**3,500**	--	--	--	**92**	--	--	--	**12,000**	--	--
MW-54	Multiunit 1	Supplementary	3/17/2015	FCPP-54-031715	**530**	<6.0	<6.0	**530**	<6.0	--	**1,500**	--	--	--	**42**	--	--	--	**5,000**	--	--
MW-54	Multiunit 1	Supplementary	8/26/2015	FCPP-54-082615	**520**	<6.0	<6.0	**520**	<6.0	--	**1,600**	--	--	--	**53**	--	--	--	**4,800**	--	--
MW-54	Multiunit 1	Supplementary	11/3/2015	FC MW-54-(031115)	**510**	<6.0	<6.0	**510**	<6.0	--	**3,200**	--	--	--	**84**	--	--	--	**9,600**	--	--
MW-54	Multiunit 1	Supplementary	6/20/2016	FC-Seep-MW54-616	**490**	<6.0	<6.0	**490**	<6.0	--	**1,300**	--	--	--	**45**	--	--	--	**4,200**	--	--
MW-54	Multiunit 1	Supplementary	9/16/2016	FC-Seep-MW54-916	**390**	<6.0	<6.0	**390**	<6.0	--	**1,200**	--	--	--	**44**	--	--	--	**3,800**	--	--
MW-56	Multiunit 1	Supplementary	3/12/2014	FC-56-031214	**570**	<6.0	<6.0	**570**	<6.0	--	**1,700**	--	--	--	**61**	--	--	--	**3,700**	--	--
MW-56	Multiunit 1	Supplementary	9/10/2014	FCPP-56-091014	**470**	<6.0	<6.0	**470**	<6.0	--	**1,400**	--	--	--	**52**	--	--	--	**3,100**	--	--
MW-56	Multiunit 1	Supplementary	3/19/2015	FCPP-56-031915	**670**	<6.0	<6.0	**670**	<6.0	--	**2,000**	--	--	--	**64**	--	--	--	**4,600**	--	--
MW-56	Multiunit 1	Supplementary	6/30/2015	MW-56	**740**	<6.0	<6.0	**740**	<6.0	--	**1,800**	--	--	--	**61**	--	--	--	**3,900**	--	--
MW-56	Multiunit 1	Supplementary	8/25/2015	FCPP-56-082515	**1,000**	<6.0	<6.0	**1,000**	<6.0	--	**2,000**	--	--	--	**78**	--	--	--	**4,400**	--	--
MW-56	Multiunit 1	Supplementary	11/5/2015	FC MW-56-(051115)	**950**	<6.0	<6.0	**950**	<6.0	--	**2,000**	--	--	--	**64**	--	--	--	**4,400**	--	--
MW-56	Multiunit 1	Supplementary	6/18/2016	FC-Seep-MW56-616	**710**	<6.0	<6.0	**710**	<6.0	--	**1,600**	--	--	--	**61**	--	--	--	**3,800**	--	--
MW-56	Multiunit 1	Supplementary	9/15/2016	FC-Seep-MW56-916	**380**	<6.0	<6.0	**380**	<6.0	--	**770**	--	--	--	**40**	--	--	--	**1,800**	--	--
MW-56	Multiunit 1	Supplementary	3/20/2019	FC-CCR-MW56-032019	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-56	Multiunit 1	Supplementary	3/20/2019	FC-CCR-MW56-032019	--	--	--	--	--	--	--	--	--	--	--	--	<0.5	**2.3**	--	--	--
MW-56	Multiunit 1	Supplementary	5/14/2019	FC-CCR-MW56-51419	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-56	Multiunit 1	Supplementary	5/14/2019	FC-CCR-MW56-51419	--	--	--	--	--	--	--	--	--	--	--	--	<0.5	**2.7**	--	--	--
MW-56	Multiunit 1	Supplementary	11/19/2019	FC-CCR-MW56-111919	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-56	Multiunit 1	Supplementary	6/22/2020	FC-CCR-MW56-0620	--	--	--	--	--	--	--	--	--	--	--	--	**1.2**	**2.2**	--	--	--
MW-56	Multiunit 1	Supplementary	11/7/2020	FC-CCR-MW56-1120	**750**	<6	<6	**750**	<6	--	**2,200**	--	--	--	**83**	--	<0.4	**2.2**	**4,900**	--	--
MW-56	Multiunit 1	Supplementary	4/26/2021	FC-CCR-MW56-0421	**800**	<6	<6	**800**	<6	**0.26**	**2,500**	--	**0.016**	--	**100**	--	<0.4	**2.2**	**5,100**	--	--
MW-56	Multiunit 1	Supplementary	11/16/2021	FC-CCR-MW56-1121	**800**	<6	<6	**800**	<6	**0.24**	**2,500**	--	**0.038**	--	**78**	--	**0.7**	**2.4**	**4,900**	--	--
MW-56	Multiunit 1	Supplementary	2/8/2022	FC-CCR-MW56-0222	**890**	<6	<6	**890**	<6	<0.1 U	**410**	--	--	--	**25**	--	--	--	**930**	--	--
MW-56	Multiunit 1	Supplementary	8/11/2022	FC-CCR-MW56-0822	**870**	<6	<6	**870**	<6	**0.27**	**2,500**	--	--	--	**83**	--	--	--	**5,100**	--	--
MW-56	Multiunit 1	Supplementary	11/15/2022	FC-CCR-MW56-1122	**910**	<6	<6	**910**	<6	**0.28**	**2,700**	--	<0.01	--	**91**	--	**1.0**	**2.7**	**5,300**	--	--
MW-56	Multiunit 1	Supplementary	5/4/2023	FC-CCR-MW56-0523	**880**	<6	<6	**880**	<6	<0.1	**3,200**	--	<0.01	**0.036**	**87**	--	**1.1**	**3.3**	**4,900**	--	--
MW-56	Multiunit 1	Supplementary	11/14/2023	FC-CCR-MW56-1124	**890**	<6	<6	**890**	<6	<0.5	**3,100**	--	<0.05	--	**81**	--	<0.5	**6.4**	**5,700 J**	--	--
MW-57	Multiunit 1	Supplementary	3/12/2014	FC-57-031214	**260**	<6.0	<6.0	**260**	<6.0	--	**540**	--	--	--	**33**	--	--	--	**1,700**	--	--
MW-57	Multiunit 1	Supplementary	9/9/2014	FCPP-57MS-090914	--	--	--	--	--	--	**470**	--	--	--	**31**	--	--	--	**1,500**	--	--
MW-57	Multiunit 1	Supplementary	9/9/2014	FCPP-57-090914	**240**	<6.0	<6.0	**240**	<6.0	--	**430**	--	--	--	**28**	--	--	--	**1,400**	--	--
MW-57	Multiunit 1	Supplementary	3/17/2015	FCPP-57-031715	**240**	<6.0	<6.0	**240**	<6.0	--	**460**	--	--	--	**28**	--	--	--	**1,400**	--	--
MW-57	Multiunit 1	Supplementary	6/29/2015	MW-57	**230**	<6.0	<6.0	**230**	<6.0	--	**450**	--	--	--	**28**	--	--	--	**1,400**	--	--
MW-57	Multiunit 1	Supplementary	8/26/2015	FCPP-57-082615	**240**	<6.0	<6.0	**240**	<6.0	--	**460**	--	--	--	**35**	--	--	--	**1,500**	--	--
MW-57	Multiunit 1	Supplementary	11/10/2015	FC MW-57-(101115)-MSD	**250**	<6.0	<6.0	**250**	<6.0	--	**550**	--	--	--	**34**	--	--	--	**1,600**	--	--
MW-57	Multiunit 1	Supplementary	11/10/2015	FC MW-57-(101115)-MS	**250**	<6.0	<6.0	**250**	<6.0	--	**590**	--	--	--	**35**	--	--	--	**1,600**	--	--
MW-57	Multiunit 1	Supplementary	11/10/2015	FC MW-57-(101115)	**250**	<6.0	<6.0	**250**	<6.0	--	**540**	--	--	--	**31**	--	--	--	**1,500**	--	--
MW-57	Multiunit 1	Supplementary	11/11/2015	*DUP* FC FD-4-(101115)	**250**	<6.0	<6.0	**250**	<6.0	--	**540**	--	--	--	**32**	--	--	--	**1,500**	--	--
MW-57	Multiunit 1	Supplementary	6/18/2016	FC-Seep-MW57-616	**300**	<6.0	<6.0	**300**	<6.0	--	**540**	--	--	--	**34**	--	--	--	**1,600**	--	--
MW-57	Multiunit 1	Supplementary	9/15/2016	FC-Seep-MW57-916	**200**	<6.0	<6.0	**200**	<6.0	--	**430**	--	--	--	**26**	--	--	--	**1,300**	--	--
MW-57	Multiunit 1	Supplementary	3/19/2019	FC-CCR-MW57-031919	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-57	Multiunit 1	Supplementary	3/19/2019	FC-CCR-MW57-031919	--	--	--	--	--	--	--	--	--	--	--	--	<0.5	**1.3**	--	--	--
MW-57	Multiunit 1	Supplementary	5/14/2019	FC-CCR-MW57-51419	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-57	Multiunit 1	Supplementary	5/14/2019	FC-CCR-MW57-51419	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	<0.7	--	--	--
MW-57	Multiunit 1	Supplementary	11/19/2019	FC-CCR-MW57-111919	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-57	Multiunit 1	Supplementary	6/22/2020	FC-CCR-MW57-0620	**400**	<6	<6	**400**	<6	--	**700**	--	--	--	**46**	--	**0.7**	**1.7**	**1,900**	--	--
MW-57	Multiunit 1	Supplementary	11/6/2020	FC-CCR-MW57-1120	**510**	<6	<6	**510**	<6	--	**840**	--	--	--	**47**	--	<0.4	**2.2**	**2,400**	--	--
MW-57	Multiunit 1	Supplementary	4/27/2021	FC-CCR-MW57-0421	**440**	<6	<6	**440**	<6	**0.62**	**810**	--	**0.17**	--	**52**	--	**0.5**	**2.2**	**2,000**	--	--

Table F-6
Groundwater Sampling Results for the Multiunit 1 Monitoring Wells - Additional Analyses

					Additional Analyses																
				Constituent:	Alkalinity Bicarbonate	Alkalinity Carbonate	Alkalinity Hydroxide	Alkalinity(as CaCO3)	Alkalinity, Phenolphthalein, as CaCO3	Iron	Magnesium	Magnesium	Manganese	Nickel	Potassium	Potassium	Radium 226	Radium 228	Sodium	Sodium	Zinc
				Filtered:	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N	N	Y	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L	pCi/L	mg/L	mg/L	mh/L
				Multiunit 1 BTV	--	--	--	--	--		--	--	--	--	--	--	--	--	--	--	--
				Multiunit 1 GWPS	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**																	
MW-57	Multiunit 1	Supplementary	11/17/2021	FC-CCR-MW57-1121	**410**	<6	<6	**410**	<6	**1.4**	**860**	--	**0.28**	--	**45**	--	**0.7**	**0.7**	**1,900**	--	--
MW-57	Multiunit 1	Supplementary	2/8/2022	FC-CCR-MW57-0222	**500**	<6	<6	**500**	<6	**0.63**	**820**	--	--	--	**47**	--	--	--	**2,200**	--	--
MW-57	Multiunit 1	Supplementary	5/24/2022	FC-CCR-MW57-0522	**430**	<6	<6	**430**	<6	**0.51**	**730**	--	**0.26**	--	**41**	--	<0.3	**1.5**	**2,000**	--	--
MW-57	Multiunit 1	Supplementary	5/24/2022	FC-CCR-SS09-0522	**393**	<20	<20	**393**	--	**0.891 J**	**712**	--	**0.272 J**	--	**41.8**	--	--	--	**2,030**	--	--
MW-57	Multiunit 1	Supplementary	8/11/2022	FC-CCR-MW57-0822	**450**	<6	<6	**450**	<6	**0.19**	**930**	--	--	--	**43**	--	--	--	**2,200**	--	--
MW-57	Multiunit 1	Supplementary	11/15/2022	FC-CCR-MW571122	**500**	<6	<6	**500**	<6	**0.14**	**1,000**	--	<0.051 U	--	**50**	--	**0.6**	**0.8**	**2,600**	--	--
MW-57	Multiunit 1	Supplementary	5/5/2023	FC-CCR-MW57-0523	**470**	<6	<6	**470**	<6	**0.18**	**940**	--	**0.17**	**0.034**	**54**	--	**1.0**	**2.1**	**2,300**	--	--
MW-57	Multiunit 1	Supplementary	11/14/2023	FC-CCR-MW57-1124	**1,000**	<6	<6	**1,000**	<6	**6.0 J**	**2,700**	--	**2.0**	--	**95**	--	<0.49	**1.2**	**7,000 J**	--	--
MW-60	Multiunit 1	Supplementary	11/8/2015	FC-CCR-MW60-110815	**320**	<5.0	--	**320**	--	--	**710**	--	--	--	**35**	--	--	--	**1,400**	--	--
MW-60	Multiunit 1	Supplementary	11/8/2015	FC-CCR-MW60-110815	--	--	--	--	--	--	--	--	--	--	--	--	<0.521	<0.422	--	--	--
MW-60	Multiunit 1	Supplementary	4/26/2016	FC-CCR-MW-60-042616	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	<0.8	--	--	--
MW-60	Multiunit 1	Supplementary	6/6/2016	FC-CCR-MW60-616	--	--	--	--	--	--	--	--	--	--	--	--	**0.8**	<0.8	--	--	--
MW-60	Multiunit 1	Supplementary	6/6/2016	FC-CCR-MW60-616	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-60	Multiunit 1	Supplementary	8/21/2016	FC-CCR-MW60-816	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-60	Multiunit 1	Supplementary	8/21/2016	FC-CCR-MW60-816	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-60	Multiunit 1	Supplementary	8/21/2016	FC-CCR-MW60-816	--	--	--	--	--	--	--	--	--	--	--	--	<0.2	<0.7	--	--	--
MW-60	Multiunit 1	Supplementary	9/13/2016	FC-CCR-MW60-916	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-60	Multiunit 1	Supplementary	9/13/2016	FC-CCR-MW60-916	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-60	Multiunit 1	Supplementary	9/13/2016	FC-CCR-MW60-916	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	**1.0**	--	--	--
MW-60	Multiunit 1	Supplementary	9/13/2016	FC-CCR-MW100-916	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-60	Multiunit 1	Supplementary	9/13/2016	FC-CCR-MW100-916	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-60	Multiunit 1	Supplementary	9/13/2016	FC-CCR-MW100-916	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	**1.6**	--	--	--
MW-60	Multiunit 1	Supplementary	10/20/2016	FC-CCR-MW60-1016	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-60	Multiunit 1	Supplementary	10/20/2016	FC-CCR-MW60-1016	--	--	--	--	--	--	--	--	--	--	--	--	<0.3	**1.0**	--	--	--
MW-60	Multiunit 1	Supplementary	10/20/2016	FC-CCR-MW60-1016	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-60	Multiunit 1	Supplementary	2/2/2017	FC-CCR-MW60-117	**120**	<6.0	<6.0	**120**	<6.0	--	**500**	--	--	--	**28**	--	--	--	**1,100**	--	--
MW-60	Multiunit 1	Supplementary	2/2/2017	FC-CCR-MW60-117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-60	Multiunit 1	Supplementary	2/2/2017	FC-CCR-MW60-117	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	**1.4**	--	--	--
MW-60	Multiunit 1	Supplementary	4/18/2017	FC-CCR-MW60-41817	**130**	<6.0	<6.0	**130**	<6.0	--	**510**	--	--	--	**27**	--	--	--	**1,100**	--	--
MW-60	Multiunit 1	Supplementary	4/18/2017	FC-CCR-MW60-41817	--	--	--	--	--	--	--	--	--	--	--	--	**0.6**	**0.6**	--	--	--
MW-60	Multiunit 1	Supplementary	4/18/2017	FC-CCR-MW60-41817	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-60	Multiunit 1	Supplementary	5/3/2017	FC-CCR-MW60-5317	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-60	Multiunit 1	Supplementary	5/3/2017	FC-CCR-MW60-5317	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	<0.6	--	--	--
MW-60	Multiunit 1	Supplementary	5/30/2017	FC-CCR-MW60-53017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-60	Multiunit 1	Supplementary	5/30/2017	FC-CCR-MW60-53017	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	**1.2**	--	--	--
MW-60	Multiunit 1	Supplementary	6/22/2017	FC-CCR-MW60-62217	**130**	<6.0	<6.0	**130**	<6.0	--	**510**	--	--	--	**27**	--	--	--	**1,100**	--	--
MW-60	Multiunit 1	Supplementary	6/22/2017	FC-CCR-MW60-62217	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-60	Multiunit 1	Supplementary	6/22/2017	FC-CCR-MW60-62217	--	--	--	--	--	--	--	--	--	--	--	--	**0.5**	**0.9**	--	--	--
MW-60	Multiunit 1	Supplementary	7/22/2017	FC-CCR-MW60-72217	**130**	<6.0	<6.0	**130**	<6.0	--	**540**	--	--	--	**28**	--	--	--	**1,200**	--	--
MW-60	Multiunit 1	Supplementary	7/22/2017	FC-CCR-MW60-72217	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-60	Multiunit 1	Supplementary	7/22/2017	FC-CCR-MW60-72217	--	--	--	--	--	--	--	--	--	--	--	--	<0.3	**0.8**	--	--	--
MW-60	Multiunit 1	Supplementary	8/10/2017	FC-CCR-MW60-81017	**130**	<6.0	<6.0	**130**	<6.0	--	**540**	--	--	--	**28**	--	--	--	**1,200**	--	--
MW-60	Multiunit 1	Supplementary	8/10/2017	FC-CCR-MW60-81017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-60	Multiunit 1	Supplementary	8/10/2017	FC-CCR-MW60-81017	--	--	--	--	--	--	--	--	--	--	--	--	<0.5	<0.7	--	--	--
MW-60	Multiunit 1	Supplementary	8/17/2017	FC-CCR-MW60-81717	--	--	--	--	--	--	--	--	--	--	--	--	<0.5	<0.7	--	--	--
MW-60	Multiunit 1	Supplementary	8/17/2017	FC-CCR-MW60-81717	**130**	<6.0	<6.0	**130**	<6.0	--	**560**	--	--	--	**32**	--	--	--	**1,200**	--	--
MW-60	Multiunit 1	Supplementary	9/10/2017	FC-CCR-MW60-91017	**130**	<6.0	<6.0	**130**	<6.0	--	**520**	--	--	--	**26**	--	--	--	**1,100**	--	--
MW-60	Multiunit 1	Supplementary	9/10/2017	FC-CCR-MW60-91017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-60	Multiunit 1	Supplementary	9/10/2017	FC-CCR-MW60-91017	--	--	--	--	--	--	--	--	--	--	--	--	<0.7	**0.8**	--	--	--
MW-60	Multiunit 1	Supplementary	10/12/2017	FC-CCR-MW60-101217	--	--	--	--	--	--	--	--	--	--	--	--	**0.5**	**1.1**	--	--	--
MW-60	Multiunit 1	Supplementary	10/12/2017	FC-CCR-MW60-101217	**130**	<6.0	<6.0	**130**	<6.0	--	**480**	--	--	--	**26**	--	--	--	**1,100**	--	--
MW-60	Multiunit 1	Supplementary	6/21/2020	FC-CCR-MW60-0620	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Table F-6
Groundwater Sampling Results for the Multiunit 1 Monitoring Wells - Additional Analyses

					Additional Analyses																
				Constituent:	Alkalinity Bicarbonate	Alkalinity Carbonate	Alkalinity Hydroxide	Alkalinity(as CaCO3)	Alkalinity, Phenolphthalein, as CaCO3	Iron	Magnesium	Magnesium	Manganese	Nickel	Potassium	Potassium	Radium 226	Radium 228	Sodium	Sodium	Zinc
				Filtered:	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N	N	Y	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L	pCi/L	mg/L	mg/L	mh/L
				Multiunit 1 BTV	--	--	--	--	--		--	--	--	--	--	--	--	--	--	--	--
				Multiunit 1 GWPS	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**																	
MW-60	Multiunit 1	Supplementary	11/8/2020	FC-CCR-MW60-1120	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-60	Multiunit 1	Supplementary	4/24/2021	FC-CCR-MW60-0421	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-60	Multiunit 1	Supplementary	11/13/2021	FC-CCR-MW60	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-60	Multiunit 1	Supplementary	5/23/2022	FC-CCR-MW60-0522	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-60	Multiunit 1	Supplementary	11/10/2022	FC-CCR-MW60-1122	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-60	Multiunit 1	Supplementary	5/2/2023	FC-CCR-MW60-0523	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-60	Multiunit 1	Supplementary	11/09/2023	FC-CCR-MW60-1124	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	11/6/2015	FC-CCR-MW61-110615	**64**	**34**	--	**98**	--	--	**110**	--	--	--	**18**	--	--	--	**1,000**	--	--
MW-61	Multiunit 1	Downgradient Boundary	11/6/2015	FC-CCR-MW61-110615	--	--	--	--	--	--	--	--	--	--	--	--	**0.288**	**1.01**	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	11/6/2015	110615	**59**	**44**	--	**100**	--	--	**110**	--	--	--	**19**	--	--	--	**1,100**	--	--
MW-61	Multiunit 1	Downgradient Boundary	11/6/2015	110615	--	--	--	--	--	--	--	--	--	--	--	--	**0.622**	**0.665**	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	4/26/2016	FC-CCR-MW-61-042616	--	--	--	--	--	--	--	--	--	--	--	--	**0.6**	**1.1**	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	6/6/2016	FC-CCR-MW61-616	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	<0.8	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	6/6/2016	FC-CCR-MW61-616	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	8/21/2016	FC-CCR-MW61-816	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	8/21/2016	FC-CCR-MW61-816	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	8/21/2016	FC-CCR-MW61-816	--	--	--	--	--	--	--	--	--	--	--	--	**0.4**	**1.0**	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	9/13/2016	FC-CCR-MW61-916	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	9/13/2016	FC-CCR-MW61-916	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	9/13/2016	FC-CCR-MW61-916	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	**1.3**	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	10/19/2016	FC-CCR-MW101-1016	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	10/19/2016	FC-CCR-MW101-1016	--	--	--	--	--	--	--	--	--	--	--	--	<0.2	<0.4	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	10/20/2016	FC-CCR-MW61-1016	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	10/20/2016	FC-CCR-MW61-1016	--	--	--	--	--	--	--	--	--	--	--	--	<0.3	**0.7**	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	2/2/2017	FC-CCR-MW61-117	**66**	**24**	<6.0	**90**	**12**	**--**	**120**	--	--	--	**20**	--	--	--	**1,000**	--	--
MW-61	Multiunit 1	Downgradient Boundary	2/2/2017	FC-CCR-MW61-117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	2/2/2017	FC-CCR-MW61-117	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	**2.2**	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	4/18/2017	FC-CCR-MW61-41817	**77**	**11**	<6.0	**89**	<6.0	--	**120**	--	--	--	**20**	--	--	--	**1,100**	--	--
MW-61	Multiunit 1	Downgradient Boundary	4/18/2017	FC-CCR-MW61-41817	--	--	--	--	--	--	--	--	--	--	--	--	<0.5	<0.6	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	4/18/2017	FC-CCR-MW61-41817	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	5/3/2017	FC-CCR-MW61-5317	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	5/3/2017	FC-CCR-MW61-5317	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	**0.7**	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	5/30/2017	FC-CCR-MW61-53017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	5/30/2017	FC-CCR-MW61-53017	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	<0.6	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	6/22/2017	FC-CCR-MW61-62217	**76**	**14**	<6.0	**90**	**6.8**	**--**	**120**	--	--	--	**20**	--	--	--	**1,100**	--	--
MW-61	Multiunit 1	Downgradient Boundary	6/22/2017	FC-CCR-MW61-62217	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	6/22/2017	FC-CCR-MW61-62217	--	--	--	--	--	--	--	--	--	--	--	--	<0.3	<0.6	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	7/22/2017	FC-CCR-MW61-72217	**88**	<6.0	<6.0	**88**	<6.0	--	**130**	--	--	--	**21**	--	--	--	**1,100**	--	--
MW-61	Multiunit 1	Downgradient Boundary	7/22/2017	FC-CCR-MW61-72217	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	7/22/2017	FC-CCR-MW61-72217	--	--	--	--	--	--	--	--	--	--	--	--	**0.5**	<0.6	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	8/10/2017	FC-CCR-MW61-81017	**88**	<6.0	<6.0	**88**	<6.0	--	**130**	--	--	--	**21**	--	--	--	**1,100**	--	--
MW-61	Multiunit 1	Downgradient Boundary	8/10/2017	FC-CCR-MW61-81017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	8/10/2017	FC-CCR-MW61-81017	--	--	--	--	--	--	--	--	--	--	--	--	<0.5	<0.7	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	8/17/2017	FC-CCR-MW61-81717	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	<0.7	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	8/17/2017	FC-CCR-MW61-81717	**89**	<6.0	<6.0	**89**	<6.0	--	**130**	--	--	--	**24**	--	--	--	**1,100**	--	--
MW-61	Multiunit 1	Downgradient Boundary	9/10/2017	FC-CCR-MW61-91017	**73**	**17**	<6.0	**90**	**8.3**	**--**	**120**	--	--	--	**20**	--	--	--	**1,000**	--	--
MW-61	Multiunit 1	Downgradient Boundary	9/10/2017	FC-CCR-MW61-91017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	9/10/2017	FC-CCR-MW61-91017	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	**0.7**	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	10/12/2017	FC-CCR-MW61-101217	--	--	--	--	--	--	--	--	--	--	--	--	**0.4**	**1.6**	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	10/12/2017	FC-CCR-MW61-101217	**76**	**14**	<6.0	**90**	**7.0**	**--**	**120**	--	--	--	**19**	--	--	--	**1,000**	--	--
MW-61	Multiunit 1	Downgradient Boundary	11/30/2017	FC-CCR-MW61-113017	**78**	**11**	<6.0	**90**	<6.0	--	**120**	--	--	--	**22**	--	--	--	**1,100**	--	--
MW-61	Multiunit 1	Downgradient Boundary	3/17/2018	FC-CCR-MW61-31718	--	--	--	--	--	--	--	--	--	--	--	--	<0.9	<0.8	--	--	--

Table F-6
Groundwater Sampling Results for the Multiunit 1 Monitoring Wells - Additional Analyses

					Additional Analyses																
				Constituent:	Alkalinity Bicarbonate	Alkalinity Carbonate	Alkalinity Hydroxide	Alkalinity(as CaCO3)	Alkalinity, Phenolphthalein, as CaCO3	Iron	Magnesium	Magnesium	Manganese	Nickel	Potassium	Potassium	Radium 226	Radium 228	Sodium	Sodium	Zinc
				Filtered:	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N	N	Y	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L	pCi/L	mg/L	mg/L	mh/L
				Multiunit 1 BTV	--	--	--	--	--		--	--	--	--	--	--	--	--	--	--	--
				Multiunit 1 GWPS	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**																	
MW-61	Multiunit 1	Downgradient Boundary	6/1/2018	FC-CCR-MW-61-6118	--	--	--	--	--	--	--	--	--	--	--	--	<0.5	<0.7	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	6/1/2018	FC-CCR-MW-61-6118	**91**	<6.0	<6.0	**91**	<6.0	--	**120**	--	--	--	**19**	--	--	--	**980**	--	--
MW-61	Multiunit 1	Downgradient Boundary	6/1/2018	6118	--	--	--	--	--	--	--	--	--	--	--	--	<0.5	<0.7	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	6/1/2018	6118	**89**	<6.0	<6.0	**91**	<6.0	--	**120**	--	--	--	**20**	--	--	--	**980**	--	--
MW-61	Multiunit 1	Downgradient Boundary	11/3/2018	FC-CCR-MW61-11318	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	11/3/2018	FC-CCR-MW61-11318	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	11/3/2018	FC-CCR-MW61-11318	--	--	--	--	--	--	--	--	--	--	--	--	<0.5	<0.7	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	3/19/2019	FC-CCR-MW61-031919	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	3/19/2019	FC-CCR-MW61-031919	--	--	--	--	--	--	--	--	--	--	--	--	<0.5	<0.7	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	5/13/2019	FC-CCR-MW61-51319	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	5/13/2019	FC-CCR-MW61-51319	--	--	--	--	--	--	--	--	--	--	--	--	<0.6	<0.7	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	11/19/2019	FC-CCR-MW61-111919	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	6/21/2020	FC-CCR-MW61-0620	--	--	--	--	--	--	--	--	--	--	--	--	**0.7**	<0.6	--	--	--
MW-61	Multiunit 1	Downgradient Boundary	11/8/2020	FC-CCR-MW61-1120	**61**	**33**	<6	**94**	**17**	--	**140**	--	--	--	**25**	--	<0.4	<0.8	**1,100**	--	--
MW-61	Multiunit 1	Downgradient Boundary	4/23/2021	FC-CCR-MW61-0421	**72**	**26**	<6	**97**	**13**	--	**130**	--	--	--	**23**	--	<0.4	**0.9**	**1,000**	--	--
MW-61	Multiunit 1	Downgradient Boundary	11/13/2021	FC-CCR-MW61-1121	**59**	**32**	<6	**91**	**16**	--	**140**	--	--	--	**21**	--	**0.6**	<0.6	**1,100**	--	--
MW-61	Multiunit 1	Downgradient Boundary	5/22/2022	FC-CCR-MW61-0522	**68**	**29**	<6	**97**	**15**	--	**140**	--	--	--	**20**	--	**0.4**	<0.6	**1,100**	--	--
MW-61	Multiunit 1	Downgradient Boundary	11/11/2022	FC-CCR-MW61-1122	**64**	**33**	<6	**97**	**16**	--	**150**	--	--	--	**21**	--	<0.3	<0.6	**1,100**	--	--
MW-61	Multiunit 1	Downgradient Boundary	5/4/2023	FC-CCR-MW61-0523	**74**	**23**	<6	**97**	**12**	--	**160**	--	--	**0.46**	**24**	--	**0.6**	**2.2**	**1,100**	--	--
MW-61	Multiunit 1	Downgradient Boundary	11/09/2023	FC-CCR-MW61-1124	**99**	<6	<6	**99**	<6	--	**190**	--	--	--	**28**	--	<0.42	<0.75	**1,200**	--	--
MW-75	Multiunit 1	Downgradient Boundary	4/18/2017	FC-CCR-MW-75-41817	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	**1.6**	--	--	--
MW-75	Multiunit 1	Downgradient Boundary	4/18/2017	FC-CCR-MW75-41817	**94**	<6.0	<6.0	**94**	<6.0	--	**210**	--	--	--	**21**	--	--	--	**1,200**	--	--
MW-75	Multiunit 1	Downgradient Boundary	4/18/2017	FC-CCR-MW75-41817	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-75	Multiunit 1	Downgradient Boundary	5/3/2017	FC-CCR-MW-75-5317	--	--	--	--	--	--	--	--	--	--	--	--	**0.4**	<0.6	--	--	--
MW-75	Multiunit 1	Downgradient Boundary	5/3/2017	FC-CCR-MW75-5317	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-75	Multiunit 1	Downgradient Boundary	5/30/2017	FC-CCR-MW-75-53017	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	**0.9**	--	--	--
MW-75	Multiunit 1	Downgradient Boundary	5/30/2017	FC-CCR-MW75-53017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-75	Multiunit 1	Downgradient Boundary	6/22/2017	FC-CCR-MW75-62217	**95**	<6.0	<6.0	**95**	<6.0	--	**240**	--	--	--	**23**	--	--	--	**1,300**	--	--
MW-75	Multiunit 1	Downgradient Boundary	6/22/2017	FC-CCR-MW75-62217	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-75	Multiunit 1	Downgradient Boundary	6/22/2017	FC-CCR-MW-75-62117	--	--	--	--	--	--	--	--	--	--	--	--	<0.3	<0.6	--	--	--
MW-75	Multiunit 1	Downgradient Boundary	7/22/2017	FC-CCR-MW75-72217	**95**	<6.0	<6.0	**95**	<6.0	--	**240**	--	--	--	**23**	--	--	--	**1,300**	--	--
MW-75	Multiunit 1	Downgradient Boundary	7/22/2017	FC-CCR-MW75-72217	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-75	Multiunit 1	Downgradient Boundary	7/22/2017	FC-CCR-MW75-72217	--	--	--	--	--	--	--	--	--	--	--	--	<0.5	<0.7	--	--	--
MW-75	Multiunit 1	Downgradient Boundary	8/10/2017	FC-CCR-MW75-81017	**94**	<6.0	<6.0	**94**	<6.0	--	**240**	--	--	--	**23**	--	--	--	**1,300**	--	--
MW-75	Multiunit 1	Downgradient Boundary	8/10/2017	FC-CCR-MW75-81017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-75	Multiunit 1	Downgradient Boundary	8/10/2017	FC-CCR-MW75-81017	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	**1.0**	--	--	--
MW-75	Multiunit 1	Downgradient Boundary	8/17/2017	FC-CCR-MW75-81717	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	<0.7	--	--	--
MW-75	Multiunit 1	Downgradient Boundary	8/17/2017	FC-CCR-MW75-81717	**95**	<6.0	<6.0	**95**	<6.0	--	**240**	--	--	--	**26**	--	--	--	**1,300**	--	--
MW-75	Multiunit 1	Downgradient Boundary	9/10/2017	FC-CCR-MW75-91017	**96**	<6.0	<6.0	**96**	<6.0	--	**230**	--	--	--	**22**	--	--	--	**1,200**	--	--
MW-75	Multiunit 1	Downgradient Boundary	9/10/2017	FC-CCR-MW75-91017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-75	Multiunit 1	Downgradient Boundary	9/10/2017	FC-CCR-MW75-91017	--	--	--	--	--	--	--	--	--	--	--	--	<0.5	**0.8**	--	--	--
MW-75	Multiunit 1	Downgradient Boundary	10/12/2017	FC-CCR-MW75-101217	--	--	--	--	--	--	--	--	--	--	--	--	<0.3	**0.8**	--	--	--
MW-75	Multiunit 1	Downgradient Boundary	10/12/2017	FC-CCR-MW75-101217	**96**	<6.0	<6.0	**96**	<6.0	--	**220**	--	--	--	**21**	--	--	--	**1,200**	--	--
MW-75	Multiunit 1	Downgradient Boundary	11/30/2017	FC-CCR-MW75-113017	**90**	<6.0	<6.0	**90**	<6.0	--	**230**	--	--	--	**24**	--	--	--	**1,300**	--	--
MW-75	Multiunit 1	Downgradient Boundary	11/30/2017	113017	**90**	<6.0	<6.0	**90**	<6.0	--	**230**	--	--	--	**24**	--	--	--	**1,200**	--	--
MW-75	Multiunit 1	Downgradient Boundary	3/17/2018	FC-CCR-MW75-31718	--	--	--	--	--	--	--	--	--	--	--	--	<0.8	<0.8	--	--	--
MW-75	Multiunit 1	Downgradient Boundary	6/1/2018	FC-CCR-MW-75-6118	--	--	--	--	--	--	--	--	--	--	--	--	<0.5	**1.4**	--	--	--
MW-75	Multiunit 1	Downgradient Boundary	6/1/2018	FC-CCR-MW-75-6118	**98**	<6.0	<6.0	**98**	<6.0	--	**210**	--	--	--	**21**	--	--	--	**1,100**	--	--
MW-75	Multiunit 1	Downgradient Boundary	11/3/2018	FC-CCR-MW75-11318	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-75	Multiunit 1	Downgradient Boundary	11/3/2018	FC-CCR-MW75-11318	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-75	Multiunit 1	Downgradient Boundary	11/3/2018	FC-CCR-MW75-11318	--	--	--	--	--	--	--	--	--	--	--	--	<0.5	<0.7	--	--	--
MW-75	Multiunit 1	Downgradient Boundary	3/19/2019	FC-CCR-MW75-031919	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Table F-6
Groundwater Sampling Results for the Multiunit 1 Monitoring Wells - Additional Analyses

					Additional Analyses																
				Constituent:	Alkalinity Bicarbonate	Alkalinity Carbonate	Alkalinity Hydroxide	Alkalinity(as CaCO3)	Alkalinity, Phenolphthalein, as CaCO3	Iron	Magnesium	Magnesium	Manganese	Nickel	Potassium	Potassium	Radium 226	Radium 228	Sodium	Sodium	Zinc
				Filtered:	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N	N	Y	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L	pCi/L	mg/L	mg/L	mh/L
				Multiunit 1 BTV	--	--	--	--	--		--	--	--	--	--	--	--	--	--	--	--
				Multiunit 1 GWPS	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**																	
MW-75	Multiunit 1	Downgradient Boundary	3/19/2019	FC-CCR-MW75-031919	--	--	--	--	--	--	--	--	--	--	--	--	<0.5	<0.7	--	--	--
MW-75	Multiunit 1	Downgradient Boundary	5/13/2019	FC-CCR-MW75-51319	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-75	Multiunit 1	Downgradient Boundary	5/13/2019	FC-CCR-MW75-51319	--	--	--	--	--	--	--	--	--	--	--	--	<0.6	<0.7	--	--	--
MW-75	Multiunit 1	Downgradient Boundary	11/19/2019	FC-CCR-MW75-111919	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-75	Multiunit 1	Downgradient Boundary	6/21/2020	FC-CCR-MW75-0620	--	--	--	--	--	--	--	--	--	--	--	--	**0.8**	<0.6	--	--	--
MW-75	Multiunit 1	Downgradient Boundary	11/8/2020	FC-CCR-MW75-1120	**99**	<6	<6	**99**	<6	--	**250**	--	--	--	**27**	--	<0.4	<0.8	**1,300**	--	--
MW-75	Multiunit 1	Downgradient Boundary	4/23/2021	FC-CCR-MW75-0421	**100**	<6	<6	**100**	<6	--	**240**	--	--	--	**25**	--	<0.5	<0.8	**1,300**	--	--
MW-75	Multiunit 1	Downgradient Boundary	11/13/2021	FC-CCR-MW75-1121	**98**	<6	<6	**98**	<6	--	**240**	--	--	--	**22**	--	<0.3	**0.8**	**1,300**	--	--
MW-75	Multiunit 1	Downgradient Boundary	5/22/2022	FC-CCR-MW75-0522	**100**	<6	<6	**100**	<6	--	**230**	--	--	--	**23**	--	<0.3	**1.4**	**1,300**	--	--
MW-75	Multiunit 1	Downgradient Boundary	11/11/2022	FC-CCR-MW75-1122	**100**	<6	<6	**100**	<6	--	**250**	--	--	--	**22**	--	**0.7**	<0.6	**1,400**	--	--
MW-75	Multiunit 1	Downgradient Boundary	5/4/2023	FC-CCR-MW75-0523	**100**	<6	<6	**100**	<6	--	**250**	--	--	**0.31**	**26**	--	**0.7**	<0.6	**1,400**	--	--
MW-75	Multiunit 1	Downgradient Boundary	11/08/2023	FC-CCR-MW75-1124	**100**	<6	<6	**100**	<6	--	**290**	--	--	--	**29**	--	<0.42	<0.75	**1,500**	--	--
MW-76	Multiunit 1	Downgradient Boundary	4/26/2021	FC-CCR-MW76-0421	**270**	<6	<6	**270**	<6	--	**200**	--	--	--	**29**	--	<0.5	<0.8	**1,200**	--	--
MW-87	Multiunit 1	Downgradient	3/19/2019	FC-CCR-MW87-031919	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-87	Multiunit 1	Downgradient	3/19/2019	FC-CCR-MW87-031919	--	--	--	--	--	--	--	--	--	--	--	--	<0.6	**1.5**	--	--	--
MW-87	Multiunit 1	Downgradient	5/14/2019	FC-CCR-MW87-51419	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-87	Multiunit 1	Downgradient	5/14/2019	FC-CCR-MW87-51419	--	--	--	--	--	--	--	--	--	--	--	--	<0.5	**1.4**	--	--	--
MW-87	Multiunit 1	Downgradient	6/22/2019	FC-NIT-MW87-62219	**830**	<6.0	<6.0	**830**	<6.0	--	**1,200**	--	--	--	**83**	--	--	--	**6,300**	--	--
MW-87	Multiunit 1	Downgradient	11/19/2019	FC-CCR-MW87-111919	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-87	Multiunit 1	Downgradient	11/19/2019	111919	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-87	Multiunit 1	Downgradient	6/23/2020	FC-CCR-MW87-0620	**900**	<6	<6	**900**	<6	--	**1,500**	--	--	--	**78**	--	**0.8**	**2.0**	**7,200**	--	--
MW-87	Multiunit 1	Downgradient	11/6/2020	FC-CCR-MW87-1120	**800**	<6	<6	**800**	<6	--	**2,000**	--	--	--	**130**	--	**1.0**	**2.7**	**8,300**	--	--
MW-87	Multiunit 1	Downgradient	4/27/2021	FC-CCR-MW87-0421	**900**	<6	<6	**900**	<6	**0.56**	**2,300**	--	**0.58**	--	**130**	--	<0.5	<0.8	**9,600**	--	--
MW-87	Multiunit 1	Downgradient	11/17/2021	FC-CCR-MW87-1121	**1,200**	<6	<6	**1,200**	<6	**1.6**	**3,500**	--	**0.43**	--	**130**	--	**0.6**	<0.7	**14,000**	--	--
MW-87	Multiunit 1	Downgradient	11/17/2021	FC-CCR-FD04-1121	**1,100**	<6	<6	**1,100**	<6	**1.5**	**3,500**	--	**0.43**	--	**130**	--	**0.7**	<0.7	**13,000**	--	--
MW-87	Multiunit 1	Downgradient	2/8/2022	FC-CCR-MW87-0222	**1,200**	<6	<6	**1,200**	<6	**0.52**	**3,000**	--	--	--	**100**	--	--	--	**13,000**	--	--
MW-87	Multiunit 1	Downgradient	5/24/2022	FC-CCR-MW87-0522	**1,200**	<6	<6	**1,200**	<6	**0.31**	**2,900**	--	**0.47**	--	**110**	--	**0.8**	**3.1**	**11,000**	--	--
MW-87	Multiunit 1	Downgradient	5/24/2022	0522	**1,200**	<6	<6	**1,200**	<6	**0.33**	**3,000**	--	**0.47**	--	**110**	--	**0.6**	**3.3**	**11,000**	--	--
MW-87	Multiunit 1	Downgradient	5/24/2022	FC-CCR-SS07-0522	**1,160**	<20	<20	**1,160**	--	<7.5	**2,680**	--	<2.5	--	**101**	--	--	--	**10,900**	--	--
MW-87	Multiunit 1	Downgradient	8/11/2022	FC-CCR-MW87-0822	**1,300**	<6	<6	**1,300**	<6	<1	**3,300**	--	--	--	**83**	--	--	--	**11,000**	--	--
MW-87	Multiunit 1	Downgradient	8/11/2022	0822	**1,300**	<6	<6	**1,300**	<6	<1	**3,200**	--	--	--	**83**	--	--	--	**12,000**	--	--
MW-87	Multiunit 1	Downgradient	11/15/2022	FC-CCR-MW87-1122	--	--	--	--	--	--	--	--	--	--	--	--	**1.5**	**3.3**	--	--	--
MW-87	Multiunit 1	Downgradient	5/5/2023	FC-CCR-MW87-0523	**1,200**	<6	<6	**1,200**	<6	**0.33**	**3,900**	--	**0.35**	**0.051**	**110**	--	<0.46	**2.3**	**9,800**	--	--
EW-14	Multiunit 1	Supplementary	6/23/2020	FC-CCR-EW14-0620	**140**	<6	<6	**140**	<6	--	**420**	--	--	--	**26**	--	<0.4	<0.6	**1,400**	--	--
EW-14	Multiunit 1	Supplementary	11/16/2023	FC-CCR-EW14-1124	--	--	--	--	--	**0.13**	**380**	--	**3.8**	--	--	--	--	--	--	--	--

Table F-6
Groundwater Sampling Results for the Multiunit 1 Monitoring Wells - Additional Analyses

					Additional Analyses																	
				Constituent:	Alkalinity Bicarbonate	Alkalinity Carbonate	Alkalinity Hydroxide	Alkalinity(as CaCO3)	Alkalinity, Phenolphthalein, as CaCO3	Iron	Magnesium	Magnesium	Manganese	Nickel	Potassium	Potassium	Radium 226	Radium 228	Sodium	Sodium	Zinc
				Filtered:	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N	N	Y	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L	pCi/L	mg/L	mg/L	mh/L
				Multiunit 1 BTV	--	--	--	--	--		--	--	--	--	--	--	--	--	--	--	--
				Multiunit 1 GWPS	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**																	
EW-15	Multiunit 1	Supplementary	11/16/2023	FC-CCR-EW15-1124	--	--	--	--	--	**0.12**	**590**	--	**2.7**	--	--	--	--	--	--	--	--
EW-15	Multiunit 1	Supplementary	6/23/2020	FC-CCR-EW15-0620	**140**	<6	<6	**140**	<6	--	**350**	--	--	--	**26**	--	<0.4	**0.8**	**1,200**	--	--
MW-50B	Multiunit 1	--	3/17/2015	FCPP-50B-031715	**630**	<6.0	<6.0	**630**	<6.0	--	<200	--	--	--	**79**	--	--	--	**4,500**	--	--

Notes:

BTV exceedances are shown in grey shaded cells. GWPS exceedence are shown in red text.

Abbreviations and Data Qualifiers:

* data appears anomalous
< = less than
BTV = Background Threshold Value
CCR = Coal Combustion Residual
degrees C = degrees Celsius
GWPS = Groundwater Protection Standard
ID = Identification
J = The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
mg/L = milligrams per liter
pCi/L = Picocuries per liter
su = standard units
UJ = The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

Table F-7
Groundwater Sampling Results for the CWTP Monitoring Wells - Appendix III Constituents

					Appendix III Constituents							
				Constituent:	Boron	Calcium	Chloride	Fluoride	pH (Field Measurement)	pH (Laboratory Measurement)	Sulfate	Total Dissolved Solids
				Filtered:	N	N	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	su	su	mg/L	mg/L
				CWTP BTV (applicable to MW-62)	*2*	*536*	*631*	*1.8*	*6.5 - 6.9*	*6.5 - 6.9*	*13,000*	*20,000*
				CWTP BTV (applicable to MW-63)	*2*	*536*	*631*	*2.3*	*6.5 - 6.9*	*6.5 - 6.9*	*13,000*	*20,000*
				CWTP BTV (applicable to MW-64)	*0.73*	*486*	*631*	*1.6*	*7.23 - 7.66*	*7.23 - 7.66*	*13,000*	*20,000*
				CWTP BTV (applicable to MW-65)	*0.73*	*486*	*631*	*2.1*	*7.00 - 7.44*	*7.00 - 7.44*	*13,000*	*20,000*
				CWTP GWPS (applicable to downgradient wells)	--	--	--	--	--	--	--	--
Well Id	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample Identification**								
MW-71	URS/CWTP	Background	3/5/2016	FC-CCR-MW-71-030516	**0.44**	**450**	**660**	<0.050	**7.73**	--	**8,500**	**13,000**
MW-71	URS/CWTP	Background	3/5/2016	FC-CCR-MW-71-030516	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	3/5/2016	*DUP* FC-CCR-FD-2-030516	**0.46**	**480**	**670**	<0.050	--	--	**8,500**	**13,000**
MW-71	URS/CWTP	Background	3/5/2016	*DUP* FC-CCR-FD-2-030516	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	4/26/2016	FC-CCR-MW-71-042616	**0.69**	**470**	**670**	<2.0	**6.58**	--	**13,000**	**21,000**
MW-71	URS/CWTP	Background	6/6/2016	FC-CCR-MW71-616	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	6/6/2016	FC-CCR-MW71-616	**0.70**	**460**	**750**	<0.40	**6.47**	**6.87**	**13,000**	**20,000**
MW-71	URS/CWTP	Background	8/21/2016	FC-CCR-MW71-816	**0.56**	**450**	**590**	<0.80	**7.04**	**7.1**	**8,400**	**14,000**
MW-71	URS/CWTP	Background	8/21/2016	FC-CCR-MW71-816	--	--	--	<0.80	--	--	--	--
MW-71	URS/CWTP	Background	8/21/2016	FC-CCR-MW71-816	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	8/21/2016	FC-CCR-MW101-816	--	--	--	--	--	**7.1**	--	**14,000**
MW-71	URS/CWTP	Background	8/21/2016	FC-CCR-MW101-816	--	--	--	<0.40	--	--	--	--
MW-71	URS/CWTP	Background	8/21/2016	FC-CCR-MW101-816	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	9/12/2016	FC-CCR-MW71-916	**0.58**	**460**	**570**	<0.40	**6.86**	**7.2**	**9,300**	**16,000**
MW-71	URS/CWTP	Background	9/12/2016	FC-CCR-MW71-916	--	--	--	<0.40	--	--	--	--
MW-71	URS/CWTP	Background	9/12/2016	FC-CCR-MW71-916	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	10/20/2016	FC-CCR-MW71-1016	**0.55**	**410**	**580**	<0.40	**6.90**	**7.3**	**9,100**	**15,000**
MW-71	URS/CWTP	Background	10/20/2016	FC-CCR-MW71-1016	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	2/2/2017	FC-CCR-MW71-117	**0.62**	**440**	**610**	<0.40	**6.64**	**7.6**	**14,000**	**17,000**
MW-71	URS/CWTP	Background	2/2/2017	FC-CCR-MW71-117	--	--	--	<0.40	--	--	--	--
MW-71	URS/CWTP	Background	2/2/2017	FC-CCR-MW71-117	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	4/17/2017	FC-CCR-MW71-41717	**0.52**	**400**	**550**	<2.0	**6.81**	**7.6**	**9,400**	**15,000**
MW-71	URS/CWTP	Background	4/17/2017	FC-CCR-MW71-41717	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	4/17/2017	FC-CCR-MW71-41717	--	--	--	<2.0	--	--	--	--
MW-71	URS/CWTP	Background	5/2/2017	FC-CCR-MW71-5217	--	--	--	<13	**6.86**	--	--	--
MW-71	URS/CWTP	Background	5/2/2017	FC-CCR-MW71-5217	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	5/29/2017	FC-CCR-MW71-52917	--	--	--	<2.0	**6.76**	--	--	--
MW-71	URS/CWTP	Background	5/29/2017	FC-CCR-MW71-52917	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	6/22/2017	FC-CCR-MW71-62217	**0.60**	**460**	**620**	--	**6.79**	**7.2**	**4,600**	**17,000**
MW-71	URS/CWTP	Background	6/22/2017	FC-CCR-MW71-62217	--	--	--	<2.0	--	--	--	--
MW-71	URS/CWTP	Background	6/22/2017	FC-CCR-MW71-62117	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	7/21/2017	FC-CCR-MW71-72117	**0.55**	**450**	**590**	<2.0	**7.00**	**7.1**	**10,000**	**15,000**
MW-71	URS/CWTP	Background	7/21/2017	FC-CCR-MW71-72117	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	7/21/2017	FC-CCR-MW71-72117	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	8/10/2017	FC-CCR-MW71-81017	**0.55**	**450**	**560**	--	**6.59**	**7.4**	**10,000**	**15,000**
MW-71	URS/CWTP	Background	8/10/2017	FC-CCR-MW71-81017	--	--	--	<2.0	--	--	--	--
MW-71	URS/CWTP	Background	8/10/2017	FC-CCR-MW71-81017	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	8/17/2017	FC-CCR-MW71-81717	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	8/17/2017	FC-CCR-MW71-81717	**0.56**	**480**	**570**	<2.0	**6.62**	**7.3**	**9,500**	**15,000**
MW-71	URS/CWTP	Background	9/11/2017	FC-CCR-MW71-91117	**0.55**	**470**	**570**	--	**6.56**	**7.1**	**9,900**	**15,000**
MW-71	URS/CWTP	Background	9/11/2017	FC-CCR-MW71-91117	--	--	--	<2.0	--	--	--	--
MW-71	URS/CWTP	Background	9/11/2017	FC-CCR-MW71-91117	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	10/13/2017	FC-CCR-MW71-101317	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	10/13/2017	FC-CCR-MW71-101317	**0.54**	**420**	**570**	<2.0	**6.79**	**7.2**	**10,000**	**15,000**
MW-71	URS/CWTP	Background	11/30/2017	FC-CCR-MW71-113017	**0.56**	**490**	**540**	<2.0	**6.71**	**7.1**	**10,000**	**15,000**
MW-71	URS/CWTP	Background	3/16/2018	FC-CCR-MW71-31618	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	6/2/2018	FC-CCR-MW-71-6218	--	--	--	--	--	--	--	--

Table F-7
Groundwater Sampling Results for the CWTP Monitoring Wells - Appendix III Constituents

					Appendix III Constituents							
				Constituent:	Boron	Calcium	Chloride	Fluoride	pH (Field Measurement)	pH (Laboratory Measurement)	Sulfate	Total Dissolved Solids
				Filtered:	N	N	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	su	su	mg/L	mg/L
				CWTP BTV (applicable to MW-62)	*2*	*536*	*631*	*1.8*	*6.5 - 6.9*	*6.5 - 6.9*	*13,000*	*20,000*
				CWTP BTV (applicable to MW-63)	*2*	*536*	*631*	*2.3*	*6.5 - 6.9*	*6.5 - 6.9*	*13,000*	*20,000*
				CWTP BTV (applicable to MW-64)	*0.73*	*486*	*631*	*1.6*	*7.23 - 7.66*	*7.23 - 7.66*	*13,000*	*20,000*
				CWTP BTV (applicable to MW-65)	*0.73*	*486*	*631*	*2.1*	*7.00 - 7.44*	*7.00 - 7.44*	*13,000*	*20,000*
				CWTP GWPS (applicable to downgradient wells)	--	--	--	--	--	--	--	--
Well Id	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample Identification**								
MW-71	URS/CWTP	Background	6/2/2018	FC-CCR-MW-71-6218	**0.55**	**420**	**520**	<0.80	**6.85**	**7.1**	**10,000**	**15,000**
MW-71	URS/CWTP	Background	11/3/2018	FC-CCR-MW71-11318	**0.56**	**470**	**520**	<2.0	**6.81**	**7.0**	**11,000**	**16,000**
MW-71	URS/CWTP	Background	11/3/2018	FC-CCR-MW71-11318	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	11/3/2018	FC-CCR-MW71-11318	--	--	--	<0.80	--	--	--	--
MW-71	URS/CWTP	Background	11/3/2018	*DUP* FC-CCR-FD01-11318	**0.54**	**450**	**520**	<0.80	--	**7.2**	**11,000**	**16,000**
MW-71	URS/CWTP	Background	11/3/2018	*DUP* FC-CCR-FD01-11318	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	3/18/2019	FC-CCR-MW71-031819	--	--	--	<0.80	**6.68**	--	--	--
MW-71	URS/CWTP	Background	3/18/2019	FC-CCR-MW71-031819	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	5/6/2019	FC-CCR-MW71-5719	--	--	--	--	**6.66**	--	--	--
MW-71	URS/CWTP	Background	12/2/2019	FC-CCR-MW71-120219	**0.50**	**440**	**500**	<0.80	**6.66**	**7.2 J**	**10,000**	**16000 J**
MW-71	URS/CWTP	Background	6/20/2020	FC-CCR-MW71-0620	**0.59**	**450**	**480**	<0.8	**6.71**	**7.3 J**	**9,900**	**15,000**
MW-71	URS/CWTP	Background	11/5/2020	FC-CCR-MW71-1120	**0.59**	**460**	**490**	<0.4	**6.78**	**7.2 J**	**10,000**	**16,000**
MW-71	URS/CWTP	Background	4/22/2021	FC-CCR-MW71-0421	**0.73**	**510**	**560**	**3.8 NJ**	**6.83**	**7.2 J**	**14,000**	**19,000**
MW-71	URS/CWTP	Background	11/12/2021	FC-CCR-MW71-1121	**0.54**	**440**	**560**	**0.14 J**	**6.74**	**7.4 J**	**12,000**	**8,000**
MW-71	URS/CWTP	Background	5/21/2022	FC-CCR-MW71-0522	**0.56**	**450**	**560**	<0.8	**6.74**	**7.58 J**	**9,900**	**16,000**
MW-71	URS/CWTP	Background	5/21/2022	FC-CCR-SS04-0522	**0.78 J**	**467**	**642**	<50 / 0.28 J	**6.74**	**7.8 J**	**12,400**	**16,000**
MW-71	URS/CWTP	Background	8/14/2022	FC-CCR-MW71-0822	**0.44**	**--**	**--**	**--**	**6.80**	**7.0 J**	**--**	**--**
MW-71	URS/CWTP	Background	11/13/2022	FC-CCR-MW71-1122	**0.52**	**490**	**530**	<0.8	**6.79**	**7.1 J**	**12,000**	**19,000**
MW-71	URS/CWTP	Background	01/27/2023	FC-CCR-MW71-0123	**0.47**	**460**	**--**	**--**	**6.99**	**--**	**--**	**--**
MW-71	URS/CWTP	Background	05/08/2023	FC-CCR-MW71-0523	**0.58**	**470**	**570**	<2	**6.80**	**7.2 J**	**10,000**	**17,000**
MW-71	URS/CWTP	Background	06/27/2023	FC-CCR-MW71-0623	**0.57**	**530**	**600**	<20	**7.04**	**7.0 J**	**14,000**	**20,000**
MW-71	URS/CWTP	Background	11/08/2023	FC-CCR-MW71-1123	**0.67 J**	**540 J**	**640**	<0.8	**6.86**	**7.2 J**	**14,000**	**20,000 J**
MW-72	URS/CWTP	Background	3/7/2016	FC-CCR-MW72-030716	**0.16**	**480**	**490**	<0.050	**7.71**	--	**12,000**	**17,000**
MW-72	URS/CWTP	Background	3/7/2016	FC-CCR-MW72-030716	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	4/26/2016	FC-CCR-MW-72-042616	**0.22**	**470**	**430**	<2.0	**6.87**	--	**11,000**	**19,000**
MW-72	URS/CWTP	Background	6/6/2016	FC-CCR-MW72-616	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	6/6/2016	FC-CCR-MW72-616	**0.25**	**570**	**530**	<0.40	**6.56**	**6.99**	**4,500**	**9,500**
MW-72	URS/CWTP	Background	8/21/2016	FC-CCR-MW72-816	**0.23**	**450**	**440**	<0.40	**6.72**	**7.0**	**10,000**	**17,000**
MW-72	URS/CWTP	Background	8/21/2016	FC-CCR-MW72-816	--	--	--	<0.40	--	--	--	--
MW-72	URS/CWTP	Background	8/21/2016	FC-CCR-MW72-816	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	9/13/2016	FC-CCR-MW72-916	**0.24**	**470**	**450**	<0.40	**6.17**	**7.1**	**10,000**	**17,000**
MW-72	URS/CWTP	Background	9/13/2016	FC-CCR-MW72-916	--	--	--	<0.40	--	--	--	--
MW-72	URS/CWTP	Background	9/13/2016	FC-CCR-MW72-916	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	10/20/2016	FC-CCR-MW72-1016	**0.23**	**400**	**480**	<0.40	**6.84**	**7.1**	**11,000**	**17,000**
MW-72	URS/CWTP	Background	10/20/2016	FC-CCR-MW72-1016	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	2/2/2017	FC-CCR-MW72-117	**0.23**	**420**	**430**	<0.40	**6.63**	**7.5**	**11,000**	**16,000**
MW-72	URS/CWTP	Background	2/2/2017	FC-CCR-MW72-117	--	--	--	<0.40	--	--	--	--
MW-72	URS/CWTP	Background	2/2/2017	FC-CCR-MW72-117	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	2/2/2017	FC-CCR-MW101-117	**0.21**	**430**	**450**	<0.40	--	**7.5**	**11,000**	**16,000**
MW-72	URS/CWTP	Background	2/2/2017	FC-CCR-MW101-117	--	--	--	<0.40	--	--	--	--
MW-72	URS/CWTP	Background	2/2/2017	FC-CCR-MW101-117	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	4/17/2017	FC-CCR-MW-72-41717	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	4/17/2017	FC-CCR-MW72-41717	**0.20**	**440**	**450**	<2.0	**6.73**	**7.4**	**610**	**17,000**
MW-72	URS/CWTP	Background	4/17/2017	FC-CCR-MW72-41717	--	--	--	<2.0	--	--	--	--
MW-72	URS/CWTP	Background	5/2/2017	FC-CCR-MW-72-5217	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	5/2/2017	FC-CCR-MW72-5217	--	--	--	<13	**6.83**	--	--	--
MW-72	URS/CWTP	Background	5/29/2017	FC-CCR-MW72-52917	--	--	--	<2.0	**6.68**	--	--	--

Table F-7
Groundwater Sampling Results for the CWTP Monitoring Wells - Appendix III Constituents

					Appendix III Constituents							
				Constituent:	Boron	Calcium	Chloride	Fluoride	pH (Field Measurement)	pH (Laboratory Measurement)	Sulfate	Total Dissolved Solids
				Filtered:	N	N	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	su	su	mg/L	mg/L
				CWTP BTV (applicable to MW-62)	*2*	*536*	*631*	*1.8*	*6.5 - 6.9*	*6.5 - 6.9*	*13,000*	*20,000*
				CWTP BTV (applicable to MW-63)	*2*	*536*	*631*	*2.3*	*6.5 - 6.9*	*6.5 - 6.9*	*13,000*	*20,000*
				CWTP BTV (applicable to MW-64)	*0.73*	*486*	*631*	*1.6*	*7.23 - 7.66*	*7.23 - 7.66*	*13,000*	*20,000*
				CWTP BTV (applicable to MW-65)	*0.73*	*486*	*631*	*2.1*	*7.00 - 7.44*	*7.00 - 7.44*	*13,000*	*20,000*
				CWTP GWPS (applicable to downgradient wells)	--	--	--	--	--	--	--	--
Well Id	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample Identification**								
MW-72	URS/CWTP	Background	6/22/2017	FC-CCR-MW72-62217	**0.23**	**450**	**450**	--	**6.65**	**7.1**	**11,000**	**17,000**
MW-72	URS/CWTP	Background	6/22/2017	FC-CCR-MW72-62217	--	--	--	<2.0	--	--	--	--
MW-72	URS/CWTP	Background	6/22/2017	FC-CCR-MW-72-62117	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	6/22/2017	*DUP* FC-CCR-FD02-62217	**0.22**	**440**	**450**	--	--	**7.0**	**11,000**	**17,000**
MW-72	URS/CWTP	Background	6/22/2017	*DUP* FC-CCR-FD02-62217	--	--	--	<2.0	--	--	--	--
MW-72	URS/CWTP	Background	6/22/2017	*DUP* FC-CCR-FD02-62117	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	7/21/2017	FC-CCR-MW72-72117	**0.23**	**450**	**460**	<2.0	**6.93**	**7.1**	**11,000**	**17,000**
MW-72	URS/CWTP	Background	7/21/2017	FC-CCR-MW72-72117	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	7/21/2017	FC-CCR-MW72-72117	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	8/10/2017	FC-CCR-MW72-81017	**0.21**	**450**	**460**	--	**6.47**	**7.3**	**11,000**	**17,000**
MW-72	URS/CWTP	Background	8/10/2017	FC-CCR-MW72-81017	--	--	--	<2.0	--	--	--	--
MW-72	URS/CWTP	Background	8/10/2017	FC-CCR-MW72-81017	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	8/10/2017	*DUP* FC-CCR-FD02-81017	**0.25**	**460**	**460**	--	--	**7.2**	**12,000**	**17,000**
MW-72	URS/CWTP	Background	8/10/2017	*DUP* FC-CCR-FD02-81017	--	--	--	<2.0	--	--	--	--
MW-72	URS/CWTP	Background	8/10/2017	*DUP* FC-CCR-FD02-81017	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	8/17/2017	FC-CCR-MW72-81717	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	8/17/2017	FC-CCR-MW72-81717	**0.26**	**490**	**450**	<2.0	**6.18**	**7.1**	**11,000**	**17,000**
MW-72	URS/CWTP	Background	8/17/2017	*DUP* FC-CCR-FD02-81717	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	8/17/2017	*DUP* FC-CCR-FD02-81717	**0.27**	**480**	**460**	<2.0	--	**7.2**	**12,000**	**17,000**
MW-72	URS/CWTP	Background	9/10/2017	FC-CCR-MW72-91017	**0.21**	**470**	**460**	--	**6.61**	**7.0**	**11,000**	**17,000**
MW-72	URS/CWTP	Background	9/10/2017	FC-CCR-MW72-91017	--	--	--	<2.0	--	--	--	--
MW-72	URS/CWTP	Background	9/10/2017	FC-CCR-MW72-91017	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	10/13/2017	FC-CCR-MW72-101317	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	10/13/2017	FC-CCR-MW72-101317	**0.22**	**430**	**450**	<2.0	**6.65**	**7.2**	**11,000**	**16,000**
MW-72	URS/CWTP	Background	11/29/2017	FC-CCR-MW72-112917	**0.22**	**500**	**450**	<2.0	**6.63**	**7.2**	**10,000**	**16,000**
MW-72	URS/CWTP	Background	3/16/2018	FC-CCR-MW72-31618	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	6/2/2018	FC-CCR-MW-72-6218	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	6/2/2018	FC-CCR-MW-72-6218	**0.21**	**410**	**450**	<0.80	**6.75**	**7.0**	**11,000**	**16,000**
MW-72	URS/CWTP	Background	11/3/2018	FC-CCR-MW72-11318	**0.22**	**470**	**450**	<2.0	**6.75**	**7.0**	**11,000**	**16,000**
MW-72	URS/CWTP	Background	11/3/2018	FC-CCR-MW72-11318	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	11/3/2018	FC-CCR-MW72-11318	--	--	--	<0.80	--	--	--	--
MW-72	URS/CWTP	Background	11/3/2018	*DUP* FC-CCR-FD02-11318	**0.21**	**460**	**450**	<2.0	--	**7.1**	**11,000**	**16,000**
MW-72	URS/CWTP	Background	11/3/2018	*DUP* FC-CCR-FD02-11318	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	3/17/2019	FC-CCR-MW72-031719	--	--	--	<0.80	**6.68**	--	--	--
MW-72	URS/CWTP	Background	3/17/2019	FC-CCR-MW72-031719	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	5/7/2019	FC-CCR-MW72-5719	--	--	--	--	**6.85**	--	--	--
MW-72	URS/CWTP	Background	12/2/2019	FC-CCR-MW72-120219	**0.19**	**430**	**430**	<0.80	**6.62**	**7.1 J**	**11,000**	**16000 J**
MW-72	URS/CWTP	Background	6/19/2020	FC-CCR-MW72-0620	**0.23**	**440**	**400**	<0.8	**6.65**	**7.2 J**	**11,000**	**16,000**
MW-72	URS/CWTP	Background	11/5/2020	FC-CCR-MW72-1120	**0.24**	**470**	**430**	<0.4	**6.70**	**7.1 J**	**10,000**	**16,000**
MW-72	URS/CWTP	Background	4/22/2021	FC-CCR-MW72-0421	**0.25**	**480**	**400**	<0.8	**6.89**	**7.2 J**	**10,000**	**16,000**
MW-72	URS/CWTP	Background	11/12/2021	FC-CCR-MW72-1121	**0.22**	**440**	**450**	<0.8	**6.64**	**7.1 J**	**11,000**	**14,000**
MW-72	URS/CWTP	Background	5/22/2022	FC-CCR-MW72-0522	**0.22**	**440**	**410**	<0.8	**6.63**	**7.50 J**	**9,600**	**13,000**
MW-72	URS/CWTP	Background	8/13/2022	FC-CCR-MW72-0822	**0.14**	**--**	**--**	**--**	**6.81**	**7.0 J**	**--**	**--**
MW-72	URS/CWTP	Background	11/13/2022	FC-CCR-MW72-1122	**0.15**	**470**	**400**	<0.8	**6.81**	**7.2 J**	**10,000**	**15,000**
MW-72	URS/CWTP	Background	01/27/2023	FC-CCR-MW72-0123	**0.16**	**470**	**--**	**--**	**6.97**	**--**	**--**	**--**
MW-72	URS/CWTP	Background	05/08/2023	FC-CCR-MW72-0523	**0.28**	**440**	**440**	**4.2**	**6.75**	**7.2 J**	**9,800**	**15,000**
MW-72	URS/CWTP	Background	06/27/2023	FC-CCR-MW72-0623	**0.18**	**510**	**430**	<20	**7.06**	**7.1 J**	**9,700**	**15,000**

Table F-7
Groundwater Sampling Results for the CWTP Monitoring Wells - Appendix III Constituents

					Appendix III Constituents							
				Constituent:	Boron	Calcium	Chloride	Fluoride	pH (Field Measurement)	pH (Laboratory Measurement)	Sulfate	Total Dissolved Solids
				Filtered:	N	N	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	su	su	mg/L	mg/L
				CWTP BTV (applicable to MW-62)	*2*	*536*	*631*	*1.8*	*6.5 - 6.9*	*6.5 - 6.9*	*13,000*	*20,000*
				CWTP BTV (applicable to MW-63)	*2*	*536*	*631*	*2.3*	*6.5 - 6.9*	*6.5 - 6.9*	*13,000*	*20,000*
				CWTP BTV (applicable to MW-64)	*0.73*	*486*	*631*	*1.6*	*7.23 - 7.66*	*7.23 - 7.66*	*13,000*	*20,000*
				CWTP BTV (applicable to MW-65)	*0.73*	*486*	*631*	*2.1*	*7.00 - 7.44*	*7.00 - 7.44*	*13,000*	*20,000*
				CWTP GWPS (applicable to downgradient wells)	--	--	--	--	--	--	--	--
Well Id	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample Identification**								
MW-72	URS/CWTP	Background	11/08/2023	FC-CCR-MW72-1123	**0.21 J**	**500 J**	**430**	<0.8	**6.89**	**7.3 J**	**9,500**	**15,000**
MW-73	URS/CWTP	Background	2/2/2017	FC-CCR-MW73-117	**1.6**	**480**	**380**	<0.40	**6.65**	**7.5**	**5,400**	**8,800**
MW-73	URS/CWTP	Background	2/2/2017	FC-CCR-MW73-117	--	--	--	<0.40	--	--	--	--
MW-73	URS/CWTP	Background	2/2/2017	FC-CCR-MW73-117	--	--	--	--	--	--	--	--
MW-73	URS/CWTP	Background	4/18/2017	FC-CCR-MW73-41817	**1.6**	**450**	**340**	<0.80	**6.70**	**7.3**	**5,700**	**9,200**
MW-73	URS/CWTP	Background	4/18/2017	FC-CCR-MW73-41817	--	--	--	--	--	--	--	--
MW-73	URS/CWTP	Background	4/18/2017	FC-CCR-MW73-41817	--	--	--	<0.80	--	--	--	--
MW-73	URS/CWTP	Background	5/2/2017	FC-CCR-MW73-5217	--	--	--	<5.0	**6.70**	--	--	--
MW-73	URS/CWTP	Background	5/2/2017	FC-CCR-MW73-5217	--	--	--	--	--	--	--	--
MW-73	URS/CWTP	Background	5/29/2017	FC-CCR-MW73-52917	--	--	--	<0.80	**6.70**	--	--	--
MW-73	URS/CWTP	Background	5/29/2017	FC-CCR-MW73-52917	--	--	--	--	--	--	--	--
MW-73	URS/CWTP	Background	6/22/2017	FC-CCR-MW73-62217	**1.6**	**490**	**450**	--	**6.74**	**7.0**	**6,700**	**11,000**
MW-73	URS/CWTP	Background	6/22/2017	FC-CCR-MW73-62217	--	--	--	<0.80	--	--	--	--
MW-73	URS/CWTP	Background	6/22/2017	FC-CCR-MW73-62117	--	--	--	--	--	--	--	--
MW-73	URS/CWTP	Background	7/22/2017	FC-CCR-MW73-72217	**1.6**	**490**	**520**	<0.80	**6.83**	**7.1**	**8,000**	**12,000**
MW-73	URS/CWTP	Background	7/22/2017	FC-CCR-MW73-72217	--	--	--	<2.0	--	--	--	--
MW-73	URS/CWTP	Background	7/22/2017	FC-CCR-MW73-72217	--	--	--	--	--	--	--	--
MW-73	URS/CWTP	Background	7/22/2017	*DUP* FC-CCR-FD02-72217	**1.6**	**490**	**500**	<2.0	--	**7.1**	**7,800**	**12,000**
MW-73	URS/CWTP	Background	7/22/2017	*DUP* FC-CCR-FD02-72217	--	--	--	--	--	--	--	--
MW-73	URS/CWTP	Background	8/10/2017	FC-CCR-MW73-81017	**1.7**	**500**	**540**	--	**6.45**	**7.4**	**7,700**	**12,000**
MW-73	URS/CWTP	Background	8/10/2017	FC-CCR-MW73-81017	--	--	--	<0.80	--	--	--	--
MW-73	URS/CWTP	Background	8/10/2017	FC-CCR-MW73-81017	--	--	--	--	--	--	--	--
MW-73	URS/CWTP	Background	8/17/2017	FC-CCR-MW73-81717	--	--	--	--	--	--	--	--
MW-73	URS/CWTP	Background	8/17/2017	FC-CCR-MW73-81717	**1.7**	**540**	**550**	<0.80	**6.50**	**7.0**	**7,600**	**11,000**
MW-73	URS/CWTP	Background	9/10/2017	FC-CCR-MW73-91017	**1.9**	**520**	**470**	--	**6.62**	**7.0**	**6,000**	**9,900**
MW-73	URS/CWTP	Background	9/10/2017	FC-CCR-MW73-91017	--	--	--	<0.80	--	--	--	--
MW-73	URS/CWTP	Background	9/10/2017	FC-CCR-MW73-91017	--	--	--	--	--	--	--	--
MW-73	URS/CWTP	Background	10/12/2017	FC-CCR-MW73-101217	--	--	--	--	--	--	--	--
MW-73	URS/CWTP	Background	10/12/2017	FC-CCR-MW73-101217	**2.0**	**510**	**310**	<0.80	**6.64**	**7.3**	**3,900**	**6,600**
MW-73	URS/CWTP	Background	10/12/2017	*DUP* FC-CCR-FD01-101217	--	--	--	--	--	--	--	--
MW-73	URS/CWTP	Background	10/12/2017	*DUP* FC-CCR-FD01-101217	**2.0**	**510**	**300**	<0.80	--	**7.1**	**3,700**	**6,600**
MW-73	URS/CWTP	Background	11/29/2017	FC-CCR-MW73-112917	**1.8**	**550**	**420**	<0.80	**6.61**	**7.1**	**5,600**	**8,900**
MW-73	URS/CWTP	Background	3/16/2018	FC-CCR-MW73-31618	--	--	--	--	--	--	--	--
MW-73	URS/CWTP	Background	6/2/2018	FC-CCR-MW-73-6218	--	--	--	--	--	--	--	--
MW-73	URS/CWTP	Background	6/2/2018	FC-CCR-MW-73-6218	**1.6**	**460**	**550**	<0.80	**6.67**	**6.9**	**7,100**	**12,000**
MW-73	URS/CWTP	Background	11/3/2018	FC-CCR-MW73-11318	**1.7**	**480**	**660**	<0.80	**6.64**	**7.0**	**7,500**	**12,000**
MW-73	URS/CWTP	Background	11/3/2018	FC-CCR-MW73-11318	--	--	--	--	--	--	--	--
MW-73	URS/CWTP	Background	3/18/2019	FC-CCR-MW73-031819	--	--	--	<0.80	**6.95**	--	--	--
MW-73	URS/CWTP	Background	3/18/2019	FC-CCR-MW73-031819	--	--	--	--	--	--	--	--
MW-73	URS/CWTP	Background	5/6/2019	FC-CCR-MW73-5619	--	--	--	--	**6.51**	--	--	--
MW-73	URS/CWTP	Background	12/2/2019	FC-CCR-MW73-120219	**1.6**	**460**	**520**	<0.80	**6.49**	**7.1 J**	**7,100**	**11000 J**
MW-73	URS/CWTP	Background	12/2/2019	*DUP* FC-CCR-FD01-120219	**1.7**	**480**	**500**	<0.80	--	**7.0 J**	**6,900**	**11000 J**
MW-73	URS/CWTP	Background	6/20/2020	FC-CCR-MW73-0620	**1.7**	**450**	**520**	<0.8	**6.53**	**7.2 J**	**7,200**	**12,000**
MW-73	URS/CWTP	Background	11/5/2020	FC-CCR-MW73-1120	**1.6**	**480**	**530**	**0.063 J**	**6.65**	**7.0 J**	**7,100**	**12,000**
MW-73	URS/CWTP	Background	4/22/2021	FC-CCR-MW73-0421	**1.6**	**530**	**380**	<0.4	**6.76**	**7.1 J**	**5,700**	**9,700**
MW-73	URS/CWTP	Background	11/13/2021	FC-CCR-MW73-1121	**1.6**	**460**	**560**	**0.12 J**	**6.48**	**7.0 J**	**7,400**	**9,600**
MW-73	URS/CWTP	Background	5/22/2022	FC-CCR-MW73-0522	**1.6**	**470**	**570**	<0.8	**6.55**	**7.47 J**	**7,100**	**11,000**

Table F-7
Groundwater Sampling Results for the CWTP Monitoring Wells - Appendix III Constituents

					Appendix III Constituents							
				Constituent:	Boron	Calcium	Chloride	Fluoride	pH (Field Measurement)	pH (Laboratory Measurement)	Sulfate	Total Dissolved Solids
				Filtered:	N	N	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	su	su	mg/L	mg/L
				CWTP BTV (applicable to MW-62)	*2*	*536*	*631*	*1.8*	*6.5 - 6.9*	*6.5 - 6.9*	*13,000*	*20,000*
				CWTP BTV (applicable to MW-63)	*2*	*536*	*631*	*2.3*	*6.5 - 6.9*	*6.5 - 6.9*	*13,000*	*20,000*
				CWTP BTV (applicable to MW-64)	*0.73*	*486*	*631*	*1.6*	*7.23 - 7.66*	*7.23 - 7.66*	*13,000*	*20,000*
				CWTP BTV (applicable to MW-65)	*0.73*	*486*	*631*	*2.1*	*7.00 - 7.44*	*7.00 - 7.44*	*13,000*	*20,000*
				CWTP GWPS (applicable to downgradient wells)	--	--	--	--	--	--	--	--
Well Id	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample Identification**								
MW-73	URS/CWTP	Background	8/13/2022	FC-CCR-MW73-0822	**1.6**	**--**	**--**	**--**	**6.66**	**6.9 J**	**--**	**--**
MW-73	URS/CWTP	Background	11/14/2022	FC-CCR-MW73-1122	**1.6**	**490**	**610**	<0.8	**6.73**	**7.0 J**	**6,800**	**12,000**
MW-73	URS/CWTP	Background	01/27/2023	FC-CCR-MW73-0123	**1.6**	**480**	**--**	**--**	**6.77**	**--**	**--**	**--**
MW-73	URS/CWTP	Background	05/07/2023	FC-CCR-MW73-0523	**1.9**	**510**	**740**	<80	**6.62**	**7.0 J**	**8,200**	**12,000**
MW-73	URS/CWTP	Background	06/27/2023	FC-CCR-MW73-0623	**1.7**	**520**	**640**	<20	**6.82**	**6.9 J**	**7,000**	**12,000**
MW-73	URS/CWTP	Background	11/08/2023	FC-CCR-MW73-1123	**1.7 J**	**550 J**	**650**	<0.8	**6.72**	**7.2 J**	**7,000**	**12,000**
MW-62	CWTP	Downgradient Boundary	11/9/2015	FC-CCR-MW62-110915	**2.1**	**520**	**150**	**1.6**	**6.63**	**6.94**	**3,600**	**6,700**
MW-62	CWTP	Downgradient Boundary	11/9/2015	FC-CCR-MW62-110915	--	--	--	--	--	--	--	--
MW-62	CWTP	Downgradient Boundary	4/27/2016	FC-CCR-MW-62-042716	--	--	--	**1.6**	**6.77**	--	--	--
MW-62	CWTP	Downgradient Boundary	6/5/2016	FC-CCR-MW62-616	--	--	--	--	--	--	--	--
MW-62	CWTP	Downgradient Boundary	6/5/2016	FC-CCR-MW62-616	**2.0**	**510**	**140**	**1.5**	**6.50**	**6.86**	**3,300**	**5,900**
MW-62	CWTP	Downgradient Boundary	8/20/2016	FC-CCR-MW62-816	**2.3**	**530**	**120**	**1.5**	**7.40**	**6.7**	**3,300**	**5,800**
MW-62	CWTP	Downgradient Boundary	8/20/2016	FC-CCR-MW62-816	--	--	--	**1.3**	--	--	--	--
MW-62	CWTP	Downgradient Boundary	8/20/2016	FC-CCR-MW62-816	--	--	--	--	--	--	--	--
MW-62	CWTP	Downgradient Boundary	9/12/2016	FC-CCR-MW62-916	**2.5**	**570**	**130**	**1.5**	**6.73**	**6.9**	**3,300**	**2,400**
MW-62	CWTP	Downgradient Boundary	9/12/2016	FC-CCR-MW62-916	--	--	--	**1.3**	--	--	--	--
MW-62	CWTP	Downgradient Boundary	9/12/2016	FC-CCR-MW62-916	--	--	--	--	--	--	--	--
MW-62	CWTP	Downgradient Boundary	10/19/2016	FC-CCR-MW62-1016	**2.2**	**480**	**120**	**1.2**	--	**7.0**	**3,300**	**6,000**
MW-62	CWTP	Downgradient Boundary	10/19/2016	FC-CCR-MW62-1016	--	--	--	--	**6.57**	--	--	--
MW-62	CWTP	Downgradient Boundary	2/1/2017	FC-CCR-MW62-117	**2.1**	**510**	**110**	**1.4**	**6.68**	**7.6**	**3,400**	**5,600**
MW-62	CWTP	Downgradient Boundary	2/1/2017	FC-CCR-MW62-117	--	--	--	**1.4**	--	--	--	--
MW-62	CWTP	Downgradient Boundary	2/1/2017	FC-CCR-MW62-117	--	--	--	--	--	--	--	--
MW-62	CWTP	Downgradient Boundary	4/16/2017	FC-CCR-MW62-41617	**1.9**	**500**	**120**	**1.2**	**6.64**	**7.2**	**3,300**	**5,900**
MW-62	CWTP	Downgradient Boundary	4/16/2017	FC-CCR-MW62-41617	--	--	--	--	--	--	--	--
MW-62	CWTP	Downgradient Boundary	4/16/2017	FC-CCR-MW62-41617	--	--	--	**1.2**	--	--	--	--
MW-62	CWTP	Downgradient Boundary	5/1/2017	FC-CCR-MW62-5117	--	--	--	**3.3**	**6.64**	--	--	--
MW-62	CWTP	Downgradient Boundary	5/1/2017	FC-CCR-MW62-5117	--	--	--	--	--	--	--	--
MW-62	CWTP	Downgradient Boundary	5/29/2017	FC-CCR-MW62-52917	--	--	--	**1.2**	**6.50**	--	--	--
MW-62	CWTP	Downgradient Boundary	5/29/2017	FC-CCR-MW62-52917	--	--	--	--	--	--	--	--
MW-62	CWTP	Downgradient Boundary	6/21/2017	FC-CCR-MW62-62117	**1.9**	**520**	**120**	--	**6.54**	**7.0**	**3,600**	**5,700**
MW-62	CWTP	Downgradient Boundary	6/21/2017	FC-CCR-MW62-62117	--	--	--	**1.4**	--	--	--	--
MW-62	CWTP	Downgradient Boundary	6/21/2017	FC-CCR-MW62-62117	--	--	--	--	--	--	--	--
MW-62	CWTP	Downgradient Boundary	7/21/2017	FC-CCR-MW62-72117	**2.1**	**540**	**99**	**1.5**	**6.69**	**7.0**	**3,300**	**5,400**
MW-62	CWTP	Downgradient Boundary	7/21/2017	FC-CCR-MW62-72117	--	--	--	--	--	--	--	--
MW-62	CWTP	Downgradient Boundary	7/21/2017	FC-CCR-MW62-72117	--	--	--	--	--	--	--	--
MW-62	CWTP	Downgradient Boundary	8/9/2017	FC-CCR-MW62-8917	**2.2**	**540**	**110**	--	**6.41**	**7.0**	**3,400**	**5,400**
MW-62	CWTP	Downgradient Boundary	8/9/2017	FC-CCR-MW62-8917	--	--	--	**1.4**	--	--	--	--
MW-62	CWTP	Downgradient Boundary	8/9/2017	FC-CCR-MW62-8917	--	--	--	--	--	--	--	--
MW-62	CWTP	Downgradient Boundary	8/16/2017	FC-CCR-MW62-81617	--	--	--	--	**6.36**	--	--	--
MW-62	CWTP	Downgradient Boundary	8/16/2017	FC-CCR-MW62-81617	**2.1**	**590**	**110**	**1.6**	--	**7.0**	**3,200**	**5,400**
MW-62	CWTP	Downgradient Boundary	9/9/2017	FC-CCR-MW62-9917	**2.3**	**570**	**120**	--	**6.41**	**6.8**	**3,300**	**5,500**
MW-62	CWTP	Downgradient Boundary	9/9/2017	FC-CCR-MW62-9917	--	--	--	**1.5**	--	--	--	--
MW-62	CWTP	Downgradient Boundary	9/9/2017	FC-CCR-MW62-9917	--	--	--	--	--	--	--	--
MW-62	CWTP	Downgradient Boundary	10/13/2017	FC-CCR-MW62-101317	--	--	--	--	--	--	--	--
MW-62	CWTP	Downgradient Boundary	10/13/2017	FC-CCR-MW62-101317	**2.2**	**520**	**130**	**1.5**	**6.46**	**6.8**	**3,300**	**5,600**
MW-62	CWTP	Downgradient Boundary	11/30/2017	FC-CCR-MW62-113017	**2.3**	**570**	**130**	**1.4**	**6.43**	**7.0**	**3,400**	**5,900**
MW-62	CWTP	Downgradient Boundary	4/6/2018	FC-CCR-MW62-4618	**2.1**	**520**	--	--	**6.70**	--	--	--

Table F-7
Groundwater Sampling Results for the CWTP Monitoring Wells - Appendix III Constituents

					Appendix III Constituents							
				Constituent:	Boron	Calcium	Chloride	Fluoride	pH (Field Measurement)	pH (Laboratory Measurement)	Sulfate	Total Dissolved Solids
				Filtered:	N	N	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	su	su	mg/L	mg/L
				CWTP BTV (applicable to MW-62)	*2*	*536*	*631*	*1.8*	*6.5 - 6.9*	*6.5 - 6.9*	*13,000*	*20,000*
				CWTP BTV (applicable to MW-63)	*2*	*536*	*631*	*2.3*	*6.5 - 6.9*	*6.5 - 6.9*	*13,000*	*20,000*
				CWTP BTV (applicable to MW-64)	*0.73*	*486*	*631*	*1.6*	*7.23 - 7.66*	*7.23 - 7.66*	*13,000*	*20,000*
				CWTP BTV (applicable to MW-65)	*0.73*	*486*	*631*	*2.1*	*7.00 - 7.44*	*7.00 - 7.44*	*13,000*	*20,000*
				CWTP GWPS (applicable to downgradient wells)	--	--	--	--	--	--	--	--
Well Id	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample Identification**								
MW-62	CWTP	Downgradient Boundary	6/3/2018	FC-CCR-MW-62-6318	1.8	490	120	1.6	6.59	6.8	3,500	5,900
MW-62	CWTP	Downgradient Boundary	11/2/2018	FC-CCR-MW62-11218	2.4	550	110	1.5	6.46	6.8	3,300	5,600
MW-62	CWTP	Downgradient Boundary	4/1/2019	FC-CCR-MW62-4119	2.0	530	110	1.6	6.73	7.1	3,400	5,500
MW-62	CWTP	Downgradient Boundary	5/7/2019	FC-CCR-MW62-5719-01	1.8	540	--	1.4	6.65	7.2	--	5,800
MW-62	CWTP	Downgradient Boundary	12/3/2019	FC-CCR-MW62-120319	2.1	530	--	1.5	6.37	7.2 J	--	5,000
MW-62	CWTP	Downgradient Boundary	6/19/2020	FC-CCR-MW62-0620	1.9	490	82	1.8	6.90	6.9 J	2,800	4,700
MW-62	CWTP	Downgradient Boundary	11/5/2020	FC-CCR-MW62-1120	2.1 J	510	130	1.8	6.57	6.9 J	3,500	5,300
MW-62	CWTP	Downgradient Boundary	1/14/2021	FC-CCR-MW62-011421	--	--	--	1.2	--	--	--	--
MW-62	CWTP	Downgradient Boundary	4/22/2021	FC-CCR-MW62-0421	1.9	530	130	1.5	6.91	7.3 J	3,400	5,700
MW-62	CWTP	Downgradient Boundary	11/15/2021	FC-CCR-MW62-1121	2.3	530	180	1.4	6.51	7.7 J	4,000	6,700
MW-62	CWTP	Downgradient Boundary	5/20/2022	FC-CCR-MW62-0522	1.8	500	180	1.4	6.89	7.45 J	3,400	6,000
MW-62	CWTP	Downgradient Boundary	11/13/2022	FC-CCR-MW62-1122	2.1	610	200	1.6	6.75	7.0 J	4,000	7,100
MW-62	CWTP	Downgradient Boundary	01/27/2023	FC-CCR-MW62-0123	2.1	550	--	--	7.00	--	--	--
MW-62	CWTP	Downgradient Boundary	05/07/2023	FC-CCR-MW62-0523	2.2	550	<400	<80	6.75	7.0 J	3,500	6,400
MW-62	CWTP	Downgradient Boundary	06/28/2023	FC-CCR-MW62-0623	2.2	550	120	2.0	7.00	6.9 J	3,600	6,300
MW-62	CWTP	Downgradient Boundary	11/06/2023	FC-CCR-MW62-1123	2.9 J	610 J	140	1.6	6.63	7.0 J	2,100	6,800
MW-63	CWTP	Downgradient Boundary	11/4/2015	FC-CCR-MW63-110415	1.6	420	77	2.4	6.86	--	2,800	4,100
MW-63	CWTP	Downgradient Boundary	11/4/2015	FC-CCR-MW63-110415	--	--	--	--	--	--	--	--
MW-63	CWTP	Downgradient Boundary	4/27/2016	FC-CCR-MW-63-042716	--	--	--	2.0	6.88	--	--	--
MW-63	CWTP	Downgradient Boundary	6/5/2016	FC-CCR-MW63-616	--	--	--	--	--	--	--	--
MW-63	CWTP	Downgradient Boundary	6/5/2016	FC-CCR-MW63-616	1.4	500	110	1.9	6.70	7.05	2,500	4,400
MW-63	CWTP	Downgradient Boundary	8/20/2016	FC-CCR-MW63-816	1.9	530	98	1.9	6.92	6.9	2,800	4,700
MW-63	CWTP	Downgradient Boundary	8/20/2016	FC-CCR-MW63-816	--	--	--	1.9	--	--	--	--
MW-63	CWTP	Downgradient Boundary	8/20/2016	FC-CCR-MW63-816	--	--	--	--	--	--	--	--
MW-63	CWTP	Downgradient Boundary	9/12/2016	FC-CCR-MW63-916	2.0	550	110	2.1	7.03	7.1	2,800	4,700
MW-63	CWTP	Downgradient Boundary	9/12/2016	FC-CCR-MW63-916	--	--	--	2.0	--	--	--	--
MW-63	CWTP	Downgradient Boundary	9/12/2016	FC-CCR-MW63-916	--	--	--	--	--	--	--	--
MW-63	CWTP	Downgradient Boundary	10/19/2016	FC-CCR-MW63-1016	1.7	470	100	1.8	6.82	7.2	2,700	4,500
MW-63	CWTP	Downgradient Boundary	10/19/2016	FC-CCR-MW63-1016	--	--	--	--	--	--	--	--
MW-63	CWTP	Downgradient Boundary	10/20/2016	FC-CCR-MW100-1016	1.7	480	98	2.0	--	7.2	2,600	4,400
MW-63	CWTP	Downgradient Boundary	10/20/2016	FC-CCR-MW100-1016	--	--	--	--	--	--	--	--
MW-63	CWTP	Downgradient Boundary	1/31/2017	FC-CCR-MW63-117	1.4	510	95	2.0	6.67	7.7	2,600	4,200
MW-63	CWTP	Downgradient Boundary	1/31/2017	FC-CCR-MW63-117	--	--	--	2.0	--	--	--	--
MW-63	CWTP	Downgradient Boundary	1/31/2017	FC-CCR-MW63-117	--	--	--	--	--	--	--	--
MW-63	CWTP	Downgradient Boundary	1/31/2017	FC-CCR-MW100-117	1.4	500	93	1.7	--	7.6	2,500	4,200
MW-63	CWTP	Downgradient Boundary	1/31/2017	FC-CCR-MW100-117	--	--	--	1.8	--	--	--	--
MW-63	CWTP	Downgradient Boundary	1/31/2017	FC-CCR-MW100-117	--	--	--	--	--	--	--	--
MW-63	CWTP	Downgradient Boundary	4/17/2017	FC-CCR-MW63-41717	1.4	520	98	1.6	6.78	7.3	2,600	4,400
MW-63	CWTP	Downgradient Boundary	4/17/2017	FC-CCR-MW63-41717	--	--	--	--	--	--	--	--
MW-63	CWTP	Downgradient Boundary	4/17/2017	FC-CCR-MW63-41717	--	--	--	1.5	--	--	--	--
MW-63	CWTP	Downgradient Boundary	5/2/2017	FC-CCR-MW63-5217	--	--	--	2.5	6.79	--	--	--
MW-63	CWTP	Downgradient Boundary	5/2/2017	FC-CCR-MW63-5217	--	--	--	--	--	--	--	--
MW-63	CWTP	Downgradient Boundary	5/28/2017	FC-CCR-MW63-52817	--	--	--	1.6	6.80	--	--	--
MW-63	CWTP	Downgradient Boundary	5/28/2017	FC-CCR-MW63-52817	--	--	--	--	--	--	--	--
MW-63	CWTP	Downgradient Boundary	5/28/2017	*DUP* FC-CCR-FD01-52817	--	--	--	1.6	--	--	--	--
MW-63	CWTP	Downgradient Boundary	5/28/2017	*DUP* FC-CCR-FD01-52817	--	--	--	--	--	--	--	--
MW-63	CWTP	Downgradient Boundary	6/21/2017	FC-CCR-MW63-62117	1.6	520	100	--	6.78	7.2	2,900	4,400

Table F-7
Groundwater Sampling Results for the CWTP Monitoring Wells - Appendix III Constituents

					Appendix III Constituents							
				Constituent:	Boron	Calcium	Chloride	Fluoride	pH (Field Measurement)	pH (Laboratory Measurement)	Sulfate	Total Dissolved Solids
				Filtered:	N	N	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	su	su	mg/L	mg/L
				CWTP BTV (applicable to MW-62)	*2*	*536*	*631*	*1.8*	*6.5 - 6.9*	*6.5 - 6.9*	*13,000*	*20,000*
				CWTP BTV (applicable to MW-63)	*2*	*536*	*631*	*2.3*	*6.5 - 6.9*	*6.5 - 6.9*	*13,000*	*20,000*
				CWTP BTV (applicable to MW-64)	*0.73*	*486*	*631*	*1.6*	*7.23 - 7.66*	*7.23 - 7.66*	*13,000*	*20,000*
				CWTP BTV (applicable to MW-65)	*0.73*	*486*	*631*	*2.1*	*7.00 - 7.44*	*7.00 - 7.44*	*13,000*	*20,000*
				CWTP GWPS (applicable to downgradient wells)	--	--	--	--	--	--	--	--
Well Id	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample Identification**								
MW-63	CWTP	Downgradient Boundary	6/21/2017	FC-CCR-MW63-62117	--	--	--	1.9	--	--	--	--
MW-63	CWTP	Downgradient Boundary	6/21/2017	FC-CCR-MW63-62117	--	--	--	--	--	--	--	--
MW-63	CWTP	Downgradient Boundary	7/21/2017	FC-CCR-MW63-72117	1.8	530	98	2.0	6.87	7.2	2,900	4,600
MW-63	CWTP	Downgradient Boundary	7/21/2017	FC-CCR-MW63-72117	--	--	--	--	--	--	--	--
MW-63	CWTP	Downgradient Boundary	7/21/2017	FC-CCR-MW63-72117	--	--	--	--	--	--	--	--
MW-63	CWTP	Downgradient Boundary	8/9/2017	FC-CCR-MW63-8917	1.9	530	97	--	6.56	7.2	2,900	4,500
MW-63	CWTP	Downgradient Boundary	8/9/2017	FC-CCR-MW63-8917	--	--	--	1.9	--	--	--	--
MW-63	CWTP	Downgradient Boundary	8/9/2017	FC-CCR-MW63-8917	--	--	--	--	--	--	--	--
MW-63	CWTP	Downgradient Boundary	8/16/2017	FC-CCR-MW63-81617	--	--	--	--	--	--	--	--
MW-63	CWTP	Downgradient Boundary	8/16/2017	FC-CCR-MW63-81617	1.8	580	100	2.1	6.53	7.2	2,700	4,500
MW-63	CWTP	Downgradient Boundary	9/9/2017	FC-CCR-MW63-9917	2.0	540	97	--	6.83	7.0	2,700	4,300
MW-63	CWTP	Downgradient Boundary	9/9/2017	FC-CCR-MW63-9917	--	--	--	2.0	--	--	--	--
MW-63	CWTP	Downgradient Boundary	9/9/2017	FC-CCR-MW63-9917	--	--	--	--	--	--	--	--
MW-63	CWTP	Downgradient Boundary	10/13/2017	FC-CCR-MW63-101317	--	--	--	--	--	--	--	--
MW-63	CWTP	Downgradient Boundary	10/13/2017	FC-CCR-MW63-101317	1.8	500	90	2.0	6.69	7.1	2,700	4,300
MW-63	CWTP	Downgradient Boundary	11/30/2017	FC-CCR-MW63-113017	1.7	560	91	1.8	6.72	7.2	2,700	4,500
MW-63	CWTP	Downgradient Boundary	4/6/2018	FC-CCR-MW63-4618	1.3	530	--	--	6.75	--	--	--
MW-63	CWTP	Downgradient Boundary	6/3/2018	FC-CCR-MW-63-6318	1.4	510	90	1.7	6.76	7.1	2,600	4,500
MW-63	CWTP	Downgradient Boundary	11/2/2018	FC-CCR-MW63-112818	1.9	550	88	1.9	6.66	7.1	2,800	4,300
MW-63	CWTP	Downgradient Boundary	4/1/2019	FC-CCR-MW63-4119	1.2	500	88	1.7	6.80	7.0	2,600	4,300
MW-63	CWTP	Downgradient Boundary	5/7/2019	FC-CCR-MW63-5719-02	1.3	540	--	1.6	6.63	7.2	--	4,400
MW-63	CWTP	Downgradient Boundary	12/3/2019	FC-CCR-MW63-120319	1.5	550	--	1.8	6.58	7.1 J	--	4,300
MW-63	CWTP	Downgradient Boundary	12/3/2019	*DUP* FC-CCR-FD01-120319	1.6	560	--	1.8	--	7.2 J	--	4,100
MW-63	CWTP	Downgradient Boundary	6/19/2020	FC-CCR-MW63-0620	1.5	540	77	2.1	--	7.2 J	2,400	4,200
MW-63	CWTP	Downgradient Boundary	11/5/2020	FC-CCR-MW63-1120	1.7	550	85	2.2	6.72	7.1 J	2,800	4,200
MW-63	CWTP	Downgradient Boundary	4/22/2021	FC-CCR-MW63-0421	0.93	400	88	2.0	7.07	7.5 J	1,900	3,200
MW-63	CWTP	Downgradient Boundary	7/8/2021	FC-CCR-MW63-0721	--	--	--	--	7.21	7.2 J	--	--
MW-63	CWTP	Downgradient Boundary	11/15/2021	FC-CCR-MW63-1121	1.3	440	81 J	0.28 J	6.89	7.7 J	2,100	3,600
MW-63	CWTP	Downgradient Boundary	5/20/2022	FC-CCR-MW63-0522	0.83	310	93	2.1	7.09	7.40 J	1,500	2,500
MW-63	CWTP	Downgradient Boundary	8/14/2022	FC-CCR-MW63-0822	--	--	--	--	6.88	7.1 J	--	--
MW-63	CWTP	Downgradient Boundary	11/13/2022	FC-CCR-MW63-1122	1.1	420	80	2.1	7.00	7.4 J	1,700	3,000
MW-63	CWTP	Downgradient Boundary	05/07/2023	FC-CCR-MW63-0523	0.90	470	76	<8	6.99	7.4 J	1,900	3,400
MW-63	CWTP	Downgradient Boundary	06/27/2023	FC-CCR-MW63-0623	0.79	330	66	1.8	7.30	7.3 J	1,300	2,400
MW-63	CWTP	Downgradient Boundary	11/06/2023	FC-CCR-MW63-1123	1.2 J	440 J	71	2.2	6.95	7.4 J	1,500	2,700
MW-64	CWTP	Downgradient Boundary	11/5/2015	FC-CCR-MW64-110515	0.64	87	49	1.5	7.64	--	320	780
MW-64	CWTP	Downgradient Boundary	11/5/2015	FC-CCR-MW64-110515	--	--	--	--	--	--	--	--
MW-64	CWTP	Downgradient Boundary	4/27/2016	FC-CCR-MW-64-042716	--	--	--	1.4	7.50	--	--	--
MW-64	CWTP	Downgradient Boundary	6/5/2016	FC-CCR-MW64-616	--	--	--	--	--	--	--	--
MW-64	CWTP	Downgradient Boundary	6/5/2016	FC-CCR-MW64-616	0.58	86	52	1.4	7.29	7.66	350	800
MW-64	CWTP	Downgradient Boundary	8/20/2016	FC-CCR-MW64-816	0.65	89	46	1.3	7.68	7.5	330	790
MW-64	CWTP	Downgradient Boundary	8/20/2016	FC-CCR-MW64-816	--	--	--	1.6	--	--	--	--
MW-64	CWTP	Downgradient Boundary	8/20/2016	FC-CCR-MW64-816	--	--	--	--	--	--	--	--
MW-64	CWTP	Downgradient Boundary	9/12/2016	FC-CCR-MW64-916	0.67	90	52	1.5	7.54	7.7	320	790
MW-64	CWTP	Downgradient Boundary	9/12/2016	FC-CCR-MW64-916	--	--	--	1.5	--	--	--	--
MW-64	CWTP	Downgradient Boundary	9/12/2016	FC-CCR-MW64-916	--	--	--	--	--	--	--	--
MW-64	CWTP	Downgradient Boundary	10/19/2016	FC-CCR-MW64-1016	0.64	83	53	1.5	7.52	7.8	330	790
MW-64	CWTP	Downgradient Boundary	10/19/2016	FC-CCR-MW64-1016	--	--	--	--	--	--	--	--

Table F-7
Groundwater Sampling Results for the CWTP Monitoring Wells - Appendix III Constituents

					Appendix III Constituents							
				Constituent:	Boron	Calcium	Chloride	Fluoride	pH (Field Measurement)	pH (Laboratory Measurement)	Sulfate	Total Dissolved Solids
				Filtered:	N	N	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	su	su	mg/L	mg/L
				CWTP BTV (applicable to MW-62)	*2*	*536*	*631*	*1.8*	*6.5 - 6.9*	*6.5 - 6.9*	*13,000*	*20,000*
				CWTP BTV (applicable to MW-63)	*2*	*536*	*631*	*2.3*	*6.5 - 6.9*	*6.5 - 6.9*	*13,000*	*20,000*
				CWTP BTV (applicable to MW-64)	*0.73*	*486*	*631*	*1.6*	*7.23 - 7.66*	*7.23 - 7.66*	*13,000*	*20,000*
				CWTP BTV (applicable to MW-65)	*0.73*	*486*	*631*	*2.1*	*7.00 - 7.44*	*7.00 - 7.44*	*13,000*	*20,000*
				CWTP GWPS (applicable to downgradient wells)	--	--	--	--	--	--	--	--
Well Id	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample Identification**								
MW-64	CWTP	Downgradient Boundary	1/31/2017	FC-CCR-MW64-117	**0.61**	**85**	**48**	**1.4**	**7.38**	**8.1**	**340**	**800**
MW-64	CWTP	Downgradient Boundary	1/31/2017	FC-CCR-MW64-117	--	--	--	**1.5**	--	--	--	--
MW-64	CWTP	Downgradient Boundary	1/31/2017	FC-CCR-MW64-117	--	--	--	--	--	--	--	--
MW-64	CWTP	Downgradient Boundary	4/17/2017	FC-CCR-MW64-41717	**0.58**	**85**	**51**	**1.4**	**7.53**	**7.9**	**870**	**800**
MW-64	CWTP	Downgradient Boundary	4/17/2017	FC-CCR-MW64-41717	--	--	--	--	--	--	--	--
MW-64	CWTP	Downgradient Boundary	4/17/2017	FC-CCR-MW64-41717	--	--	--	**1.4**	--	--	--	--
MW-64	CWTP	Downgradient Boundary	5/2/2017	FC-CCR-MW64-5217	--	--	--	**1.3**	**7.47**	--	--	--
MW-64	CWTP	Downgradient Boundary	5/2/2017	FC-CCR-MW64-5217	--	--	--	--	--	--	--	--
MW-64	CWTP	Downgradient Boundary	5/2/2017	*DUP* FC-CCR-FD02-5217	--	--	--	**1.3**	--	--	--	--
MW-64	CWTP	Downgradient Boundary	5/2/2017	*DUP* FC-CCR-FD02-5217	--	--	--	--	--	--	--	--
MW-64	CWTP	Downgradient Boundary	5/28/2017	FC-CCR-MW64-52817	--	--	--	**1.5**	**7.45**	--	--	--
MW-64	CWTP	Downgradient Boundary	5/28/2017	FC-CCR-MW64-52817	--	--	--	--	--	--	--	--
MW-64	CWTP	Downgradient Boundary	6/21/2017	FC-CCR-MW64-62117	**0.55**	**86**	**51**	--	**7.50**	**7.8**	**390**	**770**
MW-64	CWTP	Downgradient Boundary	6/21/2017	FC-CCR-MW64-62117	--	--	--	**1.4**	--	--	--	--
MW-64	CWTP	Downgradient Boundary	6/21/2017	FC-CCR-MW64-62117	--	--	--	--	--	--	--	--
MW-64	CWTP	Downgradient Boundary	7/21/2017	FC-CCR-MW64-72117	**0.59**	**88**	**52**	**1.5**	**7.61**	**7.7**	**370**	**790**
MW-64	CWTP	Downgradient Boundary	7/21/2017	FC-CCR-MW64-72117	--	--	--	--	--	--	--	--
MW-64	CWTP	Downgradient Boundary	7/21/2017	FC-CCR-MW64-72117	--	--	--	--	--	--	--	--
MW-64	CWTP	Downgradient Boundary	8/9/2017	FC-CCR-MW64-8917	**0.61**	**89**	**52**	--	**7.31**	**7.8**	**380**	**890**
MW-64	CWTP	Downgradient Boundary	8/9/2017	FC-CCR-MW64-8917	--	--	--	**1.5**	--	--	--	--
MW-64	CWTP	Downgradient Boundary	8/9/2017	FC-CCR-MW64-8917	--	--	--	--	--	--	--	--
MW-64	CWTP	Downgradient Boundary	8/16/2017	FC-CCR-MW64-81617	--	--	--	--	--	--	--	--
MW-64	CWTP	Downgradient Boundary	8/16/2017	FC-CCR-MW64-81617	**0.58**	**89**	**53**	**1.5**	**7.29**	**7.8**	**360**	**790**
MW-64	CWTP	Downgradient Boundary	9/9/2017	FC-CCR-MW64-9917	**0.67**	**90**	**53**	--	**7.36**	**7.8**	**350**	**810**
MW-64	CWTP	Downgradient Boundary	9/9/2017	FC-CCR-MW64-9917	--	--	--	**1.5**	--	--	--	--
MW-64	CWTP	Downgradient Boundary	9/9/2017	FC-CCR-MW64-9917	--	--	--	--	--	--	--	--
MW-64	CWTP	Downgradient Boundary	10/13/2017	FC-CCR-MW64-101317	--	--	--	--	--	--	--	--
MW-64	CWTP	Downgradient Boundary	10/13/2017	FC-CCR-MW64-101317	**0.62**	**82**	**52**	**1.4**	**7.42**	**7.7**	**360**	**790**
MW-64	CWTP	Downgradient Boundary	11/30/2017	FC-CCR-MW64-113017	**0.64**	**90**	**52**	**1.4**	**7.37**	**7.7**	**350**	**780**
MW-64	CWTP	Downgradient Boundary	6/3/2018	FC-CCR-MW-64-6318	**0.48**	**85**	**50**	**1.4**	**7.54**	**7.7**	**390**	**800**
MW-64	CWTP	Downgradient Boundary	11/2/2018	FC-CCR-MW64-11218	**0.64**	**88**	**50**	**1.4**	**7.43**	**7.8**	**350**	**760**
MW-64	CWTP	Downgradient Boundary	4/1/2019	FC-CCR-MW64-4119	**0.48**	**81**	**51**	**1.4**	**7.48**	**7.7**	**360**	**760**
MW-64	CWTP	Downgradient Boundary	5/7/2019	FC-CCR-MW64-5719-03	**0.49**	**89**	--	**1.4**	**7.41**	**8.0**	--	**790**
MW-64	CWTP	Downgradient Boundary	5/7/2019	*DUP* FC-CCR-FD03-5719-04	**0.48**	**88**	--	**1.4**	--	**8.0**	--	**780**
MW-64	CWTP	Downgradient Boundary	12/3/2019	FC-CCR-MW64-120319	**0.56**	**82**	--	**1.5**	**7.29**	**7.8 J**	--	**720**
MW-64	CWTP	Downgradient Boundary	6/19/2020	FC-CCR-MW64-0620	**0.47**	**77**	**49**	**1.3**	**7.22**	**7.9 J**	**300**	**790**
MW-64	CWTP	Downgradient Boundary	11/5/2020	FC-CCR-MW64-1120	**0.51**	**73**	**53**	**1.6**	**7.49**	**7.8 J**	**270**	**720**
MW-64	CWTP	Downgradient Boundary	4/22/2021	FC-CCR-MW64-0421	**0.50**	**89**	**52**	**1.4**	**7.60**	**7.9 J**	**300**	**660**
MW-64	CWTP	Downgradient Boundary	11/15/2021	FC-CCR-MW64-1121	**0.58**	**72**	**51**	**1.4**	**7.29**	**7.1 J**	**270**	**680**
MW-64	CWTP	Downgradient Boundary	5/20/2022	FC-CCR-MW64-0522	**0.53**	**77**	**52**	**1.4**	**7.61**	**7.90 J**	**290**	**850**
MW-64	CWTP	Downgradient Boundary	5/20/2022	FC-CCR-SS01-0522	**0.554**	**86.4**	**43.1**	**0.874 J / 1.39**	**7.61**	**8.3 J**	**406**	**734**
MW-64	CWTP	Downgradient Boundary	11/13/2022	FC-CCR-MW64-1122	**0.52**	**70**	**51**	**1.6**	**7.56**	**7.9 J**	**230**	**610**
MW-64	CWTP	Downgradient Boundary	05/07/2023	FC-CCR-MW64-0523	**0.53**	**81**	**51**	**1.4**	**7.45**	**7.8 J**	**200**	**650**
MW-64	CWTP	Downgradient Boundary	06/27/2023	FC-CCR-MW64-0623	**0.51**	**75**	**53**	**1.3**	**7.65**	**7.7 J**	**240**	**640**
MW-64	CWTP	Downgradient Boundary	11/06/2023	FC-CCR-MW64-1123	**0.58 J**	**87 J**	**52**	**1.5**	**7.52**	**7.9 J**	<400	**710**
MW-65	CWTP	Downgradient Boundary	11/5/2015	FC-CCR-MW65-110515	**0.86**	**100**	**52**	**2.0**	**7.50**	--	**440**	**1,000**
MW-65	CWTP	Downgradient Boundary	11/5/2015	FC-CCR-MW65-110515	--	--	--	--	--	--	--	--

Table F-7
Groundwater Sampling Results for the CWTP Monitoring Wells - Appendix III Constituents

					Appendix III Constituents							
				Constituent:	Boron	Calcium	Chloride	Fluoride	pH (Field Measurement)	pH (Laboratory Measurement)	Sulfate	Total Dissolved Solids
				Filtered:	N	N	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	su	su	mg/L	mg/L
				CWTP BTV (applicable to MW-62)	*2*	*536*	*631*	*1.8*	*6.5 - 6.9*	*6.5 - 6.9*	*13,000*	*20,000*
				CWTP BTV (applicable to MW-63)	*2*	*536*	*631*	*2.3*	*6.5 - 6.9*	*6.5 - 6.9*	*13,000*	*20,000*
				CWTP BTV (applicable to MW-64)	*0.73*	*486*	*631*	*1.6*	*7.23 - 7.66*	*7.23 - 7.66*	*13,000*	*20,000*
				CWTP BTV (applicable to MW-65)	*0.73*	*486*	*631*	*2.1*	*7.00 - 7.44*	*7.00 - 7.44*	*13,000*	*20,000*
				CWTP GWPS (applicable to downgradient wells)	--	--	--	--	--	--	--	--
Well Id	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample Identification**								
MW-65	CWTP	Downgradient Boundary	4/27/2016	FC-CCR-MW-65-042716	--	--	--	**1.8**	**7.29**	--	--	--
MW-65	CWTP	Downgradient Boundary	6/5/2016	FC-CCR-MW65-616	--	--	--	--	--	--	--	--
MW-65	CWTP	Downgradient Boundary	6/5/2016	FC-CCR-MW65-616	**0.75**	**100**	**54**	**2.0**	**7.08**	**7.41**	**460**	**1,100**
MW-65	CWTP	Downgradient Boundary	8/20/2016	FC-CCR-MW65-816	**0.79**	**100**	**52**	**1.7**	**8.27**	**7.4**	**450**	**1,000**
MW-65	CWTP	Downgradient Boundary	8/20/2016	FC-CCR-MW65-816	--	--	--	**2.1**	--	--	--	--
MW-65	CWTP	Downgradient Boundary	8/20/2016	FC-CCR-MW65-816	--	--	--	--	--	--	--	--
MW-65	CWTP	Downgradient Boundary	9/12/2016	FC-CCR-MW65-916	**0.83**	**110**	**54**	**2.0**	**7.52**	**7.5**	**480**	**1,100**
MW-65	CWTP	Downgradient Boundary	9/12/2016	FC-CCR-MW65-916	--	--	--	**2.0**	--	--	--	--
MW-65	CWTP	Downgradient Boundary	9/12/2016	FC-CCR-MW65-916	--	--	--	--	--	--	--	--
MW-65	CWTP	Downgradient Boundary	10/19/2016	FC-CCR-MW65-1016	**0.77**	**95**	**54**	**2.0**	**7.36**	**7.6**	**450**	**1,000**
MW-65	CWTP	Downgradient Boundary	10/19/2016	FC-CCR-MW65-1016	--	--	--	--	--	--	--	--
MW-65	CWTP	Downgradient Boundary	2/1/2017	FC-CCR-MW65-117	**0.76**	**96**	**51**	**1.8**	**7.35**	**7.9**	**410**	**970**
MW-65	CWTP	Downgradient Boundary	2/1/2017	FC-CCR-MW65-117	--	--	--	**2.0**	--	--	--	--
MW-65	CWTP	Downgradient Boundary	2/1/2017	FC-CCR-MW65-117	--	--	--	--	--	--	--	--
MW-65	CWTP	Downgradient Boundary	4/16/2017	FC-CCR-MW65-41617	**0.83**	**120**	**60**	**1.8**	**7.21**	**7.6**	**490**	**1,300**
MW-65	CWTP	Downgradient Boundary	4/16/2017	FC-CCR-MW65-41617	--	--	--	--	--	--	--	--
MW-65	CWTP	Downgradient Boundary	4/16/2017	FC-CCR-MW65-41617	--	--	--	**1.7**	--	--	--	--
MW-65	CWTP	Downgradient Boundary	5/1/2017	FC-CCR-MW65-5117	--	--	--	**1.6**	**7.24**	--	--	--
MW-65	CWTP	Downgradient Boundary	5/1/2017	FC-CCR-MW65-5117	--	--	--	--	--	--	--	--
MW-65	CWTP	Downgradient Boundary	5/1/2017	*DUP* FC-CCR-FD01-5117	--	--	--	**1.6**	--	--	--	--
MW-65	CWTP	Downgradient Boundary	5/1/2017	*DUP* FC-CCR-FD01-5117	--	--	--	--	--	--	--	--
MW-65	CWTP	Downgradient Boundary	5/29/2017	FC-CCR-MW65-52917	--	--	--	**1.8**	**7.10**	--	--	--
MW-65	CWTP	Downgradient Boundary	5/29/2017	FC-CCR-MW65-52917	--	--	--	--	--	--	--	--
MW-65	CWTP	Downgradient Boundary	5/29/2017	*DUP* FC-CCR-FD02-52917	--	--	--	**1.8**	--	--	--	--
MW-65	CWTP	Downgradient Boundary	5/29/2017	*DUP* FC-CCR-FD02-52917	--	--	--	--	--	--	--	--
MW-65	CWTP	Downgradient Boundary	6/21/2017	FC-CCR-MW65-62117	**0.92**	**140**	**68**	--	**7.06**	**7.6**	**710**	**1,400**
MW-65	CWTP	Downgradient Boundary	6/21/2017	FC-CCR-MW65-62117	--	--	--	**1.9**	--	--	--	--
MW-65	CWTP	Downgradient Boundary	6/21/2017	FC-CCR-MW65-62117	--	--	--	--	--	--	--	--
MW-65	CWTP	Downgradient Boundary	6/21/2017	*DUP* FC-CCR-FD01-62117	**0.96**	**140**	**68**	--	--	**7.6**	**720**	**1,300**
MW-65	CWTP	Downgradient Boundary	6/21/2017	*DUP* FC-CCR-FD01-62117	--	--	--	**2.0**	--	--	--	--
MW-65	CWTP	Downgradient Boundary	6/21/2017	*DUP* FC-CCR-FD01-62117	--	--	--	--	--	--	--	--
MW-65	CWTP	Downgradient Boundary	7/21/2017	FC-CCR-MW65-72117	**0.76**	**110**	**53**	**2.0**	**7.31**	**7.5**	**470**	**1,000**
MW-65	CWTP	Downgradient Boundary	7/21/2017	FC-CCR-MW65-72117	--	--	--	**2.0**	--	--	--	--
MW-65	CWTP	Downgradient Boundary	7/21/2017	FC-CCR-MW65-72117	--	--	--	--	--	--	--	--
MW-65	CWTP	Downgradient Boundary	7/21/2017	*DUP* FC-CCR-FD01-72117	**0.77**	**110**	**53**	**2.0**	--	**7.5**	**470**	**1,000**
MW-65	CWTP	Downgradient Boundary	7/21/2017	*DUP* FC-CCR-FD01-72117	--	--	--	--	--	--	--	--
MW-65	CWTP	Downgradient Boundary	8/9/2017	FC-CCR-MW65-8917	**0.76**	**110**	**53**	--	**7.15**	**7.7**	**500**	**1,000**
MW-65	CWTP	Downgradient Boundary	8/9/2017	FC-CCR-MW65-8917	--	--	--	**2.0**	--	--	--	--
MW-65	CWTP	Downgradient Boundary	8/9/2017	FC-CCR-MW65-8917	--	--	--	--	--	--	--	--
MW-65	CWTP	Downgradient Boundary	8/16/2017	FC-CCR-MW65-81617	--	--	--	--	--	--	--	--
MW-65	CWTP	Downgradient Boundary	8/16/2017	FC-CCR-MW65-81617	**0.75**	**110**	**53**	**2.0**	**6.96**	**7.7**	**500**	**1,000**
MW-65	CWTP	Downgradient Boundary	8/16/2017	*DUP* FC-CCR-FD01-81617	--	--	--	--	--	--	--	--
MW-65	CWTP	Downgradient Boundary	8/16/2017	*DUP* FC-CCR-FD01-81617	**0.75**	**110**	**53**	**2.0**	--	**7.6**	**470**	**1,000**
MW-65	CWTP	Downgradient Boundary	9/9/2017	FC-CCR-MW65-9917	**0.80**	**110**	**53**	--	**7.04**	**7.5**	**450**	**1,000**
MW-65	CWTP	Downgradient Boundary	9/9/2017	FC-CCR-MW65-9917	--	--	--	**2.0**	--	--	--	--
MW-65	CWTP	Downgradient Boundary	9/9/2017	FC-CCR-MW65-9917	--	--	--	--	--	--	--	--
MW-65	CWTP	Downgradient Boundary	9/9/2017	*DUP* FC-CCR-FD01-9917	**0.81**	**110**	**54**	--	--	**7.5**	**450**	**1,000**

Table F-7
Groundwater Sampling Results for the CWTP Monitoring Wells - Appendix III Constituents

					Appendix III Constituents							
				Constituent:	Boron	Calcium	Chloride	Fluoride	pH (Field Measurement)	pH (Laboratory Measurement)	Sulfate	Total Dissolved Solids
				Filtered:	N	N	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	su	su	mg/L	mg/L
				CWTP BTV (applicable to MW-62)	*2*	*536*	*631*	*1.8*	*6.5 - 6.9*	*6.5 - 6.9*	*13,000*	*20,000*
				CWTP BTV (applicable to MW-63)	*2*	*536*	*631*	*2.3*	*6.5 - 6.9*	*6.5 - 6.9*	*13,000*	*20,000*
				CWTP BTV (applicable to MW-64)	*0.73*	*486*	*631*	*1.6*	*7.23 - 7.66*	*7.23 - 7.66*	*13,000*	*20,000*
				CWTP BTV (applicable to MW-65)	*0.73*	*486*	*631*	*2.1*	*7.00 - 7.44*	*7.00 - 7.44*	*13,000*	*20,000*
				CWTP GWPS (applicable to downgradient wells)	--	--	--	--	--	--	--	--
Well Id	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample Identification**								
MW-65	CWTP	Downgradient Boundary	9/9/2017	*DUP* FC-CCR-FD01-9917	--	--	--	**2.0**	--	--	--	--
MW-65	CWTP	Downgradient Boundary	9/9/2017	*DUP* FC-CCR-FD01-9917	--	--	--	--	--	--	--	--
MW-65	CWTP	Downgradient Boundary	10/13/2017	FC-CCR-MW65-101317	--	--	--	--	--	--	--	--
MW-65	CWTP	Downgradient Boundary	10/13/2017	FC-CCR-MW65-101317	**0.75**	**92**	**52**	**1.9**	**7.13**	**7.6**	**400**	**960**
MW-65	CWTP	Downgradient Boundary	10/13/2017	*DUP* FC-CCR-FD02-101317	--	--	--	--	--	--	--	--
MW-65	CWTP	Downgradient Boundary	10/13/2017	*DUP* FC-CCR-FD02-101317	**0.76**	**93**	**52**	**1.9**	--	**7.6**	**400**	**980**
MW-65	CWTP	Downgradient Boundary	11/30/2017	FC-CCR-MW65-113017	**0.79**	**100**	**53**	**2.0**	**7.21**	**7.6**	**410**	**990**
MW-65	CWTP	Downgradient Boundary	6/3/2018	FC-CCR-MW-65-6318	**0.62**	**98**	**52**	**1.9**	**7.22**	**7.5**	**480**	**1,000**
MW-65	CWTP	Downgradient Boundary	11/2/2018	FC-CCR-MW65-11218	**0.77**	**100**	**51**	**1.9**	**7.18**	**7.5**	**420**	**940**
MW-65	CWTP	Downgradient Boundary	4/1/2019	FC-CCR-MW65-4119	**0.58**	**92**	**52**	**1.8**	**7.20**	**7.6**	**400**	**910**
MW-65	CWTP	Downgradient Boundary	4/1/2019	*DUP* FC-CCR-FD1-4119	**0.57**	**90**	**52**	**1.9**	**7.20**	**7.6**	**390**	**930**
MW-65	CWTP	Downgradient Boundary	5/7/2019	FC-CCR-MW65-5719-05	**0.60**	**100**	--	**1.7**	**7.13**	**7.9**	--	**970**
MW-65	CWTP	Downgradient Boundary	12/3/2019	FC-CCR-MW65-120319	**0.65**	**89**	--	**1.9**	**7.10**	**7.6 J**	--	**850**
MW-65	CWTP	Downgradient Boundary	6/19/2020	FC-CCR-MW65-0620	**0.57**	**88**	**48**	**1.7**	**7.18**	**7.4 J**	**380**	**940**
MW-65	CWTP	Downgradient Boundary	11/5/2020	FC-CCR-MW65-1120	**0.61**	**82**	**52**	**2.1**	**7.36**	**7.7 J**	**350**	**780**
MW-65	CWTP	Downgradient Boundary	4/22/2021	FC-CCR-MW65-0421	**0.78**	**170**	**71**	**1.5**	**7.19**	**7.7 J**	**740**	**540**
MW-65	CWTP	Downgradient Boundary	7/8/2021	FC-CCR-MW65-0721	**0.87**	--	--	--	**7.40**	--	--	--
MW-65	CWTP	Downgradient Boundary	11/15/2021	FC-CCR-MW65-1121	**0.73**	**92**	**55**	**1.7**	**7.14**	**8.0 J**	**390**	**910**
MW-65	CWTP	Downgradient Boundary	5/20/2022	FC-CCR-MW65-0522	**0.85**	**200**	**140**	**1.5**	**7.27**	**7.73 J**	**980**	**1,900**
MW-65	CWTP	Downgradient Boundary	8/14/2022	FC-CCR-MW65-0822	**0.61**	--	--	--	**7.29**	--	--	--
MW-65	CWTP	Downgradient Boundary	11/13/2022	FC-CCR-MW65-1122	**0.64**	**93**	**59**	**1.8**	**7.35**	**7.8 J**	**300**	**840**
MW-65	CWTP	Downgradient Boundary	05/07/2023	FC-CCR-MW65-0523	**0.58**	**100**	**56**	<2	**7.36**	**7.6 J**	**300**	**900**
MW-65	CWTP	Downgradient Boundary	06/28/2023	FC-CCR-MW65-0623	**0.57**	**97**	**57**	**1.4**	**7.61**	**7.6 J**	**310**	**880**
MW-65	CWTP	Downgradient Boundary	11/06/2023	FC-CCR-MW65-1123	**0.67 J**	**110 J**	**54**	**1.5**	**7.34**	**7.7 J**	**300**	**840**

BTV exceedances are shown in grey shaded cells. GWPS exceedence are shown in red text.

Abbreviations and Data Qualifiers:

< = less than

BTV = Background Threshold Value

CCR = Coal Combustion Residual

ID = Identification

J = The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

mg/L = milligrams per liter

NJ = The analyte has been "tentatively identified" or "presumptively" as present and the associated numerical value is the estimated concentration in the sample.

pCi/L = Picocuries per liter

su = standard units

Table F-8
Groundwater Sampling Results for the CWTP Monitoring Wells - Appendix IV Constituents

					Appendix IV Constituents														
				Constituent:	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Fluoride	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium	Total Radium
				Filtered:	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L
				CWTP BTV (applicable to MW-62)	*0.00027*	*0.013*	*0.51*	*0.0022*	*0.00021*	*0.0014*	*0.014*	*4.2*	*0.0011*	*0.89*	*0.0002*	*0.011*	*0.47*	*0.0012*	*4.16*
				CWTP BTV (applicable to MW-63)															
				CWTP BTV (applicable to MW-64)															
				CWTP BTV (applicable to MW-65)															
				CWTP GWPS (applicable to downgradient wells)	*0.006*	*0.013*	*2*	*0.004*	*0.005*	*0.1*	*0.014*	*4.2*	*0.015*	*0.89*	*0.002*	*0.1*	*0.47*	*0.002*	*5*
Well Id	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample Identification**															
MW-71	URS/CWTP	Background	3/5/2016	FC-CCR-MW-71-030516	**0.00016**	**0.016**	**0.027**	**0.00064**	**0.00019**	**0.00078**	**0.0028**	<0.050	**0.00061**	**0.28**	<0.00020	**0.0028**	**0.19**	**0.00031**	--
MW-71	URS/CWTP	Background	3/5/2016	FC-CCR-MW-71-030516	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	3/5/2016	*DUP* FC-CCR-FD-2-030516	<0.0020	**0.017**	**0.025**	<0.0010	**0.00010**	**0.00054**	**0.0028**	<0.050	**0.00021**	**0.28**	<0.00020	**0.0029**	**0.20**	**0.00026**	--
MW-71	URS/CWTP	Background	3/5/2016	*DUP* FC-CCR-FD-2-030516	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	4/26/2016	FC-CCR-MW-71-042616	<0.0025	**0.0064**	**0.019**	<0.0010	**0.00015**	<0.00050	**0.0049**	<2.0	<0.00050	**0.45**	<0.00020	**0.0018**	**0.31**	**0.00047**	**2.2**
MW-71	URS/CWTP	Background	6/6/2016	FC-CCR-MW71-616	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**3.2**
MW-71	URS/CWTP	Background	6/6/2016	FC-CCR-MW71-616	**0.00012**	**0.0069**	**0.020**	<0.0010	**0.00015**	<0.00050	**0.0041**	<0.40	**0.00073**	**0.41**	<0.00020	**0.0014**	**0.28**	**0.00043**	--
MW-71	URS/CWTP	Background	8/21/2016	FC-CCR-MW71-816	--	--	--	--	--	--	--	<0.80	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	8/21/2016	FC-CCR-MW71-816	**0.00022**	**0.0066**	**0.014**	<0.0010	<0.00020	<0.0010	<0.0010	<0.80	<0.0010	**0.36**	<0.00020	**0.0025**	**0.26**	**0.00029**	--
MW-71	URS/CWTP	Background	8/21/2016	FC-CCR-MW71-816	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.6**
MW-71	URS/CWTP	Background	8/21/2016	FC-CCR-MW101-816	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	8/21/2016	FC-CCR-MW101-816	**0.00024**	**0.0076**	**0.013**	<0.0010	<0.00020	<0.0010	<0.0010	<0.40	<0.0010	**0.37**	<0.00020	**0.0024**	**0.25**	**0.00028**	--
MW-71	URS/CWTP	Background	8/21/2016	FC-CCR-MW101-816	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.1**
MW-71	URS/CWTP	Background	9/12/2016	FC-CCR-MW71-916	--	--	--	--	--	--	--	<0.40	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	9/12/2016	FC-CCR-MW71-916	<0.0025	<0.0010	**0.013**	<0.0010	<0.00050	<0.0025	**0.0012**	<0.40	<0.00050	**0.30**	<0.00020	**0.0013**	**0.18**	<0.00050	--
MW-71	URS/CWTP	Background	9/12/2016	FC-CCR-MW71-916	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.1**
MW-71	URS/CWTP	Background	10/20/2016	FC-CCR-MW71-1016	--	--	--	--	--	--	--	<0.40	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	10/20/2016	FC-CCR-MW71-1016	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.4**
MW-71	URS/CWTP	Background	2/2/2017	FC-CCR-MW71-117	--	--	--	--	--	--	--	<0.40	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	2/2/2017	FC-CCR-MW71-117	<0.0010	**0.0094**	**0.012**	<0.0010	**0.00011**	<0.00050	**0.0012**	<0.40	<0.00050	**0.39**	<0.00020	**0.00078**	**0.34**	**0.00037**	--
MW-71	URS/CWTP	Background	2/2/2017	FC-CCR-MW71-117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.9**
MW-71	URS/CWTP	Background	4/17/2017	FC-CCR-MW71-41717	--	--	--	--	--	--	--	<2.0	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	4/17/2017	FC-CCR-MW71-41717	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.2**
MW-71	URS/CWTP	Background	4/17/2017	FC-CCR-MW71-41717	<0.0040	**0.0063**	**0.010**	<0.0010	<0.00040	<0.0020	<0.0020	<2.0	<0.0020	**0.32**	<0.00020	<0.0020	**0.20**	<0.00040	--
MW-71	URS/CWTP	Background	5/2/2017	FC-CCR-MW71-5217	<0.0010	**0.0072**	**0.0087**	<0.0010	<0.00010	<0.0010	<0.0010	<13	<0.00050	**0.34**	<0.00020	<0.0010	**0.27**	**0.00025**	--
MW-71	URS/CWTP	Background	5/2/2017	FC-CCR-MW71-5217	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.7**
MW-71	URS/CWTP	Background	5/29/2017	FC-CCR-MW71-52917	<0.010	**0.0070**	**0.010**	<0.0010	<0.0010	<0.0050	<0.0050	<2.0	<0.0050	**0.33**	<0.00020	<0.0050	**0.21**	<0.0010	--
MW-71	URS/CWTP	Background	5/29/2017	FC-CCR-MW71-52917	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.6
MW-71	URS/CWTP	Background	6/22/2017	FC-CCR-MW71-62217	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	6/22/2017	FC-CCR-MW71-62217	<0.0040	**0.0063**	**0.012**	<0.0010	<0.00040	<0.0020	<0.0020	<2.0	<0.0020	**0.38**	<0.00020	<0.0020	**0.25**	<0.00040	--
MW-71	URS/CWTP	Background	6/22/2017	FC-CCR-MW71-62117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.7**
MW-71	URS/CWTP	Background	7/21/2017	FC-CCR-MW71-72117	--	--	--	--	--	--	--	<2.0	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	7/21/2017	FC-CCR-MW71-72117	<0.0040	**0.0053**	**0.0086**	<0.0010	<0.00040	<0.0020	<0.0010	--	<0.0020	<0.40	<0.00020	<0.0020	**0.24**	<0.00040	--
MW-71	URS/CWTP	Background	7/21/2017	FC-CCR-MW71-72117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.5
MW-71	URS/CWTP	Background	8/10/2017	FC-CCR-MW71-81017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	8/10/2017	FC-CCR-MW71-81017	<0.010	**0.0048**	**0.0092**	<0.0010	<0.0010	<0.0040	<0.0020	<2.0	<0.0050	**0.34**	<0.00020	<0.0050	**0.21**	<0.0010	--
MW-71	URS/CWTP	Background	8/10/2017	FC-CCR-MW71-81017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.7
MW-71	URS/CWTP	Background	8/17/2017	FC-CCR-MW71-81717	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.0**
MW-71	URS/CWTP	Background	8/17/2017	FC-CCR-MW71-81717	--	--	--	--	--	--	--	<2.0	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	9/11/2017	FC-CCR-MW71-91117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	9/11/2017	FC-CCR-MW71-91117	<0.0040	**0.0048**	**0.0089**	<0.0010	<0.00040	<0.0040	<0.0020	<2.0	<0.0020	**0.32**	<0.00020	<0.0020	**0.20**	<0.00040	--
MW-71	URS/CWTP	Background	9/11/2017	FC-CCR-MW71-91117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.7
MW-71	URS/CWTP	Background	10/13/2017	FC-CCR-MW71-101317	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.6**
MW-71	URS/CWTP	Background	10/13/2017	FC-CCR-MW71-101317	<0.010	<0.0050	**0.012**	<0.0010	<0.0010	<0.010	<0.0050	<2.0	<0.0050	**0.33**	<0.00020	<0.0050	**0.20**	<0.0010	--
MW-71	URS/CWTP	Background	11/30/2017	FC-CCR-MW71-113017	--	--	--	--	--	--	--	<2.0	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	3/16/2018	FC-CCR-MW71-31618	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.8**

Table F-8
Groundwater Sampling Results for the CWTP Monitoring Wells - Appendix IV Constituents

					Appendix IV Constituents														
				Constituent:	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Fluoride	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium	Total Radium
				Filtered:	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L
				CWTP BTV (applicable to MW-62)	*0.00027*	*0.013*	*0.51*	*0.0022*	*0.00021*	*0.0014*	*0.014*	*4.2*	*0.0011*	*0.89*	*0.0002*	*0.011*	*0.47*	*0.0012*	*4.16*
				CWTP BTV (applicable to MW-63)															
				CWTP BTV (applicable to MW-64)															
				CWTP BTV (applicable to MW-65)															
				CWTP GWPS (applicable to downgradient wells)	*0.006*	*0.013*	*2*	*0.004*	*0.005*	*0.1*	*0.014*	*4.2*	*0.015*	*0.89*	*0.002*	*0.1*	*0.47*	*0.002*	*5*
Well Id	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample Identification**															
MW-71	URS/CWTP	Background	6/2/2018	FC-CCR-MW-71-6218	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.9**
MW-71	URS/CWTP	Background	6/2/2018	FC-CCR-MW-71-6218	--	**0.012**	<0.010	--	--	--	<0.010	<0.80	--	**0.32**	<0.00020	<0.010	**0.20**	<0.0020	--
MW-71	URS/CWTP	Background	11/3/2018	FC-CCR-MW71-11318	--	--	--	--	--	--	--	<2.0	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	11/3/2018	FC-CCR-MW71-11318	--	**0.0046**	**0.0098**	--	--	--	<0.00050	--	--	**0.35**	--	**0.00079**	**0.27**	**0.00031**	**1.2**
MW-71	URS/CWTP	Background	11/3/2018	FC-CCR-MW71-11318	--	--	--	--	--	--	--	<0.80	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	11/3/2018	*DUP* FC-CCR-FD01-11318	--	--	--	--	--	--	--	<0.80	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	11/3/2018	*DUP* FC-CCR-FD01-11318	--	**0.0068**	**0.0095**	--	--	--	<0.00050	--	--	**0.34**	--	**0.00065**	**0.31**	**0.00030**	**1.8**
MW-71	URS/CWTP	Background	3/18/2019	FC-CCR-MW71-031819	<0.0010	**0.0069**	**0.010**	<0.0010	<0.00010	<0.0010	<0.00050	<0.80	<0.00050	**0.32**	<0.00020	**0.00066**	**0.37**	**0.00031**	--
MW-71	URS/CWTP	Background	3/18/2019	FC-CCR-MW71-031819	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.7
MW-71	URS/CWTP	Background	5/6/2019	FC-CCR-MW71-5719	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.0**
MW-71	URS/CWTP	Background	12/2/2019	FC-CCR-MW71-120219	<0.0040	**0.0095**	**0.012**	<0.0010	<0.00040	<0.0040	<0.0020	<0.80	<0.0020	**0.32**	<0.00020	<0.0020	**0.27**	**0.00065**	--
MW-71	URS/CWTP	Background	6/20/2020	FC-CCR-MW71-0620	<0.002	**0.0048**	**0.0045**	--	<0.0002	<0.002	<0.001	<0.8	<0.001	**0.75**	--	<0.001	**0.15**	**0.00025**	<0.8
MW-71	URS/CWTP	Background	11/5/2020	FC-CCR-MW71-1120	<0.002	**0.012**	**0.0092**	<0.001	<0.0002 U	<0.002	**0.00026 J**	<0.4	<0.001	**0.35**	<0.0002	**0.00061 J**	**0.28**	**0.00023**	<0.8
MW-71	URS/CWTP	Background	4/22/2021	FC-CCR-MW71-0421	<0.004	**0.0013 J**	**0.014**	<0.001	**0.00012 J**	<0.004	**0.0003 J**	**3.8 NJ**	<0.002	**0.40**	<0.0002	<0.002	**0.36**	**0.0004**	**0.7**
MW-71	URS/CWTP	Background	11/12/2021	FC-CCR-MW71-1121	<0.002	<0.001	**0.010**	<0.001	**0.00010 J**	<0.002	**0.00013 J**	**0.14 J**	<0.001	**0.37**	<0.0002	<0.001	**0.24**	**0.00042**	**0.5**
MW-71	URS/CWTP	Background	5/21/2022	FC-CCR-MW71-0522	<0.002	<0.001	**0.0094**	<0.001	<0.0002	<0.002	<0.001	<0.8	<0.001	**0.37**	<0.0002	<0.001	**0.28**	**0.00037**	**1.2**
MW-71	URS/CWTP	Background	5/21/2022	FC-CCR-SS04-0522	<0.02	<0.01	**0.00887 J**	<0.0025	<0.0025	<0.02	**0.00147 J**	<50 / 0.28 J	<0.005	**0.367 J**	<0.001	<0.005	**0.233**	<0.005	--
MW-71	URS/CWTP	Background	8/14/2022	FC-CCR-MW71-0822	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	11/13/2022	FC-CCR-MW71-1122	<0.001	**0.00073**	**0.012**	<0.001	<0.0001	<0.001	<0.0005	<0.8	<0.0005	**0.37**	<0.0002	**0.00052**	**0.36**	**0.00043**	**1.0**
MW-71	URS/CWTP	Background	01/27/2023	FC-CCR-MW71-0123	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	05/08/2023	FC-CCR-MW71-0523	<0.002	<0.005	**0.0095**	<0.001	<0.001	<0.003	<0.001	<2	<0.001	**0.40**	<0.0002	<0.002	**0.20**	<0.001	**1.7**
MW-71	URS/CWTP	Background	06/27/2023	FC-CCR-MW71-0623	<0.01	<0.005	**0.011**	**0.0022**	<0.001	<0.01	<0.005	<20	<0.0005	**0.45**	<0.0002	<0.005	**0.25**	**0.00039**	**2.2**
MW-71	URS/CWTP	Background	11/08/2023	FC-CCR-MW71-1123	<0.004	**0.0024**	**0.010 J**	<0.001	<0.0004	<0.004	<0.002	<0.8	<0.0005	**0.40**	<0.0002	<0.002	**0.28**	**0.0004**	**1.8**
MW-72	URS/CWTP	Background	3/7/2016	FC-CCR-MW72-030716	<0.0020	**0.011**	**0.035**	<0.0010	**0.000078**	**0.00044**	**0.019**	<0.050	**0.00013**	**0.33**	<0.00020	**0.011**	**0.13**	**0.0012**	--
MW-72	URS/CWTP	Background	3/7/2016	FC-CCR-MW72-030716	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	4/26/2016	FC-CCR-MW-72-042616	<0.0025	**0.0038**	**0.034**	<0.0010	<0.00010	**0.0028**	**0.0087**	<2.0	**0.0011**	**0.40**	<0.00020	**0.0093**	**0.16**	**0.00081**	<0.8
MW-72	URS/CWTP	Background	6/6/2016	FC-CCR-MW72-616	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.3**
MW-72	URS/CWTP	Background	6/6/2016	FC-CCR-MW72-616	**0.00027**	**0.0084**	**0.051**	<0.0010	<0.00020	**0.00060**	**0.0029**	<0.40	<0.0010	<0.20	<0.00020	**0.0052**	**0.39**	**0.00058**	--
MW-72	URS/CWTP	Background	8/21/2016	FC-CCR-MW72-816	--	--	--	--	--	--	--	<0.40	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	8/21/2016	FC-CCR-MW72-816	**0.00026**	**0.0047**	**0.016**	<0.0010	<0.00020	<0.0010	**0.0034**	<0.40	<0.0010	**0.42**	<0.00020	**0.0061**	**0.18**	**0.0011**	--
MW-72	URS/CWTP	Background	8/21/2016	FC-CCR-MW72-816	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**3.2**
MW-72	URS/CWTP	Background	9/13/2016	FC-CCR-MW72-916	--	--	--	--	--	--	--	<0.40	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	9/13/2016	FC-CCR-MW72-916	<0.0025	<0.0010	**0.019**	<0.0010	<0.00050	<0.0025	**0.0073**	<0.40	<0.00050	**0.35**	<0.00020	**0.011**	<0.0030	**0.00056**	--
MW-72	URS/CWTP	Background	9/13/2016	FC-CCR-MW72-916	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**3.9**
MW-72	URS/CWTP	Background	10/20/2016	FC-CCR-MW72-1016	--	--	--	--	--	--	--	<0.40	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	10/20/2016	FC-CCR-MW72-1016	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**4.2**
MW-72	URS/CWTP	Background	2/2/2017	FC-CCR-MW72-117	--	--	--	--	--	--	--	<0.40	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	2/2/2017	FC-CCR-MW72-117	<0.0010	**0.0041**	**0.0093**	<0.0010	<0.00010	<0.0010	**0.0025**	<0.40	<0.00050	**0.39**	<0.00020	**0.00093**	**0.13**	**0.00094**	--
MW-72	URS/CWTP	Background	2/2/2017	FC-CCR-MW72-117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**4.0**
MW-72	URS/CWTP	Background	2/2/2017	FC-CCR-MW101-117	--	--	--	--	--	--	--	<0.40	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	2/2/2017	FC-CCR-MW101-117	<0.0020	**0.0027**	**0.0084**	<0.0010	<0.00020	<0.0010	**0.0025**	<0.40	<0.0010	**0.39**	<0.00020	**0.0010**	**0.12**	**0.00096**	--
MW-72	URS/CWTP	Background	2/2/2017	FC-CCR-MW101-117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.6**
MW-72	URS/CWTP	Background	4/17/2017	FC-CCR-MW-72-41717	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**3.5**
MW-72	URS/CWTP	Background	4/17/2017	FC-CCR-MW72-41717	--	--	--	--	--	--	--	<2.0	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	4/17/2017	FC-CCR-MW72-41717	<0.0040	**0.0028**	**0.0096**	<0.0010	<0.00040	<0.0020	**0.0024**	<2.0	<0.0020	**0.35**	<0.00020	<0.0020	**0.10**	**0.00096**	--
MW-72	URS/CWTP	Background	5/2/2017	FC-CCR-MW-72-5217	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**3.8**

Table F-8
Groundwater Sampling Results for the CWTP Monitoring Wells - Appendix IV Constituents

					Appendix IV Constituents														
				Constituent:	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Fluoride	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium	Total Radium
				Filtered:	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L
				CWTP BTV (applicable to MW-62)	*0.00027*	*0.013*	*0.51*	*0.0022*	*0.00021*	*0.0014*	*0.014*	*4.2*	*0.0011*	*0.89*	*0.0002*	*0.011*	*0.47*	*0.0012*	*4.16*
				CWTP BTV (applicable to MW-63)															
				CWTP BTV (applicable to MW-64)															
				CWTP BTV (applicable to MW-65)															
				CWTP GWPS (applicable to downgradient wells)	*0.006*	*0.013*	*2*	*0.004*	*0.005*	*0.1*	*0.014*	*4.2*	*0.015*	*0.89*	*0.002*	*0.1*	*0.47*	*0.002*	*5*
Well Id	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample Identification**															
MW-72	URS/CWTP	Background	5/2/2017	FC-CCR-MW72-5217	<0.0010	**0.0030**	**0.0079**	<0.0010	<0.00010	<0.0010	**0.0024**	<13	<0.00050	**0.38**	<0.00020	<0.0010	**0.12**	**0.00091**	--
MW-72	URS/CWTP	Background	5/29/2017	FC-CCR-MW72-52917	<0.010	<0.0050	**0.0093**	<0.0010	<0.0010	<0.0050	<0.0050	<2.0	<0.0050	**0.37**	<0.00020	<0.0050	**0.11**	**0.0011**	--
MW-72	URS/CWTP	Background	6/22/2017	FC-CCR-MW72-62217	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	6/22/2017	FC-CCR-MW72-62217	<0.0040	**0.0023**	**0.0077**	<0.0010	<0.00040	<0.0020	**0.0025**	<2.0	<0.0020	**0.39**	<0.00020	<0.0020	**0.10**	**0.0010**	--
MW-72	URS/CWTP	Background	6/22/2017	FC-CCR-MW-72-62117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.8**
MW-72	URS/CWTP	Background	6/22/2017	*DUP* FC-CCR-FD02-62217	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	6/22/2017	*DUP* FC-CCR-FD02-62217	<0.0040	<0.0020	**0.0086**	<0.0010	<0.00040	<0.0020	**0.0025**	<2.0	<0.0020	**0.40**	**0.00020**	<0.0020	**0.099**	**0.0011**	--
MW-72	URS/CWTP	Background	6/22/2017	*DUP* FC-CCR-FD02-62117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**3.0**
MW-72	URS/CWTP	Background	7/21/2017	FC-CCR-MW72-72117	--	--	--	--	--	--	--	<2.0	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	7/21/2017	FC-CCR-MW72-72117	<0.0040	**0.0026**	**0.0073**	<0.0010	<0.00040	<0.0020	**0.0024**	--	<0.0020	<0.80	<0.00020	<0.0020	**0.13**	**0.00089**	--
MW-72	URS/CWTP	Background	7/21/2017	FC-CCR-MW72-72117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.7**
MW-72	URS/CWTP	Background	8/10/2017	FC-CCR-MW72-81017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	8/10/2017	FC-CCR-MW72-81017	<0.0010	**0.0040**	**0.0075**	<0.0010	<0.00010	<0.0010	**0.0023**	<2.0	<0.00050	**0.41**	<0.00020	**0.00087**	**0.14**	**0.00091**	--
MW-72	URS/CWTP	Background	8/10/2017	FC-CCR-MW72-81017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.8**
MW-72	URS/CWTP	Background	8/10/2017	*DUP* FC-CCR-FD02-81017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	8/10/2017	*DUP* FC-CCR-FD02-81017	<0.010	**0.0028**	**0.0089**	<0.0010	<0.0010	<0.0040	**0.0025**	<2.0	<0.0050	**0.42**	<0.00020	<0.0050	**0.10**	**0.0010**	--
MW-72	URS/CWTP	Background	8/10/2017	*DUP* FC-CCR-FD02-81017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.7**
MW-72	URS/CWTP	Background	8/17/2017	FC-CCR-MW72-81717	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.1**
MW-72	URS/CWTP	Background	8/17/2017	FC-CCR-MW72-81717	--	--	--	--	--	--	--	<2.0	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	8/17/2017	*DUP* FC-CCR-FD02-81717	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**3.0**
MW-72	URS/CWTP	Background	8/17/2017	*DUP* FC-CCR-FD02-81717	--	--	--	--	--	--	--	<2.0	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	9/10/2017	FC-CCR-MW72-91017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	9/10/2017	FC-CCR-MW72-91017	<0.0040	**0.0029**	**0.0086**	<0.0010	<0.00040	<0.0040	**0.0023**	<2.0	<0.0020	**0.37**	<0.00020	<0.0020	**0.10**	**0.00095**	--
MW-72	URS/CWTP	Background	9/10/2017	FC-CCR-MW72-91017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.3**
MW-72	URS/CWTP	Background	10/13/2017	FC-CCR-MW72-101317	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**3.1**
MW-72	URS/CWTP	Background	10/13/2017	FC-CCR-MW72-101317	<0.010	**0.0052**	**0.011**	<0.0010	<0.0010	<0.010	<0.0050	<2.0	<0.0050	**0.38**	<0.00020	<0.0050	**0.11**	**0.0010**	--
MW-72	URS/CWTP	Background	11/29/2017	FC-CCR-MW72-112917	--	--	--	--	--	--	--	<2.0	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	3/16/2018	FC-CCR-MW72-31618	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.9**
MW-72	URS/CWTP	Background	6/2/2018	FC-CCR-MW-72-6218	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.8**
MW-72	URS/CWTP	Background	6/2/2018	FC-CCR-MW-72-6218	--	<0.010	<0.010	--	--	--	<0.010	<0.80	--	**0.35**	<0.00020	<0.010	**0.10**	<0.0020	--
MW-72	URS/CWTP	Background	11/3/2018	FC-CCR-MW72-11318	--	--	--	--	--	--	--	<2.0	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	11/3/2018	FC-CCR-MW72-11318	--	**0.0031**	**0.0075**	--	--	--	**0.0020**	--	--	**0.37**	--	**0.00078**	**0.13**	**0.00088**	**1.7**
MW-72	URS/CWTP	Background	11/3/2018	FC-CCR-MW72-11318	--	--	--	--	--	--	--	<0.80	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	11/3/2018	*DUP* FC-CCR-FD02-11318	--	--	--	--	--	--	--	<2.0	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	11/3/2018	*DUP* FC-CCR-FD02-11318	--	**0.0026**	**0.0075**	--	--	--	**0.0020**	--	--	**0.37**	--	**0.00078**	**0.15**	**0.00087**	**2.0**
MW-72	URS/CWTP	Background	3/17/2019	FC-CCR-MW72-031719	<0.0010	**0.0034**	**0.0077**	<0.0010	<0.00010	<0.0010	**0.0022**	<0.80	<0.00050	**0.36**	<0.00020	**0.00095**	**0.13**	**0.00095**	--
MW-72	URS/CWTP	Background	3/17/2019	FC-CCR-MW72-031719	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.4**
MW-72	URS/CWTP	Background	5/7/2019	FC-CCR-MW72-5719	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**3.4**
MW-72	URS/CWTP	Background	12/2/2019	FC-CCR-MW72-120219	<0.0020	**0.0031**	**0.0081**	<0.0010	<0.00020	<0.0040	**0.0023**	<0.80	<0.0010	**0.36**	<0.00020	**0.0014**	**0.11**	**0.0011**	--
MW-72	URS/CWTP	Background	6/19/2020	FC-CCR-MW72-0620	<0.004	**0.0044**	**0.020**	--	<0.0004	<0.004	**0.0027**	<0.8	<0.001	**0.89**	--	<0.002	**0.11**	**0.0011**	**3.5**
MW-72	URS/CWTP	Background	11/5/2020	FC-CCR-MW72-1120	<0.001 U	**0.0053**	**0.018**	<0.001	<0.0001 U	**0.00071 J**	**0.0013**	<0.4	<0.0005	**0.38**	<0.0002	**0.0020**	**0.11**	<0.00011 U	**2.4**
MW-72	URS/CWTP	Background	4/22/2021	FC-CCR-MW72-0421	<0.004	**0.0026**	**0.0086**	<0.001	**0.00012 J**	<0.004	**0.0029**	<0.8	<0.002	**0.37**	<0.0002	**0.0011 J**	**0.11**	**0.0010**	**2.2**
MW-72	URS/CWTP	Background	11/12/2021	FC-CCR-MW72-1121	<0.002	<0.001	**0.0085**	<0.001	**0.00006 J**	<0.002	**0.0026**	<0.8	<0.001	**0.38**	<0.0002	**0.00055**	**0.087**	**0.0010**	**3.7**
MW-72	URS/CWTP	Background	5/22/2022	FC-CCR-MW72-0522	<0.002	<0.001	**0.0073**	<0.001	<0.0002	<0.002	**0.0025**	<0.8	<0.001	**0.37**	<0.0002	<0.001	**0.095**	**0.00094**	**1.2**
MW-72	URS/CWTP	Background	8/13/2022	FC-CCR-MW72-0822	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	11/13/2022	FC-CCR-MW72-1122	<0.001	**0.00070**	**0.0086**	<0.001	<0.0001	<0.001	**0.0026**	<0.8	<0.0005	**0.34**	<0.0002	**0.00077**	**0.12**	**0.0010**	**1.9**

Table F-8
Groundwater Sampling Results for the CWTP Monitoring Wells - Appendix IV Constituents

					Appendix IV Constituents														
				Constituent:	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Fluoride	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium	Total Radium
				Filtered:	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L
				CWTP BTV (applicable to MW-62)	*0.00027*	*0.013*	*0.51*	*0.0022*	*0.00021*	*0.0014*	*0.014*	*4.2*	*0.0011*	*0.89*	*0.0002*	*0.011*	*0.47*	*0.0012*	*4.16*
				CWTP BTV (applicable to MW-63)															
				CWTP BTV (applicable to MW-64)															
				CWTP BTV (applicable to MW-65)															
				CWTP GWPS (applicable to downgradient wells)	*0.006*	*0.013*	*2*	*0.004*	*0.005*	*0.1*	*0.014*	*4.2*	*0.015*	*0.89*	*0.002*	*0.1*	*0.47*	*0.002*	*5*
Well Id	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample Identification**															
MW-72	URS/CWTP	Background	01/27/2023	FC-CCR-MW72-0123	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	05/08/2023	FC-CCR-MW72-0523	<0.002	<0.005	**0.0068**	<0.005	<0.001	<0.003	**0.0025**	**4.2**	<0.001	**0.38**	<0.0002	<0.002	**0.064**	<0.001	**4.00**
MW-72	URS/CWTP	Background	06/27/2023	FC-CCR-MW72-0623	<0.01	**0.0014**	**0.0073**	**0.0011**	<0.001	<0.001	**0.0023**	<20	<0.0005	**0.37**	<0.0002	<0.005	**0.11**	**0.00093**	**1.9**
MW-72	URS/CWTP	Background	11/08/2023	FC-CCR-MW72-1123	<0.001	**0.0024**	**0.008 J**	<0.001	<0.0001	<0.004	**0.0023**	<0.8	<0.0005	**0.29**	<0.0002	**0.0008**	**0.076**	**0.00096**	**5.1**
MW-73	URS/CWTP	Background	2/2/2017	FC-CCR-MW73-117	--	--	--	--	--	--	--	<0.40	--	--	--	--	--	--	--
MW-73	URS/CWTP	Background	2/2/2017	FC-CCR-MW73-117	<0.0010	**0.0015**	**0.043**	<0.0010	**0.00017**	<0.0010	**0.0073**	<0.40	<0.00050	**0.21**	<0.00020	**0.0086**	**0.029**	**0.00020**	--
MW-73	URS/CWTP	Background	2/2/2017	FC-CCR-MW73-117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**3.2**
MW-73	URS/CWTP	Background	4/18/2017	FC-CCR-MW73-41817	--	--	--	--	--	--	--	<0.80	--	--	--	--	--	--	--
MW-73	URS/CWTP	Background	4/18/2017	FC-CCR-MW73-41817	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.8**
MW-73	URS/CWTP	Background	4/18/2017	FC-CCR-MW73-41817	<0.0040	<0.0020	**0.027**	<0.0010	<0.00040	<0.0020	**0.0058**	<0.80	<0.0020	**0.22**	<0.00020	**0.0041**	**0.019**	<0.00040	--
MW-73	URS/CWTP	Background	5/2/2017	FC-CCR-MW73-5217	<0.0020	<0.0010	**0.026**	<0.0010	**0.00021**	<0.0010	**0.0067**	<5.0	<0.00050	**0.24**	<0.00020	**0.0037**	**0.015**	**0.00024**	--
MW-73	URS/CWTP	Background	5/2/2017	FC-CCR-MW73-5217	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.3**
MW-73	URS/CWTP	Background	5/29/2017	FC-CCR-MW73-52917	<0.010	<0.0050	**0.028**	<0.0010	<0.0010	<0.0050	<0.0050	<0.80	<0.0050	<0.20	<0.00020	<0.0050	**0.043**	<0.0010	--
MW-73	URS/CWTP	Background	5/29/2017	FC-CCR-MW73-52917	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.6
MW-73	URS/CWTP	Background	6/22/2017	FC-CCR-MW73-62217	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-73	URS/CWTP	Background	6/22/2017	FC-CCR-MW73-62217	<0.0040	<0.0020	**0.029**	<0.0010	<0.00040	<0.0020	**0.0066**	<0.80	<0.0020	**0.25**	<0.00020	<0.0020	**0.019**	<0.00040	--
MW-73	URS/CWTP	Background	6/22/2017	FC-CCR-MW73-62117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**3.1**
MW-73	URS/CWTP	Background	7/22/2017	FC-CCR-MW73-72217	--	--	--	--	--	--	--	<0.80	--	--	--	--	--	--	--
MW-73	URS/CWTP	Background	7/22/2017	FC-CCR-MW73-72217	<0.0040	<0.0020	**0.024**	<0.0010	<0.00040	<0.0020	**0.0067**	<2.0	<0.0020	<0.40	<0.00020	**0.0023**	**0.016**	<0.00040	--
MW-73	URS/CWTP	Background	7/22/2017	FC-CCR-MW73-72217	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.0**
MW-73	URS/CWTP	Background	7/22/2017	*DUP* FC-CCR-FD02-72217	--	--	--	--	--	--	--	<2.0	--	--	--	--	--	--	--
MW-73	URS/CWTP	Background	7/22/2017	*DUP* FC-CCR-FD02-72217	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.8**
MW-73	URS/CWTP	Background	8/10/2017	FC-CCR-MW73-81017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-73	URS/CWTP	Background	8/10/2017	FC-CCR-MW73-81017	<0.010	<0.0020	**0.024**	<0.0010	<0.0010	**0.0041**	**0.0065**	<0.80	<0.0050	**0.27**	<0.00020	<0.0050	**0.017**	<0.0010	--
MW-73	URS/CWTP	Background	8/10/2017	FC-CCR-MW73-81017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.1**
MW-73	URS/CWTP	Background	8/17/2017	FC-CCR-MW73-81717	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.5**
MW-73	URS/CWTP	Background	8/17/2017	FC-CCR-MW73-81717	--	--	--	--	--	--	--	<0.80	--	--	--	--	--	--	--
MW-73	URS/CWTP	Background	9/10/2017	FC-CCR-MW73-91017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-73	URS/CWTP	Background	9/10/2017	FC-CCR-MW73-91017	<0.0040	**0.0020**	**0.023**	<0.0010	<0.00040	<0.0040	**0.0048**	<0.80	<0.0020	**0.22**	<0.00020	**0.0024**	**0.033**	<0.00040	--
MW-73	URS/CWTP	Background	9/10/2017	FC-CCR-MW73-91017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.5**
MW-73	URS/CWTP	Background	10/12/2017	FC-CCR-MW73-101217	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.9**
MW-73	URS/CWTP	Background	10/12/2017	FC-CCR-MW73-101217	<0.010	<0.0050	**0.024**	<0.0010	<0.0010	<0.010	<0.0050	<0.80	<0.0050	<0.20	<0.00020	<0.0050	**0.048**	<0.0010	--
MW-73	URS/CWTP	Background	10/12/2017	*DUP* FC-CCR-FD01-101217	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.9**
MW-73	URS/CWTP	Background	10/12/2017	*DUP* FC-CCR-FD01-101217	<0.010	<0.0050	**0.024**	<0.0010	<0.0010	<0.010	<0.0050	<0.80	<0.0050	<0.20	<0.00020	<0.0050	**0.047**	<0.0010	--
MW-73	URS/CWTP	Background	11/29/2017	FC-CCR-MW73-112917	--	--	--	--	--	--	--	<0.80	--	--	--	--	--	--	--
MW-73	URS/CWTP	Background	3/16/2018	FC-CCR-MW73-31618	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.6**
MW-73	URS/CWTP	Background	6/2/2018	FC-CCR-MW-73-6218	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.8**
MW-73	URS/CWTP	Background	6/2/2018	FC-CCR-MW-73-6218	--	<0.010	**0.023**	--	--	--	<0.010	<0.80	--	**0.26**	<0.00020	<0.010	**0.011**	<0.0020	--
MW-73	URS/CWTP	Background	11/3/2018	FC-CCR-MW73-11318	--	--	--	--	--	--	--	<0.80	--	--	--	--	--	--	--
MW-73	URS/CWTP	Background	11/3/2018	FC-CCR-MW73-11318	--	<0.00050	**0.022**	--	--	--	**0.0078**	--	--	**0.31**	--	**0.0026**	**0.0062**	**0.00020**	**2.9**
MW-73	URS/CWTP	Background	3/18/2019	FC-CCR-MW73-031819	<0.0010	<0.00050	**0.023**	<0.0010	**0.00013**	<0.0010	**0.0038**	<0.80	<0.00050	**0.26**	<0.00020	**0.0017**	**0.0069**	**0.00025**	--
MW-73	URS/CWTP	Background	3/18/2019	FC-CCR-MW73-031819	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.6**
MW-73	URS/CWTP	Background	5/6/2019	FC-CCR-MW73-5619	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.7**
MW-73	URS/CWTP	Background	12/2/2019	FC-CCR-MW73-120219	<0.0020	<0.0010	**0.020**	<0.0010	<0.00020	<0.0040	**0.0040**	<0.80	<0.0010	**0.23**	<0.00020	**0.0020**	**0.0086**	**0.00022**	--
MW-73	URS/CWTP	Background	12/2/2019	*DUP* FC-CCR-FD01-120219	<0.0020	<0.0010	**0.020**	<0.0010	<0.00020	<0.0040	**0.0039**	<0.80	<0.0010	**0.23**	<0.00020	**0.0021**	**0.0094**	**0.00021**	--
MW-73	URS/CWTP	Background	6/20/2020	FC-CCR-MW73-0620	<0.004	<0.002	**0.033**	--	<0.0004	<0.004	**0.0062**	<0.8	<0.002	**0.65**	--	**0.0035**	**0.0077**	<0.0004	**3.4**

Table F-8
Groundwater Sampling Results for the CWTP Monitoring Wells - Appendix IV Constituents

					Appendix IV Constituents													
				Constituent:	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Fluoride	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium	Total Radium
				Filtered:	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L
				CWTP BTV (applicable to MW-62)	*0.00027*	*0.013*	*0.51*	*0.0022*	*0.00021*	*0.0014*	*0.014*	*4.2*	*0.0011*	*0.89*	*0.0002*	*0.011*	*0.47*	*0.0012*	*4.16*
				CWTP BTV (applicable to MW-63)															
				CWTP BTV (applicable to MW-64)															
				CWTP BTV (applicable to MW-65)															
				CWTP GWPS (applicable to downgradient wells)	*0.006*	*0.013*	*2*	*0.004*	*0.005*	*0.1*	*0.014*	*4.2*	*0.015*	*0.89*	*0.002*	*0.1*	*0.47*	*0.002*	*5*
Well Id	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample Identification**															
MW-73	URS/CWTP	Background	11/5/2020	FC-CCR-MW73-1120	<0.002 U	**0.0012**	**0.020**	<0.001	<0.0002 U	**0.00073 J**	**0.0067**	**0.063 J**	<0.001	**0.29**	<0.0002	**0.0016**	**0.0099**	**0.00022**	**2.8**
MW-73	URS/CWTP	Background	4/22/2021	FC-CCR-MW73-0421	<0.004	<0.002	**0.021**	<0.001	**0.00016 J**	<0.004	**0.0027**	<0.4	<0.002	**0.23**	<0.0002	**0.0011 J**	**0.015**	**0.00026 J**	**1.8**
MW-73	URS/CWTP	Background	11/13/2021	FC-CCR-MW73-1121	**0.00017 J**	<0.001	**0.022**	<0.001	**0.00018 J**	<0.002	**0.0041**	**0.12 J**	<0.001	**0.31**	<0.0002	**0.00093**	**0.0072**	**0.00023**	**2.8**
MW-73	URS/CWTP	Background	5/22/2022	FC-CCR-MW73-0522	<0.002	<0.001	**0.018**	<0.001	<0.0002	<0.002	**0.0042**	<0.8	<0.001	**0.34**	<0.0002	**0.0012**	**0.0038**	**0.00023**	**1.4**
MW-73	URS/CWTP	Background	8/13/2022	FC-CCR-MW73-0822	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-73	URS/CWTP	Background	11/14/2022	FC-CCR-MW73-1122	<0.001	**0.00092**	**0.022**	<0.001	**0.00017**	<0.001	**0.0042**	<0.8	<0.0005	**0.29**	<0.0002	**0.0011**	**0.0095**	**0.00025**	**4.9**
MW-73	URS/CWTP	Background	01/27/2023	FC-CCR-MW73-0123	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-73	URS/CWTP	Background	05/07/2023	FC-CCR-MW73-0523	<0.002	<0.005	**0.018**	<0.001	<0.001	<0.003	**0.0045**	<80	<0.001	**0.33**	<0.0002	<0.002	<0.005	<0.001	**0.8**
MW-73	URS/CWTP	Background	06/27/2023	FC-CCR-MW73-0623	<0.01	<0.005	**0.016**	**0.0014**	<0.001	<0.01	<0.005	<20	<0.0005	**0.34**	<0.0002	<0.005	<0.005	**0.00021**	**3.2**
MW-73	URS/CWTP	Background	11/08/2023	FC-CCR-MW73-1123	<0.001	**0.0021**	**0.017 J**	<0.001	**0.00018**	<0.004	**0.0037**	<0.8	<0.0005	**0.32**	<0.0002	**0.0011**	**0.0020**	**0.00025**	**2.3**
MW-62	CWTP	Downgradient Boundary	11/9/2015	FC-CCR-MW62-110915	<0.0020	**0.00098**	**0.043**	**0.000086**	**0.000084**	<0.0020	**0.011**	**1.6**	<0.0010	**0.11**	<0.00020	**0.0043**	**0.00093**	<0.0010	--
MW-62	CWTP	Downgradient Boundary	11/9/2015	FC-CCR-MW62-110915	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-62	CWTP	Downgradient Boundary	4/27/2016	FC-CCR-MW-62-042716	<0.0025	**0.0010**	**0.033**	<0.0010	<0.00010	**0.0010**	**0.0062**	**1.6**	**0.00058**	<0.20	<0.00020	**0.0029**	**0.00078**	<0.00010	**0.6**
MW-62	CWTP	Downgradient Boundary	6/5/2016	FC-CCR-MW62-616	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.1**
MW-62	CWTP	Downgradient Boundary	6/5/2016	FC-CCR-MW62-616	**0.00011**	**0.00062**	**0.027**	<0.0010	<0.00010	<0.00050	**0.0062**	**1.5**	<0.00050	<0.20	<0.00020	**0.0030**	<0.00050	<0.00010	--
MW-62	CWTP	Downgradient Boundary	8/20/2016	FC-CCR-MW62-816	--	--	--	--	--	--	--	**1.5**	--	--	--	--	--	--	--
MW-62	CWTP	Downgradient Boundary	8/20/2016	FC-CCR-MW62-816	**0.00011**	**0.0023**	**0.034**	<0.0010	<0.00010	**0.0015**	**0.0061**	**1.3**	**0.00050**	<0.20	<0.00020	**0.012**	**0.00054**	<0.00010	--
MW-62	CWTP	Downgradient Boundary	8/20/2016	FC-CCR-MW62-816	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.4**
MW-62	CWTP	Downgradient Boundary	9/12/2016	FC-CCR-MW62-916	--	--	--	--	--	--	--	**1.5**	--	--	--	--	--	--	--
MW-62	CWTP	Downgradient Boundary	9/12/2016	FC-CCR-MW62-916	<0.0025	**0.0020**	**0.026**	<0.0010	<0.00050	<0.0025	**0.0069**	**1.3**	<0.00050	<0.20	<0.00020	**0.0044**	<0.0030	<0.00050	--
MW-62	CWTP	Downgradient Boundary	9/12/2016	FC-CCR-MW62-916	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.3**
MW-62	CWTP	Downgradient Boundary	10/19/2016	FC-CCR-MW62-1016	--	--	--	--	--	--	--	**1.2**	--	--	--	--	--	--	--
MW-62	CWTP	Downgradient Boundary	10/19/2016	FC-CCR-MW62-1016	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.9**
MW-62	CWTP	Downgradient Boundary	2/1/2017	FC-CCR-MW62-117	--	--	--	--	--	--	--	**1.4**	--	--	--	--	--	--	--
MW-62	CWTP	Downgradient Boundary	2/1/2017	FC-CCR-MW62-117	<0.0010	**0.0025**	**0.027**	<0.0010	<0.00010	**0.00051**	**0.0062**	**1.4**	<0.00050	<0.20	<0.00020	**0.0034**	<0.00050	<0.00010	--
MW-62	CWTP	Downgradient Boundary	2/1/2017	FC-CCR-MW62-117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.9**
MW-62	CWTP	Downgradient Boundary	4/16/2017	FC-CCR-MW62-41617	--	--	--	--	--	--	--	**1.2**	--	--	--	--	--	--	--
MW-62	CWTP	Downgradient Boundary	4/16/2017	FC-CCR-MW62-41617	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.6
MW-62	CWTP	Downgradient Boundary	4/16/2017	FC-CCR-MW62-41617	<0.0040	<0.0020	**0.022**	<0.0010	<0.00040	<0.0020	**0.0070**	**1.2**	<0.0020	<0.20	<0.00020	**0.0036**	<0.0020	<0.00040	--
MW-62	CWTP	Downgradient Boundary	5/1/2017	FC-CCR-MW62-5117	<0.0010	<0.00050	**0.021**	<0.0010	<0.00010	<0.00050	**0.0066**	**3.3**	<0.00050	<0.20	<0.00020	**0.0032**	<0.00050	<0.00010	--
MW-62	CWTP	Downgradient Boundary	5/1/2017	FC-CCR-MW62-5117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.6
MW-62	CWTP	Downgradient Boundary	5/29/2017	FC-CCR-MW62-52917	<0.0010	**0.00067**	**0.021**	<0.0010	<0.00010	<0.00050	**0.0073**	**1.2**	<0.00050	<0.20	<0.00020	**0.0030**	<0.00050	<0.00010	--
MW-62	CWTP	Downgradient Boundary	5/29/2017	FC-CCR-MW62-52917	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.6**
MW-62	CWTP	Downgradient Boundary	6/21/2017	FC-CCR-MW62-62117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-62	CWTP	Downgradient Boundary	6/21/2017	FC-CCR-MW62-62117	<0.0010	**0.00065**	**0.023**	<0.0010	<0.00010	**0.0010**	**0.0084**	**1.4**	<0.00050	<0.20	**0.00025**	**0.0030**	<0.00050	<0.00010	--
MW-62	CWTP	Downgradient Boundary	6/21/2017	FC-CCR-MW62-62117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.6
MW-62	CWTP	Downgradient Boundary	7/21/2017	FC-CCR-MW62-72117	--	--	--	--	--	--	--	**1.5**	--	--	--	--	--	--	--
MW-62	CWTP	Downgradient Boundary	7/21/2017	FC-CCR-MW62-72117	<0.0040	<0.0020	**0.023**	<0.0010	<0.00040	<0.0020	**0.0044**	--	<0.0020	<0.20	<0.00020	**0.0029**	<0.0020	<0.00040	--
MW-62	CWTP	Downgradient Boundary	7/21/2017	FC-CCR-MW62-72117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.6
MW-62	CWTP	Downgradient Boundary	8/9/2017	FC-CCR-MW62-8917	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-62	CWTP	Downgradient Boundary	8/9/2017	FC-CCR-MW62-8917	<0.0010	**0.0016**	**0.027**	<0.0010	<0.00010	<0.0010	**0.0048**	**1.4**	<0.00050	<0.20	<0.00020	**0.0025**	<0.00050	<0.00010	--
MW-62	CWTP	Downgradient Boundary	8/9/2017	FC-CCR-MW62-8917	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.7
MW-62	CWTP	Downgradient Boundary	8/16/2017	FC-CCR-MW62-81617	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.0**
MW-62	CWTP	Downgradient Boundary	8/16/2017	FC-CCR-MW62-81617	--	--	--	--	--	--	--	**1.6**	--	--	--	--	--	--	--
MW-62	CWTP	Downgradient Boundary	9/9/2017	FC-CCR-MW62-9917	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-62	CWTP	Downgradient Boundary	9/9/2017	FC-CCR-MW62-9917	<0.0040	**0.0031**	**0.026**	<0.0010	<0.00040	<0.0040	**0.0064**	**1.5**	<0.0020	<0.20	<0.00020	**0.0028**	<0.0020	<0.00040	--

Table F-8
Groundwater Sampling Results for the CWTP Monitoring Wells - Appendix IV Constituents

					Appendix IV Constituents														
				Constituent:	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Fluoride	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium	Total Radium
				Filtered:	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L
				CWTP BTV (applicable to MW-62)	*0.00027*	*0.013*	*0.51*	*0.0022*	*0.00021*	*0.0014*	*0.014*	*4.2*	*0.0011*	*0.89*	*0.0002*	*0.011*	*0.47*	*0.0012*	*4.16*
				CWTP BTV (applicable to MW-63)															
				CWTP BTV (applicable to MW-64)															
				CWTP BTV (applicable to MW-65)															
				CWTP GWPS (applicable to downgradient wells)	*0.006*	*0.013*	*2*	*0.004*	*0.005*	*0.1*	*0.014*	*4.2*	*0.015*	*0.89*	*0.002*	*0.1*	*0.47*	*0.002*	*5*
Well Id	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample Identification**															
MW-62	CWTP	Downgradient Boundary	9/9/2017	FC-CCR-MW62-9917	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.6
MW-62	CWTP	Downgradient Boundary	10/13/2017	FC-CCR-MW62-101317	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.7**
MW-62	CWTP	Downgradient Boundary	10/13/2017	FC-CCR-MW62-101317	<0.0040	<0.0050	**0.028**	<0.0010	<0.0010	<0.010	**0.010**	**1.5**	<0.0050	<0.20	<0.00020	**0.0031**	<0.0020	<0.0010	--
MW-62	CWTP	Downgradient Boundary	11/30/2017	FC-CCR-MW62-113017	--	--	--	--	--	--	--	**1.4**	--	--	--	--	--	--	--
MW-62	CWTP	Downgradient Boundary	4/6/2018	FC-CCR-MW62-4618	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-62	CWTP	Downgradient Boundary	6/3/2018	FC-CCR-MW-62-6318	--	--	--	--	--	--	--	**1.6**	--	--	--	--	--	--	--
MW-62	CWTP	Downgradient Boundary	11/2/2018	FC-CCR-MW62-11218	--	--	--	--	--	--	--	**1.5**	--	--	--	--	--	--	--
MW-62	CWTP	Downgradient Boundary	4/1/2019	FC-CCR-MW62-4119	--	--	--	--	--	--	--	**1.6**	--	--	--	--	--	--	--
MW-62	CWTP	Downgradient Boundary	5/7/2019	FC-CCR-MW62-5719-01	--	--	--	--	--	--	--	**1.4**	--	<0.20	--	--	--	--	--
MW-62	CWTP	Downgradient Boundary	12/3/2019	FC-CCR-MW62-120319	--	--	--	--	--	--	--	**1.5**	--	<0.20	--	--	--	--	--
MW-62	CWTP	Downgradient Boundary	6/19/2020	FC-CCR-MW62-0620	--	--	--	--	--	--	--	**1.8**	--	--	--	--	--	--	--
MW-62	CWTP	Downgradient Boundary	11/5/2020	FC-CCR-MW62-1120	--	--	--	--	--	--	--	**1.8**	--	--	--	--	--	--	--
MW-62	CWTP	Downgradient Boundary	1/14/2021	FC-CCR-MW62-011421	--	--	--	--	--	--	--	**1.2**	--	--	--	--	--	--	--
MW-62	CWTP	Downgradient Boundary	4/22/2021	FC-CCR-MW62-0421	<0.0010 U	<0.0019 U	**0.016**	<0.001	<0.0001	<0.001	**0.00065**	**1.5**	<0.0005	**0.12**	<0.0002	**0.0029**	<0.0008 U	<0.0001	<0.7
MW-62	CWTP	Downgradient Boundary	11/15/2021	FC-CCR-MW62-1121	<0.002	<0.001	**0.025**	<0.001	<0.0002	<0.002	**0.014**	**1.4**	<0.001	**0.14**	<0.0002	**0.0027**	<0.001	**0.000098 J**	**1.1**
MW-62	CWTP	Downgradient Boundary	5/20/2022	FC-CCR-MW62-0522	<0.001	**0.00073**	**0.015**	<0.001	<0.0001	<0.001	**0.0014**	**1.4**	<0.0005	**0.13**	<0.0002	**0.0027**	**0.002**	<0.0002	<0.7
MW-62	CWTP	Downgradient Boundary	11/13/2022	FC-CCR-MW62-1122	<0.001	**0.012**	**0.031**	<0.001	<0.0001	<0.001	**0.011**	**1.6**	<0.0005	**0.15**	**0.00037**	**0.0023**	<0.0005	<0.0001	**1.0**
MW-62	CWTP	Downgradient Boundary	01/27/2023	FC-CCR-MW62-0123	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-62	CWTP	Downgradient Boundary	05/07/2023	FC-CCR-MW62-0523	<0.002	**0.011**	**0.026**	<0.001	<0.001	<0.003	**0.0033**	<80	<0.001	**0.14**	**0.00044**	<0.002	<0.005	<0.001	**0.9**
MW-62	CWTP	Downgradient Boundary	06/28/2023	FC-CCR-MW62-0623	<0.001	**0.012**	**0.022**	<0.001	<0.0001	<0.001	**0.0029**	**2.0**	<0.0005	**0.13**	<0.0002	**0.0012**	**0.00094**	<0.0001	**0.9**
MW-62	CWTP	Downgradient Boundary	11/06/2023	FC-CCR-MW62-1123	<0.001	**0.012**	**0.023 J**	<0.001	<0.0001	<0.001	**0.011**	**1.6**	<0.0005	**0.14**	<0.0002	**0.0031**	**0.00055**	<0.0001	<0.8
MW-63	CWTP	Downgradient Boundary	11/4/2015	FC-CCR-MW63-110415	<0.0020	**0.0012**	**0.033**	**0.000073**	<0.0010	**0.00043**	**0.0086**	**2.4**	**0.00015**	**0.085**	<0.00020	**0.0058**	**0.00076**	**0.00011**	--
MW-63	CWTP	Downgradient Boundary	11/4/2015	FC-CCR-MW63-110415	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-63	CWTP	Downgradient Boundary	4/27/2016	FC-CCR-MW-63-042716	<0.0025	**0.00099**	**0.021**	<0.0010	<0.00010	<0.00050	**0.0059**	**2.0**	<0.00050	<0.20	<0.00020	**0.0026**	<0.00050	<0.00010	**0.6**
MW-63	CWTP	Downgradient Boundary	6/5/2016	FC-CCR-MW63-616	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.8
MW-63	CWTP	Downgradient Boundary	6/5/2016	FC-CCR-MW63-616	**0.00013**	**0.00059**	**0.020**	<0.0010	<0.00010	<0.00050	**0.0054**	**1.9**	<0.00050	<0.20	<0.00020	**0.0025**	<0.00050	<0.00010	--
MW-63	CWTP	Downgradient Boundary	8/20/2016	FC-CCR-MW63-816	--	--	--	--	--	--	--	**1.9**	--	--	--	--	--	--	--
MW-63	CWTP	Downgradient Boundary	8/20/2016	FC-CCR-MW63-816	**0.00013**	**0.00082**	**0.022**	<0.0010	<0.00010	**0.00084**	**0.0064**	**1.9**	<0.00050	<0.20	<0.00020	**0.017**	<0.00050	<0.00010	--
MW-63	CWTP	Downgradient Boundary	8/20/2016	FC-CCR-MW63-816	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.1**
MW-63	CWTP	Downgradient Boundary	9/12/2016	FC-CCR-MW63-916	--	--	--	--	--	--	--	**2.1**	--	--	--	--	--	--	--
MW-63	CWTP	Downgradient Boundary	9/12/2016	FC-CCR-MW63-916	<0.0025	<0.0010	**0.022**	<0.0010	<0.00050	<0.0025	**0.0069**	**2.0**	<0.00050	<0.20	<0.00020	**0.0031**	<0.0030	<0.00050	--
MW-63	CWTP	Downgradient Boundary	9/12/2016	FC-CCR-MW63-916	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.0**
MW-63	CWTP	Downgradient Boundary	10/19/2016	FC-CCR-MW63-1016	--	--	--	--	--	--	--	**1.8**	--	--	--	--	--	--	--
MW-63	CWTP	Downgradient Boundary	10/19/2016	FC-CCR-MW63-1016	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.7
MW-63	CWTP	Downgradient Boundary	10/20/2016	FC-CCR-MW100-1016	--	--	--	--	--	--	--	**2.0**	--	--	--	--	--	--	--
MW-63	CWTP	Downgradient Boundary	10/20/2016	FC-CCR-MW100-1016	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.8**
MW-63	CWTP	Downgradient Boundary	1/31/2017	FC-CCR-MW63-117	--	--	--	--	--	--	--	**2.0**	--	--	--	--	--	--	--
MW-63	CWTP	Downgradient Boundary	1/31/2017	FC-CCR-MW63-117	<0.0010	<0.00050	**0.016**	<0.0010	**0.00013**	<0.00050	**0.0041**	**2.0**	<0.00050	<0.20	<0.00020	**0.0024**	<0.00050	<0.00010	--
MW-63	CWTP	Downgradient Boundary	1/31/2017	FC-CCR-MW63-117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.7**
MW-63	CWTP	Downgradient Boundary	1/31/2017	FC-CCR-MW100-117	--	--	--	--	--	--	--	**1.7**	--	--	--	--	--	--	--
MW-63	CWTP	Downgradient Boundary	1/31/2017	FC-CCR-MW100-117	<0.0010	<0.0010	**0.018**	<0.0010	**0.00017**	<0.0010	**0.0042**	**1.8**	<0.00050	<0.20	<0.00020	**0.0023**	<0.0010	<0.00010	--
MW-63	CWTP	Downgradient Boundary	1/31/2017	FC-CCR-MW100-117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.7**
MW-63	CWTP	Downgradient Boundary	4/17/2017	FC-CCR-MW63-41717	--	--	--	--	--	--	--	**1.6**	--	--	--	--	--	--	--
MW-63	CWTP	Downgradient Boundary	4/17/2017	FC-CCR-MW63-41717	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.6
MW-63	CWTP	Downgradient Boundary	4/17/2017	FC-CCR-MW63-41717	<0.0040	<0.0020	**0.017**	<0.0010	<0.00040	<0.0020	**0.0055**	**1.5**	<0.0020	<0.20	<0.00020	**0.0022**	<0.0020	<0.00040	--
MW-63	CWTP	Downgradient Boundary	5/2/2017	FC-CCR-MW63-5217	<0.0010	<0.00050	**0.017**	<0.0010	<0.00010	<0.00050	**0.0050**	**2.5**	<0.00050	<0.20	<0.00020	**0.0020**	<0.00050	<0.00010	--

Table F-8
Groundwater Sampling Results for the CWTP Monitoring Wells - Appendix IV Constituents

					Appendix IV Constituents														
				Constituent:	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Fluoride	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium	Total Radium
				Filtered:	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L
				CWTP BTV (applicable to MW-62)	*0.00027*	*0.013*	*0.51*	*0.0022*	*0.00021*	*0.0014*	*0.014*	*4.2*	*0.0011*	*0.89*	*0.0002*	*0.011*	*0.47*	*0.0012*	*4.16*
				CWTP BTV (applicable to MW-63)															
				CWTP BTV (applicable to MW-64)															
				CWTP BTV (applicable to MW-65)															
				CWTP GWPS (applicable to downgradient wells)	*0.006*	*0.013*	*2*	*0.004*	*0.005*	*0.1*	*0.014*	*4.2*	*0.015*	*0.89*	*0.002*	*0.1*	*0.47*	*0.002*	*5*
Well Id	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample Identification**															
MW-63	CWTP	Downgradient Boundary	5/2/2017	FC-CCR-MW63-5217	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.8**
MW-63	CWTP	Downgradient Boundary	5/28/2017	FC-CCR-MW63-52817	<0.0010	<0.00050	**0.017**	<0.0010	<0.00010	<0.00050	**0.0056**	**1.6**	<0.00050	<0.20	<0.00020	**0.0024**	<0.00050	<0.00010	--
MW-63	CWTP	Downgradient Boundary	5/28/2017	FC-CCR-MW63-52817	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.5**
MW-63	CWTP	Downgradient Boundary	5/28/2017	*DUP* FC-CCR-FD01-52817	<0.0010	<0.00050	**0.017**	<0.0010	<0.00010	<0.00050	**0.0056**	**1.6**	<0.00050	<0.20	<0.00020	**0.0023**	<0.00050	<0.00010	--
MW-63	CWTP	Downgradient Boundary	5/28/2017	*DUP* FC-CCR-FD01-52817	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.6
MW-63	CWTP	Downgradient Boundary	6/21/2017	FC-CCR-MW63-62117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-63	CWTP	Downgradient Boundary	6/21/2017	FC-CCR-MW63-62117	<0.0010	<0.00050	**0.019**	<0.0010	<0.00010	<0.00050	**0.0060**	**1.9**	<0.00050	<0.20	<0.00020	**0.0024**	<0.00050	<0.00010	--
MW-63	CWTP	Downgradient Boundary	6/21/2017	FC-CCR-MW63-62117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.4**
MW-63	CWTP	Downgradient Boundary	7/21/2017	FC-CCR-MW63-72117	--	--	--	--	--	--	--	**2.0**	--	--	--	--	--	--	--
MW-63	CWTP	Downgradient Boundary	7/21/2017	FC-CCR-MW63-72117	<0.0040	<0.0020	**0.018**	<0.0010	<0.00040	<0.0020	**0.0057**	--	<0.0020	<0.20	<0.00020	**0.0023**	<0.0020	<0.00040	--
MW-63	CWTP	Downgradient Boundary	7/21/2017	FC-CCR-MW63-72117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.8**
MW-63	CWTP	Downgradient Boundary	8/9/2017	FC-CCR-MW63-8917	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-63	CWTP	Downgradient Boundary	8/9/2017	FC-CCR-MW63-8917	<0.0010	<0.00050	**0.020**	<0.0010	<0.00010	<0.0010	**0.0063**	**1.9**	<0.00050	<0.20	<0.00020	**0.0026**	<0.00050	<0.00010	--
MW-63	CWTP	Downgradient Boundary	8/9/2017	FC-CCR-MW63-8917	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.7
MW-63	CWTP	Downgradient Boundary	8/16/2017	FC-CCR-MW63-81617	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.7
MW-63	CWTP	Downgradient Boundary	8/16/2017	FC-CCR-MW63-81617	--	--	--	--	--	--	--	**2.1**	--	--	--	--	--	--	--
MW-63	CWTP	Downgradient Boundary	9/9/2017	FC-CCR-MW63-9917	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-63	CWTP	Downgradient Boundary	9/9/2017	FC-CCR-MW63-9917	<0.0040	<0.0020	**0.020**	<0.0010	<0.00040	<0.0040	**0.0060**	**2.0**	<0.0020	<0.20	<0.00020	**0.0025**	<0.0020	<0.00040	--
MW-63	CWTP	Downgradient Boundary	9/9/2017	FC-CCR-MW63-9917	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.7**
MW-63	CWTP	Downgradient Boundary	10/13/2017	FC-CCR-MW63-101317	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.8**
MW-63	CWTP	Downgradient Boundary	10/13/2017	FC-CCR-MW63-101317	<0.0040	<0.0050	**0.022**	<0.0010	<0.0010	<0.010	**0.0069**	**2.0**	<0.0050	<0.20	<0.00020	**0.0029**	<0.0020	<0.0010	--
MW-63	CWTP	Downgradient Boundary	11/30/2017	FC-CCR-MW63-113017	--	--	--	--	--	--	--	**1.8**	--	--	--	--	--	--	--
MW-63	CWTP	Downgradient Boundary	4/6/2018	FC-CCR-MW63-4618	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-63	CWTP	Downgradient Boundary	6/3/2018	FC-CCR-MW-63-6318	--	--	--	--	--	--	--	**1.7**	--	--	--	--	--	--	--
MW-63	CWTP	Downgradient Boundary	11/2/2018	FC-CCR-MW63-112818	--	--	--	--	--	--	--	**1.9**	--	--	--	--	--	--	--
MW-63	CWTP	Downgradient Boundary	4/1/2019	FC-CCR-MW63-4119	--	--	--	--	--	--	--	**1.7**	--	--	--	--	--	--	--
MW-63	CWTP	Downgradient Boundary	5/7/2019	FC-CCR-MW63-5719-02	--	--	--	--	--	--	--	**1.6**	--	<0.20	--	--	--	--	--
MW-63	CWTP	Downgradient Boundary	12/3/2019	FC-CCR-MW63-120319	--	--	--	--	--	--	--	**1.8**	--	<0.20	--	--	--	--	--
MW-63	CWTP	Downgradient Boundary	12/3/2019	*DUP* FC-CCR-FD01-120319	--	--	--	--	--	--	--	**1.8**	--	<0.20	--	--	--	--	--
MW-63	CWTP	Downgradient Boundary	6/19/2020	FC-CCR-MW63-0620	--	--	--	--	--	--	--	**2.1**	--	--	--	--	--	--	--
MW-63	CWTP	Downgradient Boundary	11/5/2020	FC-CCR-MW63-1120	--	--	--	--	--	--	--	**2.2**	--	--	--	--	--	--	--
MW-63	CWTP	Downgradient Boundary	4/22/2021	FC-CCR-MW63-0421	<0.0010 U	<0.0013 U	**0.020**	<0.001	<0.0001	<0.001	**0.00062**	**2.0**	<0.0005	**0.057**	<0.0002	**0.0019**	<0.0005 U	<0.0001	<0.7
MW-63	CWTP	Downgradient Boundary	7/8/2021	FC-CCR-MW63-0721	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-63	CWTP	Downgradient Boundary	11/15/2021	FC-CCR-MW63-1121	<0.002 U	<0.001	**0.022**	<0.001 U	**0.000064 J**	<0.002	**0.0022**	**0.28 J**	<0.001	**0.066**	<0.0002	**0.0035**	<0.001	**0.00015 J**	<0.6
MW-63	CWTP	Downgradient Boundary	5/20/2022	FC-CCR-MW63-0522	<0.002	<0.001	**0.015**	<0.001	<0.0002	<0.002	**0.0012**	**2.1**	<0.001	**0.058**	<0.0002	**0.0029**	**0.0013**	<0.0002	<0.7
MW-63	CWTP	Downgradient Boundary	8/14/2022	FC-CCR-MW63-0822	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-63	CWTP	Downgradient Boundary	11/13/2022	FC-CCR-MW63-1122	<0.001	**0.00063**	**0.023**	<0.001	<0.0001	<0.001	**0.0026**	**2.1**	<0.0005	**0.061**	<0.0002	**0.0036**	**0.00051**	<0.0001	<0.6
MW-63	CWTP	Downgradient Boundary	05/07/2023	FC-CCR-MW63-0523	<0.002	<0.005	**0.016**	<0.001	<0.001	<0.003	<0.001	<8	<0.001	**0.055**	<0.0002	**0.0022**	<0.005	<0.001	**0.8**
MW-63	CWTP	Downgradient Boundary	06/27/2023	FC-CCR-MW63-0623	<0.001	**0.0012**	**0.014**	<0.001	<0.0001	<0.001	**0.0015**	**1.8**	<0.0005	**0.045**	<0.0002	**0.003**	**0.00068**	<0.0001	<0.6
MW-63	CWTP	Downgradient Boundary	11/06/2023	FC-CCR-MW63-1123	<0.001	**0.0013**	**0.025 J**	<0.001	<0.0001	<0.001	**0.0037**	**2.2**	<0.0005	**0.053**	<0.0002	**0.0033**	<0.0005	<0.0001	<0.8
MW-64	CWTP	Downgradient Boundary	11/5/2015	FC-CCR-MW64-110515	<0.0020	**0.00070**	**0.027**	<0.0010	<0.0010	**0.00023**	**0.0015**	**1.5**	**0.00016**	**0.022**	<0.00020	**0.0057**	**0.00033**	**0.00011**	--
MW-64	CWTP	Downgradient Boundary	11/5/2015	FC-CCR-MW64-110515	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-64	CWTP	Downgradient Boundary	4/27/2016	FC-CCR-MW-64-042716	<0.0025	<0.00050	**0.027**	<0.0010	<0.00010	**0.00071**	**0.0017**	**1.4**	<0.00050	<0.20	<0.00020	**0.0051**	<0.00050	**0.00012**	<0.8
MW-64	CWTP	Downgradient Boundary	6/5/2016	FC-CCR-MW64-616	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.8
MW-64	CWTP	Downgradient Boundary	6/5/2016	FC-CCR-MW64-616	<0.00010	<0.00050	**0.027**	<0.0010	<0.00010	<0.00050	**0.0012**	**1.4**	<0.00050	<0.20	<0.00020	**0.0050**	<0.00050	<0.00010	--
MW-64	CWTP	Downgradient Boundary	8/20/2016	FC-CCR-MW64-816	--	--	--	--	--	--	--	**1.3**	--	--	--	--	--	--	--

Table F-8
Groundwater Sampling Results for the CWTP Monitoring Wells - Appendix IV Constituents

					Appendix IV Constituents														
				Constituent:	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Fluoride	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium	Total Radium
				Filtered:	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L
				CWTP BTV (applicable to MW-62)	*0.00027*	*0.013*	*0.51*	*0.0022*	*0.00021*	*0.0014*	*0.014*	*4.2*	*0.0011*	*0.89*	*0.0002*	*0.011*	*0.47*	*0.0012*	*4.16*
				CWTP BTV (applicable to MW-63)															
				CWTP BTV (applicable to MW-64)															
				CWTP BTV (applicable to MW-65)															
				CWTP GWPS (applicable to downgradient wells)	*0.006*	*0.013*	*2*	*0.004*	*0.005*	*0.1*	*0.014*	*4.2*	*0.015*	*0.89*	*0.002*	*0.1*	*0.47*	*0.002*	*5*
Well Id	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample Identification**															
MW-64	CWTP	Downgradient Boundary	8/20/2016	FC-CCR-MW64-816	<0.00010	**0.00056**	**0.033**	<0.0010	<0.00010	**0.00093**	**0.0015**	**1.6**	<0.00050	<0.20	<0.00020	**0.0073**	<0.00050	**0.00013**	--
MW-64	CWTP	Downgradient Boundary	8/20/2016	FC-CCR-MW64-816	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.7
MW-64	CWTP	Downgradient Boundary	9/12/2016	FC-CCR-MW64-916	--	--	--	--	--	--	--	**1.5**	--	--	--	--	--	--	--
MW-64	CWTP	Downgradient Boundary	9/12/2016	FC-CCR-MW64-916	<0.0025	<0.0010	**0.027**	<0.0010	<0.00050	<0.0025	**0.0015**	**1.5**	<0.00050	<0.20	<0.00020	**0.0052**	<0.0030	<0.00050	--
MW-64	CWTP	Downgradient Boundary	9/12/2016	FC-CCR-MW64-916	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.8**
MW-64	CWTP	Downgradient Boundary	10/19/2016	FC-CCR-MW64-1016	--	--	--	--	--	--	--	**1.5**	--	--	--	--	--	--	--
MW-64	CWTP	Downgradient Boundary	10/19/2016	FC-CCR-MW64-1016	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.5
MW-64	CWTP	Downgradient Boundary	1/31/2017	FC-CCR-MW64-117	--	--	--	--	--	--	--	**1.4**	--	--	--	--	--	--	--
MW-64	CWTP	Downgradient Boundary	1/31/2017	FC-CCR-MW64-117	<0.0010	<0.00050	**0.025**	<0.0010	<0.00010	<0.00050	**0.0012**	**1.5**	<0.00050	<0.20	<0.00020	**0.0048**	<0.00050	**0.00011**	--
MW-64	CWTP	Downgradient Boundary	1/31/2017	FC-CCR-MW64-117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.7**
MW-64	CWTP	Downgradient Boundary	4/17/2017	FC-CCR-MW64-41717	--	--	--	--	--	--	--	**1.4**	--	--	--	--	--	--	--
MW-64	CWTP	Downgradient Boundary	4/17/2017	FC-CCR-MW64-41717	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.6
MW-64	CWTP	Downgradient Boundary	4/17/2017	FC-CCR-MW64-41717	<0.0040	<0.0020	**0.026**	<0.0010	<0.00040	<0.0020	<0.0020	**1.4**	<0.00050	<0.20	<0.00020	**0.0049**	<0.0020	**0.00012**	--
MW-64	CWTP	Downgradient Boundary	5/2/2017	FC-CCR-MW64-5217	<0.0010	<0.00050	**0.026**	<0.0010	<0.00010	<0.00050	**0.0011**	**1.3**	<0.00050	<0.20	<0.00020	**0.0045**	<0.00050	**0.00011**	--
MW-64	CWTP	Downgradient Boundary	5/2/2017	FC-CCR-MW64-5217	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.7
MW-64	CWTP	Downgradient Boundary	5/2/2017	*DUP* FC-CCR-FD02-5217	<0.0010	<0.00050	**0.026**	<0.0010	<0.00010	<0.00050	**0.0011**	**1.3**	<0.00050	<0.20	<0.00020	**0.0044**	<0.00050	**0.00011**	--
MW-64	CWTP	Downgradient Boundary	5/2/2017	*DUP* FC-CCR-FD02-5217	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.6
MW-64	CWTP	Downgradient Boundary	5/28/2017	FC-CCR-MW64-52817	<0.0010	<0.00050	**0.025**	<0.0010	<0.00010	<0.00050	**0.0011**	**1.5**	<0.00050	<0.20	<0.00020	**0.0045**	<0.00050	<0.00010	--
MW-64	CWTP	Downgradient Boundary	5/28/2017	FC-CCR-MW64-52817	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.6
MW-64	CWTP	Downgradient Boundary	6/21/2017	FC-CCR-MW64-62117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-64	CWTP	Downgradient Boundary	6/21/2017	FC-CCR-MW64-62117	<0.0010	<0.00050	**0.027**	<0.0010	<0.00010	<0.00050	**0.0012**	**1.4**	<0.00050	<0.20	<0.00020	**0.0051**	<0.00050	**0.00020**	--
MW-64	CWTP	Downgradient Boundary	6/21/2017	FC-CCR-MW64-62117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.6
MW-64	CWTP	Downgradient Boundary	7/21/2017	FC-CCR-MW64-72117	--	--	--	--	--	--	--	**1.5**	--	--	--	--	--	--	--
MW-64	CWTP	Downgradient Boundary	7/21/2017	FC-CCR-MW64-72117	<0.0040	<0.0020	**0.024**	<0.0010	<0.00040	<0.0020	<0.0020	--	<0.0020	<0.20	<0.00020	**0.0042**	<0.0020	<0.00040	--
MW-64	CWTP	Downgradient Boundary	7/21/2017	FC-CCR-MW64-72117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.6
MW-64	CWTP	Downgradient Boundary	8/9/2017	FC-CCR-MW64-8917	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-64	CWTP	Downgradient Boundary	8/9/2017	FC-CCR-MW64-8917	<0.0010	<0.00050	**0.027**	<0.0010	<0.00010	<0.0010	**0.0012**	**1.5**	<0.00050	<0.20	<0.00020	**0.0047**	<0.00050	<0.00010	--
MW-64	CWTP	Downgradient Boundary	8/9/2017	FC-CCR-MW64-8917	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.8**
MW-64	CWTP	Downgradient Boundary	8/16/2017	FC-CCR-MW64-81617	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.7
MW-64	CWTP	Downgradient Boundary	8/16/2017	FC-CCR-MW64-81617	--	--	--	--	--	--	--	**1.5**	--	--	--	--	--	--	--
MW-64	CWTP	Downgradient Boundary	9/9/2017	FC-CCR-MW64-9917	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-64	CWTP	Downgradient Boundary	9/9/2017	FC-CCR-MW64-9917	<0.0040	<0.0020	**0.024**	<0.0010	<0.00040	<0.0040	<0.0020	**1.5**	<0.0020	<0.20	<0.00020	**0.0045**	<0.0020	<0.00040	--
MW-64	CWTP	Downgradient Boundary	9/9/2017	FC-CCR-MW64-9917	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.6
MW-64	CWTP	Downgradient Boundary	10/13/2017	FC-CCR-MW64-101317	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.6
MW-64	CWTP	Downgradient Boundary	10/13/2017	FC-CCR-MW64-101317	<0.0040	<0.0050	**0.029**	<0.0010	<0.0010	<0.010	<0.0050	**1.4**	<0.0050	<0.20	<0.00020	**0.0051**	<0.0020	<0.00040	--
MW-64	CWTP	Downgradient Boundary	11/30/2017	FC-CCR-MW64-113017	--	--	--	--	--	--	--	**1.4**	--	--	--	--	--	--	--
MW-64	CWTP	Downgradient Boundary	6/3/2018	FC-CCR-MW-64-6318	--	--	--	--	--	--	--	**1.4**	--	--	--	--	--	--	--
MW-64	CWTP	Downgradient Boundary	11/2/2018	FC-CCR-MW64-11218	--	--	--	--	--	--	--	**1.4**	--	--	--	--	--	--	--
MW-64	CWTP	Downgradient Boundary	4/1/2019	FC-CCR-MW64-4119	--	--	--	--	--	--	--	**1.4**	--	--	--	--	--	--	--
MW-64	CWTP	Downgradient Boundary	5/7/2019	FC-CCR-MW64-5719-03	--	--	--	--	--	--	--	**1.4**	--	<0.20	--	--	--	--	--
MW-64	CWTP	Downgradient Boundary	5/7/2019	*DUP* FC-CCR-FD03-5719-04	--	--	--	--	--	--	--	**1.4**	--	<0.20	--	--	--	--	--
MW-64	CWTP	Downgradient Boundary	12/3/2019	FC-CCR-MW64-120319	--	--	--	--	--	--	--	**1.5**	--	<0.20	--	--	--	--	--
MW-64	CWTP	Downgradient Boundary	6/19/2020	FC-CCR-MW64-0620	--	--	--	--	--	--	--	**1.3**	--	--	--	--	--	--	--
MW-64	CWTP	Downgradient Boundary	11/5/2020	FC-CCR-MW64-1120	--	--	--	--	--	--	--	**1.6**	--	--	--	--	--	--	--
MW-64	CWTP	Downgradient Boundary	4/22/2021	FC-CCR-MW64-0421	<0.0010 U	<0.00096 U	**0.033**	<0.001	<0.0001	<0.001	**0.00083**	**1.4**	<0.0005	**0.019 J**	<0.0002	**0.0047**	<0.0005 U	<0.0001	<0.7
MW-64	CWTP	Downgradient Boundary	11/15/2021	FC-CCR-MW64-1121	<0.002	<0.001	**0.024 J**	<0.001 U	**0.000058 J**	<0.002	**0.0018**	**1.4**	<0.001	**0.019 J**	<0.0002	**0.0052**	<0.001	**0.00041**	<0.6

Table F-8
Groundwater Sampling Results for the CWTP Monitoring Wells - Appendix IV Constituents

					Appendix IV Constituents														
				Constituent:	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Fluoride	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium	Total Radium
				Filtered:	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L
				CWTP BTV (applicable to MW-62)	*0.00027*	*0.013*	*0.51*	*0.0022*	*0.00021*	*0.0014*	*0.014*	*4.2*	*0.0011*	*0.89*	*0.0002*	*0.011*	*0.47*	*0.0012*	*4.16*
				CWTP BTV (applicable to MW-63)															
				CWTP BTV (applicable to MW-64)															
				CWTP BTV (applicable to MW-65)															
				CWTP GWPS (applicable to downgradient wells)	*0.006*	*0.013*	*2*	*0.004*	*0.005*	*0.1*	*0.014*	*4.2*	*0.015*	*0.89*	*0.002*	*0.1*	*0.47*	*0.002*	*5*
Well Id	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample Identification**															
MW-64	CWTP	Downgradient Boundary	5/20/2022	FC-CCR-MW64-0522	<0.002	<0.001	**0.035**	<0.001	<0.0002	<0.002	**0.0011**	**1.4**	<0.001	**0.027**	<0.0002	**0.0049**	<0.001	<0.0002	<0.7
MW-64	CWTP	Downgradient Boundary	5/20/2022	FC-CCR-SS01-0522	<0.002	**0.00022 J**	**0.0329**	<0.00025	<0.00025	<0.002	**0.00113**	**0.874 J / 1.39**	<0.0005	**0.0601**	<0.001	**0.00479**	<0.00025	<0.0005	--
MW-64	CWTP	Downgradient Boundary	11/13/2022	FC-CCR-MW64-1122	<0.001	<0.0005	**0.023**	<0.001	<0.0001	<0.001	**0.0018**	**1.6**	<0.0005	**0.021**	<0.0002	**0.0052**	<0.0005	**0.00013**	**0.8**
MW-64	CWTP	Downgradient Boundary	05/07/2023	FC-CCR-MW64-0523	<0.002	<0.005	**0.022**	**0.0051**	<0.001	<0.003	**0.0017**	**1.4**	<0.001	**0.023**	<0.0002	**0.0050**	<0.005	<0.001	<0.6
MW-64	CWTP	Downgradient Boundary	06/27/2023	FC-CCR-MW64-0623	<0.001	**0.001**	**0.022**	<0.001	<0.0001	<0.001	**0.0017**	**1.3**	<0.0005	**0.020**	<0.0002	**0.0046**	<0.0005	**0.00012**	**1.7**
MW-64	CWTP	Downgradient Boundary	11/06/2023	FC-CCR-MW64-1123	<0.001	**0.00097**	**0.029 J**	<0.001	<0.0001	<0.001	**0.0016**	**1.5**	<0.0005	<0.05	<0.0002	**0.0044**	<0.0005	**0.00015**	<0.8
MW-65	CWTP	Downgradient Boundary	11/5/2015	FC-CCR-MW65-110515	<0.0020	**0.00071**	**0.014**	<0.0010	<0.0010	**0.00049**	**0.0012**	**2.0**	<0.0010	**0.054**	<0.00020	**0.0093**	**0.00034**	<0.0010	--
MW-65	CWTP	Downgradient Boundary	11/5/2015	FC-CCR-MW65-110515	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-65	CWTP	Downgradient Boundary	4/27/2016	FC-CCR-MW-65-042716	<0.0025	<0.00050	**0.017**	<0.0010	<0.00010	**0.0015**	**0.0012**	**1.8**	<0.00050	<0.20	<0.00020	**0.0078**	<0.00050	<0.00010	<0.8
MW-65	CWTP	Downgradient Boundary	6/5/2016	FC-CCR-MW65-616	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.8
MW-65	CWTP	Downgradient Boundary	6/5/2016	FC-CCR-MW65-616	<0.00010	<0.00050	**0.014**	<0.0010	<0.00010	<0.00050	**0.0011**	**2.0**	<0.00050	<0.20	<0.00020	**0.0083**	<0.00050	<0.00010	--
MW-65	CWTP	Downgradient Boundary	8/20/2016	FC-CCR-MW65-816	--	--	--	--	--	--	--	**1.7**	--	--	--	--	--	--	--
MW-65	CWTP	Downgradient Boundary	8/20/2016	FC-CCR-MW65-816	<0.00010	<0.00050	**0.019**	<0.0010	<0.00010	<0.00050	**0.0012**	**2.1**	<0.00050	<0.20	<0.00020	**0.013**	<0.00050	<0.00010	--
MW-65	CWTP	Downgradient Boundary	8/20/2016	FC-CCR-MW65-816	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.4
MW-65	CWTP	Downgradient Boundary	9/12/2016	FC-CCR-MW65-916	--	--	--	--	--	--	--	**2.0**	--	--	--	--	--	--	--
MW-65	CWTP	Downgradient Boundary	9/12/2016	FC-CCR-MW65-916	<0.0025	<0.0010	**0.013**	<0.0010	<0.00050	<0.0025	**0.0014**	**2.0**	<0.00050	<0.20	<0.00020	**0.0084**	<0.0030	<0.00050	--
MW-65	CWTP	Downgradient Boundary	9/12/2016	FC-CCR-MW65-916	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.0**
MW-65	CWTP	Downgradient Boundary	10/19/2016	FC-CCR-MW65-1016	--	--	--	--	--	--	--	**2.0**	--	--	--	--	--	--	--
MW-65	CWTP	Downgradient Boundary	10/19/2016	FC-CCR-MW65-1016	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.5
MW-65	CWTP	Downgradient Boundary	2/1/2017	FC-CCR-MW65-117	--	--	--	--	--	--	--	**1.8**	--	--	--	--	--	--	--
MW-65	CWTP	Downgradient Boundary	2/1/2017	FC-CCR-MW65-117	<0.0010	<0.00050	**0.014**	<0.0010	<0.00010	<0.00050	**0.0011**	**2.0**	<0.00050	<0.20	<0.00020	**0.0086**	<0.00050	<0.00010	--
MW-65	CWTP	Downgradient Boundary	2/1/2017	FC-CCR-MW65-117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.9**
MW-65	CWTP	Downgradient Boundary	4/16/2017	FC-CCR-MW65-41617	--	--	--	--	--	--	--	**1.8**	--	--	--	--	--	--	--
MW-65	CWTP	Downgradient Boundary	4/16/2017	FC-CCR-MW65-41617	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.7**
MW-65	CWTP	Downgradient Boundary	4/16/2017	FC-CCR-MW65-41617	<0.0040	<0.0020	**0.016**	<0.0010	<0.00040	<0.0020	<0.0020	**1.7**	<0.0020	<0.20	<0.00020	**0.0082**	<0.0020	<0.00040	--
MW-65	CWTP	Downgradient Boundary	5/1/2017	FC-CCR-MW65-5117	<0.0010	<0.00050	**0.017**	<0.0010	<0.00010	<0.00050	**0.0011**	**1.6**	<0.00050	<0.20	<0.00020	**0.0083**	<0.00050	<0.00010	--

Table F-8
Groundwater Sampling Results for the CWTP Monitoring Wells - Appendix IV Constituents

					Appendix IV Constituents														
				Constituent:	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Fluoride	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium	Total Radium
				Filtered:	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L
				CWTP BTV (applicable to MW-62)	*0.00027*	*0.013*	*0.51*	*0.0022*	*0.00021*	*0.0014*	*0.014*	*4.2*	*0.0011*	*0.89*	*0.0002*	*0.011*	*0.47*	*0.0012*	*4.16*
				CWTP BTV (applicable to MW-63)															
				CWTP BTV (applicable to MW-64)															
				CWTP BTV (applicable to MW-65)															
				CWTP GWPS (applicable to downgradient wells)	*0.006*	*0.013*	*2*	*0.004*	*0.005*	*0.1*	*0.014*	*4.2*	*0.015*	*0.89*	*0.002*	*0.1*	*0.47*	*0.002*	*5*
Well Id	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample Identification**															
MW-65	CWTP	Downgradient Boundary	5/1/2017	FC-CCR-MW65-5117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.6
MW-65	CWTP	Downgradient Boundary	5/1/2017	*DUP* FC-CCR-FD01-5117	<0.0010	<0.00050	**0.017**	<0.0010	<0.00010	<0.00050	**0.0011**	**1.6**	<0.00050	<0.20	<0.00020	**0.0083**	<0.00050	<0.00010	--
MW-65	CWTP	Downgradient Boundary	5/1/2017	*DUP* FC-CCR-FD01-5117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.6
MW-65	CWTP	Downgradient Boundary	5/29/2017	FC-CCR-MW65-52917	<0.0010	<0.00050	**0.021**	<0.0010	<0.00010	<0.00050	**0.0010**	**1.8**	<0.00050	<0.20	<0.00020	**0.010**	<0.00050	<0.00010	--
MW-65	CWTP	Downgradient Boundary	5/29/2017	FC-CCR-MW65-52917	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.6
MW-65	CWTP	Downgradient Boundary	5/29/2017	*DUP* FC-CCR-FD02-52917	<0.010	<0.0050	**0.023**	<0.0010	<0.0010	<0.0050	<0.0050	**1.8**	<0.0050	<0.20	<0.00020	**0.010**	<0.0050	<0.0010	--
MW-65	CWTP	Downgradient Boundary	5/29/2017	*DUP* FC-CCR-FD02-52917	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.6
MW-65	CWTP	Downgradient Boundary	6/21/2017	FC-CCR-MW65-62117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-65	CWTP	Downgradient Boundary	6/21/2017	FC-CCR-MW65-62117	<0.0010	<0.00050	**0.018**	<0.0010	<0.00010	<0.00050	**0.0011**	**1.9**	<0.00050	<0.20	<0.00020	**0.0097**	<0.00050	<0.00010	--
MW-65	CWTP	Downgradient Boundary	6/21/2017	FC-CCR-MW65-62117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.6
MW-65	CWTP	Downgradient Boundary	6/21/2017	*DUP* FC-CCR-FD01-62117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-65	CWTP	Downgradient Boundary	6/21/2017	*DUP* FC-CCR-FD01-62117	<0.0010	<0.00050	**0.019**	<0.0010	<0.00010	<0.00050	**0.0011**	**2.0**	<0.00050	<0.20	<0.00020	**0.0098**	<0.00050	<0.00010	--
MW-65	CWTP	Downgradient Boundary	6/21/2017	*DUP* FC-CCR-FD01-62117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.3**
MW-65	CWTP	Downgradient Boundary	7/21/2017	FC-CCR-MW65-72117	--	--	--	--	--	--	--	**2.0**	--	--	--	--	--	--	--
MW-65	CWTP	Downgradient Boundary	7/21/2017	FC-CCR-MW65-72117	<0.0040	<0.0020	**0.012**	<0.0010	<0.00040	<0.0020	<0.0020	**2.0**	<0.0020	<0.20	<0.00020	**0.0080**	<0.0020	<0.00040	--
MW-65	CWTP	Downgradient Boundary	7/21/2017	FC-CCR-MW65-72117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.6
MW-65	CWTP	Downgradient Boundary	7/21/2017	*DUP* FC-CCR-FD01-72117	--	--	--	--	--	--	--	**2.0**	--	--	--	--	--	--	--
MW-65	CWTP	Downgradient Boundary	7/21/2017	*DUP* FC-CCR-FD01-72117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.6
MW-65	CWTP	Downgradient Boundary	8/9/2017	FC-CCR-MW65-8917	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-65	CWTP	Downgradient Boundary	8/9/2017	FC-CCR-MW65-8917	<0.0010	<0.00050	**0.012**	<0.0010	<0.00010	<0.0010	**0.0012**	**2.0**	<0.00050	<0.20	<0.00020	**0.0083**	<0.00050	<0.00010	--
MW-65	CWTP	Downgradient Boundary	8/9/2017	FC-CCR-MW65-8917	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.5
MW-65	CWTP	Downgradient Boundary	8/16/2017	FC-CCR-MW65-81617	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.7
MW-65	CWTP	Downgradient Boundary	8/16/2017	FC-CCR-MW65-81617	--	--	--	--	--	--	--	**2.0**	--	--	--	--	--	--	--
MW-65	CWTP	Downgradient Boundary	8/16/2017	*DUP* FC-CCR-FD01-81617	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.7
MW-65	CWTP	Downgradient Boundary	8/16/2017	*DUP* FC-CCR-FD01-81617	--	--	--	--	--	--	--	**2.0**	--	--	--	--	--	--	--
MW-65	CWTP	Downgradient Boundary	9/9/2017	FC-CCR-MW65-9917	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-65	CWTP	Downgradient Boundary	9/9/2017	FC-CCR-MW65-9917	<0.0040	<0.0020	**0.012**	<0.0010	<0.00040	<0.0040	<0.0020	**2.0**	<0.0020	<0.20	<0.00020	**0.0080**	<0.0020	<0.00040	--
MW-65	CWTP	Downgradient Boundary	9/9/2017	FC-CCR-MW65-9917	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.6
MW-65	CWTP	Downgradient Boundary	9/9/2017	*DUP* FC-CCR-FD01-9917	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-65	CWTP	Downgradient Boundary	9/9/2017	*DUP* FC-CCR-FD01-9917	<0.0040	<0.0020	**0.011**	<0.0010	<0.00040	<0.0040	<0.0020	**2.0**	<0.0020	<0.20	<0.00020	**0.0081**	<0.0020	<0.00040	--
MW-65	CWTP	Downgradient Boundary	9/9/2017	*DUP* FC-CCR-FD01-9917	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.6
MW-65	CWTP	Downgradient Boundary	10/13/2017	FC-CCR-MW65-101317	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.6
MW-65	CWTP	Downgradient Boundary	10/13/2017	FC-CCR-MW65-101317	<0.0010	<0.00050	**0.013**	<0.0010	<0.00010	<0.0010	**0.0011**	**1.9**	<0.00050	<0.20	<0.00020	**0.0093**	<0.00050	<0.00010	--
MW-65	CWTP	Downgradient Boundary	10/13/2017	*DUP* FC-CCR-FD02-101317	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.6
MW-65	CWTP	Downgradient Boundary	10/13/2017	*DUP* FC-CCR-FD02-101317	<0.0010	<0.00050	**0.013**	<0.0010	<0.00010	<0.0010	**0.0012**	**1.9**	<0.00050	<0.20	<0.00020	**0.0094**	<0.00050	<0.00010	--
MW-65	CWTP	Downgradient Boundary	11/30/2017	FC-CCR-MW65-113017	--	--	--	--	--	--	--	**2.0**	--	--	--	--	--	--	--
MW-65	CWTP	Downgradient Boundary	6/3/2018	FC-CCR-MW-65-6318	--	--	--	--	--	--	--	**1.9**	--	--	--	--	--	--	--
MW-65	CWTP	Downgradient Boundary	11/2/2018	FC-CCR-MW65-11218	--	--	--	--	--	--	--	**1.9**	--	--	--	--	--	--	--
MW-65	CWTP	Downgradient Boundary	4/1/2019	FC-CCR-MW65-4119	--	--	--	--	--	--	--	**1.8**	--	--	--	--	--	--	--
MW-65	CWTP	Downgradient Boundary	4/1/2019	*DUP* FC-CCR-FD1-4119	--	--	--	--	--	--	--	**1.9**	--	--	--	--	--	--	--
MW-65	CWTP	Downgradient Boundary	5/7/2019	FC-CCR-MW65-5719-05	--	--	--	--	--	--	--	**1.7**	--	<0.20	--	--	--	--	--
MW-65	CWTP	Downgradient Boundary	12/3/2019	FC-CCR-MW65-120319	--	--	--	--	--	--	--	**1.9**	--	<0.20	--	--	--	--	--
MW-65	CWTP	Downgradient Boundary	6/19/2020	FC-CCR-MW65-0620	--	--	--	--	--	--	--	**1.7**	--	--	--	--	--	--	--

Table F-8
Groundwater Sampling Results for the CWTP Monitoring Wells - Appendix IV Constituents

					Appendix IV Constituents													
				Constituent:	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Fluoride	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium	Total Radium
				Filtered:	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L
				CWTP BTV (applicable to MW-62)	*0.00027*	*0.013*	*0.51*	*0.0022*	*0.00021*	*0.0014*	*0.014*	*4.2*	*0.0011*	*0.89*	*0.0002*	*0.011*	*0.47*	*0.0012*	*4.16*
				CWTP BTV (applicable to MW-63)															
				CWTP BTV (applicable to MW-64)															
				CWTP BTV (applicable to MW-65)															
				CWTP GWPS (applicable to downgradient wells)	*0.006*	*0.013*	*2*	*0.004*	*0.005*	*0.1*	*0.014*	*4.2*	*0.015*	*0.89*	*0.002*	*0.1*	*0.47*	*0.002*	*5*
Well Id	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample Identification**															
MW-65	CWTP	Downgradient Boundary	11/5/2020	FC-CCR-MW65-1120	--	--	--	--	--	--	--	**2.1**	--	--	--	--	--	--	--
MW-65	CWTP	Downgradient Boundary	4/22/2021	FC-CCR-MW65-0421	<0.0010 U	<0.00099 U	**0.032**	<0.001	<0.0001	<0.001	**0.0020**	**1.5**	<0.0005	**0.061**	<0.0002	**0.0072**	<0.00059 U	<0.0001	<0.7
MW-65	CWTP	Downgradient Boundary	7/8/2021	FC-CCR-MW65-0721	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-65	CWTP	Downgradient Boundary	11/15/2021	FC-CCR-MW65-1121	<0.002	<0.001	**0.020**	<0.001 U	<0.0002	<0.002	**0.0022**	**1.7**	<0.001	**0.053**	<0.0002	**0.0098**	<0.001	**0.000072 J**	<0.6
MW-65	CWTP	Downgradient Boundary	5/20/2022	FC-CCR-MW65-0522	<0.002	<0.001	**0.042**	<0.001	<0.0002	<0.002	**0.0029**	**1.5**	<0.001	**0.081**	<0.0002	**0.0066**	<0.001	<0.0002	**1.1**
MW-65	CWTP	Downgradient Boundary	8/14/2022	FC-CCR-MW65-0822	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-65	CWTP	Downgradient Boundary	11/13/2022	FC-CCR-MW65-1122	<0.001	**0.00059**	**0.021**	<0.001	<0.0001	<0.001	**0.0019**	**1.8**	<0.0005	**0.050**	<0.0002	**0.0089**	<0.0005	<0.0001	<0.6
MW-65	CWTP	Downgradient Boundary	05/07/2023	FC-CCR-MW65-0523	<0.002	<0.005	**0.023**	<0.001	<0.001	<0.003	**0.0018**	<2	<0.001	**0.045**	<0.0002	**0.0070**	<0.005	<0.001	<0.6
MW-65	CWTP	Downgradient Boundary	06/28/2023	FC-CCR-MW65-0623	<0.001	**0.0013**	**0.022**	<0.001	<0.0001	<0.001	**0.0017**	**1.4**	<0.0005	**0.050**	<0.0002	**0.0073**	<0.0005	<0.0001	**0.7**
MW-65	CWTP	Downgradient Boundary	11/06/2023	FC-CCR-MW65-1123	<0.001	**0.0011**	**0.021 J**	<0.001	<0.0001	<0.001	**0.0016**	**1.5**	<0.0005	<0.05	<0.0002	**0.0073**	<0.0005	<0.0001	<0.8

BTV exceedances are shown in grey shaded cells. GWPS exceedence are shown in red text.

Abbreviations and Data Qualifiers:

< = less than
BTV = Background Threshold Value
CCR = Coal Combustion Residual
ID = Identification
J = The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
mg/L = milligrams per liter
NJ = The analyte has been "tentatively identified" or "presumptively" as present and the associated numerical value is the estimated concentration in the sample.
pCi/L = Picocuries per liter
su = standard units

Table F-9
Groundwater Sampling Results for the CWTP Monitoring Wells - Additional Analyses

					Additional Analyses															
				Constituent:	Alkalinity Bicarbonate	Alkalinity Carbonate	Alkalinity Hydroxide	Alkalinity(as CaCO3)	Alkalinity, Phenolphthalein, as CaCO3	Iron	Magnesium	Manganese	Nickel	Nitrate as N	Nitrate Nitrite as N	Nitrite (as N)	Potassium	Radium 226	Radium 228	Sodium
				Filtered:	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L	pCi/L	mg/L
				CWTP BTV (applicable to MW-62)	--	--	--	--	--	--	--	--	--	--		--	--	--	--	--
				CWTP BTV (applicable to MW-63)	--	--	--	--	--	--	--	--	--	--		--	--	--	--	--
				CWTP BTV (applicable to MW-64)	--	--	--	--	--	--	--	--	--	--		--	--	--	--	--
				CWTP BTV (applicable to MW-65)	--	--	--	--	--	--	--	--	--	--		--	--	--	--	--
				CWTP GWPS (applicable to downgradient wells)	--	--	--	--	--	--	--	--	--	--		--	--	--	--	--
Well Id	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample Identification**																
MW-71	URS/CWTP	Background	3/5/2016	FC-CCR-MW-71-030516	**490**	<5.0	--	**490**	--	--	**1,600**	--	--	--	--	--	**23**	--	--	**880**
MW-71	URS/CWTP	Background	3/5/2016	FC-CCR-MW-71-030516	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.656**	**1.2**	--
MW-71	URS/CWTP	Background	3/5/2016	*DUP* FC-CCR-FD-2-030516	**410**	<5.0	--	**410**	--	--	**1,700**	--	--	--	--	--	**24**	--	--	**940**
MW-71	URS/CWTP	Background	3/5/2016	*DUP* FC-CCR-FD-2-030516	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.717**	**1.26**	--
MW-71	URS/CWTP	Background	4/26/2016	FC-CCR-MW-71-042616	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.7**	**1.5**	--
MW-71	URS/CWTP	Background	6/6/2016	FC-CCR-MW71-616	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.1**	**2.1**	--
MW-71	URS/CWTP	Background	6/6/2016	FC-CCR-MW71-616	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	8/21/2016	FC-CCR-MW71-816	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	8/21/2016	FC-CCR-MW71-816	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	8/21/2016	FC-CCR-MW71-816	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.6**	**1.0**	--
MW-71	URS/CWTP	Background	8/21/2016	FC-CCR-MW101-816	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	8/21/2016	FC-CCR-MW101-816	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	8/21/2016	FC-CCR-MW101-816	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.3**	**0.8**	--
MW-71	URS/CWTP	Background	9/12/2016	FC-CCR-MW71-916	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	9/12/2016	FC-CCR-MW71-916	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	9/12/2016	FC-CCR-MW71-916	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.5**	**1.6**	--
MW-71	URS/CWTP	Background	10/20/2016	FC-CCR-MW71-1016	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	10/20/2016	FC-CCR-MW71-1016	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.4**	<0.7	--
MW-71	URS/CWTP	Background	2/2/2017	FC-CCR-MW71-117	**550**	<6.0	<6.0	**550**	<6.0	--	**2,300**	--	--	--	--	--	**32**	--	--	**1,200**
MW-71	URS/CWTP	Background	2/2/2017	FC-CCR-MW71-117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	2/2/2017	FC-CCR-MW71-117	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	**1.9**	--
MW-71	URS/CWTP	Background	4/17/2017	FC-CCR-MW71-41717	**420**	<6.0	<6.0	**420**	<6.0	--	**1,800**	--	--	--	--	--	**25**	--	--	**980**
MW-71	URS/CWTP	Background	4/17/2017	FC-CCR-MW71-41717	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	**1.2**	--
MW-71	URS/CWTP	Background	4/17/2017	FC-CCR-MW71-41717	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	5/2/2017	FC-CCR-MW71-5217	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	5/2/2017	FC-CCR-MW71-5217	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.7**	<0.6	--
MW-71	URS/CWTP	Background	5/29/2017	FC-CCR-MW71-52917	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	5/29/2017	FC-CCR-MW71-52917	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	<0.6	--
MW-71	URS/CWTP	Background	6/22/2017	FC-CCR-MW71-62217	**540**	<6.0	<6.0	**540**	<6.0	--	**2,400**	--	--	--	--	--	**31**	--	--	**1,200**
MW-71	URS/CWTP	Background	6/22/2017	FC-CCR-MW71-62217	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	6/22/2017	FC-CCR-MW71-62117	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.2**	**1.5**	--
MW-71	URS/CWTP	Background	7/21/2017	FC-CCR-MW71-72117	**420**	<6.0	<6.0	**420**	<6.0	--	**1,800**	--	--	--	--	--	**27**	--	--	**1,100**
MW-71	URS/CWTP	Background	7/21/2017	FC-CCR-MW71-72117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	7/21/2017	FC-CCR-MW71-72117	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.5	<0.4	--
MW-71	URS/CWTP	Background	8/10/2017	FC-CCR-MW71-81017	**420**	<6.0	<6.0	**420**	<6.0	--	**2,000**	--	--	--	--	--	**27**	--	--	**1,100**
MW-71	URS/CWTP	Background	8/10/2017	FC-CCR-MW71-81017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	8/10/2017	FC-CCR-MW71-81017	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	<0.7	--
MW-71	URS/CWTP	Background	8/17/2017	FC-CCR-MW71-81717	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	**2.0**	--
MW-71	URS/CWTP	Background	8/17/2017	FC-CCR-MW71-81717	**430**	<6.0	<6.0	**430**	<6.0	--	**1,800**	--	--	--	--	--	**30**	--	--	**1,100**
MW-71	URS/CWTP	Background	9/11/2017	FC-CCR-MW71-91117	**420**	<6.0	<6.0	**420**	<6.0	--	**1,800**	--	--	--	--	--	**26**	--	--	**1,100**

Table F-9
Groundwater Sampling Results for the CWTP Monitoring Wells - Additional Analyses

					Additional Analyses															
				Constituent:	Alkalinity Bicarbonate	Alkalinity Carbonate	Alkalinity Hydroxide	Alkalinity(as CaCO3)	Alkalinity, Phenolphthalein, as CaCO3	Iron	Magnesium	Manganese	Nickel	Nitrate as N	Nitrate Nitrite as N	Nitrite (as N)	Potassium	Radium 226	Radium 228	Sodium
				Filtered:	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L	pCi/L	mg/L
				CWTP BTV (applicable to MW-62)	--	--	--	--	--	--	--	--	--	--		--	--	--	--	--
				CWTP BTV (applicable to MW-63)	--	--	--	--	--	--	--	--	--	--		--	--	--	--	--
				CWTP BTV (applicable to MW-64)	--	--	--	--	--	--	--	--	--	--		--	--	--	--	--
				CWTP BTV (applicable to MW-65)	--	--	--	--	--	--	--	--	--	--		--	--	--	--	--
				CWTP GWPS (applicable to downgradient wells)	--	--	--	--	--	--	--	--	--	--		--	--	--	--	--
Well Id	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample Identification**																
MW-71	URS/CWTP	Background	9/11/2017	FC-CCR-MW71-91117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	9/11/2017	FC-CCR-MW71-91117	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	<0.7	--
MW-71	URS/CWTP	Background	10/13/2017	FC-CCR-MW71-101317	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.8**	**0.8**	--
MW-71	URS/CWTP	Background	10/13/2017	FC-CCR-MW71-101317	**430**	<6.0	<6.0	**430**	<6.0	--	**1,700**	**--**	--	--	--	--	**26**	--	--	**1,000**
MW-71	URS/CWTP	Background	11/30/2017	FC-CCR-MW71-113017	**430**	<6.0	<6.0	**430**	<6.0	--	**1,700**	**--**	--	--	--	--	**29**	--	--	**1,100**
MW-71	URS/CWTP	Background	3/16/2018	FC-CCR-MW71-31618	--	--	--	--	--	--	--	--	--	--	--	--	--	<1.0	**0.8**	--
MW-71	URS/CWTP	Background	6/2/2018	FC-CCR-MW-71-6218	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.4**	**1.5**	--
MW-71	URS/CWTP	Background	6/2/2018	FC-CCR-MW-71-6218	**430**	<6.0	<6.0	**430**	<6.0	--	**2,000**	**--**	--	--	--	--	**27**	--	--	**1,000**
MW-71	URS/CWTP	Background	11/3/2018	FC-CCR-MW71-11318	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	11/3/2018	FC-CCR-MW71-11318	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.2**	<0.7	--
MW-71	URS/CWTP	Background	11/3/2018	FC-CCR-MW71-11318	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	11/3/2018	*DUP* FC-CCR-FD01-11318	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	11/3/2018	*DUP* FC-CCR-FD01-11318	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.8**	<0.7	--
MW-71	URS/CWTP	Background	3/18/2019	FC-CCR-MW71-031819	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	3/18/2019	FC-CCR-MW71-031819	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	<0.7	--
MW-71	URS/CWTP	Background	5/6/2019	FC-CCR-MW71-5719	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	**1.0**	--
MW-71	URS/CWTP	Background	12/2/2019	FC-CCR-MW71-120219	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	6/20/2020	FC-CCR-MW71-0620	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	<0.8	--
MW-71	URS/CWTP	Background	11/5/2020	FC-CCR-MW71-1120	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.5	<0.8	--
MW-71	URS/CWTP	Background	4/22/2021	FC-CCR-MW71-0421						--	--	--	--	--	--	--		**0.7**	<0.7	
MW-71	URS/CWTP	Background	11/12/2021	FC-CCR-MW71-1121	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.5**	<0.6	--
MW-71	URS/CWTP	Background	5/21/2022	FC-CCR-MW71-0522	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.4**	**0.8**	--
MW-71	URS/CWTP	Background	5/21/2022	FC-CCR-SS04-0522	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	8/14/2022	FC-CCR-MW71-0822	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	11/13/2022	FC-CCR-MW71-1122	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	**1**	--
MW-71	URS/CWTP	Background	01/27/2023	FC-CCR-MW71-0123	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-71	URS/CWTP	Background	05/08/2023	FC-CCR-MW71-0523	--	--	--	--	--	--	--	--	**0.0035**	--	--	--	--	<0.4	**1.7**	
MW-71	URS/CWTP	Background	06/27/2023	FC-CCR-MW71-0623	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	**2.2**	--
MW-71	URS/CWTP	Background	11/08/2023	FC-CCR-MW71-1123	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.8**	**1.0**	--
MW-72	URS/CWTP	Background	3/7/2016	FC-CCR-MW72-030716	**620**	<5.0	--	**620**	--	--	**2,300**	**--**	--	--	--	--	**29**	--	--	**720**
MW-72	URS/CWTP	Background	3/7/2016	FC-CCR-MW72-030716	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.06**	**1.85**	--
MW-72	URS/CWTP	Background	4/26/2016	FC-CCR-MW-72-042616	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	<0.8	--
MW-72	URS/CWTP	Background	6/6/2016	FC-CCR-MW72-616	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.5**	**0.8**	--
MW-72	URS/CWTP	Background	6/6/2016	FC-CCR-MW72-616	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	8/21/2016	FC-CCR-MW72-816	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	8/21/2016	FC-CCR-MW72-816	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	8/21/2016	FC-CCR-MW72-816	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.5**	**2.7**	--
MW-72	URS/CWTP	Background	9/13/2016	FC-CCR-MW72-916	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	9/13/2016	FC-CCR-MW72-916	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	9/13/2016	FC-CCR-MW72-916	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.5**	**3.4**	--

Table F-9
Groundwater Sampling Results for the CWTP Monitoring Wells - Additional Analyses

					Additional Analyses															
				Constituent:	Alkalinity Bicarbonate	Alkalinity Carbonate	Alkalinity Hydroxide	Alkalinity(as CaCO3)	Alkalinity, Phenolphthalein, as CaCO3	Iron	Magnesium	Manganese	Nickel	Nitrate as N	Nitrate Nitrite as N	Nitrite (as N)	Potassium	Radium 226	Radium 228	Sodium
				Filtered:	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L	pCi/L	mg/L
				CWTP BTV (applicable to MW-62)	--	--	--	--	--	--	--	--	--	--		--	--	--	--	--
				CWTP BTV (applicable to MW-63)	--	--	--	--	--	--	--	--	--	--		--	--	--	--	--
				CWTP BTV (applicable to MW-64)	--	--	--	--	--	--	--	--	--	--		--	--	--	--	--
				CWTP BTV (applicable to MW-65)	--	--	--	--	--	--	--	--	--	--		--	--	--	--	--
				CWTP GWPS (applicable to downgradient wells)	--	--	--	--	--	--	--	--	--	--		--	--	--	--	--
Well Id	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample Identification**																
MW-72	URS/CWTP	Background	10/20/2016	FC-CCR-MW72-1016	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	10/20/2016	FC-CCR-MW72-1016	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.7**	**3.5**	--
MW-72	URS/CWTP	Background	2/2/2017	FC-CCR-MW72-117	**560**	<6.0	<6.0	**560**	<6.0	--	**2,200**	**--**	--	--	--	--	**27**	--	--	**700**
MW-72	URS/CWTP	Background	2/2/2017	FC-CCR-MW72-117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	2/2/2017	FC-CCR-MW72-117	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.7**	**3.3**	--
MW-72	URS/CWTP	Background	2/2/2017	FC-CCR-MW101-117	**560**	<6.0	<6.0	**560**	<6.0	--	**2,300**	**--**	--	--	--	--	**28**	--	--	**710**
MW-72	URS/CWTP	Background	2/2/2017	FC-CCR-MW101-117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	2/2/2017	FC-CCR-MW101-117	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.6**	**0.6**	--
MW-72	URS/CWTP	Background	4/17/2017	FC-CCR-MW-72-41717	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.6**	**2.9**	--
MW-72	URS/CWTP	Background	4/17/2017	FC-CCR-MW72-41717	**600**	<6.0	<6.0	**600**	<6.0	--	**2,400**	**--**	--	--	--	--	**29**	--	--	**760**
MW-72	URS/CWTP	Background	4/17/2017	FC-CCR-MW72-41717	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	5/2/2017	FC-CCR-MW-72-5217	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.7**	**3.1**	--
MW-72	URS/CWTP	Background	5/2/2017	FC-CCR-MW72-5217	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	5/29/2017	FC-CCR-MW72-52917	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	6/22/2017	FC-CCR-MW72-62217	**600**	<6.0	<6.0	**600**	<6.0	--	**2,400**	**--**	--	--	--	--	**29**	--	--	**760**
MW-72	URS/CWTP	Background	6/22/2017	FC-CCR-MW72-62217	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	6/22/2017	FC-CCR-MW-72-62117	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.6**	**2.2**	--
MW-72	URS/CWTP	Background	6/22/2017	*DUP* FC-CCR-FD02-62217	**610**	<6.0	<6.0	**610**	<6.0	--	**2,500**	**--**	--	--	--	--	**30**	--	--	**770**
MW-72	URS/CWTP	Background	6/22/2017	*DUP* FC-CCR-FD02-62217	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	6/22/2017	*DUP* FC-CCR-FD02-62117	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.5**	**2.5**	--
MW-72	URS/CWTP	Background	7/21/2017	FC-CCR-MW72-72117	**600**	<6.0	<6.0	**600**	<6.0	--	**2,300**	**--**	--	--	--	--	**29**	--	--	**760**
MW-72	URS/CWTP	Background	7/21/2017	FC-CCR-MW72-72117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	7/21/2017	FC-CCR-MW72-72117	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.5	**1.7**	--
MW-72	URS/CWTP	Background	8/10/2017	FC-CCR-MW72-81017	**600**	<6.0	<6.0	**600**	<6.0	--	**2,500**	**--**	--	--	--	--	**30**	--	--	**780**
MW-72	URS/CWTP	Background	8/10/2017	FC-CCR-MW72-81017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	8/10/2017	FC-CCR-MW72-81017	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	**2.8**	--
MW-72	URS/CWTP	Background	8/10/2017	*DUP* FC-CCR-FD02-81017	**610**	<6.0	<6.0	**610**	<6.0	--	**2,600**	**--**	--	--	--	--	**30**	--	--	**800**
MW-72	URS/CWTP	Background	8/10/2017	*DUP* FC-CCR-FD02-81017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	8/10/2017	*DUP* FC-CCR-FD02-81017	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	**1.7**	--
MW-72	URS/CWTP	Background	8/17/2017	FC-CCR-MW72-81717	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	**2.1**	--
MW-72	URS/CWTP	Background	8/17/2017	FC-CCR-MW72-81717	**610**	<6.0	<6.0	**610**	<6.0	--	**2,300**	**--**	--	--	--	--	**33**	--	--	**790**
MW-72	URS/CWTP	Background	8/17/2017	*DUP* FC-CCR-FD02-81717	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.9**	**2.1**	--
MW-72	URS/CWTP	Background	8/17/2017	*DUP* FC-CCR-FD02-81717	**600**	<6.0	<6.0	**600**	<6.0	--	**2,400**	**--**	--	--	--	--	**32**	--	--	**770**
MW-72	URS/CWTP	Background	9/10/2017	FC-CCR-MW72-91017	**610**	<6.0	<6.0	**610**	<6.0	--	**2,300**	**--**	--	--	--	--	**28**	--	--	**730**
MW-72	URS/CWTP	Background	9/10/2017	FC-CCR-MW72-91017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	9/10/2017	FC-CCR-MW72-91017	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	**2.3**	--
MW-72	URS/CWTP	Background	10/13/2017	FC-CCR-MW72-101317	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.7**	**2.4**	--
MW-72	URS/CWTP	Background	10/13/2017	FC-CCR-MW72-101317	**610**	<6.0	<6.0	**610**	<6.0	--	**2,300**	**--**	--	--	--	--	**28**	--	--	**740**
MW-72	URS/CWTP	Background	11/29/2017	FC-CCR-MW72-112917	**590**	<6.0	<6.0	**590**	<6.0	--	**2,300**	**--**	--	--	--	--	**28**	--	--	**760**
MW-72	URS/CWTP	Background	3/16/2018	FC-CCR-MW72-31618	--	--	--	--	--	--	--	--	--	--	--	--	--	<1.0	**1.9**	--

Table F-9
Groundwater Sampling Results for the CWTP Monitoring Wells - Additional Analyses

					Additional Analyses															
				Constituent:	Alkalinity Bicarbonate	Alkalinity Carbonate	Alkalinity Hydroxide	Alkalinity(as CaCO3)	Alkalinity, Phenolphthalein, as CaCO3	Iron	Magnesium	Manganese	Nickel	Nitrate as N	Nitrate Nitrite as N	Nitrite (as N)	Potassium	Radium 226	Radium 228	Sodium
				Filtered:	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L	pCi/L	mg/L
				CWTP BTV (applicable to MW-62)	--	--	--	--	--	--	--	--	--	--		--	--	--	--	--
				CWTP BTV (applicable to MW-63)	--	--	--	--	--	--	--	--	--	--		--	--	--	--	--
				CWTP BTV (applicable to MW-64)	--	--	--	--	--	--	--	--	--	--		--	--	--	--	--
				CWTP BTV (applicable to MW-65)	--	--	--	--	--	--	--	--	--	--		--	--	--	--	--
				CWTP GWPS (applicable to downgradient wells)	--	--	--	--	--	--	--	--	--	--		--	--	--	--	--
Well Id	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample Identification**																
MW-72	URS/CWTP	Background	6/2/2018	FC-CCR-MW-72-6218	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	**2.8**	--
MW-72	URS/CWTP	Background	6/2/2018	FC-CCR-MW-72-6218	**610**	<6.0	<6.0	**610**	<6.0	--	**2,300**	--	--	--	--	--	**26**	--	--	**670**
MW-72	URS/CWTP	Background	11/3/2018	FC-CCR-MW72-11318	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	11/3/2018	FC-CCR-MW72-11318	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.7**	**1.0**	--
MW-72	URS/CWTP	Background	11/3/2018	FC-CCR-MW72-11318	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	11/3/2018	*DUP* FC-CCR-FD02-11318	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	11/3/2018	*DUP* FC-CCR-FD02-11318	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.5**	**1.5**	--
MW-72	URS/CWTP	Background	3/17/2019	FC-CCR-MW72-031719	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	3/17/2019	FC-CCR-MW72-031719	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	**2.4**	--
MW-72	URS/CWTP	Background	5/7/2019	FC-CCR-MW72-5719	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	**3.4**	--
MW-72	URS/CWTP	Background	12/2/2019	FC-CCR-MW72-120219	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	6/19/2020	FC-CCR-MW72-0620	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.9**	**2.6**	--
MW-72	URS/CWTP	Background	11/5/2020	FC-CCR-MW72-1120	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.7**	**1.7**	--
MW-72	URS/CWTP	Background	4/22/2021	FC-CCR-MW72-0421						--	--	--	--	--	--	--		**0.7**	**1.5**	
MW-72	URS/CWTP	Background	11/12/2021	FC-CCR-MW72-1121	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.3**	**2.4**	--
MW-72	URS/CWTP	Background	5/22/2022	FC-CCR-MW72-0522	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	**1.2**	--
MW-72	URS/CWTP	Background	8/13/2022	FC-CCR-MW72-0822	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	11/13/2022	FC-CCR-MW72-1122	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	**1.9**	--
MW-72	URS/CWTP	Background	01/27/2023	FC-CCR-MW72-0123	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-72	URS/CWTP	Background	05/08/2023	FC-CCR-MW72-0523	--	--	--	--	--	--	--	--	**0.0047**	--	--	--	--	<0.4	**4.0**	
MW-72	URS/CWTP	Background	06/27/2023	FC-CCR-MW72-0623	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.5**	**1.4**	--
MW-72	URS/CWTP	Background	11/08/2023	FC-CCR-MW72-1123	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.6**	**4.5**	--
MW-73	URS/CWTP	Background	2/2/2017	FC-CCR-MW73-117	**560**	<6.0	<6.0	**560**	<6.0	--	**580**	--	--	--	--	--	**28**	--	--	**1,100**
MW-73	URS/CWTP	Background	2/2/2017	FC-CCR-MW73-117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-73	URS/CWTP	Background	2/2/2017	FC-CCR-MW73-117	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.0**	**2.2**	--
MW-73	URS/CWTP	Background	4/18/2017	FC-CCR-MW73-41817	**650**	<6.0	<6.0	**650**	<6.0	--	**630**	--	--	--	--	--	**29**	--	--	**1,200**
MW-73	URS/CWTP	Background	4/18/2017	FC-CCR-MW73-41817	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.7**	**1.1**	--
MW-73	URS/CWTP	Background	4/18/2017	FC-CCR-MW73-41817	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-73	URS/CWTP	Background	5/2/2017	FC-CCR-MW73-5217	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-73	URS/CWTP	Background	5/2/2017	FC-CCR-MW73-5217	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.5**	**1.8**	--
MW-73	URS/CWTP	Background	5/29/2017	FC-CCR-MW73-52917	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-73	URS/CWTP	Background	5/29/2017	FC-CCR-MW73-52917	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	<0.6	--
MW-73	URS/CWTP	Background	6/22/2017	FC-CCR-MW73-62217	**780**	<6.0	<6.0	**780**	<6.0	--	**750**	--	--	--	--	--	**34**	--	--	**1,600**
MW-73	URS/CWTP	Background	6/22/2017	FC-CCR-MW73-62217	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-73	URS/CWTP	Background	6/22/2017	FC-CCR-MW73-62117	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.5**	**1.6**	--
MW-73	URS/CWTP	Background	7/22/2017	FC-CCR-MW73-72217	**800**	<6.0	<6.0	**800**	<6.0	--	**840**	--	--	--	--	--	**37**	--	--	**1,800**
MW-73	URS/CWTP	Background	7/22/2017	FC-CCR-MW73-72217	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-73	URS/CWTP	Background	7/22/2017	FC-CCR-MW73-72217	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.5	**2.0**	--
MW-73	URS/CWTP	Background	7/22/2017	*DUP* FC-CCR-FD02-72217	**800**	<6.0	<6.0	**800**	<6.0	--	**850**	--	--	--	--	--	**37**	--	--	**1,800**
MW-73	URS/CWTP	Background	7/22/2017	*DUP* FC-CCR-FD02-72217	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.7**	**1.1**	--

Table F-9
Groundwater Sampling Results for the CWTP Monitoring Wells - Additional Analyses

					Additional Analyses															
				Constituent:	Alkalinity Bicarbonate	Alkalinity Carbonate	Alkalinity Hydroxide	Alkalinity(as CaCO3)	Alkalinity, Phenolphthalein, as CaCO3	Iron	Magnesium	Manganese	Nickel	Nitrate as N	Nitrate Nitrite as N	Nitrite (as N)	Potassium	Radium 226	Radium 228	Sodium
				Filtered:	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L	pCi/L	mg/L
				CWTP BTV (applicable to MW-62)	--	--	--	--	--	--	--	--	--	--		--	--	--	--	--
				CWTP BTV (applicable to MW-63)	--	--	--	--	--	--	--	--	--	--		--	--	--	--	--
				CWTP BTV (applicable to MW-64)	--	--	--	--	--	--	--	--	--	--		--	--	--	--	--
				CWTP BTV (applicable to MW-65)	--	--	--	--	--	--	--	--	--	--		--	--	--	--	--
				CWTP GWPS (applicable to downgradient wells)	--	--	--	--	--	--	--	--	--	--		--	--	--	--	--
Well Id	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample Identification**																
MW-73	URS/CWTP	Background	8/10/2017	FC-CCR-MW73-81017	**800**	<6.0	<6.0	**800**	<6.0	--	**820**	--	--	--	--	--	**36**	--	--	**1,800**
MW-73	URS/CWTP	Background	8/10/2017	FC-CCR-MW73-81017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-73	URS/CWTP	Background	8/10/2017	FC-CCR-MW73-81017	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	**1.1**	--
MW-73	URS/CWTP	Background	8/17/2017	FC-CCR-MW73-81717	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	**1.5**	--
MW-73	URS/CWTP	Background	8/17/2017	FC-CCR-MW73-81717	**800**	<6.0	<6.0	**800**	<6.0	--	**860**	--	--	--	--	--	**41**	--	--	**1,800**
MW-73	URS/CWTP	Background	9/10/2017	FC-CCR-MW73-91017	**730**	<6.0	<6.0	**730**	<6.0	--	**680**	--	--	--	--	--	**30**	--	--	**1,300**
MW-73	URS/CWTP	Background	9/10/2017	FC-CCR-MW73-91017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-73	URS/CWTP	Background	9/10/2017	FC-CCR-MW73-91017	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.2**	**1.3**	--
MW-73	URS/CWTP	Background	10/12/2017	FC-CCR-MW73-101217	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.3	**0.9**	--
MW-73	URS/CWTP	Background	10/12/2017	FC-CCR-MW73-101217	**480**	<6.0	<6.0	**480**	<6.0	--	**440**	--	--	--	--	--	**20**	--	--	**600**
MW-73	URS/CWTP	Background	10/12/2017	*DUP* FC-CCR-FD01-101217	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.7**	**1.2**	--
MW-73	URS/CWTP	Background	10/12/2017	*DUP* FC-CCR-FD01-101217	**480**	<6.0	<6.0	**480**	<6.0	--	**430**	--	--	--	--	--	**20**	--	--	**590**
MW-73	URS/CWTP	Background	11/29/2017	FC-CCR-MW73-112917	**650**	<6.0	<6.0	**650**	<6.0	--	**640**	--	--	--	--	--	**32**	--	--	**1,200**
MW-73	URS/CWTP	Background	3/16/2018	FC-CCR-MW73-31618	--	--	--	--	--	--	--	--	--	--	--	--	--	<1.0	**2.6**	--
MW-73	URS/CWTP	Background	6/2/2018	FC-CCR-MW-73-6218	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.8**	**2.0**	--
MW-73	URS/CWTP	Background	6/2/2018	FC-CCR-MW-73-6218	**800**	<6.0	<6.0	**800**	<6.0	--	**710**	--	--	--	--	--	**34**	--	--	**1,600**
MW-73	URS/CWTP	Background	11/3/2018	FC-CCR-MW73-11318	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-73	URS/CWTP	Background	11/3/2018	FC-CCR-MW73-11318	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.5**	**1.4**	--
MW-73	URS/CWTP	Background	3/18/2019	FC-CCR-MW73-031819	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-73	URS/CWTP	Background	3/18/2019	FC-CCR-MW73-031819	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	**1.6**	--
MW-73	URS/CWTP	Background	5/6/2019	FC-CCR-MW73-5619	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	**1.7**	--
MW-73	URS/CWTP	Background	12/2/2019	FC-CCR-MW73-120219	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-73	URS/CWTP	Background	12/2/2019	*DUP* FC-CCR-FD01-120219	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-73	URS/CWTP	Background	6/20/2020	FC-CCR-MW73-0620	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.5**	**1.9**	--
MW-73	URS/CWTP	Background	11/5/2020	FC-CCR-MW73-1120	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.6**	**2.2**	--
MW-73	URS/CWTP	Background	4/22/2021	FC-CCR-MW73-0421						--	--	--	--	--	--	--		**0.7**	**1.1**	
MW-73	URS/CWTP	Background	11/13/2021	FC-CCR-MW73-1121	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.0**	**1.8**	--
MW-73	URS/CWTP	Background	5/22/2022	FC-CCR-MW73-0522	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	**1.4**	--
MW-73	URS/CWTP	Background	8/13/2022	FC-CCR-MW73-0822	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-73	URS/CWTP	Background	11/14/2022	FC-CCR-MW73-1122	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.7**	**2.2**	--
MW-73	URS/CWTP	Background	01/27/2023	FC-CCR-MW73-0123	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-73	URS/CWTP	Background	05/07/2023	FC-CCR-MW73-0523	--	--	--	--	--	--	--	--	**0.013**	--	--	--	--	<0.49	**0.8**	
MW-73	URS/CWTP	Background	06/27/2023	FC-CCR-MW73-0623	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.5**	**1.7**	--
MW-73	URS/CWTP	Background	11/08/2023	FC-CCR-MW73-1123	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.44	**2.3**	--
MW-62	CWTP	Downgradient Boundary	11/9/2015	FC-CCR-MW62-110915	**1,100**	<5.0	--	**1,100**	--	--	**340**	--	--	--	--	--	**11**	--	--	**710**
MW-62	CWTP	Downgradient Boundary	11/9/2015	FC-CCR-MW62-110915	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.0145	**1.59**	--
MW-62	CWTP	Downgradient Boundary	4/27/2016	FC-CCR-MW-62-042716	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.6**	<0.8	--
MW-62	CWTP	Downgradient Boundary	6/5/2016	FC-CCR-MW62-616	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	**1.1**	--
MW-62	CWTP	Downgradient Boundary	6/5/2016	FC-CCR-MW62-616	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-62	CWTP	Downgradient Boundary	8/20/2016	FC-CCR-MW62-816	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Table F-9
Groundwater Sampling Results for the CWTP Monitoring Wells - Additional Analyses

					Additional Analyses															
				Constituent:	Alkalinity Bicarbonate	Alkalinity Carbonate	Alkalinity Hydroxide	Alkalinity(as CaCO3)	Alkalinity, Phenolphthalein, as CaCO3	Iron	Magnesium	Manganese	Nickel	Nitrate as N	Nitrate Nitrite as N	Nitrite (as N)	Potassium	Radium 226	Radium 228	Sodium
				Filtered:	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L	pCi/L	mg/L
				CWTP BTV (applicable to MW-62)	--	--	--	--	--	--	--	--	--	--		--	--	--	--	--
				CWTP BTV (applicable to MW-63)	--	--	--	--	--	--	--	--	--	--		--	--	--	--	--
				CWTP BTV (applicable to MW-64)	--	--	--	--	--	--	--	--	--	--		--	--	--	--	--
				CWTP BTV (applicable to MW-65)	--	--	--	--	--	--	--	--	--	--		--	--	--	--	--
				CWTP GWPS (applicable to downgradient wells)	--	--	--	--	--	--	--	--	--	--		--	--	--	--	--
Well Id	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample Identification**																
MW-62	CWTP	Downgradient Boundary	8/20/2016	FC-CCR-MW62-816	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-62	CWTP	Downgradient Boundary	8/20/2016	FC-CCR-MW62-816	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.2	**1.4**	--
MW-62	CWTP	Downgradient Boundary	9/12/2016	FC-CCR-MW62-916	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-62	CWTP	Downgradient Boundary	9/12/2016	FC-CCR-MW62-916	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-62	CWTP	Downgradient Boundary	9/12/2016	FC-CCR-MW62-916	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	**1.3**	--
MW-62	CWTP	Downgradient Boundary	10/19/2016	FC-CCR-MW62-1016	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-62	CWTP	Downgradient Boundary	10/19/2016	FC-CCR-MW62-1016	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	**0.9**	--
MW-62	CWTP	Downgradient Boundary	2/1/2017	FC-CCR-MW62-117	**740**	<6.0	<6.0	**740**	<6.0	--	**340**	--	--	--	--	--	**10**	--	--	**660**
MW-62	CWTP	Downgradient Boundary	2/1/2017	FC-CCR-MW62-117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-62	CWTP	Downgradient Boundary	2/1/2017	FC-CCR-MW62-117	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.4**	**1.5**	--
MW-62	CWTP	Downgradient Boundary	4/16/2017	FC-CCR-MW62-41617	**800**	<6.0	<6.0	**800**	<6.0	--	**350**	--	--	--	--	--	**9.4**	--	--	**710**
MW-62	CWTP	Downgradient Boundary	4/16/2017	FC-CCR-MW62-41617	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	<0.6	--
MW-62	CWTP	Downgradient Boundary	4/16/2017	FC-CCR-MW62-41617	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-62	CWTP	Downgradient Boundary	5/1/2017	FC-CCR-MW62-5117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-62	CWTP	Downgradient Boundary	5/1/2017	FC-CCR-MW62-5117	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	<0.6	--
MW-62	CWTP	Downgradient Boundary	5/29/2017	FC-CCR-MW62-52917	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-62	CWTP	Downgradient Boundary	5/29/2017	FC-CCR-MW62-52917	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.8**	**0.8**	--
MW-62	CWTP	Downgradient Boundary	6/21/2017	FC-CCR-MW62-62117	**850**	<6.0	<6.0	**850**	<6.0	--	**360**	--	--	--	--	--	**9.3**	--	--	**710**
MW-62	CWTP	Downgradient Boundary	6/21/2017	FC-CCR-MW62-62117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-62	CWTP	Downgradient Boundary	6/21/2017	FC-CCR-MW62-62117	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.3	<0.6	--
MW-62	CWTP	Downgradient Boundary	7/21/2017	FC-CCR-MW62-72117	**760**	<6.0	<6.0	**760**	<6.0	--	**340**	--	--	--	--	--	**10**	--	--	**650**
MW-62	CWTP	Downgradient Boundary	7/21/2017	FC-CCR-MW62-72117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-62	CWTP	Downgradient Boundary	7/21/2017	FC-CCR-MW62-72117	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.3	<0.6	--
MW-62	CWTP	Downgradient Boundary	8/9/2017	FC-CCR-MW62-8917	**770**	<6.0	<6.0	**770**	<6.0	--	**330**	--	--	--	--	--	**10**	--	--	**640**
MW-62	CWTP	Downgradient Boundary	8/9/2017	FC-CCR-MW62-8917	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-62	CWTP	Downgradient Boundary	8/9/2017	FC-CCR-MW62-8917	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.5	<0.7	--
MW-62	CWTP	Downgradient Boundary	8/16/2017	FC-CCR-MW62-81617	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.5	**1.0**	--
MW-62	CWTP	Downgradient Boundary	8/16/2017	FC-CCR-MW62-81617	**760**	<6.0	<6.0	**760**	<6.0	--	**340**	--	--	--	--	--	**12**	--	--	**640**
MW-62	CWTP	Downgradient Boundary	9/9/2017	FC-CCR-MW62-9917	**800**	<6.0	<6.0	**800**	<6.0	--	**340**	--	--	--	--	--	**10**	--	--	**640**
MW-62	CWTP	Downgradient Boundary	9/9/2017	FC-CCR-MW62-9917	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-62	CWTP	Downgradient Boundary	9/9/2017	FC-CCR-MW62-9917	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	<0.6	--
MW-62	CWTP	Downgradient Boundary	10/13/2017	FC-CCR-MW62-101317	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	**0.7**	--
MW-62	CWTP	Downgradient Boundary	10/13/2017	FC-CCR-MW62-101317	**850**	<6.0	<6.0	**850**	<6.0	--	**340**	--	--	--	--	--	**10**	--	--	**680**
MW-62	CWTP	Downgradient Boundary	11/30/2017	FC-CCR-MW62-113017	**800**	<6.0	<6.0	**800**	<6.0	--	**360**	--	--	--	--	--	**10**	--	--	**740**
MW-62	CWTP	Downgradient Boundary	4/6/2018	FC-CCR-MW62-4618	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-62	CWTP	Downgradient Boundary	6/3/2018	FC-CCR-MW-62-6318	**750**	<6.0	<6.0	**750**	<6.0	--	**320**	--	--	--	--	--	**8.5**	--	--	**640**
MW-62	CWTP	Downgradient Boundary	11/2/2018	FC-CCR-MW62-11218	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-62	CWTP	Downgradient Boundary	4/1/2019	FC-CCR-MW62-4119	**690**	--	--	**690**	--	--	**350**	--	--	**0.61**	--	<0.10	**9.5**	--	--	**690**
MW-62	CWTP	Downgradient Boundary	5/7/2019	FC-CCR-MW62-5719-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-62	CWTP	Downgradient Boundary	12/3/2019	FC-CCR-MW62-120319	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Table F-9
Groundwater Sampling Results for the CWTP Monitoring Wells - Additional Analyses

					Additional Analyses															
				Constituent:	Alkalinity Bicarbonate	Alkalinity Carbonate	Alkalinity Hydroxide	Alkalinity(as CaCO3)	Alkalinity, Phenolphthalein, as CaCO3	Iron	Magnesium	Manganese	Nickel	Nitrate as N	Nitrate Nitrite as N	Nitrite (as N)	Potassium	Radium 226	Radium 228	Sodium
				Filtered:	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L	pCi/L	mg/L
				CWTP BTV (applicable to MW-62)	--	--	--	--	--	--	--	--	--	--		--	--	--	--	--
				CWTP BTV (applicable to MW-63)	--	--	--	--	--	--	--	--	--	--		--	--	--	--	--
				CWTP BTV (applicable to MW-64)	--	--	--	--	--	--	--	--	--	--		--	--	--	--	--
				CWTP BTV (applicable to MW-65)	--	--	--	--	--	--	--	--	--	--		--	--	--	--	--
				CWTP GWPS (applicable to downgradient wells)	--	--	--	--	--	--	--	--	--	--		--	--	--	--	--
Well Id	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample Identification**																
MW-62	CWTP	Downgradient Boundary	6/19/2020	FC-CCR-MW62-0620	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-62	CWTP	Downgradient Boundary	11/5/2020	FC-CCR-MW62-1120	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-62	CWTP	Downgradient Boundary	1/14/2021	FC-CCR-MW62-011421	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-62	CWTP	Downgradient Boundary	4/22/2021	FC-CCR-MW62-0421	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	<0.7	--
MW-62	CWTP	Downgradient Boundary	11/15/2021	FC-CCR-MW62-1121	**850**	<6	<6	**850**	<6	--	**480**	**--**	--	<0.1	<0.1	<0.1	**9.3**	**0.4**	**0.7**	**670**
MW-62	CWTP	Downgradient Boundary	5/20/2022	FC-CCR-MW62-0522	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	<0.7	--
MW-62	CWTP	Downgradient Boundary	11/13/2022	FC-CCR-MW62-1122	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.4**	**0.6**	--
MW-62	CWTP	Downgradient Boundary	01/27/2023	FC-CCR-MW62-0123	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-62	CWTP	Downgradient Boundary	05/07/2023	FC-CCR-MW62-0523	--	--	--	--	--	--	--	--	**0.0045**	--	--	--	--	<0.36	**0.9**	
MW-62	CWTP	Downgradient Boundary	06/28/2023	FC-CCR-MW62-0623	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.42	**0.9**	--
MW-62	CWTP	Downgradient Boundary	11/06/2023	FC-CCR-MW62-1123	**940**	<6	<6	**940**	<6	**24 J**	**520**	**8.9**	--	--	--	--	**10**	<0.44	<0.75	**840**
MW-63	CWTP	Downgradient Boundary	11/4/2015	FC-CCR-MW63-110415	**540**	<5.0	--	**540**	--	--	**260**	**--**	--	--	--	--	**7.4**	--	--	**410**
MW-63	CWTP	Downgradient Boundary	11/4/2015	FC-CCR-MW63-110415	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.408**	**0.89**	--
MW-63	CWTP	Downgradient Boundary	4/27/2016	FC-CCR-MW-63-042716	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.6**	<0.8	--
MW-63	CWTP	Downgradient Boundary	6/5/2016	FC-CCR-MW63-616	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	<0.8	--
MW-63	CWTP	Downgradient Boundary	6/5/2016	FC-CCR-MW63-616	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-63	CWTP	Downgradient Boundary	8/20/2016	FC-CCR-MW63-816	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-63	CWTP	Downgradient Boundary	8/20/2016	FC-CCR-MW63-816	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-63	CWTP	Downgradient Boundary	8/20/2016	FC-CCR-MW63-816	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.3**	**1.8**	--
MW-63	CWTP	Downgradient Boundary	9/12/2016	FC-CCR-MW63-916	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-63	CWTP	Downgradient Boundary	9/12/2016	FC-CCR-MW63-916	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-63	CWTP	Downgradient Boundary	9/12/2016	FC-CCR-MW63-916	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	**1.0**	--
MW-63	CWTP	Downgradient Boundary	10/19/2016	FC-CCR-MW63-1016	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-63	CWTP	Downgradient Boundary	10/19/2016	FC-CCR-MW63-1016	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.2	<0.7	--
MW-63	CWTP	Downgradient Boundary	10/20/2016	FC-CCR-MW100-1016	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-63	CWTP	Downgradient Boundary	10/20/2016	FC-CCR-MW100-1016	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.4**	**1.4**	--
MW-63	CWTP	Downgradient Boundary	1/31/2017	FC-CCR-MW63-117	**470**	<6.0	<6.0	**470**	<6.0	--	**260**	**--**	--	--	--	--	**5.6**	--	--	**360**
MW-63	CWTP	Downgradient Boundary	1/31/2017	FC-CCR-MW63-117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-63	CWTP	Downgradient Boundary	1/31/2017	FC-CCR-MW63-117	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	**0.7**	--
MW-63	CWTP	Downgradient Boundary	1/31/2017	FC-CCR-MW100-117	**470**	<6.0	<6.0	**470**	<6.0	--	**260**	**--**	--	--	--	--	**5.5**	--	--	**350**
MW-63	CWTP	Downgradient Boundary	1/31/2017	FC-CCR-MW100-117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-63	CWTP	Downgradient Boundary	1/31/2017	FC-CCR-MW100-117	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	**1.7**	--
MW-63	CWTP	Downgradient Boundary	4/17/2017	FC-CCR-MW63-41717	**500**	<6.0	<6.0	**500**	<6.0	--	**270**	**--**	--	--	--	--	**5.7**	--	--	**360**
MW-63	CWTP	Downgradient Boundary	4/17/2017	FC-CCR-MW63-41717	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	<0.6	--
MW-63	CWTP	Downgradient Boundary	4/17/2017	FC-CCR-MW63-41717	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-63	CWTP	Downgradient Boundary	5/2/2017	FC-CCR-MW63-5217	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-63	CWTP	Downgradient Boundary	5/2/2017	FC-CCR-MW63-5217	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	**0.8**	--
MW-63	CWTP	Downgradient Boundary	5/28/2017	FC-CCR-MW63-52817	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-63	CWTP	Downgradient Boundary	5/28/2017	FC-CCR-MW63-52817	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.5**	<0.6	--
MW-63	CWTP	Downgradient Boundary	5/28/2017	*DUP* FC-CCR-FD01-52817	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Table F-9
Groundwater Sampling Results for the CWTP Monitoring Wells - Additional Analyses

					Additional Analyses															
				Constituent:	Alkalinity Bicarbonate	Alkalinity Carbonate	Alkalinity Hydroxide	Alkalinity(as CaCO3)	Alkalinity, Phenolphthalein, as CaCO3	Iron	Magnesium	Manganese	Nickel	Nitrate as N	Nitrate Nitrite as N	Nitrite (as N)	Potassium	Radium 226	Radium 228	Sodium
				Filtered:	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L	pCi/L	mg/L
				CWTP BTV (applicable to MW-62)	--	--	--	--	--	--	--	--	--	--		--	--	--	--	--
				CWTP BTV (applicable to MW-63)	--	--	--	--	--	--	--	--	--	--		--	--	--	--	--
				CWTP BTV (applicable to MW-64)	--	--	--	--	--	--	--	--	--	--		--	--	--	--	--
				CWTP BTV (applicable to MW-65)	--	--	--	--	--	--	--	--	--	--		--	--	--	--	--
				CWTP GWPS (applicable to downgradient wells)	--	--	--	--	--	--	--	--	--	--		--	--	--	--	--
Well Id	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample Identification**																
MW-63	CWTP	Downgradient Boundary	5/28/2017	*DUP* FC-CCR-FD01-52817	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	<0.6	--
MW-63	CWTP	Downgradient Boundary	6/21/2017	FC-CCR-MW63-62117	**500**	<6.0	<6.0	**500**	<6.0	--	**280**	--	--	--	--	--	**6.3**	--	--	**380**
MW-63	CWTP	Downgradient Boundary	6/21/2017	FC-CCR-MW63-62117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-63	CWTP	Downgradient Boundary	6/21/2017	FC-CCR-MW63-62117	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.4**	<0.6	--
MW-63	CWTP	Downgradient Boundary	7/21/2017	FC-CCR-MW63-72117	**480**	<6.0	<6.0	**480**	<6.0	--	**280**	--	--	--	--	--	**6.9**	--	--	**380**
MW-63	CWTP	Downgradient Boundary	7/21/2017	FC-CCR-MW63-72117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-63	CWTP	Downgradient Boundary	7/21/2017	FC-CCR-MW63-72117	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.3	**0.8**	--
MW-63	CWTP	Downgradient Boundary	8/9/2017	FC-CCR-MW63-8917	**490**	<6.0	<6.0	**490**	<6.0	--	**280**	--	--	--	--	--	**6.9**	--	--	**390**
MW-63	CWTP	Downgradient Boundary	8/9/2017	FC-CCR-MW63-8917	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-63	CWTP	Downgradient Boundary	8/9/2017	FC-CCR-MW63-8917	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.5	<0.7	--
MW-63	CWTP	Downgradient Boundary	8/16/2017	FC-CCR-MW63-81617	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.5	<0.7	--
MW-63	CWTP	Downgradient Boundary	8/16/2017	FC-CCR-MW63-81617	**490**	<6.0	<6.0	**490**	<6.0	--	**300**	--	--	--	--	--	**7.7**	--	--	**400**
MW-63	CWTP	Downgradient Boundary	9/9/2017	FC-CCR-MW63-9917	**490**	<6.0	<6.0	**490**	<6.0	--	**270**	--	--	--	--	--	**6.9**	--	--	**360**
MW-63	CWTP	Downgradient Boundary	9/9/2017	FC-CCR-MW63-9917	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-63	CWTP	Downgradient Boundary	9/9/2017	FC-CCR-MW63-9917	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	**0.7**	--
MW-63	CWTP	Downgradient Boundary	10/13/2017	FC-CCR-MW63-101317	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.6**	**1.2**	--
MW-63	CWTP	Downgradient Boundary	10/13/2017	FC-CCR-MW63-101317	**490**	<6.0	<6.0	**490**	<6.0	--	**250**	--	--	--	--	--	**6.7**	--	--	**340**
MW-63	CWTP	Downgradient Boundary	11/30/2017	FC-CCR-MW63-113017	**500**	<6.0	<6.0	**500**	<6.0	--	**270**	--	--	--	--	--	**6.6**	--	--	**360**
MW-63	CWTP	Downgradient Boundary	4/6/2018	FC-CCR-MW63-4618	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-63	CWTP	Downgradient Boundary	6/3/2018	FC-CCR-MW-63-6318	**500**	<6.0	<6.0	**500**	<6.0	--	**260**	--	--	--	--	--	**5.4**	--	--	**320**
MW-63	CWTP	Downgradient Boundary	11/2/2018	FC-CCR-MW63-112818	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-63	CWTP	Downgradient Boundary	4/1/2019	FC-CCR-MW63-4119	**430**	--	--	**430**	--	--	**260**	--	--	<0.10	--	<0.10	**4.9**	--	--	**280**
MW-63	CWTP	Downgradient Boundary	5/7/2019	FC-CCR-MW63-5719-02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-63	CWTP	Downgradient Boundary	12/3/2019	FC-CCR-MW63-120319	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-63	CWTP	Downgradient Boundary	12/3/2019	*DUP* FC-CCR-FD01-120319	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-63	CWTP	Downgradient Boundary	6/19/2020	FC-CCR-MW63-0620	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-63	CWTP	Downgradient Boundary	11/5/2020	FC-CCR-MW63-1120	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-63	CWTP	Downgradient Boundary	4/22/2021	FC-CCR-MW63-0421	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	<0.7	--
MW-63	CWTP	Downgradient Boundary	7/8/2021	FC-CCR-MW63-0721	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-63	CWTP	Downgradient Boundary	11/15/2021	FC-CCR-MW63-1121	**330**	<6	<6	**330**	<6	--	**160**	--	--	**20**	**20**	**0.15**	**5.5**	<0.3	<0.6	**250**
MW-63	CWTP	Downgradient Boundary	5/20/2022	FC-CCR-MW63-0522	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	<0.7	--
MW-63	CWTP	Downgradient Boundary	8/14/2022	FC-CCR-MW63-0822	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-63	CWTP	Downgradient Boundary	11/13/2022	FC-CCR-MW63-1122	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	<0.6	--
MW-63	CWTP	Downgradient Boundary	05/07/2023	FC-CCR-MW63-0523	--	--	--	--	--	--	--	--	<0.003	--	--	--	--	<0.36	**0.8**	
MW-63	CWTP	Downgradient Boundary	06/27/2023	FC-CCR-MW63-0623	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.41	<0.61	--
MW-63	CWTP	Downgradient Boundary	11/06/2023	FC-CCR-MW63-1123	**320**	<6	<6	**320**	<6	**0.19 J**	**150**	**3.0**	--	--	--	--	**6.6**	<0.43	<0.75	**290**
MW-64	CWTP	Downgradient Boundary	11/5/2015	FC-CCR-MW64-110515	**320**	<5.0	--	**320**	--	--	**34**	--	--	--	--	--	**6.1**	--	--	**120**
MW-64	CWTP	Downgradient Boundary	11/5/2015	FC-CCR-MW64-110515	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.339**	<0.392	--
MW-64	CWTP	Downgradient Boundary	4/27/2016	FC-CCR-MW-64-042716	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	<0.8	--
MW-64	CWTP	Downgradient Boundary	6/5/2016	FC-CCR-MW64-616	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	<0.8	--

Table F-9
Groundwater Sampling Results for the CWTP Monitoring Wells - Additional Analyses

					Additional Analyses															
				Constituent:	Alkalinity Bicarbonate	Alkalinity Carbonate	Alkalinity Hydroxide	Alkalinity(as CaCO3)	Alkalinity, Phenolphthalein, as CaCO3	Iron	Magnesium	Manganese	Nickel	Nitrate as N	Nitrate Nitrite as N	Nitrite (as N)	Potassium	Radium 226	Radium 228	Sodium
				Filtered:	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L	pCi/L	mg/L
				CWTP BTV (applicable to MW-62)	--	--	--	--	--	--	--	--	--	--		--	--	--	--	--
				CWTP BTV (applicable to MW-63)	--	--	--	--	--	--	--	--	--	--		--	--	--	--	--
				CWTP BTV (applicable to MW-64)	--	--	--	--	--	--	--	--	--	--		--	--	--	--	--
				CWTP BTV (applicable to MW-65)	--	--	--	--	--	--	--	--	--	--		--	--	--	--	--
				CWTP GWPS (applicable to downgradient wells)	--	--	--	--	--	--	--	--	--	--		--	--	--	--	--
Well Id	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample Identification**																
MW-64	CWTP	Downgradient Boundary	6/5/2016	FC-CCR-MW64-616	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-64	CWTP	Downgradient Boundary	8/20/2016	FC-CCR-MW64-816	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-64	CWTP	Downgradient Boundary	8/20/2016	FC-CCR-MW64-816	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-64	CWTP	Downgradient Boundary	8/20/2016	FC-CCR-MW64-816	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.3	<0.7	--
MW-64	CWTP	Downgradient Boundary	9/12/2016	FC-CCR-MW64-916	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-64	CWTP	Downgradient Boundary	9/12/2016	FC-CCR-MW64-916	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-64	CWTP	Downgradient Boundary	9/12/2016	FC-CCR-MW64-916	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	**0.8**	--
MW-64	CWTP	Downgradient Boundary	10/19/2016	FC-CCR-MW64-1016	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-64	CWTP	Downgradient Boundary	10/19/2016	FC-CCR-MW64-1016	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.3	<0.5	--
MW-64	CWTP	Downgradient Boundary	1/31/2017	FC-CCR-MW64-117	**230**	<6.0	<6.0	**230**	<6.0	--	**34**	**--**	--	--	--	--	**5.7**	--	--	**120**
MW-64	CWTP	Downgradient Boundary	1/31/2017	FC-CCR-MW64-117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-64	CWTP	Downgradient Boundary	1/31/2017	FC-CCR-MW64-117	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	**1.7**	--
MW-64	CWTP	Downgradient Boundary	4/17/2017	FC-CCR-MW64-41717	**220**	<6.0	<6.0	**220**	<6.0	--	**35**	**--**	--	--	--	--	**5.8**	--	--	**120**
MW-64	CWTP	Downgradient Boundary	4/17/2017	FC-CCR-MW64-41717	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	<0.6	--
MW-64	CWTP	Downgradient Boundary	4/17/2017	FC-CCR-MW64-41717	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-64	CWTP	Downgradient Boundary	5/2/2017	FC-CCR-MW64-5217	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-64	CWTP	Downgradient Boundary	5/2/2017	FC-CCR-MW64-5217	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.7**	<0.6	--
MW-64	CWTP	Downgradient Boundary	5/2/2017	*DUP* FC-CCR-FD02-5217	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-64	CWTP	Downgradient Boundary	5/2/2017	*DUP* FC-CCR-FD02-5217	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	<0.6	--
MW-64	CWTP	Downgradient Boundary	5/28/2017	FC-CCR-MW64-52817	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-64	CWTP	Downgradient Boundary	5/28/2017	FC-CCR-MW64-52817	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	<0.6	--
MW-64	CWTP	Downgradient Boundary	6/21/2017	FC-CCR-MW64-62117	**220**	<6.0	<6.0	**220**	<6.0	--	**36**	**--**	--	--	--	--	**5.8**	--	--	**120**
MW-64	CWTP	Downgradient Boundary	6/21/2017	FC-CCR-MW64-62117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-64	CWTP	Downgradient Boundary	6/21/2017	FC-CCR-MW64-62117	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.3	<0.6	--
MW-64	CWTP	Downgradient Boundary	7/21/2017	FC-CCR-MW64-72117	**210**	<6.0	<6.0	**210**	<6.0	--	**37**	**--**	--	--	--	--	**6.2**	--	--	**130**
MW-64	CWTP	Downgradient Boundary	7/21/2017	FC-CCR-MW64-72117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-64	CWTP	Downgradient Boundary	7/21/2017	FC-CCR-MW64-72117	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.3	<0.6	--
MW-64	CWTP	Downgradient Boundary	8/9/2017	FC-CCR-MW64-8917	**220**	<6.0	<6.0	**220**	<6.0	--	**37**	**--**	--	--	--	--	**6.0**	--	--	**130**
MW-64	CWTP	Downgradient Boundary	8/9/2017	FC-CCR-MW64-8917	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-64	CWTP	Downgradient Boundary	8/9/2017	FC-CCR-MW64-8917	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.5	**0.8**	--
MW-64	CWTP	Downgradient Boundary	8/16/2017	FC-CCR-MW64-81617	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.5	<0.7	--
MW-64	CWTP	Downgradient Boundary	8/16/2017	FC-CCR-MW64-81617	**230**	<6.0	<6.0	**230**	<6.0	--	**36**	**--**	--	--	--	--	**6.1**	--	--	**120**
MW-64	CWTP	Downgradient Boundary	9/9/2017	FC-CCR-MW64-9917	**230**	<6.0	<6.0	**230**	<6.0	--	**35**	**--**	--	--	--	--	**5.8**	--	--	**120**
MW-64	CWTP	Downgradient Boundary	9/9/2017	FC-CCR-MW64-9917	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-64	CWTP	Downgradient Boundary	9/9/2017	FC-CCR-MW64-9917	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	<0.6	--
MW-64	CWTP	Downgradient Boundary	10/13/2017	FC-CCR-MW64-101317	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	<0.6	--
MW-64	CWTP	Downgradient Boundary	10/13/2017	FC-CCR-MW64-101317	**230**	<6.0	<6.0	**230**	<6.0	--	**33**	**--**	--	--	--	--	**5.7**	--	--	**120**
MW-64	CWTP	Downgradient Boundary	11/30/2017	FC-CCR-MW64-113017	**230**	<6.0	<6.0	**230**	<6.0	--	**34**	**--**	--	--	--	--	**5.9**	--	--	**120**
MW-64	CWTP	Downgradient Boundary	6/3/2018	FC-CCR-MW-64-6318	**190**	<6.0	<6.0	**190**	<6.0	--	**34**	**--**	--	--	--	--	**5.4**	--	--	**110**
MW-64	CWTP	Downgradient Boundary	11/2/2018	FC-CCR-MW64-11218	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Table F-9
Groundwater Sampling Results for the CWTP Monitoring Wells - Additional Analyses

					Additional Analyses															
				Constituent:	Alkalinity Bicarbonate	Alkalinity Carbonate	Alkalinity Hydroxide	Alkalinity(as CaCO3)	Alkalinity, Phenolphthalein, as CaCO3	Iron	Magnesium	Manganese	Nickel	Nitrate as N	Nitrate Nitrite as N	Nitrite (as N)	Potassium	Radium 226	Radium 228	Sodium
				Filtered:	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L	pCi/L	mg/L
				CWTP BTV (applicable to MW-62)	--	--	--	--	--	--	--	--	--	--		--	--	--	--	--
				CWTP BTV (applicable to MW-63)	--	--	--	--	--	--	--	--	--	--		--	--	--	--	--
				CWTP BTV (applicable to MW-64)	--	--	--	--	--	--	--	--	--	--		--	--	--	--	--
				CWTP BTV (applicable to MW-65)	--	--	--	--	--	--	--	--	--	--		--	--	--	--	--
				CWTP GWPS (applicable to downgradient wells)	--	--	--	--	--	--	--	--	--	--		--	--	--	--	--
Well Id	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample Identification**																
MW-64	CWTP	Downgradient Boundary	4/1/2019	FC-CCR-MW64-4119	**200**	--	--	**200**	--	--	**33**	**--**	--	<0.10	--	<0.10	**5.3**	--	--	**110**
MW-64	CWTP	Downgradient Boundary	5/7/2019	FC-CCR-MW64-5719-03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-64	CWTP	Downgradient Boundary	5/7/2019	*DUP* FC-CCR-FD03-5719-04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-64	CWTP	Downgradient Boundary	12/3/2019	FC-CCR-MW64-120319	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-64	CWTP	Downgradient Boundary	6/19/2020	FC-CCR-MW64-0620	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-64	CWTP	Downgradient Boundary	11/5/2020	FC-CCR-MW64-1120	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-64	CWTP	Downgradient Boundary	4/22/2021	FC-CCR-MW64-0421	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	<0.7	--
MW-64	CWTP	Downgradient Boundary	11/15/2021	FC-CCR-MW64-1121	**230**	<6	<6	**230**	<6	--	**29**	**--**	--	**1.3**	**1.5**	**0.15**	**5.4**	<0.3	<0.6	**95**
MW-64	CWTP	Downgradient Boundary	5/20/2022	FC-CCR-MW64-0522	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	<0.7	--
MW-64	CWTP	Downgradient Boundary	5/20/2022	FC-CCR-SS01-0522	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-64	CWTP	Downgradient Boundary	11/13/2022	FC-CCR-MW64-1122	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.8**	<0.6	--
MW-64	CWTP	Downgradient Boundary	05/07/2023	FC-CCR-MW64-0523	--	--	--	--	--	--	--	--	<0.003	--	--	--	--	<0.36	<0.58	
MW-64	CWTP	Downgradient Boundary	06/27/2023	FC-CCR-MW64-0623	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.5**	**1.2**	--
MW-64	CWTP	Downgradient Boundary	11/06/2023	FC-CCR-MW64-1123	**260**	<6	<6	**260**	<6	**0.48 J**	**34**	**0.38**	--	--	--	--	**6.4**	<0.43	<0.75	**130**
MW-65	CWTP	Downgradient Boundary	11/5/2015	FC-CCR-MW65-110515	**390**	<5.0	--	**390**	--	--	**59**	**--**	--	--	--	--	**3.2**	--	--	**140**
MW-65	CWTP	Downgradient Boundary	11/5/2015	FC-CCR-MW65-110515	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.0704	<0.408	--
MW-65	CWTP	Downgradient Boundary	4/27/2016	FC-CCR-MW-65-042716	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	<0.8	--
MW-65	CWTP	Downgradient Boundary	6/5/2016	FC-CCR-MW65-616	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	<0.8	--
MW-65	CWTP	Downgradient Boundary	6/5/2016	FC-CCR-MW65-616	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-65	CWTP	Downgradient Boundary	8/20/2016	FC-CCR-MW65-816	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-65	CWTP	Downgradient Boundary	8/20/2016	FC-CCR-MW65-816	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-65	CWTP	Downgradient Boundary	8/20/2016	FC-CCR-MW65-816	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.3	<0.4	--
MW-65	CWTP	Downgradient Boundary	9/12/2016	FC-CCR-MW65-916	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-65	CWTP	Downgradient Boundary	9/12/2016	FC-CCR-MW65-916	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-65	CWTP	Downgradient Boundary	9/12/2016	FC-CCR-MW65-916	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	**1.0**	--
MW-65	CWTP	Downgradient Boundary	10/19/2016	FC-CCR-MW65-1016	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-65	CWTP	Downgradient Boundary	10/19/2016	FC-CCR-MW65-1016	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.3	<0.5	--
MW-65	CWTP	Downgradient Boundary	2/1/2017	FC-CCR-MW65-117	**310**	<6.0	<6.0	**310**	<6.0	--	**56**	**--**	--	--	--	--	**3.6**	--	--	**140**
MW-65	CWTP	Downgradient Boundary	2/1/2017	FC-CCR-MW65-117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-65	CWTP	Downgradient Boundary	2/1/2017	FC-CCR-MW65-117	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.4**	**1.5**	--
MW-65	CWTP	Downgradient Boundary	4/16/2017	FC-CCR-MW65-41617	**320**	<6.0	<6.0	**320**	<6.0	--	**62**	**--**	--	--	--	--	**4.0**	--	--	**170**
MW-65	CWTP	Downgradient Boundary	4/16/2017	FC-CCR-MW65-41617	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	**0.7**	--
MW-65	CWTP	Downgradient Boundary	4/16/2017	FC-CCR-MW65-41617	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-65	CWTP	Downgradient Boundary	5/1/2017	FC-CCR-MW65-5117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-65	CWTP	Downgradient Boundary	5/1/2017	FC-CCR-MW65-5117	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	<0.6	--
MW-65	CWTP	Downgradient Boundary	5/1/2017	*DUP* FC-CCR-FD01-5117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-65	CWTP	Downgradient Boundary	5/1/2017	*DUP* FC-CCR-FD01-5117	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	<0.6	--
MW-65	CWTP	Downgradient Boundary	5/29/2017	FC-CCR-MW65-52917	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Table F-9
Groundwater Sampling Results for the CWTP Monitoring Wells - Additional Analyses

					Additional Analyses															
				Constituent:	Alkalinity Bicarbonate	Alkalinity Carbonate	Alkalinity Hydroxide	Alkalinity(as CaCO3)	Alkalinity, Phenolphthalein, as CaCO3	Iron	Magnesium	Manganese	Nickel	Nitrate as N	Nitrate Nitrite as N	Nitrite (as N)	Potassium	Radium 226	Radium 228	Sodium
				Filtered:	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L	pCi/L	mg/L
				CWTP BTV (applicable to MW-62)	--	--	--	--	--	--	--	--	--	--		--	--	--	--	--
				CWTP BTV (applicable to MW-63)	--	--	--	--	--	--	--	--	--	--		--	--	--	--	--
				CWTP BTV (applicable to MW-64)	--	--	--	--	--	--	--	--	--	--		--	--	--	--	--
				CWTP BTV (applicable to MW-65)	--	--	--	--	--	--	--	--	--	--		--	--	--	--	--
				CWTP GWPS (applicable to downgradient wells)	--	--	--	--	--	--	--	--	--	--		--	--	--	--	--
Well Id	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample Identification**																
MW-65	CWTP	Downgradient Boundary	5/29/2017	FC-CCR-MW65-52917	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	<0.6	--
MW-65	CWTP	Downgradient Boundary	5/29/2017	*DUP* FC-CCR-FD02-52917	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-65	CWTP	Downgradient Boundary	5/29/2017	*DUP* FC-CCR-FD02-52917	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	<0.6	--
MW-65	CWTP	Downgradient Boundary	6/21/2017	FC-CCR-MW65-62117	**320**	<6.0	<6.0	**320**	<6.0	--	**73**	--	--	--	--	--	**3.9**	--	--	**190**
MW-65	CWTP	Downgradient Boundary	6/21/2017	FC-CCR-MW65-62117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-65	CWTP	Downgradient Boundary	6/21/2017	FC-CCR-MW65-62117	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.3	<0.6	--
MW-65	CWTP	Downgradient Boundary	6/21/2017	*DUP* FC-CCR-FD01-62117	**330**	<6.0	<6.0	**330**	<6.0	--	**76**	--	--	--	--	--	**4.0**	--	--	**200**
MW-65	CWTP	Downgradient Boundary	6/21/2017	*DUP* FC-CCR-FD01-62117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-65	CWTP	Downgradient Boundary	6/21/2017	*DUP* FC-CCR-FD01-62117	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.5**	**1.8**	--
MW-65	CWTP	Downgradient Boundary	7/21/2017	FC-CCR-MW65-72117	**310**	<6.0	<6.0	**310**	<6.0	--	**63**	--	--	--	--	--	**3.7**	--	--	**150**
MW-65	CWTP	Downgradient Boundary	7/21/2017	FC-CCR-MW65-72117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-65	CWTP	Downgradient Boundary	7/21/2017	FC-CCR-MW65-72117	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.3	<0.6	--
MW-65	CWTP	Downgradient Boundary	7/21/2017	*DUP* FC-CCR-FD01-72117	**310**	<6.0	<6.0	**310**	<6.0	--	**63**	--	--	--	--	--	**3.7**	--	--	**150**
MW-65	CWTP	Downgradient Boundary	7/21/2017	*DUP* FC-CCR-FD01-72117	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.3	<0.6	--
MW-65	CWTP	Downgradient Boundary	8/9/2017	FC-CCR-MW65-8917	**310**	<6.0	<6.0	**310**	<6.0	--	**63**	--	--	--	--	--	**3.6**	--	--	**150**
MW-65	CWTP	Downgradient Boundary	8/9/2017	FC-CCR-MW65-8917	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-65	CWTP	Downgradient Boundary	8/9/2017	FC-CCR-MW65-8917	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	<0.5	--
MW-65	CWTP	Downgradient Boundary	8/16/2017	FC-CCR-MW65-81617	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	<0.7	--
MW-65	CWTP	Downgradient Boundary	8/16/2017	FC-CCR-MW65-81617	**320**	<6.0	<6.0	**320**	<6.0	--	**63**	--	--	--	--	--	**4.0**	--	--	**150**
MW-65	CWTP	Downgradient Boundary	8/16/2017	*DUP* FC-CCR-FD01-81617	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	<0.7	--
MW-65	CWTP	Downgradient Boundary	8/16/2017	*DUP* FC-CCR-FD01-81617	**310**	<6.0	<6.0	**310**	<6.0	--	**62**	--	--	--	--	--	**3.9**	--	--	**150**
MW-65	CWTP	Downgradient Boundary	9/9/2017	FC-CCR-MW65-9917	**320**	<6.0	<6.0	**320**	<6.0	--	**59**	--	--	--	--	--	**3.4**	--	--	**140**
MW-65	CWTP	Downgradient Boundary	9/9/2017	FC-CCR-MW65-9917	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-65	CWTP	Downgradient Boundary	9/9/2017	FC-CCR-MW65-9917	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	<0.6	--
MW-65	CWTP	Downgradient Boundary	9/9/2017	*DUP* FC-CCR-FD01-9917	**320**	<6.0	<6.0	**320**	<6.0	--	**60**	--	--	--	--	--	**3.5**	--	--	**140**
MW-65	CWTP	Downgradient Boundary	9/9/2017	*DUP* FC-CCR-FD01-9917	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-65	CWTP	Downgradient Boundary	9/9/2017	*DUP* FC-CCR-FD01-9917	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.3	<0.6	--
MW-65	CWTP	Downgradient Boundary	10/13/2017	FC-CCR-MW65-101317	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.3	<0.6	--
MW-65	CWTP	Downgradient Boundary	10/13/2017	FC-CCR-MW65-101317	**330**	<6.0	<6.0	**330**	<6.0	--	**54**	--	--	--	--	--	**3.6**	--	--	**130**
MW-65	CWTP	Downgradient Boundary	10/13/2017	*DUP* FC-CCR-FD02-101317	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.3	<0.6	--
MW-65	CWTP	Downgradient Boundary	10/13/2017	*DUP* FC-CCR-FD02-101317	**330**	<6.0	<6.0	**330**	<6.0	--	**55**	--	--	--	--	--	**3.5**	--	--	**140**
MW-65	CWTP	Downgradient Boundary	11/30/2017	FC-CCR-MW65-113017	**330**	<6.0	<6.0	**330**	<6.0	--	**57**	--	--	--	--	--	**3.5**	--	--	**140**
MW-65	CWTP	Downgradient Boundary	6/3/2018	FC-CCR-MW-65-6318	**290**	<6.0	<6.0	**290**	<6.0	--	**56**	--	--	--	--	--	**3.3**	--	--	**130**
MW-65	CWTP	Downgradient Boundary	11/2/2018	FC-CCR-MW65-11218	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-65	CWTP	Downgradient Boundary	4/1/2019	FC-CCR-MW65-4119	**290**	--	--	**290**	--	--	**51**	--	--	**0.10**	--	<0.10	**3.5**	--	--	**130**
MW-65	CWTP	Downgradient Boundary	4/1/2019	*DUP* FC-CCR-FD1-4119	**300**	--	--	**300**	--	--	**50**	--	--	**0.10**	--	<0.10	**3.5**	--	--	**120**
MW-65	CWTP	Downgradient Boundary	5/7/2019	FC-CCR-MW65-5719-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-65	CWTP	Downgradient Boundary	12/3/2019	FC-CCR-MW65-120319	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-65	CWTP	Downgradient Boundary	6/19/2020	FC-CCR-MW65-0620	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Table F-9
Groundwater Sampling Results for the CWTP Monitoring Wells - Additional Analyses

					Additional Analyses															
				Constituent:	Alkalinity Bicarbonate	Alkalinity Carbonate	Alkalinity Hydroxide	Alkalinity(as CaCO3)	Alkalinity, Phenolphthalein, as CaCO3	Iron	Magnesium	Manganese	Nickel	Nitrate as N	Nitrate Nitrite as N	Nitrite (as N)	Potassium	Radium 226	Radium 228	Sodium
				Filtered:	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L	pCi/L	mg/L
				CWTP BTV (applicable to MW-62)	--	--	--	--	--	--	--	--	--	--		--	--	--	--	--
				CWTP BTV (applicable to MW-63)	--	--	--	--	--	--	--	--	--	--		--	--	--	--	--
				CWTP BTV (applicable to MW-64)	--	--	--	--	--	--	--	--	--	--		--	--	--	--	--
				CWTP BTV (applicable to MW-65)	--	--	--	--	--	--	--	--	--	--		--	--	--	--	--
				CWTP GWPS (applicable to downgradient wells)	--	--	--	--	--	--	--	--	--	--		--	--	--	--	--
Well Id	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample Identification**																
MW-65	CWTP	Downgradient Boundary	11/5/2020	FC-CCR-MW65-1120	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-65	CWTP	Downgradient Boundary	4/22/2021	FC-CCR-MW65-0421	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	<0.7	--
MW-65	CWTP	Downgradient Boundary	7/8/2021	FC-CCR-MW65-0721	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-65	CWTP	Downgradient Boundary	11/15/2021	FC-CCR-MW65-1121	**320**	<6	<6	**330**	<6	--	**53**	**--**	--	**0.22**	**0.48**	**0.26**	**4.2**	<0.3	<0.6	**130**
MW-65	CWTP	Downgradient Boundary	5/20/2022	FC-CCR-MW65-0522	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	**1.1**	--
MW-65	CWTP	Downgradient Boundary	8/14/2022	FC-CCR-MW65-0822	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-65	CWTP	Downgradient Boundary	11/13/2022	FC-CCR-MW65-1122	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.4	<0.6	--
MW-65	CWTP	Downgradient Boundary	05/07/2023	FC-CCR-MW65-0523	--	--	--	--	--	--	--	--	**0.0031**	--	--	--	--	<0.36	<0.58	
MW-65	CWTP	Downgradient Boundary	06/28/2023	FC-CCR-MW65-0623	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.41	**0.7**	--
MW-65	CWTP	Downgradient Boundary	11/06/2023	FC-CCR-MW65-1123	**340**	<6	<6	**340**	<6	<0.1	**53**	**1.3**	--	--	--	--	**5.9**	<0.42	<0.75	**160**

BTV exceedances are shown in grey shaded cells. GWPS exceedence are shown in red text.

Abbreviations and Data Qualifiers:

< = less than

BTV = Background Threshold Value

CCR = Coal Combustion Residual

ID = Identification

J = The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

mg/L = milligrams per liter

NJ = The analyte has been "tentatively identified" or "presumptively" as present and the associated numerical value is the estimated concentration in the sample.

pCi/L = Picocuries per liter

su = standard units

Table F-10
Groundwater Sampling Results for the CWTP Surface Water Samples - Appendix III Constituents

					Appendix III Constituents							
				Constituent:	Boron	Calcium	Chloride	Fluoride	pH (Field Measurement)	pH (Laboratory Measurement)	Sulfate	Total Dissolved Solids
				Filtered:	N	N	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	su	su	mg/L	mg/L
				CWTP BTV (applicable to MW-62)	*2*	*536*	*631*	*1.8*	*6.5 - 6.9*	*6.5 - 6.9*	*13,000*	*20,000*
				CWTP BTV (applicable to MW-63)	*2*	*536*	*631*	*2.3*	*6.5 - 6.9*	*6.5 - 6.9*	*13,000*	*20,000*
				CWTP BTV (applicable to MW-64)	*0.73*	*486*	*631*	*1.6*	*7.66*	*7.66*	*13,000*	*20,000*
				CWTP BTV (applicable to MW-65)	*0.73*	*486*	*631*	*2.1*	*7.44*	*7.44*	*13,000*	*20,000*
				CWTP GWPS (applicable to downgradient wells)	--	--	--	--	--	--	--	--
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**								
SW-1	CWTP	Surface Water	4/1/2019	FC-CCR-SW1-4119	**0.31**	**83**	**48**	**0.81**	**8.38**	**8.3**	**410**	**760**
SW-1	CWTP	Surface Water	11/15/2021	FC-CCR-SW1-1121	**0.31**	**77**	**46**	**0.76**	**6.73**	**8.5 J**	**420**	**810**
SW-1	CWTP	Surface Water	2/9/2022	FC-CCR-SW1-0222	--	--	--	--	**8.39**	**8.5 J**	--	--
SW-1	CWTP	Surface Water	5/24/2022	FC-CCR-SW1-0522	**0.32**	**78**	**46**	**0.80**	**8.82**	**8.28 J**	**390**	**770**
SW-1	CWTP	Surface Water	5/24/2022	FC-CCR-FD08-0522	**0.31**	**79**	**46**	**0.81**	**8.82**	**8.31 J**	**390**	**750**
SW-1	CWTP	Surface Water	5/24/2022	FC-CCR-FD10-0522	**0.345**	**85**	**42.7**	**0.888 J**	**8.82**	**8.50 J**	**403**	**740**
SW-1	CWTP	Surface Water	5/24/2022	FC-CCR-SS02-0522	**0.326**	**85.6**	**43.3**	**0.881 J / 0.83**	**8.82**	**8.5 J**	**409**	**766**
SW-1	CWTP	Surface Water	8/14/2022	FC-CCR-SW1-0822	**0.31**	--	--	--	**8.60**	**8.7 J**	--	--
SW-1	CWTP	Surface Water	11/16/2022	FC-CCR-SW1-1122	**0.35**	**89**	**48**	< 2	**8.64**	**8.6 J**	**470**	**780**
SW-1	CWTP	Surface Water	11/16/2022	*DUP* FC-CCR-FD08-1122	**0.34**	**87**	**46**	< 2	**8.64**	**8.7 J**	**430**	**810**
SW-1	CWTP	Surface Water	01/27/2023	FC-CCR-SW1-0123	**0.31**	**90**	--	--	--	--	--	--
SW-1	CWTP	Surface Water	05/07/2023	FC-CCR-SW1-0523	**0.34**	**100**	**52**	**0.91**	**8.78**	**8.6 J**	**450**	**910**
SW-1	CWTP	Surface Water	05/07/2023	*DUP* FC-CCR-FD08-0523	**0.35**	**110**	**52**	**0.85**	--	**8.7 J**	**460**	**860**
SW-1	CWTP	Surface Water	05/07/2023	*DUP* FC-CCR-SWFD08-0523	--	--	--	--	--	--	--	--
SW-1	CWTP	Surface Water	06/28/2023	FC-CCR-SW1-0623	**0.34**	**84**	**51**	**0.83**	**8.56**	**8.6 J**	**450**	**820**
SW-1	CWTP	Surface Water	06/28/2023	*DUP* FC-CCR-FD01-0623	**0.35**	**89**	**51**	**0.84**	**8.56**	**8.5 J**	**450**	**800**
SW-1	CWTP	Surface Water	11/13/2023	FC-CCR-SW1-1123	**0.55**	**90**	**50**	**0.97**	**8.50**	**8.6 J**	**430**	**780**
SW-1	CWTP	Surface Water	11/13/2023	*DUP* FC-CCR-FD08-1123	**0.31**	**88**	**50**	**0.94**	**8.50**	**8.5 J**	**440**	**800**
SW-2	CWTP	Surface Water	4/1/2019	FC-CCR-SW2-4119	**0.36**	**87**	**50**	**0.91**	**8.04**	**8.0**	**450**	**810**
SW-2	CWTP	Surface Water	2/9/2022	FC-CCR-SW2-0222	--	--	--	--	**7.84**	**8.2 J**	--	--
SW-2	CWTP	Surface Water	11/15/2021	FC-CCR-SW2-1121	**0.33**	**83**	**48**	**0.79**	**6.17**	**8.0 J**	**430**	**670 J**
SW-2	CWTP	Surface Water	5/24/2022	FC-CCR-SW2-0522	**0.33**	**82**	**48**	**0.83**	**8.64**	**8.15**	**400**	**800**
SW-2	CWTP	Surface Water	8/14/2022	FC-CCR-SW2-0822	**0.31**	--	--	--	**8.42**	**8.5 J**	--	--
SW-2	CWTP	Surface Water	8/14/2022	*DUP* FC-CCR-FD02-0822	**0.33**	--	--	--	--	**8.5 J**	--	--
SW-2	CWTP	Surface Water	11/16/2022	FC-CCR-SW2-1122	**0.37**	**89**	**53**	< 2	**8.31**	**8.2 J**	**510**	**870**
SW-2	CWTP	Surface Water	01/27/2023	FC-CCR-SW2-0123	**0.45**	**110**	--	--	--	--	--	--
SW-2	CWTP	Surface Water	05/07/2023	FC-CCR-SW2-0523	**0.41**	**110**	**55**	**0.98**	**8.38**	**8.6 J**	**490**	**940**
SW-2	CWTP	Surface Water	06/27/2023	FC-CCR-SW2-0623	**0.40**	**92**	**53**	**0.87**	**8.87**	**8.6 J**	**470**	**840**
SW-2	CWTP	Surface Water	11/13/2023	FC-CCR-SW2-1123	**0.62**	**98**	**50**	**0.93**	**8.45**	**8.5 J**	**440**	**820**
SW-3	CWTP	Surface Water	4/1/2019	FC-CCR-SW3-4119	**0.33**	**86**	**48**	**0.81**	**8.37**	**8.3**	**400**	**760**
SW-3	CWTP	Surface Water	2/9/2022	FC-CCR-SW3-0222	--	--	--	--	**8.17**	**8.5 J**	--	--
SW-3	CWTP	Surface Water	11/15/2021	FC-CCR-SW3-1121	**0.31**	**80**	**46**	**0.75**	**6.68**	**7.9 J**	**420**	**680**
SW-3	CWTP	Surface Water	5/24/2022	FC-CCR-SW3-0522	**0.31**	**77**	**46**	**0.80**	**9.21**	**8.23**	**390**	**770**
SW-3	CWTP	Surface Water	8/14/2022	FC-CCR-SW3-0822	**0.31**	--	--	--	**8.27**	**8.5 J**	--	--
SW-3	CWTP	Surface Water	11/16/2022	FC-CCR-SW3-1122	**0.34**	**88**	**48**	< 2	**8.52**	**8.5 J**	**460**	**810**
SW-3	CWTP	Surface Water	01/27/2023	FC-CCR-SW3-0123	**0.31**	**88**	--	--	--	--	--	--

Table F-10
Groundwater Sampling Results for the CWTP Surface Water Samples - Appendix III Constituents

					Appendix III Constituents							
				Constituent:	Boron	Calcium	Chloride	Fluoride	pH (Field Measurement)	pH (Laboratory Measurement)	Sulfate	Total Dissolved Solids
				Filtered:	N	N	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	su	su	mg/L	mg/L
				CWTP BTV (applicable to MW-62)	*2*	*536*	*631*	*1.8*	*6.5 - 6.9*	*6.5 - 6.9*	*13,000*	*20,000*
				CWTP BTV (applicable to MW-63)	*2*	*536*	*631*	*2.3*	*6.5 - 6.9*	*6.5 - 6.9*	*13,000*	*20,000*
				CWTP BTV (applicable to MW-64)	*0.73*	*486*	*631*	*1.6*	*7.66*	*7.66*	*13,000*	*20,000*
				CWTP BTV (applicable to MW-65)	*0.73*	*486*	*631*	*2.1*	*7.44*	*7.44*	*13,000*	*20,000*
				CWTP GWPS (applicable to downgradient wells)	--	--	--	--	--	--	--	--
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**								
SW-3	CWTP	Surface Water	01/27/2023	*DUP* FC-CCR-FD01-0123	**0.31**	**89**	--	--	--	--	--	--
SW-3	CWTP	Surface Water	05/07/2023	FC-CCR-SW3-0523	**0.35**	**100**	**51**	**0.83**	**8.49**	**8.7 J**	**440**	**850 J**
SW-3	CWTP	Surface Water	06/27/2023	FC-CCR-SW3-0623	**0.37**	**96**	**50**	**0.83**	**8.85**	**8.4 J**	**450**	**800**
SW-3	CWTP	Surface Water	11/13/2023	FC-CCR-SW3-1123	**0.33**	**91**	**50**	**0.92**	**8.42**	**8.3 J**	**440**	**810**
SW-4	CWTP	Surface Water	4/1/2019	FC-CCR-SW4-4119	**0.33**	**87**	**48**	**0.81**	**8.45**	**8.4**	**410**	**760**
SW-5	CWTP	Surface Water	4/1/2019	FC-CCR-SW5-4119	**0.38**	**89**	**53**	**0.94**	**8.13**	**8.1**	**450**	**850**
SW-6	CWTP	Surface Water	4/1/2019	FC-CCR-SW6-4119	**0.31**	**84**	**48**	**0.82**	**8.37**	**8.4**	**410**	**770**

Abbreviations and Data Qualifiers:

< = less than

CCR = Coal Combustion Residual

ID = Identification

J = The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

mg/L = milligrams per liter

pCi/L = Picocuries per liter

su = standard units

Table F-11
Groundwater Sampling Results for the CWTP Surface Water Samples - Appendix IV Constituents

					Appendix IV Constituents													
				Constituent:	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Fluoride	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium	Total Radium
				Filtered:	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L
				CWTP BTV (applicable to MW-62) *CWTP BTV (applicable to MW-63)* *CWTP BTV (applicable to MW-64)* *CWTP BTV (applicable to MW-65)*	*0.00027*	*0.013*	*0.51*	*0.0022*	*0.00021*	*0.0014*	*0.014*	*4.2*	*0.0011*	*0.89*	*0.0002*	*0.011*	*0.47*	*0.0012*	*4.16*
				CWTP GWPS (applicable to downgradient wells)	*0.006*	*0.013*	*2*	*0.004*	*0.005*	*0.1*	*0.014*	*4.2*	*0.015*	*0.89*	*0.002*	*0.1*	*0.47*	*0.002*	*5*
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**															
SW-1	CWTP	Surface Water	4/1/2019	FC-CCR-SW1-4119	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SW-1	CWTP	Surface Water	11/15/2021	FC-CCR-SW1-1121	**0.00068 J**	< 0.001	**0.20**	< 0.001 U	< 0.0002	<0.002	**0.00023 J**	**0.76**	< 0.001	**0.082**	<0.0002	**0.0057**	<0.001	< 0.0002 U	<0.6
SW-1	CWTP	Surface Water	2/9/2022	FC-CCR-SW1-0222	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SW-1	CWTP	Surface Water	5/24/2022	FC-CCR-SW1-0522	<0.002	**0.0015**	**0.18**	<0.001	<0.0002	<0.002	<0.001	**0.80**	<0.001	**0.086**	<0.0002	**0.0061**	<0.001	<0.0002	<0.7
SW-1	CWTP	Surface Water	5/24/2022	FC-CCR-FD08-0522	<0.002	**0.0016**	**0.18**	<0.001	<0.0002	<0.002	<0.001	**0.81**	<0.001	**0.087**	<0.0002	**0.0061**	<0.001	<0.0002	<0.7
SW-1	CWTP	Surface Water	5/24/2022	FC-CCR-FD10-0522	**0.00065 J**	**0.0022**	**0.176**	<0.00025	<0.00025	<0.002	**0.000416**	**0.888 J**	**0.00024 J**	**0.0851**	<0.001	**0.00616**	**0.00079**	<0.0005	--
SW-1	CWTP	Surface Water	5/24/2022	FC-CCR-SS02-0522	**0.00072 J**	**0.00151**	**0.194**	< 0.00025	< 0.00025	< 0.002	**0.000273**	**0.881 J / 0.83**	**0.00018 J**	**0.09**	< 0.001	**0.00604**	**0.00051**	< 0.0005	--
SW-1	CWTP	Surface Water	8/14/2022	FC-CCR-SW1-0822	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SW-1	CWTP	Surface Water	11/16/2022	FC-CCR-SW1-1122	< 0.001	**0.0023**	**0.22**	< 0.001	< 0.0001	< 0.001	< 0.0005	< 2	< 0.0005	**0.085**	< 0.0002	**0.0053**	< 0.0005	< 0.0001	< 0.7
SW-1	CWTP	Surface Water	11/16/2022	*DUP* FC-CCR-FD08-1122	< 0.001	**0.0021**	**0.21**	< 0.001	< 0.0001	< 0.001	< 0.0005	< 2	< 0.0005	**0.085**	**0.00021**	**0.0051**	< 0.0005	< 0.0001	**0.6**
SW-1	CWTP	Surface Water	01/27/2023	FC-CCR-SW1-0123	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SW-1	CWTP	Surface Water	05/07/2023	FC-CCR-SW1-0523	< 0.002	< 0.005	**0.20**	< 0.001	< 0.001	< 0.003	< 0.001	**0.91**	< 0.001	**0.087**	< 0.0002	**0.0061**	< 0.005	< 0.001	< 0.6
SW-1	CWTP	Surface Water	05/07/2023	*DUP* FC-CCR-FD08-0523	< 0.002	< 0.005	**0.19**	< 0.001	< 0.001	< 0.003	< 0.001	**0.85**	< 0.001	**0.092**	< 0.0002	**0.0065**	< 0.005	< 0.001	--
SW-1	CWTP	Surface Water	05/07/2023	*DUP* FC-CCR-SWFD08-0523	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.8**
SW-1	CWTP	Surface Water	06/28/2023	FC-CCR-SW1-0623	< 0.001	**0.0031**	**0.18**	< 0.001	< 0.0001	< 0.001	< 0.0005	**0.83**	< 0.0005	**0.093**	< 0.0002	**0.0065**	**0.00066**	**0.00013**	< 0.6
SW-1	CWTP	Surface Water	06/28/2023	*DUP* FC-CCR-FD01-0623	< 0.001	**0.0033**	**0.17**	< 0.001	< 0.0001	< 0.001	< 0.0005	**0.84**	< 0.0005	**0.095**	< 0.0002	**0.0065**	**0.00092**	< 0.0001	< 0.6
SW-1	CWTP	Surface Water	11/13/2023	FC-CCR-SW1-1123	<0.01	**0.0095**	**0.17**	<0.005	<0.001	<0.01	<0.005	**0.97**	<0.005	**0.10**	<0.0002	**0.0062**	<0.005	<0.001	<0.49
SW-1	CWTP	Surface Water	11/13/2023	*DUP* FC-CCR-FD08-1123	<0.01	**0.0089**	**0.18**	<0.005	<0.001	<0.01	<0.005	**0.94**	<0.005	**0.10**	<0.0002	**0.0064**	<0.005	<0.001	<0.48
SW-2	CWTP	Surface Water	4/1/2019	FC-CCR-SW2-4119	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SW-2	CWTP	Surface Water	2/9/2022	FC-CCR-SW2-0222	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SW-2	CWTP	Surface Water	11/15/2021	FC-CCR-SW2-1121	**0.00064 J**	**0.0010**	**0.18**	< 0.001	< 0.0002	<0.002	**0.00013 J**	**0.79**	< 0.001	**0.074**	<0.0002	**0.0056**	<0.001	< 0.0002	<0.6
SW-2	CWTP	Surface Water	5/24/2022	FC-CCR-SW2-0522	<0.002	**0.0022**	**0.21**	<0.001	<0.0002	<0.002	<0.001	**0.83**	<0.001	**0.090**	<0.0002	**0.0065**	<0.001	<0.0002	<0.7
SW-2	CWTP	Surface Water	8/14/2022	FC-CCR-SW2-0822	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SW-2	CWTP	Surface Water	8/14/2022	*DUP* FC-CCR-FD02-0822	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SW-2	CWTP	Surface Water	11/16/2022	FC-CCR-SW2-1122	< 0.001	**0.0021**	**0.21**	< 0.001	< 0.0001	< 0.001	< 0.0005	< 2	**0.00063**	**0.090**	< 0.0002	**0.0076**	< 0.0005	< 0.0001	< 0.7
SW-2	CWTP	Surface Water	01/27/2023	FC-CCR-SW2-0123	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SW-2	CWTP	Surface Water	05/07/2023	FC-CCR-SW2-0523	**0.0024**	< 0.005	**0.15**	< 0.001	< 0.001	< 0.003	< 0.001	**0.98**	< 0.001	**0.085**	< 0.0002	**0.020**	< 0.005	< 0.001	**1.7**
SW-2	CWTP	Surface Water	06/27/2023	FC-CCR-SW2-0623	**0.0087**	**0.0049**	**0.30**	< 0.001	< 0.0001	**0.0027**	**0.0015**	**0.87**	**0.0034**	**0.10**	< 0.0002	**0.011**	**0.0015**	< 0.0001	**1.7**
SW-2	CWTP	Surface Water	11/13/2023	FC-CCR-SW2-1123	<0.01	**0.010**	**0.47**	<0.005	<0.001	<0.01	<0.005	**0.93**	<0.005	**0.10**	<0.0002	**0.0066**	<0.005	<0.001	<0.48
SW-3	CWTP	Surface Water	4/1/2019	FC-CCR-SW3-4119	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SW-3	CWTP	Surface Water	2/9/2022	FC-CCR-SW3-0222	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SW-3	CWTP	Surface Water	11/15/2021	FC-CCR-SW3-1121	**0.00082 J**	**0.00054 J**	**0.22**	< 0.001 U	< 0.0002	<0.002	**0.00024 J**	**0.75**	**0.00044 J**	**0.079**	<0.0002	**0.0060**	<0.001	< 0.0002	**1.3**
SW-3	CWTP	Surface Water	5/24/2022	FC-CCR-SW3-0522	<0.002	**0.0016**	**0.18**	<0.001	<0.0002	<0.002	<0.001	**0.80**	<0.001	**0.086**	<0.0002	**0.0061**	<0.001	<0.0002	<0.7
SW-3	CWTP	Surface Water	8/14/2022	FC-CCR-SW3-0822	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SW-3	CWTP	Surface Water	11/16/2022	FC-CCR-SW3-1122	< 0.001	**0.0022**	**0.22**	< 0.001	< 0.0001	< 0.001	< 0.0005	< 2	< 0.0005	**0.085**	< 0.0002	**0.0054**	< 0.0005	< 0.0001	< 0.7
SW-3	CWTP	Surface Water	01/27/2023	FC-CCR-SW3-0123	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SW-3	CWTP	Surface Water	01/27/2023	*DUP* FC-CCR-FD01-0123	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SW-3	CWTP	Surface Water	05/07/2023	FC-CCR-SW3-0523	< 0.002	< 0.005	**0.19**	< 0.001	< 0.001	< 0.003	< 0.001	**0.83**	< 0.001	**0.089**	< 0.0002	**0.0065**	< 0.005	< 0.001	< 0.6
SW-3	CWTP	Surface Water	06/27/2023	FC-CCR-SW3-0623	< 0.001	**0.0031**	**0.17**	< 0.001	< 0.0001	< 0.001	< 0.0005	**0.83**	< 0.0005	**0.094**	< 0.0002	**0.0063**	**0.00092**	< 0.0001	**0.6**
SW-3	CWTP	Surface Water	11/13/2023	FC-CCR-SW3-1123	<0.01	**0.0091**	**0.18**	<0.005	<0.001	<0.01	<0.005	**0.92**	<0.005	**0.11**	<0.0002	**0.0064**	<0.005	<0.001	<0.48
SW-4	CWTP	Surface Water	4/1/2019	FC-CCR-SW4-4119	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SW-5	CWTP	Surface Water	4/1/2019	FC-CCR-SW5-4119	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SW-6	CWTP	Surface Water	4/1/2019	FC-CCR-SW6-4119	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Abbreviations and Data Qualifiers:

< = less than
CCR = Coal Combustion Residual
ID = Identification
J = The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
mg/L = milligrams per liter
pCi/L = Picocuries per liter
su = standard units

Table F-12
Groundwater Sampling Results for the CWTP Surface Water Samples - Additional Analyses

					Additional Analyses														
				Constituent:	Alkalinity Bicarbonate	Alkalinity Carbonate	Alkalinity Hydroxide	Alkalinity(as CaCO3)	Alkalinity, Phenolphthalein, as CaCO3	Iron	Magnesium	Manganese	Nickel	Nitrate as N	Nitrate Nitrite as N	Nitrite as N	Potassium	Radium 226	Radium 228	Sodium
				Filtered:	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L	pCi/L	mg/L
				CWTP BTV (applicable to MW-62)	--	--	--	--	--	--	--	--	--	--		--	--	--	--	--
				CWTP BTV (applicable to MW-63)	--	--	--	--	--	--	--	--	--	--		--	--	--	--	--
				CWTP BTV (applicable to MW-64)	--	--	--	--	--	--	--	--	--	--		--	--	--	--	--
				CWTP BTV (applicable to MW-65)	--	--	--	--	--	--	--	--	--	--		--	--	--	--	--
				CWTP GWPS (applicable to downgradient wells)	--	--	--	--	--	--	--	--	--	--		--	--	--	--	--
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**																
SW-1	CWTP	Surface Water	4/1/2019	FC-CCR-SW1-4119	**120**	--	--	**120**	--	--	**29**	**--**	**--**	< 0.10	--	< 0.10	**6.5**	--	--	**100**
SW-1	CWTP	Surface Water	11/15/2021	FC-CCR-SW1-1121	**110**	<6	<6	**110**	<6	--	**30**	**--**	**--**	**0.073**	**0.073**	<0.05	**7.1**	<0.3	<0.6	**99**
SW-1	CWTP	Surface Water	2/9/2022	FC-CCR-SW1-0222	**--**	--	--	--	--	--	--	--	**--**	--	--	--	--	--	--	**--**
SW-1	CWTP	Surface Water	5/24/2022	FC-CCR-SW1-0522	--	--	--	--	--	--	--	--	**--**	--	--	--	--	<0.4	<0.7	--
SW-1	CWTP	Surface Water	5/24/2022	FC-CCR-FD08-0522	--	--	--	--	--	--	--	--	**--**	--	--	--	--	<0.4	<0.7	--
SW-1	CWTP	Surface Water	5/24/2022	FC-CCR-FD10-0522	--	--	--	--	--	--	--	--	**--**	--	--	--	--	--	--	--
SW-1	CWTP	Surface Water	5/24/2022	FC-CCR-SS02-0522	--	--	--	--	--	--	--	--	**--**	--	--	--	--	--	--	--
SW-1	CWTP	Surface Water	8/14/2022	FC-CCR-SW1-0822	--	--	--	--	--	--	--	--	**--**	--	--	--	--	--	--	--
SW-1	CWTP	Surface Water	11/16/2022	FC-CCR-SW1-1122	--	--	--	--	--	--	--	--	**--**	--	--	--	--	< 0.3	< 0.7	--
SW-1	CWTP	Surface Water	11/16/2022	*DUP* FC-CCR-FD08-1122	--	--	--	--	--	--	--	--	**--**	--	--	--	--	**0.6**	< 0.7	--
SW-1	CWTP	Surface Water	01/27/2023	FC-CCR-SW1-0123	--	--	--	--	--	--	--	--	**--**	--	--	--	--	--	--	--
SW-1	CWTP	Surface Water	05/07/2023	FC-CCR-SW1-0523	--	--	--	--	--	--	--	--	< 0.003	--	--	--	--	< 0.36	< 0.58	
SW-1	CWTP	Surface Water	05/07/2023	*DUP* FC-CCR-FD08-0523	--	--	--	--	--	--	--	--	< 0.003	--	--	--	--	--	--	
SW-1	CWTP	Surface Water	05/07/2023	*DUP* FC-CCR-SWFD08-0523	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.36	**0.8**	
SW-1	CWTP	Surface Water	06/28/2023	FC-CCR-SW1-0623	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.41	< 0.61	--
SW-1	CWTP	Surface Water	06/28/2023	*DUP* FC-CCR-FD01-0623	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.4	< 0.61	--
SW-1	CWTP	Surface Water	11/13/2023	FC-CCR-SW1-1123	**110**	<6	<6	**110**	<6	<0.5	**36**	<0.05	--	--	--	--	**8.5**	<0.82	<0.8	**130**
SW-1	CWTP	Surface Water	11/13/2023	*DUP* FC-CCR-FD08-1123	**110**	<6	<6	**110**	<6	<0.5	**33**	<0.05	--	--	--	--	**8.1**	<0.82	<0.8	**120**
SW-2	CWTP	Surface Water	4/1/2019	FC-CCR-SW2-4119	**120**	--	--	**120**	--	--	**31**	**--**	**--**	**0.21**	--	< 0.10	**7.0**	--	--	**110**
SW-2	CWTP	Surface Water	2/9/2022	FC-CCR-SW2-0222	**--**	--	--	--	--	--	**--**	**--**	**--**	**--**	--	--	--	--	--	**--**
SW-2	CWTP	Surface Water	11/15/2021	FC-CCR-SW2-1121	**130**	<6	<6	**130**	<6	--	**33**	**--**	**--**	**0.081**	**0.081**	<0.05	**7.8**	<0.3	<0.6	**110**
SW-2	CWTP	Surface Water	5/24/2022	FC-CCR-SW2-0522	--	--	--	--	--	--	--	--	**--**	--	--	--	--	<0.4	<0.7	--
SW-2	CWTP	Surface Water	8/14/2022	FC-CCR-SW2-0822	--	--	--	--	--	--	--	--	**--**	--	--	--	--	--	--	--
SW-2	CWTP	Surface Water	8/14/2022	*DUP* FC-CCR-FD02-0822	--	--	--	--	--	--	--	--	**--**	--	--	--	--	--	--	--
SW-2	CWTP	Surface Water	11/16/2022	FC-CCR-SW2-1122	--	--	--	--	--	--	--	--	**--**	--	--	--	--	< 0.3	< 0.7	--
SW-2	CWTP	Surface Water	01/27/2023	FC-CCR-SW2-0123	--	--	--	--	--	--	--	--	**--**	--	--	--	--	--	--	--
SW-2	CWTP	Surface Water	05/07/2023	FC-CCR-SW2-0523	--	--	--	--	--	--	--	--	< 0.003	--	--	--	--	**0.8**	**0.9**	
SW-2	CWTP	Surface Water	06/27/2023	FC-CCR-SW2-0623	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.4	**1.7**	--
SW-2	CWTP	Surface Water	11/13/2023	FC-CCR-SW2-1123	**110**	<6	<6	**110**	<6	**3.7 J**	**39**	**0.14**	--	--	--	--	**9.3**	<0.82	<0.8	**140**
SW-3	CWTP	Surface Water	4/1/2019	FC-CCR-SW3-4119	**120**	--	--	**120**	--	--	**30**	**--**	**--**	< 0.10	--	< 0.10	**6.8**	--	--	**100**
SW-3	CWTP	Surface Water	2/9/2022	FC-CCR-SW3-0222	**--**	--	--	**--**	--	--	--	--	**--**	--	--	--	--	--	--	--
SW-3	CWTP	Surface Water	11/15/2021	FC-CCR-SW3-1121	**100**	<6	<6	**100**	<6	--	**30**	**--**	**--**	<0.05	<0.05	<0.05	**7.4**	**0.7**	**0.6**	**97**
SW-3	CWTP	Surface Water	5/24/2022	FC-CCR-SW3-0522	--	--	--	--	--	--	--	--	**--**	--	--	--	--	<0.4	<0.7	--
SW-3	CWTP	Surface Water	8/14/2022	FC-CCR-SW3-0822	--	--	--	--	--	--	--	--	**--**	--	--	--	--	--	--	--
SW-3	CWTP	Surface Water	11/16/2022	FC-CCR-SW3-1122	--	--	--	--	--	--	--	--	**--**	--	--	--	--	< 0.3	< 0.7	--
SW-3	CWTP	Surface Water	01/27/2023	FC-CCR-SW3-0123	--	--	--	--	--	--	--	--	**--**	--	--	--	--	--	--	--
SW-3	CWTP	Surface Water	01/27/2023	*DUP* FC-CCR-FD01-0123	--	--	--	--	--	--	--	--	**--**	--	--	--	--	--	--	--
SW-3	CWTP	Surface Water	05/07/2023	FC-CCR-SW3-0523	--	--	--	--	--	--	--	--	< 0.003	--	--	--	--	< 0.36	< 0.58	
SW-3	CWTP	Surface Water	06/27/2023	FC-CCR-SW3-0623	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.6**	< 0.61	--
SW-3	CWTP	Surface Water	11/13/2023	FC-CCR-SW3-1123	**110**	<6	<6	**110**	<6	<0.5	**35**	<0.05	--	--	--	--	**8.7**	**0.9**	**0.9**	**130**
SW-4	CWTP	Surface Water	4/1/2019	FC-CCR-SW4-4119	**120**	--	--	**120**	--	--	**30**	**--**	**--**	< 0.10	--	< 0.10	**6.9**	--	--	**110**
SW-5	CWTP	Surface Water	4/1/2019	FC-CCR-SW5-4119	**120**	--	--	**120**	--	--	**31**	**--**	**--**	**0.19**	--	< 0.10	**6.8**	--	--	**110**
SW-6	CWTP	Surface Water	4/1/2019	FC-CCR-SW6-4119	**130**	--	--	**130**	--	--	**29**	**--**	**--**	< 0.10	--	< 0.10	**6.6**	--	--	**100**

Abbreviations and Data Qualifiers:
< = less than
CCR = Coal Combustion Residual
ID = Identification
J = The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
mg/L = milligrams per liter
pCi/L = Picocuries per liter
su = standard units

Table F-13
Groundwater Sampling Results for the Additional Monitoring Wells - Appendix III Constituents

					Appendix III Constituents									
				Constituent:	Boron	Boron	Calcium	Calcium	Chloride	Fluoride	pH (Field Measurement)	pH (Laboratory Measurement)	Sulfate	Total Dissolved Solids
				Filtered:	N	Y	N	Y	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	su	su	mg/L	mg/L
Well ID	CCR Unit	Well Designation	Sample Date	Sample ID										
DMX-01	--	Supplementary	4/20/1992	DMX-1_4/20/1992	--	5.42	--	466	700	0.87	--	7.7	12,000	21,000
DMX-01	--	Supplementary	3/18/2015	FCPP-DMX1-031815	140	--	450	--	3,000	<0.80	--	--	12,000	20,000
DMX-01	--	Supplementary	6/24/2015	DMX-1	140	--	420	--	1,600	<8.0	--	7.1	11,000	21,000
DMX-01	--	Supplementary	8/28/2015	FCPP-DMX1-082815	140	--	430	--	1,400	<2.0	--	7.07	12,000	21,000
DMX-01	--	Supplementary	11/4/2015	FC DMX-1-(041115)	140	--	420	--	1,200	<2.0	--	7.1	9,800	20,000
DMX-01	--	Supplementary	6/21/2016	FC-SEEPS-DMX-1-062116	130	--	420	--	1,500	0.67	--	7.02	12,000	20,000
DMX-01	--	Supplementary	4/25/2021	FC-CCR-DMX01-0421	89	--	--	--	--	--	7.63	--	--	--
DMX-01	--	Supplementary	11/14/2021	FC-CCR-DMX01	99	--	--	--	--	--	6.88	--	--	--
DMX-01	--	Supplementary	11/14/2021	FC-CCR-FD06	100	--	--	--	--	--	6.88	--	--	--
DMX-01	--	Supplementary	5/23/2022	FC-CCR-DMX01-0522	66	--	--	--	--	--	6.85	--	--	--
DMX-01	--	Supplementary	11/11/2022	FC-CCR-DMX01-1122	80	--	--	--	--	--	6.94	--	--	--
DMX-01	--	Supplementary	11/11/2022	*DUP* FC-CCR-FD04-1122	83	--	--	--	--	--	6.94	--	--	--
DMX-01	--	Supplementary	5/3/2023	FC-CCR-DMX01-0523	77	--	--	--	--	--	6.84	--	--	--
DMX-01	--	Supplementary	5/3/2023	*DUP* FC-CCR-FD04-0523	87	--	--	--	--	--	6.84	--	--	--
DMX-01	--	Supplementary	11/10/2023	FC-CCR-DMX01-1123	90	--	--	--	--	--	7.01	--	--	--
DMX-01	--	Supplementary	11/10/2023	*DUP* FC-CCR-FD04-1123	92	--	--	--	--	--	7.01	--	--	--
MW-01	--	Supplementary	9/28/1987	MW-1_9/28/1987	--	13	--	430	570	0.90	7.33	7.4	9,000	15,000
MW-01	--	Supplementary	6/27/1988	MW-1-19880627	--	--	436	--	619	0.90	7.17	--	8,644	14,582
MW-01	--	Supplementary	9/21/1988	MW-1-19880921	11.5	--	411	--	597	0.90	6.93	--	8,398	15,405
MW-01	--	Supplementary	11/20/1988	MW-1-19881120	9.9	--	414	--	463	0.80	7.15	--	7,922	14,475
MW-01	--	Supplementary	3/6/1989	MW-1-19890306	12	--	432	--	734	0.80	7.00	--	9,295	15,490
MW-01	--	Supplementary	9/11/1989	MW-1-19890911	13.7	--	360	--	678	0.90	7.18	--	8,299	14,710
MW-01	--	Supplementary	3/26/1990	MW-1-19900326	14.9	--	380	--	608	0.80	7.20	--	8,327	13,790
MW-01	--	Supplementary	9/18/1990	MW-1-19900918	25	--	370	--	578	0.50	7.20	--	7,982	13,565
MW-01	--	Supplementary	3/27/1991	MW-1-19910327	24.1	--	360	--	788	0.50	7.11	--	9,495	13,460
MW-01	--	Supplementary	9/11/1991	MW-1-19910911	22.6	--	427	--	779	0.60	7.21	--	10,440	13,450
MW-01	--	Supplementary	4/30/1992	MW-1-19920430	30.8	--	360	--	651	0.60	7.23	--	8,840	12,720
MW-01	--	Supplementary	10/27/1992	MW-1-19921027	41	--	400	--	569	0.80	7.23	--	7,500	11,910
MW-01	--	Supplementary	4/21/1993	MW-1-19930421	36	--	390	--	639	0.60	7.20	--	8,230	12,670
MW-01	--	Supplementary	11/23/1993	MW-1-19931123	46	--	380	--	627	0.70	7.12	--	8,650	12,850
MW-01	--	Supplementary	4/20/1994	MW-1-19940420	38	--	430	--	728	0.70	7.20	--	8,250	14,340
MW-01	--	Supplementary	8/11/1994	MW-1-19940811	41	--	440	--	662	0.70	7.16	--	7,626	12,450
MW-01	--	Supplementary	4/6/1995	MW-1-19950406	43	--	410	--	777	0.60	7.14	--	7,930	13,800
MW-01	--	Supplementary	11/19/1995	MW-1-19951119	62.3	--	400	--	603	0.80	7.26	--	7,034	12,130
MW-01	--	Supplementary	8/13/1996	MW-1-19960813	54.1	--	320	--	575.6	0.70	7.34	--	7,034	12,210

Table F-13
Groundwater Sampling Results for the Additional Monitoring Wells - Appendix III Constituents

					Appendix III Constituents									
				Constituent:	Boron	Boron	Calcium	Calcium	Chloride	Fluoride	pH (Field Measurement)	pH (Laboratory Measurement)	Sulfate	Total Dissolved Solids
				Filtered:	N	Y	N	Y	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	su	su	mg/L	mg/L
Well ID	CCR Unit	Well Designation	Sample Date	Sample ID										
MW-01	--	Supplementary	4/23/1997	MW-1-19970423	51.2	--	300	--	590.5	0.70	7.24	--	6,845	11,850
MW-01	--	Supplementary	10/20/1997	MW-1-19971020	57.7	--	380	--	549.5	1.0	7.48	--	7,003	11,890
MW-01	--	Supplementary	4/6/1998	MW-1-19980406	--	--	--	--	644	0.80	7.33	--	7,334	--
MW-01	--	Supplementary	10/19/1998	MW-1-19981019	55.1	--	380	--	591.9	0.70	7.36	--	7,345	11,666
MW-01	--	Supplementary	6/9/1999	MW-1-19990609	48.6	--	360	--	650.7	0.70	7.39	--	7,480	13,130
MW-01	--	Supplementary	12/6/1999	MW-1-19991206	60	--	440	--	493	1.0	7.37	--	6,334	110,940
MW-01	--	Supplementary	5/24/2000	MW-1-20000524	55.3	--	416	--	680.1	0.90	7.13	--	7,484	11,410
MW-01	--	Supplementary	11/14/2000	MW-1-20001114	67.4	--	2,460	--	463.5	1.2496	7.02	--	6,052	10,690
MW-01	--	Supplementary	8/22/2001	MW-1-20010822	55.3	--	400	--	540	1.1	7.27	--	5,494	10,790
MW-01	--	Supplementary	12/5/2001	MW-1-20011205	69.3	--	360	--	536.5	1.0	7.17	--	6,121	10,710
MW-01	--	Supplementary	6/11/2002	MW-1-20020611	68.1	--	400	--	535	1.7	7.59	--	5,928	10,910
MW-01	--	Supplementary	12/17/2002	MW-1-20021217	65.7	--	390	--	530.5	1.3	7.27	--	5,879	11,360
MW-01	--	Supplementary	5/28/2003	MW-1-20030528	70.5	--	380	--	400.5	1.3	7.15	--	4,102	11,490
MW-01	--	Supplementary	12/24/2003	MW-1-20031224	65.9	--	350	--	670	7.8	7.18	--	6,574	10,620
MW-01	--	Supplementary	4/21/2004	MW-1-20040421	--	--	410	--	517	1.4	7.20	--	5,337	10,690
MW-01	--	Supplementary	11/29/2004	MW-1-20041129	69.6	--	450	--	1,840	1.8	7.24	--	10,277	10,680
MW-01	--	Supplementary	6/5/2005	MW-1-20050605	64.8	--	440	--	556.5	1.2	7.25	--	5,145	10,120
MW-01	--	Supplementary	12/12/2005	MW-1-20051212	65.3	--	460	--	568.5	--	7.08	--	5,050	10,630
MW-01	--	Supplementary	5/17/2006	MW-1-20060517	66.9	--	441	--	574	1.83	7.20	--	5,790	10,400
MW-01	--	Supplementary	10/12/2006	MW-1-20061012	67.6	--	443	--	673	1.8	7.22	--	6,880	10,600
MW-01	--	Supplementary	4/19/2007	MW-1-20070419	70.7	--	431	--	623	1.72	7.24	--	5,870	10,600
MW-01	--	Supplementary	11/19/2007	MW-1-20071119	57.8	--	362	--	690	2.0	7.16	--	6,600	11,000
MW-01	--	Supplementary	5/8/2008	MW-1-20080508	61.7	--	371	--	660	1.92	7.36	--	7,000	10,600
MW-01	--	Supplementary	9/27/2012	MW-1-092712-04	62	--	410	--	710	2.6	--	--	6,400	11,000
MW-01	--	Supplementary	9/27/2012	MW-1-092712-01	62	--	390	--	730	2.6	--	--	6,500	11,000
MW-01	--	Supplementary	11/18/2013	FC-DUP-111813	69	--	470	--	720	3.8	--	--	6,400	11,000
MW-01	--	Supplementary	11/18/2013	FC-01-111813	63	--	470	--	710	3.6	--	--	6,200	11,000
MW-01	--	Supplementary	9/9/2014	FCPP-01MS-090914	63	--	390	--	--	--	--	--	--	--
MW-01	--	Supplementary	9/9/2014	FCPP-01-090914	61	--	410	--	650	1.5	--	--	6,100	10,000
MW-01	--	Supplementary	3/17/2015	FCPP-01-031715	65	--	420	--	630	1.8	--	--	6,100	9,900
MW-01	--	Supplementary	6/30/2015	MW-1	65	--	390	--	680	2.5	--	7.29	5,700	10,000
MW-01	--	Supplementary	8/27/2015	FCPP-1-082715	66	--	440	--	550	4.2	--	7.16	6,000	9,600
MW-01	--	Supplementary	6/17/2016	FC-Seep-MW1-616	61	--	420	--	760	3.1	--	7.55	6,100	10,000
MW-01	--	Supplementary	9/15/2016	FC-Seep-MW1-916	64	--	420	--	560	3.7	--	7.2	6,600	9,800
MW-01	--	Supplementary	6/21/2020	FC-CCR-MW01-0620	--	--	--	--	--	--	6.90	--	--	--

Table F-13
Groundwater Sampling Results for the Additional Monitoring Wells - Appendix III Constituents

					Appendix III Constituents									
				Constituent:	Boron	Boron	Calcium	Calcium	Chloride	Fluoride	pH (Field Measurement)	pH (Laboratory Measurement)	Sulfate	Total Dissolved Solids
				Filtered:	N	Y	N	Y	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	su	su	mg/L	mg/L
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**										
MW-01	--	Supplementary	6/21/2020	*DUP* FC-CCR-FD03-0620	--	--	--	--	--	--	--	--	--	--
MW-01	--	Supplementary	11/8/2020	FC-CCR-MW01-1120	**56**	**--**	--	--	--	--	**7.06**	--	--	--
MW-01	--	Supplementary	11/8/2020	*DUP* FC-CCR-FD03-1120	**56**	**--**	--	--	--	--	--	--	--	--
MW-01	--	Supplementary	4/24/2021	FC-CCR-MW01-0421	**56**	--	--	--	--	--	**7.67**	--	--	--
MW-01	--	Supplementary	4/24/2021	FC-CCR-FD03-0421	**56**	--	--	--	--	--	**7.67**	--	--	--
MW-01	--	Supplementary	11/13/2021	FC-CCR-MW01	**63**	--	--	--	--	--	**6.84**	--	--	--
MW-01	--	Supplementary	5/23/2022	FC-CCR-MW01-0522	**55**	--	--	--	--	--	**6.96**	--	--	--
MW-01	--	Supplementary	5/23/2022	*DUP* FC-CCR-FD05-0522	**54**	--	--	--	--	--	**6.96**	--	--	--
MW-01	--	Supplementary	11/10/2022	FC-CCR-MW01-1122	**54**	--	--	--	--	--	**6.97**	--	--	--
MW-01	--	Supplementary	5/2/2023	FC-CCR-MW01-0523	**60**	--	--	--	--	--	**6.89**	--	--	--
MW-01	--	Supplementary	11/09/2023	FC-CCR-MW01-1123	**54**	--	--	--	--	--	**6.97**	--	--	--
MW-03	--	Supplementary	4/1/1987	MW-3_4/1/1987	--	**1.2**	--	**460**	**1,100**	**0.50**	**7.60**	**7.1**	**30,000**	**43,000**
MW-03	--	Supplementary	9/29/1987	MW-3_9/29/1987	--	**1.6**	--	**470**	**1,300**	<0.5	**6.99**	**7.2**	**36,000**	**58,000**
MW-03	--	Supplementary	6/28/1988	MW-3-19880628	--	--	**472**	--	**1,152**	**1.2**	**7.41**	--	**30,437**	**60,998**
MW-03	--	Supplementary	9/21/1988	MW-3-19880921	**2.0**	--	**405**	--	**1,006**	**1.2**	**7.29**	--	**31,759**	**55,105**
MW-03	--	Supplementary	11/20/1988	MW-3-19881120	**1.0**	--	**476**	--	**792**	**1.5**	**7.34**	--	**34,816**	**56,200**
MW-03	--	Supplementary	2/27/1989	MW-3-19890227	**2.0**	--	**448**	--	**1,127**	**1.2**	**7.37**	--	**35,052**	**55,715**
MW-03	--	Supplementary	9/13/1989	MW-3-19890913	**2.0**	--	**460**	--	**1,336**	**1.4**	**7.21**	--	**35,948**	**56,820**
MW-03	--	Supplementary	3/22/1990	MW-3-19900322	**1.0**	--	**500**	--	**1,211**	**1.3**	**7.20**	--	**32,683**	**56,340**
MW-03	--	Supplementary	10/30/1990	MW-3-19901030	**1.0**	--	**300**	--	**1,409**	**0.40**	**7.32**	--	**38,450**	**56,485**
MW-03	--	Supplementary	4/4/1991	MW-3-19910404	**1.0**	--	**240**	--	**1,350**	**0.30**	**7.21**	--	**37,010**	**51,680**
MW-03	--	Supplementary	9/30/1991	MW-3-19910930	**1.0**	--	**204**	--	**1,276**	**0.30**	**7.38**	--	**43,130**	**58,250**
MW-03	--	Supplementary	5/7/1992	MW-3-19920507	**1.0**	--	**180**	--	**1,290**	**0.30**	**7.39**	--	**33,170**	**52,020**
MW-03	--	Supplementary	11/5/1992	MW-3-19921105	**1.0**	--	**220**	--	**1,170**	**0.30**	**7.17**	--	**31,495**	**48,580**
MW-03	--	Supplementary	4/28/1993	MW-3-19930428	**1.0**	--	**350**	--	**1,249**	**0.26**	**7.20**	--	**31,345**	**47,800**
MW-03	--	Supplementary	11/30/1993	MW-3-19931130	**2.0**	--	**280**	--	**1,216**	**0.30**	**7.22**	--	**31,475**	**48,630**
MW-03	--	Supplementary	4/21/1994	MW-3-19940421	**1.0**	--	**340**	--	**1,151**	**0.30**	**7.28**	--	**30,190**	**46,580**
MW-03	--	Supplementary	9/20/1994	MW-3-19940920	**2.0**	--	**380**	--	**1,171**	**0.30**	**7.23**	--	**28,895**	**45,520**
MW-03	--	Supplementary	12/14/1994	MW-3-19941214	--	--	**430**	--	--	--	**7.03**	--	--	--
MW-03	--	Supplementary	4/6/1995	MW-3-19950406	**1.0**	--	**360**	--	**1,183**	**0.20**	**7.05**	--	**28,085**	**43,870**
MW-03	--	Supplementary	12/12/1995	MW-3-19951212	**1.41**	--	**400**	--	**1,066**	**0.30**	**7.23**	--	**26,745**	**41,150**
MW-03	--	Supplementary	8/14/1996	MW-3-19960814	**1.16**	--	**300**	--	**1,110**	**0.20**	**7.22**	--	**25,150**	**40,430**
MW-03	--	Supplementary	4/23/1997	MW-3-19970423	**1.6**	--	**260**	--	**1,083**	**0.20**	**7.21**	--	**24,100**	**39,420**
MW-03	--	Supplementary	10/13/1997	MW-3-19971013	<0.05	--	**300**	--	**1,164**	**0.20**	**7.27**	--	**25,154**	**38,450**
MW-03	--	Supplementary	4/15/1998	MW-3-19980415	**1.73**	--	**320**	--	**1,052**	**0.20**	**7.20**	--	**22,542**	**39,920**

Table F-13
Groundwater Sampling Results for the Additional Monitoring Wells - Appendix III Constituents

					Appendix III Constituents									
				Constituent:	Boron	Boron	Calcium	Calcium	Chloride	Fluoride	pH (Field Measurement)	pH (Laboratory Measurement)	Sulfate	Total Dissolved Solids
				Filtered:	N	Y	N	Y	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	su	su	mg/L	mg/L
Well ID	CCR Unit	Well Designation	Sample Date	Sample ID										
MW-03	--	Supplementary	9/29/1998	MW-3-19980929	1.73	--	70	--	1,228	0.20	7.24	--	25,071	38,140
MW-03	--	Supplementary	5/10/1999	MW-3-19990510	4.1	--	50	--	1,075	0.30	7.23	--	22,883	38,650
MW-03	--	Supplementary	12/8/1999	MW-3-19991208	3.8	--	170	--	990	0.30	6.89	--	20,512	34,270
MW-03	--	Supplementary	5/10/2000	MW-3-20000510	4.72	--	457	--	1,309	0.30	7.13	--	29,283	35,180
MW-03	--	Supplementary	11/27/2000	MW-3-20001127	6.01	--	180	--	971.2	0.5938	7.23	--	16,024	36,290
MW-03	--	Supplementary	8/20/2001	MW-3-20010820	5.96	--	210	--	942.2	0.30	7.16	--	27,067	31,650
MW-03	--	Supplementary	12/4/2001	MW-3-20011204	3.9	--	180	--	1,142	0.50	6.52	--	20,827	33,270
MW-03	--	Supplementary	6/12/2002	MW-3-20020612	4.93	--	180	--	970.2	0.40	7.38	--	20,675	33,320
MW-03	--	Supplementary	12/17/2002	MW-3-20021217	4.34	--	200	--	1,059	0.30	7.23	--	18,595	32,590
MW-03	--	Supplementary	6/3/2003	MW-3-20030603	--	--	190	--	918.4	0.30	7.12	--	18,531	33,050
MW-03	--	Supplementary	9/24/2003	MW-3-20030924	3.86	--	215	--	975.6	0.54	6.65	--	17,891	32,470
MW-03	--	Supplementary	6/16/2004	MW-3-20040616	--	--	250	--	1,062	0.30	7.03	--	18,085	32,180
MW-03	--	Supplementary	11/9/2004	MW-3-20041109	4.2	--	455	--	992.4	0.40	7.25	--	16,893	31,490
MW-03	--	Supplementary	5/12/2005	MW-3-20050512	3.64	--	320	--	1,087	0.30	7.43	--	17,858	30,930
MW-03	--	Supplementary	11/1/2005	MW-3-20051101	3.96	--	422	--	1,027	0.40	7.03	--	16,628	30,270
MW-03	--	Supplementary	5/16/2006	MW-3-20060516	4.28	--	423	--	932	0.466	7.19	--	19,300	29,900
MW-03	--	Supplementary	10/12/2006	MW-3-20061012	4.55	--	461	--	1,020	0.359	7.15	--	19,700	28,300
MW-03	--	Supplementary	4/18/2007	MW-3-20070418	5.47	--	427	--	1,190	0.209	7.18	--	18,400	29,400
MW-03	--	Supplementary	11/19/2007	MW-3-20071119	4.11	--	326	--	970	0.40	7.11	--	15,000	28,600
MW-03	--	Supplementary	5/7/2008	MW-3-20080507	4.9	--	346	--	940	0.40	7.05	--	16,400	28,400
MW-03	--	Supplementary	12/3/2009	MW-3-20091203	5.7	--	363	--	880	0.40	7.00	--	15,800	26,600
MW-03	--	Supplementary	9/28/2012	MW-3-092812-01	8.8	--	380	--	900	<8.0	--	--	14,000	23,000
MW-03	--	Supplementary	9/29/2012*	MW-3-092912-03	<0.20	--	<2.0	--	<2.0	<0.40	--	--	<2.0	26
MW-03	--	Supplementary	3/11/2014	FC-03-031114	7.4	--	410	--	940	<0.80	--	--	14,000	23,000
MW-03	--	Supplementary	9/9/2014	FCPP-03-090914	7.7	--	380	--	1,000	<0.80	--	--	17,000	12,000
MW-03	--	Supplementary	3/18/2015	FCPP-03-031815	7.1	--	390	--	1,000	<0.80	--	--	19,000	22,000
MW-03	--	Supplementary	4/2/2015	FC-GF-3-0415	--	--	--	--	1,700	--	--	--	3,350	--
MW-03	--	Supplementary	6/24/2015	MW-3	7.7	--	380	--	930	<8.0	--	7.18	14,000	23,000
MW-03	--	Supplementary	8/28/2015	FCPP-03-082815	8.2	--	410	--	850	<2.0	--	7.36	14,000	22,000
MW-03	--	Supplementary	11/4/2015	FC MW-3-(041115)	8.2	--	440	--	--	--	--	7.23	--	--
MW-03	--	Supplementary	11/12/2015	FC MW-3-(121115)	7.4	--	360	--	860	<2.0	--	7.25	14,000	22,000
MW-03	--	Supplementary	6/20/2016	FC-Seep-MW3-616	7.8	--	420	--	1,000	0.43	--	7.25	14,000	17,000
MW-03	--	Supplementary	9/15/2016	FC-Seep-MW3-916	8.1	--	390	--	850	0.45	--	7.2	14,000	22,000
MW-03	--	Supplementary	9/15/2016	FC-Seep-MW105-916	7.7	--	370	--	840	0.44	--	7.1	14,000	22,000
MW-03	--	Supplementary	6/21/2020	FC-CCR-MW03-0620	--	--	--	--	--	--	6.91	--	--	--

Table F-13
Groundwater Sampling Results for the Additional Monitoring Wells - Appendix III Constituents

					Appendix III Constituents									
				Constituent:	Boron	Boron	Calcium	Calcium	Chloride	Fluoride	pH (Field Measurement)	pH (Laboratory Measurement)	Sulfate	Total Dissolved Solids
				Filtered:	N	Y	N	Y	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	su	su	mg/L	mg/L
Well ID	CCR Unit	Well Designation	Sample Date	Sample ID										
MW-03	--	Supplementary	11/8/2020	FC-CCR-MW03-1120	7.5	--	--	--	--	--	7.09	--	--	--
MW-03	--	Supplementary	4/24/2021	FC-CCR-MW03-0421	7.8	--	--	--	--	--	7.75	--	--	--
MW-03	--	Supplementary	11/13/2021	FC-CCR-MW03	8.4	--	--	--	--	--	6.93	--	--	--
MW-03	--	Supplementary	5/23/2022	FC-CCR-MW03-0522	8.0	--	--	--	--	--	7.07	--	--	--
MW-03	--	Supplementary	5/23/2022	FC-CCR-SS08-0522	8.17	--	--	--	--	--	--	--	--	--
MW-03	--	Supplementary	11/10/2022	FC-CCR-MW03-1122	8.0	--	--	--	--	--	7.02	--	--	--
MW-03	--	Supplementary	5/2/2023	FC-CCR-MW03-0523	9.9	--	--	--	--	--	6.98	--	--	--
MW-03	--	Supplementary	11/09/2023	FC-CCR-MW03-1123	11	--	--	--	--	--	7.09	--	--	--
MW-19	--	Supplementary	9/29/1987	MW-19_9/29/1987	--	1.6	--	480	1,200	<0.5	7.03	7.2	34,000	56,000
MW-19	--	Supplementary	6/14/1988	MW-19-19880614	--	--	488	--	1,518	1.1	6.90	--	45,210	75,052
MW-19	--	Supplementary	9/18/1988	MW-19-19880918	2.0	--	476	--	1,555	--	6.97	--	46,211	74,798
MW-19	--	Supplementary	11/20/1988	MW-19-19881120	2.0	--	417	--	1,306	1.1	6.91	--	43,079	71,375
MW-19	--	Supplementary	2/28/1989	MW-19-19890228	2.0	--	467	--	1,643	1.2	7.02	--	49,042	75,830
MW-19	--	Supplementary	9/12/1989	MW-19-19890912	2.0	--	353	--	1,248	1.3	6.92	--	46,881	71,520
MW-19	--	Supplementary	3/22/1990	MW-19-19900322	1.0	--	500	--	1,466	1.0	7.00	--	46,993	69,850
MW-19	--	Supplementary	10/30/1990	MW-19-19901030	1.0	--	240	--	1,405	0.20	6.98	--	42,450	63,223
MW-19	--	Supplementary	4/3/1991	MW-19-19910403	1.0	--	240	--	1,393	0.20	6.88	--	37,150	56,700
MW-19	--	Supplementary	9/25/1991	MW-19-19910925	1.0	--	200	--	1,302	0.20	7.12	--	38,110	55,580
MW-19	--	Supplementary	5/7/1992	MW-19-19920507	1.0	--	160	--	1,255	0.20	7.10	--	34,900	54,340
MW-19	--	Supplementary	11/5/1992	MW-19-19921105	1.0	--	220	--	1,404	0.20	7.01	--	34,160	53,370
MW-19	--	Supplementary	4/27/1993	MW-19-19930427	1.0	--	280	--	1,220	0.18	7.05	--	34,080	47,880
MW-19	--	Supplementary	12/1/1993	MW-19-19931201	1.0	--	260	--	1,156	0.20	6.83	--	33,720	49,160
MW-19	--	Supplementary	5/10/1994	MW-19-19940510	1.0	--	200	--	2,243	0.20	6.94	--	82,450	128,180
MW-19	--	Supplementary	11/16/1994	MW-19-19941116	1.0	--	200	--	1,155	0.20	6.98	--	25,590	45,940
MW-19	--	Supplementary	4/6/1995	MW-19-19950406	2.0	--	240	--	1,192	0.20	6.94	--	30,250	45,710
MW-19	--	Supplementary	12/12/1995	MW-19-19951212	1.43	--	260	--	1,048	0.20	6.98	--	27,010	41,820
MW-19	--	Supplementary	8/15/1996	MW-19-19960815	1.62	--	220	--	1,001	0.20	7.04	--	24,511	34,210
MW-19	--	Supplementary	4/14/1997	MW-19-19970414	2.51	--	280	--	911.2	0.20	6.98	--	23,746	41,090
MW-19	--	Supplementary	10/13/1997	MW-19-19971013	<0.05	--	220	--	1,007	0.20	7.04	--	24,366	38,360
MW-19	--	Supplementary	5/10/1999	MW-19-19990510	5.1	--	70	--	925.5	0.20	7.06	--	20,743	36,410
MW-19	--	Supplementary	12/1/1999	MW-19-19991201	5.6	--	210	--	873	0.20	6.91	--	19,252	32,430
MW-19	--	Supplementary	5/30/2000	MW-19-20000530	6.45	--	451	--	1,956	0.30	6.87	--	28,225	30,950
MW-19	--	Supplementary	11/27/2000	MW-19-20001127	7.25	--	230	--	601.5	0.2564	6.96	--	13,598	31,870
MW-19	--	Supplementary	8/21/2001	MW-19-20010821	5.99	--	200	--	869	0.26	7.11	--	19,006	35,660
MW-19	--	Supplementary	12/4/2001	MW-19-20011204	2.0	--	210	--	952.5	0.30	6.58	--	6,704	11,340

Table F-13
Groundwater Sampling Results for the Additional Monitoring Wells - Appendix III Constituents

					Appendix III Constituents									
				Constituent:	Boron	Boron	Calcium	Calcium	Chloride	Fluoride	pH (Field Measurement)	pH (Laboratory Measurement)	Sulfate	Total Dissolved Solids
				Filtered:	N	Y	N	Y	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	su	su	mg/L	mg/L
Well ID	CCR Unit	Well Designation	Sample Date	Sample ID										
MW-19	--	Supplementary	6/11/2002	MW-19-20020611	6.49	--	200	--	760	0.40	7.01	--	16,328	28,580
MW-19	--	Supplementary	12/17/2002	MW-19-20021217	6.3	--	250	--	745	0.20	6.98	--	15,539	128,070
MW-19	--	Supplementary	5/29/2003	MW-19-20030529	5.93	--	220	--	977	0.21	6.89	--	14,745	28,620
MW-19	--	Supplementary	12/15/2003	MW-19-20031215	0.89	--	220	--	1,763	0.45	6.86	--	26,266	28,170
MW-19	--	Supplementary	6/18/2004	MW-19-20040618	--	--	300	--	930.5	0.30	6.92	--	17,053	28,730
MW-19	--	Supplementary	11/30/2004	MW-19-20041130	5.2	--	260	--	952.5	0.26	6.98	--	11,112	30,210
MW-19	--	Supplementary	6/14/2005	MW-19-20050614	4.63	--	320	--	972	0.29	7.08	--	16,135	29,650
MW-19	--	Supplementary	12/12/2005	MW-19-20051212	4.52	--	468	--	1,193	0.30	7.03	--	17,202	30,250
MW-19	--	Supplementary	5/15/2006	MW-19-20060515	3.42	--	477	--	1,430	0.176	6.96	--	25,400	37,700
MW-19	--	Supplementary	4/17/2007	MW-19-20070417	2.99	--	484	--	2,310	0.754	7.02	--	26,200	40,700
MW-19	--	Supplementary	5/8/2008	MW-19-20080508	1.3	--	353	--	1,900	0.30	7.14	--	34,500	43,400
MW-19	--	Supplementary	11/18/2013	FC-19-111813	2.2	--	550	--	4,300	<8.0	--	--	28,000	41,000
MW-19	--	Supplementary	3/11/2014	FC-19-031114	2.0	--	430	--	2,700	<4.0	--	--	24,000	33,000
MW-19	--	Supplementary	9/9/2014	FCPP-19-090914	2.2	--	440	--	2,900	<2.0	--	--	27,000	39,000
MW-19	--	Supplementary	12/8/2014	FCPP-MW19-12914	1.8	--	--	--	--	--	--	--	--	--
MW-19	--	Supplementary	3/18/2015	FCPP-19-031815	1.9	--	440	--	1,800	<2.0	--	--	24,000	35,000
MW-19	--	Supplementary	6/30/2015	MW-19	1.8	--	400	--	1,900	<4.0	--	7.13	23,000	36,000
MW-19	--	Supplementary	8/25/2015	FCPP-19-082515	1.9	--	430	--	2,600	<2.0	--	7.0	25,000	38,000
MW-19	--	Supplementary	11/3/2015	FC MW-19-(031115)	1.8	--	480	--	2,200	<2.0	--	7.08	24,000	18,000
MW-19	--	Supplementary	6/17/2016	FC-Seep-MW19-616	2.1	--	450	--	2,400	<0.40	--	7.3	22,000	37,000
MW-19	--	Supplementary	6/21/2020	FC-CCR-MW19-0620	--	--	--	--	--	--	6.69	--	--	--
MW-19	--	Supplementary	11/7/2020	FC-CCR-MW19-1120	1.9	--	--	--	--	--	6.84	--	--	--
MW-19	--	Supplementary	4/25/2021	FC-CCR-MW19-0421	2.0	--	--	--	--	--	7.50	--	--	--
MW-19	--	Supplementary	4/25/2021	FC-CCR-FD05-0421	2.0	--	--	--	--	--	7.50	--	--	--
MW-19	--	Supplementary	11/14/2021	FC-CCR-MW19	2.1	--	--	--	--	--	6.76	--	--	--
MW-19	--	Supplementary	5/23/2022	FC-CCR-MW19-0522	1.9	--	--	--	--	--	6.78	--	--	--
MW-19	--	Supplementary	11/11/2022	FC-CCR-MW19-1122	1.9	--	--	--	--	--	6.84	--	--	--
MW-19	--	Supplementary	11/11/2022	*DUP* FC-CCR-FD05-1122	1.9	--	--	--	--	--	6.84	--	--	--
MW-19	--	Supplementary	5/3/2023	FC-CCR-MW19-0523	2.3	--	--	--	--	--	6.81	--	--	--
MW-19	--	Supplementary	5/3/2023	*DUP* FC-CCR-FD05-0523	2.5	--	--	--	--	--	6.81	--	--	--
MW-19	--	Supplementary	11/13/2023	FC-CCR-MW19-1123	2.1	--	--	--	--	--	6.86	--	--	--
MW-19	--	Supplementary	11/13/2023	*DUP* FC-CCR-FD05-1123	2.1	--	--	--	--	--	6.86	--	--	--
MW-21	--	Supplementary	9/27/1987	MW-21_9/27/1987	--	0.99	--	480	2,000	<0.5	7.37	7.4	76,000	130,000
MW-21	--	Supplementary	9/18/1988	MW-21-19880918	3.0	--	420	--	992	--	7.27	--	33,755	58,160
MW-21	--	Supplementary	11/20/1988	MW-21-19881120	3.0	--	402	--	1,007	0.90	7.14	--	39,264	66,155

Table F-13
Groundwater Sampling Results for the Additional Monitoring Wells - Appendix III Constituents

					Appendix III Constituents									
				Constituent:	Boron	Boron	Calcium	Calcium	Chloride	Fluoride	pH (Field Measurement)	pH (Laboratory Measurement)	Sulfate	Total Dissolved Solids
				Filtered:	N	Y	N	Y	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	su	su	mg/L	mg/L
Well ID	CCR Unit	Well Designation	Sample Date	Sample ID										
MW-21	--	Supplementary	3/6/1989	MW-21-19890306	2.0	--	399	--	2,142	0.80	7.20	--	50,033	76,561
MW-21	--	Supplementary	9/12/1989	MW-21-19890912	3.0	--	440	--	1,151	0.60	7.21	--	32,940	53,450
MW-21	--	Supplementary	3/22/1990	MW-21-19900322	2.0	--	500	--	1,918	0.80	7.00	--	61,686	96,620
MW-21	--	Supplementary	9/18/1990	MW-21-19900918	2.0	--	500	--	1,847	0.20	7.13	--	54,660	84,090
MW-21	--	Supplementary	3/20/1991	MW-21-19910320	1.0	--	640	--	2,914	0.20	7.24	--	65,480	102,930
MW-21	--	Supplementary	9/24/1991	MW-21-19910924	1.0	--	500	--	2,018	0.20	7.27	--	58,620	87,230
MW-21	--	Supplementary	5/1/1992	MW-21-19920501	2.0	--	400	--	2,292	0.20	7.21	--	67,080	101,350
MW-21	--	Supplementary	11/2/1992	MW-21-19921102	1.0	--	400	--	2,696	0.20	7.23	--	67,700	104,070
MW-21	--	Supplementary	4/21/1993	MW-21-19930421	1.0	--	500	--	3,022	0.20	7.16	--	48,280	104,360
MW-21	--	Supplementary	12/1/1993	MW-21-19931201	1.0	--	500	--	2,222	0.20	7.06	--	58,790	93,480
MW-21	--	Supplementary	4/27/1994	MW-21-19940427	2.0	--	400	--	2,393	0.20	7.14	--	63,230	96,380
MW-21	--	Supplementary	9/19/1994	MW-21-19940919	1.0	--	400	--	2,316	0.20	7.02	--	62,880	97,530
MW-21	--	Supplementary	12/14/1994	MW-21-19941214	--	--	230	--	--	--	6.85	--	--	--
MW-21	--	Supplementary	4/5/1995	MW-21-19950405	2.0	--	400	--	1,663	0.10	6.90	--	45,380	71,370
MW-21	--	Supplementary	12/12/1995	MW-21-19951212	2.7	--	400	--	1,752	0.10	6.97	--	47,460	71,300
MW-21	--	Supplementary	8/15/1996	MW-21-19960815	2.49	--	400	--	1,765	0.10	6.98	--	46,169	73,760
MW-21	--	Supplementary	6/23/1997	MW-21-19970623	11	--	400	--	1,235	0.10	6.85	--	41,615	53,930
MW-21	--	Supplementary	10/14/1997	MW-21-19971014	<0.05	--	400	--	1,217	0.20	6.91	--	31,146	52,640
MW-21	--	Supplementary	4/13/1998	MW-21-19980413	--	--	500	--	1,328	0.10	6.65	--	35,131	63,190
MW-21	--	Supplementary	5/10/1999	MW-21-19990510	7.4	--	40	--	1,669	0.20	7.13	--	48,635	77,990
MW-21	--	Supplementary	12/6/1999	MW-21-19991206	7.0	--	150	--	1,737	0.10	6.81	--	49,104	75,480
MW-21	--	Supplementary	5/24/2000	MW-21-20000524	7.17	--	467	--	2,499	0.20	6.79	--	47,049	73,200
MW-21	--	Supplementary	11/13/2000	MW-21-20001113	8.84	--	110	--	831	0.1919	7.03	--	28,681	82,430
MW-21	--	Supplementary	8/20/2001	MW-21-20010820	16.6	--	162	--	756.5	0.24	7.00	--	18,654	46,920
MW-21	--	Supplementary	12/4/2001	MW-21-20011204	15.6	--	120	--	1,215	0.20	6.62	--	31,761	50,600
MW-21	--	Supplementary	6/12/2002	MW-21-20020612	12.6	--	130	--	1,350	0.30	7.00	--	35,750	56,570
MW-21	--	Supplementary	12/17/2002	MW-21-20021217	9.55	--	160	--	1,559	0.20	7.04	--	39,708	64,480
MW-21	--	Supplementary	6/2/2003	MW-21-20030602	--	--	210	--	6,733	0.30	6.88	--	39,722	68,000
MW-21	--	Supplementary	6/3/2003	MW-21-20030603	--	--	--	--	--	--	--	--	--	--
MW-21	--	Supplementary	9/23/2003	MW-21-20030923	8.19	--	150	--	1,407	0.37	6.33	--	38,682	66,970
MW-21	--	Supplementary	6/14/2004	MW-21-20040614	--	--	160	--	2,278	0.20	6.98	--	52,477	74,110
MW-21	--	Supplementary	11/8/2004	MW-21-20041108	8.7	--	533	--	2,120	0.20	6.69	--	51,000	74,500
MW-21	--	Supplementary	5/11/2005	MW-21-20050511	7.51	--	280	--	1,948	0.30	6.93	--	45,323	69,780
MW-21	--	Supplementary	10/31/2005	MW-21-20051031	7.81	--	480	--	1,951	0.20	6.73	--	43,537	70,840
MW-21	--	Supplementary	5/15/2006	MW-21-20060515	7.06	--	484	--	1,920	<0.5	6.96	--	43,400	74,500

Table F-13
Groundwater Sampling Results for the Additional Monitoring Wells - Appendix III Constituents

					Appendix III Constituents									
				Constituent:	Boron	Boron	Calcium	Calcium	Chloride	Fluoride	pH (Field Measurement)	pH (Laboratory Measurement)	Sulfate	Total Dissolved Solids
				Filtered:	N	Y	N	Y	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	su	su	mg/L	mg/L
Well ID	CCR Unit	Well Designation	Sample Date	Sample ID										
MW-21	--	Supplementary	10/11/2006	MW-21-20061011	7.15	--	496	--	2,090	<5000	7.00	--	50,800	71,300
MW-21	--	Supplementary	4/17/2007	MW-21-20070417	7.54	--	477	--	2,450	<0.2	6.94	--	52,600	74,200
MW-21	--	Supplementary	11/20/2007	MW-21-20071120	4.55	--	314	--	2,260	0.30	6.97	--	58,000	77,000
MW-21	--	Supplementary	4/30/2008	MW-21-20080430	4.4	--	325	--	2,140	0.20	6.99	--	53,700	74,100
MW-21	--	Supplementary	12/4/2009	MW-21-20091204	17.2	--	355	--	1,580	0.20	6.89	--	31,000	52,000
MW-21	--	Supplementary	12/29/2009	MW-21-20091229	10.7	--	480	--	1,920	0.30	7.15	--	31,000	66,200
MW-21	--	Supplementary	9/29/2012	MW21-092912-01	35	--	310	--	1,300	<8.0	--	--	18,000	28,000
MW-21	--	Supplementary	11/20/2013	FC-21-112013	4.1	--	550	--	5,500	<8.0	--	--	83,000	83,000
MW-21	--	Supplementary	3/11/2014	FC-21-031114	6.1	--	430	--	2,600	<4.0	--	--	49,000	68,000
MW-21	--	Supplementary	9/9/2014	FCPP-21-090914	26	--	430	--	1,200	<2.0	--	--	27,000	36,000
MW-21	--	Supplementary	12/9/2014	FCPP-MW21-12914	7.4	--	--	--	--	--	--	--	--	--
MW-21	--	Supplementary	3/18/2015	FCPP-21-031815	7.6	--	460	--	2,200	<2.0	--	--	45,000	68,000
MW-21	--	Supplementary	6/24/2015	MW-21	7.6	--	450	--	2,500	<8.0	--	6.98	46,000	68,000
MW-21	--	Supplementary	8/28/2015	FCPP-21-082815	25	--	410	--	1,200	<2.0	--	6.92	23,000	36,000
MW-21	--	Supplementary	11/4/2015	FC MW-21-(041115)	6.3	--	320	--	--	--	--	6.97	--	--
MW-21	--	Supplementary	11/13/2015	FC MW-21-(131115)	2.9	--	130	--	2,000	<4.0	--	7.04	43,000	65,000
MW-21	--	Supplementary	11/13/2015	*DUP* FC FD-5-(131115)	3.0	--	290	--	2,000	<4.0	--	7.06	44,000	65,000
MW-21	--	Supplementary	9/15/2016	FC-Seep-MW21-916	6.0	--	350	--	4,500	<0.40	--	6.9	40,000	61,000
MW-21	--	Supplementary	6/21/2020	FC-CCR-MW21-0620	--	--	--	--	--	--	6.68	--	--	--
MW-21	--	Supplementary	11/8/2020	FC-CCR-MW21-1120	4.6	--	--	--	--	--	6.84	--	--	--
MW-21	--	Supplementary	4/24/2021	FC-CCR-MW21-0421	4.5	--	--	--	--	--	7.40	--	--	--
MW-21	--	Supplementary	11/13/2021	FC-CCR-MW21	4.8	--	--	--	--	--	6.70	--	--	--
MW-21	--	Supplementary	5/23/2022	FC-CCR-MW21-0522	4.3 J	--	--	--	--	--	6.79	--	--	--
MW-21	--	Supplementary	5/23/2022	*DUP* FC-CCR-FD06-0522	0.90 J	--	--	--	--	--	6.79	--	--	--
MW-21	--	Supplementary	11/10/2022	FC-CCR-MW21-1122	4.4	--	--	--	--	--	6.82	--	--	--
MW-21	--	Supplementary	5/2/2023	FC-CCR-MW21-0523	5.2	--	--	--	--	--	6.78	--	--	--
MW-21	--	Supplementary	11/09/2023	FC-CCR-MW-21-1123	6.2	--	--	--	--	--	6.78	--	--	--
MW-30	--	Supplementary	11/20/2013	FC-30-112013	47	--	480	--	770	<4.0	--	--	9,400	16,000
MW-30	--	Supplementary	3/11/2014	FC-30-031114	33	--	450	--	790	<0.80	--	--	9,800	17,000
MW-30	--	Supplementary	9/8/2014	FCPP-30-090814	36	--	470	--	940	<0.80	--	--	12,000	18,000
MW-30	--	Supplementary	12/9/2014	FCPP-MW30-12914	42	--	--	--	--	--	--	--	--	--
MW-30	--	Supplementary	3/16/2015	FCPP-30-031615	43	--	430	--	740	<0.80	--	--	9,800	15,000
MW-30	--	Supplementary	6/24/2015	MW-30	38	--	390	--	800	<0.40	--	7.15	9,600	16,000
MW-30	--	Supplementary	8/28/2015	FCPP-30-082815	41	--	410	--	780	<2.0	--	7.17	9,400	15,000
MW-30	--	Supplementary	11/4/2015	FC MW-30-(041115)	23	--	490	--	1,300	<2.0	--	7.04	14,000	23,000

Table F-13
Groundwater Sampling Results for the Additional Monitoring Wells - Appendix III Constituents

					Appendix III Constituents									
				Constituent:	Boron	Boron	Calcium	Calcium	Chloride	Fluoride	pH (Field Measurement)	pH (Laboratory Measurement)	Sulfate	Total Dissolved Solids
				Filtered:	N	Y	N	Y	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	su	su	mg/L	mg/L
Well ID	CCR Unit	Well Designation	Sample Date	Sample ID										
MW-30	--	Supplementary	6/21/2016	FC-SEEPS-MW-30-062116	37	--	430	--	900	0.51	--	7.33	9,300	16,000
MW-30	--	Supplementary	4/25/2021	FC-CCR-MW30-0421	28	--	--	--	--	--	7.48	--	--	--
MW-30	--	Supplementary	11/13/2021	FC-CCR-MW30	23	--	--	--	--	--	6.52	--	--	--
MW-30	--	Supplementary	5/23/2022	FC-CCR-MW30-0522	25	--	--	--	--	--	6.62	--	--	--
MW-30	--	Supplementary	11/10/2022	FC-CCR-MW30-1122	22	--	--	--	--	--	6.64	--	--	--
MW-30	--	Supplementary	11/10/2022	*DUP* FC-CCR-FD06-1122	22	--	--	--	--	--	6.64	--	--	--
MW-30	--	Supplementary	5/3/2023	FC-CCR-MW30-0523	26	--	--	--	--	--	6.62	--	--	--
MW-30	--	Supplementary	5/3/2023	*DUP* FC-CCR-FD06-0523	24	--	--	--	--	--	6.62	--	--	--
MW-30	--	Supplementary	11/10/2023	FC-CCR-MW30-1123	25 J	--	--	--	--	--	6.67	--	--	--
MW-30	--	Supplementary	11/10/2023	*DUP* FC-CCR-FD06-1123	26 J	--	--	--	--	--	6.67	--	--	--
MW-77S	--	Supplementary	6/22/2019	FC-NIT-MW77S-62219	9.6	--	440	--	2,100	1.1	--	--	13,000	23,000
MW-77S	--	Supplementary	4/24/2021	FC-CCR-MW77S-0421	11	--	--	--	--	--	7.72	--	--	--
MW-77S	--	Supplementary	11/13/2021	FC-CCR-MW77S	11	--	--	--	--	--	6.83	--	--	--
MW-77S	--	Supplementary	11/13/2021	FC-CCR-FD07	12	--	--	--	--	--	6.83	--	--	--
MW-77S	--	Supplementary	5/23/2022	FC-CCR-MW77S-0522	9.9	--	--	--	--	--	6.93	--	--	--
MW-77S	--	Supplementary	5/23/2022	*DUP* FC-CCR-FD07-0522	9.9	--	--	--	--	--	6.93	--	--	--
MW-77S	--	Supplementary	11/10/2022	FC-CCR-MW77S-1122	9.7	--	--	--	--	--	6.97	--	--	--
MW-77S	--	Supplementary	5/3/2023	FC-CCR-MW77S-0523	11	--	--	--	--	--	6.90	--	--	--
MW-77S	--	Supplementary	11/10/2023	FC-CCR-MW77S-1123	10	--	--	--	--	--	6.96	--	--	--
MW-78S	--	Supplementary	6/21/2020	FC-CCR-MW78S-0620	--	--	--	--	--	--	6.67	--	--	--
MW-78S	--	Supplementary	4/24/2021	FC-CCR-MW78S-0421	1.5	--	--	--	--	--	7.34	--	--	--
MW-78S	--	Supplementary	11/14/2021	FC-CCR-MW78S	1.6	--	--	--	--	--	6.65	--	--	--
MW-78S	--	Supplementary	5/23/2022	FC-CCR-MW78S-0522	1.4	--	--	--	--	--	6.67	--	--	--
MW-78S	--	Supplementary	11/10/2022	FC-CCR-MW78S-1122	1.5	--	--	--	--	--	6.74	--	--	--
MW-79S	--	Supplementary	6/22/2019	*DUP* FC-NIT-FD01-62219	37	--	420	--	850	<0.80	--	--	8,500	15,000
MW-79S	--	Supplementary	6/22/2019	FC-NIT-MW79S-62219	38	--	440	--	850	<0.80	--	--	8,500	15,000
MW-79S	--	Supplementary	4/24/2021	FC-CCR-MW79S-0421	17	--	--	--	--	--	7.51	--	--	--
MW-79S	--	Supplementary	11/14/2021	FC-CCR-MW79S	16	--	--	--	--	--	6.80	--	--	--
MW-79S	--	Supplementary	5/23/2022	FC-CCR-MW79S-0522	13	--	--	--	--	--	6.78	--	--	--
MW-79S	--	Supplementary	11/10/2022	FC-CCR-MW79S-1122	11	--	--	--	--	--	6.76	--	--	--
MW-79S	--	Supplementary	5/3/2023	FC-CCR-MW79S-0523	8.7	--	--	--	--	--	6.69	--	--	--
MW-79S	--	Supplementary	11/10/2023	FC-CCR-MW79S-1123	8.3	--	--	--	--	--	6.75	--	--	--
MW-81	--	Supplementary	6/22/2019	FC-NIT-MW81-62219	21	--	410	--	780	<0.80	--	--	8,500	15,000
MW-81	--	Supplementary	6/21/2020	FC-CCR-MW81-0620	--	--	--	--	--	--	6.73	--	--	--
MW-81	--	Supplementary	11/8/2020	FC-CCR-MW81-1120	38	--	--	--	--	--	6.92	--	--	--

Table F-13
Groundwater Sampling Results for the Additional Monitoring Wells - Appendix III Constituents

					Appendix III Constituents									
				Constituent:	Boron	Boron	Calcium	Calcium	Chloride	Fluoride	pH (Field Measurement)	pH (Laboratory Measurement)	Sulfate	Total Dissolved Solids
				Filtered:	N	Y	N	Y	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	su	su	mg/L	mg/L
Well ID	**CCR Unit**	**Well Designation**	**Sample Date**	**Sample ID**										
MW-81	--	Supplementary	4/24/2021	FC-CCR-MW81-0421	**38**	**--**	**--**	**--**	**--**	**--**	**7.52**	**--**	**--**	**--**
MW-81	--	Supplementary	4/24/2021	FC-CCR-FD061-0421	**40**	**--**	**--**	**--**	**--**	**--**	**7.52**	**--**	**--**	**--**
MW-81	--	Supplementary	11/14/2021	FC-CCR-MW81	**45**	--	--	--	--	--	**6.74**	--	--	--
MW-81	--	Supplementary	11/14/2021	FC-CCR-FD05	**43**	--	--	--	--	--	**6.74**	--	--	--
MW-81	--	Supplementary	5/23/2022	FC-CCR-MW81-0522	**42**	--	--	--	--	--	**6.76**	--	--	--
MW-81	--	Supplementary	11/10/2022	FC-CCR-MW81-1122	**43**	--	--	--	--	--	**6.84**	--	--	--
MW-81	--	Supplementary	11/10/2022	*DUP* FC-CCR-FD07-1122	**42**	--	--	--	--	--	**6.84**	--	--	--
MW-81	--	Supplementary	5/3/2023	FC-CCR-MW81-0523	**49**	--	--	--	--	--	**6.78**	--	--	--
MW-81	--	Supplementary	5/3/2023	*DUP* FC-CCR-FD07-0523	**49**	--	--	--	--	--	**6.78**	--	--	--
MW-81	--	Supplementary	11/10/2023	FC-CCR-MW81-1123	**50 J**	--	--	--	--	--	**6.88**	--	--	--
MW-81	--	Supplementary	11/10/2023	*DUP* FC-CCR-FD07-1123	**47 J**	--	--	--	--	--	**6.88**	--	--	--
MW-11	DFADA	Supplementary	11/18/2021	FC-CCR-MW11-1121	**0.50**		**510**		**5,600**	**2.9**	**6.56**	**7.1 J**	**140,000**	**79,000**
MW-11	DFADA	Supplementary	5/26/2022	FC-CCR-MW11-0522	<1	--	**560**	--	**7,900**	<0.8	**6.64**	**7.12 J**	**62,000**	**85,000**
MW-11	DFADA	Supplementary	11/16/2022	FC-CCR-MW11-1122	**0.52**	--	**510**	--	**3,300**	<40	**6.60**	**6.9 J**	**69,000**	**96,000**
MW-11	DFADA	Supplementary	5/5/2023	FC-CCR-MW11-0523	<2.5	--	**400**	--	**3,000**	<80	**6.56**	**6.8 J**	**60,000**	**100,000**
MW-11	DFADA	Supplementary	11/15/2023	FC-CCR-MW11-1123	<0.5	--	**530**	--	**5,500**	<0.8	**6.57**	**7.0 J**	**7,900**	**76,000**
EW-11R	--	Supplementary	11/16/2023	FC-CCR-EW11R-1123	**29**	--	--	--	**600**	<0.8	**6.76**	--	**5,200**	**8,200 J**
EW-12R	--	Supplementary	11/16/2023	FC-CCR-EW12R-1123	**49**	--	--	--	**860**	<0.8	**7.33**	--	**7,100**	**12000 J**
EW-17	Multiunit 1	Extraction	5/8/2023	FC-CCR-EW17-0523	**45**	--	--	--	**740**	--	**7.24**	--	--	**12,000**
EW-17	Multiunit 1	Extraction	11/15/2023	FC-CCR-EW17-1123	**36**	--	--	--	**970**	<0.8	**6.87**	--	**9,400**	**16,000**
MW-78S	--	Supplementary	5/3/2023	FC-CCR-MW78S-0523	**1.6**	--	--	--	--	--	**6.69**	--	--	--
MW-78S	--	Supplementary	11/10/2023	FC-CCR-MW78S-1123	**1.6**	--	--	--	--	--	**6.76**	--	--	--
MW-82S	--	Supplementary	6/22/2019	FC-NIT-MW82S-62219	**55**	--	**440**	--	**620**	<0.80	--	--	**5,600**	**10,000**
MW-82S	--	Supplementary	6/21/2020	FC-CCR-MW82S-0620	--	--	--	--	--	--	--	--	--	--
MW-82S	--	Supplementary	11/8/2020	FC-CCR-MW82S-1120	**60**	--	--	--	--	--	--	--	--	--
MW-82S	--	Supplementary	11/14/2021	FC-CCR-MW82S	**55**	--	**420**	--	**730**	**0.35 J**	**6.44**	**7.3 J**	**7,700**	**11,000**
MW-82S	--	Supplementary	5/23/2022	FC-CCR-MW82S-0522	**52**	--	**430**	--	**620**	<0.8	**7.10**	**7.40 J**	**6,200**	**10,000**
MW-82S	--	Supplementary	5/5/2023	FC-CCR-MW82S-0523	**65**	--	**460**	--	**670**	<40	**6.95**	**7.2 J**	**6,100**	**9,800**
MW-82S	--	Supplementary	11/10/2023	FC-CCR-MW82S-1123	**68**	--	**480**	--	**610**	<0.8	**7.05**	**7.3 J**	**5,700**	**9,800**
MW-82S	--	Supplementary	11/10/2023	*DUP* FC-CCR-FD02-1123	**65**	--	**460**	--	**620**	<0.8	**7.05**	**7.2 J**	**5,700**	**9,900**
IP-03	--	Supplementary	6/29/2015	IP-3	**3.8**	--	**380**	--	**1,000**	<4.0	--	**7.5**	**13,000**	**21,000**
IP-05	--	Supplementary	6/29/2015	IP-5	**0.59**	--	**360**	--	**1,700**	<4.0	--	**7.23**	**19,000**	**24,000**
Ash Pond	--	--	07/02/2013	FC-AP-070213	**270**	--	--	**606**	**5,100**	**45.6**	--	--	**16,400**	**27,700**
Ash Pond	--	--	08/05/2013	FC-AP-080513	--	--	--	**671**	**580**	**49.6**	--	--	**15,600**	--
Ash Pond	--	--	09/03/2013	FC-AP-090313	--	--	--	**637**	**69**	**52.3**	--	--	**16,000**	--

Table F-13
Groundwater Sampling Results for the Additional Monitoring Wells - Appendix III Constituents

					Appendix III Constituents									
				Constituent:	Boron	Boron	Calcium	Calcium	Chloride	Fluoride	pH (Field Measurement)	pH (Laboratory Measurement)	Sulfate	Total Dissolved Solids
				Filtered:	N	Y	N	Y	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	su	su	mg/L	mg/L
Well ID	CCR Unit	Well Designation	Sample Date	Sample ID										
Ash Pond	--	--	10/01/2013	FC-AP-100113	356	--	--	576	4,850	47.3	--	--	15,800	29,100
Ash Pond	--	--	11/07/2013	FC-AP-110713	--	--	--	632	4,850	51.3	--	--	14,600	--
Ash Pond	--	--	01/07/2015	FC-AP-010715	266	--	--	--	--	--	--	--	--	26,900
Ash Pond	--	--	04/10/2015	FC-AP-041015	252	--	--	--	--	--	--	--	--	26,400
Ash Pond	--	--	07/15/2015	FC-AP-071515	250	--	--	605	5,150	--	--	--	11,000	--
Ash Pond	--	--	10/20/2015	FC-AP-102015	250	--	--	536	4,100	--	--	--	12,000	--
Ash Pond	--	--	01/11/2016	FC-AP-011116	231	--	--	--	--	--	--	--	--	23,500
Ash Pond	--	--	04/25/2016	FC-AP-042516	292	--	--	--	--	--	--	--	--	25,600
Ash Pond	--	--	5/9/2023	FC-CCR-APV6-0523	46	--	420	--	750	<2	--	7.3 J	9,600	16,000
Ash Pond	--	--	11/09/2023	FC-CCR-AshPond6-1123	47	--	--	--	750	--	7.40	--	--	16,000
SUMP-1	--	--	4/23/2021	FC-CCR-SUMP1-0421	72	--	--	--	--	--	7.95	--	--	--
SUMP-1	--	--	11/17/2021	FC-CCR-SUMP1-1121	73	--	--	--	510	--	6.06	--	--	8,000
SUMP-1	--	--	5/26/2022	FC-CCR-SUMP1-0522	68	--	--	--	560	--	6.77	--	--	8,400
SUMP-1	--	--	11/15/2022	FC-CCR-SUMP1-1122	72	--	--	--	490	--	7.57	--	--	8,400 J
SUMP-1	--	--	5/5/2023	FC-CCR-SUMP1-0523	79	--	--	--	510	--	7.07	--	--	8,900
SUMP-1	--	--	11/09/2023	FC-CCR-SUMP1-1123	72	--	--	--	510	--	7.62	--	--	8,300
SUMP-2	--	--	4/23/2021	FC-CCR-SUMP2-0421	35	--	--	--	--	--	8.10	--	--	--
SUMP-2	--	--	11/17/2021	FC-CCR-SUMP2-1121	37	--	--	--	530	--	6.69	--	--	7,100
SUMP-2	--	--	5/26/2022	FC-CCR-SUMP2-0522	34	--	--	--	920 J	--	6.99	--	--	7,600
SUMP-2	--	--	11/15/2022	FC-CCR-SUMP2-1122	36	--	--	--	520	--	8.00	--	--	7,600 J
SUMP-2	--	--	5/5/2023	FC-CCR-SUMP2-0523	33	--	--	--	540	--	7.40	--	--	7,600
SUMP-2	--	--	11/09/2023	FC-CCR-SUMP2-1123	38	--	--	--	180	--	7.87	--	--	7,700
SUMP-3	--	--	4/23/2021	FC-CCR-SUMP3-0421	37	--	--	--	--	--	8.05	--	--	--
SUMP-3	--	--	11/17/2021	FC-CCR-SUMP3-1121	26	--	--	--	960	--	7.01	--	--	26,000
SUMP-3	--	--	5/26/2022	FC-CCR-SUMP3-0522	36	--	--	--	1,500	--	7.18	--	--	21,000
SUMP-3	--	--	11/15/2022	FC-CCR-SUMP3-1122	35	--	--	--	680	--	7.33	--	--	20,000 J
SUMP-3	--	--	5/5/2023	FC-CCR-SUMP3-0523	41	--	--	--	700	--	7.13	--	--	18,000
SUMP-3	--	--	11/09/2023	FC-CCR-SUMP3-1123	29	--	--	--	830	--	7.39	--	--	23,000
SUMP-7	--	--	4/23/2021	FC-CCR-SUMP7-0421	56	--	--	--	--	--	7.80	--	--	--
SUMP-7	--	--	11/17/2021	FC-CCR-SUMP7-1121	58	--	--	--	710	--	6.00	--	--	9,800
SUMP-7	--	--	5/26/2022	FC-CCR-SUMP7-0522	57	--	--	--	1,300	--	6.98	--	--	11,000
SUMP-7	--	--	11/15/2022	FC-CCR-SUMP7-1122	57	--	--	--	650	--	7.02	--	--	9,800 J
SUMP-7	--	--	5/5/2023	FC-CCR-SUMP7-0523	60	--	--	--	670	--	7.01	--	--	10,000
SUMP-7	--	--	11/09/2023	FC-CCR-SUMP7-1123	59	--	--	--	710	--	7.22	--	--	9,800
SUMP-8	--	--	4/23/2021	FC-CCR-SUMP8-0421	43	--	--	--	--	--	7.82	--	--	--

Table F-13
Groundwater Sampling Results for the Additional Monitoring Wells - Appendix III Constituents

					Appendix III Constituents									
				Constituent:	Boron	Boron	Calcium	Calcium	Chloride	Fluoride	pH (Field Measurement)	pH (Laboratory Measurement)	Sulfate	Total Dissolved Solids
				Filtered:	N	Y	N	Y	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	su	su	mg/L	mg/L
Well ID	CCR Unit	Well Designation	Sample Date	Sample ID										
SUMP-8	--	--	11/17/2021	FC-CCR-SUMP8-1121	46	--	--	--	820	--	8.50	--	--	17,000
SUMP-8	--	--	11/15/2022	FC-CCR-SUMP8-1122	39	--	--	--	750	--	7.12	--	--	17,000 J
SUMP-8	--	--	5/5/2023	FC-CCR-SUMP8-0523	44	--	--	--	770	--	7.23	--	--	18,000
SUMP-8	--	--	11/09/2023	FC-CCR-SUMP8-1123	44	--	--	--	790	--	7.22	--	--	17,000
SUMP-9	--	--	4/23/2021	FC-CCR-SUMP9-0421	31	--	--	--	--	--	7.92	--	--	--
SUMP-9	--	--	11/17/2021	FC-CCR-SUMP9-1121	31	--	--	--	630	--	6.38	--	--	9,800
SUMP-9	--	--	5/26/2022	FC-CCR-SUMP9-0522	30	--	--	--	890	--	7.10	--	--	10,000
SUMP-9	--	--	11/15/2022	FC-CCR-SUMP9-1122	28	--	--	--	580	--	7.09	--	--	10,000 J
SUMP-9	--	--	5/5/2023	FC-CCR-SUMP9-0523	30	--	--	--	630	--	7.01	--	--	10,000
SUMP-9	--	--	11/09/2023	FC-CCR-SUMP9-1123	26	--	--	--	610	--	7.26	--	--	9,600
SUMP-10	--	--	4/23/2021	FC-CCR-SUMP10-0421	52	--	--	--	--	--	7.93	--	--	--
SUMP-10	--	--	11/17/2021	FC-CCR-SUMP10-1121	55	--	--	--	520	--	6.55	--	--	9,900
SUMP-10	--	--	5/26/2022	FC-CCR-SUMP10-0522	52	--	--	--	900	--	7.13	--	--	7,700
SUMP-10	--	--	11/15/2022	FC-CCR-SUMP10-1122	51	--	--	--	490	--	7.31	--	--	7,300 J
SUMP-10	--	--	5/5/2023	FC-CCR-SUMP10-0523	56	--	--	--	550	--	7.20	--	--	7,700
SUMP-10	--	--	11/09/2023	FC-CCR-SUMP10-1123	48	--	--	--	530	--	7.31	--	--	7,200
SUMP-11	--	--	4/23/2021	FC-CCR-SUMP11-0421	36	--	--	--	--	--	8.00	--	--	--
SUMP-11	--	--	11/17/2021	FC-CCR-SUMP11-1121	53	--	--	--	540	--	6.45	--	--	10,000
SUMP-11	--	--	5/26/2022	FC-CCR-SUMP11-0522	51	--	--	--	950	--	7.00	--	--	7,800
SUMP-11	--	--	11/15/2022	FC-CCR-SUMP11-1122	52	--	--	--	480	--	7.27	--	--	7,400 J
SUMP-11	--	--	5/5/2023	FC-CCR-SUMP11-0523	39	--	--	--	530	--	7.15	--	--	8,300
SUMP-11	--	--	11/09/2023	FC-CCR-SUMP11-1123	41	--	--	--	550	--	7.26	--	--	8,400
SUMP-12	--	--	4/23/2021	FC-CCR-SUMP12-0421	30	--	--	--	--	--	7.98	--	--	--
SUMP-12	--	--	11/17/2021	FC-CCR-SUMP12-1121	54	--	--	--	520	--	6.40	--	--	10,000
SUMP-12	--	--	5/26/2022	FC-CCR-SUMP12-0522	38	--	--	--	900	--	7.10	--	--	8,900
SUMP-12	--	--	11/15/2022	FC-CCR-SUMP12-1122	35	--	--	--	510	--	7.01	--	--	8,900 J
SUMP-12	--	--	11/9/2023	FC-CCR-SUMP12-1123	32	--	--	--	470	--	7.38	--	--	7,100
SUMP-12	--	--	5/5/2023	FC-CCR-SUMP12-0523	34	--	--	--	560	--	7.09	--	--	8,300
SUMP-13	--	--	4/23/2021	FC-CCR-SUMP13-0421	33	--	--	--	--	--	7.99	--	--	--
SUMP-13	--	--	11/17/2021	FC-CCR-SUMP13-1121	37	--	--	--	530	--	6.66	--	--	9,300
SUMP-13	--	--	5/26/2022	FC-CCR-SUMP13-0522	51	--	--	--	710	--	7.21	--	--	7,100
SUMP-13	--	--	11/15/2022	FC-CCR-SUMP13-1122	34	--	--	--	520	--	7.18	--	--	8,500 J
SUMP-13	--	--	5/5/2023	FC-CCR-SUMP13-0523	43	--	--	--	500	--	7.41	--	--	7,400
SUMP-13	--	--	11/9/2023	FC-CCR-SUMP13-1123	40	--	--	--	470	--	7.61	--	--	7,400
SUMP-14	--	--	4/23/2021	FC-CCR-SUMP14-0421	31	--	--	--	--	--	8.14	--	--	--

Table F-13
Groundwater Sampling Results for the Additional Monitoring Wells - Appendix III Constituents

					Appendix III Constituents									
				Constituent:	Boron	Boron	Calcium	Calcium	Chloride	Fluoride	pH (Field Measurement)	pH (Laboratory Measurement)	Sulfate	Total Dissolved Solids
				Filtered:	N	Y	N	Y	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	su	su	mg/L	mg/L
Well ID	CCR Unit	Well Designation	Sample Date	Sample ID										
SUMP-14	--	--	11/17/2021	FC-CCR-SUMP14-1121	31	--	--	--	470	--	6.43	--	--	9,900
SUMP-14	--	--	5/26/2022	FC-CCR-SUMP14-0522	50	--	--	--	710	--	7.05	--	--	7,800
SUMP-14	--	--	5/5/2023	FC-CCR-SUMP14-0523	34	--	--	--	580	--	7.2	--	--	8,300
SUMP-14	--	--	11/9/2023	FC-CCR-SUMP14-1123	39	--	--	--	460	--	7.29	--	--	7,400
SUMP-15	--	--	4/23/2021	FC-CCR-SUMP15-0421	24	--	--	--	--	--	8.14	--	--	--
SUMP-15	--	--	11/17/2021	FC-CCR-SUMP15-1121	5.6	--	--	--	1,700	--	6.95	--	--	38,000 J
SUMP-15	--	--	5/26/2022	FC-CCR-SUMP15-0522	15	--	--	--	1,300	--	7.24	--	--	19,000
SUMP-15	--	--	11/15/2022	FC-CCR-SUMP15-1122	21	--	--	--	610	--	7.39	--	--	13,000 J
SUMP-15	--	--	5/5/2023	FC-CCR-SUMP15-0523	6.8	--	--	--	1,800	--	7.37	--	--	37,000 J
SUMP-15	--	--	11/9/2023	FC-CCR-SUMP15-1123	5.7	--	--	--	1,700	--	7.68	--	--	38,000
SUMP-16	--	--	4/23/2021	FC-CCR-SUMP16-0421	23	--	--	--	--	--	8.19	--	--	--
SUMP-16	--	--	11/17/2021	FC-CCR-SUMP16-1121	21	--	--	--	460	--	6.77	--	--	8,200
SUMP-16	--	--	5/26/2022	FC-CCR-SUMP16-0522	13	--	--	--	4,000	--	7.29	--	--	27,000
SUMP-16	--	--	5/26/2022	FC-CCR-SS10-0522	10.5	--	--	--	1,170 J	--	--	--	--	20,400
SUMP-16	--	--	11/15/2022	FC-CCR-SUMP16-1122	10	--	--	--	630	--	7.27	--	--	12,000 J
SUMP-16	--	--	5/5/2023	FC-CCR-SUMP16-0523	21	--	--	--	680	--	7.45	--	--	15,000
SUMP-16	--	--	11/09/2023	FC-CCR-SUMP16-1123	16	--	--	--	820	--	7.63	--	--	14,000
SUMP-17	--	--	4/23/2021	FC-CCR-SUMP17-0421	18	--	--	--	--	--	8.07	--	--	--
SUMP-17	--	--	11/17/2021	FC-CCR-SUMP17-1121	15	--	--	--	860	--	6.56	--	--	15,000
SUMP-17	--	--	5/26/2022	FC-CCR-SUMP17-0522	5.8	--	--	--	3,100	--	7.40	--	--	30,000
SUMP-17	--	--	11/15/2022	FC-CCR-SUMP17-1122	5.5	--	--	--	1,400	--	7.44	--	--	34,000 J
SUMP-17	--	--	5/5/2023	FC-CCR-SUMP17-0523	6.6	--	--	--	860	--	7.22	--	--	10,000
SUMP-17	--	--	11/09/2023	FC-CCR-SUMP17-1123	15	--	--	--	730	--	7.37	--	--	9,400

Table F-13
Groundwater Sampling Results for the Additional Monitoring Wells - Appendix III Constituents

					Appendix III Constituents									
				Constituent:	Boron	Boron	Calcium	Calcium	Chloride	Fluoride	pH (Field Measurement)	pH (Laboratory Measurement)	Sulfate	Total Dissolved Solids
				Filtered:	N	Y	N	Y	N	N	N	N	N	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	su	su	mg/L	mg/L
Well ID	CCR Unit	Well Designation	Sample Date	Sample ID										
SUMP-18	--	--	4/23/2021	FC-CCR-SUMP18-0421	**5.3**	--	--	--	--	--	**8.25**	--	--	--
SUMP-18	--	--	11/17/2021	FC-CCR-SUMP18-1121	**4.6**	--	--	--	**1,700**	--	**7.07**	--	--	**37,000**
SUMP-18	--	--	11/17/2021	FC-CCR-FD07-1121	**5.4**	--	--	--	**1,700**	--	**7.07**	--	--	**38,000**
SUMP-18	--	--	5/26/2022	FC-CCR-SUMP18-0522	**5.6**	--	--	--	**2,600**	--	**7.31**	--	--	**31,000**
SUMP-18	--	--	11/15/2022	FC-CCR-SUMP18-1122	**4.9**	--	--	--	**1,500**	--	**7.46**	--	--	**38,000 J**
SUMP-18	--	--	5/5/2023	FC-CCR-SUMP18-0523	<0.1	--	--	--	**2,000**	--	**7.42**	--	--	**41,000**
SUMP-18	--	--	11/09/2023	FC-CCR-SUMP18-1123	**4.6**	--	--	--	**1,600 J**	--	**7.71**	--	--	**40,000 J**

Abbreviations and Data Qualifiers:

*data appear anomalous

< = less than

CCR = Coal Combustion Residual

degrees C = degrees Celsius

ID = Identification

J = The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

mg/L = milligrams per liter

pCi/L = Picocuries per liter

su = standard units

Table F-14
Groundwater Sampling Results for the Additional Monitoring Wells - Appendix IV Constituents

					Appendix IV Constituents																													
				Constituent:	Antimony	Antimony	Arsenic	Arsenic	Barium	Barium	Beryllium	Beryllium	Cadmium	Cadmium	Chromium	Chromium	Cobalt	Cobalt	Fluoride	Lead	Lead	Lithium	Mercury	Mercury	Molybdenum	Molybdenum	Selenium	Selenium	Thallium	Thallium	Total Radium	
				Filtered:	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	N	Y	N	N	Y	N	Y	N	Y	N	Y	N				
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L				
Well ID	CCR Unit	Well Designation	Sample Date	Sample ID																														
DMX-01	--	Supplementary	4/20/1992	DMX-1_4/20/1992	--	--	--	<0.05	--	**0.023**	--	<0.005	--	<0.005	--	<0.010	--	--	**0.87**	--	**0.011**	--	--	<0.0002	--	--	--	**0.080**	--	--	--	--				
DMX-01	--	Supplementary	3/18/2015	FCPP-DMX1-031815	--	--	<0.0050	--	--	--	--	--	--	--	<0.013	--	--	--	<0.80	--	--	--	--	--	--	--	<0.015	--	--	--	--				
DMX-01	--	Supplementary	6/24/2015	DMX-1	--	--	<0.15	--	--	--	--	--	--	--	<0.15	--	--	--	<8.0	--	--	--	--	--	--	--	<0.15	--	--	--	--				
DMX-01	--	Supplementary	8/28/2015	FCPP-DMX1-082815	--	--	<0.012	--	--	--	--	--	<0.0020	--	<0.012	--	--	--	<2.0	--	--	--	--	--	--	--	**0.016**	--	--	--	--				
DMX-01	--	Supplementary	11/4/2015	FC DMX-1-(041115)	<0.0050	--	<0.0010	--	**0.023**	--	<0.0010	--	<0.00050	--	<0.0025	--	**0.0031**	--	<2.0	<0.00050	--	<5.0	<0.00020	--	**0.0068**	--	**0.007**	--	<0.00050	--	--				
DMX-01	--	Supplementary	6/21/2016	FC-SEEPS-DMX-1-062116	--	--	<0.005	--	--	--	--	--	--	--	<0.005	--	--	--	**0.67**	--	--	--	<0.00020	--	--	--	--	--	--	--	--				
DMX-01	--	Supplementary	4/25/2021	FC-CCR-DMX01-0421	--	--	--	--	--	--	--	--	--	--	--	--	**0.00089 J**	--	--	--	--	--	--	--	**0.014**	--	--	--	--	--	--				
DMX-01	--	Supplementary	11/14/2021	FC-CCR-DMX01	--	--	--	--	--	--	--	--	--	--	--	--	**0.00073 J**	--	--	--	--	--	--	--	**0.019**	--	--	--	--	--	--				
DMX-01	--	Supplementary	11/14/2021	FC-CCR-FD06	--	--	--	--	--	--	--	--	--	--	--	--	**0.001 J**	--	--	--	--	--	--	--	**0.021**	--	--	--	--	--	--				
DMX-01	--	Supplementary	5/23/2022	FC-CCR-DMX01-0522	--	--	--	--	--	--	--	--	--	--	--	--	**0.0020**	--	--	--	--	--	--	--	**0.012**	--	--	--	--	--	--				
DMX-01	--	Supplementary	11/11/2022	FC-CCR-DMX01-1122	--	--	--	--	--	--	--	--	--	--	--	--	**0.00064**	--	--	--	--	--	--	--	**0.0094**	--	--	--	--	--	--				
DMX-01	--	Supplementary	11/11/2022	*DUP* FC-CCR-FD04-1122	--	--	--	--	--	--	--	--	--	--	--	--	**0.00052**	--	--	--	--	--	--	--	**0.0085**	--	--	--	--	--	--				
DMX-01	--	Supplementary	5/3/2023	FC-CCR-DMX01-0523	--	--	--	--	--	--	--	--	--	--	--	--	**0.002 J**	--	--	--	--	--	--	--	**0.011**	--	--	--	--	--	--				
DMX-01	--	Supplementary	5/3/2023	*DUP* FC-CCR-FD04-0523	--	--	--	--	--	--	--	--	--	--	--	--	**0.0017**	--	--	--	--	--	--	--	**0.011**	--	--	--	--	--	--				
DMX-01	--	Supplementary	11/10/2023	FC-CCR-DMX01-1123	--	--	--	--	--	--	--	--	--	--	--	--	<0.005	--	--	--	--	--	--	--	**0.023**	--	--	--	--	--	--				
DMX-01	--	Supplementary	11/10/2023	*DUP* FC-CCR-FD04-1123	--	--	--	--	--	--	--	--	--	--	--	--	<0.005	--	--	--	--	--	--	--	**0.022**	--	--	--	--	--	--				
MW-01	--	Supplementary	9/28/1987	MW-1_9/28/1987	--	--	--	<0.05	--	**0.23**	--	--	--	<0.005	--	<0.005	--	--	**0.90**	--	**0.060**	--	--	<0.0001	--	--	--	<0.05	--	--	--				
MW-01	--	Supplementary	6/27/1988	MW-1-19880627	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.90**	--	--	--	<0.01	--	--	--	--	--	--	--	--				
MW-01	--	Supplementary	9/21/1988	MW-1-19880921	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.90**	--	--	--	--	--	--	--	--	--	--	--	--				
MW-01	--	Supplementary	11/20/1988	MW-1-19881120	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.80**	--	--	--	--	--	--	--	--	--	--	--	--				
MW-01	--	Supplementary	3/6/1989	MW-1-19890306	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.80**	--	--	--	--	--	--	--	--	--	--	--	--				
MW-01	--	Supplementary	9/11/1989	MW-1-19890911	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.90**	--	--	--	--	--	--	--	--	--	--	--	--				
MW-01	--	Supplementary	3/26/1990	MW-1-19900326	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.80**	--	--	--	--	--	--	--	--	--	--	--	--				
MW-01	--	Supplementary	9/18/1990	MW-1-19900918	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.50**	--	--	--	--	--	--	--	--	--	--	--	--				
MW-01	--	Supplementary	3/27/1991	MW-1-19910327	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.50**	--	--	--	--	--	--	--	--	--	--	--	--				
MW-01	--	Supplementary	9/11/1991	MW-1-19910911	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.60**	--	--	--	--	--	--	--	--	--	--	--	--				
MW-01	--	Supplementary	4/30/1992	MW-1-19920430	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.60**	--	--	--	--	--	--	--	--	--	--	--	--				
MW-01	--	Supplementary	10/27/1992	MW-1-19921027	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.80**	--	--	--	--	--	--	--	--	--	--	--	--				
MW-01	--	Supplementary	4/21/1993	MW-1-19930421	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.60**	--	--	--	--	--	--	--	--	--	--	--	--				
MW-01	--	Supplementary	11/23/1993	MW-1-19931123	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.70**	--	--	--	--	--	--	--	--	--	--	--	--				
MW-01	--	Supplementary	4/20/1994	MW-1-19940420	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.70**	--	--	--	--	--	--	--	--	--	--	--	--				
MW-01	--	Supplementary	8/11/1994	MW-1-19940811	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.70**	--	--	--	--	--	--	--	--	--	--	--	--				
MW-01	--	Supplementary	4/6/1995	MW-1-19950406	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.60**	--	--	--	--	--	--	--	--	--	--	--	--				
MW-01	--	Supplementary	11/19/1995	MW-1-19951119	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.80**	--	--	--	--	--	--	--	--	--	--	--	--				
MW-01	--	Supplementary	8/13/1996	MW-1-19960813	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.70**	--	--	--	--	--	--	--	--	--	--	--	--				
MW-01	--	Supplementary	4/23/1997	MW-1-19970423	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.70**	--	--	--	--	--	--	--	--	--	--	--	--				
MW-01	--	Supplementary	10/20/1997	MW-1-19971020	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.0**	--	--	--	--	--	--	--	--	--	--	--	--				
MW-01	--	Supplementary	4/6/1998	MW-1-19980406	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.80**	--	--	--	--	--	--	--	--	--	--	--	--				
MW-01	--	Supplementary	10/19/1998	MW-1-19981019	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.70**	--	--	--	--	--	--	--	--	--	--	--	--				
MW-01	--	Supplementary	6/9/1999	MW-1-19990609	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.70**	--	--	--	--	--	--	--	--	--	--	--	--				
MW-01	--	Supplementary	12/6/1999	MW-1-19991206	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.0**	--	--	--	--	--	--	--	--	--	--	--	--				
MW-01	--	Supplementary	5/24/2000	MW-1-20000524	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.90**	--	--	--	--	--	--	--	--	--	--	--	--				
MW-01	--	Supplementary	11/14/2000	MW-1-20001114	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.2496**	--	--	--	--	--	--	--	--	--	--	--	--				
MW-01	--	Supplementary	8/22/2001	MW-1-20010822	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.1**	--	--	--	--	--	--	--	--	--	--	--	--				
MW-01	--	Supplementary	12/5/2001	MW-1-20011205	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.0**	--	--	--	--	--	--	--	--	--	--	--	--				
MW-01	--	Supplementary	6/11/2002	MW-1-20020611	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.7**	--	--	--	--	--	--	--	--	--	--	--	--				
MW-01	--	Supplementary	12/17/2002	MW-1-20021217	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.3**	--	--	--	--	--	--	--	--	--	--	--	--				
MW-01	--	Supplementary	5/28/2003	MW-1-20030528	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.3**	--	--	--	--	--	--	--	--	--	--	--	--				
MW-01	--	Supplementary	12/24/2003	MW-1-20031224	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**7.8**	--	--	--	--	--	--	--	--	--	--	--	--				
MW-01	--	Supplementary	4/21/2004	MW-1-20040421	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.4**	--	--	--	--	--	--	--	--	--	--	--	--				
MW-01	--	Supplementary	11/29/2004	MW-1-20041129	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.8**	--	--	--	--	--	--	--	--	--	--	--	--				
MW-01	--	Supplementary	6/5/2005	MW-1-20050605	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.2**	--	--	--	--	--	--	--	--	--	--	--	--				
MW-01	--	Supplementary	12/12/2005	MW-1-20051212	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--				
MW-01	--	Supplementary	5/17/2006	MW-1-20060517	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.83**	--	--	--	--	--	--	--	--	--	--	--	--				
MW-01	--	Supplementary	10/12/2006	MW-1-20061012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.8**	--	--	--	--	--	--	--	--	--	--	--	--				
MW-01	--	Supplementary	4/19/2007	MW-1-20070419	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.72**	--	--	--	--	--	--	--	--	--	--	--	--				
MW-01	--	Supplementary	11/19/2007	MW-1-20071119	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.0**	--	--	--	--	--	--	--	--	--	--	--	--				
MW-01	--	Supplementary	5/8/2008	MW-1-20080508	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.92**	--	--	--	--	--	--	--	--	--	--	--	--				
MW-01	--	Supplementary	9/27/2012	MW-1-092712-04	--	--	<0.0010	--	--	--	--	--	--	--	**0.0018**	--	--	--	**2.6**	--	--	--	--	--	--	--	**0.0016**	--	--	--	--				
MW-01	--	Supplementary	9/27/2012	MW-1-092712-01	--	--	<0.0010	--	--	--	--	--	--	--	**0.0014**	--	--	--	**2.6**	--	--	--	--	--	--	--	**0.0018**	--	--	--	--				
MW-01	--	Supplementary	11/18/2013	FC-DUP-111813	--	--	**0.00030**	--	--	--	--	--	--	--	**0.0018**	--	--	--	**3.8**	--	--	--	--	--	--	--	<0.001	--	--	--	--				
MW-01	--	Supplementary	11/18/2013	FC-01-111813	--	--	**0.00051**	--	--	--	--	--	--	--	**0.0019**	--	--	--	**3.6**	--	--	--	--	--	--	--	<0.001	--	--	--	--				
MW-01	--	Supplementary	9/9/2014	FCPP-01MS-090914	--	--	**0.00031**	--	--	--	--	--	--	--	**0.0015**	--	--	--	--	--	--	--	--	--	--	--	**0.0010**	--	--	--	--				
MW-01	--	Supplementary	9/9/2014	FCPP-01-090914	--	--	**0.00043**	--	--	--	--	--	--	--	**0.0016**	--	--	--	**1.5**	--	--	--	--	--	--	--	**0.00084**	--	--	--	--				
MW-01	--	Supplementary	3/17/2015	FCPP-01-031715	--	--	**0.00039**	--	--	--	--	--	--	--	**0.0016**	--	--	--	**1.8**	--	--	--	--	--	--	--	**0.00092**	--	--	--	--				
MW-01	--	Supplementary	6/30/2015	MW-1	--	--	<0.012	--	--	--	--	--	--	--	<0.012	--	--	--	**2.5**	--	--	--	--	--	--	--	<0.012	--	--	--	--				
MW-01	--	Supplementary	8/27/2015	FCPP-1-082715	--	--	<0.0030	--	--	--	--	--	**0.0027**	--	<0.030	--	--	--	**4.2**	--	--	--	--	--	--	--	**0.0056**	--	--	--	--				
MW-01	--	Supplementary	6/17/2016	FC-Seep-MW1-616	--	--	<0.005	--	--	--	--	--	--	--	<0.005	--	--	--	**3.1**	--	--	--	<0.00020	--	--	--	--	--	--	--	--				
MW-01	--	Supplementary	9/15/2016	FC-Seep-MW1-916	--	--	<0.0010	--	--	--	--	--	--	--	<0.0025	--	--	--	**3.7**	--	--	--	<0.00020	--	--	--	--	--	--	--	--				
MW-01	--	Supplementary	6/21/2020	FC-CCR-MW01-0620	--	--	--	--	--	--	--	--	--	--	--	--	**0.073**	--	--	--	--	--	--	--	**0.045**	--	--	--	--	--	--				
MW-01	--	Supplementary	6/21/2020	*DUP* FC-CCR-FD03-0620	--	--	--	--	--	--	--	--	--	--	--	--	**0.073**	--	--	--	--	--	--	--	**0.041**	--	--	--	--	--	--				
MW-01	--	Supplementary	11/8/2020	FC-CCR-MW01-1120	--	--	--	--	--	--	--	--	--	--	--	--	**0.0015 J**	--	--	--	--	--	--	--	**0.00051 J**	--	--	--	--	--	--				
MW-01	--	Supplementary	11/8/2020	*DUP* FC-CCR-FD03-1120	--	--	--	--	--	--	--	--	--	--	--	--	**0.00035 J**	--	--	--	--	--	--	--	**0.055 J**	--	--	--	--	--	--				
MW-01	--	Supplementary	4/24/2021	FC-CCR-MW01-0421	--	--	--	--	--	--	--	--	--	--	--	--	**0.066**	--	--	--	--	--	--	--	**0.031**	--	--	--	--	--	--				
MW-01	--	Supplementary	4/24/2021	FC-CCR-FD03-0421	--	--	--	--	--	--	--	--	--	--	--	--	**0.070**	--	--	--	--	--	--	--	**0.034**	--	--	--	--	--	--				
MW-01	--	Supplementary	11/13/2021	FC-CCR-MW01	--	--	--	--	--	--	--	--	--	--	--	--	**0.074**	--	--	--	--	--	--	--	**0.036**	--	--	--	--	--	--				
MW-01	--	Supplementary	5/23/2022	FC-CCR-MW01-0522	--	--	--	--	--	--	--	--	--	--	--	--	**0.056**	--	--	--	--	--	--	--	**0.025**	--	--	--	--	--	--				
MW-01	--	Supplementary	5/23/2022	*DUP* FC-CCR-FD05-0522	--	--	--	--	--	--	--	--	--	--	--	--	**0.057**	--	--	--	--	--	--	--	**0.025**	--	--	--	--	--	--				
MW-01	--	Supplementary	11/10/2022	FC-CCR-MW01-1122	--	--	--	--	--	--	--	--	--	--	--	--	**0.047**	--	--	--	--	--	--	--	**0.024**	--	--	--	--	--	--				
MW-01	--	Supplementary	5/2/2023	FC-CCR-MW01-0523	--	--	--	--	--	--	--	--	--	--	--	--	**0.047**	--	--	--	--	--	--	--	**0.023**	--	--	--	--	--	--				

Table F-14
Groundwater Sampling Results for the Additional Monitoring Wells - Appendix IV Constituents

				Constituent:	Appendix IV Constituents																											
					Antimony	Antimony	Arsenic	Arsenic	Barium	Barium	Beryllium	Beryllium	Cadmium	Cadmium	Chromium	Chromium	Cobalt	Cobalt	Fluoride	Lead	Lead	Lithium	Mercury	Mercury	Molybdenum	Molybdenum	Selenium	Selenium	Thallium	Thallium	Total Radium
				Filtered:	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	N	Y	N	N	Y	N	Y	N	Y	N	Y	N	Y	N
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L
Well ID	CCR Unit	Well Designation	Sample Date	Sample ID																												
MW-01	--	Supplementary	11/09/2023	FC-CCR-MW01-1123	--	--	--	--	--	--	--	--	--	--	--	--	**0.040**	--	--	--	--	--	--	--	**0.020**	--	--	--	--	--	--	--
MW-03	--	Supplementary	4/1/1987	MW-3_4/1/1987	--	--	--	<0.1	--	<0.005	--	--	--	<0.005	--	<0.005	--	--	**0.50**	--	<0.05	--	--	<0.0001	--	--	--	**0.64**	--	--	--
MW-03	--	Supplementary	9/29/1987	MW-3_9/29/1987	--	--	--	<0.05	--	**0.59**	--	--	--	<0.005	--	<0.005	--	--	<0.5	--	**0.090**	--	--	<0.0001	--	--	--	<0.05	--	--	--
MW-03	--	Supplementary	6/28/1988	MW-3-19880628	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.2**	--	--	--	<0.001	--	--	--	--	--	--	--	--	--
MW-03	--	Supplementary	9/21/1988	MW-3-19880921	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.2**	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-03	--	Supplementary	11/20/1988	MW-3-19881120	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.5**	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-03	--	Supplementary	2/27/1989	MW-3-19890227	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.2**	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-03	--	Supplementary	9/13/1989	MW-3-19890913	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.4**	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-03	--	Supplementary	3/22/1990	MW-3-19900322	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.3**	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-03	--	Supplementary	10/30/1990	MW-3-19901030	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.40**	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-03	--	Supplementary	4/4/1991	MW-3-19910404	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.30**	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-03	--	Supplementary	9/30/1991	MW-3-19910930	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.30**	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-03	--	Supplementary	5/7/1992	MW-3-19920507	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.30**	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-03	--	Supplementary	11/5/1992	MW-3-19921105	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.30**	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-03	--	Supplementary	4/28/1993	MW-3-19930428	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.26**	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-03	--	Supplementary	11/30/1993	MW-3-19931130	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.30**	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-03	--	Supplementary	4/21/1994	MW-3-19940421	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.30**	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-03	--	Supplementary	9/20/1994	MW-3-19940920	--	--	**0.080**	--	<0.5	--	--	--	<0.0005	--	<0.02	--	--	--	**0.30**	<0.1	--	--	--	--	<0.01	--	**0.51**	--	--	--	--	--
MW-03	--	Supplementary	12/14/1994	MW-3-19941214	<0.3	--	<0.05	--	<1	--	<0.025	--	<0.025	--	<0.05	--	<0.25	--	--	<0.015	--	--	<0.0002	--	--	--	<0.025	--	<0.05	--	--	--
MW-03	--	Supplementary	4/6/1995	MW-3-19950406	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.20**	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-03	--	Supplementary	12/12/1995	MW-3-19951212	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.30**	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-03	--	Supplementary	8/14/1996	MW-3-19960814	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.20**	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-03	--	Supplementary	4/23/1997	MW-3-19970423	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.20**	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-03	--	Supplementary	10/13/1997	MW-3-19971013	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.20**	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-03	--	Supplementary	4/15/1998	MW-3-19980415	--	--	<0.005	--	**0.020**	--	--	--	<0.001	--	<0.01	--	--	--	**0.20**	<0.005	--	--	--	--	**0.010**	--	<0.005	--	--	--	--	--
MW-03	--	Supplementary	9/29/1998	MW-3-19980929	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.20**	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-03	--	Supplementary	5/10/1999	MW-3-19990510	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.30**	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-03	--	Supplementary	12/8/1999	MW-3-19991208	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.30**	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-03	--	Supplementary	5/10/2000	MW-3-20000510	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.30**	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-03	--	Supplementary	11/27/2000	MW-3-20001127	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.5938**	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-03	--	Supplementary	8/20/2001	MW-3-20010820	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.30**	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-03	--	Supplementary	12/4/2001	MW-3-20011204	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.50**	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-03	--	Supplementary	6/12/2002	MW-3-20020612	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.40**	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-03	--	Supplementary	12/17/2002	MW-3-20021217	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.30**	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-03	--	Supplementary	6/3/2003	MW-3-20030603	--	--	--	--	**0.011**	--	**0.010**	**0.011**	--	--	--	--	--	--	**0.30**	--	--	--	--	--	--	--	**0.27**	**0.29**	--	--	--	--
MW-03	--	Supplementary	9/24/2003	MW-3-20030924	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.54**	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-03	--	Supplementary	6/16/2004	MW-3-20040616	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.30**	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-03	--	Supplementary	11/9/2004	MW-3-20041109	--	--	**0.0031**	--	**0.0438**	--	--	--	<0.0005	--	**0.011**	--	--	--	**0.40**	**0.0051**	--	--	--	--	**0.01055**	--	**0.215**	--	--	--	--	--
MW-03	--	Supplementary	5/12/2005	MW-3-20050512	--	--	**0.014**	--	**0.038**	--	<0.005	--	<0.001	--	**0.010**	--	**0.0055**	--	**0.30**	**0.0050**	--	--	<0.0002	--	--	--	**0.23**	--	**0.0022**	--	--	--
MW-03	--	Supplementary	11/1/2005	MW-3-20051101	--	--	**0.034**	--	**0.0036**	--	--	--	--	--	**0.0050**	--	**0.0040**	--	**0.40**	--	--	--	--	--	--	--	**0.21**	--	--	--	--	--
MW-03	--	Supplementary	5/16/2006	MW-3-20060516	--	--	**0.073**	--	**0.014**	--	**0.0010**	--	<0.006	--	<0.004	--	**0.0040**	--	**0.466**	<0.012	--	--	--	--	<0.006	--	**0.227**	--	**0.037**	--	--	--
MW-03	--	Supplementary	10/12/2006	MW-3-20061012	--	--	**0.026**	--	**0.015**	--	<0.003	--	<0.002	--	<0.002	--	<0.008	--	**0.359**	<0.009	--	--	--	--	<0.012	--	**0.185**	--	<0.025	--	--	--
MW-03	--	Supplementary	4/18/2007	MW-3-20070418	--	--	**0.128**	--	**0.020**	--	<0.003	--	<0.002	--	<0.002	--	**0.0040**	--	**0.209**	<0.009	--	--	<0.0022	--	<0.012	--	**0.219**	--	**0.0090**	--	--	--
MW-03	--	Supplementary	11/19/2007	MW-3-20071119	--	--	**0.0074**	--	**0.0126**	--	<0.5	--	<0.05	--	**0.015**	--	**0.00193**	--	**0.40**	<0.1	--	--	--	--	**0.0023**	--	**0.217**	--	**0.00025**	--	--	--
MW-03	--	Supplementary	5/7/2008	MW-3-20080507	--	--	**0.0075**	--	**0.0155**	--	<0.0005	--	<0.00005	--	**0.0050**	--	**0.00245**	--	**0.40**	**0.00020**	--	--	--	--	**0.0017**	--	**0.166**	--	**0.00034**	--	--	--
MW-03	--	Supplementary	12/3/2009	MW-3-20091203	--	--	**0.0077**	--	**0.0129**	--	<0.0005	--	**0.00058**	--	**0.0090**	--	**0.00138**	--	**0.40**	<0.0001	--	--	<0.0002	--	**0.0017**	--	**0.219**	--	**0.00042**	--	--	--
MW-03	--	Supplementary	9/28/2012	MW-3-092812-01	--	--	<0.020	--	--	--	--	--	--	--	**0.020**	--	--	--	<8.0	--	--	--	--	--	--	--	**0.16**	--	--	--	--	--
MW-03	--	Supplementary	9/29/2012*	MW-3-092912-03	--	--	<0.00050	--	--	--	--	--	--	--	<0.00050	--	--	--	<0.40	--	--	--	--	--	--	--	<0.00050	--	--	--	--	--
MW-03	--	Supplementary	3/11/2014	FC-03-031114	--	--	**0.0016**	--	--	--	--	--	--	--	**0.021**	--	--	--	<0.80	--	--	--	--	--	--	--	**0.084**	--	--	--	--	--
MW-03	--	Supplementary	9/9/2014	FCPP-03-090914	--	--	**0.00065**	--	--	--	--	--	--	--	<0.0010	--	--	--	<0.80	--	--	--	--	--	--	--	**0.11**	--	--	--	--	--
MW-03	--	Supplementary	3/18/2015	FCPP-03-031815	--	--	<0.0010	--	--	--	--	--	--	--	<0.0025	--	--	--	<0.80	--	--	--	--	--	--	--	**0.079**	--	--	--	--	--
MW-03	--	Supplementary	4/2/2015	FC-GF-3-0415	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-03	--	Supplementary	6/24/2015	MW-3	--	--	<0.030	--	--	--	--	--	--	--	<0.030	--	--	--	<8.0	--	--	--	--	--	--	--	**0.13**	--	--	--	--	--
MW-03	--	Supplementary	8/28/2015	FCPP-03-082815	--	--	<0.012	--	--	--	--	--	<0.0040	--	<0.012	--	--	--	<2.0	--	--	--	--	--	--	--	**0.13**	--	--	--	--	--
MW-03	--	Supplementary	11/4/2015	FC MW-3-(041115)	--	--	<0.0050	--	--	--	--	--	<0.0025	--	<0.013	--	--	--	--	--	--	--	--	--	--	--	**0.077**	--	--	--	--	--
MW-03	--	Supplementary	11/12/2015	FC MW-3-(121115)	--	--	<0.0010	--	--	--	--	--	--	--	**0.0048**	--	--	--	<2.0	--	--	--	--	--	--	--	**0.10**	--	--	--	--	--
MW-03	--	Supplementary	6/20/2016	FC-Seep-MW3-616	--	--	<0.005	--	--	--	--	--	--	--	<0.005	--	--	--	**0.43**	--	--	--	<0.00020	--	--	--	--	--	--	--	--	--
MW-03	--	Supplementary	9/15/2016	FC-Seep-MW3-916	--	--	<0.0020	--	--	--	--	--	--	--	<0.0050	--	--	--	**0.45**	--	--	--	<0.00020	--	--	--	--	--	--	--	--	--
MW-03	--	Supplementary	9/15/2016	FC-Seep-MW 105-916	--	--	<0.0020	--	--	--	--	--	--	--	<0.0050	--	--	--	**0.44**	--	--	--	<0.00020	--	--	--	--	--	--	--	--	--
MW-03	--	Supplementary	6/21/2020	FC-CCR-MW03-0620	--	--	--	--	--	--	--	--	--	--	--	--	<0.001	--	--	--	--	--	--	--	**0.0037**	--	--	--	--	--	--	--
MW-03	--	Supplementary	11/8/2020	FC-CCR-MW03-1120	--	--	--	--	--	--	--	--	--	--	--	--	**0.0031**	--	--	--	--	--	--	--	**0.003**	--	--	--	--	--	--	--
MW-03	--	Supplementary	4/24/2021	FC-CCR-MW03-0421	--	--	--	--	--	--	--	--	--	--	--	--	**0.00054 J**	--	--	--	--	--	--	--	**0.0022**	--	--	--	--	--	--	--
MW-03	--	Supplementary	11/13/2021	FC-CCR-MW03	--	--	--	--	--	--	--	--	--	--	--	--	**0.00031 J**	--	--	--	--	--	--	--	**0.0022**	--	--	--	--	--	--	--
MW-03	--	Supplementary	5/23/2022	FC-CCR-MW03-0522	--	--	--	--	--	--	--	--	--	--	--	--	**0.00055**	--	--	--	--	--	--	--	**0.0014**	--	--	--	--	--	--	--
MW-03	--	Supplementary	5/23/2022	FC-CCR-SS08-0522	--	--	--	--	--	--	--	--	--	--	--	--	**0.00165 J**	--	--	--	--	--	--	--	<0.005	--	--	--	--	--	--	--
MW-03	--	Supplementary	11/10/2022	FC-CCR-MW03-1122	--	--	--	--	--	--	--	--	--	--	--	--	<0.0005	--	--	--	--	--	--	--	**0.0023**	--	--	--	--	--	--	--
MW-03	--	Supplementary	5/2/2023	FC-CCR-MW03-0523	--	--	--	--	--	--	--	--	--	--	--	--	<0.001	--	--	--	--	--	--	--	<0.002	--	--	--	--	--	--	--
MW-03	--	Supplementary	11/09/2023	FC-CCR-MW03-1123	--	--	--	--	--	--	--	--	--	--	--	--	**0.0015**	--	--	--	--	--	--	--	**0.0018**	--	--	--	--	--	--	--
MW-19	--	Supplementary	9/29/1987	MW-19_9/29/1987	--	--	--	<0.05	--	**0.60**	--	--	--	<0.005	--	<0.005	--	--	<0.5	--	**0.11**	--	--	<0.0001	--	--	--	<0.05	--	--	--
MW-19	--	Supplementary	6/14/1988	MW-19-19880614	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.1**	--	--	--	<0.001	--	--	--	--	--	--	--	--	--
MW-19	--	Supplementary	9/18/1988	MW-19-19880918	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-19	--	Supplementary	11/20/1988	MW-19-19881120	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.1**	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-19	--	Supplementary	2/28/1989	MW-19-19890228	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.2**	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-19	--	Supplementary	9/12/1989	MW-19-19890912	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.3**	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-19	--	Supplementary	3/22/1990	MW-19-19900322	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.0**	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-19	--	Supplementary	10/30/1990	MW-19-19901030	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.20**	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-19	--	Supplementary	4/3/1991	MW-19-19910403	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.20**	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-19	--	Supplementary	9/25/1991	MW-19-19910925	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.20**	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-19	--	Supplementary	5/7/1992	MW-19-19920507	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.20**	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-19	--	Supplementary	11/5/1992	MW-19-19921105	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.20**	--	--	--	--	--	--	--	--	--	--	--	--	--

Table F-14
Groundwater Sampling Results for the Additional Monitoring Wells - Appendix IV Constituents

					Appendix IV Constituents																															
				Constituent:	Antimony	Antimony	Arsenic	Arsenic	Barium	Barium	Beryllium	Beryllium	Cadmium	Cadmium	Chromium	Chromium	Cobalt	Cobalt	Fluoride	Lead	Lead	Lithium	Mercury	Mercury	Molybdenum	Molybdenum	Selenium	Selenium	Thallium	Thallium	Total Radium						
				Filtered:	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	N	Y	N	N	Y	N	Y	N	Y	N	Y	N						
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L						
Well ID	CCR Unit	Well Designation	Sample Date	Sample ID																																
MW-19	--	Supplementary	4/27/1993	MW-19-19930427	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.18**	--	--	--	--	--	--	--	--	--	--	--	--						
MW-19	--	Supplementary	12/1/1993	MW-19-19931201	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.20**	--	--	--	--	--	--	--	--	--	--	--	--						
MW-19	--	Supplementary	5/10/1994	MW-19-19940510	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.20**	--	--	--	--	--	--	--	--	--	--	--	--						
MW-19	--	Supplementary	11/16/1994	MW-19-19941116	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.20**	--	--	--	--	--	--	--	--	--	--	--	--						
MW-19	--	Supplementary	4/6/1995	MW-19-19950406	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.20**	--	--	--	--	--	--	--	--	--	--	--	--						
MW-19	--	Supplementary	12/12/1995	MW-19-19951212	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.20**	--	--	--	--	--	--	--	--	--	--	--	--						
MW-19	--	Supplementary	8/15/1996	MW-19-19960815	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.20**	--	--	--	--	--	--	--	--	--	--	--	--						
MW-19	--	Supplementary	4/14/1997	MW-19-19970414	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.20**	--	--	--	--	--	--	--	--	--	--	--	--						
MW-19	--	Supplementary	10/13/1997	MW-19-19971013	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.20**	--	--	--	--	--	--	--	--	--	--	--	--						
MW-19	--	Supplementary	5/10/1999	MW-19-19990510	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.20**	--	--	--	--	--	--	--	--	--	--	--	--						
MW-19	--	Supplementary	12/1/1999	MW-19-19991201	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.20**	--	--	--	--	--	--	--	--	--	--	--	--						
MW-19	--	Supplementary	5/30/2000	MW-19-20000530	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.30**	--	--	--	--	--	--	--	--	--	--	--	--						
MW-19	--	Supplementary	11/27/2000	MW-19-20001127	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.2564**	--	--	--	--	--	--	--	--	--	--	--	--						
MW-19	--	Supplementary	8/21/2001	MW-19-20010821	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.26**	--	--	--	--	--	--	--	--	--	--	--	--						
MW-19	--	Supplementary	12/4/2001	MW-19-20011204	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.30**	--	--	--	--	--	--	--	--	--	--	--	--						
MW-19	--	Supplementary	6/11/2002	MW-19-20020611	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.40**	--	--	--	--	--	--	--	--	--	--	--	--						
MW-19	--	Supplementary	12/17/2002	MW-19-20021217	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.20**	--	--	--	--	--	--	--	--	--	--	--	--						
MW-19	--	Supplementary	5/29/2003	MW-19-20030529	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.21**	--	--	--	--	--	--	--	--	--	--	--	--						
MW-19	--	Supplementary	12/15/2003	MW-19-20031215	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.45**	--	--	--	--	--	--	--	--	--	--	--	--						
MW-19	--	Supplementary	6/18/2004	MW-19-20040618	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.30**	--	--	--	--	--	--	--	--	--	--	--	--						
MW-19	--	Supplementary	11/30/2004	MW-19-20041130	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.26**	--	--	--	--	--	--	--	--	--	--	--	--						
MW-19	--	Supplementary	6/14/2005	MW-19-20050614	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.29**	--	--	--	--	--	--	--	--	--	--	--	--						
MW-19	--	Supplementary	12/12/2005	MW-19-20051212	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.30**	--	--	--	--	--	--	--	--	--	--	--	--						
MW-19	--	Supplementary	5/15/2006	MW-19-20060515	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.176**	--	--	--	--	--	--	--	--	--	--	--	--						
MW-19	--	Supplementary	4/17/2007	MW-19-20070417	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.754**	--	--	--	--	--	--	--	--	--	--	--	--						
MW-19	--	Supplementary	5/8/2008	MW-19-20080508	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.30**	--	--	--	--	--	--	--	--	--	--	--	--						
MW-19	--	Supplementary	11/18/2013	FC-19-111813	--	--	**0.00072**	--	--	--	--	--	--	--	<0.0010	--	--	--	<8.0	--	--	--	--	--	--	--	**0.014**	--	--	--	--						
MW-19	--	Supplementary	3/11/2014	FC-19-031114	--	--	<0.00040	--	--	--	--	--	--	--	<0.0010	--	--	--	<4.0	--	--	--	--	--	--	--	**0.013**	--	--	--	--						
MW-19	--	Supplementary	9/9/2014	FCPP-19-090914	--	--	**0.00078**	--	--	--	--	--	--	--	**0.0014**	--	--	--	<2.0	--	--	--	--	--	--	--	**0.015**	--	--	--	--						
MW-19	--	Supplementary	12/8/2014	FCPP-MW19-12914	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--						
MW-19	--	Supplementary	3/18/2015	FCPP-19-031815	--	--	<0.0050	--	--	--	--	--	--	--	<0.013	--	--	--	<2.0	--	--	--	--	--	--	--	<0.015	--	--	--	--						
MW-19	--	Supplementary	6/30/2015	MW-19	--	--	<0.012	--	--	--	--	--	--	--	<0.012	--	--	--	<4.0	--	--	--	--	--	--	--	**0.022**	--	--	--	--						
MW-19	--	Supplementary	8/25/2015	FCPP-19-082515	--	--	<0.030	--	--	--	--	--	--	--	<0.030	--	--	--	<2.0	--	--	--	--	--	--	--	<0.030	--	--	--	--						
MW-19	--	Supplementary	11/3/2015	FC MW-19-(031115)	<0.0025	--	<0.0010	--	**0.018**	--	<0.0010	--	<0.00050	--	<0.0025	--	<0.0010	--	<2.0	<0.00050	--	<5.0	<0.00020	--	**0.0016**	--	**0.011**	--	<0.00050	--	--						
MW-19	--	Supplementary	6/17/2016	FC-Seep-MW19-616	--	--	<0.005	--	--	--	--	--	--	--	<0.005	--	--	--	<0.40	--	--	--	<0.00020	--	--	--	--	--	--	--	--						
MW-19	--	Supplementary	6/21/2020	FC-CCR-MW19-0620	--	--	--	--	--	--	--	--	--	--	--	--	**0.0015**	--	--	--	--	--	--	--	**0.014**	--	--	--	--	--	--						
MW-19	--	Supplementary	11/7/2020	FC-CCR-MW19-1120	--	--	--	--	--	--	--	--	--	--	--	--	**0.002**	--	--	--	--	--	--	--	**0.0061**	--	--	--	--	--	--						
MW-19	--	Supplementary	4/25/2021	FC-CCR-MW19-0421	--	--	--	--	--	--	--	--	--	--	--	--	**0.00052**	--	--	--	--	--	--	--	**0.0030**	--	--	--	--	--	--						
MW-19	--	Supplementary	4/25/2021	FC-CCR-FD05-0421	--	--	--	--	--	--	--	--	--	--	--	--	**0.0013 J**	--	--	--	--	--	--	--	**0.0040**	--	--	--	--	--	--						
MW-19	--	Supplementary	11/14/2021	FC-CCR-MW19	--	--	--	--	--	--	--	--	--	--	--	--	**0.0016**	--	--	--	--	--	--	--	**0.0032**	--	--	--	--	--	--						
MW-19	--	Supplementary	5/23/2022	FC-CCR-MW19-0522	--	--	--	--	--	--	--	--	--	--	--	--	**0.0031**	--	--	--	--	--	--	--	**0.0034**	--	--	--	--	--	--						
MW-19	--	Supplementary	11/11/2022	FC-CCR-MW19-1122	--	--	--	--	--	--	--	--	--	--	--	--	**0.0013**	--	--	--	--	--	--	--	**0.0033**	--	--	--	--	--	--						
MW-19	--	Supplementary	11/11/2022	*DUP* FC-CCR-FD05-1122	--	--	--	--	--	--	--	--	--	--	--	--	**0.0013**	--	--	--	--	--	--	--	**0.0034**	--	--	--	--	--	--						
MW-19	--	Supplementary	5/3/2023	FC-CCR-MW19-0523	--	--	--	--	--	--	--	--	--	--	--	--	**0.0014**	--	--	--	--	--	--	--	**0.0033**	--	--	--	--	--	--						
MW-19	--	Supplementary	5/3/2023	*DUP* FC-CCR-FD05-0523	--	--	--	--	--	--	--	--	--	--	--	--	**0.0014**	--	--	--	--	--	--	--	**0.0032**	--	--	--	--	--	--						
MW-19	--	Supplementary	11/13/2023	FC-CCR-MW19-1123	--	--	--	--	--	--	--	--	--	--	--	--	<0.005	--	--	--	--	--	--	--	<0.005	--	--	--	--	--	--						
MW-19	--	Supplementary	11/13/2023	*DUP* FC-CCR-FD05-1123	--	--	--	--	--	--	--	--	--	--	--	--	<0.005	--	--	--	--	--	--	--	<0.005	--	--	--	--	--	--						
MW-21	--	Supplementary	9/27/1987	MW-21_9/27/1987	--	--	--	<0.05	--	**0.88**	--	--	--	<0.005	--	<0.005	--	--	<0.5	--	**0.12**	--	--	<0.0001	--	--	--	<0.05	--	--						
MW-21	--	Supplementary	9/18/1988	MW-21-19880918	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--						
MW-21	--	Supplementary	11/20/1988	MW-21-19881120	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.90**	--	--	--	--	--	--	--	--	--	--	--	--						
MW-21	--	Supplementary	3/6/1989	MW-21-19890306	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.80**	--	--	--	--	--	--	--	--	--	--	--	--						
MW-21	--	Supplementary	9/12/1989	MW-21-19890912	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.60**	--	--	--	--	--	--	--	--	--	--	--	--						
MW-21	--	Supplementary	3/22/1990	MW-21-19900322	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.80**	--	--	--	--	--	--	--	--	--	--	--	--						
MW-21	--	Supplementary	9/18/1990	MW-21-19900918	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.20**	--	--	--	--	--	--	--	--	--	--	--	--						
MW-21	--	Supplementary	3/20/1991	MW-21-19910320	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.20**	--	--	--	--	--	--	--	--	--	--	--	--						
MW-21	--	Supplementary	9/24/1991	MW-21-19910924	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.20**	--	--	--	--	--	--	--	--	--	--	--	--						
MW-21	--	Supplementary	5/1/1992	MW-21-19920501	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.20**	--	--	--	--	--	--	--	--	--	--	--	--						
MW-21	--	Supplementary	11/2/1992	MW-21-19921102	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.20**	--	--	--	--	--	--	--	--	--	--	--	--						
MW-21	--	Supplementary	4/21/1993	MW-21-19930421	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.20**	--	--	--	--	--	--	--	--	--	--	--	--						
MW-21	--	Supplementary	12/1/1993	MW-21-19931201	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.20**	--	--	--	--	--	--	--	--	--	--	--	--						
MW-21	--	Supplementary	4/27/1994	MW-21-19940427	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.20**	--	--	--	--	--	--	--	--	--	--	--	--						
MW-21	--	Supplementary	9/19/1994	MW-21-19940919	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.20**	--	--	--	--	--	--	--	--	--	--	--	--						
MW-21	--	Supplementary	12/14/1994	MW-21-19941214	<0.3	--	<0.2	--	<2	--	<0.025	--	<0.025	--	<0.05	--	<0.25	--	--	<0.06	--	--	<0.001	--	--	--	**0.058**	--	<0.1	--	--						
MW-21	--	Supplementary	4/5/1995	MW-21-19950405	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.10**	--	--	--	--	--	--	--	--	--	--	--	--						
MW-21	--	Supplementary	12/12/1995	MW-21-19951212	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.10**	--	--	--	--	--	--	--	--	--	--	--	--						
MW-21	--	Supplementary	8/15/1996	MW-21-19960815	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.10**	--	--	--	--	--	--	--	--	--	--	--	--						
MW-21	--	Supplementary	6/23/1997	MW-21-19970623	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.10**	--	--	--	--	--	--	--	--	--	--	--	--						
MW-21	--	Supplementary	10/14/1997	MW-21-19971014	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.20**	--	--	--	--	--	--	--	--	--	--	--	--						
MW-21	--	Supplementary	4/13/1998	MW-21-19980413	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.10**	--	--	--	--	--	--	--	--	--	--	--	--						
MW-21	--	Supplementary	5/10/1999	MW-21-19990510	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.20**	--	--	--	--	--	--	--	--	--	--	--	--						
MW-21	--	Supplementary	12/6/1999	MW-21-19991206	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.10**	--	--	--	--	--	--	--	--	--	--	--	--						
MW-21	--	Supplementary	5/24/2000	MW-21-20000524	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.20**	--	--	--	--	--	--	--	--	--	--	--	--						
MW-21	--	Supplementary	11/13/2000	MW-21-20001113	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.1919**	--	--	--	--	--	--	--	--	--	--	--	--						
MW-21	--	Supplementary	8/20/2001	MW-21-20010820	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.24**	--	--	--	--	--	--	--	--	--	--	--	--						
MW-21	--	Supplementary	12/4/2001	MW-21-20011204	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.20**	--	--	--	--	--	--	--	--	--	--	--	--						
MW-21	--	Supplementary	6/12/2002	MW-21-20020612	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.30**	--	--	--	--	--	--	--	--	--	--	--	--						
MW-21	--	Supplementary	12/17/2002	MW-21-20021217	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.20**	--	--	--	--	--	--	--	--	--	--	--	--						
MW-21	--	Supplementary	6/2/2003	MW-21-20030602	--	--	--	--	**0.011**	--	--	--	--	--	--	--	--	--	**0.30**	--	--	--	--	--	--	--	**0.68**	--	--	--	--						
MW-21	--	Supplementary	6/3/2003	MW-21-20030603	--	--	--	--	--	--	**0.011**	**0.011**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.74**	**0.68**	--	--	--						
MW-21	--	Supplementary	9/23/2003	MW-21-20030923	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.37**	--	--	--	--	--	--	--	--	--	--	--	--						

Table F-14
Groundwater Sampling Results for the Additional Monitoring Wells - Appendix IV Constituents

					Appendix IV Constituents																															
				Constituent:	Antimony	Antimony	Arsenic	Arsenic	Barium	Barium	Beryllium	Beryllium	Cadmium	Cadmium	Chromium	Chromium	Cobalt	Cobalt	Fluoride	Lead	Lead	Lithium	Mercury	Mercury	Molybdenum	Molybdenum	Selenium	Selenium	Thallium	Thallium	Total Radium	
				Filtered:	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	N	Y	N	N	Y	N	Y	N	Y	N	Y	N						
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L						
Well ID	CCR Unit	Well Designation	Sample Date	Sample ID																																
MW-21	--	Supplementary	6/14/2004	MW-21-20040614	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.20**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-21	--	Supplementary	11/8/2004	MW-21-20041108	--	--	**0.0097**	--	**0.023**	--	--	--	<0.00005	--	**0.0050**	--	--	--	**0.20**	**0.00060**	--	--	--	--	**0.00179**	--	**0.512**	--	--	--	--	--	--	--	--	--	--
MW-21	--	Supplementary	5/11/2005	MW-21-20050511	--	--	**0.02**	--	**0.021**	--	<0.005	--	<0.001	--	**0.020**	--	**0.0018**	--	**0.30**	<0.001	--	--	<0.0002	--	--	--	**0.57**	--	<0.0005	--	--	--	--	--	--	--	--
MW-21	--	Supplementary	10/31/2005	MW-21-20051031	--	--	**0.060**	--	**0.025**	--	--	--	--	--	--	--	**0.0040**	--	**0.20**	--	--	--	--	--	--	--	**0.542**	--	--	--	--	--	--	--	--	--	--
MW-21	--	Supplementary	5/15/2006	MW-21-20060515	--	--	**0.092**	--	**0.020**	--	<0.001	--	<0.006	--	<0.004	--	**0.0040**	--	<0.5	<0.012	--	--	--	--	<0.006	--	**0.59**	--	**0.057**	--	--	--	--	--	--	--	--
MW-21	--	Supplementary	10/11/2006	MW-21-20061011	--	--	**0.037**	--	**0.022**	--	<0.003	--	<0.002	--	<0.002	--	<0.008	--	<5000	<0.009	--	--	--	--	<0.012	--	**0.526**	--	<0.025	--	--	--	--	--	--	--	--
MW-21	--	Supplementary	4/17/2007	MW-21-20070417	<0.028	--	**0.041**	--	**0.028**	--	<0.003	--	<0.002	--	<0.002	--	<0.008	--	<0.2	<0.009	--	--	<0.0022	--	<0.012	--	**0.549**	--	<0.025	--	--	--	--	--	--	--	--
MW-21	--	Supplementary	11/20/2007	MW-21-20071120	**0.0060**	--	**0.015**	--	**0.027**	--	<0.5	--	<0.0005	--	**0.028**	--	**0.0027**	--	**0.30**	<0.001	--	--	--	--	<0.005	--	**0.421**	--	<0.0005	--	--	--	--	--	--	--	--
MW-21	--	Supplementary	4/30/2008	MW-21-20080430	<0.0005	--	**0.0144**	--	**0.0224**	--	<0.0005	--	<0.0005	--	**0.018**	--	**0.00296**	--	**0.20**	**0.00020**	--	--	--	--	**0.00060**	--	**0.42**	--	<0.00005	--	--	--	--	--	--	--	--
MW-21	--	Supplementary	12/4/2009	MW-21-20091204	<0.01	--	**0.02**	--	**0.040**	--	<0.01	--	**0.0010**	--	**0.060**	--	**0.0020**	--	**0.20**	<0.002	--	--	<0.0002	--	<0.01	--	**0.35**	--	<0.001	--	--	--	--	--	--	--	--
MW-21	--	Supplementary	12/29/2009	MW-21-20091229	<0.005	--	**0.016**	--	**0.025**	--	<0.005	--	**0.0011**	--	**0.040**	--	**0.0029**	--	**0.30**	<0.001	--	--	<0.0002	--	<0.005	--	**0.31**	--	<0.0005	--	--	--	--	--	--	--	--
MW-21	--	Supplementary	9/29/2012	MW21-092912-01	--	--	**0.02**	--	--	--	--	--	--	--	<0.020	--	--	--	<8.0	--	--	--	--	--	--	--	**0.19**	--	--	--	--	--	--	--	--	--	--
MW-21	--	Supplementary	11/20/2013	FC-21-112013	--	--	**0.00060**	--	--	--	--	--	--	--	**0.0046**	--	--	--	<8.0	--	--	--	--	--	--	--	**0.14**	--	--	--	--	--	--	--	--	--	--
MW-21	--	Supplementary	3/11/2014	FC-21-031114	--	--	<0.0010	--	--	--	--	--	--	--	**0.014**	--	--	--	<4.0	--	--	--	--	--	--	--	**0.16**	--	--	--	--	--	--	--	--	--	--
MW-21	--	Supplementary	9/9/2014	FCPP-21-090914	--	--	**0.00044**	--	--	--	--	--	--	--	<0.0010	--	--	--	<2.0	--	--	--	--	--	--	--	**0.11**	--	--	--	--	--	--	--	--	--	--
MW-21	--	Supplementary	12/9/2014	FCPP-MW21-12914	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-21	--	Supplementary	3/18/2015	FCPP-21-031815	--	--	<0.0050	--	--	--	--	--	--	--	<0.013	--	--	--	<2.0	--	--	--	--	--	--	--	**0.12**	--	--	--	--	--	--	--	--	--	--
MW-21	--	Supplementary	6/24/2015	MW-21	--	--	<0.15	--	--	--	--	--	--	--	<0.15	--	--	--	<8.0	--	--	--	--	--	--	--	**0.18**	--	--	--	--	--	--	--	--	--	--
MW-21	--	Supplementary	8/28/2015	FCPP-21-082815	--	--	<0.030	--	--	--	--	--	<0.010	--	<0.030	--	--	--	<2.0	--	--	--	--	--	--	--	**0.18**	--	--	--	--	--	--	--	--	--	--
MW-21	--	Supplementary	11/4/2015	FC MW-21-(041115)	--	--	<0.0020	--	--	--	--	--	<0.0010	--	<0.0050	--	--	--	--	--	--	--	--	--	--	--	**0.14**	--	--	--	--	--	--	--	--	--	--
MW-21	--	Supplementary	11/13/2015	FC MW-21-(131115)	--	--	<0.0020	--	--	--	--	--	--	--	<0.0050	--	--	--	<4.0	--	--	--	--	--	--	--	**0.16**	--	--	--	--	--	--	--	--	--	--
MW-21	--	Supplementary	11/13/2015	*DUP* FC FD-5-(131115)	--	--	<0.0020	--	--	--	--	--	--	--	<0.0050	--	--	--	<4.0	--	--	--	--	--	--	--	**0.14**	--	--	--	--	--	--	--	--	--	--
MW-21	--	Supplementary	9/15/2016	FC-Seep-MW21-916	--	--	<0.0020	--	--	--	--	--	--	--	<0.0050	--	--	--	<0.40	--	--	--	<0.00020	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-21	--	Supplementary	6/21/2020	FC-CCR-MW21-0620	--	--	--	--	--	--	--	--	--	--	--	--	**0.0046**	--	--	--	--	--	--	--	**0.0053**	--	--	--	--	--	--	--	--	--	--	--	--
MW-21	--	Supplementary	11/8/2020	FC-CCR-MW21-1120	--	--	--	--	--	--	--	--	--	--	--	--	**0.0054**	--	--	--	--	--	--	--	**0.0035**	--	--	--	--	--	--	--	--	--	--	--	--
MW-21	--	Supplementary	4/24/2021	FC-CCR-MW21-0421	--	--	--	--	--	--	--	--	--	--	--	--	**0.0052**	--	--	--	--	--	--	--	**0.0029**	--	--	--	--	--	--	--	--	--	--	--	--
MW-21	--	Supplementary	11/13/2021	FC-CCR-MW21	--	--	--	--	--	--	--	--	--	--	--	--	**0.0059**	--	--	--	--	--	--	--	**0.0039**	--	--	--	--	--	--	--	--	--	--	--	--
MW-21	--	Supplementary	5/23/2022	FC-CCR-MW21-0522	--	--	--	--	--	--	--	--	--	--	--	--	**0.0055**	--	--	--	--	--	--	--	<0.005	--	--	--	--	--	--	--	--	--	--	--	--
MW-21	--	Supplementary	5/23/2022	*DUP* FC-CCR-FD06-0522	--	--	--	--	--	--	--	--	--	--	--	--	**0.0048**	--	--	--	--	--	--	--	**0.0024**	--	--	--	--	--	--	--	--	--	--	--	--
MW-21	--	Supplementary	11/10/2022	FC-CCR-MW21-1122	--	--	--	--	--	--	--	--	--	--	--	--	**0.0048**	--	--	--	--	--	--	--	**0.0024**	--	--	--	--	--	--	--	--	--	--	--	--
MW-21	--	Supplementary	5/2/2023	FC-CCR-MW21-0523	--	--	--	--	--	--	--	--	--	--	--	--	**0.0045**	--	--	--	--	--	--	--	**0.0022**	--	--	--	--	--	--	--	--	--	--	--	--
MW-21	--	Supplementary	11/09/2023	FC-CCR-MW-21-1123	--	--	--	--	--	--	--	--	--	--	--	--	**0.0045**	--	--	--	--	--	--	--	**0.0022**	--	--	--	--	--	--	--	--	--	--	--	--
MW-30	--	Supplementary	11/20/2013	FC-30-112013	--	--	**0.0081**	--	--	--	--	--	--	--	**0.013**	--	--	--	<4.0	--	--	--	--	--	--	--	**0.016**	--	--	--	--	--	--	--	--	--	--
MW-30	--	Supplementary	3/11/2014	FC-30-031114	--	--	**0.022**	--	--	--	--	--	--	--	**0.05**	--	--	--	<0.80	--	--	--	--	--	--	--	**0.014**	--	--	--	--	--	--	--	--	--	--
MW-30	--	Supplementary	9/8/2014	FCPP-30-090814	--	--	<0.0010	--	--	--	--	--	--	--	<0.0025	--	--	--	<0.80	--	--	--	--	--	--	--	**0.0094**	--	--	--	--	--	--	--	--	--	--
MW-30	--	Supplementary	12/9/2014	FCPP-MW30-12914	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-30	--	Supplementary	3/16/2015	FCPP-30-031615	--	--	**0.00033**	--	--	--	--	--	--	--	<0.00050	--	--	--	<0.80	--	--	--	--	--	--	--	**0.0071**	--	--	--	--	--	--	--	--	--	--
MW-30	--	Supplementary	6/24/2015	MW-30	--	--	<0.030	--	--	--	--	--	--	--	<0.030	--	--	--	<0.40	--	--	--	--	--	--	--	<0.030	--	--	--	--	--	--	--	--	--	--
MW-30	--	Supplementary	8/28/2015	FCPP-30-082815	--	--	<0.0030	--	--	--	--	--	<0.0020	--	<0.0030	--	--	--	<2.0	--	--	--	--	--	--	--	**0.051**	--	--	--	--	--	--	--	--	--	--
MW-30	--	Supplementary	11/4/2015	FC MW-30-(041115)	<0.0025	--	<0.0010	--	**0.029**	--	<0.0010	--	<0.00050	--	<0.0025	--	**0.0062**	--	<2.0	**0.0012**	--	<5.0	<0.00020	--	**0.0075**	--	**0.015**	--	**0.00066**	--	--	--	--	--	--	--	--
MW-30	--	Supplementary	6/21/2016	FC-SEEPS-MW-30-062116	--	--	<0.005	--	--	--	--	--	--	--	**0.0034**	--	--	--	**0.51**	--	--	--	<0.00020	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-30	--	Supplementary	4/25/2021	FC-CCR-MW30-0421	--	--	--	--	--	--	--	--	--	--	--	--	**0.0025**	--	--	--	--	--	--	--	**0.0065**	--	--	--	--	--	--	--	--	--	--	--	--
MW-30	--	Supplementary	11/13/2021	FC-CCR-MW30	--	--	--	--	--	--	--	--	--	--	--	--	**0.0042**	--	--	--	--	--	--	--	**0.015**	--	--	--	--	--	--	--	--	--	--	--	--
MW-30	--	Supplementary	5/23/2022	FC-CCR-MW30-0522	--	--	--	--	--	--	--	--	--	--	--	--	**0.0013**	--	--	--	--	--	--	--	**0.0066**	--	--	--	--	--	--	--	--	--	--	--	--
MW-30	--	Supplementary	11/10/2022	FC-CCR-MW30-1122	--	--	--	--	--	--	--	--	--	--	--	--	**0.0016**	--	--	--	--	--	--	--	**0.0056**	--	--	--	--	--	--	--	--	--	--	--	--
MW-30	--	Supplementary	11/10/2022	*DUP* FC-CCR-FD06-1122	--	--	--	--	--	--	--	--	--	--	--	--	**0.0015**	--	--	--	--	--	--	--	**0.006**	--	--	--	--	--	--	--	--	--	--	--	--
MW-30	--	Supplementary	5/3/2023	FC-CCR-MW30-0523	--	--	--	--	--	--	--	--	--	--	--	--	**0.0013**	--	--	--	--	--	--	--	**0.0048**	--	--	--	--	--	--	--	--	--	--	--	--
MW-30	--	Supplementary	5/3/2023	*DUP* FC-CCR-FD06-0523	--	--	--	--	--	--	--	--	--	--	--	--	**0.0012**	--	--	--	--	--	--	--	**0.0048**	--	--	--	--	--	--	--	--	--	--	--	--
MW-30	--	Supplementary	11/10/2023	FC-CCR-MW30-1123	--	--	--	--	--	--	--	--	--	--	--	--	<0.005	--	--	--	--	--	--	--	<0.005	--	--	--	--	--	--	--	--	--	--	--	--
MW-30	--	Supplementary	11/10/2023	*DUP* FC-CCR-FD06-1123	--	--	--	--	--	--	--	--	--	--	--	--	<0.005	--	--	--	--	--	--	--	<0.005	--	--	--	--	--	--	--	--	--	--	--	--
MW-77S	--	Supplementary	6/22/2019	FC-NIT-MW77S-62219	**0.0015**	--	**0.0053**	--	**0.023**	--	<0.0010	--	**0.00012**	--	**0.0015**	--	**0.0065**	--	**1.1**	<0.00050	--	**1.3**	<0.00020	--	**0.051**	--	<0.0020	--	<0.00010	--	--	--	--	--	--	--	--
MW-77S	--	Supplementary	4/24/2021	FC-CCR-MW77S-0421	--	--	--	--	--	--	--	--	--	--	--	--	**0.0053**	--	--	--	--	--	--	--	**0.028**	--	--	--	--	--	--	--	--	--	--	--	--
MW-77S	--	Supplementary	11/13/2021	FC-CCR-MW77S	--	--	--	--	--	--	--	--	--	--	--	--	**0.0058**	--	--	--	--	--	--	--	**0.020**	--	--	--	--	--	--	--	--	--	--	--	--
MW-77S	--	Supplementary	11/13/2021	FC-CCR-FD07	--	--	--	--	--	--	--	--	--	--	--	--	**0.0057**	--	--	--	--	--	--	--	**0.020**	--	--	--	--	--	--	--	--	--	--	--	--
MW-77S	--	Supplementary	5/23/2022	FC-CCR-MW77S-0522	--	--	--	--	--	--	--	--	--	--	--	--	**0.0066**	--	--	--	--	--	--	--	**0.017**	--	--	--	--	--	--	--	--	--	--	--	--
MW-77S	--	Supplementary	5/23/2022	*DUP* FC-CCR-FD07-0522	--	--	--	--	--	--	--	--	--	--	--	--	**0.0066**	--	--	--	--	--	--	--	**0.018**	--	--	--	--	--	--	--	--	--	--	--	--
MW-77S	--	Supplementary	11/10/2022	FC-CCR-MW77S-1122	--	--	--	--	--	--	--	--	--	--	--	--	**0.0071**	--	--	--	--	--	--	--	**0.017**	--	--	--	--	--	--	--	--	--	--	--	--
MW-77S	--	Supplementary	5/3/2023	FC-CCR-MW77S-0523	--	--	--	--	--	--	--	--	--	--	--	--	**0.0073**	--	--	--	--	--	--	--	**0.021**	--	--	--	--	--	--	--	--	--	--	--	--
MW-77S	--	Supplementary	11/10/2023	FC-CCR-MW77S-1123	--	--	--	--	--	--	--	--	--	--	--	--	**0.0069**	--	--	--	--	--	--	--	**0.017**	--	--	--	--	--	--	--	--	--	--	--	--
MW-78S	--	Supplementary	6/21/2020	FC-CCR-MW78S-0620	--	--	--	--	--	--	--	--	--	--	--	--	**0.0063**	--	--	--	--	--	--	--	**0.039**	--	--	--	--	--	--	--	--	--	--	--	--
MW-78S	--	Supplementary	4/24/2021	FC-CCR-MW78S-0421	--	--	--	--	--	--	--	--	--	--	--	--	**0.019**	--	--	--	--	--	--	--	**0.022**	--	--	--	--	--	--	--	--	--	--	--	--
MW-78S	--	Supplementary	11/14/2021	FC-CCR-MW78S	--	--	--	--	--	--	--	--	--	--	--	--	**0.0071**	--	--	--	--	--	--	--	**0.013**	--	--	--	--	--	--	--	--	--	--	--	--
MW-78S	--	Supplementary	5/23/2022	FC-CCR-MW78S-0522	--	--	--	--	--	--	--	--	--	--	--	--	**0.0033**	--	--	--	--	--	--	--	**0.0092**	--	--	--	--	--	--	--	--	--	--	--	--
MW-78S	--	Supplementary	11/10/2022	FC-CCR-MW78S-1122	--	--	--	--	--	--	--	--	--	--	--	--	**0.0035**	--	--	--	--	--	--	--	**0.0098**	--	--	--	--	--	--	--	--	--	--	--	--
MW-79S	--	Supplementary	6/22/2019	*DUP* FC-NIT-FD01-62219	<0.0010	--	**0.0031**	--	**0.022**	--	<0.0010	--	**0.00014**	--	**0.0016**	--	**0.0023**	--	<0.80	<0.00050	--	**0.9**	<0.00020	--	**0.0028**	--	<0.00050	--	**0.00053**	--	--	--	--	--	--	--	--
MW-79S	--	Supplementary	6/22/2019	FC-NIT-MW79S-62219	<0.0010	--	**0.0026**	--	**0.022**	--	<0.0010	--	**0.00016**	--	**0.0015**	--	**0.0027**	--	<0.80	<0.00050	--	**0.93**	<0.00020	--	**0.0029**	--	<0.00050	--	**0.00054**	--	--	--	--	--	--	--	--
MW-79S	--	Supplementary	4/24/2021	FC-CCR-MW79S-0421	--	--	--	--	--	--	--	--	--	--	--	--	**0.0038**	--	--	--	--	--	--	--	**0.011**	--	--	--	--	--	--	--	--	--	--	--	--
MW-79S	--	Supplementary	11/14/2021	FC-CCR-MW79S	--	--	--	--	--	--	--	--	--	--	--	--	**0.0036**	--	--	--	--	--	--	--	**0.0092**	--	--	--	--	--	--	--	--	--	--	--	--
MW-79S	--	Supplementary	5/23/2022	FC-CCR-MW79S-0522	--	--	--	--	--	--	--	--	--	--	--	--	**0.0036**	--	--	--	--	--	--	--	**0.0070**	--	--	--	--	--	--	--	--	--	--	--	--
MW-79S	--	Supplementary	11/10/2022	FC-CCR-MW79S-1122	--	--	--	--	--	--	--	--	--	--	--	--	**0.0042**	--	--	--	--	--	--	--	**0.0050**	--	--	--	--	--	--	--	--	--	--	--	--
MW-79S	--	Supplementary	5/3/2023	FC-CCR-MW79S-0523	--	--	--	--	--	--	--	--	--	--	--	--	**0.0035 J**	--	--	--	--	--	--	--	**0.0044**	--	--	--	--	--	--	--	--	--	--	--	--
MW-79S	--	Supplementary	11/10/2023	FC-CCR-MW79S-1123	--	--	--	--	--	--	--	--	--	--	--	--	<0.005	--	--	--	--	--	--	--	<0.005	--	--	--	--	--	--	--	--	--	--	--	--
MW-81	--	Supplementary	6/22/2019	FC-NIT-MW81-62219	<0.0010	--	**0.0044**	--	**0.021**	--	<0.0010	--	**0.00018**	--	**0.0012**	--	**0.011**	--	<0.80	**0.00099**	--	**0.93**	<0.00020	--	**0.017**	--	<0.00050	--	<0.00010	--	--	--	--	--	--	--	--
MW-81	--	Supplementary	6/21/2020	FC-CCR-MW81-0620	--	--	--	--	--	--	--	--	--	--	--	--	**0.021**	--	--	--	--	--	--	--	**0.027**	--	--	--	--	--	--	--	--	--	--	--	--
MW-81	--	Supplementary	11/8/2020	FC-CCR-MW81-1120	--	--	--	--	--	--	--	--	--	--	--	--	**0.018**	--	--	--	--	--	--	--	**0.0077**	--	--	--	--	--	--	--	--	--	--	--	--
MW-81	--	Supplementary	4/24/2021	FC-CCR-MW81-0421	--	--	--	--	--	--	--	--	--	--	--	--	**0.020**	--	--	--	--	--	--	--	**0.0072**	--	--	--	--	--	--	--	--	--	--	--	--
MW-81	--	Supplementary	4/24/2021	FC-CCR-FD061-0421	--	--	--	--	--	--	--	--	--	--	--	--	**0.020**	--	--	--	--	--	--	--	**0.0073**	--	--	--	--	--	--	--	--	--	--	--	--
MW-81	--	Supplementary	11/14/2021	FC-CCR-MW81	--	--	--	--	--	--	--	--	--	--	--	--	**0.023**	--	--	--	--	--	--	--	**0.0035**	--	--	--	--	--	--	--	--	--	--	--	--
MW-81	--	Supplementary	11/14/2021	FC-CCR-FD05	--	--	--	--	--	--	--	--	--	--	--	--	**0.022**	--	--	--	--	--	--	--	**0.0034**	--	--	--	--	--	--	--	--	--	--	--	--
MW-81	--	Supplementary	5/23/2022	FC-CCR-MW81-0522	--	--	--	--	--	--	--	--	--	--	--	--	**0.022**	--	--	--	--	--	--	--	**0.0017**	--	--	--	--	--	--	--	--	--	--	--	--

Table F-14
Groundwater Sampling Results for the Additional Monitoring Wells - Appendix IV Constituents

					Appendix IV Constituents																															
				Constituent:	Antimony	Antimony	Arsenic	Arsenic	Barium	Barium	Beryllium	Beryllium	Cadmium	Cadmium	Chromium	Chromium	Cobalt	Cobalt	Fluoride	Lead	Lead	Lithium	Mercury	Mercury	Molybdenum	Molybdenum	Selenium	Selenium	Thallium	Thallium	Total Radium	
				Filtered:	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	N	Y	N	N	Y	N	Y	N	Y	N	Y	N						
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L						
Well ID	CCR Unit	Well Designation	Sample Date	Sample ID																																
MW-81	--	Supplementary	11/10/2022	FC-CCR-MW81-1122	--	--	--	--	--	--	--	--	--	--	--	--	**0.020**	--	--	--	--	--	--	--	**0.0025**	--	--	--	--	--	--						
MW-81	--	Supplementary	11/10/2022	*DUP* FC-CCR-FD07-1122	--	--	--	--	--	--	--	--	--	--	--	--	**0.023**	--	--	--	--	--	--	--	**0.0025**	--	--	--	--	--	--						
MW-81	--	Supplementary	5/3/2023	FC-CCR-MW81-0523	--	--	--	--	--	--	--	--	--	--	--	--	**0.019**	--	--	--	--	--	--	--	**0.0021**	--	--	--	--	--	--						
MW-81	--	Supplementary	5/3/2023	*DUP* FC-CCR-FD07-0523	--	--	--	--	--	--	--	--	--	--	--	--	**0.020**	--	--	--	--	--	--	--	**0.0024**	--	--	--	--	--	--						
MW-81	--	Supplementary	11/10/2023	FC-CCR-MW81-1123	--	--	--	--	--	--	--	--	--	--	--	--	**0.022**	--	--	--	--	--	--	--	<0.005	--	--	--	--	--	--						
MW-81	--	Supplementary	11/10/2023	*DUP* FC-CCR-FD07-1123	--	--	--	--	--	--	--	--	--	--	--	--	**0.021**	--	--	--	--	--	--	--	<0.005	--	--	--	--	--	--						
MW-11	DFADA	Supplementary	11/18/2021	FC-CCR-MW11-1121		--											**0.022**	--	**2.9**						**0.0034**	--	--	--	--	--	--						
MW-11	DFADA	Supplementary	5/26/2022	FC-CCR-MW11-0522	--	--	--	--	--	--	--	--	--	--	--	--	**0.022**	--	<0.8	--	--	--	--	--	<0.002	--	--	--	--	--	--						
MW-11	DFADA	Supplementary	11/16/2022	FC-CCR-MW11-1122	--	--	--	--	--	--	--	--	--	--	--	--	**0.019**	--	<40	--	--	--	--	--	<0.001	--	--	--	--	--	--						
MW-11	DFADA	Supplementary	5/5/2023	FC-CCR-MW11-0523	--	--	--	--	--	--	<0.001	--	--	--	--	--	**0.022**	--	<80	--	--	--	--	--	<0.002	--	--	--	--	--	--						
MW-11	DFADA	Supplementary	11/15/2023	FC-CCR-MW11-1123	--	--	--	--	--	--	--	--	--	--	--	--	**0.025**	--	<0.8	--	--	--	--	--	<0.005	--	--	--	--	--	--						
EW-11R	--	Supplementary	11/16/2023	FC-CCR-EW11R-1123	--	--	--	--	--	--	--	--	--	--	--	--	**0.0061**	--	<0.8	--	--	--	--	--	**0.019**	--	--	--	--	--	--						
EW-12R	--	Supplementary	11/16/2023	FC-CCR-EW12R-1123	--	--	--	--	--	--	--	--	--	--	--	--	<0.005	--	<0.8	--	--	--	--	--	**0.069**	--	--	--	--	--	--						
EW-17	Multiunit 1	Extraction	5/8/2023	FC-CCR-EW17-0523	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.0002	--	--	--	--	--	--	--						
EW-17	Multiunit 1	Extraction	11/15/2023	FC-CCR-EW17-1123	--	--	--	--	--	--	--	--	--	--	--	--	**0.011**	--	<0.8	--	--	--	--	--	<0.005	--	--	--	--	--	--						
MW-78S	--	Supplementary	5/3/2023	FC-CCR-MW78S-0523	--	--	--	--	--	--	--	--	--	--	--	--	**0.0066**	--	--	--	--	--	--	--	**0.017**	--	--	--	--	--	--						
MW-78S	--	Supplementary	11/10/2023	FC-CCR-MW78S-1123	--	--	--	--	--	--	--	--	--	--	--	--	<0.005	--	--	--	--	--	--	--	**0.0074**	--	--	--	--	--	--						
MW-82S	--	Supplementary	6/22/2019	FC-NIT-MW82S-62219	<0.0010	--	**0.0014**	--	**0.019**	--	<0.0010	--	**0.0015**	--	**0.0037**	--	**0.12**	--	<0.80	**0.0034**	--	**0.75**	<0.00020	--	**0.0036**	--	<0.00050	--	**0.00038**	--	--						
MW-82S	--	Supplementary	6/21/2020	FC-CCR-MW82S-0620	--	--	--	--	--	--	--	--	--	--	--	--	**0.13**	--	--	--	--	--	--	--	**0.0044**	--	--	--	--	--	--						
MW-82S	--	Supplementary	11/8/2020	FC-CCR-MW82S-1120	--	--	--	--	--	--	--	--	--	--	--	--	**0.10**	--	--	--	--	--	--	--	**0.0028**	--	--	--	--	--	--						
MW-82S	--	Supplementary	11/14/2021	FC-CCR-MW82S	--	--	--	--	--	--	--	--	--	--	--	--	**0.060**	--	**0.35J**	--	--	--	--	--	**0.00048J**	--	--	--	--	--	--						
MW-82S	--	Supplementary	5/23/2022	FC-CCR-MW82S-0522	--	--	--	--	--	--	--	--	--	--	--	--	**0.063**	--	<0.8	--	--	--	--	--	<0.001	--	--	--	--	--	--						
MW-82S	--	Supplementary	5/5/2023	FC-CCR-MW82S-0523	--	--	--	--	--	--	<0.01	--	--	--	--	--	**0.096**	--	<40	--	--	--	--	--	**0.0065**	--	--	--	--	--	--						
MW-82S	--	Supplementary	11/10/2023	FC-CCR-MW82S-1123	--	--	--	--	--	--	<0.005	--	--	--	--	--	**0.10**	--	<0.8	--	--	--	--	--	<0.005	--	--	--	--	--	--						
MW-82S	--	Supplementary	11/10/2023	*DUP* FC-CCR-FD02-1123	--	--	--	--	--	--	<0.005	--	--	--	--	--	**0.11**	--	<0.8	--	--	--	--	--	<0.005	--	--	--	--	--	--						
IP-03	--	Supplementary	6/29/2015	IP-3	--	--	<0.0030	--	--	--	--	--	--	--	<0.0030	--	--	--	<4.0	--	--	--	--	--	--	--	**0.11**	--	--	--	--						
IP-05	--	Supplementary	6/29/2015	IP-5	--	--	<0.0030	--	--	--	--	--	--	--	**0.0041**	--	--	--	<4.0	--	--	--	--	--	--	--	**0.59**	--	--	--	--						
Ash Pond	--	--	07/02/2013	FC-AP-070213	**0.0451**	--	--	**0.301**	--	**0.0307**	--	<0.0100	--	<0.0020	--	<0.0200	--	<0.0020	**45.6**	--	<0.0100	--	--	<0.0002	--	**0.0177**	--	**0.0591**	--	<0.0020	--						
Ash Pond	--	--	08/05/2013	FC-AP-080513	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**49.6**	--	--	--	--	--	--	--	--	--	--	--	--						
Ash Pond	--	--	09/03/2013	FC-AP-090313	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**52.3**	--	--	--	--	--	--	--	--	--	--	--	--						
Ash Pond	--	--	10/01/2013	FC-AP-100113	<0.0250	--	--	**0.57**	--	**0.0274**	--	<0.0250	--	<0.0050	--	**0.0532**	--	<0.0050	**47.3**	--	<0.0250	--	--	<0.0002	--	<0.0250	--	**0.265**	--	**0.0086**	--						
Ash Pond	--	--	11/07/2013	FC-AP-110713	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**51.3**	--	--	--	--	--	--	--	--	--	--	--	--						
Ash Pond	--	--	01/07/2015	FC-AP-010715	**0.136**	--	--	**1.21**	--	**0.021**	--	<0.0100	--	<0.0020	--	<0.0200	--	<0.0020	--	--	<0.0100	--	--	<0.0002	--	**0.0255**	--	**0.413**	--	<0.0020	--						
Ash Pond	--	--	04/10/2015	FC-AP-041015	**0.022**	--	--	**0.0363**	--	**0.0237**	--	<0.0100	--	<0.0020	--	<0.0200	--	<0.0020	--	--	<0.0100	--	--	<0.0002	--	<0.0100	--	**0.354**	--	<0.0020	--						
Ash Pond	--	--	07/15/2015	FC-AP-071515	**0.0329**	--	--	**0.139**	--	**0.0224**	--	<0.0100	--	<0.0020	--	**0.0227**	--	<0.0020	--	--	<0.0100	--	--	<0.0002	--	**0.0167**	--	**0.0804**	--	**0.0050**	--						
Ash Pond	--	--	10/20/2015	FC-AP-102015	<0.0250	--	--	**0.182**	--	**0.0353**	--	<0.0250	--	<0.0050	--	<0.0500	--	<0.0050	--	--	<0.0250	--	--	<0.0002	--	**0.0253**	--	**0.0604**	--	<0.0050	--						
Ash Pond	--	--	01/11/2016	FC-AP-011116	<0.0250	--	--	**0.258**	--	<0.0250	--	<0.0250	--	<0.0050	--	<0.0500	--	<0.0050	--	--	<0.0250	--	--	<0.0002	--	**0.0585**	--	**0.171**	--	<0.0050	--						
Ash Pond	--	--	04/25/2016	FC-AP-042516	**0.0507**	--	--	**1.28**	--	<0.0250	--	<0.0250	--	<0.0050	--	<0.0500	--	<0.0050	--	--	<0.0250	--	--	<0.0002	--	**0.0379**	--	**1.49**	--	<0.0050	--						
Ash Pond	--	--	5/9/2023	FC-CCR-APV6-0523	<0.002	--	<0.005	--	**0.016**	--	<0.001	--	<0.001	--	<0.003	--	**0.034**	--	<2	<0.001	--	**1.1**	<0.0002	--	**0.0099**	--	**0.025**	--	<0.001	--	**1.8**						
Ash Pond	--	--	11/09/2023	FC-CCR-AshPond6-1123	--	--	--	--	--	--	--	--	--	--	--	--	**0.031**	--	--	--	--	--	--	--	**0.0043**	--	--	--	--	--	--						
SUMP-1	--	--	4/23/2021	FC-CCR-SUMP1-0421	--	--	--	--	--	--	--	--	--	--	--	--	**0.067**	--	--	--	--	--	--	--	**0.13**	--	--	--	--	--	--						
SUMP-1	--	--	11/17/2021	FC-CCR-SUMP1-1121	--	--	--	--	--	--	--	--	--	--	--	--	**0.060**	--	--	--	--	--	--	--	**0.13**	--	--	--	--	--	--						
SUMP-1	--	--	5/26/2022	FC-CCR-SUMP1-0522	--	--	--	--	--	--	--	--	--	--	--	--	**0.059**	--	--	--	--	--	--	--	**0.11**	--	--	--	--	--	--						
SUMP-1	--	--	11/15/2022	FC-CCR-SUMP1-1122	--	--	--	--	--	--	--	--	--	--	--	--	**0.056**	--	--	--	--	--	--	--	**0.19**	--	--	--	--	--	--						
SUMP-1	--	--	5/5/2023	FC-CCR-SUMP1-0523	--	--	--	--	--	--	--	--	--	--	--	--	**0.047**	--	--	--	--	--	--	--	**0.087**	--	--	--	--	--	--						
SUMP-1	--	--	11/09/2023	FC-CCR-SUMP1-1123	--	--	--	--	--	--	--	--	--	--	--	--	**0.045**	--	--	--	--	--	--	--	**0.12**	--	--	--	--	--	--						
SUMP-2	--	--	4/23/2021	FC-CCR-SUMP2-0421	--	--	--	--	--	--	--	--	--	--	--	--	**0.0024**	--	--	--	--	--	--	--	**0.0054**	--	--	--	--	--	--						
SUMP-2	--	--	11/17/2021	FC-CCR-SUMP2-1121	--	--	--	--	--	--	--	--	--	--	--	--	**0.00018 J**	--	--	--	--	--	--	--	**0.0051**	--	--	--	--	--	--						
SUMP-2	--	--	5/26/2022	FC-CCR-SUMP2-0522	--	--	--	--	--	--	--	--	--	--	--	--	**0.0015**	--	--	--	--	--	--	--	**0.0042**	--	--	--	--	--	--						
SUMP-2	--	--	11/15/2022	FC-CCR-SUMP2-1122	--	--	--	--	--	--	--	--	--	--	--	--	**0.0028**	--	--	--	--	--	--	--	**0.0059**	--	--	--	--	--	--						
SUMP-2	--	--	5/5/2023	FC-CCR-SUMP2-0523	--	--	--	--	--	--	--	--	--	--	--	--	<0.001	--	--	--	--	--	--	--	**0.0068**	--	--	--	--	--	--						
SUMP-2	--	--	11/09/2023	FC-CCR-SUMP2-1123	--	--	--	--	--	--	--	--	--	--	--	--	<0.0005	--	--	--	--	--	--	--	**0.0034**	--	--	--	--	--	--						
SUMP-3	--	--	4/23/2021	FC-CCR-SUMP3-0421	--	--	--	--	--	--	--	--	--	--	--	--	**0.0025**	--	--	--	--	--	--	--	**0.017**	--	--	--	--	--	--						
SUMP-3	--	--	11/17/2021	FC-CCR-SUMP3-1121	--	--	--	--	--	--	--	--	--	--	--	--	**0.0021**	--	--	--	--	--	--	--	**0.021**	--	--	--	--	--	--						
SUMP-3	--	--	5/26/2022	FC-CCR-SUMP3-0522	--	--	--	--	--	--	--	--	--	--	--	--	**0.0024**	--	--	--	--	--	--	--	**0.013**	--	--	--	--	--	--						
SUMP-3	--	--	11/15/2022	FC-CCR-SUMP3-1122	--	--	--	--	--	--	--	--	--	--	--	--	**0.0042**	--	--	--	--	--	--	--	**0.015**	--	--	--	--	--	--						
SUMP-3	--	--	5/5/2023	FC-CCR-SUMP3-0523	--	--	--	--	--	--	--	--	--	--	--	--	**0.0026**	--	--	--	--	--	--	--	**0.014**	--	--	--	--	--	--						
SUMP-3	--	--	11/09/2023	FC-CCR-SUMP3-1123	--	--	--	--	--	--	--	--	--	--	--	--	**0.0019**	--	--	--	--	--	--	--	**0.014**	--	--	--	--	--	--						
SUMP-7	--	--	4/23/2021	FC-CCR-SUMP7-0421	--	--	--	--	--	--	--	--	--	--	--	--	**0.083**	--	--	--	--	--	--	--	**0.0054**	--	--	--	--	--	--						
SUMP-7	--	--	11/17/2021	FC-CCR-SUMP7-1121	--	--	--	--	--	--	--	--	--	--	--	--	**0.082**	--	--	--	--	--	--	--	**0.0051**	--	--	--	--	--	--						
SUMP-7	--	--	5/26/2022	FC-CCR-SUMP7-0522	--	--	--	--	--	--	--	--	--	--	--	--	**0.067**	--	--	--	--	--	--	--	**0.0039**	--	--	--	--	--	--						
SUMP-7	--	--	11/15/2022	FC-CCR-SUMP7-1122	--	--	--	--	--	--	--	--	--	--	--	--	**0.074**	--	--	--	--	--	--	--	**0.0042**	--	--	--	--	--	--						
SUMP-7	--	--	5/5/2023	FC-CCR-SUMP7-0523	--	--	--	--	--	--	--	--	--	--	--	--	**0.062**	--	--	--	--	--	--	--	**0.0030**	--	--	--	--	--	--						
SUMP-7	--	--	11/09/2023	FC-CCR-SUMP7-1123	--	--	--	--	--	--	--	--	--	--	--	--	**0.069**	--	--	--	--	--	--	--	**0.0038**	--	--	--	--	--	--						
SUMP-8	--	--	4/23/2021	FC-CCR-SUMP8-0421	--	--	--	--	--	--	--	--	--	--	--	--	**0.041**	--	--	--	--	--	--	--	**0.0032**	--	--	--	--	--	--						
SUMP-8	--	--	11/17/2021	FC-CCR-SUMP8-1121	--	--	--	--	--	--	--	--	--	--	--	--	**0.036**	--	--	--	--	--	--	--	**0.0037**	--	--	--	--	--	--						
SUMP-8	--	--	11/15/2022	FC-CCR-SUMP8-1122	--	--	--	--	--	--	--	--	--	--	--	--	**0.027**	--	--	--	--	--	--	--	**0.0039**	--	--	--	--	--	--						
SUMP-8	--	--	5/5/2023	FC-CCR-SUMP8-0523	--	--	--	--	--	--	--	--	--	--	--	--	**0.026**	--	--	--	--	--	--	--	**0.0023**	--	--	--	--	--	--						
SUMP-8	--	--	11/09/2023	FC-CCR-SUMP8-1123	--	--	--	--	--	--	--	--	--	--	--	--	**0.028**	--	--	--	--	--	--	--	**0.0024**	--	--	--	--	--	--						
SUMP-9	--	--	4/23/2021	FC-CCR-SUMP9-0421	--	--	--	--	--	--	--	--	--	--	--	--	**0.025**	--	--	--	--	--	--	--	**0.0023**	--	--	--	--	--	--						
SUMP-9	--	--	11/17/2021	FC-CCR-SUMP9-1121	--	--	--	--	--	--	--	--	--	--	--	--	**0.022**	--	--	--	--	--	--	--	**0.0011**	--	--	--	--	--	--						
SUMP-9	--	--	5/26/2022	FC-CCR-SUMP9-0522	--	--	--	--	--	--	--	--	--	--	--	--	**0.021**	--	--	--	--	--	--	--	<0.002	--	--	--	--	--	--						
SUMP-9	--	--	11/15/2022	FC-CCR-SUMP9-1122	--	--	--	--	--	--	--	--	--	--	--	--	**0.021**	--	--	--	--	--	--	--	**0.0010**	--	--	--	--	--	--						
SUMP-9	--	--	5/5/2023	FC-CCR-SUMP9-0523	--	--	--	--	--	--	--	--	--	--	--	--	**0.022**	--	--	--	--	--	--	--	**0.027**	--	--	--	--	--	--						
SUMP-9	--	--	11/09/2023	FC-CCR-SUMP9-1123	--	--	--	--	--	--	--	--	--	--	--	--	**0.023**	--	--	--	--	--	--	--	**0.0098**	--	--	--	--	--	--						
SUMP-10	--	--	4/23/2021	FC-CCR-SUMP10-0421	--	--	--	--	--	--	--	--	--	--	--	--	**0.19**	--	--	--	--	--	--	--	**0.00085J**	--	--	--	--	--	--						
SUMP-10	--	--	11/17/2021	FC-CCR-SUMP10-1121	--	--	--	--	--	--	--	--	--	--	--	--	**0.19**	--	--	--	--	--	--	--	**0.00089J**	--	--	--	--	--	--						
SUMP-10	--	--	5/26/2022	FC-CCR-SUMP10-0522	--	--	--	--	--	--	--	--	--	--	--	--	**0.18**	--	--	--	--	--	--	--	<0.001	--	--	--	--	--	--						
SUMP-10	--	--	11/15/2022	FC-CCR-SUMP10-1122	--	--	--	--	--	--	--	--	--	--	--	--	**0.18**	--	--	--	--	--	--	--	**0.0013**	--	--	--	--	--	--						
SUMP-10	--	--	5/5/2023	FC-CCR-SUMP10-0523	--	--	--	--	--	--	--	--	--	--	--	--	**0.15**	--	--	--	--	--	--	--	<0.002	--	--	--	--	--	--						

Table F-14
Groundwater Sampling Results for the Additional Monitoring Wells - Appendix IV Constituents

					Appendix IV Constituents																														
				Constituent:	Antimony	Antimony	Arsenic	Arsenic	Barium	Barium	Beryllium	Beryllium	Cadmium	Cadmium	Chromium	Chromium	Cobalt	Cobalt	Fluoride	Lead	Lead	Lithium	Mercury	Mercury	Molybdenum	Molybdenum	Selenium	Selenium	Thallium	Thallium	Total Radium					
				Filtered:	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	N	Y	N	N	Y	N	Y	N	Y	N	Y	N					
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L					
Well ID	CCR Unit	Well Designation	Sample Date	Sample ID																															
SUMP-10	--	--	11/09/2023	FC-CCR-SUMP10-1123	--	--	--	--	--	--	--	--	--	--	--	--	**0.15**	--	--	--	--	--	--	--	**0.00085**	--	--	--	--	--	--					
SUMP-11	--	--	4/23/2021	FC-CCR-SUMP11-0421	--	--	--	--	--	--	--	--	--	--	--	--	**0.072**	--	--	--	--	--	--	--	**0.0055**	--	--	--	--	--	--					
SUMP-11	--	--	11/17/2021	FC-CCR-SUMP11-1121	--	--	--	--	--	--	--	--	--	--	--	--	**0.18**	--	--	--	--	--	--	--	**0.0014**	--	--	--	--	--	--					
SUMP-11	--	--	5/26/2022	FC-CCR-SUMP11-0522	--	--	--	--	--	--	--	--	--	--	--	--	**0.18**	--	--	--	--	--	--	--	<0.001	--	--	--	--	--	--					
SUMP-11	--	--	11/15/2022	FC-CCR-SUMP11-1122	--	--	--	--	--	--	--	--	--	--	--	--	**0.16**	--	--	--	--	--	--	--	**0.00082**	--	--	--	--	--	--					
SUMP-11	--	--	5/5/2023	FC-CCR-SUMP11-0523	--	--	--	--	--	--	--	--	--	--	--	--	**0.077**	--	--	--	--	--	--	--	<0.002	--	--	--	--	--	--					
SUMP-11	--	--	11/09/2023	FC-CCR-SUMP11-1123	--	--	--	--	--	--	--	--	--	--	--	--	**0.084**	--	--	--	--	--	--	--	**0.00075**	--	--	--	--	--	--					
SUMP-12	--	--	4/23/2021	FC-CCR-SUMP12-0421	--	--	--	--	--	--	--	--	--	--	--	--	**0.052**	--	--	--	--	--	--	--	<0.002	--	--	--	--	--	--					
SUMP-12	--	--	11/17/2021	FC-CCR-SUMP12-1121	--	--	--	--	--	--	--	--	--	--	--	--	**0.19**	--	--	--	--	--	--	--	**0.00088J**	--	--	--	--	--	--					
SUMP-12	--	--	5/26/2022	FC-CCR-SUMP12-0522	--	--	--	--	--	--	--	--	--	--	--	--	**0.084**	--	--	--	--	--	--	--	<0.001	--	--	--	--	--	--					
SUMP-12	--	--	11/15/2022	FC-CCR-SUMP12-1122	--	--	--	--	--	--	--	--	--	--	--	--	**0.057**	--	--	--	--	--	--	--	**0.00088**	--	--	--	--	--	--					
SUMP-12	--	--	11/9/2023	FC-CCR-SUMP12-1123	--	--	--	--	--	--	--	--	--	--	--	--	**0.050**	--	--	--	--	--	--	--	**0.00057**	--	--	--	--	--	--					
SUMP-12	--	--	5/5/2023	FC-CCR-SUMP12-0523	--	--	--	--	--	--	--	--	--	--	--	--	**0.061**	--	--	--	--	--	--	--	<0.002	--	--	--	--	--	--					
SUMP-13	--	--	4/23/2021	FC-CCR-SUMP13-0421	--	--	--	--	--	--	--	--	--	--	--	--	**0.041**	--	--	--	--	--	--	--	**0.0064**	--	--	--	--	--	--					
SUMP-13	--	--	11/17/2021	FC-CCR-SUMP13-1121	--	--	--	--	--	--	--	--	--	--	--	--	**0.093**	--	--	--	--	--	--	--	**0.00097J**	--	--	--	--	--	--					
SUMP-13	--	--	5/26/2022	FC-CCR-SUMP13-0522	--	--	--	--	--	--	--	--	--	--	--	--	**0.18**	--	--	--	--	--	--	--	<0.001	--	--	--	--	--	--					
SUMP-13	--	--	11/15/2022	FC-CCR-SUMP13-1122	--	--	--	--	--	--	--	--	--	--	--	--	**0.057**	--	--	--	--	--	--	--	**0.0013**	--	--	--	--	--	--					
SUMP-13	--	--	5/5/2023	FC-CCR-SUMP13-0523	--	--	--	--	--	--	--	--	--	--	--	--	**0.099**	--	--	--	--	--	--	--	<0.002	--	--	--	--	--	--					
SUMP-13	--	--	11/9/2023	FC-CCR-SUMP13-1123	--	--	--	--	--	--	--	--	--	--	--	--	**0.095**	--	--	--	--	--	--	--	**0.0016**	--	--	--	--	--	--					
SUMP-14	--	--	4/23/2021	FC-CCR-SUMP14-0421	--	--	--	--	--	--	--	--	--	--	--	--	**0.11**	--	--	--	--	--	--	--	**0.021**	--	--	--	--	--	--					
SUMP-14	--	--	11/17/2021	FC-CCR-SUMP14-1121	--	--	--	--	--	--	--	--	--	--	--	--	**0.061**	--	--	--	--	--	--	--	**0.0032**	--	--	--	--	--	--					
SUMP-14	--	--	5/26/2022	FC-CCR-SUMP14-0522	--	--	--	--	--	--	--	--	--	--	--	--	**0.17**	--	--	--	--	--	--	--	**0.0013**	--	--	--	--	--	--					
SUMP-14	--	--	5/5/2023	FC-CCR-SUMP14-0523	--	--	--	--	--	--	--	--	--	--	--	--	**0.067**	--	--	--	--	--	--	--	**0.0043**	--	--	--	--	--	--					
SUMP-14	--	--	11/9/2023	FC-CCR-SUMP14-1123	--	--	--	--	--	--	--	--	--	--	--	--	**0.096**	--	--	--	--	--	--	--	**0.0076**	--	--	--	--	--	--					
SUMP-15	--	--	4/23/2021	FC-CCR-SUMP15-0421	--	--	--	--	--	--	--	--	--	--	--	--	**0.18**	--	--	--	--	--	--	--	**0.0020**	--	--	--	--	--	--					
SUMP-15	--	--	11/17/2021	FC-CCR-SUMP15-1121	--	--	--	--	--	--	--	--	--	--	--	--	**0.0015**	--	--	--	--	--	--	--	**0.0032**	--	--	--	--	--	--					
SUMP-15	--	--	5/26/2022	FC-CCR-SUMP15-0522	--	--	--	--	--	--	--	--	--	--	--	--	**0.031**	--	--	--	--	--	--	--	**0.0019**	--	--	--	--	--	--					
SUMP-15	--	--	11/15/2022	FC-CCR-SUMP15-1122	--	--	--	--	--	--	--	--	--	--	--	--	**0.084**	--	--	--	--	--	--	--	**0.013**	--	--	--	--	--	--					
SUMP-15	--	--	5/5/2023	FC-CCR-SUMP15-0523	--	--	--	--	,	--	--	--	--	--	--	--	**0.0051**	--	--	--	--	--	--	--	**0.0028**	--	--	--	--	--	--					
SUMP-15	--	--	11/9/2023	FC-CCR-SUMP15-1123	--	--	--	--	--	--	--	--	--	--	--	--	**0.0038**	--	--	--	--	--	--	--	**0.0035**	--	--	--	--	--	--					
SUMP-16	--	--	4/23/2021	FC-CCR-SUMP16-0421	--	--	--	--	--	--	--	--	--	--	--	--	**0.082**	--	--	--	--	--	--	--	**0.0011 J**	--	--	--	--	--	--					
SUMP-16	--	--	11/17/2021	FC-CCR-SUMP16-1121	--	--	--	--	--	--	--	--	--	--	--	--	**0.029**	--	--	--	--	--	--	--	**0.0029**	--	--	--	--	--	--					
SUMP-16	--	--	5/26/2022	FC-CCR-SUMP16-0522	--	--	--	--	--	--	--	--	--	--	--	--	**0.025**	--	--	--	--	--	--	--	**0.0020**	--	--	--	--	--	--					
SUMP-16	--	--	5/26/2022	FC-CCR-SS10-0522	--	--	--	--	--	--	--	--	--	--	--	--	**0.0225**	--	--	--	--	--	--	--	<0.01	--	--	--	--	--	--					
SUMP-16	--	--	11/15/2022	FC-CCR-SUMP16-1122	--	--	--	--	--	--	--	--	--	--	--	--	**0.018**	--	--	--	--	--	--	--	**0.0023**	--	--	--	--	--	--					
SUMP-16	--	--	5/5/2023	FC-CCR-SUMP16-0523	--	--	--	--	--	--	--	--	--	--	--	--	**0.051**	--	--	--	--	--	--	--	<0.002	--	--	--	--	--	--					
SUMP-16	--	--	11/09/2023	FC-CCR-SUMP16-1123	--	--	--	--	--	--	--	--	--	--	--	--	**0.014**	--	--	--	--	--	--	--	**0.0014**	--	--	--	--	--	--					
SUMP-17	--	--	4/23/2021	FC-CCR-SUMP17-0421	--	--	--	--	--	--	--	--	--	--	--	--	**0.0013 J**	--	--	--	--	--	--	--	**0.0015 J**	--	--	--	--	--	--					
SUMP-17	--	--	11/17/2021	FC-CCR-SUMP17-1121	--	--	--	--	--	--	--	--	--	--	--	--	**0.0011**	--	--	--	--	--	--	--	**0.0016**	--	--	--	--	--	--					
SUMP-17	--	--	5/26/2022	FC-CCR-SUMP17-0522	--	--	--	--	--	--	--	--	--	--	--	--	<0.002	--	--	--	--	--	--	--	**0.0030**	--	--	--	--	--	--					
SUMP-17	--	--	11/15/2022	FC-CCR-SUMP17-1122	--	--	--	--	--	--	--	--	--	--	--	--	**0.00097**	--	--	--	--	--	--	--	**0.0032**	--	--	--	--	--	--					
SUMP-17	--	--	5/5/2023	FC-CCR-SUMP17-0523	--	--	--	--	--	--	--	--	--	--	--	--	<0.001	--	--	--	--	--	--	--	<0.002	--	--	--	--	--	--					
SUMP-17	--	--	11/09/2023	FC-CCR-SUMP17-1123	--	--	--	--	--	--	--	--	--	--	--	--	**0.00091**	--	--	--	--	--	--	--	**0.0010**	--	--	--	--	--	--					
SUMP-18	--	--	4/23/2021	FC-CCR-SUMP18-0421	--	--	--	--	--	--	--	--	--	--	--	--	**0.0011 J**	--	--	--	--	--	--	--	**0.0033**	--	--	--	--	--	--					
SUMP-18	--	--	11/17/2021	FC-CCR-SUMP18-1121	--	--	--	--	--	--	--	--	--	--	--	--	**0.0013**	--	--	--	--	--	--	--	**0.0036**	--	--	--	--	--	--					
SUMP-18	--	--	11/17/2021	FC-CCR-FD07-1121	--	--	--	--	--	--	--	--	--	--	--	--	**0.0011**	--	--	--	--	--	--	--	**0.0032**	--	--	--	--	--	--					
SUMP-18	--	--	5/26/2022	FC-CCR-SUMP18-0522	--	--	--	--	--	--	--	--	--	--	--	--	<0.002	--	--	--	--	--	--	--	**0.0032**	--	--	--	--	--	--					
SUMP-18	--	--	11/15/2022	FC-CCR-SUMP18-1122	--	--	--	--	--	--	--	--	--	--	--	--	**0.00089**	--	--	--	--	--	--	--	**0.0034**	--	--	--	--	--	--					
SUMP-18	--	--	5/5/2023	FC-CCR-SUMP18-0523	--	--	--	--	--	--	--	--	--	--	--	--	<0.001	--	--	--	--	--	--	--	**0.0032**	--	--	--	--	--	--					
SUMP-18	--	--	11/09/2023	FC-CCR-SUMP18-1123	--	--	--	--	--	--	--	--	--	--	--	--	<0.002	--	--	--	--	--	--	--	**0.0030**	--	--	--	--	--	--					

Abbreviations and Data Qualifiers:

*data appear anomalous
< = less than
CCR = Coal Combustion Residual
degrees C = degrees Celsius
ID = Identification
J = The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
mg/L = milligrams per liter
pCi/L = Picocuries per liter
su = standard units

Table F-15
Groundwater Sampling Results for the Additional Monitoring Wells - Additional Analyses

| | | | | | Additional Analyses | | | | |

Table F-15
Groundwater Sampling Results for the Additional Monitoring Wells - Additional Analyses

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Groundwater Sampling Results for the Additional Monitoring Wells - Additional Analyses

| | | | | | Additional Analyses | | | | |

APPENDIX

G

CCR GROUNDWATER ASSESSMENT MONITORING STATISTICAL ANALYSIS AND RESULTS FOR THE CWTP APPENDIX IV CONSTITUENT DATA COLLECTED THROUGH JUNE 2023

TECHNICAL MEMORANDUM

To:	Arizona Public Service Company	Project No.	14-2023-2011
By:	Samantha O'Shea	Reviewed by:	Maren Henley, PE
Tel:	602-733-6000	CC:	File
Date:	October 09, 2023		

Re: CCR GROUNDWATER ASSESSMENT MONITORING
STATISTICAL ANALYSIS AND RESULTS FOR THE CWTP
APPENDIX IV CONSTITUENT DATA COLLECTED THROUGH JUNE 2023
Arizona Public Service Company Four Corners Power Plant – Fruitland, New Mexico

1.0 INTRODUCTION

This Technical Memorandum presents the results of a statistical evaluation of groundwater monitoring data collected from monitoring wells downgradient of the Combined Waste Treatment Pond (CWTP) located at the Arizona Public Service Company (APS) Four Corners Power Plant (Site) in Fruitland, New Mexico. The statistical evaluation was performed by Geosciences Consulting Strategies, LLC (Geosciences Consulting), a subcontractor to WSP USA Environment and Infrastructure, Inc. (WSP) pursuant to Coal Combustion Residuals (CCR) Rule requirements for groundwater monitoring and corrective action detailed in 40 Code of Federal Regulations Sections 257.90 through 257.98 (CCR Rule) (Federal Register, 2020).

The statistical analysis documented herein presents an initial evaluation of assessment monitoring (i.e., Appendix IV constituent) groundwater data collected from the CWTP to date. Statistically significant increases (SSIs) over background concentrations were declared on April 10, 2023 at CWTP monitoring well, MW-62 for two detection monitoring constituents (boron and calcium). CWTP downgradient compliance wells include MW-62, MW-63, MW-64, and MW-65 and CWTP background wells include MW-71, MW-72, and MW-73 during the May 2023 semi-annual sampling event and a June 2023 assessment monitoring sampling event.

2.0 STATISTICAL EVALUATION RESULTS

Attachment A presents the initial statistical evaluation of Appendix IV constituents performed by Geosciences Consulting. The results of the evaluation are summarized as follows:

- Table 1 of Attachment A summarizes the groundwater protection standard (GWPS) selection for each Appendix IV constituent. Table 2 of Attachment A summarizes the lower confidence level (LCL) value for each constituent in each well, if the LCL value exceeds its respective GWPS, statistically significant temporal trends, and the type of LCL test applied.
- This statistical evaluation indicates there is insufficient evidence to declare statistically significant levels (SSLs) in Appendix IV constituent concentrations above respective GWPSs at the CWTP.

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- Several compliance monitoring wells exhibit statistically significant ($p < 0.05$) temporal trends as follows:
    - Increasing temporal trends were noted at downgradient wells MW-62 for arsenic and total radium and at MW-65 for barium and cobalt.
    - Decreasing temporal trends were noted at downgradient wells MW-62 for barium and molybdenum, MW-63 for cobalt, MW-64 for barium and fluoride, and MW-65 for fluoride.
- The analysis suggests spatial heterogeneity is present for the grouped background wells (MW-71, MW-72 and MW-73) for multiple Appendix IV constituents, including arsenic, barium, cadmium, cobalt, lithium, molybdenum, total radium, selenium and thallium. Additional assessment is warranted to confirm adequacy and representativeness of background well designations for the CWTP.

3.0 RECOMMENDATIONS

Pursuant to the CCR Rule, the SSI declaration made in April 2023 triggers either initiation into the assessment monitoring program or performing a successful Alternative Source Demonstration (ASD) to the CWTP as cause of the Appendix III constituent exceedances above the BTVs. There are currently no SSLs for Appendix IV constituents above their respective GWPSs.

Based on the statistical evaluation presented in Attachment A and pursuant to the CCR Rule, the CWTP should remain in assessment monitoring until criteria under §257.95(e) of the CCR Rule are met (Federal Register, 2020). WSP recommends performing continued trend testing after each monitoring event and updates to the BTVs after 1-2 years of future sampling events.

4.0 REFERENCES

- Federal Register, 2020. 40 Code of Federal Regulations Part 257 – Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals From Electric Utilities; Final Rule promulgated at 80 FR 21468 on April 17, 2015 with amendments issued through November 12, 2020 at 85 FR 72539 (A Holistic Approach to Closure Part B: Alternate Demonstration for Unlined Surface Impoundments).
- United States Environmental Protection Agency (USEPA), 2009. *Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities Unified Guidance. EPA 530/R-09-007*. Environmental Protection Agency Office of Resource Conservation and Recovery.
- Wood, 2022. Alternative Source Demonstration for Boron and pH at the CWTP. Arizona Public Service Company Four Corners Power Plant. Fruitland, New Mexico. Prepared on behalf of APS. Report dated January 11, 2022.
- WSP USA Environment & Infrastructure, Inc. (WSP), 2023. *Statistical Data Analysis Work Plan*. Coal Combustion Residual Rule Groundwater Monitoring System Compliance, Four Corners Power Plan, Fruitland, New Mexico. Prepared for Arizona Public Service. January 10, 2023.

ATTACHMENT A

CCR GROUNDWATER ASSESSMENT MONITORING STATISTICAL EVALUATION OF CWTP DATA THROUGH JUNE 2023 –

GEOSCIENCE CONSULTING STRATERGIES LLC

Technical Memorandum

To: Maren Henley, PE
Wood Environment & Infrastructure Solutions, Inc.

From: Carla Landrum, PhD
Geoscience Consulting Strategies LLC

Date: October 09, 2023

Subject: CCR Groundwater Assessment Monitoring
Statistical Evaluation of CWTP Data through June 2023
Arizona Public Service Company Four Corners Power Plant – Fruitland, New Mexico

1.0 INTRODUCTION

This Technical Memorandum (Tech Memo) documents the statistical evaluation of assessment monitoring (i.e., Appendix IV constituents) groundwater data associated with the Combined Waste Treatment Pond (CWTP) unit located at the Arizona Public Service Company (APS) Four Corners Power Plant (FCPP) in Fruitland, New Mexico. This statistical evaluation is completed by Geoscience Consulting Strategies LLC in accordance with the Statistical Data Analysis Work Plan (SDAWP) for the FCPP and the Coal Combustion Residuals (CCR) Rule (Federal Register, 2020; WSP USA Environment & Infrastructure Inc (WSP), 2023).

On 10 April 2023 APS declared a statistically significant increase for two detection monitoring (i.e., Appendix III) constituents (boron and calcium) at the CWTP. Per the CCR Rule, within 90 days of this declaration APS initiated an assessment monitoring program for the CWTP.

The statistical methods and analysis herein includes updates to the groundwater protection standards (GWPSs) for Appendix IV constituents at the FCPP using either: 1) statistically-driven background threshold values (BTVs), 2) the applicable U.S. Environmental Protection Agency (EPA) Maximum Contaminant Level (MCL) promulgated under the Safe Drinking Water Act, or 3) alternative risk-based GWPSs established in the statute, whichever is higher (40 Code of Federal Regulations [CFR] Section [§] 257.95(h)).

The following sections detail data inputs, methods, results and recommendations for the subject statistical evaluation.

2.0 DATA INPUTS

The CWTP groundwater monitoring well network consists of three background monitoring wells (MW-71, MW-72, and MW-73) and four compliance (i.e., downgradient) monitoring wells (MW-62, MW-63, MW-64 and MW-65). The period of evaluation for the CWTP Appendix IV constituent statistical analysis ranges from November 2015 through June 2023 and includes the minimum of eight initial, or baseline, sampling rounds required by the CCR Rule and six subsequent sampling rounds of for Appendix IV groundwater constituents that occur on a semi-annual frequency, as shown in the table below.

CWTP Appendix IV Sampling Round	Date
1st	October 2017
2nd	April 2021
3rd	November 2021
4th	May 2022
5th	November 2022
6th	May/June 2023

Appendix A contains the sample data for the subject analysis. Due principally to the CCR Rule requirement that a minimum of eight initial rounds of data be collected from the site prior to October 17, 2017, the frequency of sample collection prior to this date is short and variable (e.g., biweekly to quarterly sampling). The duration is shorter (i.e. February 2017 through June 2018) for MW-73, which was installed in January 2017.

Depending on the Appendix IV constituent, the minimal sample numbers in this statistical evaluation ranges between 19 to 31 for compliance wells and 67 to 80 for pooled background monitoring wells.

Data inputs for this statistical analysis were prepared, and provided by, WSP. As shown in Appendix A, the Appendix IV analytes are listed by name or chemical symbol as column headers as required by the statistical software (i.e., ProUCL). By convention, each analyte has a corresponding data column (indicated with a "D_" prefix) that indicates if the analyte was detected or not at a concentration that exceeds the analytical reporting limit, where detectable concentrations are symbolized by a "1" and non-detectable concentrations are symbolized by a "0."

3.0 METHODS

The assessment monitoring statistical evaluation implements a single-sample population testing approach, where downgradient samples are compared to a pre-defined standard, in this case the GWPS. This is a fundamental distinction from the detection monitoring statistical evaluation. As such, the statistical methods and testing approaches differ between detection monitoring and assessment monitoring.

To establish current GWPSs for the CWTP, updates to the FCPP Appendix IV BTVs are necessary. In accordance with the Unified Guidance (U.S. EPA, 2009) and CCR Rule (40 C.F.R. § 257.93(f)(3)), the Statistical Data Analysis Work Plan (WSP, 2023) identifies the upper tolerance limit (UTL) method as the prescribed approach for establishing BTVs for assessment monitoring. The advantage of selecting the UTL method is its ability to serve as a single-sample statistical comparison. The statistical hypothesis structure for a single-sample comparison is reversible, such that the same fixed background level can be used for assessment monitoring and later for corrective action comparison testing, if necessary. The UTL tests are applicable for analytes that exhibit non-detectable frequencies of less than 100%.

The U.S. EPA's Unified Guidance (2009) and the Statistical Data Analysis Work Plan (WSP, 2023) promotes the use of the Double Quantification Rule (DQR) to calculate the UTL in cases where the background non-detection frequency is equal to 100%.

To determine CWTP compliance under assessment monitoring, the Appendix IV sample data from downgradient compliance wells are statistically compared to respective GWPSs using confidence intervals. Confidence intervals encompasses a variety of statistical tests (U.S. EPA, 2009). For assessment monitoring, the lower confidence limit (LCL) for each Appendix IV constituent is compared to its respective GWPS to assess if the lower limit exceeds the GWPS and, if so, declares a statistically significant level (SSL) in constituent concentrations above the GWPS.

Each compliance well analyte underwent exploratory data analysis (EDA) (see Section 3.2) to ensure that the compliance well had no sample outliers and to assess for statistically significant ($p<0.05$) increasing or decreasing temporal trends in the sample data. The EDA process also identified which statistical distribution the sample data best fit to select an appropriate statistical comparison (e.g. parametric versus non-parametric) to the GWPS (WSP, 2023).

The following section describe the above statistical methods in more detail.

3.1 Exploratory Data Analysis Workflow Procedures

EDA is a data diagnostic step that generates qualitative and quantitative information necessary to select a defensible statistical method to determine if there is a SSL over the GWPS. Figure 1 generalizes the EDA workflow, including assessment of spatial heterogeneity, trend detection, data distribution assessment, and outlier detection. Sample number, monitoring well network configuration, sampling frequency and non-detect frequency determine which EDA methods are most useful. The final EDA step is selecting an adequate and appropriate statistical method. Notably, the EDA workflow procedure is standard between detection monitoring and assessment monitoring.

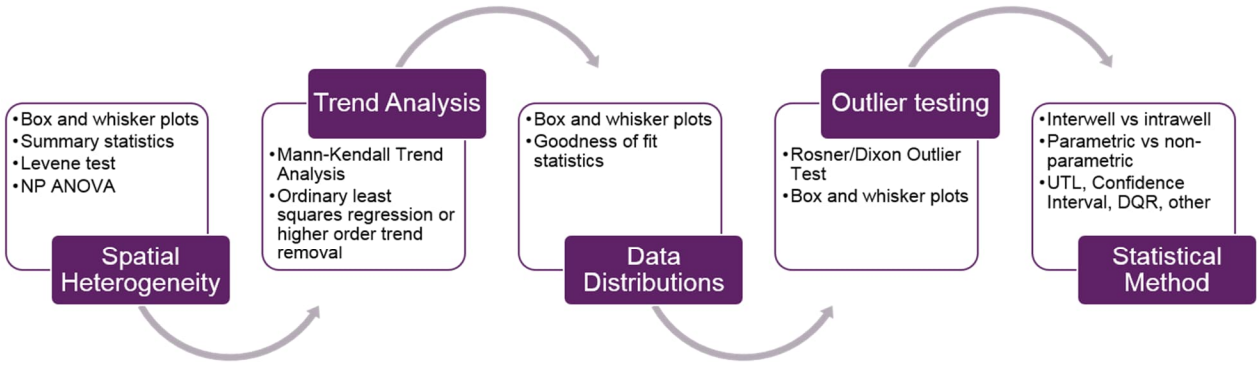


Figure 1. Assessment monitoring EDA and statistical method workflow procedures. Each box represent as separate step in the EDA workflow process. The items listed in each box identifies the statistical method(s) applied for each step. Both quantitative and qualitative methods are listed.

There are a number of different types of tolerance limit and confidence interval quantification methods to select from, depending on the statistical distribution, the presence of a temporal trend, the type of statistical comparison (e.g. interwell or intrawell) and the quantity of non-detect values in the background sample data. The following subsections describe these methods and criteria for their selection.

Appendix B summarizes the results of the EDA of CWTP Appendix IV groundwater data. Non-detect values can introduce subjective uncertainty into the trend analysis, mainly through changes in the reporting limits over time since they are often substituted as the sample analytical value. To avoid this subjective uncertainty, constituents with a non-detect frequency greater than 50% were excluded from the trend analysis.

3.2 Establishing Background Threshold Values

As stated in Section 1.0, BTVs can serve as the GWPS, if appropriate. For this reason, the BTVs were updated as part of this statistical evaluation. Three UTL statistical tests are applicable for updating BTVs for Appendix IV constituents at FCPP: the parametric interwell upper tolerance limit, non-parametric interwell upper tolerance limit and the Double Quantification Rule. This work assumes that background well locations are adequate and thereby declare interwell comparisons appropriate. Each statistical test is described below.

3.2.1 Parametric Interwell Upper Tolerance Limit (P-UTL)

An interwell UTL represents an upper boundary, or threshold concentration value, that contains a pre-specified proportion, or coverage, of the underlying groundwater statistical population. For example, this coverage can range from 95% to 99% of all possible sample measurements in the underlying background statistical population, depending on the data characteristics. Because the monitoring program cannot sample everywhere, there is inherent uncertainty in defining the true underlying statistical population. For this reason, statistical confidence in this coverage is incorporated into the UTL equation using a tolerance coefficient (U.S. EPA, 2009). Oftentimes a tolerance coefficient of at least 95% is used, which corresponds to a significance level (α) equal to 5% (U.S. EPA, 2009). Table 17-3 within the Unified Guidance (U.S. EPA, 2009) combines the coverage and confidence to calculate the UTL.

A parametric interwell upper tolerance limit (P-UTL) is an adequate method if the background sample data generally met the following criteria, which are tested using procedures declared in the Statistical Data Analysis Work Plan (Wood, 2018):

1. Temporal stationarity (no trend in concentration through time)
2. Normal or transformed normal data distribution
3. Spatial heterogeneity is minimal
4. Sample outliers have been removed
5. Sample data are statistically independent and identically distributed

The P-UTLs were calculated using a 99% coverage with a 95% confidence. Although the Unified Guidance (U.S. EPA, 2009) recommends at least a 95% coverage, the 99% coverage is justifiable for the following reasons:

1. The sampling frequency for the November 2015 to June 2018 sampling period is higher than quarterly in some cases, suggesting the background sample data might not be independent samples and might underrepresent long-term temporal variations in groundwater constituent concentrations. A larger coverage can help compensate for underrepresented temporal variation. A more conservative coverage (i.e. only 95%) is suggested once a longer history of samples exists and the background sampling frequency becomes more consistent (e.g., semiannual).

2. Spatial heterogeneity is suspected at the CWTP. Spatial heterogeneity introduces uncertainty in the sample data in that one sample location might have naturally occurring elevated concentrations of a constituent relative to other sample locations. This uncertainty can increase the chance of a declaring a false positive SSL. By increasing the UTL coverage it is possible to reduce the chance of declaring a false positive SSL due to spatial heterogeneity. This analysis assumes that the background well designations are adequate such that the other extreme does not occur (i.e., that the spatial heterogeneity causes background analyte concentrations to be elevated and result in a false negative SSL downgradient of the site).

The UTL coverage assumes the background sample data set is adequate and representative of intrinsic spatial and temporal variability in groundwater constituent concentrations beneath the CWTP for Appendix IV constituents. Factors that can violate this assumption include: 1) background wells completed in a different water-bearing unit than compliance wells (i.e., spatial heterogeneity), 2) background wells that have not been sampled during times of extreme potentiometric level (e.g., drought, etc.), and 3) structurally-compromised wells that do not produce representative groundwater samples. Reference to the conceptual site model and professional judgement/interpretation are necessary to confirm the adequacy of background well designations for this statistical evaluation.

Table 1 lists background analytes and wells that are subject to the P-UTL method.

3.2.2 Non-Parametric Interwell Upper Tolerance Limit (NP-UTL)

A non-parametric interwell tolerance limit (NP-UTL) was calculated if the upgradient sample data generally met the following diagnostic criteria:

1. Temporal stationarity
2. No discernable data distribution
3. Spatial heterogeneity is minimal
4. Sample outliers have been removed
5. Statistical independence

Criterion Number 2, where a parametric distribution is not discernable from the sample data, primarily drives the NP-UTL selection. A NP-UTL uses the first or second highest-ranked background concentration value to establish the UTL, depending on the number of data points. “Ranked” means the grouped background concentration values are ordered in decreasing order and assigned a rank based on this order, where a rank equal to one represents the maximum concentration value. Table 17-4 in the Unified Guidance (U.S. EPA, 2009) provides minimum coverage levels for the first and second ordered sample values with 95% confidence for different background sample numbers. Table 17-4 illustrates that the sample number controls the coverage for the NP-UTL and higher sample numbers are necessary to achieve a higher coverage. Overall, the non-parametric tolerance limit is less powerful in comparison to its parametric counterparts (but more appropriate when parametric assumptions are not met).

The NP-UTL uses the maximum ranked value in the background well, which can constitute a reporting limit value if the reporting limit is higher than detectable concentrations.

Table 1 lists background analytes and wells that are subject to the NP-UTL method.

3.2.3 Double Quantification Rule

The DQR is appropriate when the analyte exhibits 100% non-detectable concentrations in the background data set. The DQR states that, for any given compliance well analyte, two consecutive detectable concentrations that are above the maximum reporting limit are sufficient evidence to declare an SSL.

It should be noted that implications exist when there are inconsistencies in reporting limit values over time and between monitoring wells. For example, when the downgradient wells reflect a higher maximum reporting limit in comparison to the background well, applying the DQR leads to uncertainty in identifying a real SSL (i.e., the statistical test results in a false negative SSL). In other cases, it is possible to have lower reporting limit values in downgradient wells, resulting in higher detections, which can trigger a false positive SSL. For these reasons, it is highly recommended that the laboratory establish achievable and consistent analytical reporting limit values among all wells throughout the duration of the monitoring program.

Table 1 lists background analytes and wells that subject to the DQR.

3.3 Establishing Compliance Well Comparison Limits

Assessment monitoring, unlike detection monitoring, does not compare individual sample observations to a GWPS. Rather, for any given constituent, the entire sample population for an Appendix IV constituent within a compliance well is taken into consideration when making a comparison to its respective GWPS. In this case, the central tendency of the sample population is the parameter of interest, consisting of the mean or median. Since the groundwater program cannot sample everywhere all the time, there is uncertainty as to where the true central tendency sits for any given sampled groundwater constituent. As such, it is adequate to establish a confidence limit around the sample population's central tendency with an acceptable margin of error, typically 5%, which corresponds to a 95% confidence interval. Both of these statistical parameters are discussed in more detail below.

Confidence intervals are a recommended approach for comparing compliance well (i.e., downgradient) data to a GWPS during assessment monitoring or corrective action (U.S. EPA, 2009). The confidence interval accounts for both the level of statistical variation in the data and the desired confidence level. For this statistical analysis, the lower confidence limit is of interest and reflects the lowest concentration beyond which we do not expect the true central tendency of the downgradient sample data to reside.

Below is the formal null hypothesis statement for the confidence limit:

Ho: The true central tendency of the sample concentrations at the compliance point (e.g. downgradient well) is no greater than the predetermined GWPS.

This is the assumed condition unless, through a statistical test, the sample data demonstrate otherwise. The null hypothesis is rejected when the lower confidence limit (LCL) of the compliance sample dataset resides above the GWPS, resulting in sufficient evidence to declare an SSL.

Statistical power describes the sensitivity of a statistical test, or its ability to detect a true increase above the GWPS. The statistical power can be negligible when the sample size is small, the sample variability is high and/or the confidence level is set too high (U.S. EPA, 2009). Statistical confidence should not be confused

with the statistical power. The statistical confidence (1-α) indicates how often the confidence limit will contain the statistical parameter of interest (i.e., mean or median). The significance level (α) describes the error rate, or the rate at which the null hypothesis is rejected when in fact it is true (i.e., the test results in a false positive SSL declaration). Because the statistical power typically decreases with higher confidence levels, the Unified Guidance (U.S. EPA, 2009) recommends first establishing an acceptable level of statistical power and then computing the associated confidence level. The Unified Guidance (U.S. EPA, 2009) suggests that the compliance test have at least 80% statistical power to detect a compliance well central tendency that is two times above the GWPS. This recommendation primarily accommodates parametric statistical tests, meaning when parametric method assumptions are not met, the parametric methods' power and confidence are not meaningful. In these cases, non-parametric methods are appropriate and their confidence limits generally exhibit somewhat less statistical power than their parametric counterparts.

The EDA results for the subject analysis suggest that three LCL statistical tests are appropriate for groundwater data collected downgradient of the URS: the parametric lower confidence limit, non-parametric lower confidence limit and the parametric lower confidence limit with a temporal trend. Each statistical test is described below.

3.3.1 Parametric Lower Confidence Limits (P-LCL)

For parametric data distributions, the mean (i.e., central tendency), standard deviation, and one-tailed Student's t value are necessary to calculate the parametric lower confidence limit (P-LCL) according to Equation 21.1 in the Unified Guidance (U.S. EPA, 2009). The confidence level (1-α) is necessary to establish the Student's t value. The objective is to select the α that achieves high statistical power with an acceptable level of confidence. Table 22-2 in Appendix D of the Unified Guidance (U.S. EPA, 2009) allows for the selection of α based on the compliance well's sample number and the above statistical power criterion (i.e., at least 80%). The selected α for the P-LCL test is the maximum value that achieves at least 80% statistical power for the set sample number (n) and the minimum RCRA standard requirement of $\alpha = 0.01$ (U.S. EPA, 2009).

Table 2 summarizes compliance well analytes subject to the P-LCL test.

3.3.2 Non-Parametric Lower Confidence Limits (NP-LCL)

For the non-parametric cases, the median represents the central tendency. The Unified Guidance (U.S. EPA, 2009) does not provide formal guidance for calculating the statistical power for a non-parametric statistical test using environmental data. As such, the non-parametric confidence limit calculations will achieve a minimum confidence level of 95%.

The non-parametric LCL (NP-LCL) test uses the sample number and the 95% confidence level (1-α) to establish the LCL. The compliance well with a sample count (n) is first ordered from smallest to largest sample concentration then assigned a numeric rank, where 1 is the lowest concentration and (n) is the highest concentration. Table 21-11 in Appendix D of the Unified Guidance (U.S. EPA, 2009) provides achievable confidence levels for ranked values for small sample sizes ($n<20$). The rank value that achieves the 95% confidence level or higher serves as the lower non-parametric confidence limit.

Table 2 summarizes compliance well analytes subject to the NP-LCL test.

3.3.3 Calculating the Trend-Dependent Lower Confidence Limit (P-LCLT)

The confidence interval tests are sensitive to temporal trends, which can inflate the standard deviation. If the temporal Mann-Kendall trend was significant ($p<0.05$), and the data exhibit a parametric distribution, the 95% lower confidence interval was calculated around the temporal trend (P-LCLT). If a trend was significant ($p<0.05$) but the data distribution was non-parametric, then a NP-LCL was calculated. The P-LCLT was calculated in ProUCL 5.1 using equation 10-12 in the ProUCL 5.1.1 Technical Guidance (U.S. EPA, 2015). By proxy, the coefficient of variation was calculated to assess the statistical power of this parametric test. The Unified Guidance (Section 7.4.1) suggests that if the coefficient of variation is less than or equal to 0.5, the lower limit confidence exhibits adequate statistical power.

Table 2 summarizes compliance well analytes subject to the P-LCLT test and Appendix B contains the relevant ProUCL outputs.

4.0 Results

Table 1 summarizes the GWPS selection for each Appendix IV constituent. The GWPS constitutes either: 1) the statistically calculated BTV, 2) the U.S. EPA's promulgated MCL, or 3) the risk-based alternative GWPS identified for constituents without MCLs, whichever value is higher.

Table 2 summarizes: 1) the LCL value for each constituent in each well, 2) which compliance wells exhibit statistically significant temporal trends and 3) the type of LCL test applied.

This statistical evaluation indicates there is insufficient evidence to declare a statistically significant level (SSL) in Appendix IV constituent concentrations above respective GWPSs at the CWTP.

Several compliance monitoring wells exhibit statistically significant ($p<0.05$) temporal trends. Most notable are the statistically significant ($p<0.05$) increasing trends present in more than one compliance well for arsenic, barium, cobalt and combined radium. Statistically significant ($p<0.05$) trends were detected in the background dataset for arsenic (decreasing), barium (decreasing), molybdenum (decreasing) and selenium (decreasing).

This analysis suggests spatial heterogeneity is present for the grouped background wells (MW-71, MW-72 and MW-73) for multiple Appendix IV constituents, including arsenic, barium, cadmium, cobalt, lithium, molybdenum, total radium, selenium and thallium. Reference to the conceptual site model and professional judgement/interpretation are necessary to confirm adequacy and representativeness of background well designations for the CWTP.

5.0 Recommendations

This statistical analysis results in the following recommendations for the CWTP assessment monitoring statistical analysis:

1. The laboratory should achieve reporting limits below the U.S. EPA's promulgated MCLs and maintain a constant reporting limit for each analyte over time for all monitoring wells – background and compliance. This recommendation will improve the certainty of detection of temporal trends

in the groundwater sample data while also decreasing the probability for declaring a false negative or false positive SSLs when applying statistical tests, especially the DQR.

2. Intrawell statistical comparisons should be considered for analytes that exhibit spatial heterogeneity. Reference to the conceptual site model and professional judgement/interpretation are necessary to confirm adequacy and representativeness of background well designations for the CWTP.

3. The CWTP should remain in Assessment Monitoring until criteria under §257.95(e) of the CCR Rule are met.

6.0 REFERENCES

Federal Register, 2020. 40 Code of Federal Regulations Part 257 – Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals from Electric Utilities; Final Rule promulgated at 80 FR 21468 on April 17, 2015 with amendments issued through November 12, 2020 at 85 FR 72539 (A Holistic Approach to Closure Part B: Alternate Demonstration for Unlined Surface Impoundments).

WSP USA Environment & Infrastructure Inc (WSP), 2023. *Statistical Data Analysis Work Plan*. Coal Combustion Residual Rule Groundwater Monitoring System Compliance, Four Corners Power Plan, Fruitland, New Mexico. Prepared for Arizona Public Service. January 10, 2023.

United States Environmental Protection Agency (US EPA), 2009. Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities Unified Guidance. EPA 530/R-09-007. Environmental Protection Agency Office of Resource Conservation and Recovery.

U.S. EPA, 2015. *ProUCL (Version 5.1.1) User Guide, Statistical Software for Environmental Applications for Data Sets with and without Nondetect Observations*. EPA/600/R-07/041. Washington D.C. October 2015.

ATTACHMENTS

Table 1 – GWPS selection for the Four Corners CWTP
Table 2 – CWTP Downgradient Sample Data Summary

Appendix A – ProUCL Data Upload Table
Appendix B – ProUCL Output Files

TABLES

Table 1
GWPS Selection - FCPP CWTP
Appendix IV Statistical Comparison
Updated September 2023

Grouped Background Wells	Constituent	US EPA MCL	Alternative Risk-Based GWPS	Background Threshold Value (Calculation Method[1,2])	Units	GWPS Selection[3]
MW-71, MW-72, MW-73	Antimony	**0.006**	---	0.00027 (NP-UTL)	mg/L	US EPA MCL
MW-71, MW-72, MW-73	Arsenic	0.01	---	**0.013 (P-UTLT)**	mg/L	BTV
MW-71, MW-72, MW-73	Barium	**2**	---	0.051 (NP-UTL)	mg/L	US EPA MCL
MW-71, MW-72, MW-73	Beryllium	**0.004**	---	0.0022 (NP-UTL)	mg/L	US EPA MCL
MW-71, MW-72, MW-73	Cadmium	**0.005**	---	0.00021 (NP-UTL)	mg/L	US EPA MCL
MW-71, MW-72, MW-73	Chromium	**0.1**	---	0.0014 (NP-UTL)	mg/L	US EPA MCL
MW-71, MW-72, MW-73	Cobalt	---	0.006	**0.014 (P-UTL)**	mg/L	BTV
MW-71, MW-72, MW-73	Fluoride	4	---	**4.2 (NP-UTL)**	mg/L	BTV
MW-71, MW-72, MW-73	Lead	---	**0.015**	0.0011 (NP-UTL)	mg/L	Alternative Risk-Based GWPS
MW-71, MW-72, MW-73	Lithium	---	0.04	**0.89 (NP-UTL)**	mg/L	BTV
MW-71, MW-72, MW-73	Mercury	**0.002**	---	0.0002 (DQR)	mg/L	US EPA MCL
MW-71, MW-72, MW-73	Molybdenum	---	**0.1**	0.011 (NP-UTL)	mg/L	Alternative Risk-Based GWPS
MW-71, MW-72, MW-73	Selenium	0.05	---	**0.47 (P-UTLT)**	mg/L	BTV
MW-71, MW-72, MW-73	Thallium	**0.002**	---	0.0012 (NP-UTL)	mg/L	US EPA MCL
MW-71, MW-72, MW-73	Combined Radium	**5**	---	4.16 (P-UTL)	pCi/L	US EPA MCL

Notes:

BTV = Background Threshold Value

GWPS = Groundwater Protection Standard

US EPA MCL = United States Environmental Protection Agency Maximum Contaminant Level under the Safe Drinking Water Act

[1] Double Quantification Rule (DQR), Parametric Upper Tolerance Limit (P-UTL), Non-Parametric Upper Tolerance Limit (NP-UTL)

[2] The DQR BTV represents the maximum reporting limit value

[3] The GWPS selection represents the highest value between the US EPA MCL, the Alternative Risk-Based GWPS and the BTV

Table 2
Statistical Results Summary - FCPP CWTP CCR Unit
Appendix IV Statistical Comparison

Appendix IV Constituent	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Fluoride	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium	Combined Radium
Units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L
GWPS	0.006	0.013	2	0.004	0.005	0.1	0.014	4.2	0.015	0.89	0.002	0.1	0.47	0.002	5
MW-62	NP-LCL (0.001)	P-LCLT (0.0022)	P-LCLT (0.015)	NP-LCL (0.001)	NP-LCL (0.001)	NP-LCL (0.001)	P-LCL (0.008)	NP-LCL (1.4)	NP-LCL (0.0005)	NP-LCL (0.14)	NP-LCL (0.0002)	P-LCLT (0.0015)	NP-LCL (0.0005)	NP-LCL (0.0001)	P-LCLT (.438)
MW-63	NP-LCL (0.001)	NP-LCL (0.0013)	P-LCL (0.022)	NP-LCL (0.001)	NP-LCL (0.001)	NP-LCL (0.0005)	P-LCLT (0.000)	NP-LCL (1.9)	NP-LCL (0.0005)	P-LCLT (0.066)	NP-LCL (0.0002)	P-LCL (0.003)	NP-LCL (0.0005)	NP-LCL (0.0001)	P-LCL (1.01)
MW-64	NP-LCL (0.001)	NP-LCL (0.001)	P-LCLT (0.022)	NP-LCL (0.001)	NP-LCL (0.001)	NP-LCL (0.0005)	P-LCL (0.0015)	P-LCLT (1.34)	NP-LCL (0.0005)	P-LCLT (0.023)	NP-LCL (0.0002)	NP-LCL (0.0024)	NP-LCL (0.0005)	NP-LCL (0.0001)	NP-LCL (0.6)
MW-65	NP-LCL (0.001)	NP-LCL (0.0005)	P-LCLT (0.022)	NP-LCL (0.001)	NP-LCL (0.001)	NP-LCL (0.0005)	P-LCLT (0.0018)	P-LCLT (1.52)	NP-LCL (0.0005)	P-LCLT (0.061)	NP-LCL (0.0002)	P-LCL (0.0089)	NP-LCL (0.0005)	NP-LCL (0.0001)	NP-LCL (0.6)

Legend

Method (LCL)	There is insufficient evidence to declare an SSL over the GWPS
Method (LCL)	Statistically significant increasing trend (p<0.05
Method (LCL)	Statistically significant decreasing trend (p<0.05)
Method (LCL)	There is sufficient evidence to declare an SSL over the GWPS

NP-LCL	Non-Parametric Lower Confidence Limit
P-LCLT	Parametric Lower Confidence Limit with a Trend
P-LCL	Parametric Lower Confidence Limit
LCL	Lower Confidence Limit

APPENDIX A

PROUCL DATA UPLOAD TABLE

Appendix A - PROUCL DATA UPLOAD TABLE

Designation	StationName	QC_SampleID	NumDate	Antimony	D_Antimony	Arsenic	D_Arsenic	Barium	D_Barium	Beryllium	D_Beryllium	Cadmium	D_Cadmium	Chromium
Background	MW-71	FC-CCR-MW-71-030516	3/5/2016	0.00016	1	0.016	1	0.027	1	0.00064	1	0.00019	1	0.00078
Background	MW-71	FC-CCR-MW-71-042616	4/26/2016	0.0025	0	0.0064	1	0.019	1	0.0010	0	0.00015	1	0.00050
Background	MW-71	FC-CCR-MW71-616	6/6/2016	0.00012	1	0.0069	1	0.020	1	0.0010	0	0.00015	1	0.00050
Background	MW-71	FC-CCR-MW71-816	8/21/2016	0.00022	1	0.0066	1	0.014	1	0.0010	0	0.00020	0	0.0010
Background	MW-71	FC-CCR-MW71-916	9/12/2016	0.0025	0	0.0010	0	0.013	1	0.0010	0	0.00050	0	0.0025
Background	MW-71	FC-CCR-MW71-1016	10/20/2016	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Background	MW-71	FC-CCR-MW71-117	2/2/2017	0.0010	0	0.0094	1	0.012	1	0.0010	0	0.00011	1	0.00050
Background	MW-71	FC-CCR-MW71-41717	4/17/2017	0.0040	0	0.0063	1	0.010	1	0.0010	0	0.00040	0	0.0020
Background	MW-71	FC-CCR-MW71-5217	5/2/2017	0.0010	0	0.0072	1	0.0087	1	0.0010	0	0.00010	0	0.0010
Background	MW-71	FC-CCR-MW71-52917	5/29/2017	0.010	0	0.0070	1	0.010	1	0.0010	0	0.0010	0	0.0050
Background	MW-71	FC-CCR-MW71-62217	6/22/2017	0.0040	0	0.0063	1	0.012	1	0.0010	0	0.00040	0	0.0020
Background	MW-71	FC-CCR-MW71-72117	7/21/2017	0.0040	0	0.0053	1	0.0086	1	0.0010	0	0.00040	0	0.0020
Background	MW-71	FC-CCR-MW71-81017	8/10/2017	0.010	0	0.0048	1	0.0092	1	0.0010	0	0.0010	0	0.0040
Background	MW-71	FC-CCR-MW71-81717	8/17/2017	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Background	MW-71	FC-CCR-MW71-91117	9/11/2017	0.0040	0	0.0048	1	0.0089	1	0.0010	0	0.00040	0	0.0040
Background	MW-71	FC-CCR-MW71-101317	10/13/2017	0.010	0	0.0050	0	0.012	1	0.0010	0	0.0010	0	0.010
Background	MW-71	FC-CCR-MW71-113017	11/30/2017	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Background	MW-71	FC-CCR-MW71-31618	3/16/2018	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Background	MW-71	FC-CCR-MW-71-6218	6/2/2018	NA	NA	0.012	1	0.010	0	NA	NA	NA	NA	NA
Background	MW-71	FC-CCR-MW71-11318	11/3/2018	NA	NA	0.0046	1	0.0098	1	NA	NA	NA	NA	NA
Background	MW-71	FC-CCR-MW71-031819	3/18/2019	0.0010	0	0.0069	1	0.010	1	0.0010	0	0.00010	0	0.0010
Background	MW-71	FC-CCR-MW71-5719	5/6/2019	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Background	MW-71	FC-CCR-MW71-120219	12/2/2019	0.0040	0	0.0095	1	0.012	1	0.0010	0	0.00040	0	0.0040
Background	MW-71	FC-CCR-MW71-0620	6/20/2020	0.002	0	0.0048	1	0.0045	1	NA	NA	0.0002	0	0.002
Background	MW-71	FC-CCR-MW71-1120	11/5/2020	0.002	0	0.012	1	0.0092	1	0.001	0	0.0002	0	0.002
Background	MW-71	FC-CCR-MW71-0421	4/22/2021	0.004	0	0.0013	1	0.014	1	0.001	0	0.00012	1	0.004
Background	MW-71	FC-CCR-MW71-1121	11/12/2021	0.002	0	0.001	0	0.01	1	0.001	0	0.0001	1	0.002
Background	MW-71	FC-CCR-MW71-0522	5/21/2022	0.002	0	0.001	0	0.0094	1	0.001	0	0.0002	0	0.002
Background	MW-71	FC-CCR-MW71-1122	11/13/2022	0.001	0	0.00073	1	0.012	1	0.001	0	0.0001	0	0.001
Background	MW-71	FC-CCR-MW71-0523	5/8/2023	0.002	0	0.005	0	0.0095	1	0.001	0	0.001	0	0.003
Background	MW-71	FC-CCR-MW71-0623	6/27/2023	0.01	0	0.005	0	0.011	1	0.0022	1	0.001	0	0.01
Background	MW-72	FC-CCR-MW72-030716	3/7/2016	0.0020	0	0.011	1	0.035	1	0.0010	0	0.000078	1	0.00044
Background	MW-72	FC-CCR-MW-72-042616	4/26/2016	0.0025	0	0.0038	1	0.034	1	0.0010	0	0.00010	0	0.0028
Background	MW-72	FC-CCR-MW72-616	6/6/2016	0.00027	1	0.0084	1	0.051	1	0.0010	0	0.00020	0	0.00060
Background	MW-72	FC-CCR-MW72-816	8/21/2016	0.00026	1	0.0047	1	0.016	1	0.0010	0	0.00020	0	0.0010
Background	MW-72	FC-CCR-MW72-916	9/13/2016	0.0025	0	0.0010	0	0.019	1	0.0010	0	0.00050	0	0.0025
Background	MW-72	FC-CCR-MW72-1016	10/20/2016	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Background	MW-72	FC-CCR-MW72-117	2/2/2017	0.0010	0	0.0041	1	0.0093	1	0.0010	0	0.00010	0	0.0010
Background	MW-72	FC-CCR-MW72-41717	4/17/2017	0.0040	0	0.0028	1	0.0096	1	0.0010	0	0.00040	0	0.0020
Background	MW-72	FC-CCR-MW72-5217	5/2/2017	0.0010	0	0.0030	1	0.0079	1	0.0010	0	0.00010	0	0.0010
Background	MW-72	FC-CCR-MW72-52917	5/29/2017	0.010	0	0.0050	0	0.0093	1	0.0010	0	0.0010	0	0.0050
Background	MW-72	FC-CCR-MW72-62217	6/22/2017	0.0040	0	0.0023	1	0.0077	1	0.0010	0	0.00040	0	0.0020
Background	MW-72	FC-CCR-MW72-72117	7/21/2017	0.0040	0	0.0026	1	0.0073	1	0.0010	0	0.00040	0	0.0020

Appendix A - PROUCL DATA UPLOAD TABLE

Designation	StationName	QC_SampleID	NumDate	Antimony	D_Antimony	Arsenic	D_Arsenic	Barium	D_Barium	Beryllium	D_Beryllium	Cadmium	D_Cadmium	Chromium
Background	MW-72	FC-CCR-MW72-81017	8/10/2017	0.0010	0	0.0040	1	0.0075	1	0.0010	0	0.00010	0	0.0010
Background	MW-72	FC-CCR-MW72-81717	8/17/2017	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Background	MW-72	FC-CCR-MW72-91017	9/10/2017	0.0040	0	0.0029	1	0.0086	1	0.0010	0	0.00040	0	0.0040
Background	MW-72	FC-CCR-MW72-101317	10/13/2017	0.010	0	0.0052	1	0.011	1	0.0010	0	0.0010	0	0.010
Background	MW-72	FC-CCR-MW72-112917	11/29/2017	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Background	MW-72	FC-CCR-MW72-31618	3/16/2018	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Background	MW-72	FC-CCR-MW-72-6218	6/2/2018	NA	NA	0.010	0	0.010	0	NA	NA	NA	NA	NA
Background	MW-72	FC-CCR-MW72-11318	11/3/2018	NA	NA	0.0031	1	0.0075	1	NA	NA	NA	NA	NA
Background	MW-72	FC-CCR-MW72-031719	3/17/2019	0.0010	0	0.0034	1	0.0077	1	0.0010	0	0.00010	0	0.0010
Background	MW-72	FC-CCR-MW72-5719	5/7/2019	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Background	MW-72	FC-CCR-MW72-120219	12/2/2019	0.0020	0	0.0031	1	0.0081	1	0.0010	0	0.00020	0	0.0040
Background	MW-72	FC-CCR-MW72-0620	6/19/2020	0.004	0	0.0044	1	0.02	1	NA	NA	0.0004	0	0.004
Background	MW-72	FC-CCR-MW72-1120	11/5/2020	0.001	0	0.0053	1	0.018	1	0.001	0	0.0001	0	0.00071
Background	MW-72	FC-CCR-MW72-0421	4/22/2021	0.004	0	0.0026	1	0.0086	1	0.001	0	0.00012	1	0.004
Background	MW-72	FC-CCR-MW72-1121	11/12/2021	0.002	0	0.001	0	0.0085	1	0.001	0	0.00006	1	0.002
Background	MW-72	FC-CCR-MW72-0522	5/22/2022	0.002	0	0.001	0	0.0073	1	0.001	0	0.0002	0	0.002
Background	MW-72	FC-CCR-MW72-1122	11/13/2022	0.001	0	0.0007	1	0.0086	1	0.001	0	0.0001	0	0.001
Background	MW-72	FC-CCR-MW72-0523	5/8/2023	0.002	0	0.005	0	0.0068	1	0.005	0	0.001	0	0.003
Background	MW-72	FC-CCR-MW72-0623	6/27/2023	0.01	0	0.0014	1	0.0073	1	0.0011	1	0.001	0	0.001
Background	MW-73	FC-CCR-MW73-117	2/2/2017	0.0010	0	0.0015	1	0.043	1	0.0010	0	0.00017	1	0.0010
Background	MW-73	FC-CCR-MW73-41817	4/18/2017	0.0040	0	0.0020	0	0.027	1	0.0010	0	0.00040	0	0.0020
Background	MW-73	FC-CCR-MW73-5217	5/2/2017	0.0020	0	0.0010	0	0.026	1	0.0010	0	0.00021	1	0.0010
Background	MW-73	FC-CCR-MW73-52917	5/29/2017	0.010	0	0.0050	0	0.028	1	0.0010	0	0.0010	0	0.0050
Background	MW-73	FC-CCR-MW73-62217	6/22/2017	0.0040	0	0.0020	0	0.029	1	0.0010	0	0.00040	0	0.0020
Background	MW-73	FC-CCR-MW73-72217	7/22/2017	0.0040	0	0.0020	0	0.025	1	0.0010	0	0.00040	0	0.0020
Background	MW-73	FC-CCR-MW73-81017	8/10/2017	0.010	0	0.0020	0	0.024	1	0.0010	0	0.0010	0	0.0041
Background	MW-73	FC-CCR-MW73-81717	8/17/2017	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Background	MW-73	FC-CCR-MW73-91017	9/10/2017	0.0040	0	0.0020	1	0.023	1	0.0010	0	0.00040	0	0.0040
Background	MW-73	FC-CCR-MW73-101217	10/12/2017	0.010	0	0.0050	0	0.024	1	0.0010	0	0.0010	0	0.010
Background	MW-73	FC-CCR-MW73-112917	11/29/2017	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Background	MW-73	FC-CCR-MW73-31618	3/16/2018	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Background	MW-73	FC-CCR-MW-73-6218	6/2/2018	NA	NA	0.010	0	0.023	1	NA	NA	NA	NA	NA
Background	MW-73	FC-CCR-MW73-11318	11/3/2018	NA	NA	0.00050	0	0.022	1	NA	NA	NA	NA	NA
Background	MW-73	FC-CCR-MW73-031819	3/18/2019	0.0010	0	0.00050	0	0.023	1	0.0010	0	0.00013	1	0.0010
Background	MW-73	FC-CCR-MW73-5619	5/6/2019	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Background	MW-73	FC-CCR-MW73-120219	12/2/2019	0.0020	0	0.0010	0	0.020	1	0.0010	0	0.00020	0	0.0040
Background	MW-73	FC-CCR-MW73-0620	6/20/2020	0.004	0	0.002	0	0.033	1	NA	NA	0.0004	0	0.004
Background	MW-73	FC-CCR-MW73-1120	11/5/2020	0.002	0	0.0012	1	0.02	1	0.001	0	0.0002	0	0.00073
Background	MW-73	FC-CCR-MW73-0421	4/22/2021	0.004	0	0.002	0	0.021	1	0.001	0	0.00016	1	0.004
Background	MW-73	FC-CCR-MW73-1121	11/13/2021	0.00017	1	0.001	0	0.022	1	0.001	0	0.00018	1	0.002
Background	MW-73	FC-CCR-MW73-0522	5/22/2022	0.002	0	0.001	0	0.018	1	0.001	0	0.0002	0	0.002
Background	MW-73	FC-CCR-MW73-1122	11/14/2022	0.001	0	0.00092	1	0.022	1	0.001	0	0.00017	1	0.001
Background	MW-73	FC-CCR-MW73-0523	5/7/2023	0.002	0	0.005	0	0.018	1	0.001	0	0.001	0	0.003

Appendix A - PROUCL DATA UPLOAD TABLE

Designation	StationName	QC_SampleID	NumDate	Antimony	D_Antimony	Arsenic	D_Arsenic	Barium	D_Barium	Beryllium	D_Beryllium	Cadmium	D_Cadmium	Chromium
Background	MW-73	FC-CCR-MW73-0623	6/27/2023	0.01	0	0.005	0	0.016	1	0.0014	1	0.001	0	0.01
Downgradient	MW-62	FC-CCR-MW62-110915	11/9/2015	0.0020	0	0.00098	1	0.043	1	0.000086	1	0.000084	1	0.0020
Downgradient	MW-62	FC-CCR-MW-62-042716	4/27/2016	0.0025	0	0.0010	1	0.033	1	0.0010	0	0.00010	0	0.0010
Downgradient	MW-62	FC-CCR-MW62-616	6/5/2016	0.00011	1	0.00062	1	0.027	1	0.0010	0	0.00010	0	0.00050
Downgradient	MW-62	FC-CCR-MW62-816	8/20/2016	0.00011	1	0.0023	1	0.034	1	0.0010	0	0.00010	0	0.0015
Downgradient	MW-62	FC-CCR-MW62-916	9/12/2016	0.0025	0	0.0020	1	0.026	1	0.0010	0	0.00050	0	0.0025
Downgradient	MW-62	FC-CCR-MW62-1016	10/19/2016	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-62	FC-CCR-MW62-117	2/1/2017	0.0010	0	0.0025	1	0.027	1	0.0010	0	0.00010	0	0.00051
Downgradient	MW-62	FC-CCR-MW62-41617	4/16/2017	0.0040	0	0.0020	0	0.022	1	0.0010	0	0.00040	0	0.0020
Downgradient	MW-62	FC-CCR-MW62-5117	5/1/2017	0.0010	0	0.00050	0	0.021	1	0.0010	0	0.00010	0	0.00050
Downgradient	MW-62	FC-CCR-MW62-52917	5/29/2017	0.0010	0	0.00067	1	0.021	1	0.0010	0	0.00010	0	0.00050
Downgradient	MW-62	FC-CCR-MW62-62117	6/21/2017	0.0010	0	0.00065	1	0.023	1	0.0010	0	0.00010	0	0.0010
Downgradient	MW-62	FC-CCR-MW62-72117	7/21/2017	0.0040	0	0.0020	0	0.023	1	0.0010	0	0.00040	0	0.0020
Downgradient	MW-62	FC-CCR-MW62-8917	8/9/2017	0.0010	0	0.0016	1	0.027	1	0.0010	0	0.00010	0	0.0010
Downgradient	MW-62	FC-CCR-MW62-81617	8/16/2017	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-62	FC-CCR-MW62-9917	9/9/2017	0.0040	0	0.0031	1	0.026	1	0.0010	0	0.00040	0	0.0040
Downgradient	MW-62	FC-CCR-MW62-101317	10/13/2017	0.0040	0	0.0050	0	0.028	1	0.0010	0	0.0010	0	0.010
Downgradient	MW-62	FC-CCR-MW62-113017	11/30/2017	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-62	FC-CCR-MW-62-6318	6/3/2018	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-62	FC-CCR-MW62-11218	11/2/2018	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-62	FC-CCR-MW62-4119	4/1/2019	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-62	FC-CCR-MW62-5719-01	5/7/2019	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-62	FC-CCR-MW62-120319	12/3/2019	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-62	FC-CCR-MW62-0620	6/19/2020	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-62	FC-CCR-MW62-1120	11/5/2020	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-62	FC-CCR-MW62-011421	1/14/2021	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-62	FC-CCR-MW62-0421	4/22/2021	0.0010	0	0.0019	0	0.016	1	0.001	0	0.0001	0	0.001
Downgradient	MW-62	FC-CCR-MW62-1121	11/15/2021	0.002	0	0.001	0	0.025	1	0.001	0	0.0002	0	0.002
Downgradient	MW-62	FC-CCR-MW62-0522	5/20/2022	0.001	0	0.00073	1	0.015	1	0.001	0	0.0001	0	0.001
Downgradient	MW-62	FC-CCR-MW62-1122	11/13/2022	0.001	0	0.012	1	0.031	1	0.001	0	0.0001	0	0.001
Downgradient	MW-62	FC-CCR-MW62-0523	5/7/2023	0.002	0	0.011	1	0.026	1	0.001	0	0.001	0	0.003
Downgradient	MW-62	FC-CCR-MW62-0623	6/28/2023	0.001	0	0.012	1	0.022	1	0.001	0	0.0001	0	0.001
Downgradient	MW-63	FC-CCR-MW63-110415	11/4/2015	0.0020	0	0.0012	1	0.033	1	0.000073	1	0.0010	0	0.00043
Downgradient	MW-63	FC-CCR-MW-63-042716	4/27/2016	0.0025	0	0.00099	1	0.021	1	0.0010	0	0.00010	0	0.00050
Downgradient	MW-63	FC-CCR-MW63-616	6/5/2016	0.00013	1	0.00059	1	0.020	1	0.0010	0	0.00010	0	0.00050
Downgradient	MW-63	FC-CCR-MW63-816	8/20/2016	0.00013	1	0.00082	1	0.022	1	0.0010	0	0.00010	0	0.00084
Downgradient	MW-63	FC-CCR-MW63-916	9/12/2016	0.0025	0	0.0010	0	0.022	1	0.0010	0	0.00050	0	0.0025
Downgradient	MW-63	FC-CCR-MW63-1016	10/19/2016	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-63	FC-CCR-MW63-117	1/31/2017	0.0010	0	0.00050	0	0.016	1	0.0010	0	0.00013	1	0.00050
Downgradient	MW-63	FC-CCR-MW63-41717	4/17/2017	0.0040	0	0.0020	0	0.017	1	0.0010	0	0.00040	0	0.0020
Downgradient	MW-63	FC-CCR-MW63-5217	5/2/2017	0.0010	0	0.00050	0	0.017	1	0.0010	0	0.00010	0	0.00050
Downgradient	MW-63	FC-CCR-MW63-52817	5/28/2017	0.0010	0	0.00050	0	0.017	1	0.0010	0	0.00010	0	0.00050
Downgradient	MW-63	FC-CCR-MW63-62117	6/21/2017	0.0010	0	0.00050	0	0.019	1	0.0010	0	0.00010	0	0.00050

Appendix A - PROUCL DATA UPLOAD TABLE

Designation	StationName	QC_SampleID	NumDate	Antimony	D_Antimony	Arsenic	D_Arsenic	Barium	D_Barium	Beryllium	D_Beryllium	Cadmium	D_Cadmium	Chromium
Downgradient	MW-63	FC-CCR-MW63-72117	7/21/2017	0.0040	0	0.0020	0	0.018	1	0.0010	0	0.00040	0	0.0020
Downgradient	MW-63	FC-CCR-MW63-8917	8/9/2017	0.0010	0	0.00050	0	0.020	1	0.0010	0	0.00010	0	0.0010
Downgradient	MW-63	FC-CCR-MW63-81617	8/16/2017	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-63	FC-CCR-MW63-9917	9/9/2017	0.0040	0	0.0020	0	0.020	1	0.0010	0	0.00040	0	0.0040
Downgradient	MW-63	FC-CCR-MW63-101317	10/13/2017	0.0040	0	0.0050	0	0.022	1	0.0010	0	0.0010	0	0.010
Downgradient	MW-63	FC-CCR-MW63-113017	11/30/2017	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-63	FC-CCR-MW-63-6318	6/3/2018	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-63	FC-CCR-MW63-112818	11/2/2018	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-63	FC-CCR-MW63-4119	4/1/2019	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-63	FC-CCR-MW63-5719-02	5/7/2019	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-63	FC-CCR-MW63-120319	12/3/2019	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-63	FC-CCR-MW63-0620	6/19/2020	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-63	FC-CCR-MW63-1120	11/5/2020	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-63	FC-CCR-MW63-0421	4/22/2021	0.0010	0	0.0013	0	0.02	1	0.001	0	0.0001	0	0.001
Downgradient	MW-63	FC-CCR-MW63-1121	11/15/2021	0.002	0	0.001	0	0.022	1	0.001	0	0.000064	1	0.002
Downgradient	MW-63	FC-CCR-MW63-0522	5/20/2022	0.002	0	0.001	0	0.015	1	0.001	0	0.0002	0	0.002
Downgradient	MW-63	FC-CCR-MW63-1122	11/13/2022	0.001	0	0.00063	1	0.023	1	0.001	0	0.0001	0	0.001
Downgradient	MW-63	FC-CCR-MW63-0523	5/7/2023	0.002	0	0.005	0	0.016	1	0.001	0	0.001	0	0.003
Downgradient	MW-63	FC-CCR-MW63-0623	6/27/2023	0.001	0	0.0012	1	0.014	1	0.001	0	0.0001	0	0.001
Downgradient	MW-64	FC-CCR-MW64-110515	11/5/2015	0.0020	0	0.00070	1	0.027	1	0.0010	0	0.0010	0	0.00023
Downgradient	MW-64	FC-CCR-MW-64-042716	4/27/2016	0.0025	0	0.00050	0	0.027	1	0.0010	0	0.00010	0	0.00071
Downgradient	MW-64	FC-CCR-MW64-616	6/5/2016	0.00010	0	0.00050	0	0.027	1	0.0010	0	0.00010	0	0.00050
Downgradient	MW-64	FC-CCR-MW64-816	8/20/2016	0.00010	0	0.00056	1	0.033	1	0.0010	0	0.00010	0	0.00093
Downgradient	MW-64	FC-CCR-MW64-916	9/12/2016	0.0025	0	0.0010	0	0.027	1	0.0010	0	0.00050	0	0.0025
Downgradient	MW-64	FC-CCR-MW64-1016	10/19/2016	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-64	FC-CCR-MW64-117	1/31/2017	0.0010	0	0.00050	0	0.025	1	0.0010	0	0.00010	0	0.00050
Downgradient	MW-64	FC-CCR-MW64-41717	4/17/2017	0.0040	0	0.0020	0	0.026	1	0.0010	0	0.00040	0	0.0020
Downgradient	MW-64	FC-CCR-MW64-5217	5/2/2017	0.0010	0	0.00050	0	0.026	1	0.0010	0	0.00010	0	0.00050
Downgradient	MW-64	FC-CCR-MW64-52817	5/28/2017	0.0010	0	0.00050	0	0.025	1	0.0010	0	0.00010	0	0.00050
Downgradient	MW-64	FC-CCR-MW64-62117	6/21/2017	0.0010	0	0.00050	0	0.027	1	0.0010	0	0.00010	0	0.00050
Downgradient	MW-64	FC-CCR-MW64-72117	7/21/2017	0.0040	0	0.0020	0	0.024	1	0.0010	0	0.00040	0	0.0020
Downgradient	MW-64	FC-CCR-MW64-8917	8/9/2017	0.0010	0	0.00050	0	0.027	1	0.0010	0	0.00010	0	0.0010
Downgradient	MW-64	FC-CCR-MW64-81617	8/16/2017	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-64	FC-CCR-MW64-9917	9/9/2017	0.0040	0	0.0020	0	0.024	1	0.0010	0	0.00040	0	0.0040
Downgradient	MW-64	FC-CCR-MW64-101317	10/13/2017	0.0040	0	0.0050	0	0.029	1	0.0010	0	0.0010	0	0.010
Downgradient	MW-64	FC-CCR-MW64-113017	11/30/2017	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-64	FC-CCR-MW-64-6318	6/3/2018	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-64	FC-CCR-MW64-11218	11/2/2018	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-64	FC-CCR-MW64-4119	4/1/2019	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-64	FC-CCR-MW64-5719-03	5/7/2019	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-64	FC-CCR-MW64-120319	12/3/2019	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-64	FC-CCR-MW64-0620	6/19/2020	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-64	FC-CCR-MW64-1120	11/5/2020	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Appendix A - PROUCL DATA UPLOAD TABLE

Designation	StationName	QC_SampleID	NumDate	Antimony	D_Antimony	Arsenic	D_Arsenic	Barium	D_Barium	Beryllium	D_Beryllium	Cadmium	D_Cadmium	Chromium
Downgradient	MW-64	FC-CCR-MW64-0421	4/22/2021	0.0010	0	0.00096	0	0.033	1	0.001	0	0.0001	0	0.001
Downgradient	MW-64	FC-CCR-MW64-1121	11/15/2021	0.002	0	0.001	0	0.024	1	0.001	0	0.000058	1	0.002
Downgradient	MW-64	FC-CCR-MW64-0522	5/20/2022	0.002	0	0.001	0	0.035	1	0.001	0	0.0002	0	0.002
Downgradient	MW-64	FC-CCR-MW64-1122	11/13/2022	0.001	0	0.0005	0	0.023	1	0.001	0	0.0001	0	0.001
Downgradient	MW-64	FC-CCR-MW64-0523	5/7/2023	0.002	0	0.005	0	0.022	1	0.0051	1	0.001	0	0.003
Downgradient	MW-64	FC-CCR-MW64-0623	6/27/2023	0.001	0	0.001	1	0.022	1	0.001	0	0.0001	0	0.001
Downgradient	MW-65	FC-CCR-MW65-110515	11/5/2015	0.0020	0	0.00071	1	0.014	1	0.0010	0	0.0010	0	0.00049
Downgradient	MW-65	FC-CCR-MW-65-042716	4/27/2016	0.0025	0	0.00050	0	0.017	1	0.0010	0	0.00010	0	0.0015
Downgradient	MW-65	FC-CCR-MW65-616	6/5/2016	0.00010	0	0.00050	0	0.014	1	0.0010	0	0.00010	0	0.00050
Downgradient	MW-65	FC-CCR-MW65-816	8/20/2016	0.00010	0	0.00050	0	0.019	1	0.0010	0	0.00010	0	0.00050
Downgradient	MW-65	FC-CCR-MW65-916	9/12/2016	0.0025	0	0.0010	0	0.013	1	0.0010	0	0.00050	0	0.0025
Downgradient	MW-65	FC-CCR-MW65-1016	10/19/2016	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-65	FC-CCR-MW65-117	2/1/2017	0.0010	0	0.00050	0	0.014	1	0.0010	0	0.00010	0	0.00050
Downgradient	MW-65	FC-CCR-MW65-41617	4/16/2017	0.0040	0	0.0020	0	0.016	1	0.0010	0	0.00040	0	0.0020
Downgradient	MW-65	FC-CCR-MW65-5117	5/1/2017	0.0010	0	0.00050	0	0.017	1	0.0010	0	0.00010	0	0.00050
Downgradient	MW-65	FC-CCR-MW65-52917	5/29/2017	0.0010	0	0.00050	0	0.021	1	0.0010	0	0.00010	0	0.00050
Downgradient	MW-65	FC-CCR-MW65-62117	6/21/2017	0.0010	0	0.00050	0	0.018	1	0.0010	0	0.00010	0	0.00050
Downgradient	MW-65	FC-CCR-MW65-72117	7/21/2017	0.0040	0	0.0020	0	0.012	1	0.0010	0	0.00040	0	0.0020
Downgradient	MW-65	FC-CCR-MW65-8917	8/9/2017	0.0010	0	0.00050	0	0.012	1	0.0010	0	0.00010	0	0.0010
Downgradient	MW-65	FC-CCR-MW65-81617	8/16/2017	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-65	FC-CCR-MW65-9917	9/9/2017	0.0040	0	0.0020	0	0.012	1	0.0010	0	0.00040	0	0.0040
Downgradient	MW-65	FC-CCR-MW65-101317	10/13/2017	0.0010	0	0.00050	0	0.013	1	0.0010	0	0.00010	0	0.0010
Downgradient	MW-65	FC-CCR-MW65-113017	11/30/2017	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-65	FC-CCR-MW-65-6318	6/3/2018	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-65	FC-CCR-MW65-11218	11/2/2018	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-65	FC-CCR-MW65-4119	4/1/2019	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-65	FC-CCR-MW65-5719-05	5/7/2019	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-65	FC-CCR-MW65-120319	12/3/2019	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-65	FC-CCR-MW65-0620	6/19/2020	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-65	FC-CCR-MW65-1120	11/5/2020	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-65	FC-CCR-MW65-0421	4/22/2021	0.0010	0	0.00099	0	0.032	1	0.001	0	0.0001	0	0.001
Downgradient	MW-65	FC-CCR-MW65-1121	11/15/2021	0.002	0	0.001	0	0.02	1	0.001	0	0.0002	0	0.002
Downgradient	MW-65	FC-CCR-MW65-0522	5/20/2022	0.002	0	0.001	0	0.042	1	0.001	0	0.0002	0	0.002
Downgradient	MW-65	FC-CCR-MW65-1122	11/13/2022	0.001	0	0.00059	1	0.021	1	0.001	0	0.0001	0	0.001
Downgradient	MW-65	FC-CCR-MW65-0523	5/7/2023	0.002	0	0.005	0	0.023	1	0.001	0	0.001	0	0.003
Downgradient	MW-65	FC-CCR-MW65-0623	6/28/2023	0.001	0	0.0013	1	0.022	1	0.001	0	0.0001	0	0.001

Appendix A - PROUCL DATA UPLOAD TABLE

Designation	StationName	QC_SampleID	NumDate	D_Chromium	Cobalt	D_Cobalt	Fluoride	D_Fluoride	Lead	D_Lead	Lithium	D_Lithium	Mercury	D_Mercury	Molybdenum
Background	MW-71	FC-CCR-MW-71-030516	3/5/2016	1	0.0028	1	0.050	0	0.00061	1	0.28	1	0.00020	0	0.0028
Background	MW-71	FC-CCR-MW-71-042616	4/26/2016	0	0.0049	1	2.0	0	0.00050	0	0.45	1	0.00020	0	0.0018
Background	MW-71	FC-CCR-MW71-616	6/6/2016	0	0.0041	1	0.40	0	0.00073	1	0.41	1	0.00020	0	0.0014
Background	MW-71	FC-CCR-MW71-816	8/21/2016	0	0.0010	0	0.80	0	0.0010	0	0.36	1	0.00020	0	0.0025
Background	MW-71	FC-CCR-MW71-916	9/12/2016	0	0.0012	1	0.40	0	0.00050	0	0.30	1	0.00020	0	0.0013
Background	MW-71	FC-CCR-MW71-1016	10/20/2016	NA	NA	NA	0.40	0	NA	NA	NA	NA	NA	NA	NA
Background	MW-71	FC-CCR-MW71-117	2/2/2017	0	0.0012	1	0.40	0	0.00050	0	0.39	1	0.00020	0	0.00078
Background	MW-71	FC-CCR-MW71-41717	4/17/2017	0	0.0020	0	2.0	0	0.0020	0	0.32	1	0.00020	0	0.0020
Background	MW-71	FC-CCR-MW71-5217	5/2/2017	0	0.0010	0	13	0	0.00050	0	0.34	1	0.00020	0	0.0010
Background	MW-71	FC-CCR-MW71-52917	5/29/2017	0	0.0050	0	2.0	0	0.0050	0	0.33	1	0.00020	0	0.0050
Background	MW-71	FC-CCR-MW71-62217	6/22/2017	0	0.0020	0	2.0	0	0.0020	0	0.38	1	0.00020	0	0.0020
Background	MW-71	FC-CCR-MW71-72117	7/21/2017	0	0.0010	0	2.0	0	0.0020	0	0.40	0	0.00020	0	0.0020
Background	MW-71	FC-CCR-MW71-81017	8/10/2017	0	0.0020	0	2.0	0	0.0050	0	0.34	1	0.00020	0	0.0050
Background	MW-71	FC-CCR-MW71-81717	8/17/2017	NA	NA	NA	2.0	0	NA	NA	NA	NA	NA	NA	NA
Background	MW-71	FC-CCR-MW71-91117	9/11/2017	0	0.0020	0	2.0	0	0.0020	0	0.32	1	0.00020	0	0.0020
Background	MW-71	FC-CCR-MW71-101317	10/13/2017	0	0.0050	0	2.0	0	0.0050	0	0.33	1	0.00020	0	0.0050
Background	MW-71	FC-CCR-MW71-113017	11/30/2017	NA	NA	NA	2.0	0	NA	NA	NA	NA	NA	NA	NA
Background	MW-71	FC-CCR-MW71-31618	3/16/2018	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Background	MW-71	FC-CCR-MW-71-6218	6/2/2018	NA	0.010	0	0.80	0	NA	NA	0.32	1	0.00020	0	0.010
Background	MW-71	FC-CCR-MW71-11318	11/3/2018	NA	0.00050	0	0.80	0	NA	NA	0.35	1	NA	NA	0.00079
Background	MW-71	FC-CCR-MW71-031819	3/18/2019	0	0.00050	0	0.80	0	0.00050	0	0.32	1	0.00020	0	0.00066
Background	MW-71	FC-CCR-MW71-5719	5/6/2019	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Background	MW-71	FC-CCR-MW71-120219	12/2/2019	0	0.0020	0	0.80	0	0.0020	0	0.32	1	0.00020	0	0.0020
Background	MW-71	FC-CCR-MW71-0620	6/20/2020	0	0.001	0	0.8	0	0.001	0	0.75	1	NA	NA	0.001
Background	MW-71	FC-CCR-MW71-1120	11/5/2020	0	0.00026	1	0.4	0	0.001	0	0.35	1	0.0002	0	0.00061
Background	MW-71	FC-CCR-MW71-0421	4/22/2021	0	0.0003	1	3.8	1	0.002	0	0.4	1	0.0002	0	0.002
Background	MW-71	FC-CCR-MW71-1121	11/12/2021	0	0.00013	1	0.14	1	0.001	0	0.37	1	0.0002	0	0.001
Background	MW-71	FC-CCR-MW71-0522	5/21/2022	0	0.001	0	0.8	0	0.001	0	0.37	1	0.0002	0	0.001
Background	MW-71	FC-CCR-MW71-1122	11/13/2022	0	0.0005	0	0.8	0	0.0005	0	0.37	1	0.0002	0	0.00052
Background	MW-71	FC-CCR-MW71-0523	5/8/2023	0	0.001	0	2	0	0.001	0	0.4	1	0.0002	0	0.002
Background	MW-71	FC-CCR-MW71-0623	6/27/2023	0	0.005	0	20	0	0.0005	0	0.45	1	0.0002	0	0.005
Background	MW-72	FC-CCR-MW72-030716	3/7/2016	1	0.019	1	0.050	0	0.00013	1	0.33	1	0.00020	0	0.011
Background	MW-72	FC-CCR-MW-72-042616	4/26/2016	1	0.0087	1	2.0	0	0.0011	1	0.40	1	0.00020	0	0.0093
Background	MW-72	FC-CCR-MW72-616	6/6/2016	1	0.0029	1	0.40	0	0.0010	0	0.20	0	0.00020	0	0.0052
Background	MW-72	FC-CCR-MW72-816	8/21/2016	0	0.0034	1	0.40	0	0.0010	0	0.42	1	0.00020	0	0.0061
Background	MW-72	FC-CCR-MW72-916	9/13/2016	0	0.0073	1	0.40	0	0.00050	0	0.35	1	0.00020	0	0.011
Background	MW-72	FC-CCR-MW72-1016	10/20/2016	NA	NA	NA	0.40	0	NA	NA	NA	NA	NA	NA	NA
Background	MW-72	FC-CCR-MW72-117	2/2/2017	0	0.0025	1	0.40	0	0.00050	0	0.39	1	0.00020	0	0.00093
Background	MW-72	FC-CCR-MW72-41717	4/17/2017	0	0.0024	1	2.0	0	0.0020	0	0.35	1	0.00020	0	0.0020
Background	MW-72	FC-CCR-MW72-5217	5/2/2017	0	0.0024	1	13	0	0.00050	0	0.38	1	0.00020	0	0.0010
Background	MW-72	FC-CCR-MW72-52917	5/29/2017	0	0.0050	0	2.0	0	0.0050	0	0.37	1	0.00020	0	0.0050
Background	MW-72	FC-CCR-MW72-62217	6/22/2017	0	0.0025	1	2.0	0	0.0020	0	0.39	1	0.00020	0	0.0020
Background	MW-72	FC-CCR-MW72-72117	7/21/2017	0	0.0024	1	2.0	0	0.0020	0	0.80	0	0.00020	0	0.0020

Appendix A - PROUCL DATA UPLOAD TABLE

Designation	StationName	QC_SampleID	NumDate	D_Chromium	Cobalt	D_Cobalt	Fluoride	D_Fluoride	Lead	D_Lead	Lithium	D_Lithium	Mercury	D_Mercury	Molybdenum
Background	MW-72	FC-CCR-MW72-81017	8/10/2017	0	0.0023	1	2.0	0	0.00050	0	0.41	1	0.00020	0	0.00087
Background	MW-72	FC-CCR-MW72-81717	8/17/2017	NA	NA	NA	2.0	0	NA	NA	NA	NA	NA	NA	NA
Background	MW-72	FC-CCR-MW72-91017	9/10/2017	0	0.0023	1	2.0	0	0.0020	0	0.37	1	0.00020	0	0.0020
Background	MW-72	FC-CCR-MW72-101317	10/13/2017	0	0.0050	0	2.0	0	0.0050	0	0.38	1	0.00020	0	0.0050
Background	MW-72	FC-CCR-MW72-112917	11/29/2017	NA	NA	NA	2.0	0	NA	NA	NA	NA	NA	NA	NA
Background	MW-72	FC-CCR-MW72-31618	3/16/2018	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Background	MW-72	FC-CCR-MW-72-6218	6/2/2018	NA	0.010	0	0.80	0	NA	NA	0.35	1	0.00020	0	0.010
Background	MW-72	FC-CCR-MW72-11318	11/3/2018	NA	0.0020	1	0.80	0	NA	NA	0.37	1	NA	NA	0.00078
Background	MW-72	FC-CCR-MW72-031719	3/17/2019	0	0.0022	1	0.80	0	0.00050	0	0.36	1	0.00020	0	0.00095
Background	MW-72	FC-CCR-MW72-5719	5/7/2019	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Background	MW-72	FC-CCR-MW72-120219	12/2/2019	0	0.0023	1	0.80	0	0.0010	0	0.36	1	0.00020	0	0.0014
Background	MW-72	FC-CCR-MW72-0620	6/19/2020	0	0.0027	1	0.8	0	0.001	0	0.89	1	NA	NA	0.002
Background	MW-72	FC-CCR-MW72-1120	11/5/2020	1	0.0013	1	0.4	0	0.0005	0	0.38	1	0.0002	0	0.002
Background	MW-72	FC-CCR-MW72-0421	4/22/2021	0	0.0029	1	0.8	0	0.002	0	0.37	1	0.0002	0	0.0011
Background	MW-72	FC-CCR-MW72-1121	11/12/2021	0	0.0026	1	0.8	0	0.001	0	0.38	1	0.0002	0	0.00055
Background	MW-72	FC-CCR-MW72-0522	5/22/2022	0	0.0025	1	0.8	0	0.001	0	0.37	1	0.0002	0	0.001
Background	MW-72	FC-CCR-MW72-1122	11/13/2022	0	0.0026	1	0.8	0	0.0005	0	0.34	1	0.0002	0	0.00077
Background	MW-72	FC-CCR-MW72-0523	5/8/2023	0	0.0025	1	4.2	1	0.001	0	0.38	1	0.0002	0	0.002
Background	MW-72	FC-CCR-MW72-0623	6/27/2023	0	0.0023	1	20	0	0.0005	0	0.37	1	0.0002	0	0.005
Background	MW-73	FC-CCR-MW73-117	2/2/2017	0	0.0073	1	0.40	0	0.00050	0	0.21	1	0.00020	0	0.0086
Background	MW-73	FC-CCR-MW73-41817	4/18/2017	0	0.0058	1	0.80	0	0.0020	0	0.22	1	0.00020	0	0.0041
Background	MW-73	FC-CCR-MW73-5217	5/2/2017	0	0.0067	1	5.0	0	0.00050	0	0.24	1	0.00020	0	0.0037
Background	MW-73	FC-CCR-MW73-52917	5/29/2017	0	0.0050	0	0.80	0	0.0050	0	0.20	0	0.00020	0	0.0050
Background	MW-73	FC-CCR-MW73-62217	6/22/2017	0	0.0066	1	0.80	0	0.0020	0	0.25	1	0.00020	0	0.0020
Background	MW-73	FC-CCR-MW73-72217	7/22/2017	0	0.0067	1	0.80	0	0.0020	0	0.27	1	0.00020	0	0.0023
Background	MW-73	FC-CCR-MW73-81017	8/10/2017	1	0.0065	1	0.80	0	0.0050	0	0.27	1	0.00020	0	0.0050
Background	MW-73	FC-CCR-MW73-81717	8/17/2017	NA	NA	NA	0.80	0	NA	NA	NA	NA	NA	NA	NA
Background	MW-73	FC-CCR-MW73-91017	9/10/2017	0	0.0048	1	0.80	0	0.0020	0	0.22	1	0.00020	0	0.0024
Background	MW-73	FC-CCR-MW73-101217	10/12/2017	0	0.0050	0	0.80	0	0.0050	0	0.20	0	0.00020	0	0.0050
Background	MW-73	FC-CCR-MW73-112917	11/29/2017	NA	NA	NA	0.80	0	NA	NA	NA	NA	NA	NA	NA
Background	MW-73	FC-CCR-MW73-31618	3/16/2018	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Background	MW-73	FC-CCR-MW-73-6218	6/2/2018	NA	0.010	0	0.80	0	NA	NA	0.26	1	0.00020	0	0.010
Background	MW-73	FC-CCR-MW73-11318	11/3/2018	NA	0.0078	1	0.80	0	NA	NA	0.31	1	NA	NA	0.0026
Background	MW-73	FC-CCR-MW73-031819	3/18/2019	0	0.0038	1	0.80	0	0.00050	0	0.26	1	0.00020	0	0.0017
Background	MW-73	FC-CCR-MW73-5619	5/6/2019	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Background	MW-73	FC-CCR-MW73-120219	12/2/2019	0	0.0040	1	0.80	0	0.0010	0	0.23	1	0.00020	0	0.0020
Background	MW-73	FC-CCR-MW73-0620	6/20/2020	0	0.0062	1	0.8	0	0.002	0	0.65	1	NA	NA	0.0035
Background	MW-73	FC-CCR-MW73-1120	11/5/2020	1	0.0067	1	0.063	1	0.001	0	0.29	1	0.0002	0	0.0016
Background	MW-73	FC-CCR-MW73-0421	4/22/2021	0	0.0027	1	0.4	0	0.002	0	0.23	1	0.0002	0	0.0011
Background	MW-73	FC-CCR-MW73-1121	11/13/2021	0	0.0041	1	0.12	1	0.001	0	0.31	1	0.0002	0	0.00093
Background	MW-73	FC-CCR-MW73-0522	5/22/2022	0	0.0042	1	0.8	0	0.001	0	0.34	1	0.0002	0	0.0012
Background	MW-73	FC-CCR-MW73-1122	11/14/2022	0	0.0042	1	0.8	0	0.0005	0	0.29	1	0.0002	0	0.0011
Background	MW-73	FC-CCR-MW73-0523	5/7/2023	0	0.0045	1	80	0	0.001	0	0.33	1	0.0002	0	0.002

Appendix A - PROUCL DATA UPLOAD TABLE

Designation	StationName	QC_SampleID	NumDate	D_Chromium	Cobalt	D_Cobalt	Fluoride	D_Fluoride	Lead	D_Lead	Lithium	D_Lithium	Mercury	D_Mercury	Molybdenum
Background	MW-73	FC-CCR-MW73-0623	6/27/2023	0	0.005	0	20	0	0.0005	0	0.34	1	0.0002	0	0.005
Downgradient	MW-62	FC-CCR-MW62-110915	11/9/2015	0	0.011	1	1.6	1	0.0010	0	0.11	1	0.00020	0	0.0043
Downgradient	MW-62	FC-CCR-MW-62-042716	4/27/2016	1	0.0062	1	1.6	1	0.00058	1	0.20	0	0.00020	0	0.0029
Downgradient	MW-62	FC-CCR-MW62-616	6/5/2016	0	0.0062	1	1.5	1	0.00050	0	0.20	0	0.00020	0	0.0030
Downgradient	MW-62	FC-CCR-MW62-816	8/20/2016	1	0.0061	1	1.5	1	0.00050	1	0.20	0	0.00020	0	0.012
Downgradient	MW-62	FC-CCR-MW62-916	9/12/2016	0	0.0069	1	1.5	1	0.00050	0	0.20	0	0.00020	0	0.0044
Downgradient	MW-62	FC-CCR-MW62-1016	10/19/2016	NA	NA	NA	1.2	1	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-62	FC-CCR-MW62-117	2/1/2017	1	0.0062	1	1.4	1	0.00050	0	0.20	0	0.00020	0	0.0034
Downgradient	MW-62	FC-CCR-MW62-41617	4/16/2017	0	0.0070	1	1.2	1	0.0020	0	0.20	0	0.00020	0	0.0036
Downgradient	MW-62	FC-CCR-MW62-5117	5/1/2017	0	0.0066	1	3.3	1	0.00050	0	0.20	0	0.00020	0	0.0032
Downgradient	MW-62	FC-CCR-MW62-52917	5/29/2017	0	0.0073	1	1.2	1	0.00050	0	0.20	0	0.00020	0	0.0030
Downgradient	MW-62	FC-CCR-MW62-62117	6/21/2017	1	0.0084	1	1.4	1	0.00050	0	0.20	0	0.00025	1	0.0030
Downgradient	MW-62	FC-CCR-MW62-72117	7/21/2017	0	0.0044	1	1.5	1	0.0020	0	0.20	0	0.00020	0	0.0029
Downgradient	MW-62	FC-CCR-MW62-8917	8/9/2017	0	0.0048	1	1.4	1	0.00050	0	0.20	0	0.00020	0	0.0025
Downgradient	MW-62	FC-CCR-MW62-81617	8/16/2017	NA	NA	NA	1.6	1	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-62	FC-CCR-MW62-9917	9/9/2017	0	0.0064	1	1.5	1	0.0020	0	0.20	0	0.00020	0	0.0028
Downgradient	MW-62	FC-CCR-MW62-101317	10/13/2017	0	0.010	1	1.5	1	0.0050	0	0.20	0	0.00020	0	0.0031
Downgradient	MW-62	FC-CCR-MW62-113017	11/30/2017	NA	NA	NA	1.4	1	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-62	FC-CCR-MW-62-6318	6/3/2018	NA	NA	NA	1.6	1	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-62	FC-CCR-MW62-11218	11/2/2018	NA	NA	NA	1.5	1	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-62	FC-CCR-MW62-4119	4/1/2019	NA	NA	NA	1.6	1	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-62	FC-CCR-MW62-5719-01	5/7/2019	NA	NA	NA	1.4	1	NA	NA	0.20	0	NA	NA	NA
Downgradient	MW-62	FC-CCR-MW62-120319	12/3/2019	NA	NA	NA	1.5	1	NA	NA	0.20	0	NA	NA	NA
Downgradient	MW-62	FC-CCR-MW62-0620	6/19/2020	NA	NA	NA	1.8	1	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-62	FC-CCR-MW62-1120	11/5/2020	NA	NA	NA	1.8	1	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-62	FC-CCR-MW62-011421	1/14/2021	NA	NA	NA	1.2	1	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-62	FC-CCR-MW62-0421	4/22/2021	0	0.00065	1	1.5	1	0.0005	0	0.12	1	0.0002	0	0.0029
Downgradient	MW-62	FC-CCR-MW62-1121	11/15/2021	0	0.014	1	1.4	1	0.001	0	0.14	1	0.0002	0	0.0027
Downgradient	MW-62	FC-CCR-MW62-0522	5/20/2022	0	0.0014	1	1.4	1	0.0005	0	0.13	1	0.0002	0	0.0027
Downgradient	MW-62	FC-CCR-MW62-1122	11/13/2022	0	0.011	1	1.6	1	0.0005	0	0.15	1	0.00037	1	0.0023
Downgradient	MW-62	FC-CCR-MW62-0523	5/7/2023	0	0.0033	1	80	0	0.001	0	0.14	1	0.00044	1	0.002
Downgradient	MW-62	FC-CCR-MW62-0623	6/28/2023	0	0.0029	1	2	1	0.0005	0	0.13	1	0.0002	0	0.0012
Downgradient	MW-63	FC-CCR-MW63-110415	11/4/2015	1	0.0086	1	2.4	1	0.00015	1	0.085	1	0.00020	0	0.0058
Downgradient	MW-63	FC-CCR-MW-63-042716	4/27/2016	0	0.0059	1	2.0	1	0.00050	0	0.20	0	0.00020	0	0.0026
Downgradient	MW-63	FC-CCR-MW63-616	6/5/2016	0	0.0054	1	1.9	1	0.00050	0	0.20	0	0.00020	0	0.0025
Downgradient	MW-63	FC-CCR-MW63-816	8/20/2016	1	0.0064	1	1.9	1	0.00050	0	0.20	0	0.00020	0	0.017
Downgradient	MW-63	FC-CCR-MW63-916	9/12/2016	0	0.0069	1	2.1	1	0.00050	0	0.20	0	0.00020	0	0.0031
Downgradient	MW-63	FC-CCR-MW63-1016	10/19/2016	NA	NA	NA	1.8	1	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-63	FC-CCR-MW63-117	1/31/2017	0	0.0041	1	2.0	1	0.00050	0	0.20	0	0.00020	0	0.0024
Downgradient	MW-63	FC-CCR-MW63-41717	4/17/2017	0	0.0055	1	1.6	1	0.0020	0	0.20	0	0.00020	0	0.0022
Downgradient	MW-63	FC-CCR-MW63-5217	5/2/2017	0	0.0050	1	2.5	1	0.00050	0	0.20	0	0.00020	0	0.0020
Downgradient	MW-63	FC-CCR-MW63-52817	5/28/2017	0	0.0056	1	1.6	1	0.00050	0	0.20	0	0.00020	0	0.0024
Downgradient	MW-63	FC-CCR-MW63-62117	6/21/2017	0	0.0060	1	1.9	1	0.00050	0	0.20	0	0.00020	0	0.0024

Appendix A - PROUCL DATA UPLOAD TABLE

Designation	StationName	QC_SampleID	NumDate	D_Chromium	Cobalt	D_Cobalt	Fluoride	D_Fluoride	Lead	D_Lead	Lithium	D_Lithium	Mercury	D_Mercury	Molybdenum
Downgradient	MW-63	FC-CCR-MW63-72117	7/21/2017	0	0.0057	1	2.0	1	0.0020	0	0.20	0	0.00020	0	0.0023
Downgradient	MW-63	FC-CCR-MW63-8917	8/9/2017	0	0.0063	1	1.9	1	0.00050	0	0.20	0	0.00020	0	0.0026
Downgradient	MW-63	FC-CCR-MW63-81617	8/16/2017	NA	NA	NA	2.1	1	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-63	FC-CCR-MW63-9917	9/9/2017	0	0.0060	1	2.0	1	0.0020	0	0.20	0	0.00020	0	0.0025
Downgradient	MW-63	FC-CCR-MW63-101317	10/13/2017	0	0.0069	1	2.0	1	0.0050	0	0.20	0	0.00020	0	0.0029
Downgradient	MW-63	FC-CCR-MW63-113017	11/30/2017	NA	NA	NA	1.8	1	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-63	FC-CCR-MW-63-6318	6/3/2018	NA	NA	NA	1.7	1	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-63	FC-CCR-MW63-112818	11/2/2018	NA	NA	NA	1.9	1	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-63	FC-CCR-MW63-4119	4/1/2019	NA	NA	NA	1.7	1	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-63	FC-CCR-MW63-5719-02	5/7/2019	NA	NA	NA	1.6	1	NA	NA	0.20	0	NA	NA	NA
Downgradient	MW-63	FC-CCR-MW63-120319	12/3/2019	NA	NA	NA	1.8	1	NA	NA	0.20	0	NA	NA	NA
Downgradient	MW-63	FC-CCR-MW63-0620	6/19/2020	NA	NA	NA	2.1	1	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-63	FC-CCR-MW63-1120	11/5/2020	NA	NA	NA	2.2	1	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-63	FC-CCR-MW63-0421	4/22/2021	0	0.00062	1	2	1	0.0005	0	0.057	1	0.0002	0	0.0019
Downgradient	MW-63	FC-CCR-MW63-1121	11/15/2021	0	0.0022	1	0.28	1	0.001	0	0.066	1	0.0002	0	0.0035
Downgradient	MW-63	FC-CCR-MW63-0522	5/20/2022	0	0.0012	1	2.1	1	0.001	0	0.058	1	0.0002	0	0.0029
Downgradient	MW-63	FC-CCR-MW63-1122	11/13/2022	0	0.0026	1	2.1	1	0.0005	0	0.061	1	0.0002	0	0.0036
Downgradient	MW-63	FC-CCR-MW63-0523	5/7/2023	0	0.001	0	8	0	0.001	0	0.055	1	0.0002	0	0.0022
Downgradient	MW-63	FC-CCR-MW63-0623	6/27/2023	0	0.0015	1	1.8	1	0.0005	0	0.045	1	0.0002	0	0.003
Downgradient	MW-64	FC-CCR-MW64-110515	11/5/2015	1	0.0015	1	1.5	1	0.00016	1	0.022	1	0.00020	0	0.0057
Downgradient	MW-64	FC-CCR-MW-64-042716	4/27/2016	1	0.0017	1	1.4	1	0.00050	0	0.20	0	0.00020	0	0.0051
Downgradient	MW-64	FC-CCR-MW64-616	6/5/2016	0	0.0012	1	1.5	1	0.00050	0	0.20	0	0.00020	0	0.0050
Downgradient	MW-64	FC-CCR-MW64-816	8/20/2016	1	0.0015	1	1.6	1	0.00050	0	0.20	0	0.00020	0	0.0073
Downgradient	MW-64	FC-CCR-MW64-916	9/12/2016	0	0.0015	1	1.5	1	0.00050	0	0.20	0	0.00020	0	0.0052
Downgradient	MW-64	FC-CCR-MW64-1016	10/19/2016	NA	NA	NA	1.5	1	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-64	FC-CCR-MW64-117	1/31/2017	0	0.0012	1	1.5	1	0.00050	0	0.20	0	0.00020	0	0.0048
Downgradient	MW-64	FC-CCR-MW64-41717	4/17/2017	0	0.0020	0	1.4	1	0.00050	0	0.20	0	0.00020	0	0.0049
Downgradient	MW-64	FC-CCR-MW64-5217	5/2/2017	0	0.0011	1	1.3	1	0.00050	0	0.20	0	0.00020	0	0.0045
Downgradient	MW-64	FC-CCR-MW64-52817	5/28/2017	0	0.0011	1	1.5	1	0.00050	0	0.20	0	0.00020	0	0.0045
Downgradient	MW-64	FC-CCR-MW64-62117	6/21/2017	0	0.0012	1	1.4	1	0.00050	0	0.20	0	0.00020	0	0.0051
Downgradient	MW-64	FC-CCR-MW64-72117	7/21/2017	0	0.0020	0	1.5	1	0.0020	0	0.20	0	0.00020	0	0.0042
Downgradient	MW-64	FC-CCR-MW64-8917	8/9/2017	0	0.0012	1	1.5	1	0.00050	0	0.20	0	0.00020	0	0.0047
Downgradient	MW-64	FC-CCR-MW64-81617	8/16/2017	NA	NA	NA	1.5	1	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-64	FC-CCR-MW64-9917	9/9/2017	0	0.0020	0	1.5	1	0.0020	0	0.20	0	0.00020	0	0.0045
Downgradient	MW-64	FC-CCR-MW64-101317	10/13/2017	0	0.0050	0	1.4	1	0.0050	0	0.20	0	0.00020	0	0.0051
Downgradient	MW-64	FC-CCR-MW64-113017	11/30/2017	NA	NA	NA	1.4	1	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-64	FC-CCR-MW-64-6318	6/3/2018	NA	NA	NA	1.4	1	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-64	FC-CCR-MW64-11218	11/2/2018	NA	NA	NA	1.4	1	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-64	FC-CCR-MW64-4119	4/1/2019	NA	NA	NA	1.4	1	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-64	FC-CCR-MW64-5719-03	5/7/2019	NA	NA	NA	1.4	1	NA	NA	0.20	0	NA	NA	NA
Downgradient	MW-64	FC-CCR-MW64-120319	12/3/2019	NA	NA	NA	1.5	1	NA	NA	0.20	0	NA	NA	NA
Downgradient	MW-64	FC-CCR-MW64-0620	6/19/2020	NA	NA	NA	1.3	1	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-64	FC-CCR-MW64-1120	11/5/2020	NA	NA	NA	1.6	1	NA	NA	NA	NA	NA	NA	NA

Appendix A - PROUCL DATA UPLOAD TABLE

Designation	StationName	QC_SampleID	NumDate	D_Chromium	Cobalt	D_Cobalt	Fluoride	D_Fluoride	Lead	D_Lead	Lithium	D_Lithium	Mercury	D_Mercury	Molybdenum
Downgradient	MW-64	FC-CCR-MW64-0421	4/22/2021	0	0.00083	1	1.4	1	0.0005	0	0.019	1	0.0002	0	0.0047
Downgradient	MW-64	FC-CCR-MW64-1121	11/15/2021	0	0.0018	1	1.4	1	0.001	0	0.019	1	0.0002	0	0.0052
Downgradient	MW-64	FC-CCR-MW64-0522	5/20/2022	0	0.0011	1	1.4	1	0.001	0	0.027	1	0.0002	0	0.0049
Downgradient	MW-64	FC-CCR-MW64-1122	11/13/2022	0	0.0018	1	1.6	1	0.0005	0	0.021	1	0.0002	0	0.0052
Downgradient	MW-64	FC-CCR-MW64-0523	5/7/2023	0	0.0017	1	1.4	1	0.001	0	0.023	1	0.0002	0	0.005
Downgradient	MW-64	FC-CCR-MW64-0623	6/27/2023	0	0.0017	1	1.3	1	0.0005	0	0.02	1	0.0002	0	0.0046
Downgradient	MW-65	FC-CCR-MW65-110515	11/5/2015	1	0.0012	1	2.0	1	0.0010	0	0.054	1	0.00020	0	0.0093
Downgradient	MW-65	FC-CCR-MW-65-042716	4/27/2016	1	0.0012	1	1.8	1	0.00050	0	0.20	0	0.00020	0	0.0078
Downgradient	MW-65	FC-CCR-MW65-616	6/5/2016	0	0.0011	1	2.0	1	0.00050	0	0.20	0	0.00020	0	0.0083
Downgradient	MW-65	FC-CCR-MW65-816	8/20/2016	0	0.0012	1	2.1	1	0.00050	0	0.20	0	0.00020	0	0.013
Downgradient	MW-65	FC-CCR-MW65-916	9/12/2016	0	0.0014	1	2.0	1	0.00050	0	0.20	0	0.00020	0	0.0084
Downgradient	MW-65	FC-CCR-MW65-1016	10/19/2016	NA	NA	NA	2.0	1	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-65	FC-CCR-MW65-117	2/1/2017	0	0.0011	1	2.0	1	0.00050	0	0.20	0	0.00020	0	0.0086
Downgradient	MW-65	FC-CCR-MW65-41617	4/16/2017	0	0.0020	0	1.8	1	0.0020	0	0.20	0	0.00020	0	0.0082
Downgradient	MW-65	FC-CCR-MW65-5117	5/1/2017	0	0.0011	1	1.6	1	0.00050	0	0.20	0	0.00020	0	0.0083
Downgradient	MW-65	FC-CCR-MW65-52917	5/29/2017	0	0.0010	1	1.8	1	0.00050	0	0.20	0	0.00020	0	0.010
Downgradient	MW-65	FC-CCR-MW65-62117	6/21/2017	0	0.0011	1	1.9	1	0.00050	0	0.20	0	0.00020	0	0.0097
Downgradient	MW-65	FC-CCR-MW65-72117	7/21/2017	0	0.0020	0	2.0	1	0.0020	0	0.20	0	0.00020	0	0.0080
Downgradient	MW-65	FC-CCR-MW65-8917	8/9/2017	0	0.0012	1	2.0	1	0.00050	0	0.20	0	0.00020	0	0.0083
Downgradient	MW-65	FC-CCR-MW65-81617	8/16/2017	NA	NA	NA	2.0	1	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-65	FC-CCR-MW65-9917	9/9/2017	0	0.0020	0	2.0	1	0.0020	0	0.20	0	0.00020	0	0.0080
Downgradient	MW-65	FC-CCR-MW65-101317	10/13/2017	0	0.0011	1	1.9	1	0.00050	0	0.20	0	0.00020	0	0.0093
Downgradient	MW-65	FC-CCR-MW65-113017	11/30/2017	NA	NA	NA	2.0	1	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-65	FC-CCR-MW-65-6318	6/3/2018	NA	NA	NA	1.9	1	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-65	FC-CCR-MW65-11218	11/2/2018	NA	NA	NA	1.9	1	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-65	FC-CCR-MW65-4119	4/1/2019	NA	NA	NA	1.8	1	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-65	FC-CCR-MW65-5719-05	5/7/2019	NA	NA	NA	1.7	1	NA	NA	0.20	0	NA	NA	NA
Downgradient	MW-65	FC-CCR-MW65-120319	12/3/2019	NA	NA	NA	1.9	1	NA	NA	0.20	0	NA	NA	NA
Downgradient	MW-65	FC-CCR-MW65-0620	6/19/2020	NA	NA	NA	1.7	1	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-65	FC-CCR-MW65-1120	11/5/2020	NA	NA	NA	2.1	1	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-65	FC-CCR-MW65-0421	4/22/2021	0	0.002	1	1.5	1	0.0005	0	0.061	1	0.0002	0	0.0072
Downgradient	MW-65	FC-CCR-MW65-1121	11/15/2021	0	0.0022	1	1.7	1	0.001	0	0.053	1	0.0002	0	0.0098
Downgradient	MW-65	FC-CCR-MW65-0522	5/20/2022	0	0.0029	1	1.5	1	0.001	0	0.081	1	0.0002	0	0.0066
Downgradient	MW-65	FC-CCR-MW65-1122	11/13/2022	0	0.0019	1	1.8	1	0.0005	0	0.05	1	0.0002	0	0.0089
Downgradient	MW-65	FC-CCR-MW65-0523	5/7/2023	0	0.0018	1	2	0	0.001	0	0.045	1	0.0002	0	0.007
Downgradient	MW-65	FC-CCR-MW65-0623	6/28/2023	0	0.0017	1	1.4	1	0.0005	0	0.05	1	0.0002	0	0.0073

Appendix A - PROUCL DATA UPLOAD TABLE

Designation	StationName	QC_SampleID	NumDate	D_Molybdenum	Total Radium	D_Total Radium	Selenium	D_Selenium	Thallium	D_Thallium
Background	MW-71	FC-CCR-MW-71-030516	3/5/2016	1	1.86	1	0.19	1	0.00031	1
Background	MW-71	FC-CCR-MW-71-042616	4/26/2016	1	2.2	1	0.31	1	0.00047	1
Background	MW-71	FC-CCR-MW71-616	6/6/2016	1	3.2	1	0.28	1	0.00043	1
Background	MW-71	FC-CCR-MW71-816	8/21/2016	1	1.6	1	0.26	1	0.00029	1
Background	MW-71	FC-CCR-MW71-916	9/12/2016	1	2.1	1	0.18	1	0.00050	0
Background	MW-71	FC-CCR-MW71-1016	10/20/2016	NA	0.4	1	NA	NA	NA	NA
Background	MW-71	FC-CCR-MW71-117	2/2/2017	1	1.9	1	0.34	1	0.00037	1
Background	MW-71	FC-CCR-MW71-41717	4/17/2017	0	1.2	1	0.20	1	0.00040	0
Background	MW-71	FC-CCR-MW71-5217	5/2/2017	0	0.7	1	0.27	1	0.00025	1
Background	MW-71	FC-CCR-MW71-52917	5/29/2017	0	0.6	0	0.21	1	0.0010	0
Background	MW-71	FC-CCR-MW71-62217	6/22/2017	0	2.7	1	0.25	1	0.00040	0
Background	MW-71	FC-CCR-MW71-72117	7/21/2017	0	0.5	0	0.24	1	0.00040	0
Background	MW-71	FC-CCR-MW71-81017	8/10/2017	0	0.7	0	0.21	1	0.0010	0
Background	MW-71	FC-CCR-MW71-81717	8/17/2017	NA	2.0	1	NA	NA	NA	NA
Background	MW-71	FC-CCR-MW71-91117	9/11/2017	0	0.7	0	0.20	1	0.00040	0
Background	MW-71	FC-CCR-MW71-101317	10/13/2017	0	1.6	1	0.20	1	0.0010	0
Background	MW-71	FC-CCR-MW71-113017	11/30/2017	NA	NA	NA	NA	NA	NA	NA
Background	MW-71	FC-CCR-MW71-31618	3/16/2018	NA	0.8	1	NA	NA	NA	NA
Background	MW-71	FC-CCR-MW-71-6218	6/2/2018	0	1.9	1	0.20	1	0.0020	0
Background	MW-71	FC-CCR-MW71-11318	11/3/2018	1	1.2	1	0.27	1	0.00031	1
Background	MW-71	FC-CCR-MW71-031819	3/18/2019	1	0.7	0	0.37	1	0.00031	1
Background	MW-71	FC-CCR-MW71-5719	5/6/2019	NA	1.0	1	NA	NA	NA	NA
Background	MW-71	FC-CCR-MW71-120219	12/2/2019	0	NA	NA	0.27	1	0.00065	1
Background	MW-71	FC-CCR-MW71-0620	6/20/2020	0	0.8	0	0.15	1	0.00025	1
Background	MW-71	FC-CCR-MW71-1120	11/5/2020	1	0.8	0	0.28	1	0.00023	1
Background	MW-71	FC-CCR-MW71-0421	4/22/2021	0	0.7	1	0.36	1	0.0004	1
Background	MW-71	FC-CCR-MW71-1121	11/12/2021	0	0.5	1	0.24	1	0.00042	1
Background	MW-71	FC-CCR-MW71-0522	5/21/2022	0	1.2	1	0.28	1	0.00037	1
Background	MW-71	FC-CCR-MW71-1122	11/13/2022	1	1	1	0.36	1	0.00043	1
Background	MW-71	FC-CCR-MW71-0523	5/8/2023	0	1.7	1	0.2	1	0.001	0
Background	MW-71	FC-CCR-MW71-0623	6/27/2023	0	2.2	1	0.25	1	0.00039	1
Background	MW-72	FC-CCR-MW72-030716	3/7/2016	1	2.91	1	0.13	1	0.0012	1
Background	MW-72	FC-CCR-MW-72-042616	4/26/2016	1	0.8	0	0.16	1	0.00081	1
Background	MW-72	FC-CCR-MW72-616	6/6/2016	1	1.3	1	0.39	1	0.00058	1
Background	MW-72	FC-CCR-MW72-816	8/21/2016	1	3.2	1	0.18	1	0.0011	1
Background	MW-72	FC-CCR-MW72-916	9/13/2016	1	3.9	1	0.0030	0	0.00056	1
Background	MW-72	FC-CCR-MW72-1016	10/20/2016	NA	4.2	1	NA	NA	NA	NA
Background	MW-72	FC-CCR-MW72-117	2/2/2017	1	4.0	1	0.13	1	0.00094	1
Background	MW-72	FC-CCR-MW72-41717	4/17/2017	0	3.5	1	0.10	1	0.00096	1
Background	MW-72	FC-CCR-MW72-5217	5/2/2017	0	3.8	1	0.12	1	0.00091	1
Background	MW-72	FC-CCR-MW72-52917	5/29/2017	0	NA	NA	0.11	1	0.0011	1
Background	MW-72	FC-CCR-MW72-62217	6/22/2017	0	2.8	1	0.10	1	0.0010	1
Background	MW-72	FC-CCR-MW72-72117	7/21/2017	0	1.7	1	0.13	1	0.00089	1

Appendix A - PROUCL DATA UPLOAD TABLE

Designation	StationName	QC_SampleID	NumDate	D_Molybdenum	Total Radium	D_Total Radium	Selenium	D_Selenium	Thallium	D_Thallium
Background	MW-72	FC-CCR-MW72-81017	8/10/2017	1	2.8	1	0.14	1	0.00091	1
Background	MW-72	FC-CCR-MW72-81717	8/17/2017	NA	2.1	1	NA	NA	NA	NA
Background	MW-72	FC-CCR-MW72-91017	9/10/2017	0	2.3	1	0.10	1	0.00095	1
Background	MW-72	FC-CCR-MW72-101317	10/13/2017	0	3.1	1	0.11	1	0.0010	1
Background	MW-72	FC-CCR-MW72-112917	11/29/2017	NA	NA	NA	NA	NA	NA	NA
Background	MW-72	FC-CCR-MW72-31618	3/16/2018	NA	1.9	1	NA	NA	NA	NA
Background	MW-72	FC-CCR-MW-72-6218	6/2/2018	0	2.8	1	0.10	1	0.0020	0
Background	MW-72	FC-CCR-MW72-11318	11/3/2018	1	1.7	1	0.13	1	0.00088	1
Background	MW-72	FC-CCR-MW72-031719	3/17/2019	1	2.4	1	0.13	1	0.00095	1
Background	MW-72	FC-CCR-MW72-5719	5/7/2019	NA	3.4	1	NA	NA	NA	NA
Background	MW-72	FC-CCR-MW72-120219	12/2/2019	1	NA	NA	0.11	1	0.0011	1
Background	MW-72	FC-CCR-MW72-0620	6/19/2020	0	3.5	1	0.11	1	0.0011	1
Background	MW-72	FC-CCR-MW72-1120	11/5/2020	1	2.4	1	0.11	1	0.00011	0
Background	MW-72	FC-CCR-MW72-0421	4/22/2021	1	2.2	1	0.11	1	0.001	1
Background	MW-72	FC-CCR-MW72-1121	11/12/2021	1	3.7	1	0.087	1	0.001	1
Background	MW-72	FC-CCR-MW72-0522	5/22/2022	0	1.2	1	0.095	1	0.00094	1
Background	MW-72	FC-CCR-MW72-1122	11/13/2022	1	1.9	1	0.12	1	0.001	1
Background	MW-72	FC-CCR-MW72-0523	5/8/2023	0	4.0	1	0.064	1	0.001	0
Background	MW-72	FC-CCR-MW72-0623	6/27/2023	0	1.9	1	0.11	1	0.00093	1
Background	MW-73	FC-CCR-MW73-117	2/2/2017	1	3.2	1	0.029	1	0.00020	1
Background	MW-73	FC-CCR-MW73-41817	4/18/2017	1	1.8	1	0.019	1	0.00040	0
Background	MW-73	FC-CCR-MW73-5217	5/2/2017	1	2.3	1	0.015	1	0.00024	1
Background	MW-73	FC-CCR-MW73-52917	5/29/2017	0	0.6	0	0.043	1	0.0010	0
Background	MW-73	FC-CCR-MW73-62217	6/22/2017	0	3.1	1	0.019	1	0.00040	0
Background	MW-73	FC-CCR-MW73-72217	7/22/2017	1	2.0	1	0.016	1	0.00040	0
Background	MW-73	FC-CCR-MW73-81017	8/10/2017	0	1.1	1	0.017	1	0.0010	0
Background	MW-73	FC-CCR-MW73-81717	8/17/2017	NA	1.5	1	NA	NA	NA	NA
Background	MW-73	FC-CCR-MW73-91017	9/10/2017	1	2.5	1	0.033	1	0.00040	0
Background	MW-73	FC-CCR-MW73-101217	10/12/2017	0	0.9	1	0.048	1	0.0010	0
Background	MW-73	FC-CCR-MW73-112917	11/29/2017	NA	NA	NA	NA	NA	NA	NA
Background	MW-73	FC-CCR-MW73-31618	3/16/2018	NA	2.6	1	NA	NA	NA	NA
Background	MW-73	FC-CCR-MW-73-6218	6/2/2018	0	2.8	1	0.011	1	0.0020	0
Background	MW-73	FC-CCR-MW73-11318	11/3/2018	1	2.9	1	0.0062	1	0.00020	1
Background	MW-73	FC-CCR-MW73-031819	3/18/2019	1	1.6	1	0.0069	1	0.00025	1
Background	MW-73	FC-CCR-MW73-5619	5/6/2019	NA	1.7	1	NA	NA	NA	NA
Background	MW-73	FC-CCR-MW73-120219	12/2/2019	1	NA	NA	0.0086	1	0.00022	1
Background	MW-73	FC-CCR-MW73-0620	6/20/2020	1	3.4	1	0.0077	1	0.0004	0
Background	MW-73	FC-CCR-MW73-1120	11/5/2020	1	2.8	1	0.0099	1	0.00022	1
Background	MW-73	FC-CCR-MW73-0421	4/22/2021	1	1.8	1	0.015	1	0.00026	1
Background	MW-73	FC-CCR-MW73-1121	11/13/2021	1	2.8	1	0.0072	1	0.00023	1
Background	MW-73	FC-CCR-MW73-0522	5/22/2022	1	1.4	1	0.0038	1	0.00023	1
Background	MW-73	FC-CCR-MW73-1122	11/14/2022	1	4.9	1	0.0095	1	0.00025	1
Background	MW-73	FC-CCR-MW73-0523	5/7/2023	0	0.8	1	0.005	0	0.001	0

Appendix A - PROUCL DATA UPLOAD TABLE

Designation	StationName	QC_SampleID	NumDate	D_Molybdenum	Total Radium	D_Total Radium	Selenium	D_Selenium	Thallium	D_Thallium
Background	MW-73	FC-CCR-MW73-0623	6/27/2023	0	3.2	1	0.005	0	0.00021	1
Downgradient	MW-62	FC-CCR-MW62-110915	11/9/2015	1	1.6045	1	0.00093	1	0.0010	0
Downgradient	MW-62	FC-CCR-MW-62-042716	4/27/2016	1	0.6	1	0.00078	1	0.00010	0
Downgradient	MW-62	FC-CCR-MW62-616	6/5/2016	1	1.1	1	0.00050	0	0.00010	0
Downgradient	MW-62	FC-CCR-MW62-816	8/20/2016	1	1.4	1	0.00054	1	0.00010	0
Downgradient	MW-62	FC-CCR-MW62-916	9/12/2016	1	1.3	1	0.0030	0	0.00050	0
Downgradient	MW-62	FC-CCR-MW62-1016	10/19/2016	NA	0.9	1	NA	NA	NA	NA
Downgradient	MW-62	FC-CCR-MW62-117	2/1/2017	1	1.9	1	0.00050	0	0.00010	0
Downgradient	MW-62	FC-CCR-MW62-41617	4/16/2017	1	0.6	0	0.0020	0	0.00040	0
Downgradient	MW-62	FC-CCR-MW62-5117	5/1/2017	1	0.6	0	0.00050	0	0.00010	0
Downgradient	MW-62	FC-CCR-MW62-52917	5/29/2017	1	1.6	1	0.00050	0	0.00010	0
Downgradient	MW-62	FC-CCR-MW62-62117	6/21/2017	1	0.6	0	0.00050	0	0.00010	0
Downgradient	MW-62	FC-CCR-MW62-72117	7/21/2017	1	0.6	0	0.0020	0	0.00040	0
Downgradient	MW-62	FC-CCR-MW62-8917	8/9/2017	1	0.7	0	0.00050	0	0.00010	0
Downgradient	MW-62	FC-CCR-MW62-81617	8/16/2017	NA	1.0	1	NA	NA	NA	NA
Downgradient	MW-62	FC-CCR-MW62-9917	9/9/2017	1	0.6	0	0.0020	0	0.00040	0
Downgradient	MW-62	FC-CCR-MW62-101317	10/13/2017	1	0.7	1	0.0020	0	0.0010	0
Downgradient	MW-62	FC-CCR-MW62-113017	11/30/2017	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-62	FC-CCR-MW-62-6318	6/3/2018	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-62	FC-CCR-MW62-11218	11/2/2018	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-62	FC-CCR-MW62-4119	4/1/2019	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-62	FC-CCR-MW62-5719-01	5/7/2019	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-62	FC-CCR-MW62-120319	12/3/2019	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-62	FC-CCR-MW62-0620	6/19/2020	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-62	FC-CCR-MW62-1120	11/5/2020	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-62	FC-CCR-MW62-011421	1/14/2021	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-62	FC-CCR-MW62-0421	4/22/2021	1	0.7	0	0.0008	0	0.0001	0
Downgradient	MW-62	FC-CCR-MW62-1121	11/15/2021	1	1.1	1	0.001	0	0.000098	1
Downgradient	MW-62	FC-CCR-MW62-0522	5/20/2022	1	0.7	0	0.002	1	0.0002	0
Downgradient	MW-62	FC-CCR-MW62-1122	11/13/2022	1	1	1	0.0005	0	0.0001	0
Downgradient	MW-62	FC-CCR-MW62-0523	5/7/2023	0	0.9	1	0.005	0	0.001	0
Downgradient	MW-62	FC-CCR-MW62-0623	6/28/2023	1	0.9	1	0.00094	1	0.0001	0
Downgradient	MW-63	FC-CCR-MW63-110415	11/4/2015	1	1.298	1	0.00076	1	0.00011	1
Downgradient	MW-63	FC-CCR-MW-63-042716	4/27/2016	1	0.6	1	0.00050	0	0.00010	0
Downgradient	MW-63	FC-CCR-MW63-616	6/5/2016	1	0.8	0	0.00050	0	0.00010	0
Downgradient	MW-63	FC-CCR-MW63-816	8/20/2016	1	2.1	1	0.00050	0	0.00010	0
Downgradient	MW-63	FC-CCR-MW63-916	9/12/2016	1	1.0	1	0.0030	0	0.00050	0
Downgradient	MW-63	FC-CCR-MW63-1016	10/19/2016	NA	0.7	0	NA	NA	NA	NA
Downgradient	MW-63	FC-CCR-MW63-117	1/31/2017	1	0.7	1	0.00050	0	0.00010	0
Downgradient	MW-63	FC-CCR-MW63-41717	4/17/2017	1	0.6	0	0.0020	0	0.00040	0
Downgradient	MW-63	FC-CCR-MW63-5217	5/2/2017	1	0.8	1	0.00050	0	0.00010	0
Downgradient	MW-63	FC-CCR-MW63-52817	5/28/2017	1	0.5	1	0.00050	0	0.00010	0
Downgradient	MW-63	FC-CCR-MW63-62117	6/21/2017	1	0.4	1	0.00050	0	0.00010	0

Appendix A - PROUCL DATA UPLOAD TABLE

Designation	StationName	QC_SampleID	NumDate	D_Molybdenum	Total Radium	D_Total Radium	Selenium	D_Selenium	Thallium	D_Thallium
Downgradient	MW-63	FC-CCR-MW63-72117	7/21/2017	1	0.8	1	0.0020	0	0.00040	0
Downgradient	MW-63	FC-CCR-MW63-8917	8/9/2017	1	0.7	0	0.00050	0	0.00010	0
Downgradient	MW-63	FC-CCR-MW63-81617	8/16/2017	NA	0.7	0	NA	NA	NA	NA
Downgradient	MW-63	FC-CCR-MW63-9917	9/9/2017	1	0.7	1	0.0020	0	0.00040	0
Downgradient	MW-63	FC-CCR-MW63-101317	10/13/2017	1	1.8	1	0.0020	0	0.0010	0
Downgradient	MW-63	FC-CCR-MW63-113017	11/30/2017	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-63	FC-CCR-MW-63-6318	6/3/2018	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-63	FC-CCR-MW63-112818	11/2/2018	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-63	FC-CCR-MW63-4119	4/1/2019	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-63	FC-CCR-MW63-5719-02	5/7/2019	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-63	FC-CCR-MW63-120319	12/3/2019	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-63	FC-CCR-MW63-0620	6/19/2020	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-63	FC-CCR-MW63-1120	11/5/2020	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-63	FC-CCR-MW63-0421	4/22/2021	1	0.7	0	0.00050	0	0.0001	0
Downgradient	MW-63	FC-CCR-MW63-1121	11/15/2021	1	0.6	0	0.001	0	0.00015	1
Downgradient	MW-63	FC-CCR-MW63-0522	5/20/2022	1	0.7	0	0.0013	1	0.0002	0
Downgradient	MW-63	FC-CCR-MW63-1122	11/13/2022	1	0.6	0	0.00051	1	0.0001	0
Downgradient	MW-63	FC-CCR-MW63-0523	5/7/2023	1	0.8	1	0.005	0	0.001	0
Downgradient	MW-63	FC-CCR-MW63-0623	6/27/2023	1	0.6	0	0.00068	1	0.0001	0
Downgradient	MW-64	FC-CCR-MW64-110515	11/5/2015	1	0.731	1	0.00033	1	0.00011	1
Downgradient	MW-64	FC-CCR-MW-64-042716	4/27/2016	1	0.8	0	0.00050	0	0.00012	1
Downgradient	MW-64	FC-CCR-MW64-616	6/5/2016	1	0.8	0	0.00050	0	0.00010	0
Downgradient	MW-64	FC-CCR-MW64-816	8/20/2016	1	0.7	0	0.00050	0	0.00013	1
Downgradient	MW-64	FC-CCR-MW64-916	9/12/2016	1	0.8	1	0.0030	0	0.00050	0
Downgradient	MW-64	FC-CCR-MW64-1016	10/19/2016	NA	0.5	0	NA	NA	NA	NA
Downgradient	MW-64	FC-CCR-MW64-117	1/31/2017	1	1.7	1	0.00050	0	0.00011	1
Downgradient	MW-64	FC-CCR-MW64-41717	4/17/2017	1	0.6	0	0.0020	0	0.00012	1
Downgradient	MW-64	FC-CCR-MW64-5217	5/2/2017	1	0.7	0	0.00050	0	0.00011	1
Downgradient	MW-64	FC-CCR-MW64-52817	5/28/2017	1	0.6	0	0.00050	0	0.00010	0
Downgradient	MW-64	FC-CCR-MW64-62117	6/21/2017	1	0.6	0	0.00050	0	0.00020	1
Downgradient	MW-64	FC-CCR-MW64-72117	7/21/2017	1	0.6	0	0.0020	0	0.00040	0
Downgradient	MW-64	FC-CCR-MW64-8917	8/9/2017	1	0.8	1	0.00050	0	0.00010	0
Downgradient	MW-64	FC-CCR-MW64-81617	8/16/2017	NA	0.7	0	NA	NA	NA	NA
Downgradient	MW-64	FC-CCR-MW64-9917	9/9/2017	1	0.6	0	0.0020	0	0.00040	0
Downgradient	MW-64	FC-CCR-MW64-101317	10/13/2017	1	0.6	0	0.0020	0	0.00040	0
Downgradient	MW-64	FC-CCR-MW64-113017	11/30/2017	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-64	FC-CCR-MW-64-6318	6/3/2018	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-64	FC-CCR-MW64-11218	11/2/2018	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-64	FC-CCR-MW64-4119	4/1/2019	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-64	FC-CCR-MW64-5719-03	5/7/2019	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-64	FC-CCR-MW64-120319	12/3/2019	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-64	FC-CCR-MW64-0620	6/19/2020	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-64	FC-CCR-MW64-1120	11/5/2020	NA	NA	NA	NA	NA	NA	NA

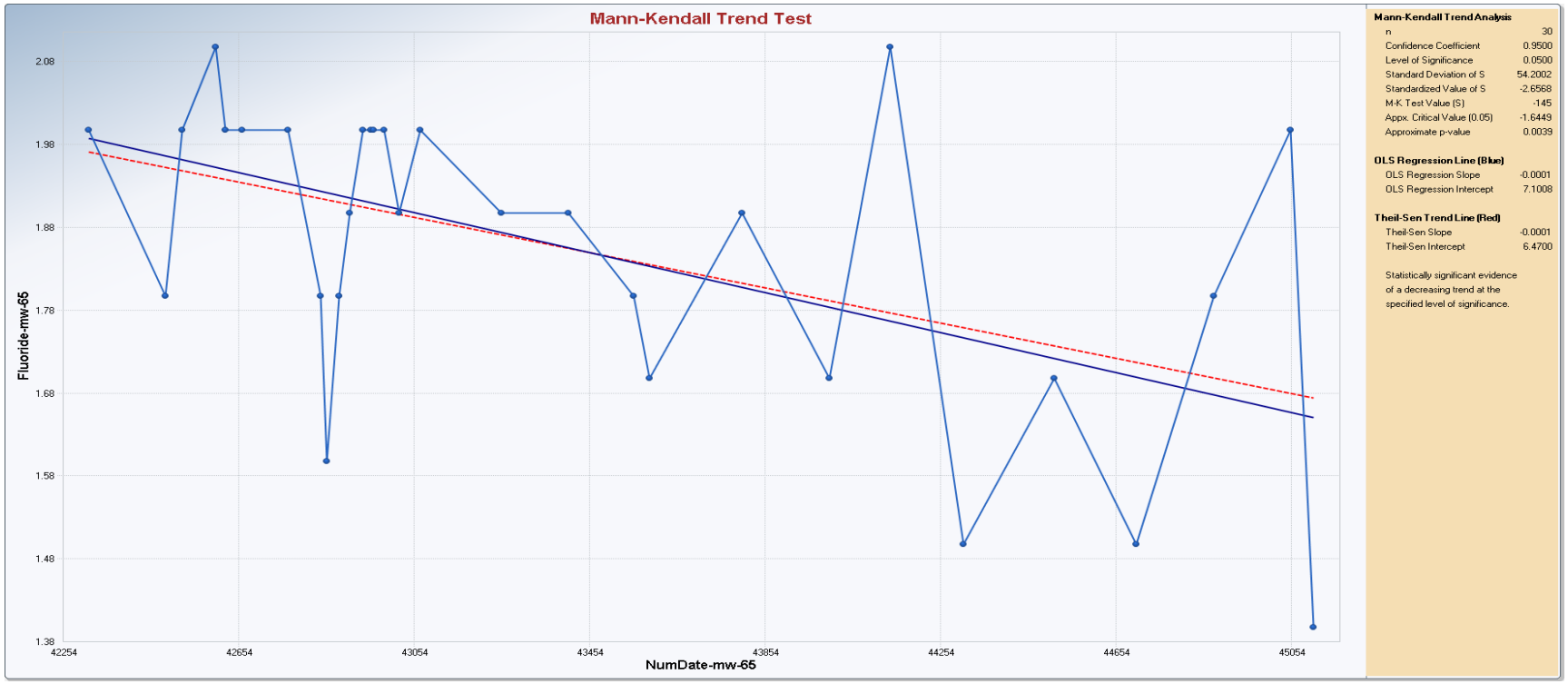
Appendix A - PROUCL DATA UPLOAD TABLE

Designation	StationName	QC_SampleID	NumDate	D_Molybdenum	Total Radium	D_Total Radium	Selenium	D_Selenium	Thallium	D_Thallium
Downgradient	MW-64	FC-CCR-MW64-0421	4/22/2021	1	0.7	0	0.00050	0	0.0001	0
Downgradient	MW-64	FC-CCR-MW64-1121	11/15/2021	1	0.6	0	0.001	0	0.00041	1
Downgradient	MW-64	FC-CCR-MW64-0522	5/20/2022	1	0.7	0	0.001	0	0.0002	0
Downgradient	MW-64	FC-CCR-MW64-1122	11/13/2022	1	0.8	1	0.0005	0	0.00013	1
Downgradient	MW-64	FC-CCR-MW64-0523	5/7/2023	1	0.6	0	0.005	0	0.001	0
Downgradient	MW-64	FC-CCR-MW64-0623	6/27/2023	1	1.7	1	0.0005	0	0.00012	1
Downgradient	MW-65	FC-CCR-MW65-110515	11/5/2015	1	0.4784	1	0.00034	1	0.0010	0
Downgradient	MW-65	FC-CCR-MW-65-042716	4/27/2016	1	0.8	0	0.00050	0	0.00010	0
Downgradient	MW-65	FC-CCR-MW65-616	6/5/2016	1	0.8	0	0.00050	0	0.00010	0
Downgradient	MW-65	FC-CCR-MW65-816	8/20/2016	1	0.4	0	0.00050	0	0.00010	0
Downgradient	MW-65	FC-CCR-MW65-916	9/12/2016	1	1.0	1	0.0030	0	0.00050	0
Downgradient	MW-65	FC-CCR-MW65-1016	10/19/2016	NA	0.5	0	NA	NA	NA	NA
Downgradient	MW-65	FC-CCR-MW65-117	2/1/2017	1	1.9	1	0.00050	0	0.00010	0
Downgradient	MW-65	FC-CCR-MW65-41617	4/16/2017	1	0.7	1	0.0020	0	0.00040	0
Downgradient	MW-65	FC-CCR-MW65-5117	5/1/2017	1	0.6	0	0.00050	0	0.00010	0
Downgradient	MW-65	FC-CCR-MW65-52917	5/29/2017	1	0.6	0	0.00050	0	0.00010	0
Downgradient	MW-65	FC-CCR-MW65-62117	6/21/2017	1	0.6	0	0.00050	0	0.00010	0
Downgradient	MW-65	FC-CCR-MW65-72117	7/21/2017	1	0.6	0	0.0020	0	0.00040	0
Downgradient	MW-65	FC-CCR-MW65-8917	8/9/2017	1	0.5	0	0.00050	0	0.00010	0
Downgradient	MW-65	FC-CCR-MW65-81617	8/16/2017	NA	0.7	0	NA	NA	NA	NA
Downgradient	MW-65	FC-CCR-MW65-9917	9/9/2017	1	0.6	0	0.0020	0	0.00040	0
Downgradient	MW-65	FC-CCR-MW65-101317	10/13/2017	1	0.6	0	0.00050	0	0.00010	0
Downgradient	MW-65	FC-CCR-MW65-113017	11/30/2017	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-65	FC-CCR-MW-65-6318	6/3/2018	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-65	FC-CCR-MW65-11218	11/2/2018	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-65	FC-CCR-MW65-4119	4/1/2019	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-65	FC-CCR-MW65-5719-05	5/7/2019	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-65	FC-CCR-MW65-120319	12/3/2019	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-65	FC-CCR-MW65-0620	6/19/2020	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-65	FC-CCR-MW65-1120	11/5/2020	NA	NA	NA	NA	NA	NA	NA
Downgradient	MW-65	FC-CCR-MW65-0421	4/22/2021	1	0.7	0	0.00059	0	0.0001	0
Downgradient	MW-65	FC-CCR-MW65-1121	11/15/2021	1	0.6	0	0.001	0	0.000072	1
Downgradient	MW-65	FC-CCR-MW65-0522	5/20/2022	1	1.1	1	0.001	0	0.0002	0
Downgradient	MW-65	FC-CCR-MW65-1122	11/13/2022	1	0.6	0	0.0005	0	0.0001	0
Downgradient	MW-65	FC-CCR-MW65-0523	5/7/2023	1	0.6	0	0.005	0	0.001	0
Downgradient	MW-65	FC-CCR-MW65-0623	6/28/2023	1	0.7	1	0.0005	0	0.0001	0

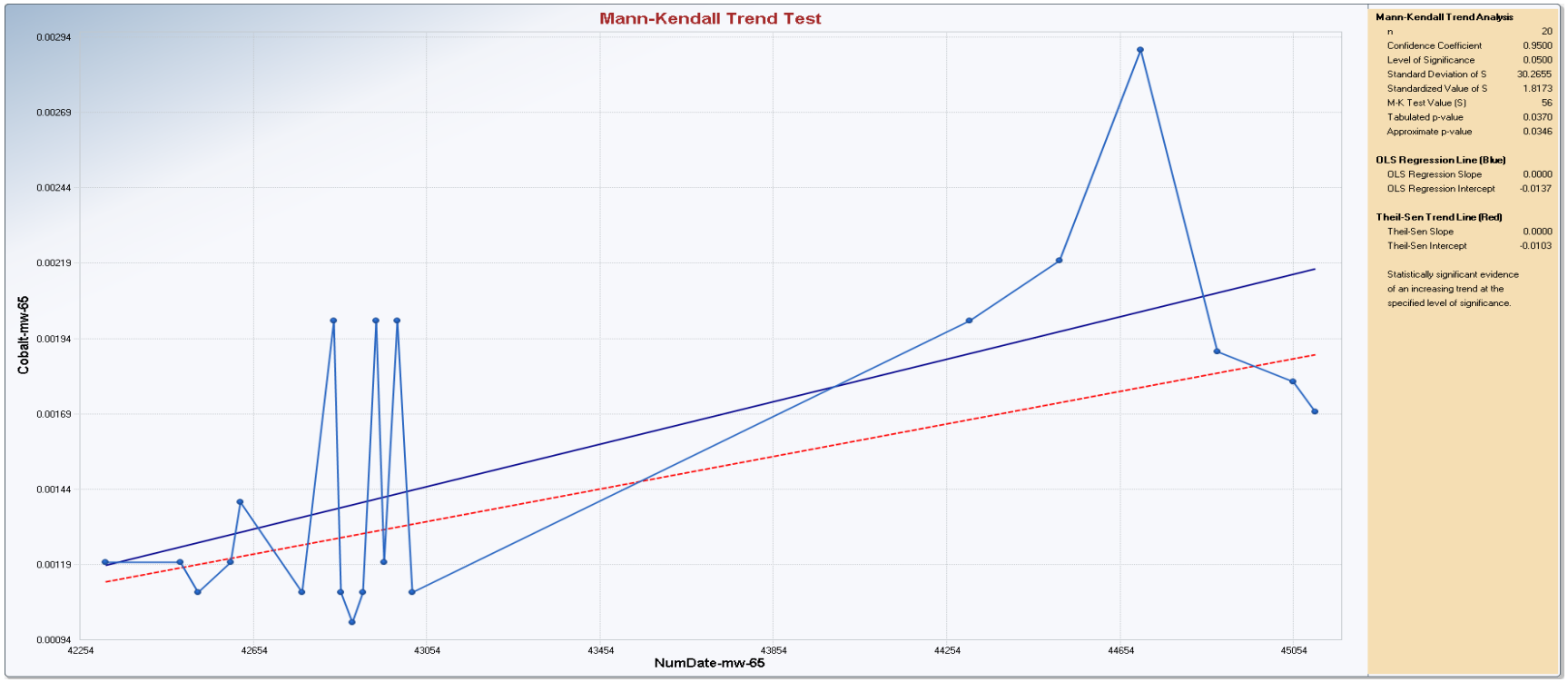
APPENDIX B

PROUCL EDA OUTPUT FILES

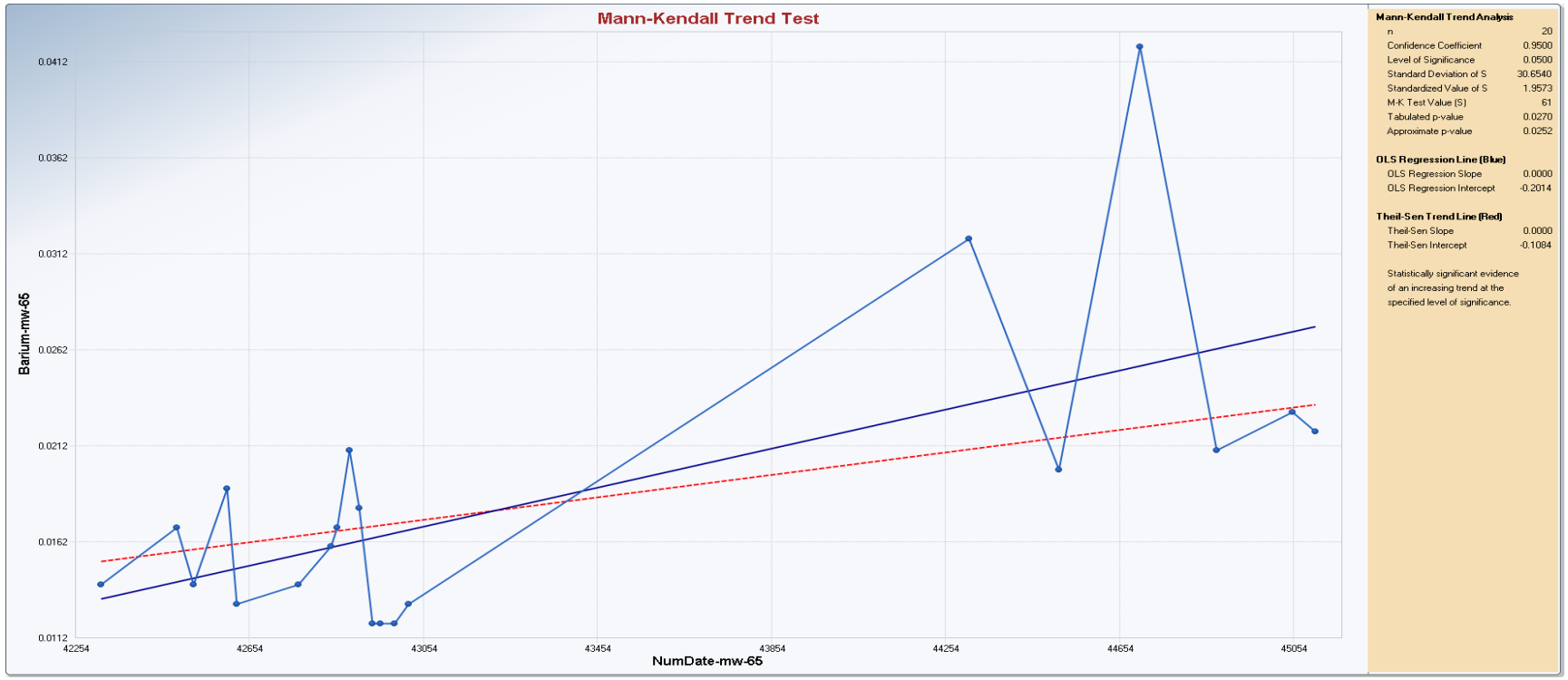
Appendix B
Mann-Kendall Trend Test



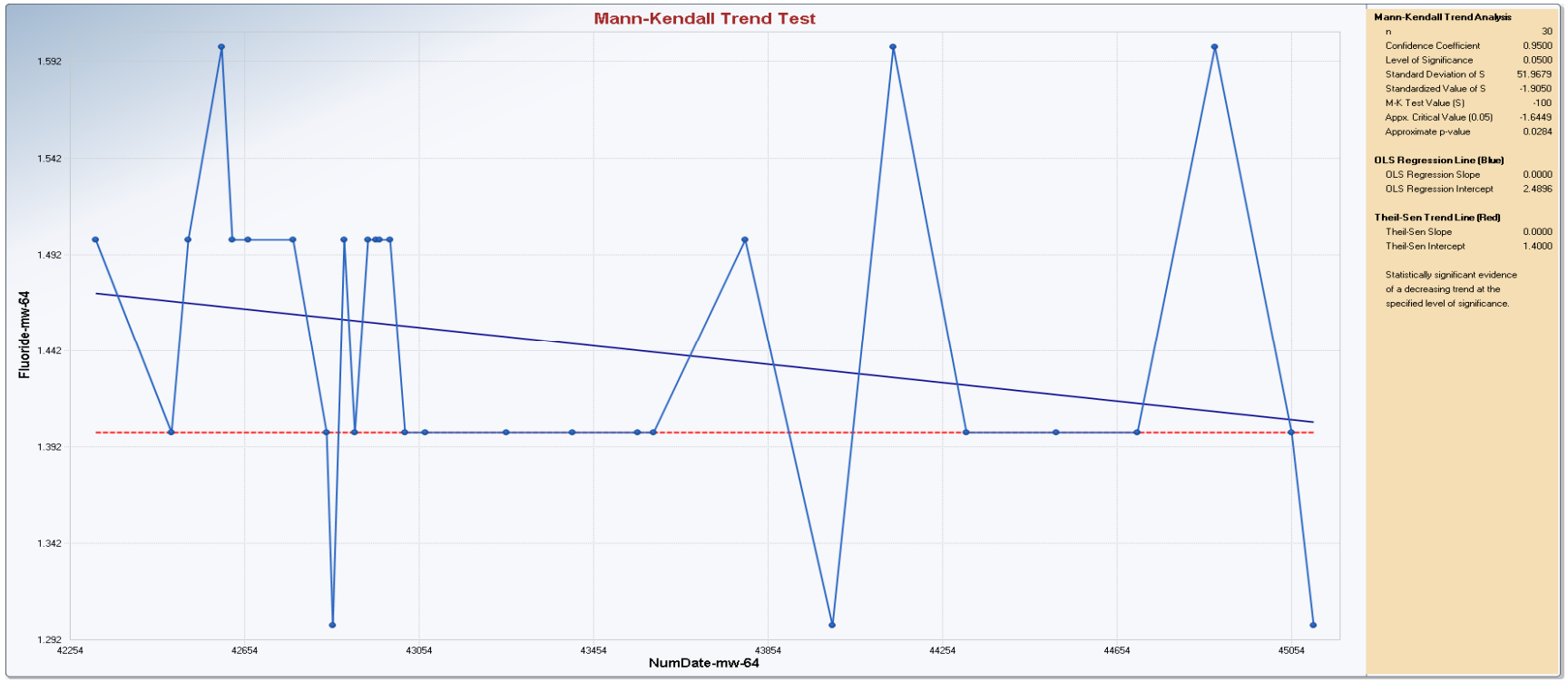
Appendix B
Mann-Kendall Trend Test



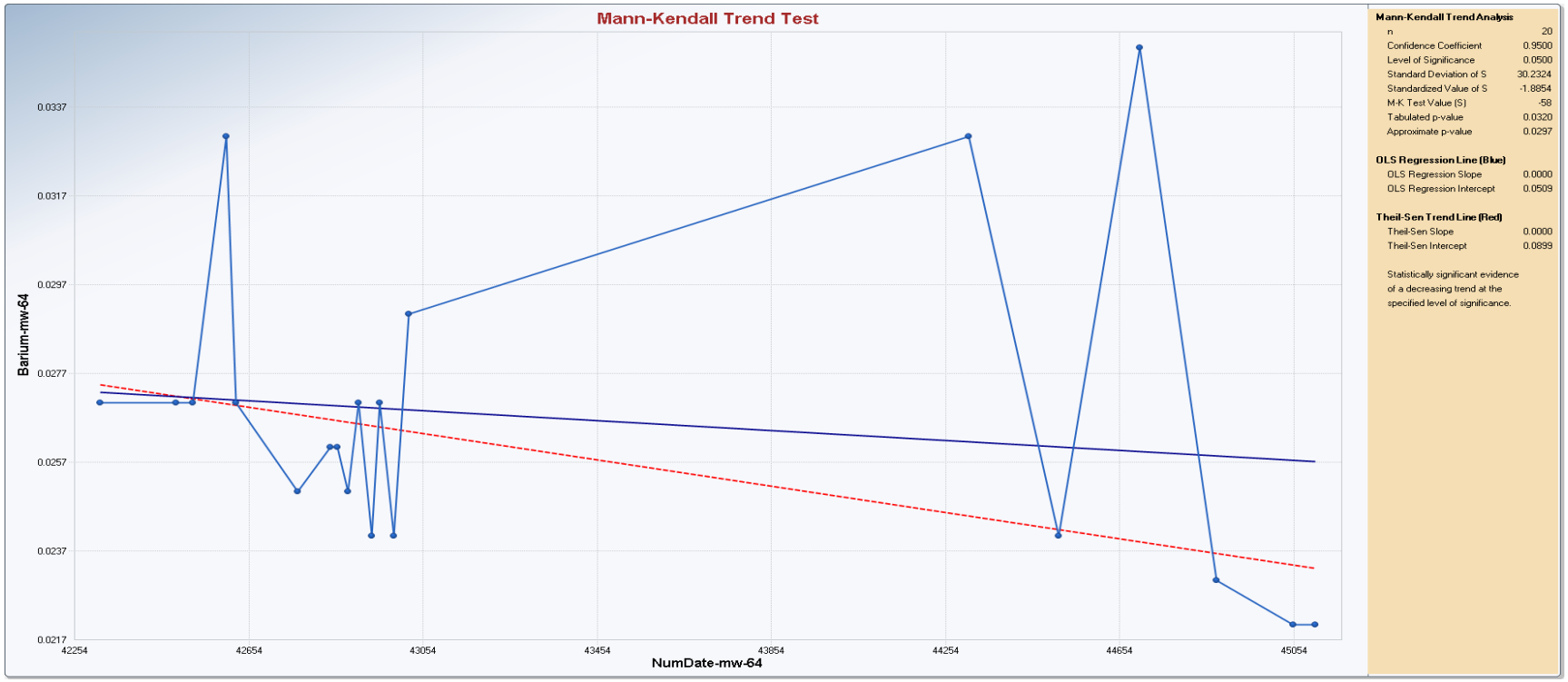
Appendix B
Mann-Kendall Trend Test



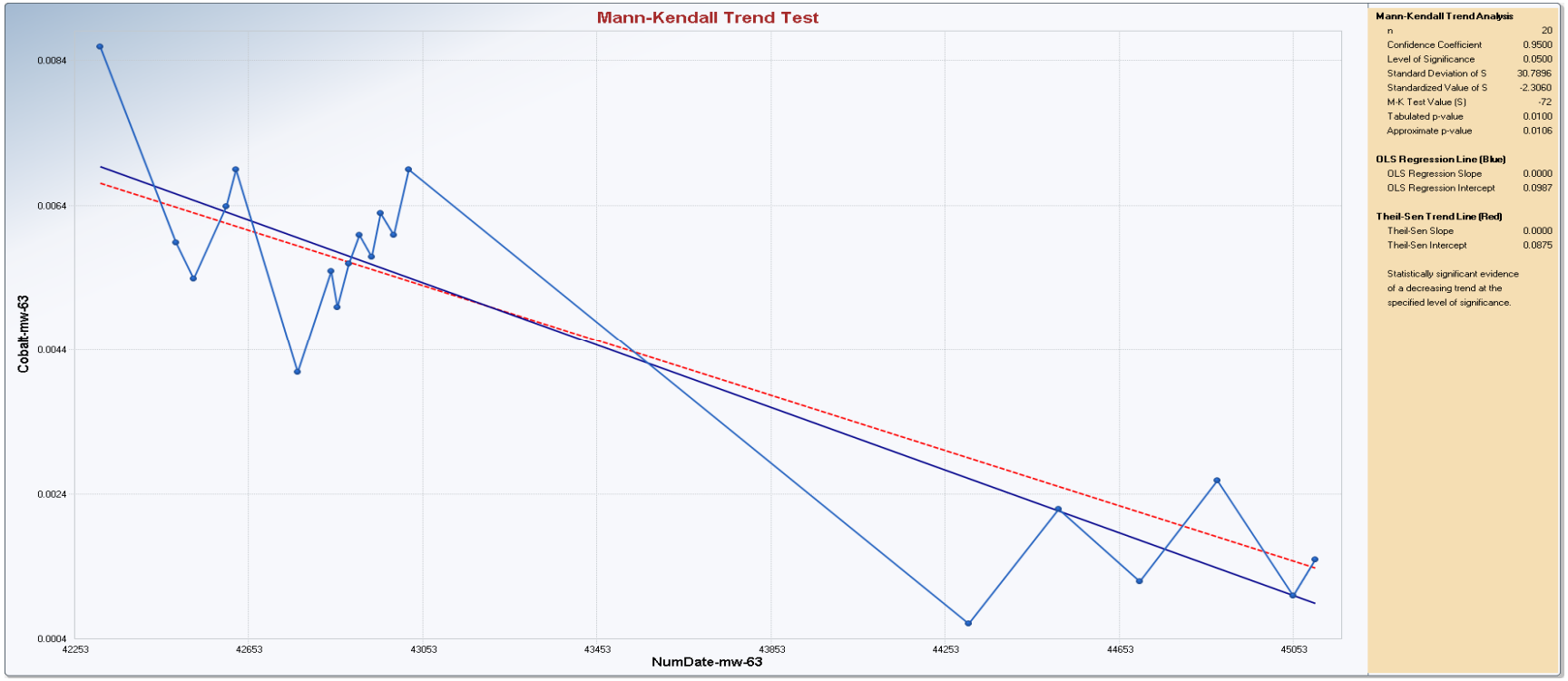
Appendix B
Mann-Kendall Trend Test



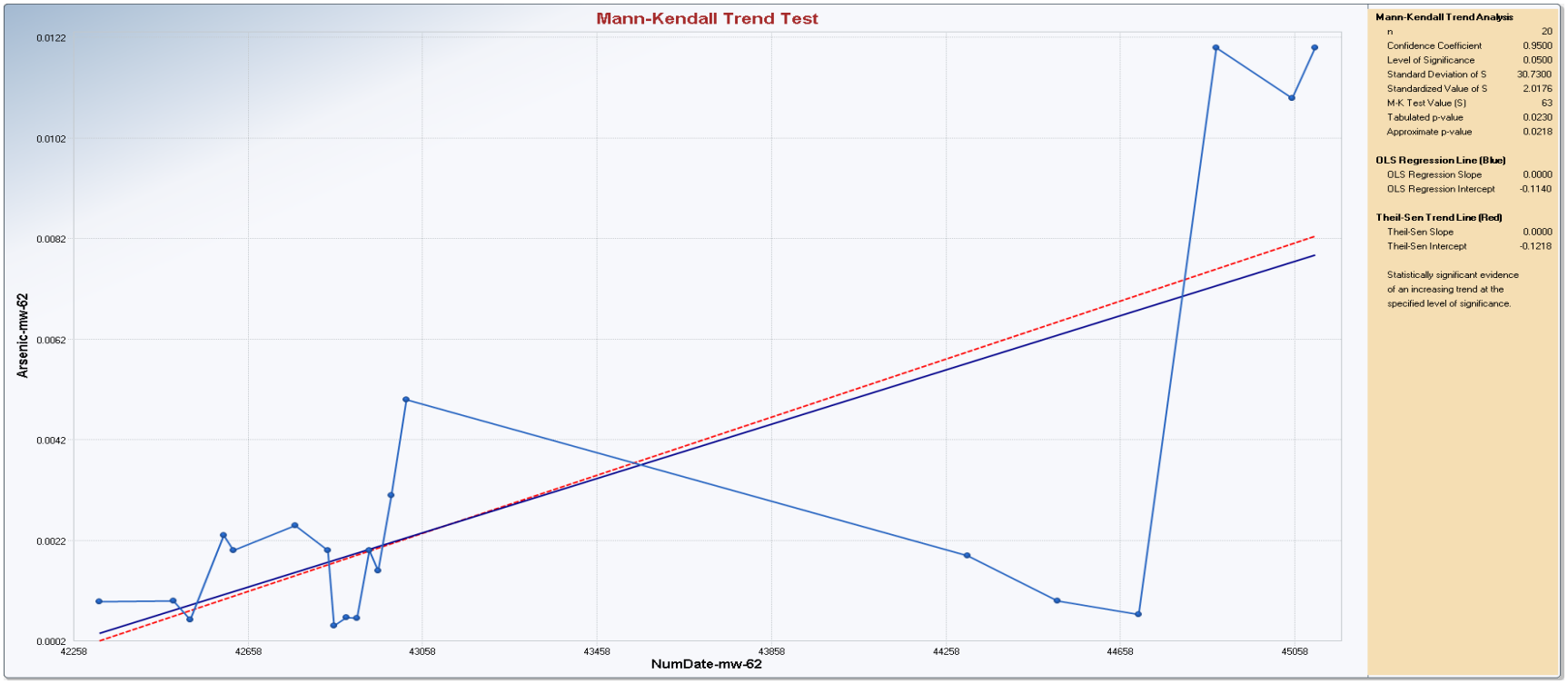
Appendix B
Mann-Kendall Trend Test



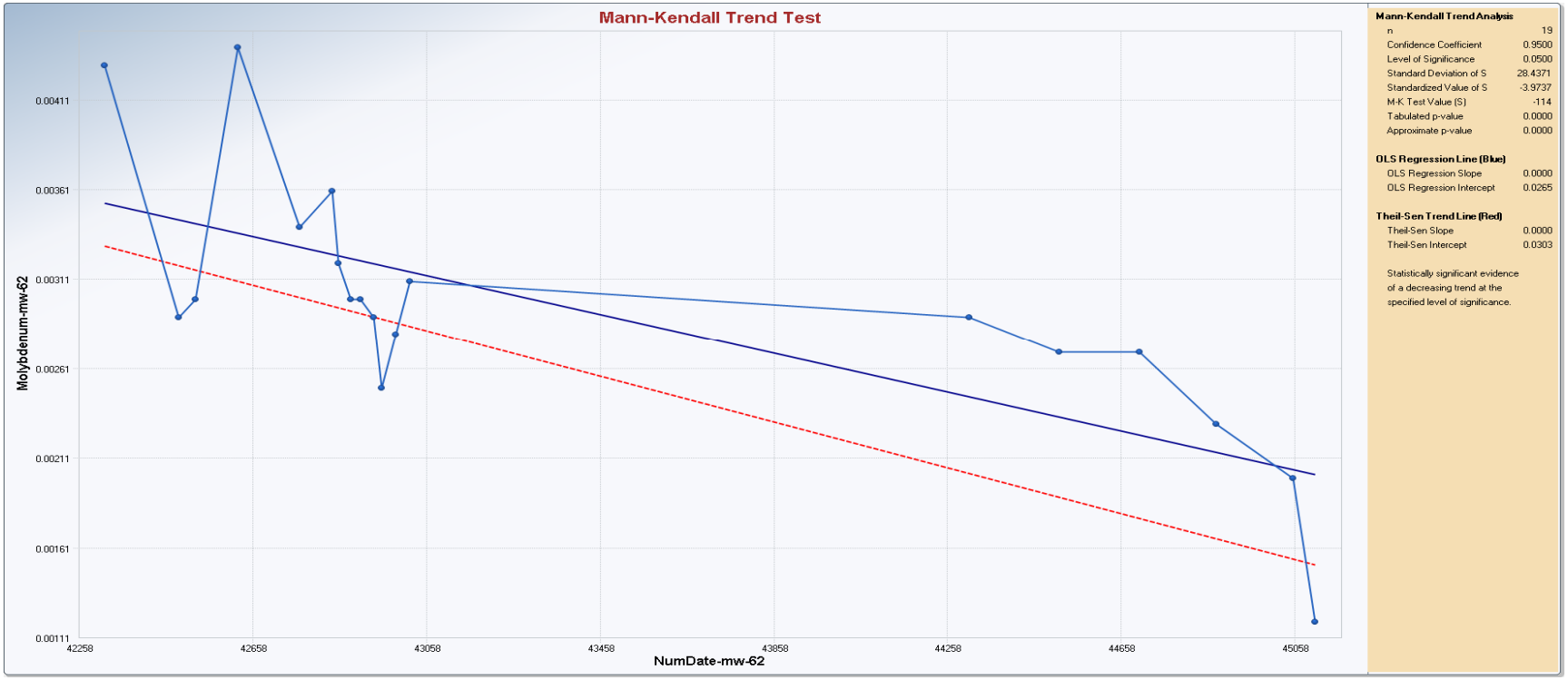
Appendix B
Mann-Kendall Trend Test



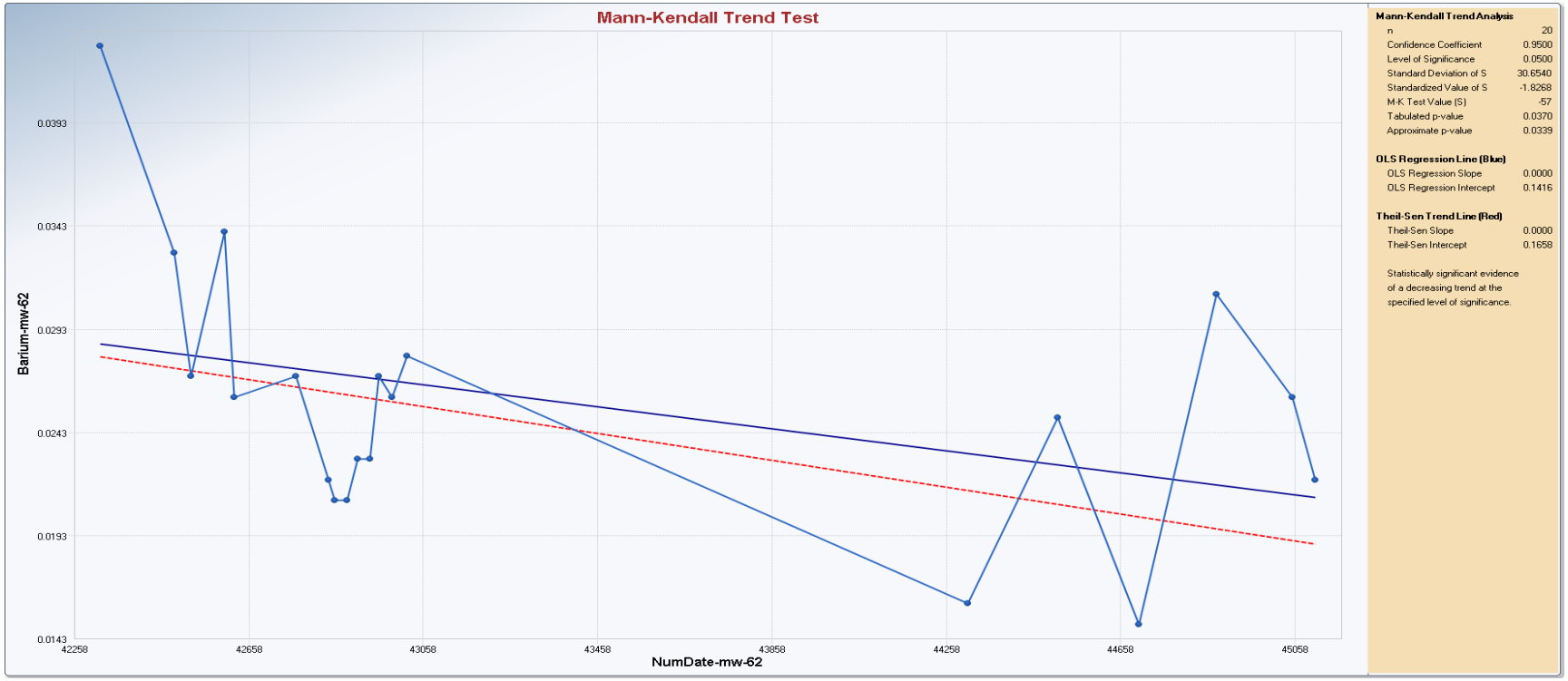
Appendix B
Mann-Kendall Trend Test



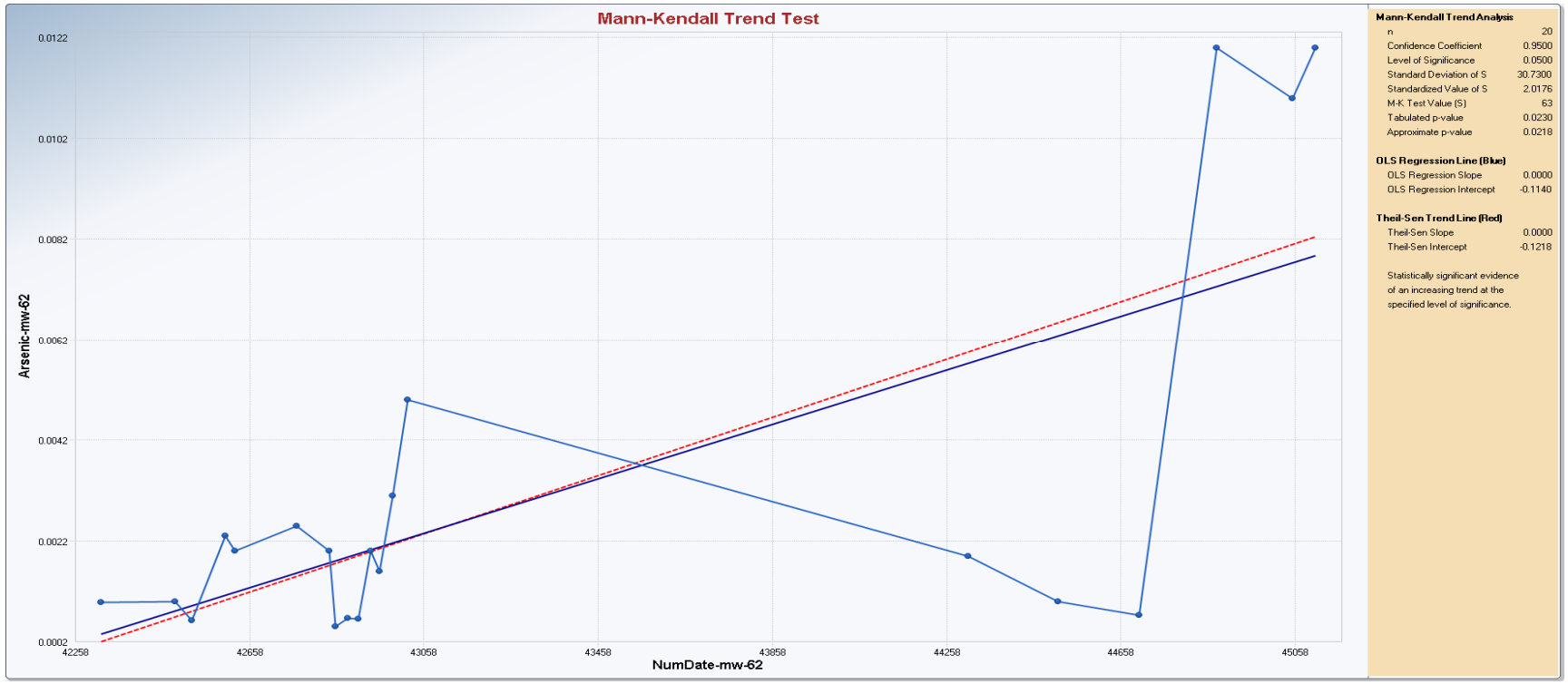
Appendix B
Mann-Kendall Trend Test



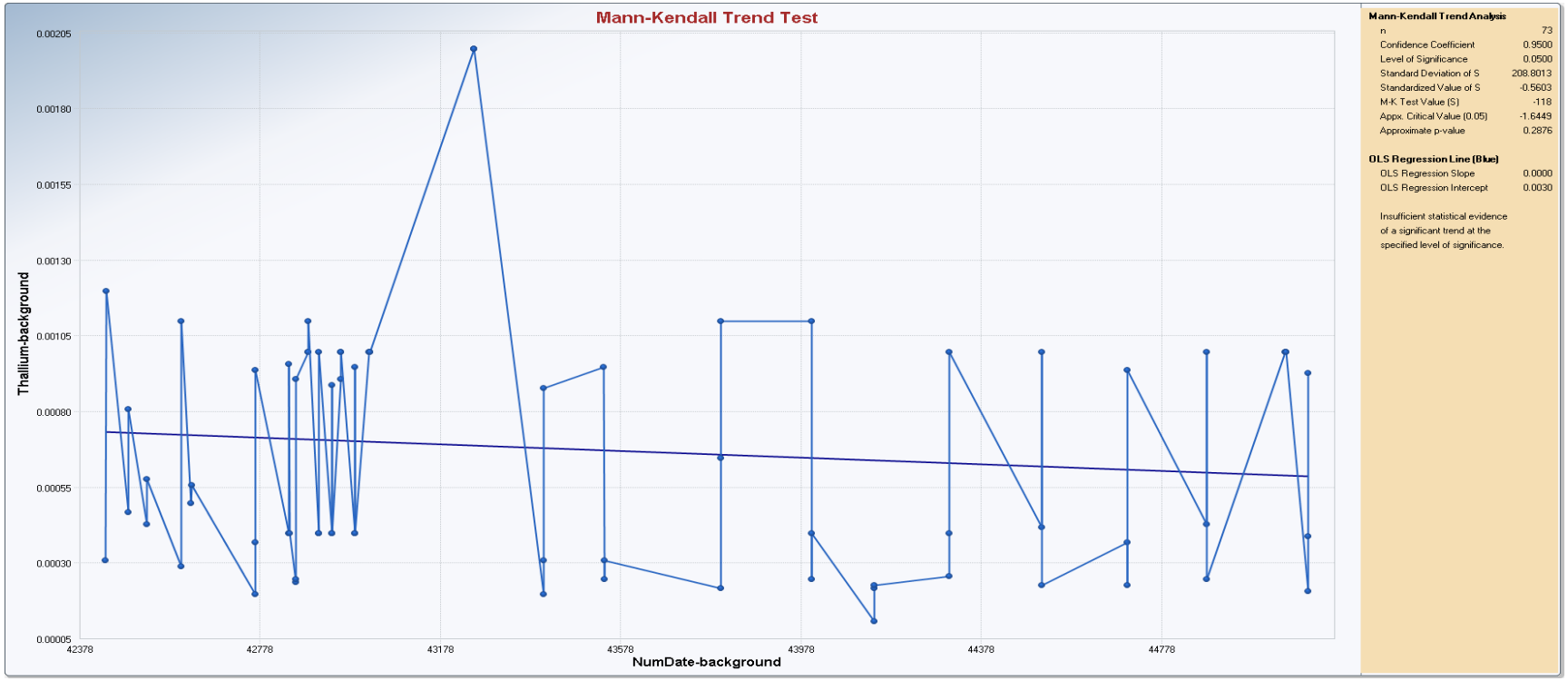
Appendix B
Mann-Kendall Trend Test



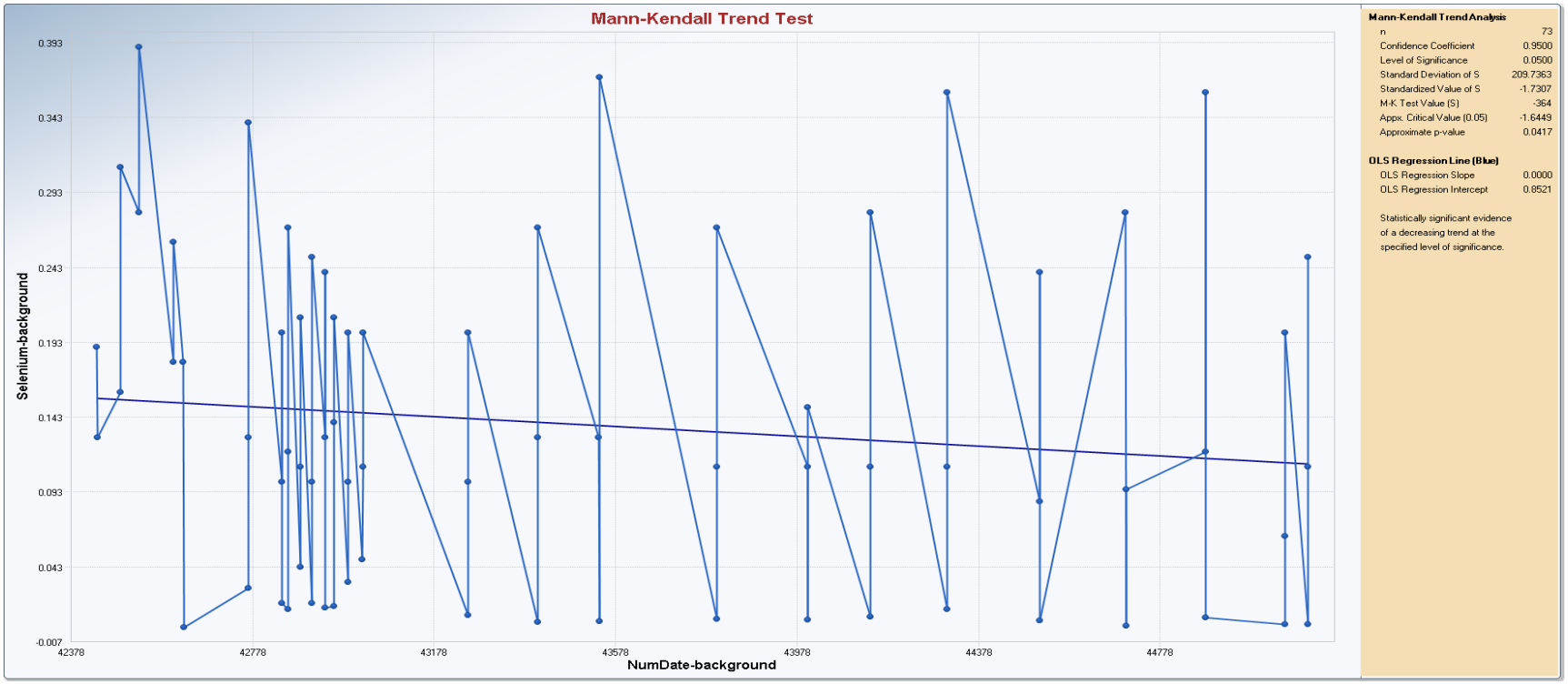
Appendix B
Mann-Kendall Trend Test



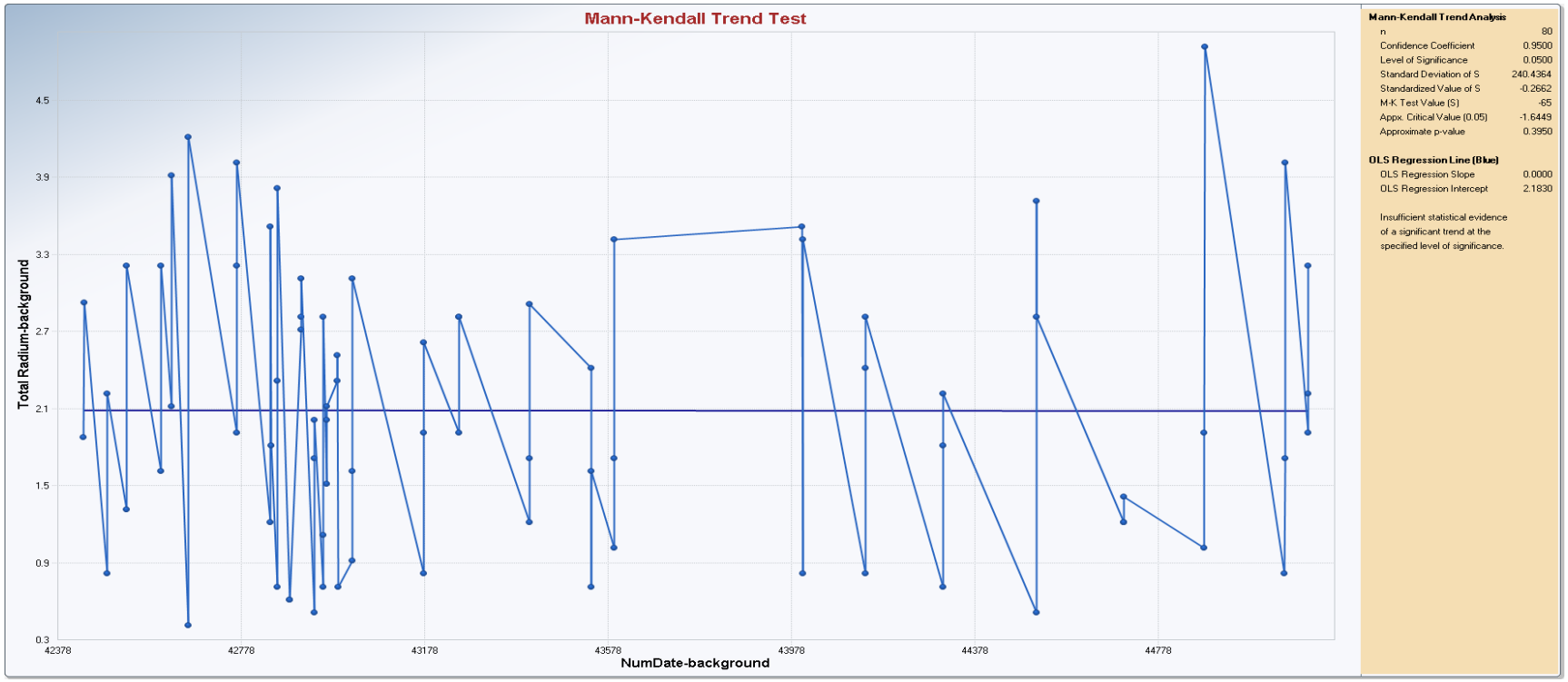
Appendix B
Mann-Kendall Trend Test



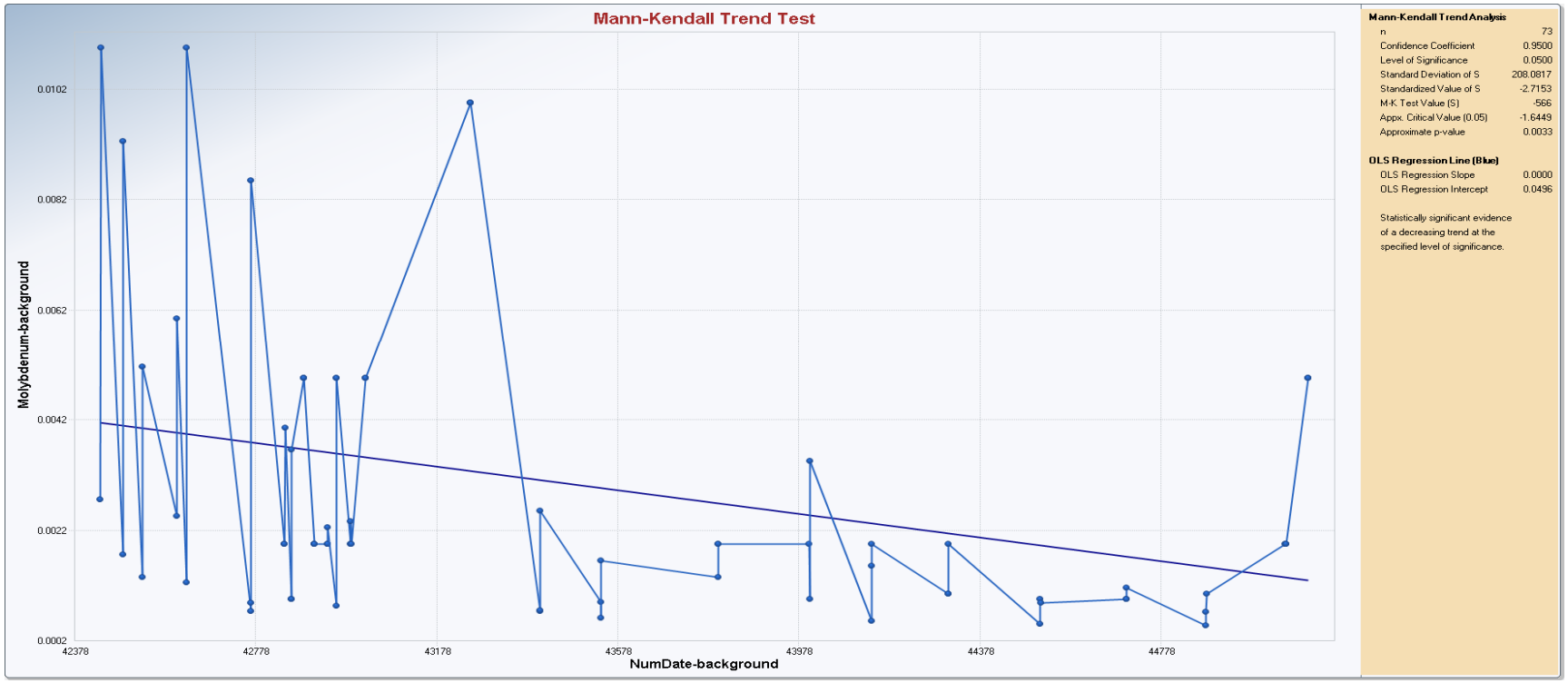
Appendix B
Mann-Kendall Trend Test



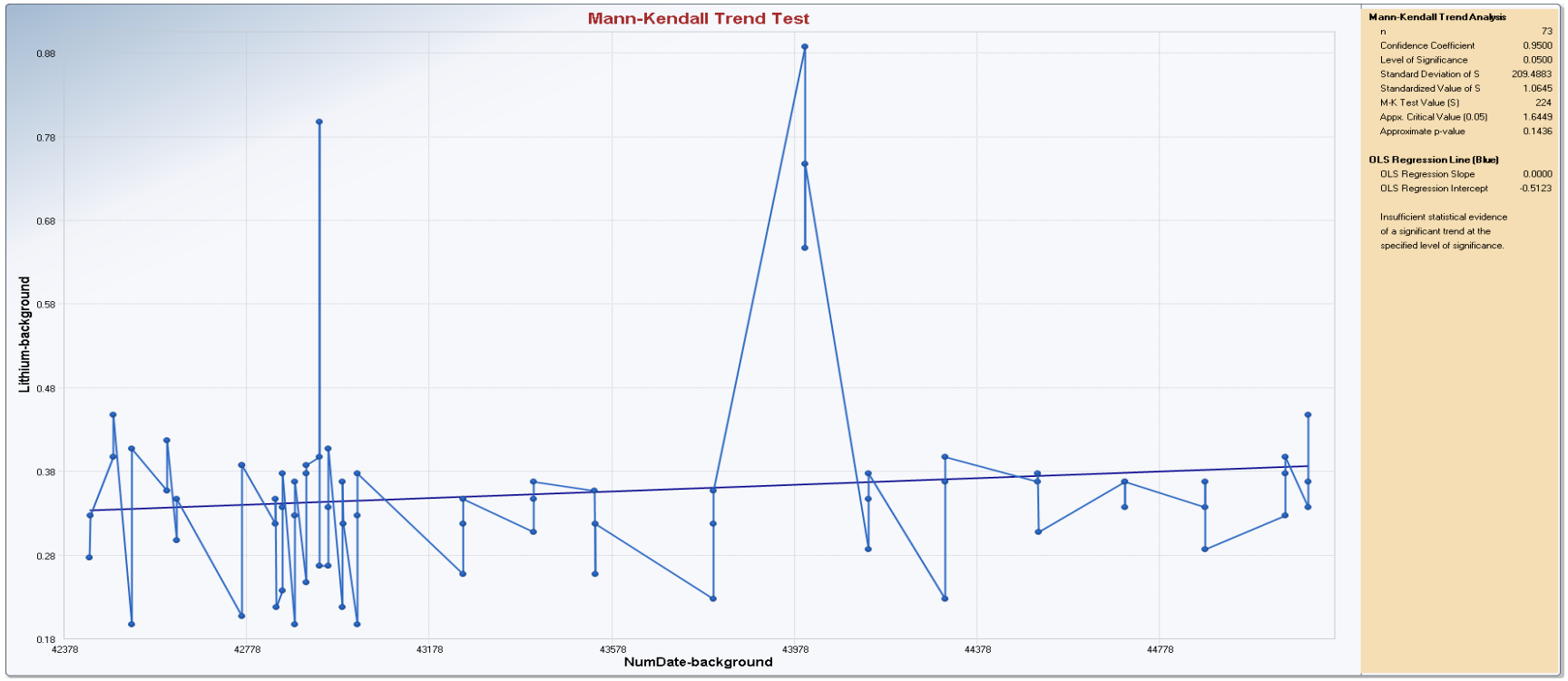
Appendix B
Mann-Kendall Trend Test



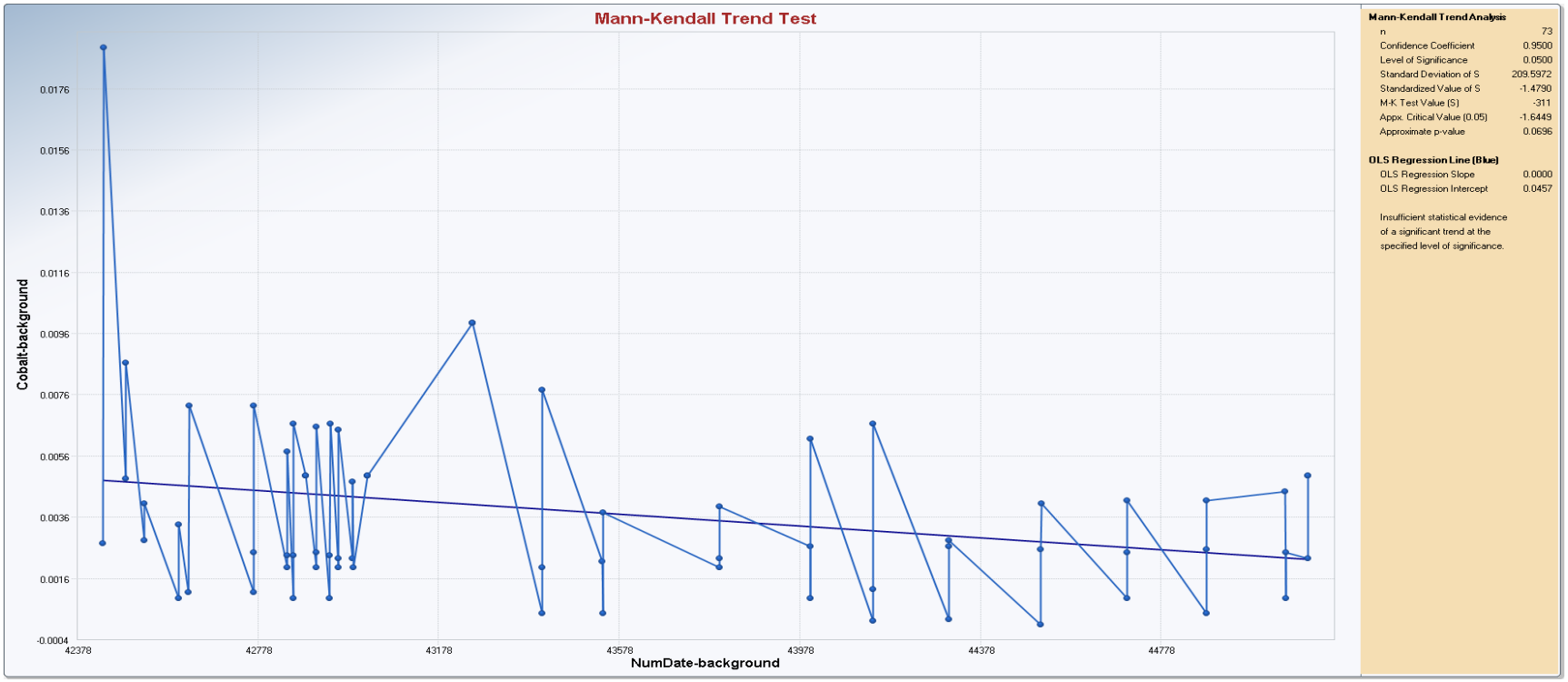
Appendix B
Mann-Kendall Trend Test



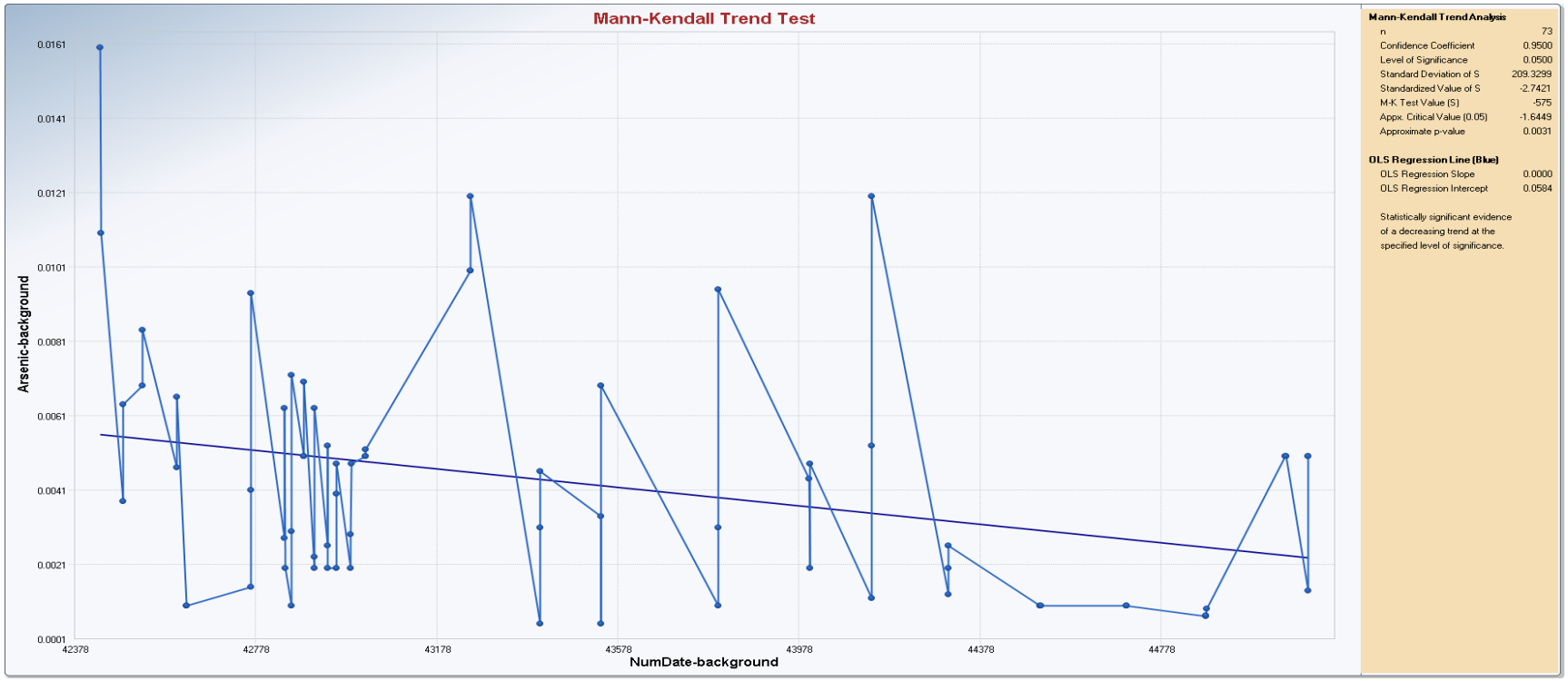
Appendix B
Mann-Kendall Trend Test



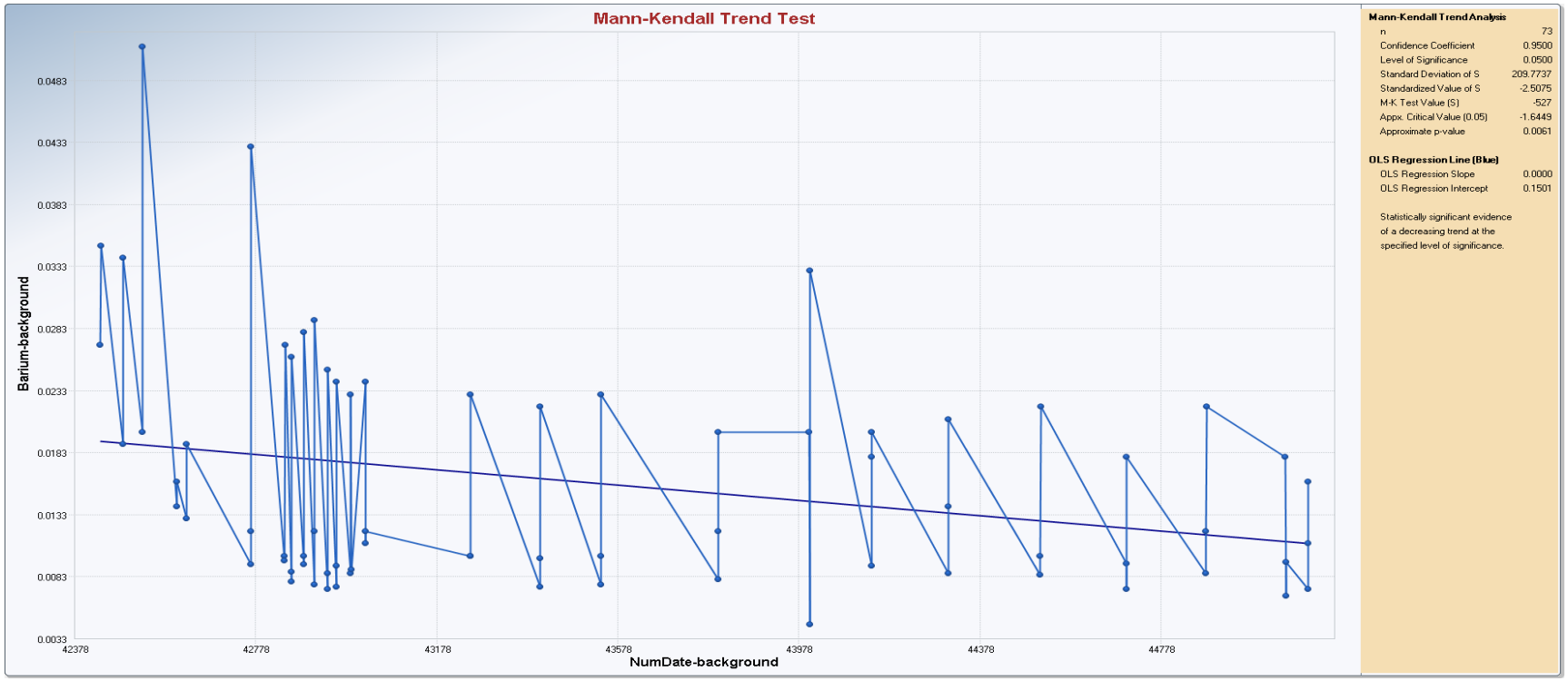
Appendix B
Mann-Kendall Trend Test



Appendix B
Mann-Kendall Trend Test



Appendix B
Mann-Kendall Trend Test



Appendix B
Time Series Statistics

	Mann-Kendall Trend Test Analysis
User Selected Options	
Date/Time of Computation	ProUCL 5.18/14/2023 11:49:46 PM
From File	ProUCLUpload_FC_CWTP_AppxIV_ProUCL_20230809_a.xls
Full Precision	OFF
Confidence Coefficient	0.95
Level of Significance	0.05

Arsenic-background	
General Statistics	
Number of Events Reported (m)	87
Number of Missing Events	14
Number or Reported Events Used	73
Number Values Reported (n)	87
Number Values Missing	14
Number Values Used	73
Minimum	5.0000E-4
Maximum	0.016
Mean	0.00426
Geometric Mean	0.00311
Median	0.004
Standard Deviation	0.00324
Coefficient of Variation	0.76
Mann-Kendall Test	
M-K Test Value (S)	-575
Critical Value (0.05)	-1.645
Standard Deviation of S	209.3
Standardized Value of S	-2.742
Approximate p-value	0.00305

Statistically significant evidence of a decreasing trend at the specified level of significance.

	Mann-Kendall Trend Test Analysis
User Selected Options	
Date/Time of Computation	ProUCL 5.18/14/2023 11:51:37 PM
From File	ProUCLUpload_FC_CWTP_AppxIV_ProUCL_20230809_a.xls
Full Precision	OFF

Appendix B
Time Series Statistics

Confidence Coefficient	0.95
Level of Significance	0.05
Barium-background	
General Statistics	
Number of Events Reported (m)	87
Number of Missing Events	14
Number or Reported Events Used	73
Number Values Reported (n)	87
Number Values Missing	14
Number Values Used	73
Minimum	0.0045
Maximum	0.051
Mean	0.016
Geometric Mean	0.0138
Median	0.012
Standard Deviation	0.00921
Coefficient of Variation	0.578
Mann-Kendall Test	
M-K Test Value (S)	-527
Critical Value (0.05)	-1.645
Standard Deviation of S	209.8
Standardized Value of S	-2.507
Approximate p-value	0.00608
Statistically significant evidence of a decreasing	
trend at the specified level of significance.	
	Mann-Kendall Trend Test Analysis
User Selected Options	
Date/Time of Computation	ProUCL 5.18/14/2023 11:53:05 PM
From File	ProUCLUpload_FC_CWTP_AppxIV_ProUCL_20230809_a.xls
Full Precision	OFF
Confidence Coefficient	0.95
Level of Significance	0.05
Cobalt-background	

Appendix B
Time Series Statistics

General Statistics	
Number of Events Reported (m)	87
Number of Missing Events	14
Number or Reported Events Used	73
Number Values Reported (n)	87
Number Values Missing	14
Number Values Used	73
Minimum	1.3000E-4
Maximum	0.019
Mean	0.00382
Geometric Mean	0.00275
Median	0.0027
Standard Deviation	0.00304
Coefficient of Variation	0.795
Mann-Kendall Test	
M-K Test Value (S)	-311
Critical Value (0.05)	-1.645
Standard Deviation of S	209.6
Standardized Value of S	-1.479
Approximate p-value	0.0696

Insufficient evidence to identify a significant trend at the specified level of significance.

	Mann-Kendall Trend Test Analysis
User Selected Options	
Date/Time of Computation	ProUCL 5.18/15/2023 2:35:04 PM
From File	ProUCLUpload_FC_CWTP_AppxIV_ProUCL_20230809_a.xls
Full Precision	OFF
Confidence Coefficient	0.95
Level of Significance	0.05

Lithium-background	
General Statistics	
Number of Events Reported (m)	87
Number of Missing Events	14

Appendix B
Time Series Statistics

Number or Reported Events Used	73
Number Values Reported (n)	87
Number Values Missing	14
Number Values Used	73
Minimum	0.2
Maximum	0.89
Mean	0.358
Geometric Mean	0.343
Median	0.35
Standard Deviation	0.119
Coefficient of Variation	0.333
Mann-Kendall Test	
M-K Test Value (S)	224
Critical Value (0.05)	1.645
Standard Deviation of S	209.5
Standardized Value of S	1.064
Approximate p-value	0.144
Insufficient evidence to identify a significant	
trend at the specified level of significance.	

	Mann-Kendall Trend Test Analysis
User Selected Options	
Date/Time of Computation	ProUCL 5.18/15/2023 2:37:18 PM
From File	ProUCLUpload_FC_CWTP_AppxIV_ProUCL_20230809_a.xls
Full Precision	OFF
Confidence Coefficient	0.95
Level of Significance	0.05

Molybdenum-background	
General Statistics	
Number of Events Reported (m)	87
Number of Missing Events	14
Number or Reported Events Used	73
Number Values Reported (n)	87
Number Values Missing	14
Number Values Used	73

Appendix B
Time Series Statistics

Minimum	5.2000E-4
Maximum	0.011
Mean	0.00305
Geometric Mean	0.00219
Median	0.002
Standard Deviation	0.00273
Coefficient of Variation	0.893
Mann-Kendall Test	
M-K Test Value (S)	-566
Critical Value (0.05)	-1.645
Standard Deviation of S	208.1
Standardized Value of S	-2.715
Approximate p-value	0.00331
Statistically significant evidence of a decreasing	
trend at the specified level of significance.	

	Mann-Kendall Trend Test Analysis
User Selected Options	
Date/Time of Computation	ProUCL 5.18/15/2023 3:00:30 PM
From File	ProUCLUpload_FC_CWTP_AppxIV_ProUCL_20230809_a.xls
Full Precision	OFF
Confidence Coefficient	0.95
Level of Significance	0.05

Total Radium-background	
General Statistics	
Number of Events Reported (m)	87
Number of Missing Events	7
Number or Reported Events Used	80
Number Values Reported (n)	87
Number Values Missing	7
Number Values Used	80
Minimum	0.4
Maximum	4.9
Mean	2.07
Geometric Mean	1.767

Appendix B
Time Series Statistics

Median	1.9
Standard Deviation	1.066
Coefficient of Variation	0.515
Mann-Kendall Test	
M-K Test Value (S)	-65
Critical Value (0.05)	-1.645
Standard Deviation of S	240.4
Standardized Value of S	-0.266
Approximate p-value	0.395
Insufficient evidence to identify a significant	
trend at the specified level of significance.	

	Mann-Kendall Trend Test Analysis
User Selected Options	
Date/Time of Computation	ProUCL 5.18/15/2023 3:10:26 PM
From File	ProUCLUpload_FC_CWTP_AppxIV_ProUCL_20230809_a.xls
Full Precision	OFF
Confidence Coefficient	0.95
Level of Significance	0.05

Selenium-background

General Statistics

Number of Events Reported (m)	87
Number of Missing Events	14
Number or Reported Events Used	73
Number Values Reported (n)	87
Number Values Missing	14
Number Values Used	73
Minimum	0.003
Maximum	0.39
Mean	0.138
Geometric Mean	0.0765
Median	0.12
Standard Deviation	0.109
Coefficient of Variation	0.788

Appendix B
Time Series Statistics

Mann-Kendall Test	
M-K Test Value (S)	-364
Critical Value (0.05)	-1.645
Standard Deviation of S	209.7
Standardized Value of S	-1.731
Approximate p-value	0.0417
Statistically significant evidence of a decreasing	
trend at the specified level of significance.	

	Mann-Kendall Trend Test Analysis
User Selected Options	
Date/Time of Computation	ProUCL 5.18/15/2023 3:12:11 PM
From File	ProUCLUpload_FC_CWTP_AppxIV_ProUCL_20230809_a.xls
Full Precision	OFF
Confidence Coefficient	0.95
Level of Significance	0.05

Thallium-background	
General Statistics	
Number of Events Reported (m)	87
Number of Missing Events	14
Number or Reported Events Used	73
Number Values Reported (n)	87
Number Values Missing	14
Number Values Used	73
Minimum	1.1000E-4
Maximum	0.002
Mean	6.7685E-4
Geometric Mean	5.5117E-4
Median	5.0000E-4
Standard Deviation	4.3026E-4
Coefficient of Variation	0.636
Mann-Kendall Test	
M-K Test Value (S)	-118
Critical Value (0.05)	-1.645

Appendix B
Time Series Statistics

Standard Deviation of S	208.8
Standardized Value of S	-0.56
Approximate p-value	0.288
Insufficient evidence to identify a significant	
trend at the specified level of significance.	
	Mann-Kendall Trend Test Analysis
User Selected Options	
Date/Time of Computation	ProUCL 5.18/18/2023 4:07:57 PM
From File	ProUCLUpload_FC_CWTP_AppxIV_ProUCL_20230809_b.xls
Full Precision	OFF
Confidence Coefficient	0.95
Level of Significance	0.05
Arsenic-mw-62	
General Statistics	
Number of Events Reported (m)	31
Number of Missing Events	11
Number or Reported Events Used	20
Number Values Reported (n)	31
Number Values Missing	11
Number Values Used	20
Minimum	5.0000E-4
Maximum	0.012
Mean	0.00318
Geometric Mean	0.00189
Median	0.00195
Standard Deviation	0.00381
Coefficient of Variation	1.2
Mann-Kendall Test	
M-K Test Value (S)	63
Tabulated p-value	0.023
Standard Deviation of S	30.73
Standardized Value of S	2.018
Approximate p-value	0.0218

Appendix B
Time Series Statistics

Statistically significant evidence of an increasing	
trend at the specified level of significance.	
Arsenic-mw-63	
General Statistics	
Number of Events Reported (m)	30
Number of Missing Events	10
Number or Reported Events Used	20
Number Values Reported (n)	30
Number Values Missing	10
Number Values Used	20
Minimum	5.0000E-4
Maximum	0.005
Mean	0.00141
Geometric Mean	0.00107
Median	0.001
Standard Deviation	0.00133
Coefficient of Variation	0.939
Mann-Kendall Test	
M-K Test Value (S)	34
Tabulated p-value	0.144
Standard Deviation of S	30.4
Standardized Value of S	1.086
Approximate p-value	0.139
Insufficient evidence to identify a significant	
trend at the specified level of significance.	
Arsenic-mw-64	
General Statistics	
Number of Events Reported (m)	30
Number of Missing Events	10
Number or Reported Events Used	20
Number Values Reported (n)	30
Number Values Missing	10
Number Values Used	20
Minimum	5.0000E-4
Maximum	0.005

Appendix B
Time Series Statistics

Mean	0.00131
Geometric Mean	9.4063E-4
Median	8.3000E-4
Standard Deviation	0.00136
Coefficient of Variation	1.04
Mann-Kendall Test	
M-K Test Value (S)	50
Tabulated p-value	0.056
Standard Deviation of S	29.52
Standardized Value of S	1.66
Approximate p-value	0.0485
Insufficient evidence to identify a significant	
trend at the specified level of significance.	
Arsenic-mw-65	
General Statistics	
Number of Events Reported (m)	30
Number of Missing Events	10
Number or Reported Events Used	20
Number Values Reported (n)	30
Number Values Missing	10
Number Values Used	20
Minimum	5.0000E-4
Maximum	0.005
Mean	0.0011
Geometric Mean	8.5354E-4
Median	6.5000E-4
Standard Deviation	0.00106
Coefficient of Variation	0.96
Mann-Kendall Test	
M-K Test Value (S)	58
Tabulated p-value	0.032
Standard Deviation of S	29.17
Standardized Value of S	1.954
Approximate p-value	0.0253

Appendix B
Time Series Statistics

Statistically significant evidence of an increasing	
trend at the specified level of significance.	
	Mann-Kendall Trend Test Analysis
User Selected Options	
Date/Time of Computation	ProUCL 5.18/18/2023 4:25:50 PM
From File	ProUCLUpload_FC_CWTP_AppxIV_ProUCL_20230809_b.xls
Full Precision	OFF
Confidence Coefficient	0.95
Level of Significance	0.05
Barium-mw-62	
General Statistics	
Number of Events Reported (m)	31
Number of Missing Events	11
Number or Reported Events Used	20
Number Values Reported (n)	31
Number Values Missing	11
Number Values Used	20
Minimum	0.015
Maximum	0.043
Mean	0.0258
Geometric Mean	0.0251
Median	0.026
Standard Deviation	0.0063
Coefficient of Variation	0.244
Mann-Kendall Test	
M-K Test Value (S)	-57
Tabulated p-value	0.037
Standard Deviation of S	30.65
Standardized Value of S	-1.827
Approximate p-value	0.0339
Statistically significant evidence of a decreasing	
trend at the specified level of significance.	
Barium-mw-63	

Appendix B
Time Series Statistics

General Statistics	
Number of Events Reported (m)	30
Number of Missing Events	10
Number or Reported Events Used	20
Number Values Reported (n)	30
Number Values Missing	10
Number Values Used	20
Minimum	0.014
Maximum	0.033
Mean	0.0197
Geometric Mean	0.0193
Median	0.02
Standard Deviation	0.00409
Coefficient of Variation	0.208
Mann-Kendall Test	
M-K Test Value (S)	-32
Tabulated p-value	0.159
Standard Deviation of S	30.46
Standardized Value of S	-1.018
Approximate p-value	0.154
Insufficient evidence to identify a significant	
trend at the specified level of significance.	
Barium-mw-64	
General Statistics	
Number of Events Reported (m)	30
Number of Missing Events	10
Number or Reported Events Used	20
Number Values Reported (n)	30
Number Values Missing	10
Number Values Used	20
Minimum	0.022
Maximum	0.035
Mean	0.0267
Geometric Mean	0.0264
Median	0.0265
Standard Deviation	0.00356

Appendix B
Time Series Statistics

Coefficient of Variation	0.134
Mann-Kendall Test	
M-K Test Value (S)	-58
Tabulated p-value	0.032
Standard Deviation of S	30.23
Standardized Value of S	-1.885
Approximate p-value	0.0297
Statistically significant evidence of a decreasing	
trend at the specified level of significance.	
Barium-mw-65	
General Statistics	
Number of Events Reported (m)	30
Number of Missing Events	10
Number or Reported Events Used	20
Number Values Reported (n)	30
Number Values Missing	10
Number Values Used	20
Minimum	0.012
Maximum	0.042
Mean	0.0186
Geometric Mean	0.0175
Median	0.017
Standard Deviation	0.0074
Coefficient of Variation	0.398
Mann-Kendall Test	
M-K Test Value (S)	61
Tabulated p-value	0.027
Standard Deviation of S	30.65
Standardized Value of S	1.957
Approximate p-value	0.0252
Statistically significant evidence of an increasing	
trend at the specified level of significance.	

Appendix B
Time Series Statistics

	Mann-Kendall Trend Test Analysis
User Selected Options	
Date/Time of Computation	ProUCL 5.18/18/2023 4:56:58 PM
From File	ProUCLUpload_FC_CWTP_AppxIV_ProUCL_20230809_b.xls
Full Precision	OFF
Confidence Coefficient	0.95
Level of Significance	0.05

Cobalt-mw-62

General Statistics	
Number of Events Reported (m)	31
Number of Missing Events	11
Number or Reported Events Used	20
Number Values Reported (n)	31
Number Values Missing	11
Number Values Used	20
Minimum	6.5000E-4
Maximum	0.014
Mean	0.00654
Geometric Mean	0.00547
Median	0.0063
Standard Deviation	0.00328
Coefficient of Variation	0.502

Mann-Kendall Test	
M-K Test Value (S)	-22
Tabulated p-value	0.25
Standard Deviation of S	30.75
Standardized Value of S	-0.683
Approximate p-value	0.247

Insufficient evidence to identify a significant trend at the specified level of significance.

Cobalt-mw-63

General Statistics	
Number of Events Reported (m)	30

Appendix B
Time Series Statistics

Number of Missing Events	10
Number or Reported Events Used	20
Number Values Reported (n)	30
Number Values Missing	10
Number Values Used	20
Minimum	6.2000E-4
Maximum	0.0086
Mean	0.00467
Geometric Mean	0.00382
Median	0.00555
Standard Deviation	0.00232
Coefficient of Variation	0.496
Mann-Kendall Test	
M-K Test Value (S)	-72
Tabulated p-value	0.01
Standard Deviation of S	30.79
Standardized Value of S	-2.306
Approximate p-value	0.0106
Statistically significant evidence of a decreasing	
trend at the specified level of significance.	
Cobalt-mw-64	
General Statistics	
Number of Events Reported (m)	30
Number of Missing Events	10
Number or Reported Events Used	20
Number Values Reported (n)	30
Number Values Missing	10
Number Values Used	20
Minimum	8.3000E-4
Maximum	0.005
Mean	0.00166
Geometric Mean	0.00153
Median	0.0015
Standard Deviation	8.6143E-4
Coefficient of Variation	0.52

Appendix B
Time Series Statistics

Mann-Kendall Test	
M-K Test Value (S)	11
Tabulated p-value	0.387
Standard Deviation of S	30.42
Standardized Value of S	0.329
Approximate p-value	0.371
Insufficient evidence to identify a significant	
trend at the specified level of significance.	
Cobalt-mw-65	
General Statistics	
Number of Events Reported (m)	30
Number of Missing Events	10
Number or Reported Events Used	20
Number Values Reported (n)	30
Number Values Missing	10
Number Values Used	20
Minimum	0.001
Maximum	0.0029
Mean	0.00156
Geometric Mean	0.00149
Median	0.0013
Standard Deviation	5.1748E-4
Coefficient of Variation	0.332
Mann-Kendall Test	
M-K Test Value (S)	56
Tabulated p-value	0.037
Standard Deviation of S	30.27
Standardized Value of S	1.817
Approximate p-value	0.0346
Statistically significant evidence of an increasing	
trend at the specified level of significance.	

Appendix B
Time Series Statistics

	Mann-Kendall Trend Test Analysis
User Selected Options	
Date/Time of Computation	ProUCL 5.18/19/2023 9:07:42 PM
From File	ProUCLUpload_FC_CWTP_AppxIV_ProUCL_20230809_b.xls
Full Precision	OFF
Confidence Coefficient	0.95
Level of Significance	0.05

Fluoride-mw-62

General Statistics	
Number of Events Reported (m)	31
Number of Missing Events	1
Number or Reported Events Used	30
Number Values Reported (n)	31
Number Values Missing	1
Number Values Used	30
Minimum	1.2
Maximum	3.3
Mean	1.553
Geometric Mean	1.523
Median	1.5
Standard Deviation	0.375
Coefficient of Variation	0.241

Mann-Kendall Test	
M-K Test Value (S)	38
Critical Value (0.05)	1.645
Standard Deviation of S	54.47
Standardized Value of S	0.679
Approximate p-value	0.248

Insufficient evidence to identify a significant trend at the specified level of significance.

Fluoride-mw-63

General Statistics

Appendix B
Time Series Statistics

Number of Events Reported (m)	30
Number of Missing Events	1
Number or Reported Events Used	29
Number Values Reported (n)	30
Number Values Missing	1
Number Values Used	29
Minimum	0.28
Maximum	2.5
Mean	1.889
Geometric Mean	1.81
Median	1.9
Standard Deviation	0.377
Coefficient of Variation	0.199
Mann-Kendall Test	
M-K Test Value (S)	-33
Critical Value (0.05)	-1.645
Standard Deviation of S	52.6
Standardized Value of S	-0.608
Approximate p-value	0.271
Insufficient evidence to identify a significant	
trend at the specified level of significance.	
Fluoride-mw-64	
General Statistics	
Number of Events Reported (m)	30
Number of Missing Events	0
Number or Reported Events Used	30
Number Values Reported (n)	30
Minimum	1.3
Maximum	1.6
Mean	1.447
Geometric Mean	1.444
Median	1.4
Standard Deviation	0.0819
Coefficient of Variation	0.0566
Mann-Kendall Test	

Appendix B
Time Series Statistics

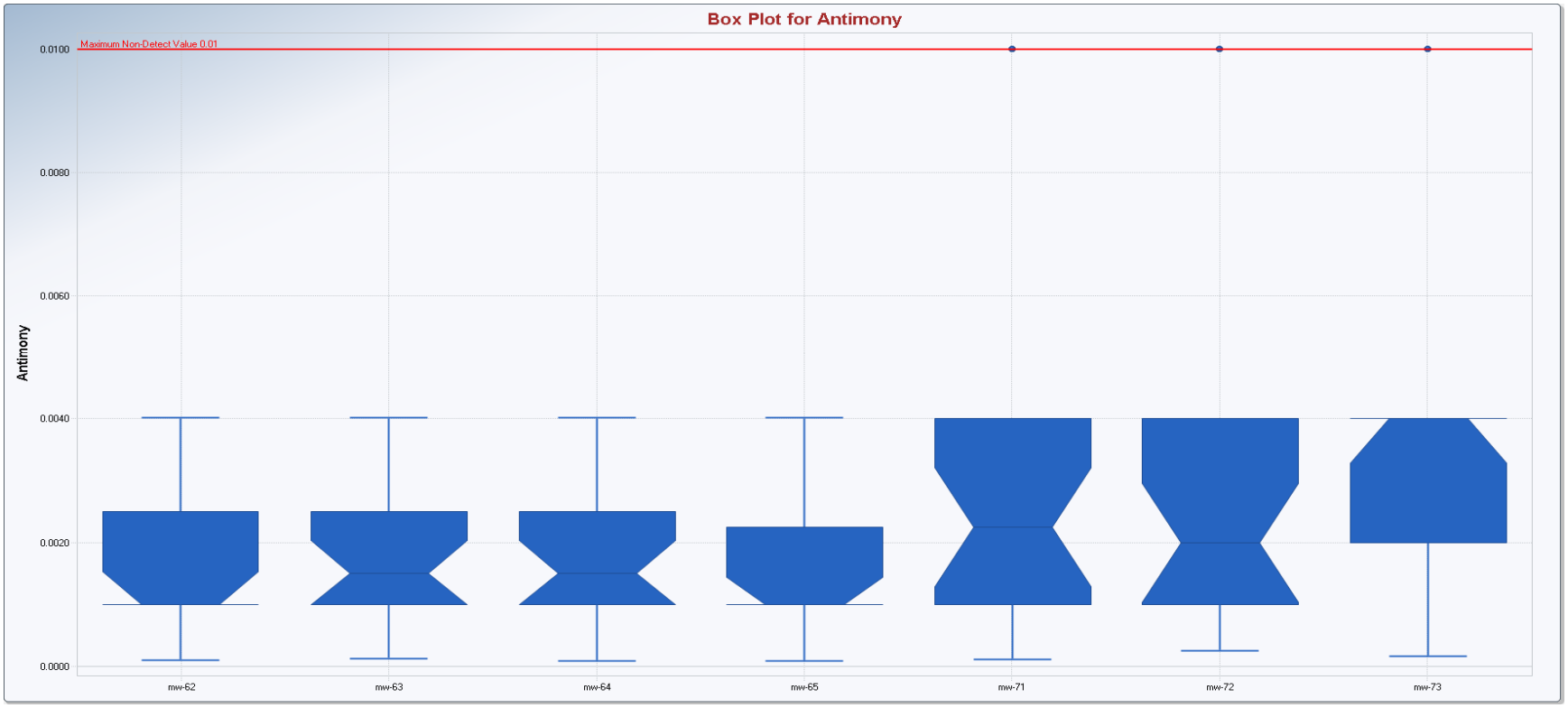
M-K Test Value (S)	-100
Critical Value (0.05)	-1.645
Standard Deviation of S	51.97
Standardized Value of S	-1.905
Approximate p-value	0.0284
Statistically significant evidence of a decreasing	
trend at the specified level of significance.	
Fluoride-mw-65	
General Statistics	
Number of Events Reported (m)	30
Number of Missing Events	0
Number or Reported Events Used	30
Number Values Reported (n)	30
Minimum	1.4
Maximum	2.1
Mean	1.86
Geometric Mean	1.851
Median	1.9
Standard Deviation	0.183
Coefficient of Variation	0.0984
Mann-Kendall Test	
M-K Test Value (S)	-145
Critical Value (0.05)	-1.645
Standard Deviation of S	54.2
Standardized Value of S	-2.657
Approximate p-value	0.00394
Statistically significant evidence of a decreasing	
trend at the specified level of significance.	

	Mann-Kendall Trend Test Analysis
User Selected Options	
Date/Time of Computation	ProUCL 5.18/19/2023 7:22:30 PM
From File	ProUCLUpload_FC_CWTP_AppxIV_ProUCL_20230809_b.xls
Full Precision	OFF

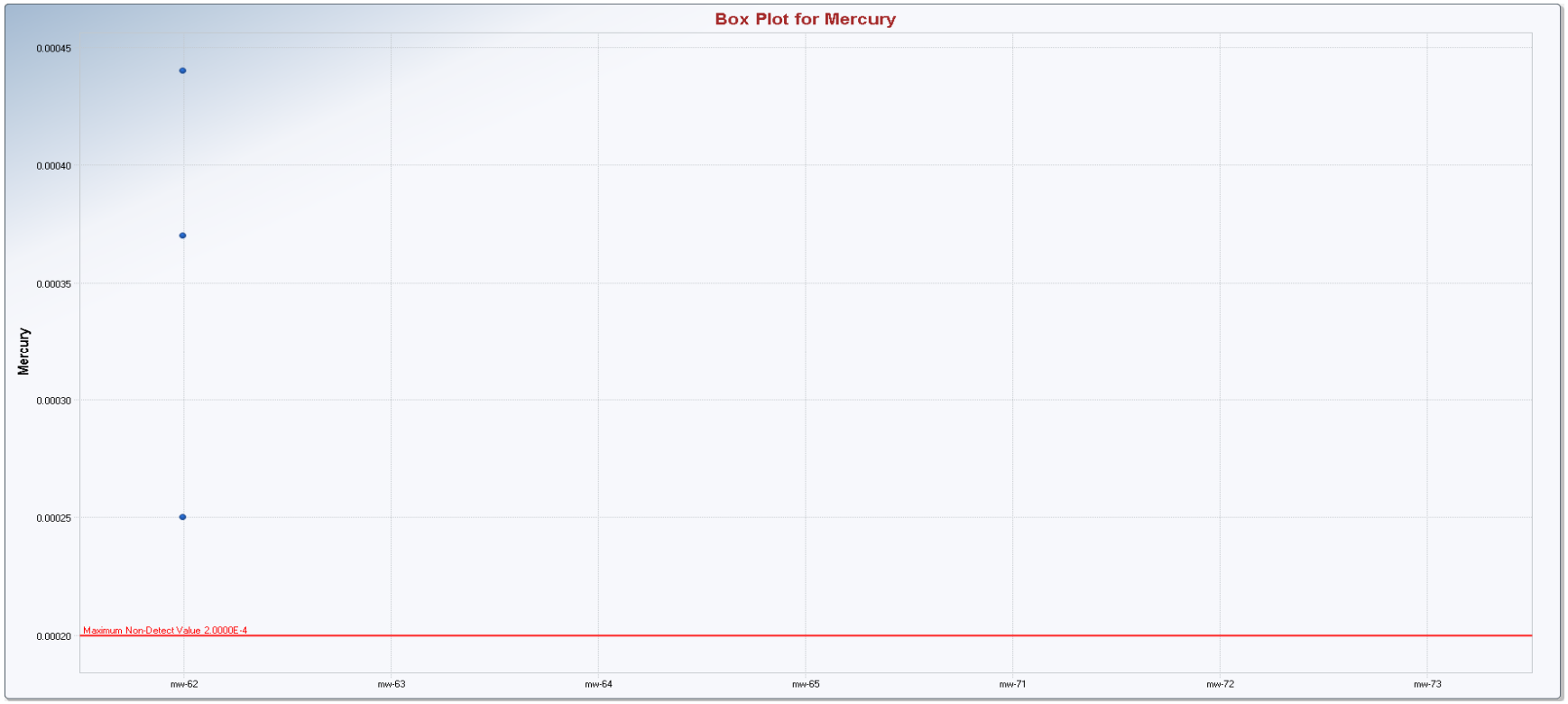
Appendix B
Time Series Statistics

Confidence Coefficient	0.95
Level of Significance	0.05
Molybdenum-mw-62	
General Statistics	
Number of Events Reported (m)	31
Number of Missing Events	12
Number or Reported Events Used	19
Number Values Reported (n)	31
Number Values Missing	12
Number Values Used	19
Minimum	0.0012
Maximum	0.0044
Mean	0.00294
Geometric Mean	0.00285
Median	0.0029
Standard Deviation	7.2212E-4
Coefficient of Variation	0.245
Mann-Kendall Test	
M-K Test Value (S)	-114
Tabulated p-value	0
Standard Deviation of S	28.44
Standardized Value of S	-3.974
Approximate p-value	3.5384E-5
Statistically significant evidence of a decreasing	
trend at the specified level of significance.	
Molybdenum-mw-63	
General Statistics	
Number of Events Reported (m)	30

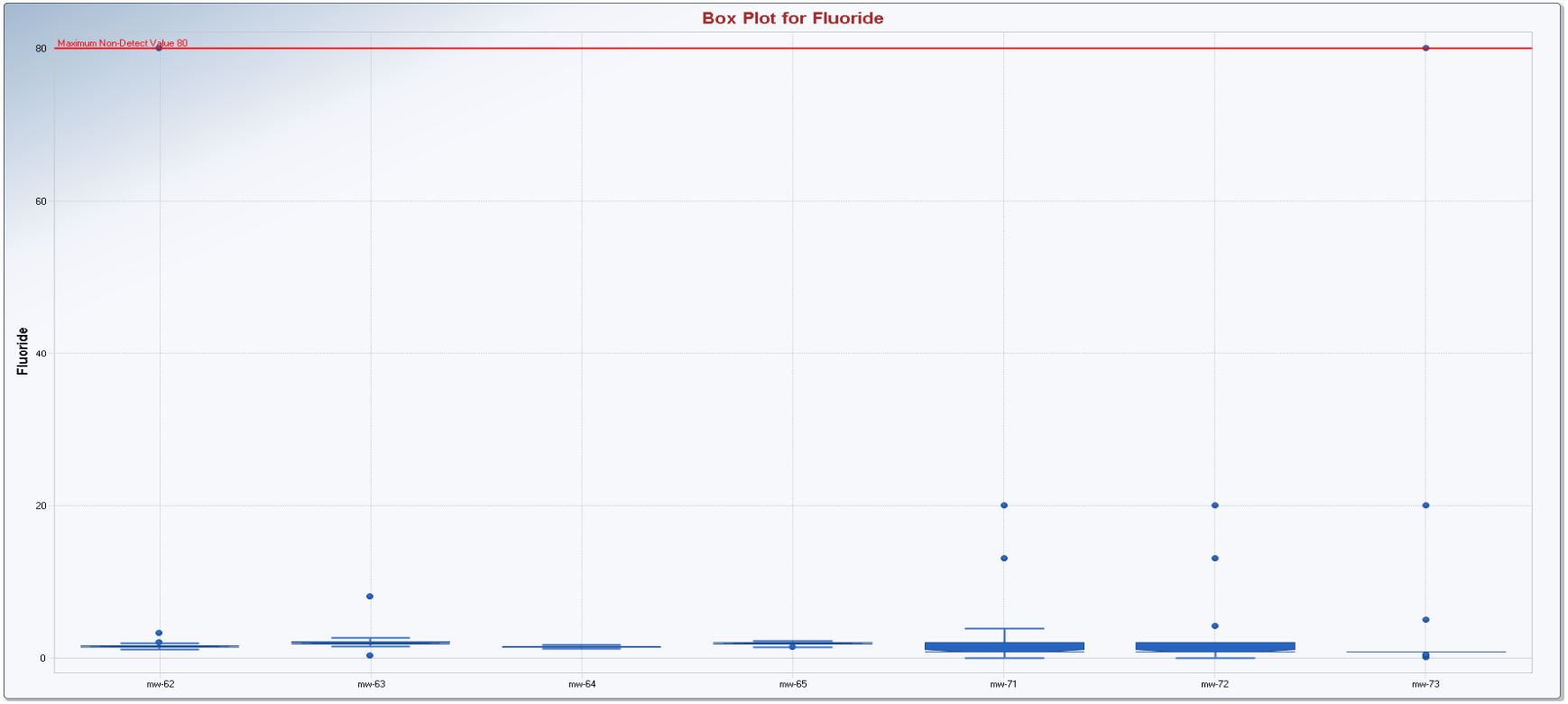
Appendix B
Box and Whisker Plots



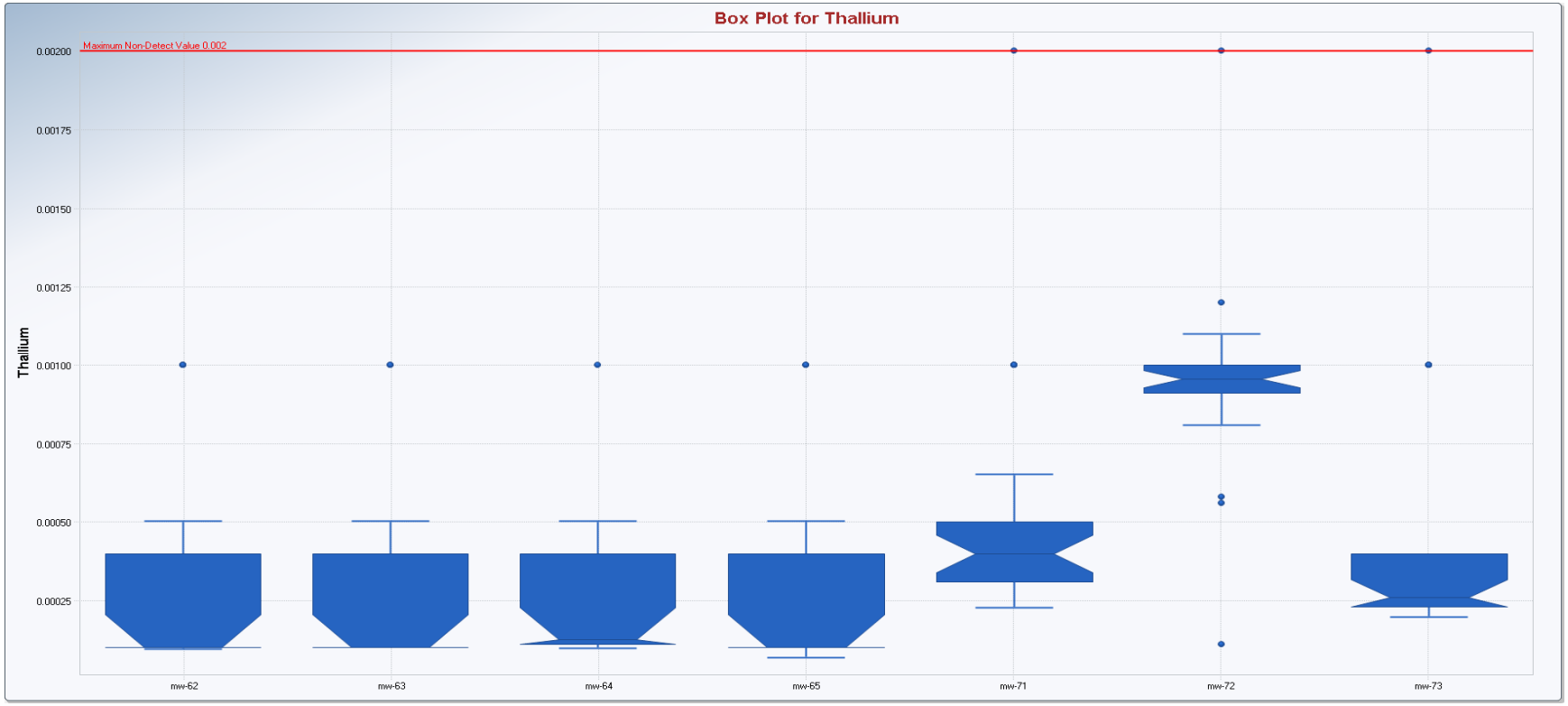
Appendix B
Box and Whisker Plots



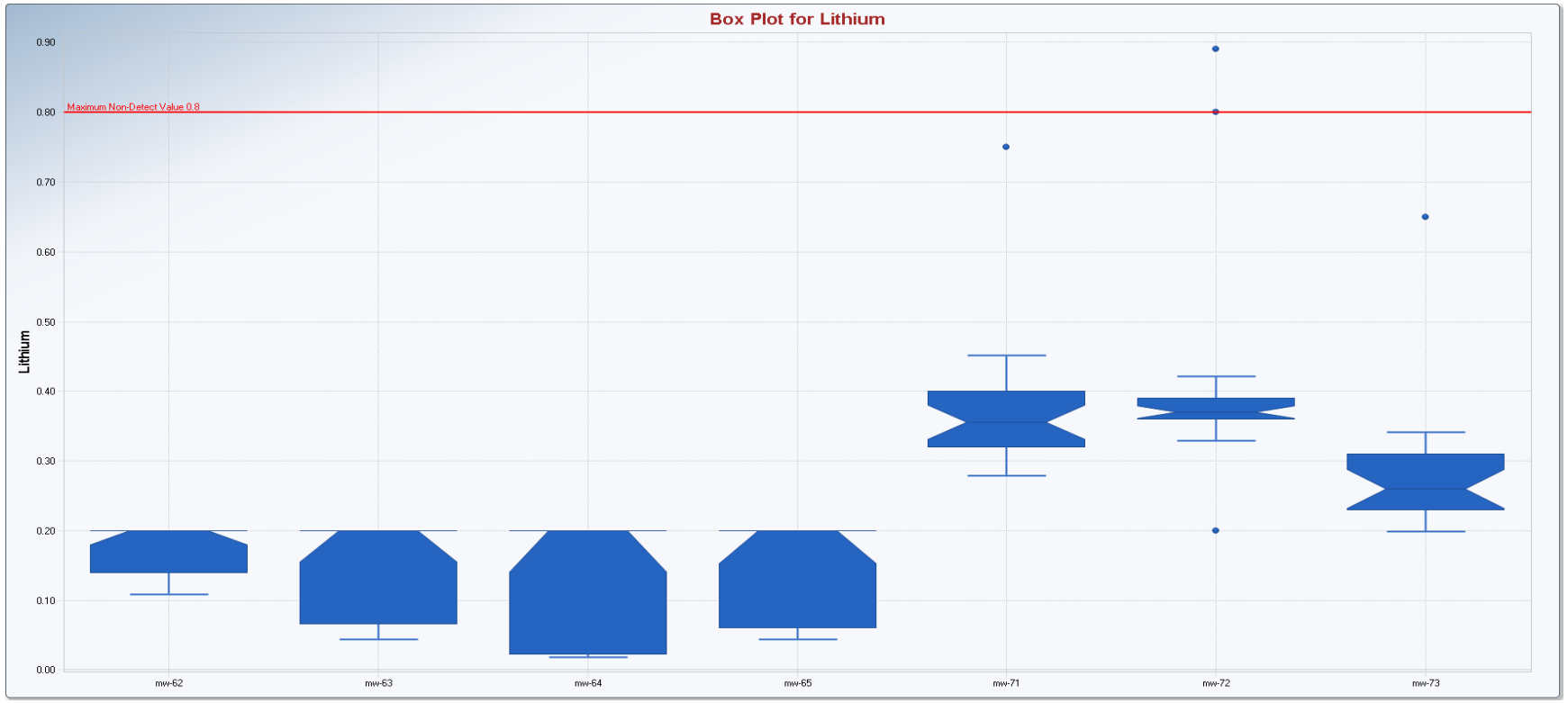
Appendix B
Box and Whisker Plots



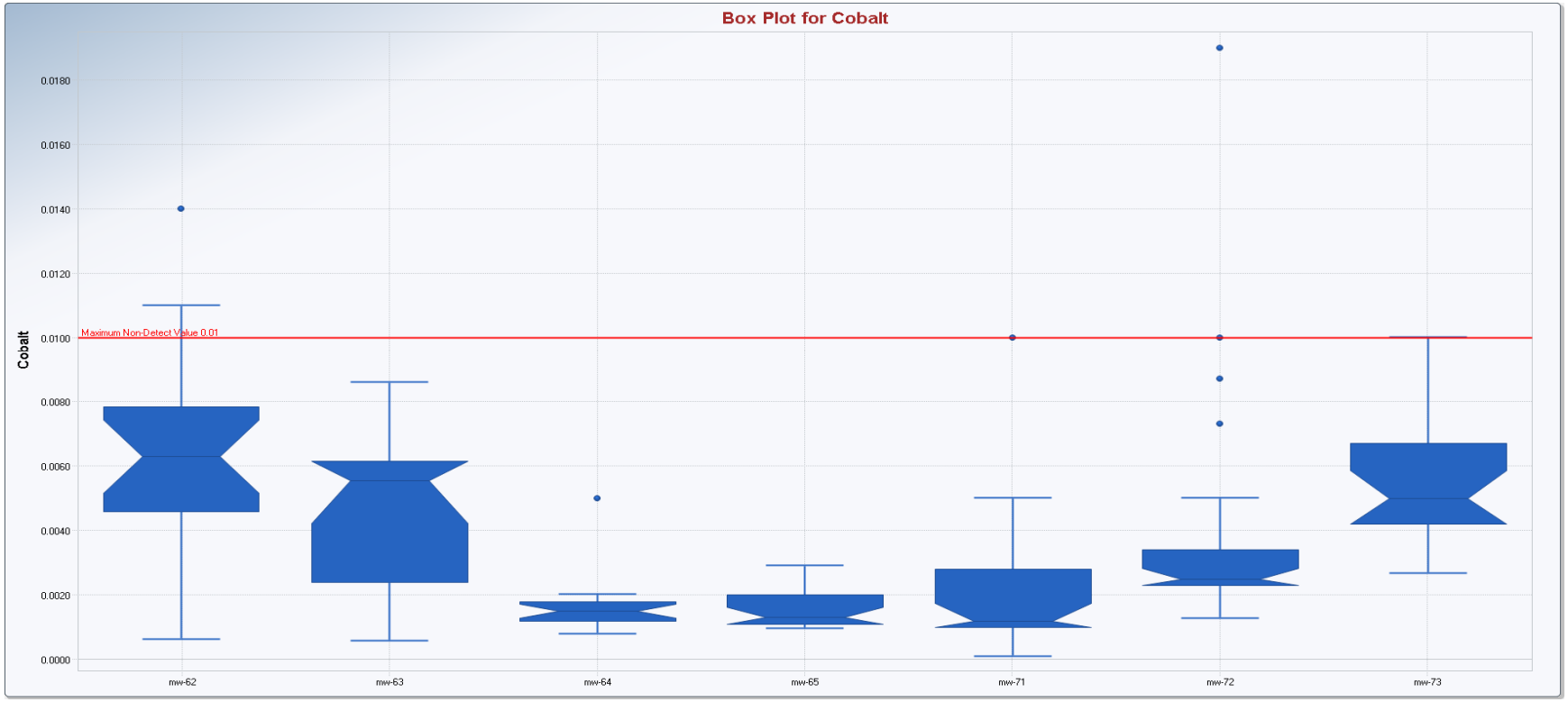
Appendix B
Box and Whisker Plots



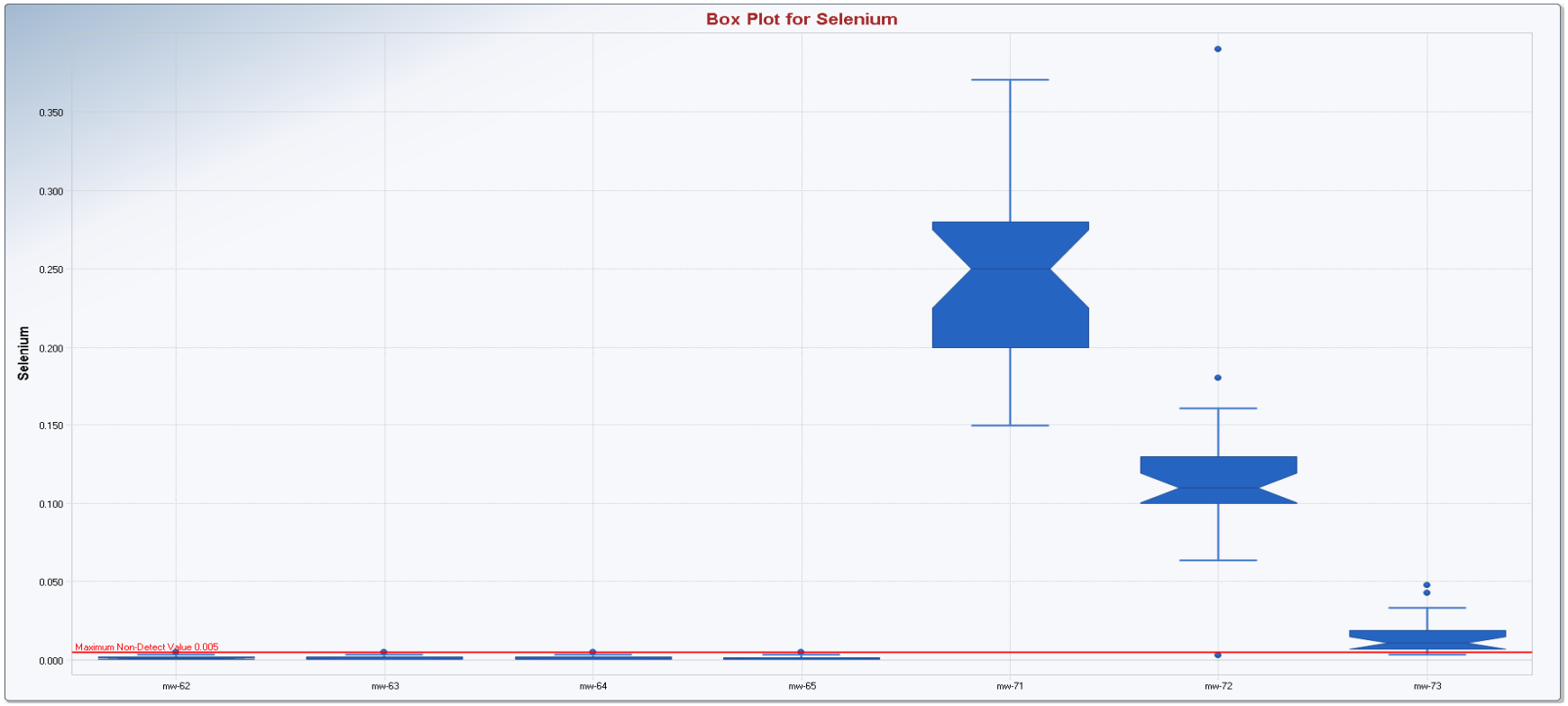
Appendix B
Box and Whisker Plots



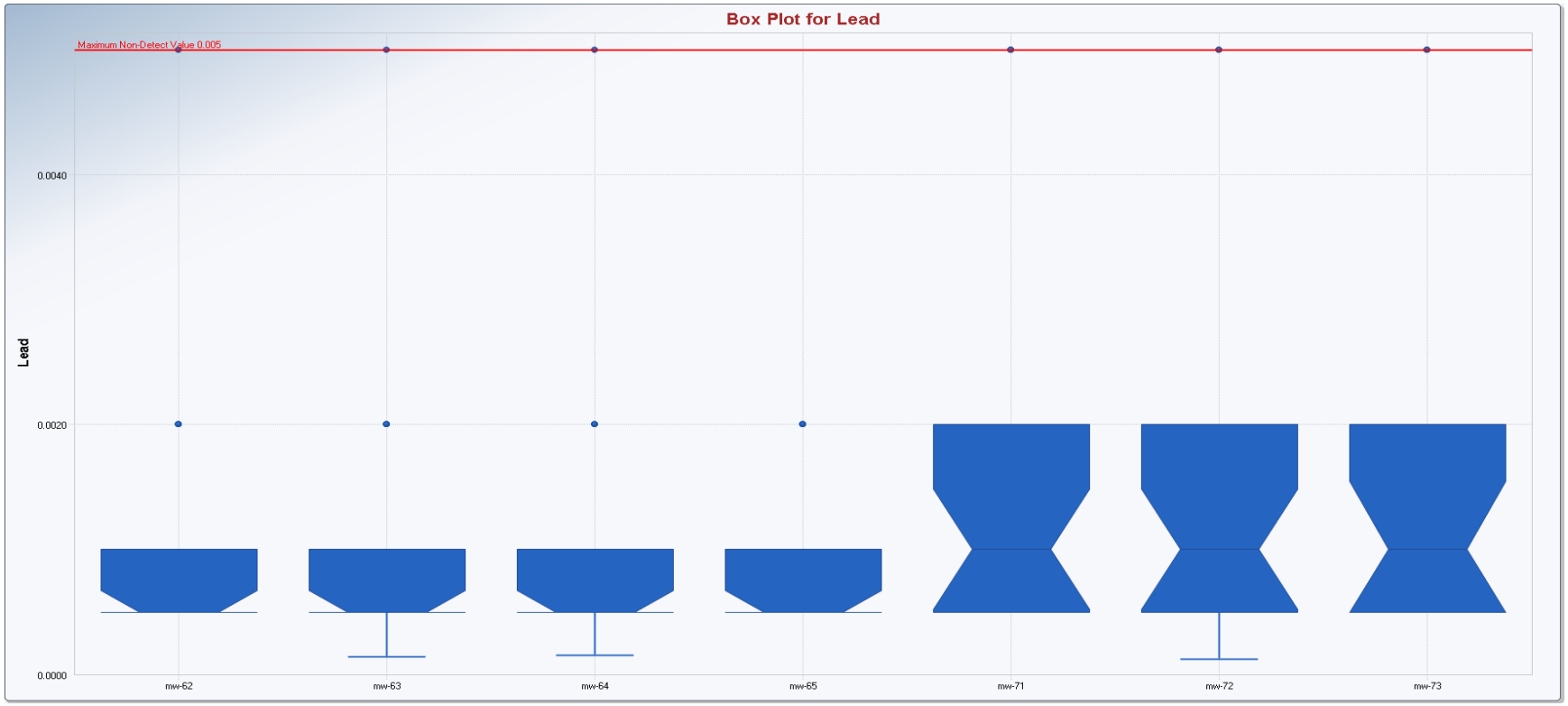
Appendix B
Box and Whisker Plots



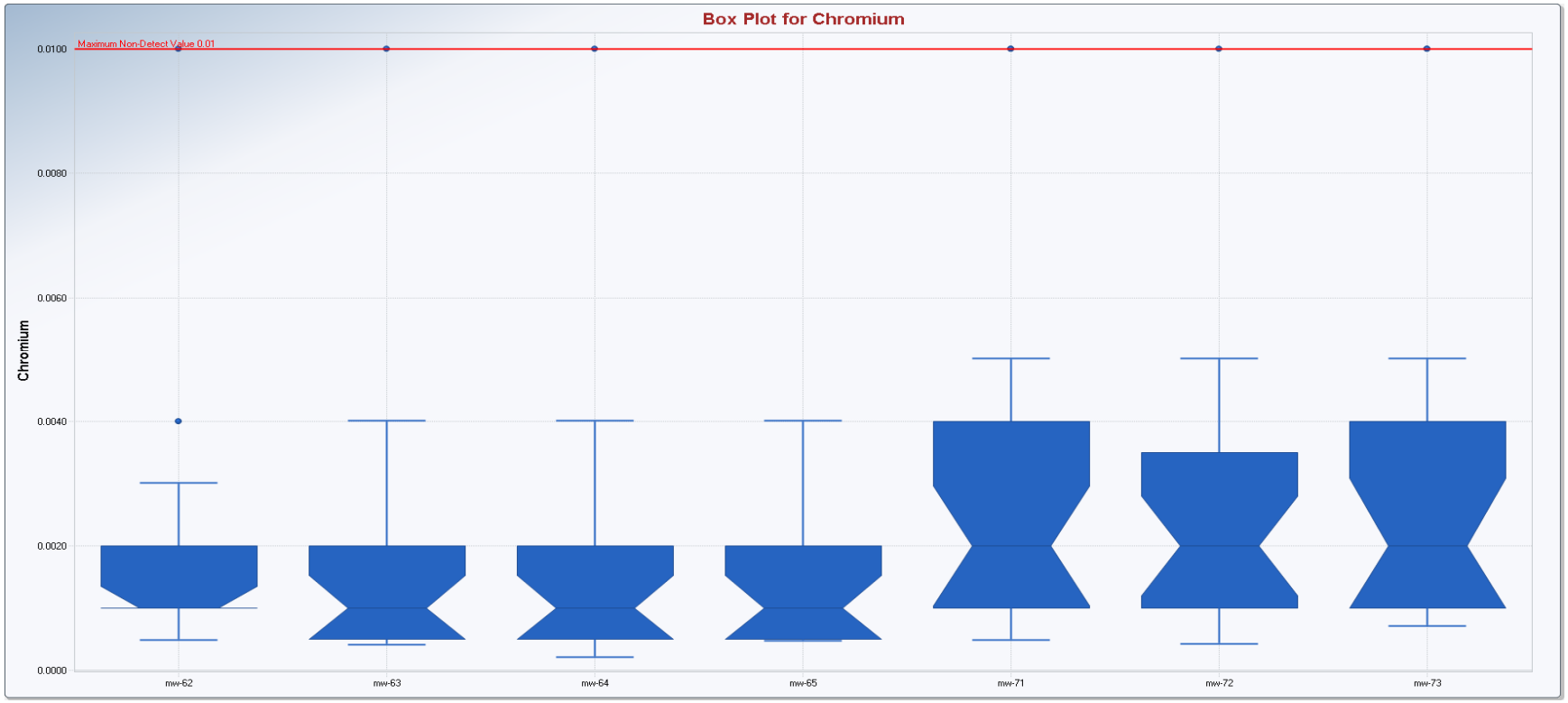
Appendix B
Box and Whisker Plots



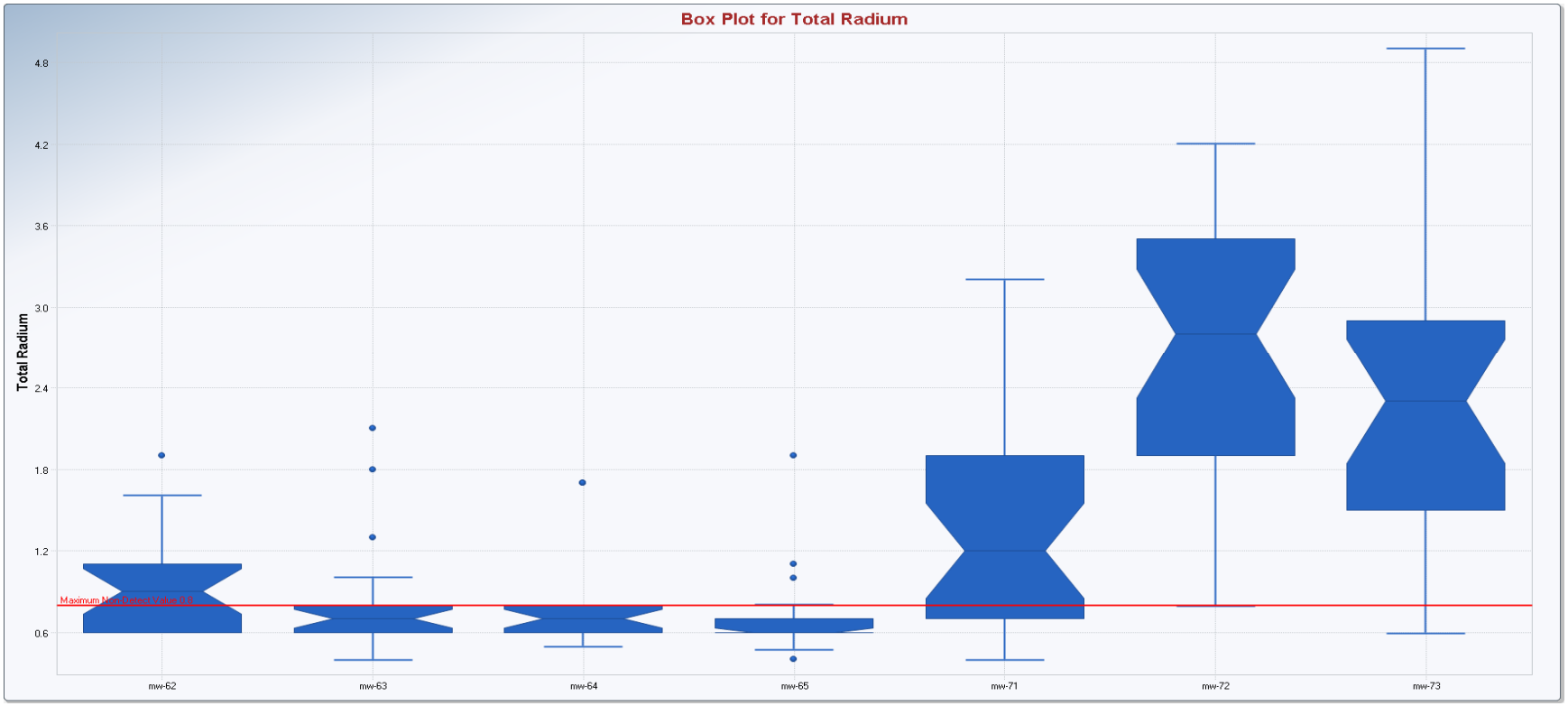
Appendix B
Box and Whisker Plots



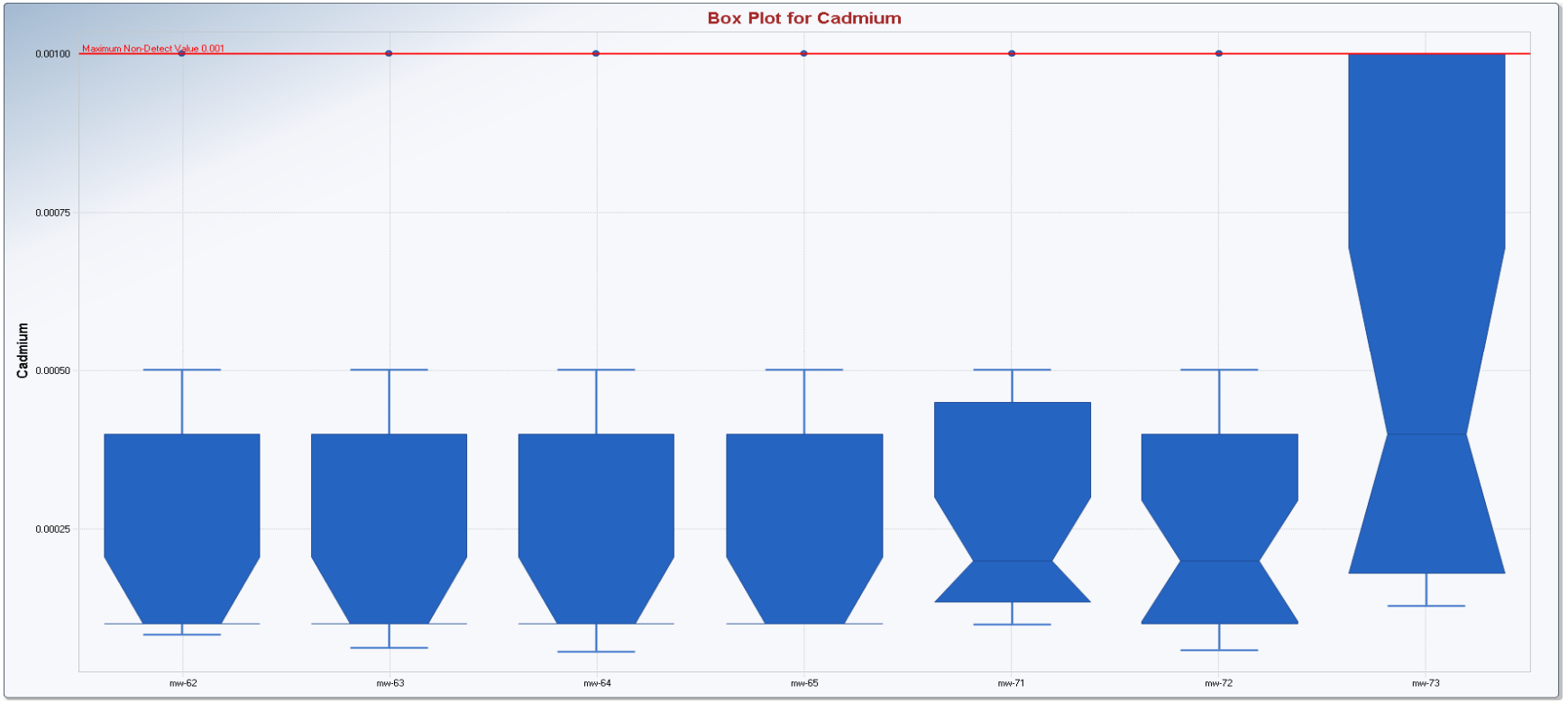
Appendix B
Box and Whisker Plots



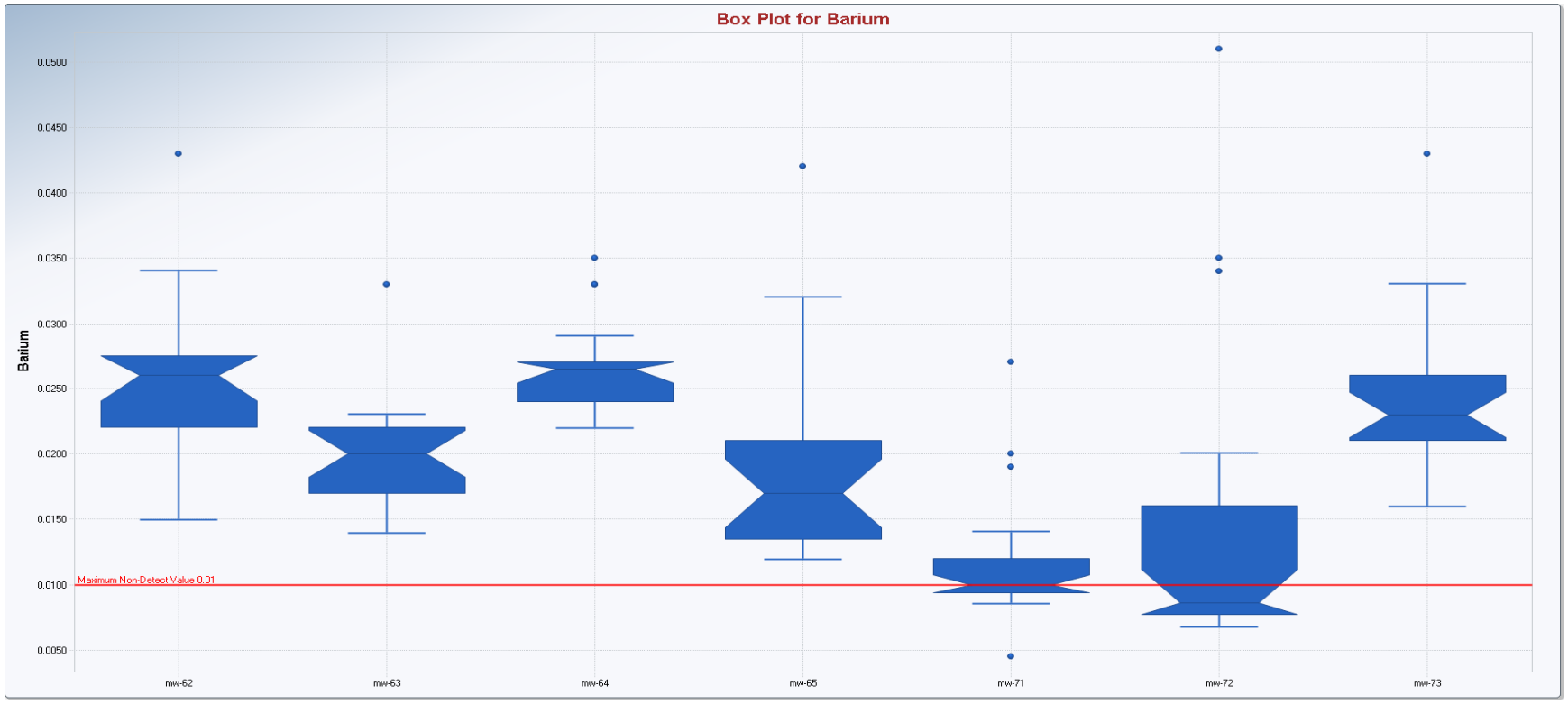
Appendix B
Box and Whisker Plots



Appendix B
Box and Whisker Plots



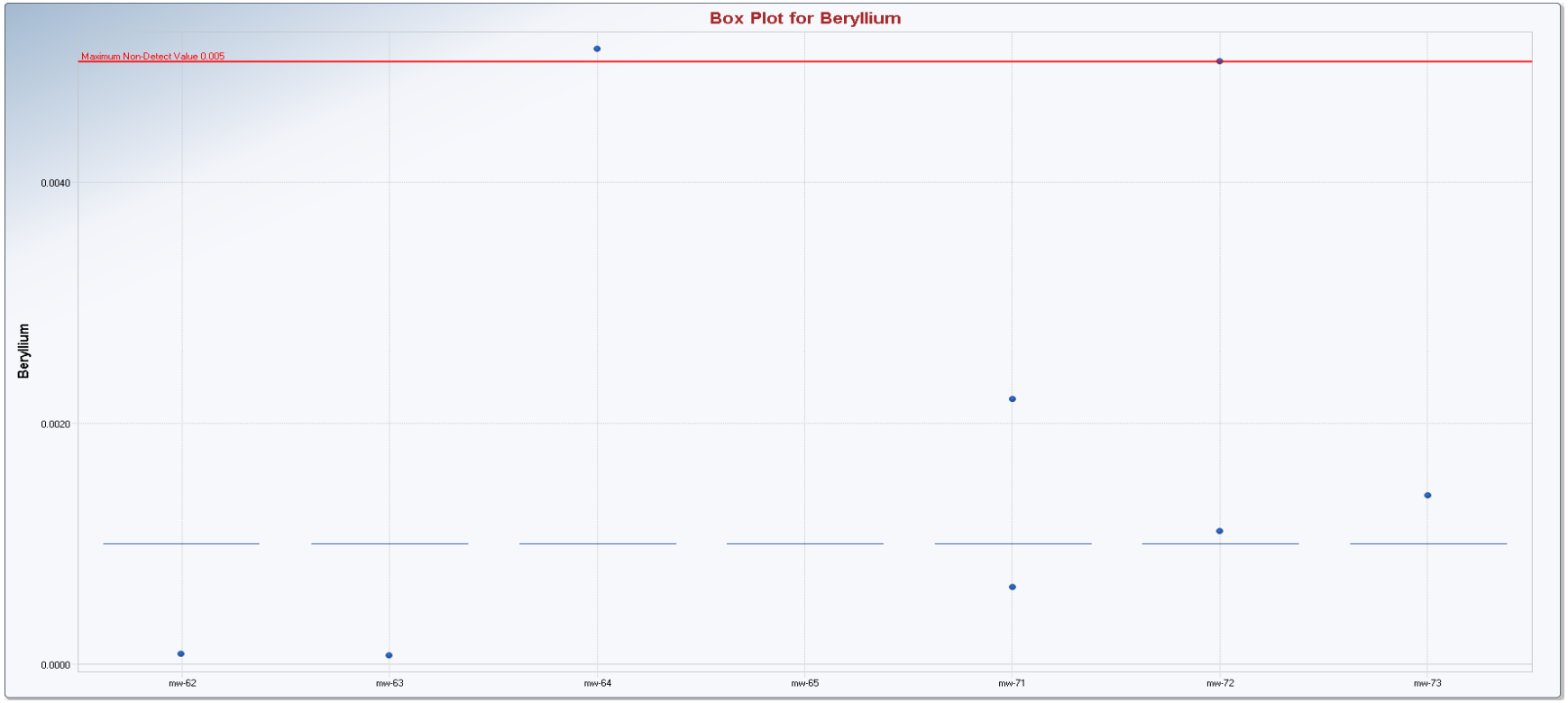
Appendix B
Box and Whisker Plots



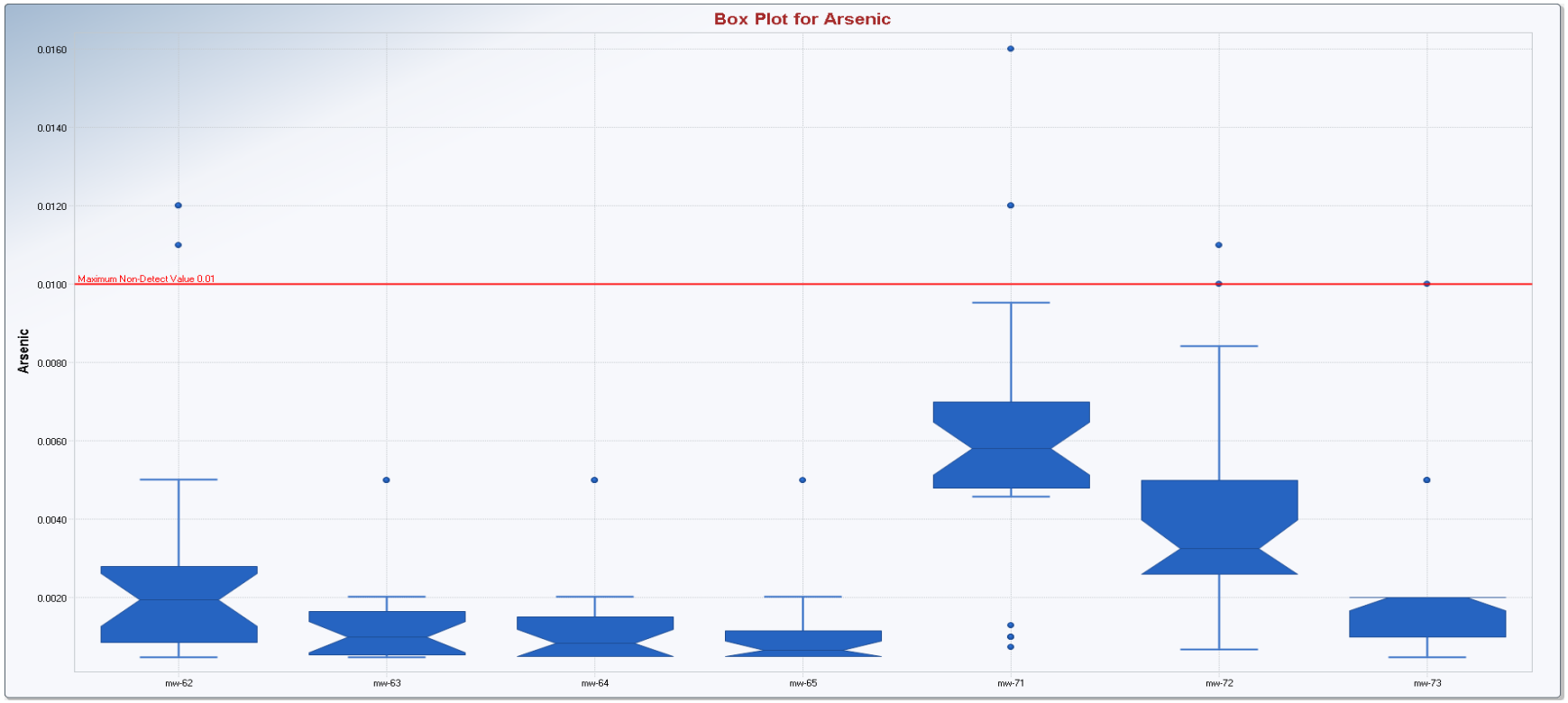
Appendix B
Box and Whisker Plots



Appendix B
Box and Whisker Plots



Appendix B
Box and Whisker Plots



Appendix B
Goodness of Fit Statistics

	Goodness-of-Fit Test Statistics for Data Sets with Non-Detects
User Selected Options	
Date/Time of Computation	ProUCL 5.18/10/2023 10:37:54 PM
From File	ProUCLUpload_FC_CWTP_AppxIV_ProUCL_20230809.xls
Full Precision	OFF
Confidence Coefficient	0.95

Antimony (mw-62)

	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs
Raw Statistics	31	11	20	2	18	90.00%

Warning: Only one distinct data value was detected! ProUCL (or any other software) should not be used on such a data set!
It is suggested to use alternative site specific values determined by the Project Team to estimate environmental parameters (e.g., EPC, BTV).

The data set for variable Antimony (mw-62) was not processed!

Antimony (mw-63)

	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs
Raw Statistics	30	10	20	2	18	90.00%

Warning: Only one distinct data value was detected! ProUCL (or any other software) should not be used on such a data set!
It is suggested to use alternative site specific values determined by the Project Team to estimate environmental parameters (e.g., EPC, BTV).

The data set for variable Antimony (mw-63) was not processed!

Antimony (mw-64)

	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs
Raw Statistics	30	10	20	0	20	100.00%

Warning: All observations are Non-Detects (NDs), therefore all statistics and estimates should also be NDs!
Specifically, sample mean, UCLs, UPLs, and other statistics are also NDs lying below the largest detection limit!
The Project Team may decide to use alternative site specific values to estimate environmental parameters (e.g., EPC, BTV).

Appendix B
Goodness of Fit Statistics

The data set for variable Antimony (mw-64) was not processed!

Antimony (mw-65)

	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs
Raw Statistics	30	10	20	0	20	100.00%

Warning: All observations are Non-Detects (NDs), therefore all statistics and estimates should also be NDs!
Specifically, sample mean, UCLs, UPLs, and other statistics are also NDs lying below the largest detection limit!
The Project Team may decide to use alternative site specific values to estimate environmental parameters (e.g., EPC, BTV).

The data set for variable Antimony (mw-65) was not processed!

Antimony (mw-71)

	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs
Raw Statistics	31	7	24	3	21	87.50%

	Number	Minimum	Maximum	Mean	Median	SD
Statistics (Non-Detects Only)	21	0.001	0.01	0.00395	0.0025	0.0032
Statistics (Non-Detects Only)	3	1.2000E-4	2.2000E-4	1.6667E-4	1.6000E-4	5.0332E-5
Statistics (All: NDs treated as DL value)	24	1.2000E-4	0.01	0.00348	0.00225	0.00324
Statistics (All: NDs treated as DL/2 value)	24	1.2000E-4	0.005	0.00175	0.00113	0.00161
Statistics (Normal ROS Imputed Data)	24	8.7528E-5	2.4581E-4	1.6667E-4	1.6333E-4	4.7919E-5
Statistics (Gamma ROS Imputed Data)	24	1.2000E-4	0.01	0.00877	0.01	0.00332
Statistics (Lognormal ROS Imputed Data)	24	1.0006E-4	2.6116E-4	1.6826E-4	1.6082E-4	4.8553E-5

	K hat	K Star	Theta hat	Log Mean	Log Stdv	Log CV
Statistics (Non-Detects Only)	N/A	N/A	N/A	N/A	N/A	N/A
Statistics (NDs = DL)	1.092	0.983	0.00319	-6.184	1.223	-0.198
Statistics (NDs = DL/2)	1.27	1.139	0.00138	-6.791	1.044	-0.154
Statistics (Gamma ROS Estimates)	1.445	1.292	0.00607	-5.121	1.396	-0.273
Statistics (Lognormal ROS Estimates)	--	--	--	-8.73	0.29	-0.0333

Appendix B
Goodness of Fit Statistics

Normal GOF Test Results					
	No NDs	NDs = DL	NDs = DL/2	Normal ROS	
Correlation Coefficient R	0.993	0.891	0.887	0.988	
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)		
Shapiro-Wilk (Detects Only)	0.987	0.767	Data Appear Normal		
Shapiro-Wilk (NDs = DL)	0.783	0.916	Data Not Normal		
Shapiro-Wilk (NDs = DL/2)	0.775	0.916	Data Not Normal		
Shapiro-Wilk (Normal ROS Estimates)	0.959	0.916	Data Appear Normal		
Lilliefors (Detects Only)	0.219	0.425	Data Appear Normal		
Lilliefors (NDs = DL)	0.27	0.177	Data Not Normal		
Lilliefors (NDs = DL/2)	0.272	0.177	Data Not Normal		
Lilliefors (Normal ROS Estimates)	0.0807	0.177	Data Appear Normal		
Gamma GOF Test Results					
	No NDs	NDs = DL	NDs = DL/2	Gamma ROS	
Correlation Coefficient R	N/A	0.93	0.932	0.402	
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)		
Anderson-Darling (Detects Only)	N/A	N/A			
Kolmogorov-Smirnov (Detects Only)	N/A	N/A			
Anderson-Darling (NDs = DL)	0.639	0.77			
Kolmogorov-Smirnov (NDs = DL)	0.153	0.183	Data Appear Gamma Distributed		
Anderson-Darling (NDs = DL/2)	0.645	0.766			
Kolmogorov-Smirnov (NDs = DL/2)	0.16	0.182	Data Appear Gamma Distributed		
Anderson-Darling (Gamma ROS Estimates)	7.839	0.763			
Kolmogorov-Smirnov (Gamma ROS Est.)	0.545	0.181	Data Not Gamma Distributed		
Lognormal GOF Test Results					
	No NDs	NDs = DL	NDs = DL/2	Log ROS	
Correlation Coefficient R	1	0.947	0.97	0.988	
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)		
Shapiro-Wilk (Detects Only)	0.999	0.767	Data Appear Lognormal		
Shapiro-Wilk (NDs = DL)	0.891	0.916	Data Not Lognormal		
Shapiro-Wilk (NDs = DL/2)	0.932	0.916	Data Appear Lognormal		

Appendix B
Goodness of Fit Statistics

Shapiro-Wilk (Lognormal ROS Estimates)	0.96	0.916	Data Appear Lognormal					
Lilliefors (Detects Only)	0.18	0.425	Data Appear Lognormal					
Lilliefors (NDs = DL)	0.198	0.177	Data Not Lognormal					
Lilliefors (NDs = DL/2)	0.164	0.177	Data Appear Lognormal					
Lilliefors (Lognormal ROS Estimates)	0.0809	0.177	Data Appear Lognormal					
Note: Substitution methods such as DL or DL/2 are not recommended.								
Antimony (mw-72)								
	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs		
Raw Statistics	31	7	24	2	22	91.67%		
	Number	Minimum	Maximum	Mean	Median	SD		
Statistics (Non-Detects Only)	22	0.001	0.01	0.00341	0.00225	0.00292		
Statistics (Non-Detects Only)	2	2.6000E-4	2.7000E-4	2.6500E-4	2.6500E-4	7.0711E-6		
Statistics (All: NDs treated as DL value)	24	2.6000E-4	0.01	0.00315	0.002	0.00293		
Statistics (All: NDs treated as DL/2 value)	24	2.6000E-4	0.005	0.00158	0.001	0.00145		
Statistics (Normal ROS Imputed Data)	24	2.5261E-4	2.7739E-4	2.6500E-4	2.6500E-4	7.6022E-6		
Statistics (Gamma ROS Imputed Data)	24	N/A	N/A	N/A	N/A	N/A		
Statistics (Lognormal ROS Imputed Data)	24	2.5285E-4	2.7764E-4	2.6506E-4	2.6495E-4	7.6045E-6		
	K hat	K Star	Theta hat	Log Mean	Log Stdv	Log CV		
Statistics (Non-Detects Only)	N/A	N/A	N/A	N/A	N/A	N/A		
Statistics (NDs = DL)	1.387	1.241	0.00227	-6.163	0.972	-0.158		
Statistics (NDs = DL/2)	1.569	1.401	0.00101	-6.799	0.857	-0.126		
Statistics (Gamma ROS Estimates)	N/A	N/A	N/A	N/A	N/A	N/A		
Statistics (Lognormal ROS Estimates)	--	--	--	-8.236	0.0287	-0.00348		
Normal GOF Test Results								
	No NDs	NDs = DL	NDs = DL/2	Normal ROS				
Correlation Coefficient R	1	0.872	0.865	0.986				
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)					
Shapiro-Wilk (NDs = DL)	0.755	0.916	Data Not Normal					
Shapiro-Wilk (NDs = DL/2)	0.742	0.916	Data Not Normal					
Shapiro-Wilk (Normal ROS Estimates)	0.955	0.916	Data Appear Normal					
Lilliefors (Detects Only)	N/A	N/A						

Appendix B
Goodness of Fit Statistics

Lilliefors (NDs = DL)	0.26	0.177	Data Not Normal					
Lilliefors (NDs = DL/2)	0.262	0.177	Data Not Normal					
Lilliefors (Normal ROS Estimates)	0.12	0.177	Data Appear Normal					
Gamma GOF Test Results								
	No NDs	NDs = DL	NDs = DL/2	Gamma ROS				
Correlation Coefficient R	N/A	0.942	0.94	0.381				
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)					
Anderson-Darling (Detects Only)	N/A	N/A						
Kolmogorov-Smirnov (Detects Only)	N/A	N/A						
Anderson-Darling (NDs = DL)	0.745	0.764						
Kolmogorov-Smirnov (NDs = DL)	0.158	0.182	Data Appear Gamma Distributed					
Anderson-Darling (NDs = DL/2)	0.916	0.761						
Kolmogorov-Smirnov (NDs = DL/2)	0.16	0.181	Detected Data appear Approximate Gamma Distribution					
Anderson-Darling (Gamma ROS Estimates)	N/A	0.742						
Kolmogorov-Smirnov (Gamma ROS Est.)	N/A	0.177						
Lognormal GOF Test Results								
	No NDs	NDs = DL	NDs = DL/2	Log ROS				
Correlation Coefficient R	1	0.965	0.97	N/A				
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)					
Shapiro-Wilk (NDs = DL)	0.926	0.916	Data Appear Lognormal					
Shapiro-Wilk (NDs = DL/2)	0.93	0.916	Data Appear Lognormal					
Shapiro-Wilk (Lognormal ROS Estimates)	0.955	0.916	Data Appear Lognormal					
Lilliefors (Detects Only)	N/A	N/A						
Lilliefors (NDs = DL)	0.146	0.177	Data Appear Lognormal					
Lilliefors (NDs = DL/2)	0.159	0.177	Data Appear Lognormal					
Lilliefors (Lognormal ROS Estimates)	0.12	0.177	Data Appear Lognormal					
Note: Substitution methods such as DL or DL/2 are not recommended.								
Antimony (mw-73)								
	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs		
Raw Statistics	25	6	19	1	18	94.74%		

Appendix B
Goodness of Fit Statistics

Warning: Only one distinct data value was detected! ProUCL (or any other software) should not be used on such a data set!
It is suggested to use alternative site specific values determined by the Project Team to estimate environmental parameters (e.g., EPC, BTV).

The data set for variable Antimony (mw-73) was not processed!

Arsenic (mw-62)

	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs
Raw Statistics	31	11	20	14	6	30.00%

	Number	Minimum	Maximum	Mean	Median	SD
Statistics (Non-Detects Only)	6	5.0000E-4	0.005	0.00207	0.00195	0.00156
Statistics (Non-Detects Only)	14	6.2000E-4	0.012	0.00365	0.0018	0.00442
Statistics (All: NDs treated as DL value)	20	5.0000E-4	0.012	0.00318	0.00195	0.00381
Statistics (All: NDs treated as DL/2 value)	20	2.5000E-4	0.012	0.00287	0.001	0.00388
Statistics (Normal ROS Imputed Data)	20	-0.00538	0.012	0.00234	0.0012	0.00439
Statistics (Gamma ROS Imputed Data)	20	6.2000E-4	0.012	0.00556	0.0028	0.00472
Statistics (Lognormal ROS Imputed Data)	20	1.5771E-4	0.012	0.00276	0.00103	0.00391

	K hat	K Star	Theta hat	Log Mean	Log Stdv	Log CV
Statistics (Non-Detects Only)	0.969	0.809	0.00377	-6.21	1.091	-0.176
Statistics (NDs = DL)	1.097	0.966	0.0029	-6.272	0.991	-0.158
Statistics (NDs = DL/2)	0.93	0.824	0.00308	-6.48	1.073	-0.166
Statistics (Gamma ROS Estimates)	1.069	0.942	0.0052	-5.729	1.176	-0.205
Statistics (Lognormal ROS Estimates)	--	--	--	-6.581	1.134	-0.172

Normal GOF Test Results

	No NDs	NDs = DL	NDs = DL/2	Normal ROS
Correlation Coefficient R	0.823	0.813	0.782	0.876

	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)
Shapiro-Wilk (Detects Only)	0.667	0.874	Data Not Normal
Shapiro-Wilk (NDs = DL)	0.657	0.905	Data Not Normal
Shapiro-Wilk (NDs = DL/2)	0.611	0.905	Data Not Normal
Shapiro-Wilk (Normal ROS Estimates)	0.777	0.905	Data Not Normal

Appendix B
Goodness of Fit Statistics

Lilliefors (Detects Only)	0.336	0.226	Data Not Normal		
Lilliefors (NDs = DL)	0.32	0.192	Data Not Normal		
Lilliefors (NDs = DL/2)	0.338	0.192	Data Not Normal		
Lilliefors (Normal ROS Estimates)	0.285	0.192	Data Not Normal		
Gamma GOF Test Results					
	No NDs	NDs = DL	NDs = DL/2	Gamma ROS	
Correlation Coefficient R	0.915	0.929	0.915	0.837	
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)		
Anderson-Darling (Detects Only)	1.139	0.761			
Kolmogorov-Smirnov (Detects Only)	0.214	0.235	Detected Data appear Approximate Gamma Distribution		
Anderson-Darling (NDs = DL)	1.274	0.766			
Kolmogorov-Smirnov (NDs = DL)	0.216	0.199	Data Not Gamma Distributed		
Anderson-Darling (NDs = DL/2)	1.552	0.771			
Kolmogorov-Smirnov (NDs = DL/2)	0.24	0.2	Data Not Gamma Distributed		
Anderson-Darling (Gamma ROS Estimates)	1.581	0.767			
Kolmogorov-Smirnov (Gamma ROS Est.)	0.287	0.199	Data Not Gamma Distributed		
Lognormal GOF Test Results					
	No NDs	NDs = DL	NDs = DL/2	Log ROS	
Correlation Coefficient R	0.941	0.959	0.957	0.953	
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)		
Shapiro-Wilk (Detects Only)	0.863	0.874	Data Not Lognormal		
Shapiro-Wilk (NDs = DL)	0.907	0.905	Data Appear Lognormal		
Shapiro-Wilk (NDs = DL/2)	0.91	0.905	Data Appear Lognormal		
Shapiro-Wilk (Lognormal ROS Estimates)	0.909	0.905	Data Appear Lognormal		
Lilliefors (Detects Only)	0.167	0.226	Data Appear Lognormal		
Lilliefors (NDs = DL)	0.139	0.192	Data Appear Lognormal		
Lilliefors (NDs = DL/2)	0.205	0.192	Data Not Lognormal		
Lilliefors (Lognormal ROS Estimates)	0.191	0.192	Data Appear Lognormal		
Note: Substitution methods such as DL or DL/2 are not recommended.					
Arsenic (mw-63)					

Appendix B
Goodness of Fit Statistics

	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs
Raw Statistics	30	10	20	6	14	70.00%

	Number	Minimum	Maximum	Mean	Median	SD
Statistics (Non-Detects Only)	14	5.0000E-4	0.005	0.00163	0.001	0.00154
Statistics (Non-Detects Only)	6	5.9000E-4	0.0012	9.0500E-4	9.0500E-4	2.6957E-4
Statistics (All: NDs treated as DL value)	20	5.0000E-4	0.005	0.00141	0.001	0.00133
Statistics (All: NDs treated as DL/2 value)	20	2.5000E-4	0.0025	8.4150E-4	6.4000E-4	6.5293E-4
Statistics (Normal ROS Imputed Data)	20	-5.873E-5	0.0012	5.6462E-4	5.5832E-4	3.4083E-4
Statistics (Gamma ROS Imputed Data)	20	5.9000E-4	0.01	0.00727	0.01	0.00428
Statistics (Lognormal ROS Imputed Data)	20	2.9265E-4	0.0012	6.3686E-4	5.8803E-4	2.5918E-4

	K hat	K Star	Theta hat	Log Mean	Log Stdv	Log CV
Statistics (Non-Detects Only)	12.95	6.587	6.9874E-5	-7.047	0.31	-0.0441
Statistics (NDs = DL)	1.926	1.67	7.3300E-4	-6.845	0.711	-0.104
Statistics (NDs = DL/2)	2.155	1.865	3.9042E-4	-7.33	0.724	-0.0987
Statistics (Gamma ROS Estimates)	1.351	1.181	0.00538	-5.338	1.159	-0.217
Statistics (Lognormal ROS Estimates)	--	--	--	-7.432	0.387	-0.052

Normal GOF Test Results

	No NDs	NDs = DL	NDs = DL/2	Normal ROS
Correlation Coefficient R	0.958	0.812	0.885	0.992

	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)
Shapiro-Wilk (Detects Only)	0.885	0.788	Data Appear Normal
Shapiro-Wilk (NDs = DL)	0.664	0.905	Data Not Normal
Shapiro-Wilk (NDs = DL/2)	0.783	0.905	Data Not Normal
Shapiro-Wilk (Normal ROS Estimates)	0.977	0.905	Data Appear Normal
Lilliefors (Detects Only)	0.196	0.325	Data Appear Normal
Lilliefors (NDs = DL)	0.284	0.192	Data Not Normal
Lilliefors (NDs = DL/2)	0.204	0.192	Data Not Normal
Lilliefors (Normal ROS Estimates)	0.0739	0.192	Data Appear Normal

Gamma GOF Test Results

	No NDs	NDs = DL	NDs = DL/2	Gamma ROS
Correlation Coefficient R	0.944	0.923	0.955	0.598

Appendix B
Goodness of Fit Statistics

	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)
Anderson-Darling (Detects Only)	0.385	0.698	
Kolmogorov-Smirnov (Detects Only)	0.209	0.332	Detected Data Appear Gamma Distributed
Anderson-Darling (NDs = DL)	1.21	0.753	
Kolmogorov-Smirnov (NDs = DL)	0.198	0.196	Data Not Gamma Distributed
Anderson-Darling (NDs = DL/2)	0.626	0.752	
Kolmogorov-Smirnov (NDs = DL/2)	0.142	0.196	Data Appear Gamma Distributed
Anderson-Darling (Gamma ROS Estimates)	4.099	0.761	
Kolmogorov-Smirnov (Gamma ROS Est.)	0.45	0.198	Data Not Gamma Distributed

Lognormal GOF Test Results

	No NDs	NDs = DL	NDs = DL/2	Log ROS
Correlation Coefficient R	0.958	0.943	0.964	0.991

	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)
Shapiro-Wilk (Detects Only)	0.887	0.788	Data Appear Lognormal
Shapiro-Wilk (NDs = DL)	0.879	0.905	Data Not Lognormal
Shapiro-Wilk (NDs = DL/2)	0.916	0.905	Data Appear Lognormal
Shapiro-Wilk (Lognormal ROS Estimates)	0.974	0.905	Data Appear Lognormal
Lilliefors (Detects Only)	0.184	0.325	Data Appear Lognormal
Lilliefors (NDs = DL)	0.144	0.192	Data Appear Lognormal
Lilliefors (NDs = DL/2)	0.159	0.192	Data Appear Lognormal
Lilliefors (Lognormal ROS Estimates)	0.104	0.192	Data Appear Lognormal

Note: Substitution methods such as DL or DL/2 are not recommended.

Arsenic (mw-64)

	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs
Raw Statistics	30	10	20	3	17	85.00%

	Number	Minimum	Maximum	Mean	Median	SD
Statistics (Non-Detects Only)	17	5.0000E-4	0.005	0.00141	9.6000E-4	0.00146
Statistics (Non-Detects Only)	3	5.6000E-4	0.001	7.5333E-4	7.0000E-4	2.2480E-4
Statistics (All: NDs treated as DL value)	20	5.0000E-4	0.005	0.00131	8.3000E-4	0.00136
Statistics (All: NDs treated as DL/2 value)	20	2.5000E-4	0.0025	7.1200E-4	5.0000E-4	6.7454E-4
Statistics (Normal ROS Imputed Data)	20	-4.506E-4	0.001	1.8437E-4	1.5505E-4	3.4801E-4
Statistics (Gamma ROS Imputed Data)	20	5.6000E-4	0.01	0.00861	0.01	0.00339

Appendix B
Goodness of Fit Statistics

Statistics (Lognormal ROS Imputed Data)	20	1.5446E-4	0.001	3.8839E-4	3.3792E-4	1.9742E-4		
	K hat	K Star	Theta hat	Log Mean	Log Stdv	Log CV		
Statistics (Non-Detects Only)	N/A	N/A	N/A	N/A	N/A	N/A		
Statistics (NDs = DL)	1.653	1.438	7.9308E-4	-6.969	0.756	-0.108		
Statistics (NDs = DL/2)	1.757	1.527	4.0512E-4	-7.558	0.762	-0.101		
Statistics (Gamma ROS Estimates)	2.211	1.912	0.0039	-4.997	0.963	-0.193		
Statistics (Lognormal ROS Estimates)	--	--	--	-7.955	0.45	-0.0565		
Normal GOF Test Results								
	No NDs	NDs = DL	NDs = DL/2	Normal ROS				
Correlation Coefficient R	0.979	0.788	0.826	0.99				
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)					
Shapiro-Wilk (Detects Only)	0.958	0.767	Data Appear Normal					
Shapiro-Wilk (NDs = DL)	0.625	0.905	Data Not Normal					
Shapiro-Wilk (NDs = DL/2)	0.684	0.905	Data Not Normal					
Shapiro-Wilk (Normal ROS Estimates)	0.984	0.905	Data Appear Normal					
Lilliefors (Detects Only)	0.26	0.425	Data Appear Normal					
Lilliefors (NDs = DL)	0.34	0.192	Data Not Normal					
Lilliefors (NDs = DL/2)	0.247	0.192	Data Not Normal					
Lilliefors (Normal ROS Estimates)	0.111	0.192	Data Appear Normal					
Gamma GOF Test Results								
	No NDs	NDs = DL	NDs = DL/2	Gamma ROS				
Correlation Coefficient R	N/A	0.918	0.934	0.483				
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)					
Anderson-Darling (Detects Only)	N/A	N/A						
Kolmogorov-Smirnov (Detects Only)	N/A	N/A						
Anderson-Darling (NDs = DL)	1.904	0.756						
Kolmogorov-Smirnov (NDs = DL)	0.276	0.197	Data Not Gamma Distributed					
Anderson-Darling (NDs = DL/2)	1.343	0.755						
Kolmogorov-Smirnov (NDs = DL/2)	0.219	0.197	Data Not Gamma Distributed					
Anderson-Darling (Gamma ROS Estimates)	5.97	0.751						
Kolmogorov-Smirnov (Gamma ROS Est.)	0.524	0.196	Data Not Gamma Distributed					

Appendix B
Goodness of Fit Statistics

Lognormal GOF Test Results

	No NDs	NDs = DL	NDs = DL/2	Log ROS
Correlation Coefficient R	0.991	0.901	0.928	0.989

	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)
Shapiro-Wilk (Detects Only)	0.983	0.767	Data Appear Lognormal
Shapiro-Wilk (NDs = DL)	0.801	0.905	Data Not Lognormal
Shapiro-Wilk (NDs = DL/2)	0.846	0.905	Data Not Lognormal
Shapiro-Wilk (Lognormal ROS Estimates)	0.983	0.905	Data Appear Lognormal
Lilliefors (Detects Only)	0.227	0.425	Data Appear Lognormal
Lilliefors (NDs = DL)	0.218	0.192	Data Not Lognormal
Lilliefors (NDs = DL/2)	0.233	0.192	Data Not Lognormal
Lilliefors (Lognormal ROS Estimates)	0.11	0.192	Data Appear Lognormal

Note: Substitution methods such as DL or DL/2 are not recommended.

Arsenic (mw-65)

	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs
Raw Statistics	30	10	20	3	17	85.00%

	Number	Minimum	Maximum	Mean	Median	SD
Statistics (Non-Detects Only)	17	5.0000E-4	0.005	0.00115	5.0000E-4	0.00114
Statistics (Non-Detects Only)	3	5.9000E-4	0.0013	8.6667E-4	7.1000E-4	3.8004E-4
Statistics (All: NDs treated as DL value)	20	5.0000E-4	0.005	0.0011	6.5000E-4	0.00106
Statistics (All: NDs treated as DL/2 value)	20	2.5000E-4	0.0025	6.1725E-4	4.9750E-4	5.4915E-4
Statistics (Normal ROS Imputed Data)	20	-0.00129	0.0013	-1.535E-4	-2.003E-4	6.1618E-4
Statistics (Gamma ROS Imputed Data)	20	5.9000E-4	0.01	0.00863	0.01	0.00335
Statistics (Lognormal ROS Imputed Data)	20	7.7697E-5	0.0013	3.3813E-4	2.5478E-4	2.7853E-4

	K hat	K Star	Theta hat	Log Mean	Log Stdv	Log CV
Statistics (Non-Detects Only)	N/A	N/A	N/A	N/A	N/A	N/A
Statistics (NDs = DL)	2.091	1.811	5.2816E-4	-7.066	0.662	-0.0936
Statistics (NDs = DL/2)	2.037	1.765	3.0297E-4	-7.655	0.702	-0.0917
Statistics (Gamma ROS Estimates)	2.342	2.024	0.00368	-4.981	0.928	-0.186
Statistics (Lognormal ROS Estimates)	--	--	--	-8.224	0.673	-0.0818

Normal GOF Test Results

Appendix B
Goodness of Fit Statistics

	No NDs	NDs = DL	NDs = DL/2	Normal ROS	
Correlation Coefficient R	0.934	0.77	0.828	0.988	
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)		
Shapiro-Wilk (Detects Only)	0.873	0.767	Data Appear Normal		
Shapiro-Wilk (NDs = DL)	0.613	0.905	Data Not Normal		
Shapiro-Wilk (NDs = DL/2)	0.699	0.905	Data Not Normal		
Shapiro-Wilk (Normal ROS Estimates)	0.981	0.905	Data Appear Normal		
Lilliefors (Detects Only)	0.327	0.425	Data Appear Normal		
Lilliefors (NDs = DL)	0.289	0.192	Data Not Normal		
Lilliefors (NDs = DL/2)	0.252	0.192	Data Not Normal		
Lilliefors (Normal ROS Estimates)	0.114	0.192	Data Appear Normal		
Gamma GOF Test Results					
	No NDs	NDs = DL	NDs = DL/2	Gamma ROS	
Correlation Coefficient R	N/A	0.905	0.946	0.489	
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)		
Anderson-Darling (Detects Only)	N/A	N/A			
Kolmogorov-Smirnov (Detects Only)	N/A	N/A			
Anderson-Darling (NDs = DL)	1.755	0.752			
Kolmogorov-Smirnov (NDs = DL)	0.229	0.196	Data Not Gamma Distributed		
Anderson-Darling (NDs = DL/2)	1.365	0.752			
Kolmogorov-Smirnov (NDs = DL/2)	0.259	0.196	Data Not Gamma Distributed		
Anderson-Darling (Gamma ROS Estimates)	5.911	0.751			
Kolmogorov-Smirnov (Gamma ROS Est.)	0.523	0.196	Data Not Gamma Distributed		
Lognormal GOF Test Results					
	No NDs	NDs = DL	NDs = DL/2	Log ROS	
Correlation Coefficient R	0.956	0.898	0.921	0.988	
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)		
Shapiro-Wilk (Detects Only)	0.914	0.767	Data Appear Lognormal		
Shapiro-Wilk (NDs = DL)	0.803	0.905	Data Not Lognormal		
Shapiro-Wilk (NDs = DL/2)	0.839	0.905	Data Not Lognormal		
Shapiro-Wilk (Lognormal ROS Estimates)	0.982	0.905	Data Appear Lognormal		

Appendix B
Goodness of Fit Statistics

Lilliefors (Detects Only)	0.299	0.425	Data Appear Lognormal					
Lilliefors (NDs = DL)	0.241	0.192	Data Not Lognormal					
Lilliefors (NDs = DL/2)	0.269	0.192	Data Not Lognormal					
Lilliefors (Lognormal ROS Estimates)	0.114	0.192	Data Appear Lognormal					
Note: Substitution methods such as DL or DL/2 are not recommended.								
Arsenic (mw-71)								
	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs		
Raw Statistics	31	5	26	20	6	23.08%		
	Number	Minimum	Maximum	Mean	Median	SD		
Statistics (Non-Detects Only)	6	0.001	0.005	0.003	0.003	0.00219		
Statistics (Non-Detects Only)	20	7.3000E-4	0.016	0.00694	0.0065	0.00355		
Statistics (All: NDs treated as DL value)	26	7.3000E-4	0.016	0.00603	0.0058	0.00366		
Statistics (All: NDs treated as DL/2 value)	26	5.0000E-4	0.016	0.00569	0.0058	0.00391		
Statistics (Normal ROS Imputed Data)	26	-0.00159	0.016	0.00557	0.0058	0.0041		
Statistics (Gamma ROS Imputed Data)	26	7.3000E-4	0.016	0.00765	0.00695	0.00336		
Statistics (Lognormal ROS Imputed Data)	26	7.3000E-4	0.016	0.00581	0.0058	0.00376		
	K hat	K Star	Theta hat	Log Mean	Log Stdv	Log CV		
Statistics (Non-Detects Only)	3.046	2.622	0.00228	-5.143	0.705	-0.137		
Statistics (NDs = DL)	2.119	1.901	0.00285	-5.365	0.839	-0.156		
Statistics (NDs = DL/2)	1.554	1.401	0.00366	-5.525	1.019	-0.184		
Statistics (Gamma ROS Estimates)	3.59	3.201	0.00213	-5.019	0.657	-0.131		
Statistics (Lognormal ROS Estimates)	--	--	--	-5.398	0.792	-0.147		
Normal GOF Test Results								
	No NDs	NDs = DL	NDs = DL/2	Normal ROS				
Correlation Coefficient R	0.956	0.955	0.967	0.979				
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)					
Shapiro-Wilk (Detects Only)	0.925	0.905	Data Appear Normal					
Shapiro-Wilk (NDs = DL)	0.914	0.92	Data Not Normal					
Shapiro-Wilk (NDs = DL/2)	0.932	0.92	Data Appear Normal					
Shapiro-Wilk (Normal ROS Estimates)	0.96	0.92	Data Appear Normal					
Lilliefors (Detects Only)	0.221	0.192	Data Not Normal					

Appendix B
Goodness of Fit Statistics

Lilliefors (NDs = DL)	0.183	0.17	Data Not Normal					
Lilliefors (NDs = DL/2)	0.157	0.17	Data Appear Normal					
Lilliefors (Normal ROS Estimates)	0.153	0.17	Data Appear Normal					
Gamma GOF Test Results								
	No NDs	NDs = DL	NDs = DL/2	Gamma ROS				
Correlation Coefficient R	0.971	0.969	0.972	0.957				
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)					
Anderson-Darling (Detects Only)	0.903	0.747						
Kolmogorov-Smirnov (Detects Only)	0.218	0.195	Data Not Gamma Distributed					
Anderson-Darling (NDs = DL)	1.33	0.756						
Kolmogorov-Smirnov (NDs = DL)	0.251	0.173	Data Not Gamma Distributed					
Anderson-Darling (NDs = DL/2)	0.887	0.761						
Kolmogorov-Smirnov (NDs = DL/2)	0.2	0.174	Data Not Gamma Distributed					
Anderson-Darling (Gamma ROS Estimates)	1.092	0.749						
Kolmogorov-Smirnov (Gamma ROS Est.)	0.164	0.172	Detected Data appear Approximate Gamma Distribution					
Lognormal GOF Test Results								
	No NDs	NDs = DL	NDs = DL/2	Log ROS				
Correlation Coefficient R	0.892	0.914	0.929	0.967				
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)					
Shapiro-Wilk (Detects Only)	0.812	0.905	Data Not Lognormal					
Shapiro-Wilk (NDs = DL)	0.831	0.92	Data Not Lognormal					
Shapiro-Wilk (NDs = DL/2)	0.854	0.92	Data Not Lognormal					
Shapiro-Wilk (Lognormal ROS Estimates)	0.93	0.92	Data Appear Lognormal					
Lilliefors (Detects Only)	0.268	0.192	Data Not Lognormal					
Lilliefors (NDs = DL)	0.3	0.17	Data Not Lognormal					
Lilliefors (NDs = DL/2)	0.248	0.17	Data Not Lognormal					
Lilliefors (Lognormal ROS Estimates)	0.201	0.17	Data Not Lognormal					
Note: Substitution methods such as DL or DL/2 are not recommended.								
Arsenic (mw-72)								
	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs		

Appendix B
Goodness of Fit Statistics

Raw Statistics	31	5	26	20	6	23.08%		
	Number	Minimum	Maximum	Mean	Median	SD		
Statistics (Non-Detects Only)	6	0.001	0.01	0.00383	0.003	0.0036		
Statistics (Non-Detects Only)	20	7.0000E-4	0.011	0.00394	0.00325	0.00232		
Statistics (All: NDs treated as DL value)	26	7.0000E-4	0.011	0.00392	0.00325	0.00259		
Statistics (All: NDs treated as DL/2 value)	26	5.0000E-4	0.011	0.00347	0.00305	0.00234		
Statistics (Normal ROS Imputed Data)	26	-0.00105	0.011	0.00334	0.0031	0.00246		
Statistics (Gamma ROS Imputed Data)	26	7.0000E-4	0.011	0.00534	0.00405	0.0033		
Statistics (Lognormal ROS Imputed Data)	26	7.0000E-4	0.011	0.00347	0.00305	0.00224		
	K hat	K Star	Theta hat	Log Mean	Log Stdv	Log CV		
Statistics (Non-Detects Only)	3.473	2.985	0.00113	-5.687	0.585	-0.103		
Statistics (NDs = DL)	2.493	2.231	0.00157	-5.757	0.702	-0.122		
Statistics (NDs = DL/2)	2.121	1.902	0.00164	-5.917	0.811	-0.137		
Statistics (Gamma ROS Estimates)	2.596	2.322	0.00206	-5.438	0.69	-0.127		
Statistics (Lognormal ROS Estimates)	--	--	--	-5.844	0.626	-0.107		
Normal GOF Test Results								
	No NDs	NDs = DL	NDs = DL/2	Normal ROS				
Correlation Coefficient R	0.903	0.931	0.926	0.941				
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)					
Shapiro-Wilk (Detects Only)	0.833	0.905	Data Not Normal					
Shapiro-Wilk (NDs = DL)	0.866	0.92	Data Not Normal					
Shapiro-Wilk (NDs = DL/2)	0.867	0.92	Data Not Normal					
Shapiro-Wilk (Normal ROS Estimates)	0.903	0.92	Data Not Normal					
Lilliefors (Detects Only)	0.179	0.192	Data Appear Normal					
Lilliefors (NDs = DL)	0.181	0.17	Data Not Normal					
Lilliefors (NDs = DL/2)	0.141	0.17	Data Appear Normal					
Lilliefors (Normal ROS Estimates)	0.147	0.17	Data Appear Normal					
Gamma GOF Test Results								
	No NDs	NDs = DL	NDs = DL/2	Gamma ROS				
Correlation Coefficient R	0.961	0.978	0.974	0.926				
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)					

Appendix B
Goodness of Fit Statistics

Anderson-Darling (Detects Only)	0.532	0.747						
Kolmogorov-Smirnov (Detects Only)	0.145	0.195	Detected Data Appear Gamma Distributed					
Anderson-Darling (NDs = DL)	0.454	0.754						
Kolmogorov-Smirnov (NDs = DL)	0.123	0.173	Data Appear Gamma Distributed					
Anderson-Darling (NDs = DL/2)	0.788	0.756						
Kolmogorov-Smirnov (NDs = DL/2)	0.183	0.173	Data Not Gamma Distributed					
Anderson-Darling (Gamma ROS Estimates)	0.992	0.753						
Kolmogorov-Smirnov (Gamma ROS Est.)	0.177	0.173	Data Not Gamma Distributed					
Lognormal GOF Test Results								
	No NDs	NDs = DL	NDs = DL/2	Log ROS				
Correlation Coefficient R	0.956	0.973	0.938	0.98				
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)					
Shapiro-Wilk (Detects Only)	0.934	0.905	Data Appear Lognormal					
Shapiro-Wilk (NDs = DL)	0.943	0.92	Data Appear Lognormal					
Shapiro-Wilk (NDs = DL/2)	0.877	0.92	Data Not Lognormal					
Shapiro-Wilk (Lognormal ROS Estimates)	0.966	0.92	Data Appear Lognormal					
Lilliefors (Detects Only)	0.175	0.192	Data Appear Lognormal					
Lilliefors (NDs = DL)	0.159	0.17	Data Appear Lognormal					
Lilliefors (NDs = DL/2)	0.232	0.17	Data Not Lognormal					
Lilliefors (Lognormal ROS Estimates)	0.162	0.17	Data Appear Lognormal					
Note: Substitution methods such as DL or DL/2 are not recommended.								
Arsenic (mw-73)								
	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs		
Raw Statistics	25	4	21	4	17	80.95%		
	Number	Minimum	Maximum	Mean	Median	SD		
Statistics (Non-Detects Only)	17	5.0000E-4	0.01	0.00276	0.002	0.00248		
Statistics (Non-Detects Only)	4	9.2000E-4	0.002	0.00141	0.00135	4.6199E-4		
Statistics (All: NDs treated as DL value)	21	5.0000E-4	0.01	0.00251	0.002	0.00229		
Statistics (All: NDs treated as DL/2 value)	21	2.5000E-4	0.005	0.00139	0.001	0.00112		
Statistics (Normal ROS Imputed Data)	21	-7.457E-5	0.002	7.1161E-4	6.9493E-4	5.4481E-4		
Statistics (Gamma ROS Imputed Data)	21	9.2000E-4	0.01	0.00836	0.01	0.00346		
Statistics (Lognormal ROS Imputed Data)	21	4.6951E-4	0.002	8.8721E-4	8.1290E-4	3.7963E-4		

Appendix B
Goodness of Fit Statistics

	K hat	K Star	Theta hat	Log Mean	Log Stdv	Log CV
Statistics (Non-Detects Only)	12.46	3.283	1.1272E-4	-6.608	0.33	-0.0499
Statistics (NDs = DL)	1.744	1.527	0.00144	-6.302	0.791	-0.125
Statistics (NDs = DL/2)	1.918	1.676	7.2291E-4	-6.864	0.786	-0.115
Statistics (Gamma ROS Estimates)	2.62	2.278	0.00319	-4.987	0.816	-0.164
Statistics (Lognormal ROS Estimates)	--	--	--	-7.103	0.389	-0.0547

Normal GOF Test Results

	No NDs	NDs = DL	NDs = DL/2	Normal ROS
Correlation Coefficient R	0.99	0.849	0.888	0.986

	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)
Shapiro-Wilk (Detects Only)	0.981	0.748	Data Appear Normal
Shapiro-Wilk (NDs = DL)	0.733	0.908	Data Not Normal
Shapiro-Wilk (NDs = DL/2)	0.8	0.908	Data Not Normal
Shapiro-Wilk (Normal ROS Estimates)	0.968	0.908	Data Appear Normal
Lilliefors (Detects Only)	0.171	0.375	Data Appear Normal
Lilliefors (NDs = DL)	0.349	0.188	Data Not Normal
Lilliefors (NDs = DL/2)	0.254	0.188	Data Not Normal
Lilliefors (Normal ROS Estimates)	0.0745	0.188	Data Appear Normal

Gamma GOF Test Results

	No NDs	NDs = DL	NDs = DL/2	Gamma ROS
Correlation Coefficient R	1	0.948	0.964	0.551

	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)
Anderson-Darling (Detects Only)	0.198	0.657	
Kolmogorov-Smirnov (Detects Only)	0.172	0.395	Detected Data Appear Gamma Distributed
Anderson-Darling (NDs = DL)	1.041	0.756	
Kolmogorov-Smirnov (NDs = DL)	0.273	0.192	Data Not Gamma Distributed
Anderson-Darling (NDs = DL/2)	0.614	0.755	
Kolmogorov-Smirnov (NDs = DL/2)	0.191	0.192	Data Appear Gamma Distributed
Anderson-Darling (Gamma ROS Estimates)	5.535	0.751	
Kolmogorov-Smirnov (Gamma ROS Est.)	0.502	0.191	Data Not Gamma Distributed

Lognormal GOF Test Results

Appendix B
Goodness of Fit Statistics

	No NDs	NDs = DL	NDs = DL/2	Log ROS
Correlation Coefficient R	1	0.966	0.975	0.986

	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)
Shapiro-Wilk (Detects Only)	0.999	0.748	Data Appear Lognormal
Shapiro-Wilk (NDs = DL)	0.93	0.908	Data Appear Lognormal
Shapiro-Wilk (NDs = DL/2)	0.947	0.908	Data Appear Lognormal
Shapiro-Wilk (Lognormal ROS Estimates)	0.967	0.908	Data Appear Lognormal
Lilliefors (Detects Only)	0.139	0.375	Data Appear Lognormal
Lilliefors (NDs = DL)	0.218	0.188	Data Not Lognormal
Lilliefors (NDs = DL/2)	0.15	0.188	Data Appear Lognormal
Lilliefors (Lognormal ROS Estimates)	0.0993	0.188	Data Appear Lognormal

Note: Substitution methods such as DL or DL/2 are not recommended.

Barium (mw-62)

Raw Statistics	
Number of Valid Observations	20
Number of Missing Observations	11
Number of Distinct Observations	13
Minimum	0.015
Maximum	0.043
Mean of Raw Data	0.0258
Standard Deviation of Raw Data	0.0063
Khat	18.22
Theta hat	0.00142
Kstar	15.52
Theta star	0.00166
Mean of Log Transformed Data	-3.685
Standard Deviation of Log Transformed Data	0.242

Normal GOF Test Results	
Correlation Coefficient R	0.961
Shapiro Wilk Test Statistic	0.938
Shapiro Wilk Critical (0.05) Value	0.905
Approximate Shapiro Wilk P Value	0.209

Appendix B
Goodness of Fit Statistics

Lilliefors Test Statistic	0.175
Lilliefors Critical (0.05) Value	0.192
Data appear Normal at (0.05) Significance Level	
Gamma GOF Test Results	
Correlation Coefficient R	0.975
A-D Test Statistic	0.383
A-D Critical (0.05) Value	0.741
K-S Test Statistic	0.142
K-S Critical(0.05) Value	0.194
Data appear Gamma Distributed at (0.05) Significance Level	
Lognormal GOF Test Results	
Correlation Coefficient R	0.975
Shapiro Wilk Test Statistic	0.961
Shapiro Wilk Critical (0.05) Value	0.905
Approximate Shapiro Wilk P Value	0.542
Lilliefors Test Statistic	0.131
Lilliefors Critical (0.05) Value	0.192
Data appear Lognormal at (0.05) Significance Level	
Barium (mw-63)	
Raw Statistics	
Number of Valid Observations	20
Number of Missing Observations	10
Number of Distinct Observations	11
Minimum	0.014
Maximum	0.033
Mean of Raw Data	0.0197
Standard Deviation of Raw Data	0.00409
Khat	27.79
Theta hat	7.0892E-4
Kstar	23.65
Theta star	8.3284E-4
Mean of Log Transformed Data	-3.945
Standard Deviation of Log Transformed Data	0.19

Appendix B
Goodness of Fit Statistics

Normal GOF Test Results	
Correlation Coefficient R	0.912
Shapiro Wilk Test Statistic	0.851
Shapiro Wilk Critical (0.05) Value	0.905
Approximate Shapiro Wilk P Value	0.00434
Lilliefors Test Statistic	0.187
Lilliefors Critical (0.05) Value	0.192
Data appear Approximate Normal at (0.05) Significance Level	
Gamma GOF Test Results	
Correlation Coefficient R	0.932
A-D Test Statistic	0.529
A-D Critical (0.05) Value	0.74
K-S Test Statistic	0.156
K-S Critical(0.05) Value	0.193
Data appear Gamma Distributed at (0.05) Significance Level	
Lognormal GOF Test Results	
Correlation Coefficient R	0.956
Shapiro Wilk Test Statistic	0.929
Shapiro Wilk Critical (0.05) Value	0.905
Approximate Shapiro Wilk P Value	0.146
Lilliefors Test Statistic	0.15
Lilliefors Critical (0.05) Value	0.192
Data appear Lognormal at (0.05) Significance Level	
Barium (mw-64)	
Raw Statistics	
Number of Valid Observations	20
Number of Missing Observations	10
Number of Distinct Observations	9
Minimum	0.022
Maximum	0.035
Mean of Raw Data	0.0267

Appendix B
Goodness of Fit Statistics

Standard Deviation of Raw Data	0.00356						
Khat	62.89						
Theta hat	4.2372E-4						
Kstar	53.49						
Theta star	4.9819E-4						
Mean of Log Transformed Data	-3.633						
Standard Deviation of Log Transformed Data	0.128						
Normal GOF Test Results							
Correlation Coefficient R	0.942						
Shapiro Wilk Test Statistic	0.886						
Shapiro Wilk Critical (0.05) Value	0.905						
Approximate Shapiro Wilk P Value	0.0226						
Lilliefors Test Statistic	0.261						
Lilliefors Critical (0.05) Value	0.192						
Data not Normal at (0.05) Significance Level							
Gamma GOF Test Results							
Correlation Coefficient R	0.954						
A-D Test Statistic	0.759						
A-D Critical (0.05) Value	0.74						
K-S Test Statistic	0.242						
K-S Critical(0.05) Value	0.193						
Data not Gamma Distributed at (0.05) Significance Level							
Lognormal GOF Test Results							
Correlation Coefficient R	0.959						
Shapiro Wilk Test Statistic	0.916						
Shapiro Wilk Critical (0.05) Value	0.905						
Approximate Shapiro Wilk P Value	0.0892						
Lilliefors Test Statistic	0.235						
Lilliefors Critical (0.05) Value	0.192						
Data appear Approximate_Lognormal at (0.05) Significance Level							
Barium (mw-65)							

Appendix B
Goodness of Fit Statistics

Raw Statistics	
Number of Valid Observations	20
Number of Missing Observations	10
Number of Distinct Observations	13
Minimum	0.012
Maximum	0.042
Mean of Raw Data	0.0186
Standard Deviation of Raw Data	0.0074
Khat	8.689
Theta hat	0.00214
Kstar	7.419
Theta star	0.00251
Mean of Log Transformed Data	-4.043
Standard Deviation of Log Transformed Data	0.333
Normal GOF Test Results	
Correlation Coefficient R	0.882
Shapiro Wilk Test Statistic	0.789
Shapiro Wilk Critical (0.05) Value	0.905
Approximate Shapiro Wilk P Value	3.3452E-4
Lilliefors Test Statistic	0.186
Lilliefors Critical (0.05) Value	0.192
Data appear Approximate Normal at (0.05) Significance Level	
Gamma GOF Test Results	
Correlation Coefficient R	0.937
A-D Test Statistic	0.737
A-D Critical (0.05) Value	0.743
K-S Test Statistic	0.153
K-S Critical(0.05) Value	0.194
Data appear Gamma Distributed at (0.05) Significance Level	
Lognormal GOF Test Results	
Correlation Coefficient R	0.952
Shapiro Wilk Test Statistic	0.905
Shapiro Wilk Critical (0.05) Value	0.905

Appendix B
Goodness of Fit Statistics

Approximate Shapiro Wilk P Value	0.0529							
Lilliefors Test Statistic	0.151							
Lilliefors Critical (0.05) Value	0.192							
Data appear Approximate_Lognormal at (0.05) Significance Level								
Barium (mw-71)								
	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs		
Raw Statistics	31	5	26	25	1	3.85%		
	Number	Minimum	Maximum	Mean	Median	SD		
Statistics (Non-Detects Only)	1	0.01	0.01	0.01	0.01	N/A		
Statistics (Non-Detects Only)	25	0.0045	0.027	0.0118	0.01	0.0045		
Statistics (All: NDs treated as DL value)	26	0.0045	0.027	0.0118	0.01	0.00442		
Statistics (All: NDs treated as DL/2 value)	26	0.0045	0.027	0.0116	0.01	0.0046		
Statistics (Normal ROS Imputed Data)	26	0.0045	0.027	0.0117	0.01	0.00447		
Statistics (Gamma ROS Imputed Data)	26	0.0045	0.027	0.0118	0.01	0.00442		
Statistics (Lognormal ROS Imputed Data)	26	0.0045	0.027	0.0117	0.01	0.00446		
	K hat	K Star	Theta hat	Log Mean	Log Stdv	Log CV		
Statistics (Non-Detects Only)	8.842	7.807	0.00134	-4.495	0.339	-0.0754		
Statistics (NDs = DL)	9.109	8.083	0.00129	-4.499	0.333	-0.074		
Statistics (NDs = DL/2)	7.731	6.864	0.0015	-4.525	0.368	-0.0812		
Statistics (Gamma ROS Estimates)	9.109	8.083	0.00129	-4.499	0.333	-0.074		
Statistics (Lognormal ROS Estimates)	--	--	--	-4.506	0.338	-0.0749		
Normal GOF Test Results								
	No NDs	NDs = DL	NDs = DL/2	Normal ROS				
Correlation Coefficient R	0.881	0.875	0.898	0.883				
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)					
Shapiro-Wilk (Detects Only)	0.799	0.918	Data Not Normal					
Shapiro-Wilk (NDs = DL)	0.789	0.92	Data Not Normal					
Shapiro-Wilk (NDs = DL/2)	0.826	0.92	Data Not Normal					
Shapiro-Wilk (Normal ROS Estimates)	0.802	0.92	Data Not Normal					
Lilliefors (Detects Only)	0.245	0.173	Data Not Normal					
Lilliefors (NDs = DL)	0.248	0.17	Data Not Normal					
Lilliefors (NDs = DL/2)	0.232	0.17	Data Not Normal					

Appendix B
Goodness of Fit Statistics

Lilliefors (Normal ROS Estimates)	0.241	0.17	Data Not Normal			
Gamma GOF Test Results						
	No NDs	NDs = DL	NDs = DL/2	Gamma ROS		
Correlation Coefficient R	0.929	0.924	0.942	0.924		
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)			
Anderson-Darling (Detects Only)	1.26	0.745				
Kolmogorov-Smirnov (Detects Only)	0.199	0.175	Data Not Gamma Distributed			
Anderson-Darling (NDs = DL)	1.404	0.745				
Kolmogorov-Smirnov (NDs = DL)	0.201	0.171	Data Not Gamma Distributed			
Anderson-Darling (NDs = DL/2)	1.088	0.745				
Kolmogorov-Smirnov (NDs = DL/2)	0.181	0.171	Data Not Gamma Distributed			
Anderson-Darling (Gamma ROS Estimates)	1.404	0.745				
Kolmogorov-Smirnov (Gamma ROS Est.)	0.201	0.171	Data Not Gamma Distributed			
Lognormal GOF Test Results						
	No NDs	NDs = DL	NDs = DL/2	Log ROS		
Correlation Coefficient R	0.935	0.93	0.948	0.94		
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)			
Shapiro-Wilk (Detects Only)	0.899	0.918	Data Not Lognormal			
Shapiro-Wilk (NDs = DL)	0.892	0.92	Data Not Lognormal			
Shapiro-Wilk (NDs = DL/2)	0.916	0.92	Data Not Lognormal			
Shapiro-Wilk (Lognormal ROS Estimates)	0.907	0.92	Data Not Lognormal			
Lilliefors (Detects Only)	0.18	0.173	Data Not Lognormal			
Lilliefors (NDs = DL)	0.181	0.17	Data Not Lognormal			
Lilliefors (NDs = DL/2)	0.188	0.17	Data Not Lognormal			
Lilliefors (Lognormal ROS Estimates)	0.172	0.17	Data Not Lognormal			
Note: Substitution methods such as DL or DL/2 are not recommended.						
Barium (mw-72)						
	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs
Raw Statistics	31	5	26	25	1	3.85%

Appendix B
Goodness of Fit Statistics

	Number	Minimum	Maximum	Mean	Median	SD
Statistics (Non-Detects Only)	1	0.01	0.01	0.01	0.01	N/A
Statistics (Non-Detects Only)	25	0.0068	0.051	0.0137	0.0086	0.011
Statistics (All: NDs treated as DL value)	26	0.0068	0.051	0.0135	0.0086	0.0108
Statistics (All: NDs treated as DL/2 value)	26	0.005	0.051	0.0133	0.0086	0.0109
Statistics (Normal ROS Imputed Data)	26	0.0068	0.051	0.0135	0.0086	0.0108
Statistics (Gamma ROS Imputed Data)	26	0.0068	0.051	0.0135	0.0086	0.0108
Statistics (Lognormal ROS Imputed Data)	26	0.0068	0.051	0.0135	0.0086	0.0108

	K hat	K Star	Theta hat	Log Mean	Log Stdv	Log CV
Statistics (Non-Detects Only)	2.714	2.415	0.00504	-4.488	0.57	-0.127
Statistics (NDs = DL)	2.793	2.497	0.00484	-4.493	0.559	-0.124
Statistics (NDs = DL/2)	2.631	2.353	0.00507	-4.52	0.581	-0.129
Statistics (Gamma ROS Estimates)	2.793	2.497	0.00484	-4.493	0.559	-0.124
Statistics (Lognormal ROS Estimates)	--	--	--	-4.497	0.56	-0.125

Normal GOF Test Results

	No NDs	NDs = DL	NDs = DL/2	Normal ROS
Correlation Coefficient R	0.793	0.788	0.798	0.788

	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)
Shapiro-Wilk (Detects Only)	0.639	0.918	Data Not Normal
Shapiro-Wilk (NDs = DL)	0.633	0.92	Data Not Normal
Shapiro-Wilk (NDs = DL/2)	0.649	0.92	Data Not Normal
Shapiro-Wilk (Normal ROS Estimates)	0.632	0.92	Data Not Normal
Lilliefors (Detects Only)	0.324	0.173	Data Not Normal
Lilliefors (NDs = DL)	0.323	0.17	Data Not Normal
Lilliefors (NDs = DL/2)	0.326	0.17	Data Not Normal
Lilliefors (Normal ROS Estimates)	0.328	0.17	Data Not Normal

Gamma GOF Test Results

	No NDs	NDs = DL	NDs = DL/2	Gamma ROS
Correlation Coefficient R	0.915	0.911	0.918	0.911

	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)
Anderson-Darling (Detects Only)	2.846	0.753	
Kolmogorov-Smirnov (Detects Only)	0.313	0.176	Data Not Gamma Distributed

Appendix B
Goodness of Fit Statistics

Anderson-Darling (NDs = DL)	2.94	0.752					
Kolmogorov-Smirnov (NDs = DL)	0.301	0.173	Data Not Gamma Distributed				
Anderson-Darling (NDs = DL/2)	2.709	0.753					
Kolmogorov-Smirnov (NDs = DL/2)	0.308	0.173	Data Not Gamma Distributed				
Anderson-Darling (Gamma ROS Estimates)	2.94	0.752					
Kolmogorov-Smirnov (Gamma ROS Est.)	0.301	0.173	Data Not Gamma Distributed				
Lognormal GOF Test Results							
	No NDs	NDs = DL	NDs = DL/2	Log ROS			
Correlation Coefficient R	0.878	0.879	0.899	0.874			
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)				
Shapiro-Wilk (Detects Only)	0.768	0.918	Data Not Lognormal				
Shapiro-Wilk (NDs = DL)	0.77	0.92	Data Not Lognormal				
Shapiro-Wilk (NDs = DL/2)	0.812	0.92	Data Not Lognormal				
Shapiro-Wilk (Lognormal ROS Estimates)	0.762	0.92	Data Not Lognormal				
Lilliefors (Detects Only)	0.289	0.173	Data Not Lognormal				
Lilliefors (NDs = DL)	0.272	0.17	Data Not Lognormal				
Lilliefors (NDs = DL/2)	0.278	0.17	Data Not Lognormal				
Lilliefors (Lognormal ROS Estimates)	0.297	0.17	Data Not Lognormal				
Note: Substitution methods such as DL or DL/2 are not recommended.							
Barium (mw-73)							
Raw Statistics							
Number of Valid Observations	21						
Number of Missing Observations	4						
Number of Distinct Observations	14						
Minimum	0.016						
Maximum	0.043						
Mean of Raw Data	0.0241						
Standard Deviation of Raw Data	0.00587						
Khat	20.81						
Theta hat	0.00116						
Kstar	17.87						
Theta star	0.00135						
Mean of Log Transformed Data	-3.748						

Appendix B
Goodness of Fit Statistics

Standard Deviation of Log Transformed Data	0.219						
Normal GOF Test Results							
Correlation Coefficient R	0.919						
Shapiro Wilk Test Statistic	0.861						
Shapiro Wilk Critical (0.05) Value	0.908						
Approximate Shapiro Wilk P Value	0.00542						
Lilliefors Test Statistic	0.176						
Lilliefors Critical (0.05) Value	0.188						
Data appear Approximate Normal at (0.05) Significance Level							
Gamma GOF Test Results							
Correlation Coefficient R	0.948						
A-D Test Statistic	0.495						
A-D Critical (0.05) Value	0.742						
K-S Test Statistic	0.148						
K-S Critical(0.05) Value	0.189						
Data appear Gamma Distributed at (0.05) Significance Level							
Lognormal GOF Test Results							
Correlation Coefficient R	0.968						
Shapiro Wilk Test Statistic	0.949						
Shapiro Wilk Critical (0.05) Value	0.908						
Approximate Shapiro Wilk P Value	0.326						
Lilliefors Test Statistic	0.133						
Lilliefors Critical (0.05) Value	0.188						
Data appear Lognormal at (0.05) Significance Level							
Beryllium (mw-62)							
	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs	
Raw Statistics	31	11	20	1	19	95.00%	
Warning: Only one distinct data value was detected! ProUCL (or any other software) should not be used on such a data set!							
It is suggested to use alternative site specific values determined by the Project Team to estimate environmental parameters (e.g., EPC, BTV).							

Appendix B
Goodness of Fit Statistics

The data set for variable Beryllium (mw-62) was not processed!

Beryllium (mw-63)

	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs
Raw Statistics	30	10	20	1	19	95.00%

Warning: Only one distinct data value was detected! ProUCL (or any other software) should not be used on such a data set!
It is suggested to use alternative site specific values determined by the Project Team to estimate environmental parameters (e.g., EPC, BTV).

The data set for variable Beryllium (mw-63) was not processed!

Beryllium (mw-64)

	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs
Raw Statistics	30	10	20	1	19	95.00%

Warning: Only one distinct data value was detected! ProUCL (or any other software) should not be used on such a data set!
It is suggested to use alternative site specific values determined by the Project Team to estimate environmental parameters (e.g., EPC, BTV).

The data set for variable Beryllium (mw-64) was not processed!

Beryllium (mw-65)

	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs
Raw Statistics	30	10	20	0	20	100.00%

Warning: All observations are Non-Detects (NDs), therefore all statistics and estimates should also be NDs!
Specifically, sample mean, UCLs, UPLs, and other statistics are also NDs lying below the largest detection limit!
The Project Team may decide to use alternative site specific values to estimate environmental parameters (e.g., EPC, BTV).

The data set for variable Beryllium (mw-65) was not processed!

Appendix B
Goodness of Fit Statistics

Beryllium (mw-71)

	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs
Raw Statistics	31	8	23	2	21	91.30%

	Number	Minimum	Maximum	Mean	Median	SD
Statistics (Non-Detects Only)	21	0.001	0.001	0.001	0.001	4.444E-19
Statistics (Non-Detects Only)	2	6.4000E-4	0.0022	0.00142	0.00142	0.0011
Statistics (All: NDs treated as DL value)	23	6.4000E-4	0.0022	0.00104	0.001	2.6448E-4
Statistics (All: NDs treated as DL/2 value)	23	5.0000E-4	0.0022	5.8000E-4	5.0000E-4	3.5435E-4
Statistics (Normal ROS Imputed Data)	23	-6.067E-4	0.0022	6.8929E-4	6.4000E-4	6.8198E-4
Statistics (Gamma ROS Imputed Data)	23	N/A	N/A	N/A	N/A	N/A
Statistics (Lognormal ROS Imputed Data)	23	2.3858E-4	0.0022	7.6713E-4	6.4000E-4	4.4973E-4

	K hat	K Star	Theta hat	Log Mean	Log Stdv	Log CV
Statistics (Non-Detects Only)	N/A	N/A	N/A	N/A	N/A	N/A
Statistics (NDs = DL)	23.98	20.88	4.3220E-5	-6.893	0.193	-0.0279
Statistics (NDs = DL/2)	6.987	6.104	8.3016E-5	-7.526	0.311	-0.0413
Statistics (Gamma ROS Estimates)	N/A	N/A	N/A	N/A	N/A	N/A
Statistics (Lognormal ROS Estimates)	--	--	--	-7.315	0.54	-0.0738

Normal GOF Test Results

	No NDs	NDs = DL	NDs = DL/2	Normal ROS
Correlation Coefficient R	1	0.535	0.462	0.998

	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)
Shapiro-Wilk (NDs = DL)	0.326	0.914	Data Not Normal
Shapiro-Wilk (NDs = DL/2)	0.241	0.914	Data Not Normal
Shapiro-Wilk (Normal ROS Estimates)	0.996	0.914	Data Appear Normal
Lilliefors (Detects Only)	N/A	N/A	
Lilliefors (NDs = DL)	0.511	0.18	Data Not Normal
Lilliefors (NDs = DL/2)	0.502	0.18	Data Not Normal
Lilliefors (Normal ROS Estimates)	0.0505	0.18	Data Appear Normal

Gamma GOF Test Results

Appendix B
Goodness of Fit Statistics

	No NDs	NDs = DL	NDs = DL/2	Gamma ROS				
Correlation Coefficient R	N/A	0.576	0.563	0.44				
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)					
Anderson-Darling (Detects Only)	N/A	N/A						
Kolmogorov-Smirnov (Detects Only)	N/A	N/A						
Anderson-Darling (NDs = DL)	6.976	0.742						
Kolmogorov-Smirnov (NDs = DL)	0.499	0.181	Data Not Gamma Distributed					
Anderson-Darling (NDs = DL/2)	7.746	0.746						
Kolmogorov-Smirnov (NDs = DL/2)	0.514	0.182	Data Not Gamma Distributed					
Anderson-Darling (Gamma ROS Estimates)	N/A	0.74						
Kolmogorov-Smirnov (Gamma ROS Est.)	N/A	0.181						
Lognormal GOF Test Results								
	No NDs	NDs = DL	NDs = DL/2	Log ROS				
Correlation Coefficient R	1	0.581	0.487	N/A				
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)					
Shapiro-Wilk (NDs = DL)	0.386	0.914	Data Not Lognormal					
Shapiro-Wilk (NDs = DL/2)	0.265	0.914	Data Not Lognormal					
Shapiro-Wilk (Lognormal ROS Estimates)	0.996	0.914	Data Appear Lognormal					
Lilliefors (Detects Only)	N/A	N/A						
Lilliefors (NDs = DL)	0.487	0.18	Data Not Lognormal					
Lilliefors (NDs = DL/2)	0.509	0.18	Data Not Lognormal					
Lilliefors (Lognormal ROS Estimates)	0.0505	0.18	Data Appear Lognormal					
Note: Substitution methods such as DL or DL/2 are not recommended.								
Beryllium (mw-72)								
	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs		
Raw Statistics	31	8	23	1	22	95.65%		
Warning: Only one distinct data value was detected! ProUCL (or any other software) should not be used on such a data set!								
It is suggested to use alternative site specific values determined by the Project Team to estimate environmental parameters (e.g., EPC, BTV).								
The data set for variable Beryllium (mw-72) was not processed!								

Appendix B
Goodness of Fit Statistics

Beryllium (mw-73)

	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs
Raw Statistics	25	7	18	1	17	94.44%

Warning: Only one distinct data value was detected! ProUCL (or any other software) should not be used on such a data set!
It is suggested to use alternative site specific values determined by the Project Team to estimate environmental parameters (e.g., EPC, BTV).

The data set for variable Beryllium (mw-73) was not processed!

Cadmium (mw-62)

	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs
Raw Statistics	31	11	20	1	19	95.00%

Warning: Only one distinct data value was detected! ProUCL (or any other software) should not be used on such a data set!
It is suggested to use alternative site specific values determined by the Project Team to estimate environmental parameters (e.g., EPC, BTV).

The data set for variable Cadmium (mw-62) was not processed!

Cadmium (mw-63)

	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs
Raw Statistics	30	10	20	2	18	90.00%

	Number	Minimum	Maximum	Mean	Median	SD
Statistics (Non-Detects Only)	18	1.0000E-4	0.001	3.2778E-4	1.0000E-4	3.3747E-4
Statistics (Non-Detects Only)	2	6.4000E-5	1.3000E-4	9.7000E-5	9.7000E-5	4.6669E-5
Statistics (All: NDs treated as DL value)	20	6.4000E-5	0.001	3.0470E-4	1.0000E-4	3.2720E-4
Statistics (All: NDs treated as DL/2 value)	20	5.0000E-5	5.0000E-4	1.5720E-4	5.7000E-5	1.6129E-4
Statistics (Normal ROS Imputed Data)	20	1.8053E-5	1.3000E-4	6.8199E-5	6.7761E-5	2.6049E-5
Statistics (Gamma ROS Imputed Data)	20	N/A	N/A	N/A	N/A	N/A
Statistics (Lognormal ROS Imputed Data)	20	3.9078E-5	1.3000E-4	6.9561E-5	6.6637E-5	2.0694E-5

Appendix B
Goodness of Fit Statistics

	K hat	K Star	Theta hat	Log Mean	Log Stdv	Log CV
Statistics (Non-Detects Only)	N/A	N/A	N/A	N/A	N/A	N/A
Statistics (NDs = DL)	1.239	1.087	2.4587E-4	-8.551	0.927	-0.108
Statistics (NDs = DL/2)	1.341	1.174	1.1718E-4	-9.175	0.891	-0.0972
Statistics (Gamma ROS Estimates)	N/A	N/A	N/A	N/A	N/A	N/A
Statistics (Lognormal ROS Estimates)	--	--	--	-9.612	0.28	-0.0291

Normal GOF Test Results

	No NDs	NDs = DL	NDs = DL/2	Normal ROS
Correlation Coefficient R	1	0.829	0.835	0.982

	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)
Shapiro-Wilk (NDs = DL)	0.68	0.905	Data Not Normal
Shapiro-Wilk (NDs = DL/2)	0.688	0.905	Data Not Normal
Shapiro-Wilk (Normal ROS Estimates)	0.973	0.905	Data Appear Normal
Lilliefors (Detects Only)	N/A	N/A	
Lilliefors (NDs = DL)	0.303	0.192	Data Not Normal
Lilliefors (NDs = DL/2)	0.268	0.192	Data Not Normal
Lilliefors (Normal ROS Estimates)	0.157	0.192	Data Appear Normal

Gamma GOF Test Results

	No NDs	NDs = DL	NDs = DL/2	Gamma ROS
Correlation Coefficient R	N/A	0.93	0.934	0.367

	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)
Anderson-Darling (Detects Only)	N/A	N/A	
Kolmogorov-Smirnov (Detects Only)	N/A	N/A	
Anderson-Darling (NDs = DL)	2.201	0.763	
Kolmogorov-Smirnov (NDs = DL)	0.316	0.198	Data Not Gamma Distributed
Anderson-Darling (NDs = DL/2)	2.042	0.761	
Kolmogorov-Smirnov (NDs = DL/2)	0.29	0.198	Data Not Gamma Distributed
Anderson-Darling (Gamma ROS Estimates)	N/A	0.74	
Kolmogorov-Smirnov (Gamma ROS Est.)	N/A	0.193	

Lognormal GOF Test Results

Appendix B
Goodness of Fit Statistics

	No NDs	NDs = DL	NDs = DL/2	Log ROS
Correlation Coefficient R	1	0.895	0.89	N/A

	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)
Shapiro-Wilk (NDs = DL)	0.788	0.905	Data Not Lognormal
Shapiro-Wilk (NDs = DL/2)	0.773	0.905	Data Not Lognormal
Shapiro-Wilk (Lognormal ROS Estimates)	0.973	0.905	Data Appear Lognormal
Lilliefors (Detects Only)	N/A	N/A	
Lilliefors (NDs = DL)	0.312	0.192	Data Not Lognormal
Lilliefors (NDs = DL/2)	0.293	0.192	Data Not Lognormal
Lilliefors (Lognormal ROS Estimates)	0.157	0.192	Data Appear Lognormal

Note: Substitution methods such as DL or DL/2 are not recommended.

Cadmium (mw-64)

	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs
Raw Statistics	30	10	20	1	19	95.00%

Warning: Only one distinct data value was detected! ProUCL (or any other software) should not be used on such a data set!
It is suggested to use alternative site specific values determined by the Project Team to estimate environmental parameters (e.g., EPC, BTV).

The data set for variable Cadmium (mw-64) was not processed!

Cadmium (mw-65)

	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs
Raw Statistics	30	10	20	0	20	100.00%

Warning: All observations are Non-Detects (NDs), therefore all statistics and estimates should also be NDs!
Specifically, sample mean, UCLs, UPLs, and other statistics are also NDs lying below the largest detection limit!
The Project Team may decide to use alternative site specific values to estimate environmental parameters (e.g., EPC, BTV).

The data set for variable Cadmium (mw-65) was not processed!

Appendix B
Goodness of Fit Statistics

Cadmium (mw-71)

	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs
Raw Statistics	31	7	24	6	18	75.00%

	Number	Minimum	Maximum	Mean	Median	SD
Statistics (Non-Detects Only)	18	1.0000E-4	0.001	4.7778E-4	4.0000E-4	3.5406E-4
Statistics (Non-Detects Only)	6	1.0000E-4	1.9000E-4	1.3667E-4	1.3500E-4	3.3267E-5
Statistics (All: NDs treated as DL value)	24	1.0000E-4	0.001	3.9250E-4	2.0000E-4	3.4009E-4
Statistics (All: NDs treated as DL/2 value)	24	5.0000E-5	5.0000E-4	2.1333E-4	1.7000E-4	1.5953E-4
Statistics (Normal ROS Imputed Data)	24	2.5209E-5	1.9000E-4	1.0733E-4	1.0755E-4	4.3593E-5
Statistics (Gamma ROS Imputed Data)	24	1.0000E-4	0.01	0.00753	0.01	0.00436
Statistics (Lognormal ROS Imputed Data)	24	5.9885E-5	1.9000E-4	1.1319E-4	1.0823E-4	3.5045E-5

	K hat	K Star	Theta hat	Log Mean	Log Stdv	Log CV
Statistics (Non-Detects Only)	21.02	10.62	6.5008E-6	-8.922	0.238	-0.0267
Statistics (NDs = DL)	1.599	1.427	2.4545E-4	-8.187	0.842	-0.103
Statistics (NDs = DL/2)	2.117	1.881	1.0075E-4	-8.707	0.732	-0.0841
Statistics (Gamma ROS Estimates)	0.752	0.686	0.01	-5.684	1.913	-0.336
Statistics (Lognormal ROS Estimates)	--	--	--	-9.133	0.313	-0.0343

Normal GOF Test Results

	No NDs	NDs = DL	NDs = DL/2	Normal ROS
Correlation Coefficient R	0.966	0.877	0.888	0.991

	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)
Shapiro-Wilk (Detects Only)	0.93	0.788	Data Appear Normal
Shapiro-Wilk (NDs = DL)	0.751	0.916	Data Not Normal
Shapiro-Wilk (NDs = DL/2)	0.774	0.916	Data Not Normal
Shapiro-Wilk (Normal ROS Estimates)	0.975	0.916	Data Appear Normal
Lilliefors (Detects Only)	0.192	0.325	Data Appear Normal
Lilliefors (NDs = DL)	0.256	0.177	Data Not Normal
Lilliefors (NDs = DL/2)	0.283	0.177	Data Not Normal
Lilliefors (Normal ROS Estimates)	0.0862	0.177	Data Appear Normal

Gamma GOF Test Results

	No NDs	NDs = DL	NDs = DL/2	Gamma ROS

Appendix B
Goodness of Fit Statistics

Correlation Coefficient R	0.978	0.92	0.922	0.473			
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)				
Anderson-Darling (Detects Only)	0.289	0.697					
Kolmogorov-Smirnov (Detects Only)	0.195	0.332	Detected Data Appear Gamma Distributed				
Anderson-Darling (NDs = DL)	1.325	0.76					
Kolmogorov-Smirnov (NDs = DL)	0.229	0.181	Data Not Gamma Distributed				
Anderson-Darling (NDs = DL/2)	1.062	0.755					
Kolmogorov-Smirnov (NDs = DL/2)	0.195	0.18	Data Not Gamma Distributed				
Anderson-Darling (Gamma ROS Estimates)	5.999	0.782					
Kolmogorov-Smirnov (Gamma ROS Est.)	0.489	0.185	Data Not Gamma Distributed				
Lognormal GOF Test Results							
	No NDs	NDs = DL	NDs = DL/2	Log ROS			
Correlation Coefficient R	0.978	0.949	0.963	0.989			
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)				
Shapiro-Wilk (Detects Only)	0.949	0.788	Data Appear Lognormal				
Shapiro-Wilk (NDs = DL)	0.878	0.916	Data Not Lognormal				
Shapiro-Wilk (NDs = DL/2)	0.91	0.916	Data Not Lognormal				
Shapiro-Wilk (Lognormal ROS Estimates)	0.97	0.916	Data Appear Lognormal				
Lilliefors (Detects Only)	0.188	0.325	Data Appear Lognormal				
Lilliefors (NDs = DL)	0.194	0.177	Data Not Lognormal				
Lilliefors (NDs = DL/2)	0.148	0.177	Data Appear Lognormal				
Lilliefors (Lognormal ROS Estimates)	0.102	0.177	Data Appear Lognormal				
Note: Substitution methods such as DL or DL/2 are not recommended.							
Cadmium (mw-72)							
	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs	
Raw Statistics	31	7	24	3	21	87.50%	
	Number	Minimum	Maximum	Mean	Median	SD	
Statistics (Non-Detects Only)	21	1.0000E-4	0.001	3.8095E-4	2.0000E-4	3.3409E-4	
Statistics (Non-Detects Only)	3	6.0000E-5	1.2000E-4	8.6000E-5	7.8000E-5	3.0790E-5	
Statistics (All: NDs treated as DL value)	24	6.0000E-5	0.001	3.4408E-4	2.0000E-4	3.2722E-4	
Statistics (All: NDs treated as DL/2 value)	24	5.0000E-5	5.0000E-4	1.7742E-4	1.0000E-4	1.5998E-4	

Appendix B
Goodness of Fit Statistics

Statistics (Normal ROS Imputed Data)	24	3.9277E-5	1.2000E-4	7.3511E-5	7.3198E-5	1.9757E-5		
Statistics (Gamma ROS Imputed Data)	24	6.0000E-5	0.01	0.00876	0.01	0.00335		
Statistics (Lognormal ROS Imputed Data)	24	4.8462E-5	1.2000E-4	7.3354E-5	7.1312E-5	1.7085E-5		
	K hat	K Star	Theta hat	Log Mean	Log Stdv	Log CV		
Statistics (Non-Detects Only)	N/A	N/A	N/A	N/A	N/A	N/A		
Statistics (NDs = DL)	1.379	1.234	2.4957E-4	-8.379	0.911	-0.109		
Statistics (NDs = DL/2)	1.58	1.41	1.1230E-4	-8.986	0.837	-0.0931		
Statistics (Gamma ROS Estimates)	1.209	1.086	0.00724	-5.205	1.624	-0.312		
Statistics (Lognormal ROS Estimates)	--	--	--	-9.545	0.225	-0.0236		
Normal GOF Test Results								
	No NDs	NDs = DL	NDs = DL/2	Normal ROS				
Correlation Coefficient R	0.974	0.87	0.868	0.99				
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)					
Shapiro-Wilk (Detects Only)	0.949	0.767	Data Appear Normal					
Shapiro-Wilk (NDs = DL)	0.744	0.916	Data Not Normal					
Shapiro-Wilk (NDs = DL/2)	0.74	0.916	Data Not Normal					
Shapiro-Wilk (Normal ROS Estimates)	0.979	0.916	Data Appear Normal					
Lilliefors (Detects Only)	0.269	0.425	Data Appear Normal					
Lilliefors (NDs = DL)	0.253	0.177	Data Not Normal					
Lilliefors (NDs = DL/2)	0.236	0.177	Data Not Normal					
Lilliefors (Normal ROS Estimates)	0.0755	0.177	Data Appear Normal					
Gamma GOF Test Results								
	No NDs	NDs = DL	NDs = DL/2	Gamma ROS				
Correlation Coefficient R	N/A	0.934	0.934	0.382				
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)					
Anderson-Darling (Detects Only)	N/A	N/A						
Kolmogorov-Smirnov (Detects Only)	N/A	N/A						
Anderson-Darling (NDs = DL)	1.347	0.764						
Kolmogorov-Smirnov (NDs = DL)	0.196	0.182	Data Not Gamma Distributed					
Anderson-Darling (NDs = DL/2)	1.337	0.761						
Kolmogorov-Smirnov (NDs = DL/2)	0.19	0.181	Data Not Gamma Distributed					
Anderson-Darling (Gamma ROS Estimates)	7.952	0.768						

Appendix B
Goodness of Fit Statistics

Kolmogorov-Smirnov (Gamma ROS Est.)	0.55	0.182	Data Not Gamma Distributed			
Lognormal GOF Test Results						
	No NDs	NDs = DL	NDs = DL/2	Log ROS		
Correlation Coefficient R	0.99	0.951	0.943	0.991		
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)			
Shapiro-Wilk (Detects Only)	0.981	0.767	Data Appear Lognormal			
Shapiro-Wilk (NDs = DL)	0.888	0.916	Data Not Lognormal			
Shapiro-Wilk (NDs = DL/2)	0.867	0.916	Data Not Lognormal			
Shapiro-Wilk (Lognormal ROS Estimates)	0.98	0.916	Data Appear Lognormal			
Lilliefors (Detects Only)	0.23	0.425	Data Appear Lognormal			
Lilliefors (NDs = DL)	0.194	0.177	Data Not Lognormal			
Lilliefors (NDs = DL/2)	0.155	0.177	Data Appear Lognormal			
Lilliefors (Lognormal ROS Estimates)	0.0756	0.177	Data Appear Lognormal			
Note: Substitution methods such as DL or DL/2 are not recommended.						
Cadmium (mw-73)						
	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs
Raw Statistics	25	6	19	6	13	68.42%
	Number	Minimum	Maximum	Mean	Median	SD
Statistics (Non-Detects Only)	13	2.0000E-4	0.001	5.8462E-4	4.0000E-4	3.5082E-4
Statistics (Non-Detects Only)	6	1.3000E-4	2.1000E-4	1.7000E-4	1.7000E-4	2.6077E-5
Statistics (All: NDs treated as DL value)	19	1.3000E-4	0.001	4.5368E-4	4.0000E-4	3.4849E-4
Statistics (All: NDs treated as DL/2 value)	19	1.0000E-4	5.0000E-4	2.5368E-4	2.0000E-4	1.5529E-4
Statistics (Normal ROS Imputed Data)	19	1.3000E-4	2.1000E-4	1.6698E-4	1.6658E-4	2.0237E-5
Statistics (Gamma ROS Imputed Data)	19	1.3000E-4	0.01	0.0069	0.01	0.00469
Statistics (Lognormal ROS Imputed Data)	19	1.3000E-4	2.1000E-4	1.6646E-4	1.6493E-4	2.0035E-5
	K hat	K Star	Theta hat	Log Mean	Log Stdv	Log CV
Statistics (Non-Detects Only)	49.82	25.02	3.4124E-6	-8.69	0.157	-0.018
Statistics (NDs = DL)	2.019	1.735	2.2471E-4	-7.966	0.741	-0.093
Statistics (NDs = DL/2)	3.271	2.789	7.7561E-5	-8.44	0.569	-0.0674
Statistics (Gamma ROS Estimates)	0.663	0.594	0.0104	-5.895	1.952	-0.331
Statistics (Lognormal ROS Estimates)	--	--	--	-8.708	0.121	-0.0139

Appendix B
Goodness of Fit Statistics

Normal GOF Test Results					
	No NDs	NDs = DL	NDs = DL/2	Normal ROS	
Correlation Coefficient R	0.966	0.87	0.868	0.991	
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)		
Shapiro-Wilk (Detects Only)	0.958	0.788	Data Appear Normal		
Shapiro-Wilk (NDs = DL)	0.738	0.901	Data Not Normal		
Shapiro-Wilk (NDs = DL/2)	0.736	0.901	Data Not Normal		
Shapiro-Wilk (Normal ROS Estimates)	0.982	0.901	Data Appear Normal		
Lilliefors (Detects Only)	0.184	0.325	Data Appear Normal		
Lilliefors (NDs = DL)	0.298	0.197	Data Not Normal		
Lilliefors (NDs = DL/2)	0.348	0.197	Data Not Normal		
Lilliefors (Normal ROS Estimates)	0.102	0.197	Data Appear Normal		
Gamma GOF Test Results					
	No NDs	NDs = DL	NDs = DL/2	Gamma ROS	
Correlation Coefficient R	0.968	0.898	0.893	0.523	
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)		
Anderson-Darling (Detects Only)	0.301	0.697			
Kolmogorov-Smirnov (Detects Only)	0.187	0.332	Detected Data Appear Gamma Distributed		
Anderson-Darling (NDs = DL)	1.508	0.752			
Kolmogorov-Smirnov (NDs = DL)	0.239	0.201	Data Not Gamma Distributed		
Anderson-Darling (NDs = DL/2)	1.605	0.747			
Kolmogorov-Smirnov (NDs = DL/2)	0.294	0.2	Data Not Gamma Distributed		
Anderson-Darling (Gamma ROS Estimates)	4.129	0.787			
Kolmogorov-Smirnov (Gamma ROS Est.)	0.45	0.207	Data Not Gamma Distributed		
Lognormal GOF Test Results					
	No NDs	NDs = DL	NDs = DL/2	Log ROS	
Correlation Coefficient R	0.961	0.93	0.929	0.992	
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)		
Shapiro-Wilk (Detects Only)	0.948	0.788	Data Appear Lognormal		
Shapiro-Wilk (NDs = DL)	0.844	0.901	Data Not Lognormal		

Appendix B
Goodness of Fit Statistics

Shapiro-Wilk (NDs = DL/2)	0.845	0.901	Data Not Lognormal					
Shapiro-Wilk (Lognormal ROS Estimates)	0.986	0.901	Data Appear Lognormal					
Lilliefors (Detects Only)	0.207	0.325	Data Appear Lognormal					
Lilliefors (NDs = DL)	0.225	0.197	Data Not Lognormal					
Lilliefors (NDs = DL/2)	0.257	0.197	Data Not Lognormal					
Lilliefors (Lognormal ROS Estimates)	0.0824	0.197	Data Appear Lognormal					
Note: Substitution methods such as DL or DL/2 are not recommended.								
Chromium (mw-62)								
	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs		
Raw Statistics	31	11	20	4	16	80.00%		
	Number	Minimum	Maximum	Mean	Median	SD		
Statistics (Non-Detects Only)	16	5.0000E-4	0.01	0.00213	0.0015	0.00232		
Statistics (Non-Detects Only)	4	5.1000E-4	0.0015	0.001	0.001	4.0418E-4		
Statistics (All: NDs treated as DL value)	20	5.0000E-4	0.01	0.0019	0.001	0.00212		
Statistics (All: NDs treated as DL/2 value)	20	2.5000E-4	0.005	0.00105	0.001	0.00104		
Statistics (Normal ROS Imputed Data)	20	-7.689E-4	0.0015	1.9381E-4	1.8161E-4	5.9109E-4		
Statistics (Gamma ROS Imputed Data)	20	5.1000E-4	0.01	0.0082	0.01	0.0037		
Statistics (Lognormal ROS Imputed Data)	20	1.3271E-4	0.0015	4.7384E-4	3.7839E-4	3.4887E-4		
	K hat	K Star	Theta hat	Log Mean	Log Stdv	Log CV		
Statistics (Non-Detects Only)	7.36	2.007	1.3620E-4	-6.975	0.447	-0.0641		
Statistics (NDs = DL)	1.636	1.424	0.00116	-6.601	0.774	-0.117		
Statistics (NDs = DL/2)	1.831	1.589	5.7384E-4	-7.156	0.755	-0.106		
Statistics (Gamma ROS Estimates)	1.965	1.704	0.00417	-5.079	0.989	-0.195		
Statistics (Lognormal ROS Estimates)	--	--	--	-7.866	0.652	-0.0829		
Normal GOF Test Results								
	No NDs	NDs = DL	NDs = DL/2	Normal ROS				
Correlation Coefficient R	0.962	0.761	0.785	0.984				
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)					
Shapiro-Wilk (Detects Only)	0.944	0.748	Data Appear Normal					
Shapiro-Wilk (NDs = DL)	0.603	0.905	Data Not Normal					
Shapiro-Wilk (NDs = DL/2)	0.64	0.905	Data Not Normal					

Appendix B
Goodness of Fit Statistics

Shapiro-Wilk (Normal ROS Estimates)	0.966	0.905	Data Appear Normal		
Lilliefors (Detects Only)	0.252	0.375	Data Appear Normal		
Lilliefors (NDs = DL)	0.281	0.192	Data Not Normal		
Lilliefors (NDs = DL/2)	0.269	0.192	Data Not Normal		
Lilliefors (Normal ROS Estimates)	0.158	0.192	Data Appear Normal		
Gamma GOF Test Results					
	No NDs	NDs = DL	NDs = DL/2	Gamma ROS	
Correlation Coefficient R	0.951	0.903	0.905	0.536	
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)		
Anderson-Darling (Detects Only)	0.353	0.658			
Kolmogorov-Smirnov (Detects Only)	0.296	0.395	Detected Data Appear Gamma Distributed		
Anderson-Darling (NDs = DL)	1.01	0.756			
Kolmogorov-Smirnov (NDs = DL)	0.23	0.197	Data Not Gamma Distributed		
Anderson-Darling (NDs = DL/2)	0.826	0.754			
Kolmogorov-Smirnov (NDs = DL/2)	0.18	0.197	Detected Data appear Approximate Gamma Distribution		
Anderson-Darling (Gamma ROS Estimates)	5.172	0.753			
Kolmogorov-Smirnov (Gamma ROS Est.)	0.5	0.196	Data Not Gamma Distributed		
Lognormal GOF Test Results					
	No NDs	NDs = DL	NDs = DL/2	Log ROS	
Correlation Coefficient R	0.947	0.955	0.961	0.983	
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)		
Shapiro-Wilk (Detects Only)	0.916	0.748	Data Appear Lognormal		
Shapiro-Wilk (NDs = DL)	0.913	0.905	Data Appear Lognormal		
Shapiro-Wilk (NDs = DL/2)	0.927	0.905	Data Appear Lognormal		
Shapiro-Wilk (Lognormal ROS Estimates)	0.961	0.905	Data Appear Lognormal		
Lilliefors (Detects Only)	0.31	0.375	Data Appear Lognormal		
Lilliefors (NDs = DL)	0.204	0.192	Data Not Lognormal		
Lilliefors (NDs = DL/2)	0.179	0.192	Data Appear Lognormal		
Lilliefors (Lognormal ROS Estimates)	0.158	0.192	Data Appear Lognormal		
Note: Substitution methods such as DL or DL/2 are not recommended.					
Chromium (mw-63)					

Appendix B
Goodness of Fit Statistics

	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs
Raw Statistics	30	10	20	2	18	90.00%

	Number	Minimum	Maximum	Mean	Median	SD
Statistics (Non-Detects Only)	18	5.0000E-4	0.01	0.00192	0.001	0.00226
Statistics (Non-Detects Only)	2	4.3000E-4	8.4000E-4	6.3500E-4	6.3500E-4	2.8991E-4
Statistics (All: NDs treated as DL value)	20	4.3000E-4	0.01	0.00179	0.001	0.00217
Statistics (All: NDs treated as DL/2 value)	20	2.5000E-4	0.005	9.2600E-4	5.0000E-4	0.00107
Statistics (Normal ROS Imputed Data)	20	1.8929E-4	8.4000E-4	4.7088E-4	4.6813E-4	1.5632E-4
Statistics (Gamma ROS Imputed Data)	20	N/A	N/A	N/A	N/A	N/A
Statistics (Lognormal ROS Imputed Data)	20	2.9022E-4	8.4000E-4	4.7459E-4	4.5763E-4	1.2869E-4

	K hat	K Star	Theta hat	Log Mean	Log Stdv	Log CV
Statistics (Non-Detects Only)	N/A	N/A	N/A	N/A	N/A	N/A
Statistics (NDs = DL)	1.343	1.175	0.00133	-6.743	0.867	-0.129
Statistics (NDs = DL/2)	1.453	1.268	6.3727E-4	-7.367	0.836	-0.113
Statistics (Gamma ROS Estimates)	N/A	N/A	N/A	N/A	N/A	N/A
Statistics (Lognormal ROS Estimates)	--	--	--	-7.685	0.255	-0.0332

Normal GOF Test Results

	No NDs	NDs = DL	NDs = DL/2	Normal ROS
Correlation Coefficient R	1	0.767	0.77	0.98

	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)
Shapiro-Wilk (NDs = DL)	0.611	0.905	Data Not Normal
Shapiro-Wilk (NDs = DL/2)	0.616	0.905	Data Not Normal
Shapiro-Wilk (Normal ROS Estimates)	0.965	0.905	Data Appear Normal
Lilliefors (Detects Only)	N/A	N/A	
Lilliefors (NDs = DL)	0.266	0.192	Data Not Normal
Lilliefors (NDs = DL/2)	0.273	0.192	Data Not Normal
Lilliefors (Normal ROS Estimates)	0.157	0.192	Data Appear Normal

Gamma GOF Test Results

	No NDs	NDs = DL	NDs = DL/2	Gamma ROS
Correlation Coefficient R	N/A	0.921	0.916	0.427

Appendix B
Goodness of Fit Statistics

	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)
Anderson-Darling (Detects Only)	N/A	N/A	
Kolmogorov-Smirnov (Detects Only)	N/A	N/A	
Anderson-Darling (NDs = DL)	1.077	0.761	
Kolmogorov-Smirnov (NDs = DL)	0.223	0.198	Data Not Gamma Distributed
Anderson-Darling (NDs = DL/2)	0.938	0.759	
Kolmogorov-Smirnov (NDs = DL/2)	0.199	0.198	Data Not Gamma Distributed
Anderson-Darling (Gamma ROS Estimates)	N/A	0.74	
Kolmogorov-Smirnov (Gamma ROS Est.)	N/A	0.193	

Lognormal GOF Test Results

	No NDs	NDs = DL	NDs = DL/2	Log ROS
Correlation Coefficient R	1	0.948	0.952	N/A

	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)
Shapiro-Wilk (NDs = DL)	0.895	0.905	Data Not Lognormal
Shapiro-Wilk (NDs = DL/2)	0.9	0.905	Data Not Lognormal
Shapiro-Wilk (Lognormal ROS Estimates)	0.965	0.905	Data Appear Lognormal
Lilliefors (Detects Only)	N/A	N/A	
Lilliefors (NDs = DL)	0.189	0.192	Data Appear Lognormal
Lilliefors (NDs = DL/2)	0.166	0.192	Data Appear Lognormal
Lilliefors (Lognormal ROS Estimates)	0.157	0.192	Data Appear Lognormal

Note: Substitution methods such as DL or DL/2 are not recommended.

Chromium (mw-64)

	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs
Raw Statistics	30	10	20	3	17	85.00%

	Number	Minimum	Maximum	Mean	Median	SD
Statistics (Non-Detects Only)	17	5.0000E-4	0.01	0.002	0.001	0.0023
Statistics (Non-Detects Only)	3	2.3000E-4	9.3000E-4	6.2333E-4	7.1000E-4	3.5796E-4
Statistics (All: NDs treated as DL value)	20	2.3000E-4	0.01	0.00179	0.001	0.00217
Statistics (All: NDs treated as DL/2 value)	20	2.3000E-4	0.005	9.4350E-4	6.0500E-4	0.00107
Statistics (Normal ROS Imputed Data)	20	-1.120E-4	9.3000E-4	3.5502E-4	3.5085E-4	2.6153E-4
Statistics (Gamma ROS Imputed Data)	20	2.3000E-4	0.01	0.00859	0.01	0.00344
Statistics (Lognormal ROS Imputed Data)	20	1.1616E-4	9.3000E-4	3.5339E-4	3.0325E-4	2.0940E-4

Appendix B
Goodness of Fit Statistics

	K hat	K Star	Theta hat	Log Mean	Log Stdv	Log CV
Statistics (Non-Detects Only)	N/A	N/A	N/A	N/A	N/A	N/A
Statistics (NDs = DL)	1.31	1.147	0.00137	-6.751	0.9	-0.133
Statistics (NDs = DL/2)	1.479	1.29	6.3798E-4	-7.341	0.838	-0.114
Statistics (Gamma ROS Estimates)	1.885	1.636	0.00456	-5.045	1.1	-0.218
Statistics (Lognormal ROS Estimates)	--	--	--	-8.092	0.542	-0.067

Normal GOF Test Results

	No NDs	NDs = DL	NDs = DL/2	Normal ROS
Correlation Coefficient R	0.978	0.773	0.775	0.981

	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)
Shapiro-Wilk (Detects Only)	0.956	0.767	Data Appear Normal
Shapiro-Wilk (NDs = DL)	0.622	0.905	Data Not Normal
Shapiro-Wilk (NDs = DL/2)	0.624	0.905	Data Not Normal
Shapiro-Wilk (Normal ROS Estimates)	0.964	0.905	Data Appear Normal
Lilliefors (Detects Only)	0.262	0.425	Data Appear Normal
Lilliefors (NDs = DL)	0.262	0.192	Data Not Normal
Lilliefors (NDs = DL/2)	0.279	0.192	Data Not Normal
Lilliefors (Normal ROS Estimates)	0.156	0.192	Data Appear Normal

Gamma GOF Test Results

	No NDs	NDs = DL	NDs = DL/2	Gamma ROS
Correlation Coefficient R	N/A	0.923	0.916	0.468

	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)
Anderson-Darling (Detects Only)	N/A	N/A	
Kolmogorov-Smirnov (Detects Only)	N/A	N/A	
Anderson-Darling (NDs = DL)	0.812	0.762	
Kolmogorov-Smirnov (NDs = DL)	0.219	0.198	Data Not Gamma Distributed
Anderson-Darling (NDs = DL/2)	0.838	0.758	
Kolmogorov-Smirnov (NDs = DL/2)	0.164	0.198	Detected Data appear Approximate Gamma Distribution
Anderson-Darling (Gamma ROS Estimates)	5.882	0.754	
Kolmogorov-Smirnov (Gamma ROS Est.)	0.526	0.196	Data Not Gamma Distributed

Lognormal GOF Test Results

Appendix B
Goodness of Fit Statistics

	No NDs	NDs = DL	NDs = DL/2	Log ROS
Correlation Coefficient R	0.943	0.973	0.957	0.983

	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)
Shapiro-Wilk (Detects Only)	0.888	0.767	Data Appear Lognormal
Shapiro-Wilk (NDs = DL)	0.952	0.905	Data Appear Lognormal
Shapiro-Wilk (NDs = DL/2)	0.912	0.905	Data Appear Lognormal
Shapiro-Wilk (Lognormal ROS Estimates)	0.964	0.905	Data Appear Lognormal
Lilliefors (Detects Only)	0.317	0.425	Data Appear Lognormal
Lilliefors (NDs = DL)	0.169	0.192	Data Appear Lognormal
Lilliefors (NDs = DL/2)	0.172	0.192	Data Appear Lognormal
Lilliefors (Lognormal ROS Estimates)	0.156	0.192	Data Appear Lognormal

Note: Substitution methods such as DL or DL/2 are not recommended.

Chromium (mw-65)

	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs
Raw Statistics	30	10	20	2	18	90.00%

	Number	Minimum	Maximum	Mean	Median	SD
Statistics (Non-Detects Only)	18	5.0000E-4	0.004	0.00142	0.001	0.00102
Statistics (Non-Detects Only)	2	4.9000E-4	0.0015	9.9500E-4	9.9500E-4	7.1418E-4
Statistics (All: NDs treated as DL value)	20	4.9000E-4	0.004	0.00137	0.001	9.8556E-4
Statistics (All: NDs treated as DL/2 value)	20	2.5000E-4	0.002	7.3700E-4	5.0000E-4	5.1627E-4
Statistics (Normal ROS Imputed Data)	20	-6.284E-5	0.0015	5.5200E-4	5.4228E-4	3.7586E-4
Statistics (Gamma ROS Imputed Data)	20	N/A	N/A	N/A	N/A	N/A
Statistics (Lognormal ROS Imputed Data)	20	2.6560E-4	0.0015	5.7338E-4	5.1922E-4	2.7797E-4

	K hat	K Star	Theta hat	Log Mean	Log Stdv	Log CV
Statistics (Non-Detects Only)	N/A	N/A	N/A	N/A	N/A	N/A
Statistics (NDs = DL)	2.301	1.989	5.9729E-4	-6.822	0.7	-0.103
Statistics (NDs = DL/2)	2.296	1.985	3.2101E-4	-7.446	0.707	-0.095
Statistics (Gamma ROS Estimates)	N/A	N/A	N/A	N/A	N/A	N/A
Statistics (Lognormal ROS Estimates)	--	--	--	-7.552	0.416	-0.0551

Normal GOF Test Results

Appendix B
Goodness of Fit Statistics

	No NDs	NDs = DL	NDs = DL/2	Normal ROS	
Correlation Coefficient R	1	0.916	0.925	0.978	
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)		
Shapiro-Wilk (NDs = DL)	0.837	0.905	Data Not Normal		
Shapiro-Wilk (NDs = DL/2)	0.848	0.905	Data Not Normal		
Shapiro-Wilk (Normal ROS Estimates)	0.963	0.905	Data Appear Normal		
Lilliefors (Detects Only)	N/A	N/A			
Lilliefors (NDs = DL)	0.248	0.192	Data Not Normal		
Lilliefors (NDs = DL/2)	0.277	0.192	Data Not Normal		
Lilliefors (Normal ROS Estimates)	0.121	0.192	Data Appear Normal		
Gamma GOF Test Results					
	No NDs	NDs = DL	NDs = DL/2	Gamma ROS	
Correlation Coefficient R	N/A	0.98	0.975	0.442	
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)		
Anderson-Darling (Detects Only)	N/A	N/A			
Kolmogorov-Smirnov (Detects Only)	N/A	N/A			
Anderson-Darling (NDs = DL)	0.958	0.751			
Kolmogorov-Smirnov (NDs = DL)	0.21	0.196	Data Not Gamma Distributed		
Anderson-Darling (NDs = DL/2)	0.956	0.751			
Kolmogorov-Smirnov (NDs = DL/2)	0.227	0.196	Data Not Gamma Distributed		
Anderson-Darling (Gamma ROS Estimates)	N/A	0.74			
Kolmogorov-Smirnov (Gamma ROS Est.)	N/A	0.193			
Lognormal GOF Test Results					
	No NDs	NDs = DL	NDs = DL/2	Log ROS	
Correlation Coefficient R	1	0.947	0.949	N/A	
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)		
Shapiro-Wilk (NDs = DL)	0.879	0.905	Data Not Lognormal		
Shapiro-Wilk (NDs = DL/2)	0.882	0.905	Data Not Lognormal		
Shapiro-Wilk (Lognormal ROS Estimates)	0.963	0.905	Data Appear Lognormal		
Lilliefors (Detects Only)	N/A	N/A			
Lilliefors (NDs = DL)	0.217	0.192	Data Not Lognormal		
Lilliefors (NDs = DL/2)	0.187	0.192	Data Appear Lognormal		

Appendix B
Goodness of Fit Statistics

Lilliefors (Lognormal ROS Estimates)	0.121	0.192	Data Appear Lognormal					
Note: Substitution methods such as DL or DL/2 are not recommended.								
Chromium (mw-71)								
	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs		
Raw Statistics	31	7	24	1	23	95.83%		
Warning: Only one distinct data value was detected! ProUCL (or any other software) should not be used on such a data set!								
It is suggested to use alternative site specific values determined by the Project Team to estimate environmental parameters (e.g., EPC, BTV).								
The data set for variable Chromium (mw-71) was not processed!								
Chromium (mw-72)								
	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs		
Raw Statistics	31	7	24	4	20	83.33%		
	Number	Minimum	Maximum	Mean	Median	SD		
Statistics (Non-Detects Only)	20	0.001	0.01	0.00268	0.002	0.00215		
Statistics (Non-Detects Only)	4	4.4000E-4	0.0028	0.00114	6.5500E-4	0.00111		
Statistics (All: NDs treated as DL value)	24	4.4000E-4	0.01	0.00242	0.002	0.00208		
Statistics (All: NDs treated as DL/2 value)	24	4.4000E-4	0.005	0.0013	0.001	0.00106		
Statistics (Normal ROS Imputed Data)	24	-3.434E-4	0.0028	7.7509E-4	6.9978E-4	6.6461E-4		
Statistics (Gamma ROS Imputed Data)	24	4.4000E-4	0.01	0.00852	0.01	0.0034		
Statistics (Lognormal ROS Imputed Data)	24	2.7272E-4	0.0028	7.4151E-4	6.1954E-4	5.0746E-4		
	K hat	K Star	Theta hat	Log Mean	Log Stdv	Log CV		
Statistics (Non-Detects Only)	1.874	0.635	6.0712E-4	-7.069	0.818	-0.116		
Statistics (NDs = DL)	1.888	1.679	0.00128	-6.312	0.77	-0.122		
Statistics (NDs = DL/2)	2.171	1.927	6.0071E-4	-6.89	0.693	-0.101		
Statistics (Gamma ROS Estimates)	2.145	1.905	0.00397	-5.016	0.983	-0.196		
Statistics (Lognormal ROS Estimates)	--	--	--	-7.347	0.503	-0.0684		
Normal GOF Test Results								

Appendix B
Goodness of Fit Statistics

	No NDs	NDs = DL	NDs = DL/2	Normal ROS	
Correlation Coefficient R	0.843	0.865	0.867	0.956	
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)		
Shapiro-Wilk (Detects Only)	0.723	0.748	Data Not Normal		
Shapiro-Wilk (NDs = DL)	0.765	0.916	Data Not Normal		
Shapiro-Wilk (NDs = DL/2)	0.763	0.916	Data Not Normal		
Shapiro-Wilk (Normal ROS Estimates)	0.928	0.916	Data Appear Normal		
Lilliefors (Detects Only)	0.399	0.375	Data Not Normal		
Lilliefors (NDs = DL)	0.205	0.177	Data Not Normal		
Lilliefors (NDs = DL/2)	0.238	0.177	Data Not Normal		
Lilliefors (Normal ROS Estimates)	0.177	0.177	Data Not Normal		
Gamma GOF Test Results					
	No NDs	NDs = DL	NDs = DL/2	Gamma ROS	
Correlation Coefficient R	0.967	0.958	0.964	0.502	
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)		
Anderson-Darling (Detects Only)	0.588	0.661			
Kolmogorov-Smirnov (Detects Only)	0.385	0.398	Detected Data Appear Gamma Distributed		
Anderson-Darling (NDs = DL)	0.689	0.757			
Kolmogorov-Smirnov (NDs = DL)	0.205	0.18	Detected Data appear Approximate Gamma Distribution		
Anderson-Darling (NDs = DL/2)	1.047	0.754			
Kolmogorov-Smirnov (NDs = DL/2)	0.182	0.18	Data Not Gamma Distributed		
Anderson-Darling (Gamma ROS Estimates)	6.682	0.754			
Kolmogorov-Smirnov (Gamma ROS Est.)	0.513	0.18	Data Not Gamma Distributed		
Lognormal GOF Test Results					
	No NDs	NDs = DL	NDs = DL/2	Log ROS	
Correlation Coefficient R	0.911	0.977	0.953	0.966	
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)		
Shapiro-Wilk (Detects Only)	0.841	0.748	Data Appear Lognormal		
Shapiro-Wilk (NDs = DL)	0.954	0.916	Data Appear Lognormal		
Shapiro-Wilk (NDs = DL/2)	0.9	0.916	Data Not Lognormal		
Shapiro-Wilk (Lognormal ROS Estimates)	0.945	0.916	Data Appear Lognormal		
Lilliefors (Detects Only)	0.338	0.375	Data Appear Lognormal		

Appendix B
Goodness of Fit Statistics

Lilliefors (NDs = DL)	0.197	0.177	Data Not Lognormal					
Lilliefors (NDs = DL/2)	0.181	0.177	Data Not Lognormal					
Lilliefors (Lognormal ROS Estimates)	0.135	0.177	Data Appear Lognormal					
Note: Substitution methods such as DL or DL/2 are not recommended.								
Chromium (mw-73)								
	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs		
Raw Statistics	25	6	19	2	17	89.47%		
	Number	Minimum	Maximum	Mean	Median	SD		
Statistics (Non-Detects Only)	17	0.001	0.01	0.00341	0.002	0.00279		
Statistics (Non-Detects Only)	2	7.3000E-4	0.0041	0.00242	0.00242	0.00238		
Statistics (All: NDs treated as DL value)	19	7.3000E-4	0.01	0.00331	0.002	0.0027		
Statistics (All: NDs treated as DL/2 value)	19	5.0000E-4	0.005	0.00178	0.001	0.00145		
Statistics (Normal ROS Imputed Data)	19	-8.873E-4	0.0041	9.0961E-4	7.3000E-4	0.0012		
Statistics (Gamma ROS Imputed Data)	19	N/A	N/A	N/A	N/A	N/A		
Statistics (Lognormal ROS Imputed Data)	19	3.1890E-4	0.0041	9.8538E-4	7.3000E-4	8.3943E-4		
	K hat	K Star	Theta hat	Log Mean	Log Stdv	Log CV		
Statistics (Non-Detects Only)	N/A	N/A	N/A	N/A	N/A	N/A		
Statistics (NDs = DL)	1.941	1.67	0.0017	-5.991	0.768	-0.128		
Statistics (NDs = DL/2)	1.934	1.664	9.2050E-4	-6.611	0.762	-0.115		
Statistics (Gamma ROS Estimates)	N/A	N/A	N/A	N/A	N/A	N/A		
Statistics (Lognormal ROS Estimates)	--	--	--	-7.13	0.613	-0.0859		
Normal GOF Test Results								
	No NDs	NDs = DL	NDs = DL/2	Normal ROS				
Correlation Coefficient R	1	0.882	0.894	0.968				
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)					
Shapiro-Wilk (NDs = DL)	0.777	0.901	Data Not Normal					
Shapiro-Wilk (NDs = DL/2)	0.792	0.901	Data Not Normal					
Shapiro-Wilk (Normal ROS Estimates)	0.945	0.901	Data Appear Normal					
Lilliefors (Detects Only)	N/A	N/A						
Lilliefors (NDs = DL)	0.227	0.197	Data Not Normal					
Lilliefors (NDs = DL/2)	0.232	0.197	Data Not Normal					

Appendix B
Goodness of Fit Statistics

Lilliefors (Normal ROS Estimates)	0.108	0.197	Data Appear Normal		
Gamma GOF Test Results					
	No NDs	NDs = DL	NDs = DL/2	Gamma ROS	
Correlation Coefficient R	N/A	0.953	0.962	0.474	
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)		
Anderson-Darling (Detects Only)	N/A	N/A			
Kolmogorov-Smirnov (Detects Only)	N/A	N/A			
Anderson-Darling (NDs = DL)	0.679	0.752			
Kolmogorov-Smirnov (NDs = DL)	0.181	0.201	Data Appear Gamma Distributed		
Anderson-Darling (NDs = DL/2)	0.723	0.752			
Kolmogorov-Smirnov (NDs = DL/2)	0.211	0.201	Detected Data appear Approximate Gamma Distribution		
Anderson-Darling (Gamma ROS Estimates)	N/A	0.738			
Kolmogorov-Smirnov (Gamma ROS Est.)	N/A	0.198			
Lognormal GOF Test Results					
	No NDs	NDs = DL	NDs = DL/2	Log ROS	
Correlation Coefficient R	1	0.969	0.967	N/A	
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)		
Shapiro-Wilk (NDs = DL)	0.93	0.901	Data Appear Lognormal		
Shapiro-Wilk (NDs = DL/2)	0.917	0.901	Data Appear Lognormal		
Shapiro-Wilk (Lognormal ROS Estimates)	0.945	0.901	Data Appear Lognormal		
Lilliefors (Detects Only)	N/A	N/A			
Lilliefors (NDs = DL)	0.151	0.197	Data Appear Lognormal		
Lilliefors (NDs = DL/2)	0.178	0.197	Data Appear Lognormal		
Lilliefors (Lognormal ROS Estimates)	0.108	0.197	Data Appear Lognormal		
Note: Substitution methods such as DL or DL/2 are not recommended.					

Cobalt (mw-62)						
Raw Statistics						
Number of Valid Observations	20					
Number of Missing Observations	11					
Number of Distinct Observations	17					

Appendix B
Goodness of Fit Statistics

Minimum	6.5000E-4
Maximum	0.014
Mean of Raw Data	0.00654
Standard Deviation of Raw Data	0.00328
Khat	2.949
Theta hat	0.00222
Kstar	2.54
Theta star	0.00257
Mean of Log Transformed Data	-5.209
Standard Deviation of Log Transformed Data	0.72
Normal GOF Test Results	
Correlation Coefficient R	0.98
Shapiro Wilk Test Statistic	0.963
Shapiro Wilk Critical (0.05) Value	0.905
Approximate Shapiro Wilk P Value	0.599
Lilliefors Test Statistic	0.158
Lilliefors Critical (0.05) Value	0.192
Data appear Normal at (0.05) Significance Level	
Gamma GOF Test Results	
Correlation Coefficient R	0.97
A-D Test Statistic	0.709
A-D Critical (0.05) Value	0.748
K-S Test Statistic	0.231
K-S Critical(0.05) Value	0.195
Data follow Appr. Gamma Distribution at (0.05) Significance Level	
Lognormal GOF Test Results	
Correlation Coefficient R	0.91
Shapiro Wilk Test Statistic	0.842
Shapiro Wilk Critical (0.05) Value	0.905
Approximate Shapiro Wilk P Value	0.00289
Lilliefors Test Statistic	0.261
Lilliefors Critical (0.05) Value	0.192
Data not Lognormal at (0.05) Significance Level	

Appendix B
Goodness of Fit Statistics

Cobalt (mw-63)

	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs
Raw Statistics	30	10	20	19	1	5.00%

	Number	Minimum	Maximum	Mean	Median	SD
Statistics (Non-Detects Only)	1	0.001	0.001	0.001	0.001	N/A
Statistics (Non-Detects Only)	19	6.2000E-4	0.0086	0.00486	0.0056	0.00221
Statistics (All: NDs treated as DL value)	20	6.2000E-4	0.0086	0.00467	0.00555	0.00232
Statistics (All: NDs treated as DL/2 value)	20	5.0000E-4	0.0086	0.00465	0.00555	0.00236
Statistics (Normal ROS Imputed Data)	20	6.2000E-4	0.0086	0.00465	0.00555	0.00235
Statistics (Gamma ROS Imputed Data)	20	6.2000E-4	0.01	0.00512	0.00565	0.00244
Statistics (Lognormal ROS Imputed Data)	20	6.2000E-4	0.0086	0.00468	0.00555	0.0023

	K hat	K Star	Theta hat	Log Mean	Log Stdv	Log CV
Statistics (Non-Detects Only)	3.073	2.623	0.00158	-5.497	0.707	-0.129
Statistics (NDs = DL)	2.637	2.275	0.00177	-5.568	0.757	-0.136
Statistics (NDs = DL/2)	2.32	2.005	0.002	-5.602	0.833	-0.149
Statistics (Gamma ROS Estimates)	2.961	2.55	0.00173	-5.453	0.716	-0.131
Statistics (Lognormal ROS Estimates)	--	--	--	-5.56	0.743	-0.134

Normal GOF Test Results

	No NDs	NDs = DL	NDs = DL/2	Normal ROS
Correlation Coefficient R	0.952	0.952	0.952	0.951

	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)
Shapiro-Wilk (Detects Only)	0.903	0.901	Data Appear Normal
Shapiro-Wilk (NDs = DL)	0.898	0.905	Data Not Normal
Shapiro-Wilk (NDs = DL/2)	0.897	0.905	Data Not Normal
Shapiro-Wilk (Normal ROS Estimates)	0.896	0.905	Data Not Normal
Lilliefors (Detects Only)	0.227	0.197	Data Not Normal
Lilliefors (NDs = DL)	0.223	0.192	Data Not Normal
Lilliefors (NDs = DL/2)	0.225	0.192	Data Not Normal
Lilliefors (Normal ROS Estimates)	0.225	0.192	Data Not Normal

Gamma GOF Test Results

Appendix B
Goodness of Fit Statistics

	No NDs	NDs = DL	NDs = DL/2	Gamma ROS		
Correlation Coefficient R	0.883	0.883	0.873	0.924		
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)			
Anderson-Darling (Detects Only)	1.531	0.748				
Kolmogorov-Smirnov (Detects Only)	0.279	0.2	Data Not Gamma Distributed			
Anderson-Darling (NDs = DL)	1.549	0.749				
Kolmogorov-Smirnov (NDs = DL)	0.275	0.195	Data Not Gamma Distributed			
Anderson-Darling (NDs = DL/2)	1.613	0.751				
Kolmogorov-Smirnov (NDs = DL/2)	0.28	0.196	Data Not Gamma Distributed			
Anderson-Darling (Gamma ROS Estimates)	1.304	0.748				
Kolmogorov-Smirnov (Gamma ROS Est.)	0.263	0.195	Data Not Gamma Distributed			
Lognormal GOF Test Results						
	No NDs	NDs = DL	NDs = DL/2	Log ROS		
Correlation Coefficient R	0.884	0.898	0.886	0.899		
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)			
Shapiro-Wilk (Detects Only)	0.786	0.901	Data Not Lognormal			
Shapiro-Wilk (NDs = DL)	0.804	0.905	Data Not Lognormal			
Shapiro-Wilk (NDs = DL/2)	0.783	0.905	Data Not Lognormal			
Shapiro-Wilk (Lognormal ROS Estimates)	0.807	0.905	Data Not Lognormal			
Lilliefors (Detects Only)	0.295	0.197	Data Not Lognormal			
Lilliefors (NDs = DL)	0.289	0.192	Data Not Lognormal			
Lilliefors (NDs = DL/2)	0.292	0.192	Data Not Lognormal			
Lilliefors (Lognormal ROS Estimates)	0.288	0.192	Data Not Lognormal			
Note: Substitution methods such as DL or DL/2 are not recommended.						
Cobalt (mw-64)						
	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs
Raw Statistics	30	10	20	16	4	20.00%
	Number	Minimum	Maximum	Mean	Median	SD
Statistics (Non-Detects Only)	4	0.002	0.005	0.00275	0.002	0.0015
Statistics (Non-Detects Only)	16	8.3000E-4	0.0018	0.00138	0.00135	3.0225E-4
Statistics (All: NDs treated as DL value)	20	8.3000E-4	0.005	0.00166	0.0015	8.6143E-4

Appendix B
Goodness of Fit Statistics

Statistics (All: NDs treated as DL/2 value)	20	8.3000E-4	0.0025	0.00138	0.0012	4.0119E-4		
Statistics (Normal ROS Imputed Data)	20	8.3000E-4	0.0018	0.00138	0.00138	2.7824E-4		
Statistics (Gamma ROS Imputed Data)	20	8.3000E-4	0.01	0.00311	0.0015	0.00355		
Statistics (Lognormal ROS Imputed Data)	20	8.3000E-4	0.0018	0.00138	0.00135	2.7874E-4		
	K hat	K Star	Theta hat	Log Mean	Log Stdv	Log CV		
Statistics (Non-Detects Only)	21.4	17.43	6.4639E-5	-6.607	0.227	-0.0344		
Statistics (NDs = DL)	6.441	5.509	2.5716E-4	-6.483	0.373	-0.0575		
Statistics (NDs = DL/2)	13.78	11.75	1.0024E-4	-6.621	0.274	-0.0413		
Statistics (Gamma ROS Estimates)	1.298	1.137	0.00239	-6.207	0.846	-0.136		
Statistics (Lognormal ROS Estimates)	--	--	--	-6.607	0.209	-0.0317		
Normal GOF Test Results								
	No NDs	NDs = DL	NDs = DL/2	Normal ROS				
Correlation Coefficient R	0.959	0.768	0.942	0.972				
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)					
Shapiro-Wilk (Detects Only)	0.906	0.887	Data Appear Normal					
Shapiro-Wilk (NDs = DL)	0.62	0.905	Data Not Normal					
Shapiro-Wilk (NDs = DL/2)	0.895	0.905	Data Not Normal					
Shapiro-Wilk (Normal ROS Estimates)	0.935	0.905	Data Appear Normal					
Lilliefors (Detects Only)	0.228	0.213	Data Not Normal					
Lilliefors (NDs = DL)	0.295	0.192	Data Not Normal					
Lilliefors (NDs = DL/2)	0.225	0.192	Data Not Normal					
Lilliefors (Normal ROS Estimates)	0.195	0.192	Data Not Normal					
Gamma GOF Test Results								
	No NDs	NDs = DL	NDs = DL/2	Gamma ROS				
Correlation Coefficient R	0.95	0.837	0.966	0.86				
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)					
Anderson-Darling (Detects Only)	0.699	0.736						
Kolmogorov-Smirnov (Detects Only)	0.215	0.215	Detected Data appear Approximate Gamma Distribution					
Anderson-Darling (NDs = DL)	1.153	0.744						
Kolmogorov-Smirnov (NDs = DL)	0.216	0.194	Data Not Gamma Distributed					
Anderson-Darling (NDs = DL/2)	0.596	0.741						
Kolmogorov-Smirnov (NDs = DL/2)	0.213	0.194	Detected Data appear Approximate Gamma Distribution					

Appendix B
Goodness of Fit Statistics

Anderson-Darling (Gamma ROS Estimates)	3.397	0.762				
Kolmogorov-Smirnov (Gamma ROS Est.)	0.404	0.198	Data Not Gamma Distributed			
Lognormal GOF Test Results						
	No NDs	NDs = DL	NDs = DL/2	Log ROS		
Correlation Coefficient R	0.955	0.915	0.972	0.967		
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)			
Shapiro-Wilk (Detects Only)	0.905	0.887	Data Appear Lognormal			
Shapiro-Wilk (NDs = DL)	0.861	0.905	Data Not Lognormal			
Shapiro-Wilk (NDs = DL/2)	0.947	0.905	Data Appear Lognormal			
Shapiro-Wilk (Lognormal ROS Estimates)	0.931	0.905	Data Appear Lognormal			
Lilliefors (Detects Only)	0.199	0.213	Data Appear Lognormal			
Lilliefors (NDs = DL)	0.186	0.192	Data Appear Lognormal			
Lilliefors (NDs = DL/2)	0.198	0.192	Data Not Lognormal			
Lilliefors (Lognormal ROS Estimates)	0.164	0.192	Data Appear Lognormal			
Note: Substitution methods such as DL or DL/2 are not recommended.						
Cobalt (mw-65)						
	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs
Raw Statistics	30	10	20	17	3	15.00%
	Number	Minimum	Maximum	Mean	Median	SD
Statistics (Non-Detects Only)	3	0.002	0.002	0.002	0.002	0
Statistics (Non-Detects Only)	17	0.001	0.0029	0.00148	0.0012	5.2468E-4
Statistics (All: NDs treated as DL value)	20	0.001	0.0029	0.00156	0.0013	5.1748E-4
Statistics (All: NDs treated as DL/2 value)	20	0.001	0.0029	0.00141	0.0012	5.1289E-4
Statistics (Normal ROS Imputed Data)	20	0.001	0.0029	0.00146	0.0012	4.9314E-4
Statistics (Gamma ROS Imputed Data)	20	0.001	0.01	0.00276	0.0013	0.00316
Statistics (Lognormal ROS Imputed Data)	20	0.001	0.0029	0.00146	0.0012	4.9136E-4
	K hat	K Star	Theta hat	Log Mean	Log Stdv	Log CV
Statistics (Non-Detects Only)	10.25	8.48	1.4463E-4	-6.564	0.312	-0.0475
Statistics (NDs = DL)	10.52	8.977	1.4825E-4	-6.511	0.313	-0.0481
Statistics (NDs = DL/2)	9.94	8.482	1.4185E-4	-6.615	0.313	-0.0472
Statistics (Gamma ROS Estimates)	1.469	1.282	0.00188	-6.27	0.772	-0.123

Appendix B
Goodness of Fit Statistics

Statistics (Lognormal ROS Estimates)	--	--	--	-6.576	0.293	-0.0446		
Normal GOF Test Results								
	No NDs	NDs = DL	NDs = DL/2	Normal ROS				
Correlation Coefficient R	0.893	0.923	0.879	0.899				
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)					
Shapiro-Wilk (Detects Only)	0.802	0.892	Data Not Normal					
Shapiro-Wilk (NDs = DL)	0.851	0.905	Data Not Normal					
Shapiro-Wilk (NDs = DL/2)	0.775	0.905	Data Not Normal					
Shapiro-Wilk (Normal ROS Estimates)	0.814	0.905	Data Not Normal					
Lilliefors (Detects Only)	0.293	0.207	Data Not Normal					
Lilliefors (NDs = DL)	0.257	0.192	Data Not Normal					
Lilliefors (NDs = DL/2)	0.309	0.192	Data Not Normal					
Lilliefors (Normal ROS Estimates)	0.252	0.192	Data Not Normal					
Gamma GOF Test Results								
	No NDs	NDs = DL	NDs = DL/2	Gamma ROS				
Correlation Coefficient R	0.941	0.952	0.932	0.873				
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)					
Anderson-Darling (Detects Only)	1.211	0.739						
Kolmogorov-Smirnov (Detects Only)	0.296	0.209	Data Not Gamma Distributed					
Anderson-Darling (NDs = DL)	1.19	0.742						
Kolmogorov-Smirnov (NDs = DL)	0.261	0.194	Data Not Gamma Distributed					
Anderson-Darling (NDs = DL/2)	1.52	0.742						
Kolmogorov-Smirnov (NDs = DL/2)	0.301	0.194	Data Not Gamma Distributed					
Anderson-Darling (Gamma ROS Estimates)	3.004	0.758						
Kolmogorov-Smirnov (Gamma ROS Est.)	0.293	0.198	Data Not Gamma Distributed					
Lognormal GOF Test Results								
	No NDs	NDs = DL	NDs = DL/2	Log ROS				
Correlation Coefficient R	0.925	0.94	0.916	0.931				
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)					
Shapiro-Wilk (Detects Only)	0.852	0.892	Data Not Lognormal					

Appendix B
Goodness of Fit Statistics

Shapiro-Wilk (NDs = DL)	0.875	0.905	Data Not Lognormal					
Shapiro-Wilk (NDs = DL/2)	0.834	0.905	Data Not Lognormal					
Shapiro-Wilk (Lognormal ROS Estimates)	0.865	0.905	Data Not Lognormal					
Lilliefors (Detects Only)	0.286	0.207	Data Not Lognormal					
Lilliefors (NDs = DL)	0.253	0.192	Data Not Lognormal					
Lilliefors (NDs = DL/2)	0.288	0.192	Data Not Lognormal					
Lilliefors (Lognormal ROS Estimates)	0.244	0.192	Data Not Lognormal					
Note: Substitution methods such as DL or DL/2 are not recommended.								
Cobalt (mw-71)								
	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs		
Raw Statistics	31	5	26	8	18	69.23%		
	Number	Minimum	Maximum	Mean	Median	SD		
Statistics (Non-Detects Only)	18	5.0000E-4	0.01	0.00236	0.0015	0.00244		
Statistics (Non-Detects Only)	8	1.3000E-4	0.0049	0.00186	0.0012	0.00185		
Statistics (All: NDs treated as DL value)	26	1.3000E-4	0.01	0.00221	0.0012	0.00225		
Statistics (All: NDs treated as DL/2 value)	26	1.3000E-4	0.005	0.00139	0.001	0.00144		
Statistics (Normal ROS Imputed Data)	26	-0.00146	0.0049	7.7679E-4	5.7387E-4	0.00146		
Statistics (Gamma ROS Imputed Data)	26	1.3000E-4	0.01	0.0075	0.01	0.00395		
Statistics (Lognormal ROS Imputed Data)	26	6.4070E-5	0.0049	8.1948E-4	3.4250E-4	0.00123		
	K hat	K Star	Theta hat	Log Mean	Log Stdv	Log CV		
Statistics (Non-Detects Only)	0.905	0.649	0.00206	-6.932	1.366	-0.197		
Statistics (NDs = DL)	1.199	1.086	0.00184	-6.588	1.045	-0.159		
Statistics (NDs = DL/2)	1.16	1.052	0.0012	-7.068	1.023	-0.145		
Statistics (Gamma ROS Estimates)	1.31	1.185	0.00572	-5.321	1.312	-0.247		
Statistics (Lognormal ROS Estimates)	--	--	--	-7.821	1.147	-0.147		
Normal GOF Test Results								
	No NDs	NDs = DL	NDs = DL/2	Normal ROS				
Correlation Coefficient R	0.937	0.872	0.88	0.951				
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)					
Shapiro-Wilk (Detects Only)	0.858	0.818	Data Appear Normal					
Shapiro-Wilk (NDs = DL)	0.773	0.92	Data Not Normal					

Appendix B
Goodness of Fit Statistics

Shapiro-Wilk (NDs = DL/2)	0.767	0.92	Data Not Normal		
Shapiro-Wilk (Normal ROS Estimates)	0.911	0.92	Data Not Normal		
Lilliefors (Detects Only)	0.264	0.283	Data Appear Normal		
Lilliefors (NDs = DL)	0.267	0.17	Data Not Normal		
Lilliefors (NDs = DL/2)	0.283	0.17	Data Not Normal		
Lilliefors (Normal ROS Estimates)	0.161	0.17	Data Appear Normal		
Gamma GOF Test Results					
	No NDs	NDs = DL	NDs = DL/2	Gamma ROS	
Correlation Coefficient R	0.954	0.973	0.97	0.597	
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)		
Anderson-Darling (Detects Only)	0.35	0.739			
Kolmogorov-Smirnov (Detects Only)	0.205	0.302	Detected Data Appear Gamma Distributed		
Anderson-Darling (NDs = DL)	0.57	0.769			
Kolmogorov-Smirnov (NDs = DL)	0.151	0.176	Data Appear Gamma Distributed		
Anderson-Darling (NDs = DL/2)	0.911	0.77			
Kolmogorov-Smirnov (NDs = DL/2)	0.191	0.176	Data Not Gamma Distributed		
Anderson-Darling (Gamma ROS Estimates)	4.679	0.766			
Kolmogorov-Smirnov (Gamma ROS Est.)	0.429	0.175	Data Not Gamma Distributed		
Lognormal GOF Test Results					
	No NDs	NDs = DL	NDs = DL/2	Log ROS	
Correlation Coefficient R	0.968	0.984	0.978	0.981	
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)		
Shapiro-Wilk (Detects Only)	0.916	0.818	Data Appear Lognormal		
Shapiro-Wilk (NDs = DL)	0.967	0.92	Data Appear Lognormal		
Shapiro-Wilk (NDs = DL/2)	0.945	0.92	Data Appear Lognormal		
Shapiro-Wilk (Lognormal ROS Estimates)	0.955	0.92	Data Appear Lognormal		
Lilliefors (Detects Only)	0.185	0.283	Data Appear Lognormal		
Lilliefors (NDs = DL)	0.149	0.17	Data Appear Lognormal		
Lilliefors (NDs = DL/2)	0.16	0.17	Data Appear Lognormal		
Lilliefors (Lognormal ROS Estimates)	0.112	0.17	Data Appear Lognormal		
Note: Substitution methods such as DL or DL/2 are not recommended.					

Appendix B
Goodness of Fit Statistics

Cobalt (mw-72)

	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs
Raw Statistics	31	5	26	23	3	11.54%

	Number	Minimum	Maximum	Mean	Median	SD
Statistics (Non-Detects Only)	3	0.005	0.01	0.00667	0.005	0.00289
Statistics (Non-Detects Only)	23	0.0013	0.019	0.00365	0.0025	0.00373
Statistics (All: NDs treated as DL value)	26	0.0013	0.019	0.004	0.0025	0.00373
Statistics (All: NDs treated as DL/2 value)	26	0.0013	0.019	0.00362	0.0025	0.00353
Statistics (Normal ROS Imputed Data)	26	0.0013	0.019	0.0036	0.0025	0.00352
Statistics (Gamma ROS Imputed Data)	26	0.0013	0.019	0.00438	0.0025	0.00407
Statistics (Lognormal ROS Imputed Data)	26	0.0013	0.019	0.00355	0.0025	0.00352

	K hat	K Star	Theta hat	Log Mean	Log Stdv	Log CV
Statistics (Non-Detects Only)	2.421	2.134	0.00151	-5.833	0.561	-0.0961
Statistics (NDs = DL)	2.394	2.143	0.00167	-5.745	0.593	-0.103
Statistics (NDs = DL/2)	2.63	2.352	0.00137	-5.825	0.538	-0.0924
Statistics (Gamma ROS Estimates)	2.062	1.85	0.00213	-5.691	0.661	-0.116
Statistics (Lognormal ROS Estimates)	--	--	--	-5.842	0.529	-0.0906

Normal GOF Test Results

	No NDs	NDs = DL	NDs = DL/2	Normal ROS
Correlation Coefficient R	0.663	0.743	0.668	0.67

	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)
Shapiro-Wilk (Detects Only)	0.467	0.914	Data Not Normal
Shapiro-Wilk (NDs = DL)	0.576	0.92	Data Not Normal
Shapiro-Wilk (NDs = DL/2)	0.475	0.92	Data Not Normal
Shapiro-Wilk (Normal ROS Estimates)	0.478	0.92	Data Not Normal
Lilliefors (Detects Only)	0.406	0.18	Data Not Normal
Lilliefors (NDs = DL)	0.347	0.17	Data Not Normal
Lilliefors (NDs = DL/2)	0.388	0.17	Data Not Normal
Lilliefors (Normal ROS Estimates)	0.367	0.17	Data Not Normal

Gamma GOF Test Results

	No NDs	NDs = DL	NDs = DL/2	Gamma ROS

Appendix B
Goodness of Fit Statistics

Correlation Coefficient R	0.812	0.883	0.812	0.911			
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)				
Anderson-Darling (Detects Only)	3.931	0.753					
Kolmogorov-Smirnov (Detects Only)	0.376	0.183	Data Not Gamma Distributed				
Anderson-Darling (NDs = DL)	3.163	0.755					
Kolmogorov-Smirnov (NDs = DL)	0.329	0.173	Data Not Gamma Distributed				
Anderson-Darling (NDs = DL/2)	4.122	0.753					
Kolmogorov-Smirnov (NDs = DL/2)	0.361	0.173	Data Not Gamma Distributed				
Anderson-Darling (Gamma ROS Estimates)	3.531	0.757					
Kolmogorov-Smirnov (Gamma ROS Est.)	0.354	0.173	Data Not Gamma Distributed				
Lognormal GOF Test Results							
	No NDs	NDs = DL	NDs = DL/2	Log ROS			
Correlation Coefficient R	0.814	0.88	0.826	0.814			
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)				
Shapiro-Wilk (Detects Only)	0.687	0.914	Data Not Lognormal				
Shapiro-Wilk (NDs = DL)	0.788	0.92	Data Not Lognormal				
Shapiro-Wilk (NDs = DL/2)	0.707	0.92	Data Not Lognormal				
Shapiro-Wilk (Lognormal ROS Estimates)	0.689	0.92	Data Not Lognormal				
Lilliefors (Detects Only)	0.333	0.18	Data Not Lognormal				
Lilliefors (NDs = DL)	0.297	0.17	Data Not Lognormal				
Lilliefors (NDs = DL/2)	0.321	0.17	Data Not Lognormal				
Lilliefors (Lognormal ROS Estimates)	0.308	0.17	Data Not Lognormal				
Note: Substitution methods such as DL or DL/2 are not recommended.							
Cobalt (mw-73)							
	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs	
Raw Statistics	25	4	21	17	4	19.05%	
	Number	Minimum	Maximum	Mean	Median	SD	
Statistics (Non-Detects Only)	4	0.005	0.01	0.00625	0.005	0.0025	
Statistics (Non-Detects Only)	17	0.0027	0.0078	0.00545	0.0058	0.00149	
Statistics (All: NDs treated as DL value)	21	0.0027	0.01	0.0056	0.005	0.00168	
Statistics (All: NDs treated as DL/2 value)	21	0.0025	0.0078	0.005	0.0048	0.0017	

Appendix B
Goodness of Fit Statistics

Statistics (Normal ROS Imputed Data)	21	0.0027	0.0078	0.00526	0.00489	0.00142		
Statistics (Gamma ROS Imputed Data)	21	0.0027	0.01	0.00631	0.0065	0.00226		
Statistics (Lognormal ROS Imputed Data)	21	0.0027	0.0078	0.00524	0.0048	0.00142		
	K hat	K Star	Theta hat	Log Mean	Log Stdv	Log CV		
Statistics (Non-Detects Only)	13.08	10.81	4.1655E-4	-5.251	0.295	-0.0562		
Statistics (NDs = DL)	11.97	10.29	4.6774E-4	-5.227	0.3	-0.0575		
Statistics (NDs = DL/2)	8.228	7.085	6.0823E-4	-5.359	0.374	-0.0697		
Statistics (Gamma ROS Estimates)	8.053	6.934	7.8407E-4	-5.128	0.37	-0.0722		
Statistics (Lognormal ROS Estimates)	--	--	--	-5.287	0.281	-0.0531		
Normal GOF Test Results								
	No NDs	NDs = DL	NDs = DL/2	Normal ROS				
Correlation Coefficient R	0.966	0.969	0.971	0.977				
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)					
Shapiro-Wilk (Detects Only)	0.926	0.892	Data Appear Normal					
Shapiro-Wilk (NDs = DL)	0.947	0.908	Data Appear Normal					
Shapiro-Wilk (NDs = DL/2)	0.928	0.908	Data Appear Normal					
Shapiro-Wilk (Normal ROS Estimates)	0.948	0.908	Data Appear Normal					
Lilliefors (Detects Only)	0.172	0.207	Data Appear Normal					
Lilliefors (NDs = DL)	0.164	0.188	Data Appear Normal					
Lilliefors (NDs = DL/2)	0.144	0.188	Data Appear Normal					
Lilliefors (Normal ROS Estimates)	0.142	0.188	Data Appear Normal					
Gamma GOF Test Results								
	No NDs	NDs = DL	NDs = DL/2	Gamma ROS				
Correlation Coefficient R	0.952	0.982	0.956	0.961				
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)					
Anderson-Darling (Detects Only)	0.698	0.739						
Kolmogorov-Smirnov (Detects Only)	0.186	0.209	Detected Data Appear Gamma Distributed					
Anderson-Darling (NDs = DL)	0.349	0.743						
Kolmogorov-Smirnov (NDs = DL)	0.137	0.189	Data Appear Gamma Distributed					
Anderson-Darling (NDs = DL/2)	0.668	0.744						
Kolmogorov-Smirnov (NDs = DL/2)	0.155	0.19	Data Appear Gamma Distributed					
Anderson-Darling (Gamma ROS Estimates)	0.535	0.744						

Appendix B
Goodness of Fit Statistics

Kolmogorov-Smirnov (Gamma ROS Est.)	0.127	0.19	Data Appear Gamma Distributed					
Lognormal GOF Test Results								
	No NDs	NDs = DL	NDs = DL/2	Log ROS				
Correlation Coefficient R	0.956	0.982	0.957	0.972				
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)					
Shapiro-Wilk (Detects Only)	0.911	0.892	Data Appear Lognormal					
Shapiro-Wilk (NDs = DL)	0.971	0.908	Data Appear Lognormal					
Shapiro-Wilk (NDs = DL/2)	0.901	0.908	Data Not Lognormal					
Shapiro-Wilk (Lognormal ROS Estimates)	0.943	0.908	Data Appear Lognormal					
Lilliefors (Detects Only)	0.186	0.207	Data Appear Lognormal					
Lilliefors (NDs = DL)	0.119	0.188	Data Appear Lognormal					
Lilliefors (NDs = DL/2)	0.151	0.188	Data Appear Lognormal					
Lilliefors (Lognormal ROS Estimates)	0.148	0.188	Data Appear Lognormal					
Note: Substitution methods such as DL or DL/2 are not recommended.								
Fluoride (mw-62)								
	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs		
Raw Statistics	31	0	31	30	1	3.23%		
	Number	Minimum	Maximum	Mean	Median	SD		
Statistics (Non-Detects Only)	1	80	80	80	80	N/A		
Statistics (Non-Detects Only)	30	1.2	3.3	1.553	1.5	0.375		
Statistics (All: NDs treated as DL value)	31	1.2	80	4.084	1.5	14.09		
Statistics (All: NDs treated as DL/2 value)	31	1.2	40	2.794	1.5	6.915		
Statistics (Normal ROS Imputed Data)	31	1.2	3.3	1.553	1.5	0.369		
Statistics (Gamma ROS Imputed Data)	31	1.2	3.3	1.553	1.5	0.369		
Statistics (Lognormal ROS Imputed Data)	31	1.2	3.3	1.552	1.5	0.369		
	K hat	K Star	Theta hat	Log Mean	Log Stdv	Log CV		
Statistics (Non-Detects Only)	25.35	22.84	0.0613	0.421	0.188	0.446		
Statistics (NDs = DL)	0.703	0.657	5.807	0.548	0.735	1.34		
Statistics (NDs = DL/2)	1.135	1.047	2.461	0.526	0.615	1.17		
Statistics (Gamma ROS Estimates)	26.18	23.67	0.0593	0.421	0.185	0.439		
Statistics (Lognormal ROS Estimates)	--	--	--	0.421	0.185	0.439		

Appendix B
Goodness of Fit Statistics

Normal GOF Test Results					
	No NDs	NDs = DL	NDs = DL/2	Normal ROS	
Correlation Coefficient R	0.758	0.409	0.426	0.755	
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)		
Shapiro-Wilk (Detects Only)	0.608	0.927	Data Not Normal		
Shapiro-Wilk (NDs = DL)	0.199	0.929	Data Not Normal		
Shapiro-Wilk (NDs = DL/2)	0.214	0.929	Data Not Normal		
Shapiro-Wilk (Normal ROS Estimates)	0.606	0.929	Data Not Normal		
Lilliefors (Detects Only)	0.317	0.159	Data Not Normal		
Lilliefors (NDs = DL)	0.494	0.156	Data Not Normal		
Lilliefors (NDs = DL/2)	0.481	0.156	Data Not Normal		
Lilliefors (Normal ROS Estimates)	0.321	0.156	Data Not Normal		
Gamma GOF Test Results					
	No NDs	NDs = DL	NDs = DL/2	Gamma ROS	
Correlation Coefficient R	0.798	0.662	0.636	0.794	
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)		
Anderson-Darling (Detects Only)	2.416	0.744			
Kolmogorov-Smirnov (Detects Only)	0.281	0.16	Data Not Gamma Distributed		
Anderson-Darling (NDs = DL)	9.988	0.792			
Kolmogorov-Smirnov (NDs = DL)	0.482	0.164	Data Not Gamma Distributed		
Anderson-Darling (NDs = DL/2)	8.965	0.772			
Kolmogorov-Smirnov (NDs = DL/2)	0.447	0.162	Data Not Gamma Distributed		
Anderson-Darling (Gamma ROS Estimates)	2.518	0.745			
Kolmogorov-Smirnov (Gamma ROS Est.)	0.284	0.157	Data Not Gamma Distributed		
Lognormal GOF Test Results					
	No NDs	NDs = DL	NDs = DL/2	Log ROS	
Correlation Coefficient R	0.855	0.57	0.602	0.852	
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)		
Shapiro-Wilk (Detects Only)	0.759	0.927	Data Not Lognormal		
Shapiro-Wilk (NDs = DL)	0.362	0.929	Data Not Lognormal		

Appendix B
Goodness of Fit Statistics

Shapiro-Wilk (NDs = DL/2)	0.399	0.929	Data Not Lognormal					
Shapiro-Wilk (Lognormal ROS Estimates)	0.756	0.929	Data Not Lognormal					
Lilliefors (Detects Only)	0.263	0.159	Data Not Lognormal					
Lilliefors (NDs = DL)	0.382	0.156	Data Not Lognormal					
Lilliefors (NDs = DL/2)	0.375	0.156	Data Not Lognormal					
Lilliefors (Lognormal ROS Estimates)	0.265	0.156	Data Not Lognormal					
Note: Substitution methods such as DL or DL/2 are not recommended.								
Fluoride (mw-63)								
	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs		
Raw Statistics	30	0	30	29	1	3.33%		
	Number	Minimum	Maximum	Mean	Median	SD		
Statistics (Non-Detects Only)	1	8	8	8	8	N/A		
Statistics (Non-Detects Only)	29	0.28	2.5	1.889	1.9	0.377		
Statistics (All: NDs treated as DL value)	30	0.28	8	2.093	1.95	1.175		
Statistics (All: NDs treated as DL/2 value)	30	0.28	4	1.959	1.95	0.534		
Statistics (Normal ROS Imputed Data)	30	0.28	2.5	1.889	1.9	0.37		
Statistics (Gamma ROS Imputed Data)	30	0.28	2.5	1.888	1.9	0.37		
Statistics (Lognormal ROS Imputed Data)	30	0.28	2.5	1.886	1.9	0.37		
	K hat	K Star	Theta hat	Log Mean	Log Stdv	Log CV		
Statistics (Non-Detects Only)	11.88	10.68	0.159	0.593	0.375	0.632		
Statistics (NDs = DL)	5.394	4.877	0.388	0.643	0.458	0.712		
Statistics (NDs = DL/2)	9.631	8.69	0.203	0.62	0.396	0.639		
Statistics (Gamma ROS Estimates)	12.29	11.08	0.154	0.594	0.369	0.62		
Statistics (Lognormal ROS Estimates)	--	--	--	0.593	0.369	0.621		
Normal GOF Test Results								
	No NDs	NDs = DL	NDs = DL/2	Normal ROS				
Correlation Coefficient R	0.84	0.62	0.823	0.837				
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)					
Shapiro-Wilk (Detects Only)	0.742	0.926	Data Not Normal					
Shapiro-Wilk (NDs = DL)	0.433	0.927	Data Not Normal					
Shapiro-Wilk (NDs = DL/2)	0.732	0.927	Data Not Normal					

Appendix B
Goodness of Fit Statistics

Shapiro-Wilk (Normal ROS Estimates)	0.739	0.927	Data Not Normal		
Lilliefors (Detects Only)	0.2	0.161	Data Not Normal		
Lilliefors (NDs = DL)	0.364	0.159	Data Not Normal		
Lilliefors (NDs = DL/2)	0.263	0.159	Data Not Normal		
Lilliefors (Normal ROS Estimates)	0.205	0.159	Data Not Normal		
Gamma GOF Test Results					
	No NDs	NDs = DL	NDs = DL/2	Gamma ROS	
Correlation Coefficient R	0.803	0.693	0.838	0.802	
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)		
Anderson-Darling (Detects Only)	3.936	0.745			
Kolmogorov-Smirnov (Detects Only)	0.289	0.162	Data Not Gamma Distributed		
Anderson-Darling (NDs = DL)	4.818	0.746			
Kolmogorov-Smirnov (NDs = DL)	0.306	0.16	Data Not Gamma Distributed		
Anderson-Darling (NDs = DL/2)	3.651	0.746			
Kolmogorov-Smirnov (NDs = DL/2)	0.276	0.16	Data Not Gamma Distributed		
Anderson-Darling (Gamma ROS Estimates)	4.074	0.745			
Kolmogorov-Smirnov (Gamma ROS Est.)	0.286	0.16	Data Not Gamma Distributed		
Lognormal GOF Test Results					
	No NDs	NDs = DL	NDs = DL/2	Log ROS	
Correlation Coefficient R	0.645	0.72	0.706	0.642	
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)		
Shapiro-Wilk (Detects Only)	0.455	0.926	Data Not Lognormal		
Shapiro-Wilk (NDs = DL)	0.579	0.927	Data Not Lognormal		
Shapiro-Wilk (NDs = DL/2)	0.55	0.927	Data Not Lognormal		
Shapiro-Wilk (Lognormal ROS Estimates)	0.453	0.927	Data Not Lognormal		
Lilliefors (Detects Only)	0.337	0.161	Data Not Lognormal		
Lilliefors (NDs = DL)	0.319	0.159	Data Not Lognormal		
Lilliefors (NDs = DL/2)	0.319	0.159	Data Not Lognormal		
Lilliefors (Lognormal ROS Estimates)	0.336	0.159	Data Not Lognormal		
Note: Substitution methods such as DL or DL/2 are not recommended.					
Fluoride (mw-64)					

Appendix B
Goodness of Fit Statistics

Raw Statistics	
Number of Valid Observations	30
Number of Distinct Observations	4
Minimum	1.3
Maximum	1.6
Mean of Raw Data	1.447
Standard Deviation of Raw Data	0.0819
Khat	322.7
Theta hat	0.00448
Kstar	290.5
Theta star	0.00498
Mean of Log Transformed Data	0.368
Standard Deviation of Log Transformed Data	0.0566
Normal GOF Test Results	
Correlation Coefficient R	0.935
Shapiro Wilk Test Statistic	0.867
Shapiro Wilk Critical (0.05) Value	0.927
Approximate Shapiro Wilk P Value	0.00117
Lilliefors Test Statistic	0.249
Lilliefors Critical (0.05) Value	0.159
Data not Normal at (0.05) Significance Level	
Gamma GOF Test Results	
Correlation Coefficient R	0.936
A-D Test Statistic	1.911
A-D Critical (0.05) Value	0.745
K-S Test Statistic	0.248
K-S Critical(0.05) Value	0.16
Data not Gamma Distributed at (0.05) Significance Level	
Lognormal GOF Test Results	
Correlation Coefficient R	0.935
Shapiro Wilk Test Statistic	0.867
Shapiro Wilk Critical (0.05) Value	0.927

Appendix B
Goodness of Fit Statistics

Approximate Shapiro Wilk P Value	0.00119					
Lilliefors Test Statistic	0.243					
Lilliefors Critical (0.05) Value	0.159					
Data not Lognormal at (0.05) Significance Level						
Non-parametric GOF Test Results						
Data do not follow a discernible distribution at (0.05) Level of Significance						
Fluoride (mw-65)						
	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs
Raw Statistics	30	0	30	29	1	3.33%
	Number	Minimum	Maximum	Mean	Median	SD
Statistics (Non-Detects Only)	1	2	2	2	2	N/A
Statistics (Non-Detects Only)	29	1.4	2.1	1.855	1.9	0.184
Statistics (All: NDs treated as DL value)	30	1.4	2.1	1.86	1.9	0.183
Statistics (All: NDs treated as DL/2 value)	30	1	2.1	1.827	1.9	0.239
Statistics (Normal ROS Imputed Data)	30	1.4	2.1	1.852	1.9	0.182
Statistics (Gamma ROS Imputed Data)	30	1.4	2.1	1.852	1.9	0.182
Statistics (Lognormal ROS Imputed Data)	30	1.4	2.1	1.851	1.9	0.182
	K hat	K Star	Theta hat	Log Mean	Log Stdv	Log CV
Statistics (Non-Detects Only)	97.8	87.71	0.019	0.613	0.105	0.171
Statistics (NDs = DL)	99.3	89.39	0.0187	0.616	0.104	0.169
Statistics (NDs = DL/2)	49.84	44.88	0.0366	0.592	0.152	0.257
Statistics (Gamma ROS Estimates)	100.1	90.11	0.0185	0.611	0.104	0.169
Statistics (Lognormal ROS Estimates)	--	--	--	0.611	0.104	0.17
Normal GOF Test Results						
	No NDs	NDs = DL	NDs = DL/2	Normal ROS		
Correlation Coefficient R	0.945	0.939	0.906	0.95		
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)			
Shapiro-Wilk (Detects Only)	0.887	0.926	Data Not Normal			
Shapiro-Wilk (NDs = DL)	0.876	0.927	Data Not Normal			
Shapiro-Wilk (NDs = DL/2)	0.832	0.927	Data Not Normal			

Appendix B
Goodness of Fit Statistics

Shapiro-Wilk (Normal ROS Estimates)	0.897	0.927	Data Not Normal		
Lilliefors (Detects Only)	0.198	0.161	Data Not Normal		
Lilliefors (NDs = DL)	0.211	0.159	Data Not Normal		
Lilliefors (NDs = DL/2)	0.189	0.159	Data Not Normal		
Lilliefors (Normal ROS Estimates)	0.192	0.159	Data Not Normal		
Gamma GOF Test Results					
	No NDs	NDs = DL	NDs = DL/2	Gamma ROS	
Correlation Coefficient R	0.932	0.926	0.883	0.938	
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)		
Anderson-Darling (Detects Only)	1.401	0.742			
Kolmogorov-Smirnov (Detects Only)	0.198	0.162	Data Not Gamma Distributed		
Anderson-Darling (NDs = DL)	1.584	0.745			
Kolmogorov-Smirnov (NDs = DL)	0.211	0.16	Data Not Gamma Distributed		
Anderson-Darling (NDs = DL/2)	1.914	0.744			
Kolmogorov-Smirnov (NDs = DL/2)	0.211	0.16	Data Not Gamma Distributed		
Anderson-Darling (Gamma ROS Estimates)	1.285	0.745			
Kolmogorov-Smirnov (Gamma ROS Est.)	0.192	0.16	Data Not Gamma Distributed		
Lognormal GOF Test Results					
	No NDs	NDs = DL	NDs = DL/2	Log ROS	
Correlation Coefficient R	0.933	0.927	0.861	0.939	
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)		
Shapiro-Wilk (Detects Only)	0.866	0.926	Data Not Lognormal		
Shapiro-Wilk (NDs = DL)	0.856	0.927	Data Not Lognormal		
Shapiro-Wilk (NDs = DL/2)	0.76	0.927	Data Not Lognormal		
Shapiro-Wilk (Lognormal ROS Estimates)	0.877	0.927	Data Not Lognormal		
Lilliefors (Detects Only)	0.195	0.161	Data Not Lognormal		
Lilliefors (NDs = DL)	0.205	0.159	Data Not Lognormal		
Lilliefors (NDs = DL/2)	0.221	0.159	Data Not Lognormal		
Lilliefors (Lognormal ROS Estimates)	0.186	0.159	Data Not Lognormal		
Note: Substitution methods such as DL or DL/2 are not recommended.					
Fluoride (mw-71)					

Appendix B
Goodness of Fit Statistics

	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs
Raw Statistics	31	2	29	2	27	93.10%

	Number	Minimum	Maximum	Mean	Median	SD
Statistics (Non-Detects Only)	27	0.05	20	2.35	0.8	4.251
Statistics (Non-Detects Only)	2	0.14	3.8	1.97	1.97	2.588
Statistics (All: NDs treated as DL value)	29	0.05	20	2.324	0.8	4.126
Statistics (All: NDs treated as DL/2 value)	29	0.025	10	1.23	0.4	2.116
Statistics (Normal ROS Imputed Data)	29	-4.736	3.8	-1.262	-1.302	1.948
Statistics (Gamma ROS Imputed Data)	29	N/A	N/A	N/A	N/A	N/A
Statistics (Lognormal ROS Imputed Data)	29	0.00172	3.8	0.217	0.0381	0.7

	K hat	K Star	Theta hat	Log Mean	Log Stdv	Log CV
Statistics (Non-Detects Only)	N/A	N/A	N/A	N/A	N/A	N/A
Statistics (NDs = DL)	0.808	0.748	2.875	0.11	1.191	10.82
Statistics (NDs = DL/2)	0.8	0.74	1.538	-0.535	1.187	-2.217
Statistics (Gamma ROS Estimates)	N/A	N/A	N/A	N/A	N/A	N/A
Statistics (Lognormal ROS Estimates)	--	--	--	-3.231	1.757	-0.544

Normal GOF Test Results

	No NDs	NDs = DL	NDs = DL/2	Normal ROS
Correlation Coefficient R	1	0.663	0.689	0.99

	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)
Shapiro-Wilk (NDs = DL)	0.466	0.926	Data Not Normal
Shapiro-Wilk (NDs = DL/2)	0.499	0.926	Data Not Normal
Shapiro-Wilk (Normal ROS Estimates)	0.982	0.926	Data Appear Normal
Lilliefors (Detects Only)	N/A	N/A	
Lilliefors (NDs = DL)	0.428	0.161	Data Not Normal
Lilliefors (NDs = DL/2)	0.44	0.161	Data Not Normal
Lilliefors (Normal ROS Estimates)	0.072	0.161	Data Appear Normal

Gamma GOF Test Results

	No NDs	NDs = DL	NDs = DL/2	Gamma ROS
Correlation Coefficient R	N/A	0.872	0.899	0.942

Appendix B
Goodness of Fit Statistics

	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)
Anderson-Darling (Detects Only)	N/A	N/A	
Kolmogorov-Smirnov (Detects Only)	N/A	N/A	
Anderson-Darling (NDs = DL)	2.047	0.781	
Kolmogorov-Smirnov (NDs = DL)	0.299	0.169	Data Not Gamma Distributed
Anderson-Darling (NDs = DL/2)	2.202	0.782	
Kolmogorov-Smirnov (NDs = DL/2)	0.316	0.169	Data Not Gamma Distributed
Anderson-Darling (Gamma ROS Estimates)	N/A	0.742	
Kolmogorov-Smirnov (Gamma ROS Est.)	N/A	0.162	

Lognormal GOF Test Results

	No NDs	NDs = DL	NDs = DL/2	Log ROS
Correlation Coefficient R	1	0.949	0.947	N/A

	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)
Shapiro-Wilk (NDs = DL)	0.917	0.926	Data Not Lognormal
Shapiro-Wilk (NDs = DL/2)	0.913	0.926	Data Not Lognormal
Shapiro-Wilk (Lognormal ROS Estimates)	0.982	0.926	Data Appear Lognormal
Lilliefors (Detects Only)	N/A	N/A	
Lilliefors (NDs = DL)	0.209	0.161	Data Not Lognormal
Lilliefors (NDs = DL/2)	0.222	0.161	Data Not Lognormal
Lilliefors (Lognormal ROS Estimates)	0.072	0.161	Data Appear Lognormal

Note: Substitution methods such as DL or DL/2 are not recommended.

Fluoride (mw-72)

	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs
Raw Statistics	31	2	29	1	28	96.55%

Warning: Only one distinct data value was detected! ProUCL (or any other software) should not be used on such a data set!
It is suggested to use alternative site specific values determined by the Project Team to estimate environmental parameters (e.g., EPC, BTV).

The data set for variable Fluoride (mw-72) was not processed!

Fluoride (mw-73)

Appendix B
Goodness of Fit Statistics

	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs
Raw Statistics	25	2	23	2	21	91.30%

	Number	Minimum	Maximum	Mean	Median	SD
Statistics (Non-Detects Only)	21	0.4	80	5.648	0.8	17.56
Statistics (Non-Detects Only)	2	0.063	0.12	0.0915	0.0915	0.0403
Statistics (All: NDs treated as DL value)	23	0.063	80	5.164	0.8	16.82
Statistics (All: NDs treated as DL/2 value)	23	0.063	40	2.586	0.4	8.407
Statistics (Normal ROS Imputed Data)	23	-0.012	0.195	0.0915	0.0915	0.0493
Statistics (Gamma ROS Imputed Data)	23	N/A	N/A	N/A	N/A	N/A
Statistics (Lognormal ROS Imputed Data)	23	0.027	0.28	0.101	0.0869	0.0592

	K hat	K Star	Theta hat	Log Mean	Log Stdv	Log CV
Statistics (Non-Detects Only)	N/A	N/A	N/A	N/A	N/A	N/A
Statistics (NDs = DL)	0.389	0.367	13.27	-0.0565	1.435	-25.38
Statistics (NDs = DL/2)	0.401	0.378	6.447	-0.689	1.341	-1.945
Statistics (Gamma ROS Estimates)	N/A	N/A	N/A	N/A	N/A	N/A
Statistics (Lognormal ROS Estimates)	--	--	--	-2.442	0.557	-0.228

Normal GOF Test Results

	No NDs	NDs = DL	NDs = DL/2	Normal ROS
Correlation Coefficient R	1	0.53	0.529	0.996

	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)
Shapiro-Wilk (NDs = DL)	0.308	0.914	Data Not Normal
Shapiro-Wilk (NDs = DL/2)	0.307	0.914	Data Not Normal
Shapiro-Wilk (Normal ROS Estimates)	0.993	0.914	Data Appear Normal
Lilliefors (Detects Only)	N/A	N/A	
Lilliefors (NDs = DL)	0.472	0.18	Data Not Normal
Lilliefors (NDs = DL/2)	0.472	0.18	Data Not Normal
Lilliefors (Normal ROS Estimates)	0.0692	0.18	Data Appear Normal

Gamma GOF Test Results

	No NDs	NDs = DL	NDs = DL/2	Gamma ROS
Correlation Coefficient R	N/A	0.853	0.85	0.989

Appendix B
Goodness of Fit Statistics

	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)
Anderson-Darling (Detects Only)	N/A	N/A	
Kolmogorov-Smirnov (Detects Only)	N/A	N/A	
Anderson-Darling (NDs = DL)	5.181	0.829	
Kolmogorov-Smirnov (NDs = DL)	0.498	0.195	Data Not Gamma Distributed
Anderson-Darling (NDs = DL/2)	5.493	0.827	
Kolmogorov-Smirnov (NDs = DL/2)	0.506	0.194	Data Not Gamma Distributed
Anderson-Darling (Gamma ROS Estimates)	N/A	0.74	
Kolmogorov-Smirnov (Gamma ROS Est.)	N/A	0.181	

Lognormal GOF Test Results

	No NDs	NDs = DL	NDs = DL/2	Log ROS
Correlation Coefficient R	1	0.822	0.797	N/A

	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)
Shapiro-Wilk (NDs = DL)	0.702	0.914	Data Not Lognormal
Shapiro-Wilk (NDs = DL/2)	0.66	0.914	Data Not Lognormal
Shapiro-Wilk (Lognormal ROS Estimates)	0.993	0.914	Data Appear Lognormal
Lilliefors (Detects Only)	N/A	N/A	
Lilliefors (NDs = DL)	0.416	0.18	Data Not Lognormal
Lilliefors (NDs = DL/2)	0.437	0.18	Data Not Lognormal
Lilliefors (Lognormal ROS Estimates)	0.0692	0.18	Data Appear Lognormal

Note: Substitution methods such as DL or DL/2 are not recommended.

Lead (mw-62)

	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs
Raw Statistics	31	11	20	2	18	90.00%

	Number	Minimum	Maximum	Mean	Median	SD
Statistics (Non-Detects Only)	18	5.0000E-4	0.005	0.00108	5.0000E-4	0.00113
Statistics (Non-Detects Only)	2	5.0000E-4	5.8000E-4	5.4000E-4	5.4000E-4	5.6569E-5
Statistics (All: NDs treated as DL value)	20	5.0000E-4	0.005	0.00103	5.0000E-4	0.00108
Statistics (All: NDs treated as DL/2 value)	20	2.5000E-4	0.0025	5.4150E-4	2.5000E-4	5.3358E-4
Statistics (Normal ROS Imputed Data)	20	-9.957E-5	5.8000E-4	2.2470E-4	2.2264E-4	1.7087E-4
Statistics (Gamma ROS Imputed Data)	20	N/A	N/A	N/A	N/A	N/A
Statistics (Lognormal ROS Imputed Data)	20	1.6439E-4	5.8000E-4	3.1490E-4	2.9888E-4	1.0364E-4

Appendix B
Goodness of Fit Statistics

	K hat	K Star	Theta hat	Log Mean	Log Stdv	Log CV
Statistics (Non-Detects Only)	N/A	N/A	N/A	N/A	N/A	N/A
Statistics (NDs = DL)	1.89	1.64	5.4440E-4	-7.166	0.679	-0.0947
Statistics (NDs = DL/2)	2.009	1.741	2.6957E-4	-7.79	0.674	-0.0865
Statistics (Gamma ROS Estimates)	N/A	N/A	N/A	N/A	N/A	N/A
Statistics (Lognormal ROS Estimates)	--	--	--	-8.112	0.317	-0.0391

Normal GOF Test Results

	No NDs	NDs = DL	NDs = DL/2	Normal ROS
Correlation Coefficient R	1	0.733	0.76	0.993

	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)
Shapiro-Wilk (NDs = DL)	0.558	0.905	Data Not Normal
Shapiro-Wilk (NDs = DL/2)	0.597	0.905	Data Not Normal
Shapiro-Wilk (Normal ROS Estimates)	0.986	0.905	Data Appear Normal
Lilliefors (Detects Only)	N/A	N/A	
Lilliefors (NDs = DL)	0.312	0.192	Data Not Normal
Lilliefors (NDs = DL/2)	0.292	0.192	Data Not Normal
Lilliefors (Normal ROS Estimates)	0.105	0.192	Data Appear Normal

Gamma GOF Test Results

	No NDs	NDs = DL	NDs = DL/2	Gamma ROS
Correlation Coefficient R	N/A	0.888	0.901	0.423

	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)
Anderson-Darling (Detects Only)	N/A	N/A	
Kolmogorov-Smirnov (Detects Only)	N/A	N/A	
Anderson-Darling (NDs = DL)	2.872	0.754	
Kolmogorov-Smirnov (NDs = DL)	0.336	0.196	Data Not Gamma Distributed
Anderson-Darling (NDs = DL/2)	2.149	0.752	
Kolmogorov-Smirnov (NDs = DL/2)	0.315	0.196	Data Not Gamma Distributed
Anderson-Darling (Gamma ROS Estimates)	N/A	0.74	
Kolmogorov-Smirnov (Gamma ROS Est.)	N/A	0.193	

Lognormal GOF Test Results

Appendix B
Goodness of Fit Statistics

	No NDs	NDs = DL	NDs = DL/2	Log ROS				
Correlation Coefficient R	1	0.834	0.874	N/A				
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)					
Shapiro-Wilk (NDs = DL)	0.697	0.905	Data Not Lognormal					
Shapiro-Wilk (NDs = DL/2)	0.762	0.905	Data Not Lognormal					
Shapiro-Wilk (Lognormal ROS Estimates)	0.986	0.905	Data Appear Lognormal					
Lilliefors (Detects Only)	N/A	N/A						
Lilliefors (NDs = DL)	0.339	0.192	Data Not Lognormal					
Lilliefors (NDs = DL/2)	0.323	0.192	Data Not Lognormal					
Lilliefors (Lognormal ROS Estimates)	0.105	0.192	Data Appear Lognormal					
Note: Substitution methods such as DL or DL/2 are not recommended.								
Lead (mw-63)								
	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs		
Raw Statistics	30	10	20	1	19	95.00%		
Warning: Only one distinct data value was detected! ProUCL (or any other software) should not be used on such a data set!								
It is suggested to use alternative site specific values determined by the Project Team to estimate environmental parameters (e.g., EPC, BTV).								
The data set for variable Lead (mw-63) was not processed!								
Lead (mw-64)								
	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs		
Raw Statistics	30	10	20	1	19	95.00%		
Warning: Only one distinct data value was detected! ProUCL (or any other software) should not be used on such a data set!								
It is suggested to use alternative site specific values determined by the Project Team to estimate environmental parameters (e.g., EPC, BTV).								
The data set for variable Lead (mw-64) was not processed!								
Lead (mw-65)								

Appendix B
Goodness of Fit Statistics

	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs
Raw Statistics	30	10	20	0	20	100.00%

Warning: All observations are Non-Detects (NDs), therefore all statistics and estimates should also be NDs!
Specifically, sample mean, UCLs, UPLs, and other statistics are also NDs lying below the largest detection limit!
The Project Team may decide to use alternative site specific values to estimate environmental parameters (e.g., EPC, BTV).

The data set for variable Lead (mw-65) was not processed!

Lead (mw-71)

	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs
Raw Statistics	31	7	24	2	22	91.67%

	Number	Minimum	Maximum	Mean	Median	SD
Statistics (Non-Detects Only)	22	5.0000E-4	0.005	0.00166	0.001	0.00148
Statistics (Non-Detects Only)	2	6.1000E-4	7.3000E-4	6.7000E-4	6.7000E-4	8.4853E-5
Statistics (All: NDs treated as DL value)	24	5.0000E-4	0.005	0.00158	0.001	0.00144
Statistics (All: NDs treated as DL/2 value)	24	2.5000E-4	0.0025	8.1625E-4	5.0000E-4	7.1024E-4
Statistics (Normal ROS Imputed Data)	24	-8.962E-5	7.3000E-4	2.9981E-4	2.9280E-4	2.2574E-4
Statistics (Gamma ROS Imputed Data)	24	N/A	N/A	N/A	N/A	N/A
Statistics (Lognormal ROS Imputed Data)	24	2.1410E-4	7.3000E-4	4.0509E-4	3.7947E-4	1.3897E-4

	K hat	K Star	Theta hat	Log Mean	Log Stdv	Log CV
Statistics (Non-Detects Only)	N/A	N/A	N/A	N/A	N/A	N/A
Statistics (NDs = DL)	1.727	1.539	9.1318E-4	-6.769	0.777	-0.115
Statistics (NDs = DL/2)	1.851	1.648	4.4090E-4	-7.405	0.76	-0.103
Statistics (Gamma ROS Estimates)	N/A	N/A	N/A	N/A	N/A	N/A
Statistics (Lognormal ROS Estimates)	--	--	--	-7.866	0.338	-0.0429

Normal GOF Test Results

	No NDs	NDs = DL	NDs = DL/2	Normal ROS	
Correlation Coefficient R	1	0.842	0.852	0.991	

	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)

Appendix B
Goodness of Fit Statistics

Shapiro-Wilk (NDs = DL)	0.703	0.916	Data Not Normal		
Shapiro-Wilk (NDs = DL/2)	0.72	0.916	Data Not Normal		
Shapiro-Wilk (Normal ROS Estimates)	0.973	0.916	Data Appear Normal		
Lilliefors (Detects Only)	N/A	N/A			
Lilliefors (NDs = DL)	0.28	0.177	Data Not Normal		
Lilliefors (NDs = DL/2)	0.273	0.177	Data Not Normal		
Lilliefors (Normal ROS Estimates)	0.102	0.177	Data Appear Normal		
Gamma GOF Test Results					
	No NDs	NDs = DL	NDs = DL/2	Gamma ROS	
Correlation Coefficient R	N/A	0.931	0.933	0.412	
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)		
Anderson-Darling (Detects Only)	N/A	N/A			
Kolmogorov-Smirnov (Detects Only)	N/A	N/A			
Anderson-Darling (NDs = DL)	1.499	0.759			
Kolmogorov-Smirnov (NDs = DL)	0.24	0.181	Data Not Gamma Distributed		
Anderson-Darling (NDs = DL/2)	1.255	0.757			
Kolmogorov-Smirnov (NDs = DL/2)	0.183	0.18	Data Not Gamma Distributed		
Anderson-Darling (Gamma ROS Estimates)	N/A	0.742			
Kolmogorov-Smirnov (Gamma ROS Est.)	N/A	0.177			
Lognormal GOF Test Results					
	No NDs	NDs = DL	NDs = DL/2	Log ROS	
Correlation Coefficient R	1	0.938	0.946	N/A	
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)		
Shapiro-Wilk (NDs = DL)	0.862	0.916	Data Not Lognormal		
Shapiro-Wilk (NDs = DL/2)	0.879	0.916	Data Not Lognormal		
Shapiro-Wilk (Lognormal ROS Estimates)	0.973	0.916	Data Appear Lognormal		
Lilliefors (Detects Only)	N/A	N/A			
Lilliefors (NDs = DL)	0.196	0.177	Data Not Lognormal		
Lilliefors (NDs = DL/2)	0.171	0.177	Data Appear Lognormal		
Lilliefors (Lognormal ROS Estimates)	0.102	0.177	Data Appear Lognormal		
Note: Substitution methods such as DL or DL/2 are not recommended.					

Appendix B
Goodness of Fit Statistics

Lead (mw-72)

	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs
Raw Statistics	31	7	24	2	22	91.67%

	Number	Minimum	Maximum	Mean	Median	SD
Statistics (Non-Detects Only)	22	5.0000E-4	0.005	0.00141	0.001	0.0013
Statistics (Non-Detects Only)	2	1.3000E-4	0.0011	6.1500E-4	6.1500E-4	6.8589E-4
Statistics (All: NDs treated as DL value)	24	1.3000E-4	0.005	0.00134	0.001	0.00127
Statistics (All: NDs treated as DL/2 value)	24	1.3000E-4	0.0025	6.9708E-4	5.0000E-4	6.3639E-4
Statistics (Normal ROS Imputed Data)	24	-4.540E-4	0.0011	1.7417E-4	1.4823E-4	3.7754E-4
Statistics (Gamma ROS Imputed Data)	24	N/A	N/A	N/A	N/A	N/A
Statistics (Lognormal ROS Imputed Data)	24	3.5935E-5	0.0011	2.0511E-4	1.3543E-4	2.2141E-4

	K hat	K Star	Theta hat	Log Mean	Log Stdv	Log CV
Statistics (Non-Detects Only)	N/A	N/A	N/A	N/A	N/A	N/A
Statistics (NDs = DL)	1.67	1.489	8.0427E-4	-6.941	0.823	-0.119
Statistics (NDs = DL/2)	1.771	1.578	3.9355E-4	-7.577	0.776	-0.102
Statistics (Gamma ROS Estimates)	N/A	N/A	N/A	N/A	N/A	N/A
Statistics (Lognormal ROS Estimates)	--	--	--	-8.851	0.831	-0.0939

Normal GOF Test Results

	No NDs	NDs = DL	NDs = DL/2	Normal ROS
Correlation Coefficient R	1	0.83	0.842	0.989

	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)
Shapiro-Wilk (NDs = DL)	0.696	0.916	Data Not Normal
Shapiro-Wilk (NDs = DL/2)	0.712	0.916	Data Not Normal
Shapiro-Wilk (Normal ROS Estimates)	0.978	0.916	Data Appear Normal
Lilliefors (Detects Only)	N/A	N/A	
Lilliefors (NDs = DL)	0.284	0.177	Data Not Normal
Lilliefors (NDs = DL/2)	0.288	0.177	Data Not Normal
Lilliefors (Normal ROS Estimates)	0.0715	0.177	Data Appear Normal

Gamma GOF Test Results

	No NDs	NDs = DL	NDs = DL/2	Gamma ROS
Correlation Coefficient R	N/A	0.933	0.939	0.392

Appendix B
Goodness of Fit Statistics

	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)
Anderson-Darling (Detects Only)	N/A	N/A	
Kolmogorov-Smirnov (Detects Only)	N/A	N/A	
Anderson-Darling (NDs = DL)	1.235	0.759	
Kolmogorov-Smirnov (NDs = DL)	0.205	0.181	Data Not Gamma Distributed
Anderson-Darling (NDs = DL/2)	1.286	0.758	
Kolmogorov-Smirnov (NDs = DL/2)	0.23	0.181	Data Not Gamma Distributed
Anderson-Darling (Gamma ROS Estimates)	N/A	0.742	
Kolmogorov-Smirnov (Gamma ROS Est.)	N/A	0.177	

Lognormal GOF Test Results

	No NDs	NDs = DL	NDs = DL/2	Log ROS
Correlation Coefficient R	1	0.951	0.953	N/A

	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)
Shapiro-Wilk (NDs = DL)	0.912	0.916	Data Not Lognormal
Shapiro-Wilk (NDs = DL/2)	0.906	0.916	Data Not Lognormal
Shapiro-Wilk (Lognormal ROS Estimates)	0.978	0.916	Data Appear Lognormal
Lilliefors (Detects Only)	N/A	N/A	
Lilliefors (NDs = DL)	0.17	0.177	Data Appear Lognormal
Lilliefors (NDs = DL/2)	0.197	0.177	Data Not Lognormal
Lilliefors (Lognormal ROS Estimates)	0.0715	0.177	Data Appear Lognormal

Note: Substitution methods such as DL or DL/2 are not recommended.

Lead (mw-73)

	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs
Raw Statistics	25	6	19	0	19	100.00%

Warning: All observations are Non-Detects (NDs), therefore all statistics and estimates should also be NDs!
Specifically, sample mean, UCLs, UPLs, and other statistics are also NDs lying below the largest detection limit!
The Project Team may decide to use alternative site specific values to estimate environmental parameters (e.g., EPC, BTV).

The data set for variable Lead (mw-73) was not processed!

Appendix B
Goodness of Fit Statistics

Lithium (mw-62)

	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs
Raw Statistics	31	9	22	7	15	68.18%

	Number	Minimum	Maximum	Mean	Median	SD
Statistics (Non-Detects Only)	15	0.2	0.2	0.2	0.2	2.873E-17
Statistics (Non-Detects Only)	7	0.11	0.15	0.131	0.13	0.0135
Statistics (All: NDs treated as DL value)	22	0.11	0.2	0.178	0.2	0.0335
Statistics (All: NDs treated as DL/2 value)	22	0.1	0.15	0.11	0.1	0.0166
Statistics (Normal ROS Imputed Data)	22	0.106	0.157	0.131	0.131	0.0138
Statistics (Gamma ROS Imputed Data)	22	0.107	0.158	0.131	0.131	0.0138
Statistics (Lognormal ROS Imputed Data)	22	0.107	0.159	0.132	0.13	0.014

	K hat	K Star	Theta hat	Log Mean	Log Stdv	Log CV
Statistics (Non-Detects Only)	108.6	62.14	0.00121	-2.034	0.104	-0.0514
Statistics (NDs = DL)	25.75	22.27	0.00692	-1.744	0.21	-0.12
Statistics (NDs = DL/2)	51.08	44.14	0.00215	-2.217	0.14	-0.063
Statistics (Gamma ROS Estimates)	93.92	81.14	0.0014	-2.034	0.106	-0.0521
Statistics (Lognormal ROS Estimates)	--	--	--	-2.034	0.107	-0.0527

Normal GOF Test Results

	No NDs	NDs = DL	NDs = DL/2	Normal ROS
Correlation Coefficient R	0.983	0.818	0.812	0.996

	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)
Shapiro-Wilk (Detects Only)	0.967	0.803	Data Appear Normal
Shapiro-Wilk (NDs = DL)	0.658	0.911	Data Not Normal
Shapiro-Wilk (NDs = DL/2)	0.654	0.911	Data Not Normal
Shapiro-Wilk (Normal ROS Estimates)	0.984	0.911	Data Appear Normal
Lilliefors (Detects Only)	0.172	0.304	Data Appear Normal
Lilliefors (NDs = DL)	0.425	0.184	Data Not Normal
Lilliefors (NDs = DL/2)	0.408	0.184	Data Not Normal
Lilliefors (Normal ROS Estimates)	0.0856	0.184	Data Appear Normal

Gamma GOF Test Results

Appendix B
Goodness of Fit Statistics

	No NDs	NDs = DL	NDs = DL/2	Gamma ROS			
Correlation Coefficient R	0.978	0.779	0.839	0.994			
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)				
Anderson-Darling (Detects Only)	0.254	0.708					
Kolmogorov-Smirnov (Detects Only)	0.186	0.311	Detected Data Appear Gamma Distributed				
Anderson-Darling (NDs = DL)	3.768	0.741					
Kolmogorov-Smirnov (NDs = DL)	0.428	0.185	Data Not Gamma Distributed				
Anderson-Darling (NDs = DL/2)	3.747	0.743					
Kolmogorov-Smirnov (NDs = DL/2)	0.415	0.185	Data Not Gamma Distributed				
Anderson-Darling (Gamma ROS Estimates)	0.149	0.741					
Kolmogorov-Smirnov (Gamma ROS Est.)	0.0913	0.185	Data Appear Gamma Distributed				
Lognormal GOF Test Results							
	No NDs	NDs = DL	NDs = DL/2	Log ROS			
Correlation Coefficient R	0.978	0.822	0.813	0.996			
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)				
Shapiro-Wilk (Detects Only)	0.957	0.803	Data Appear Lognormal				
Shapiro-Wilk (NDs = DL)	0.667	0.911	Data Not Lognormal				
Shapiro-Wilk (NDs = DL/2)	0.655	0.911	Data Not Lognormal				
Shapiro-Wilk (Lognormal ROS Estimates)	0.984	0.911	Data Appear Lognormal				
Lilliefors (Detects Only)	0.19	0.304	Data Appear Lognormal				
Lilliefors (NDs = DL)	0.422	0.184	Data Not Lognormal				
Lilliefors (NDs = DL/2)	0.411	0.184	Data Not Lognormal				
Lilliefors (Lognormal ROS Estimates)	0.0853	0.184	Data Appear Lognormal				
Note: Substitution methods such as DL or DL/2 are not recommended.							
Lithium (mw-63)							
	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs	
Raw Statistics	30	8	22	7	15	68.18%	
	Number	Minimum	Maximum	Mean	Median	SD	
Statistics (Non-Detects Only)	15	0.2	0.2	0.2	0.2	2.873E-17	
Statistics (Non-Detects Only)	7	0.045	0.085	0.061	0.058	0.0124	
Statistics (All: NDs treated as DL value)	22	0.045	0.2	0.156	0.2	0.0666	

Appendix B
Goodness of Fit Statistics

Statistics (All: NDs treated as DL/2 value)	22	0.045	0.1	0.0876	0.1	0.0197		
Statistics (Normal ROS Imputed Data)	22	0.0387	0.085	0.061	0.0599	0.0123		
Statistics (Gamma ROS Imputed Data)	22	0.0401	0.0852	0.0611	0.0594	0.0124		
Statistics (Lognormal ROS Imputed Data)	22	0.042	0.0858	0.0611	0.059	0.0121		
	K hat	K Star	Theta hat	Log Mean	Log Stdv	Log CV		
Statistics (Non-Detects Only)	30.48	17.51	0.002	-2.813	0.194	-0.0688		
Statistics (NDs = DL)	3.914	3.411	0.0398	-1.993	0.583	-0.293		
Statistics (NDs = DL/2)	16.81	14.55	0.00521	-2.465	0.265	-0.107		
Statistics (Gamma ROS Estimates)	25.88	22.38	0.00236	-2.815	0.202	-0.0719		
Statistics (Lognormal ROS Estimates)	--	--	--	-2.813	0.195	-0.0693		
Normal GOF Test Results								
	No NDs	NDs = DL	NDs = DL/2	Normal ROS				
Correlation Coefficient R	0.938	0.799	0.812	0.993				
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)					
Shapiro-Wilk (Detects Only)	0.905	0.803	Data Appear Normal					
Shapiro-Wilk (NDs = DL)	0.624	0.911	Data Not Normal					
Shapiro-Wilk (NDs = DL/2)	0.651	0.911	Data Not Normal					
Shapiro-Wilk (Normal ROS Estimates)	0.981	0.911	Data Appear Normal					
Lilliefors (Detects Only)	0.214	0.304	Data Appear Normal					
Lilliefors (NDs = DL)	0.429	0.184	Data Not Normal					
Lilliefors (NDs = DL/2)	0.417	0.184	Data Not Normal					
Lilliefors (Normal ROS Estimates)	0.0909	0.184	Data Appear Normal					
Gamma GOF Test Results								
	No NDs	NDs = DL	NDs = DL/2	Gamma ROS				
Correlation Coefficient R	0.956	0.702	0.761	0.992				
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)					
Anderson-Darling (Detects Only)	0.348	0.707						
Kolmogorov-Smirnov (Detects Only)	0.19	0.311	Detected Data Appear Gamma Distributed					
Anderson-Darling (NDs = DL)	4.132	0.747						
Kolmogorov-Smirnov (NDs = DL)	0.434	0.186	Data Not Gamma Distributed					
Anderson-Darling (NDs = DL/2)	3.841	0.741						
Kolmogorov-Smirnov (NDs = DL/2)	0.419	0.185	Data Not Gamma Distributed					

Appendix B
Goodness of Fit Statistics

Anderson-Darling (Gamma ROS Estimates)	0.147	0.741						
Kolmogorov-Smirnov (Gamma ROS Est.)	0.0701	0.185	Data Appear Gamma Distributed					
Lognormal GOF Test Results								
	No NDs	NDs = DL	NDs = DL/2	Log ROS				
Correlation Coefficient R	0.96	0.811	0.813	0.994				
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)					
Shapiro-Wilk (Detects Only)	0.946	0.803	Data Appear Lognormal					
Shapiro-Wilk (NDs = DL)	0.645	0.911	Data Not Lognormal					
Shapiro-Wilk (NDs = DL/2)	0.656	0.911	Data Not Lognormal					
Shapiro-Wilk (Lognormal ROS Estimates)	0.981	0.911	Data Appear Lognormal					
Lilliefors (Detects Only)	0.184	0.304	Data Appear Lognormal					
Lilliefors (NDs = DL)	0.426	0.184	Data Not Lognormal					
Lilliefors (NDs = DL/2)	0.412	0.184	Data Not Lognormal					
Lilliefors (Lognormal ROS Estimates)	0.0691	0.184	Data Appear Lognormal					
Note: Substitution methods such as DL or DL/2 are not recommended.								
Lithium (mw-64)								
	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs		
Raw Statistics	30	8	22	7	15	68.18%		
	Number	Minimum	Maximum	Mean	Median	SD		
Statistics (Non-Detects Only)	15	0.2	0.2	0.2	0.2	2.873E-17		
Statistics (Non-Detects Only)	7	0.019	0.027	0.0216	0.021	0.00282		
Statistics (All: NDs treated as DL value)	22	0.019	0.2	0.143	0.2	0.0851		
Statistics (All: NDs treated as DL/2 value)	22	0.019	0.1	0.075	0.1	0.0374		
Statistics (Normal ROS Imputed Data)	22	0.0165	0.027	0.0216	0.0213	0.00281		
Statistics (Gamma ROS Imputed Data)	22	0.0166	0.027	0.0216	0.0213	0.00282		
Statistics (Lognormal ROS Imputed Data)	22	0.017	0.027	0.0216	0.0212	0.00275		
	K hat	K Star	Theta hat	Log Mean	Log Stdv	Log CV		
Statistics (Non-Detects Only)	72.96	41.79	2.9566E-4	-3.843	0.125	-0.0324		
Statistics (NDs = DL)	1.471	1.301	0.0974	-2.32	1.067	-0.46		
Statistics (NDs = DL/2)	2.616	2.29	0.0287	-2.793	0.738	-0.264		
Statistics (Gamma ROS Estimates)	62.05	53.62	3.4787E-4	-3.844	0.13	-0.0338		

Appendix B
Goodness of Fit Statistics

Statistics (Lognormal ROS Estimates)	--	--	--	-3.843	0.125	-0.0326		
Normal GOF Test Results								
	No NDs	NDs = DL	NDs = DL/2	Normal ROS				
Correlation Coefficient R	0.937	0.784	0.788	0.993				
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)					
Shapiro-Wilk (Detects Only)	0.88	0.803	Data Appear Normal					
Shapiro-Wilk (NDs = DL)	0.598	0.911	Data Not Normal					
Shapiro-Wilk (NDs = DL/2)	0.605	0.911	Data Not Normal					
Shapiro-Wilk (Normal ROS Estimates)	0.98	0.911	Data Appear Normal					
Lilliefors (Detects Only)	0.181	0.304	Data Appear Normal					
Lilliefors (NDs = DL)	0.43	0.184	Data Not Normal					
Lilliefors (NDs = DL/2)	0.429	0.184	Data Not Normal					
Lilliefors (Normal ROS Estimates)	0.076	0.184	Data Appear Normal					
Gamma GOF Test Results								
	No NDs	NDs = DL	NDs = DL/2	Gamma ROS				
Correlation Coefficient R	0.953	0.622	0.672	0.992				
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)					
Anderson-Darling (Detects Only)	0.356	0.708						
Kolmogorov-Smirnov (Detects Only)	0.154	0.311	Detected Data Appear Gamma Distributed					
Anderson-Darling (NDs = DL)	4.524	0.759						
Kolmogorov-Smirnov (NDs = DL)	0.44	0.189	Data Not Gamma Distributed					
Anderson-Darling (NDs = DL/2)	4.391	0.752						
Kolmogorov-Smirnov (NDs = DL/2)	0.437	0.187	Data Not Gamma Distributed					
Anderson-Darling (Gamma ROS Estimates)	0.158	0.742						
Kolmogorov-Smirnov (Gamma ROS Est.)	0.0729	0.185	Data Appear Gamma Distributed					
Lognormal GOF Test Results								
	No NDs	NDs = DL	NDs = DL/2	Log ROS				
Correlation Coefficient R	0.952	0.793	0.798	0.993				
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)					
Shapiro-Wilk (Detects Only)	0.904	0.803	Data Appear Lognormal					

Appendix B
Goodness of Fit Statistics

Shapiro-Wilk (NDs = DL)	0.613	0.911	Data Not Lognormal					
Shapiro-Wilk (NDs = DL/2)	0.621	0.911	Data Not Lognormal					
Shapiro-Wilk (Lognormal ROS Estimates)	0.978	0.911	Data Appear Lognormal					
Lilliefors (Detects Only)	0.168	0.304	Data Appear Lognormal					
Lilliefors (NDs = DL)	0.429	0.184	Data Not Lognormal					
Lilliefors (NDs = DL/2)	0.429	0.184	Data Not Lognormal					
Lilliefors (Lognormal ROS Estimates)	0.0718	0.184	Data Appear Lognormal					
Note: Substitution methods such as DL or DL/2 are not recommended.								
Lithium (mw-65)								
	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs		
Raw Statistics	30	8	22	7	15	68.18%		
	Number	Minimum	Maximum	Mean	Median	SD		
Statistics (Non-Detects Only)	15	0.2	0.2	0.2	0.2	2.873E-17		
Statistics (Non-Detects Only)	7	0.045	0.081	0.0563	0.053	0.0119		
Statistics (All: NDs treated as DL value)	22	0.045	0.2	0.154	0.2	0.0688		
Statistics (All: NDs treated as DL/2 value)	22	0.045	0.1	0.0861	0.1	0.0218		
Statistics (Normal ROS Imputed Data)	22	0.0358	0.081	0.0563	0.0541	0.0114		
Statistics (Gamma ROS Imputed Data)	22	0.037	0.081	0.0564	0.0539	0.0116		
Statistics (Lognormal ROS Imputed Data)	22	0.0394	0.081	0.0563	0.0537	0.0109		
	K hat	K Star	Theta hat	Log Mean	Log Stdv	Log CV		
Statistics (Non-Detects Only)	29.88	17.17	0.00188	-2.894	0.192	-0.0662		
Statistics (NDs = DL)	3.51	3.061	0.044	-2.018	0.621	-0.308		
Statistics (NDs = DL/2)	13.17	11.4	0.00654	-2.491	0.3	-0.12		
Statistics (Gamma ROS Estimates)	25.69	22.22	0.00219	-2.895	0.202	-0.0698		
Statistics (Lognormal ROS Estimates)	--	--	--	-2.894	0.188	-0.0649		
Normal GOF Test Results								
	No NDs	NDs = DL	NDs = DL/2	Normal ROS				
Correlation Coefficient R	0.889	0.796	0.807	0.989				
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)					
Shapiro-Wilk (Detects Only)	0.811	0.803	Data Appear Normal					
Shapiro-Wilk (NDs = DL)	0.618	0.911	Data Not Normal					

Appendix B
Goodness of Fit Statistics

Shapiro-Wilk (NDs = DL/2)	0.639	0.911	Data Not Normal		
Shapiro-Wilk (Normal ROS Estimates)	0.978	0.911	Data Appear Normal		
Lilliefors (Detects Only)	0.29	0.304	Data Appear Normal		
Lilliefors (NDs = DL)	0.429	0.184	Data Not Normal		
Lilliefors (NDs = DL/2)	0.42	0.184	Data Not Normal		
Lilliefors (Normal ROS Estimates)	0.118	0.184	Data Appear Normal		
Gamma GOF Test Results					
	No NDs	NDs = DL	NDs = DL/2	Gamma ROS	
Correlation Coefficient R	0.92	0.695	0.752	0.992	
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)		
Anderson-Darling (Detects Only)	0.566	0.707			
Kolmogorov-Smirnov (Detects Only)	0.279	0.311	Detected Data Appear Gamma Distributed		
Anderson-Darling (NDs = DL)	4.201	0.748			
Kolmogorov-Smirnov (NDs = DL)	0.435	0.186	Data Not Gamma Distributed		
Anderson-Darling (NDs = DL/2)	3.99	0.743			
Kolmogorov-Smirnov (NDs = DL/2)	0.423	0.185	Data Not Gamma Distributed		
Anderson-Darling (Gamma ROS Estimates)	0.177	0.741			
Kolmogorov-Smirnov (Gamma ROS Est.)	0.105	0.185	Data Appear Gamma Distributed		
Lognormal GOF Test Results					
	No NDs	NDs = DL	NDs = DL/2	Log ROS	
Correlation Coefficient R	0.922	0.806	0.808	0.992	
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)		
Shapiro-Wilk (Detects Only)	0.868	0.803	Data Appear Lognormal		
Shapiro-Wilk (NDs = DL)	0.635	0.911	Data Not Lognormal		
Shapiro-Wilk (NDs = DL/2)	0.644	0.911	Data Not Lognormal		
Shapiro-Wilk (Lognormal ROS Estimates)	0.98	0.911	Data Appear Lognormal		
Lilliefors (Detects Only)	0.265	0.304	Data Appear Lognormal		
Lilliefors (NDs = DL)	0.427	0.184	Data Not Lognormal		
Lilliefors (NDs = DL/2)	0.417	0.184	Data Not Lognormal		
Lilliefors (Lognormal ROS Estimates)	0.0976	0.184	Data Appear Lognormal		
Note: Substitution methods such as DL or DL/2 are not recommended.					

Appendix B
Goodness of Fit Statistics

Lithium (mw-71)

	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs
Raw Statistics	31	5	26	25	1	3.85%

	Number	Minimum	Maximum	Mean	Median	SD
Statistics (Non-Detects Only)	1	0.4	0.4	0.4	0.4	N/A
Statistics (Non-Detects Only)	25	0.28	0.75	0.373	0.35	0.0895
Statistics (All: NDs treated as DL value)	26	0.28	0.75	0.374	0.355	0.0879
Statistics (All: NDs treated as DL/2 value)	26	0.2	0.75	0.366	0.35	0.094
Statistics (Normal ROS Imputed Data)	26	0.28	0.75	0.372	0.35	0.0878
Statistics (Gamma ROS Imputed Data)	26	0.28	0.75	0.372	0.35	0.0879
Statistics (Lognormal ROS Imputed Data)	26	0.28	0.75	0.372	0.35	0.0879

	K hat	K Star	Theta hat	Log Mean	Log Stdv	Log CV
Statistics (Non-Detects Only)	25	22.03	0.0149	-1.007	0.191	-0.189
Statistics (NDs = DL)	25.87	22.91	0.0145	-1.003	0.188	-0.187
Statistics (NDs = DL/2)	19.91	17.64	0.0184	-1.03	0.221	-0.215
Statistics (Gamma ROS Estimates)	25.85	22.89	0.0144	-1.009	0.187	-0.185
Statistics (Lognormal ROS Estimates)	--	--	--	-1.009	0.187	-0.185

Normal GOF Test Results

	No NDs	NDs = DL	NDs = DL/2	Normal ROS
Correlation Coefficient R	0.791	0.795	0.834	0.787

	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)
Shapiro-Wilk (Detects Only)	0.656	0.918	Data Not Normal
Shapiro-Wilk (NDs = DL)	0.663	0.92	Data Not Normal
Shapiro-Wilk (NDs = DL/2)	0.733	0.92	Data Not Normal
Shapiro-Wilk (Normal ROS Estimates)	0.65	0.92	Data Not Normal
Lilliefors (Detects Only)	0.221	0.173	Data Not Normal
Lilliefors (NDs = DL)	0.229	0.17	Data Not Normal
Lilliefors (NDs = DL/2)	0.206	0.17	Data Not Normal
Lilliefors (Normal ROS Estimates)	0.221	0.17	Data Not Normal

Gamma GOF Test Results

	No NDs	NDs = DL	NDs = DL/2	Gamma ROS

Appendix B
Goodness of Fit Statistics

Correlation Coefficient R	0.832	0.834	0.867	0.827			
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)				
Anderson-Darling (Detects Only)	1.533	0.743					
Kolmogorov-Smirnov (Detects Only)	0.176	0.174	Data Not Gamma Distributed				
Anderson-Darling (NDs = DL)	1.478	0.744					
Kolmogorov-Smirnov (NDs = DL)	0.186	0.171	Data Not Gamma Distributed				
Anderson-Darling (NDs = DL/2)	1.351	0.744					
Kolmogorov-Smirnov (NDs = DL/2)	0.189	0.171	Data Not Gamma Distributed				
Anderson-Darling (Gamma ROS Estimates)	1.631	0.744					
Kolmogorov-Smirnov (Gamma ROS Est.)	0.176	0.171	Data Not Gamma Distributed				
Lognormal GOF Test Results							
	No NDs	NDs = DL	NDs = DL/2	Log ROS			
Correlation Coefficient R	0.881	0.886	0.908	0.878			
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)				
Shapiro-Wilk (Detects Only)	0.802	0.918	Data Not Lognormal				
Shapiro-Wilk (NDs = DL)	0.81	0.92	Data Not Lognormal				
Shapiro-Wilk (NDs = DL/2)	0.863	0.92	Data Not Lognormal				
Shapiro-Wilk (Lognormal ROS Estimates)	0.797	0.92	Data Not Lognormal				
Lilliefors (Detects Only)	0.163	0.173	Data Appear Lognormal				
Lilliefors (NDs = DL)	0.167	0.17	Data Appear Lognormal				
Lilliefors (NDs = DL/2)	0.195	0.17	Data Not Lognormal				
Lilliefors (Lognormal ROS Estimates)	0.166	0.17	Data Appear Lognormal				
Note: Substitution methods such as DL or DL/2 are not recommended.							
Lithium (mw-72)							
	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs	
Raw Statistics	31	5	26	24	2	7.69%	
	Number	Minimum	Maximum	Mean	Median	SD	
Statistics (Non-Detects Only)	2	0.2	0.8	0.5	0.5	0.424	
Statistics (Non-Detects Only)	24	0.33	0.89	0.394	0.37	0.108	
Statistics (All: NDs treated as DL value)	26	0.2	0.89	0.402	0.37	0.137	
Statistics (All: NDs treated as DL/2 value)	26	0.1	0.89	0.383	0.37	0.118	

Appendix B
Goodness of Fit Statistics

Statistics (Normal ROS Imputed Data)	26	0.225	0.89	0.387	0.37	0.108		
Statistics (Gamma ROS Imputed Data)	26	0.239	0.89	0.388	0.37	0.108		
Statistics (Lognormal ROS Imputed Data)	26	0.278	0.89	0.389	0.37	0.106		
	K hat	K Star	Theta hat	Log Mean	Log Stdv	Log CV		
Statistics (Non-Detects Only)	23.45	20.55	0.0168	-0.952	0.187	-0.196		
Statistics (NDs = DL)	12.94	11.47	0.0311	-0.95	0.266	-0.28		
Statistics (NDs = DL/2)	11.67	10.35	0.0328	-1.003	0.32	-0.319		
Statistics (Gamma ROS Estimates)	21.17	18.75	0.0183	-0.972	0.202	-0.208		
Statistics (Lognormal ROS Estimates)	--	--	--	-0.966	0.19	-0.197		
Normal GOF Test Results								
	No NDs	NDs = DL	NDs = DL/2	Normal ROS				
Correlation Coefficient R	0.592	0.718	0.686	0.649				
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)					
Shapiro-Wilk (Detects Only)	0.382	0.916	Data Not Normal					
Shapiro-Wilk (NDs = DL)	0.544	0.92	Data Not Normal					
Shapiro-Wilk (NDs = DL/2)	0.523	0.92	Data Not Normal					
Shapiro-Wilk (Normal ROS Estimates)	0.466	0.92	Data Not Normal					
Lilliefors (Detects Only)	0.364	0.177	Data Not Normal					
Lilliefors (NDs = DL)	0.372	0.17	Data Not Normal					
Lilliefors (NDs = DL/2)	0.339	0.17	Data Not Normal					
Lilliefors (Normal ROS Estimates)	0.343	0.17	Data Not Normal					
Gamma GOF Test Results								
	No NDs	NDs = DL	NDs = DL/2	Gamma ROS				
Correlation Coefficient R	0.643	0.77	0.721	0.685				
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)					
Anderson-Darling (Detects Only)	4.525	0.742						
Kolmogorov-Smirnov (Detects Only)	0.326	0.178	Data Not Gamma Distributed					
Anderson-Darling (NDs = DL)	4.344	0.744						
Kolmogorov-Smirnov (NDs = DL)	0.325	0.171	Data Not Gamma Distributed					
Anderson-Darling (NDs = DL/2)	4.704	0.744						
Kolmogorov-Smirnov (NDs = DL/2)	0.307	0.171	Data Not Gamma Distributed					
Anderson-Darling (Gamma ROS Estimates)	4.185	0.744						

Appendix B
Goodness of Fit Statistics

Kolmogorov-Smirnov (Gamma ROS Est.)	0.306	0.171	Data Not Gamma Distributed					
Lognormal GOF Test Results								
	No NDs	NDs = DL	NDs = DL/2	Log ROS				
Correlation Coefficient R	0.674	0.79	0.698	0.725				
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)					
Shapiro-Wilk (Detects Only)	0.489	0.916	Data Not Lognormal					
Shapiro-Wilk (NDs = DL)	0.66	0.92	Data Not Lognormal					
Shapiro-Wilk (NDs = DL/2)	0.541	0.92	Data Not Lognormal					
Shapiro-Wilk (Lognormal ROS Estimates)	0.571	0.92	Data Not Lognormal					
Lilliefors (Detects Only)	0.31	0.177	Data Not Lognormal					
Lilliefors (NDs = DL)	0.302	0.17	Data Not Lognormal					
Lilliefors (NDs = DL/2)	0.332	0.17	Data Not Lognormal					
Lilliefors (Lognormal ROS Estimates)	0.295	0.17	Data Not Lognormal					
Note: Substitution methods such as DL or DL/2 are not recommended.								
Lithium (mw-73)								
	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs		
Raw Statistics	25	4	21	19	2	9.52%		
	Number	Minimum	Maximum	Mean	Median	SD		
Statistics (Non-Detects Only)	2	0.2	0.2	0.2	0.2	0		
Statistics (Non-Detects Only)	19	0.21	0.65	0.291	0.27	0.0963		
Statistics (All: NDs treated as DL value)	21	0.2	0.65	0.282	0.26	0.0954		
Statistics (All: NDs treated as DL/2 value)	21	0.1	0.65	0.272	0.26	0.108		
Statistics (Normal ROS Imputed Data)	21	0.0881	0.65	0.273	0.26	0.107		
Statistics (Gamma ROS Imputed Data)	21	0.115	0.65	0.275	0.26	0.104		
Statistics (Lognormal ROS Imputed Data)	21	0.154	0.65	0.278	0.26	0.0993		
	K hat	K Star	Theta hat	Log Mean	Log Stdv	Log CV		
Statistics (Non-Detects Only)	14.04	11.86	0.0207	-1.272	0.254	-0.2		
Statistics (NDs = DL)	13.31	11.44	0.0212	-1.304	0.261	-0.2		
Statistics (NDs = DL/2)	7.339	6.322	0.0371	-1.37	0.393	-0.287		
Statistics (Gamma ROS Estimates)	8.978	7.727	0.0306	-1.348	0.341	-0.253		
Statistics (Lognormal ROS Estimates)	--	--	--	-1.325	0.293	-0.221		

Appendix B
Goodness of Fit Statistics

Normal GOF Test Results					
	No NDs	NDs = DL	NDs = DL/2	Normal ROS	
Correlation Coefficient R	0.79	0.804	0.87	0.871	
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)		
Shapiro-Wilk (Detects Only)	0.65	0.901	Data Not Normal		
Shapiro-Wilk (NDs = DL)	0.67	0.908	Data Not Normal		
Shapiro-Wilk (NDs = DL/2)	0.785	0.908	Data Not Normal		
Shapiro-Wilk (Normal ROS Estimates)	0.789	0.908	Data Not Normal		
Lilliefors (Detects Only)	0.251	0.197	Data Not Normal		
Lilliefors (NDs = DL)	0.224	0.188	Data Not Normal		
Lilliefors (NDs = DL/2)	0.218	0.188	Data Not Normal		
Lilliefors (Normal ROS Estimates)	0.218	0.188	Data Not Normal		
Gamma GOF Test Results					
	No NDs	NDs = DL	NDs = DL/2	Gamma ROS	
Correlation Coefficient R	0.841	0.855	0.901	0.898	
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)		
Anderson-Darling (Detects Only)	1.156	0.741			
Kolmogorov-Smirnov (Detects Only)	0.192	0.198	Detected Data appear Approximate Gamma Distribution		
Anderson-Darling (NDs = DL)	1.023	0.743			
Kolmogorov-Smirnov (NDs = DL)	0.165	0.189	Detected Data appear Approximate Gamma Distribution		
Anderson-Darling (NDs = DL/2)	1.136	0.744			
Kolmogorov-Smirnov (NDs = DL/2)	0.196	0.19	Data Not Gamma Distributed		
Anderson-Darling (Gamma ROS Estimates)	0.861	0.743			
Kolmogorov-Smirnov (Gamma ROS Est.)	0.173	0.19	Detected Data appear Approximate Gamma Distribution		
Lognormal GOF Test Results					
	No NDs	NDs = DL	NDs = DL/2	Log ROS	
Correlation Coefficient R	0.892	0.91	0.91	0.942	
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)		
Shapiro-Wilk (Detects Only)	0.815	0.901	Data Not Lognormal		
Shapiro-Wilk (NDs = DL)	0.842	0.908	Data Not Lognormal		

Appendix B
Goodness of Fit Statistics

Shapiro-Wilk (NDs = DL/2)	0.847	0.908	Data Not Lognormal					
Shapiro-Wilk (Lognormal ROS Estimates)	0.907	0.908	Data Not Lognormal					
Lilliefors (Detects Only)	0.171	0.197	Data Appear Lognormal					
Lilliefors (NDs = DL)	0.147	0.188	Data Appear Lognormal					
Lilliefors (NDs = DL/2)	0.219	0.188	Data Not Lognormal					
Lilliefors (Lognormal ROS Estimates)	0.153	0.188	Data Appear Lognormal					
Note: Substitution methods such as DL or DL/2 are not recommended.								
Mercury (mw-62)								
	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs		
Raw Statistics	31	11	20	3	17	85.00%		
	Number	Minimum	Maximum	Mean	Median	SD		
Statistics (Non-Detects Only)	17	2.0000E-4	2.0000E-4	2.0000E-4	2.0000E-4	5.588E-20		
Statistics (Non-Detects Only)	3	2.5000E-4	4.4000E-4	3.5333E-4	3.7000E-4	9.6090E-5		
Statistics (All: NDs treated as DL value)	20	2.0000E-4	4.4000E-4	2.2300E-4	2.0000E-4	6.4245E-5		
Statistics (All: NDs treated as DL/2 value)	20	1.0000E-4	4.4000E-4	1.3800E-4	1.0000E-4	9.7904E-5		
Statistics (Normal ROS Imputed Data)	20	-6.694E-4	4.4000E-4	-1.231E-4	-1.298E-4	2.9925E-4		
Statistics (Gamma ROS Imputed Data)	20	2.5000E-4	0.01	0.00855	0.01	0.00353		
Statistics (Lognormal ROS Imputed Data)	20	1.6837E-5	4.4000E-4	1.2169E-4	8.2836E-5	1.1438E-4		
	K hat	K Star	Theta hat	Log Mean	Log Stdv	Log CV		
Statistics (Non-Detects Only)	N/A	N/A	N/A	N/A	N/A	N/A		
Statistics (NDs = DL)	18.34	15.62	1.2161E-5	-8.436	0.22	-0.0261		
Statistics (NDs = DL/2)	3.814	3.276	3.6179E-5	-9.025	0.462	-0.0512		
Statistics (Gamma ROS Estimates)	1.578	1.375	0.00542	-5.111	1.238	-0.242		
Statistics (Lognormal ROS Estimates)	--	--	--	-9.38	0.883	-0.0941		
Normal GOF Test Results								
	No NDs	NDs = DL	NDs = DL/2	Normal ROS				
Correlation Coefficient R	0.989	0.632	0.66	0.998				
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)					
Shapiro-Wilk (Detects Only)	0.977	0.767	Data Appear Normal					
Shapiro-Wilk (NDs = DL)	0.418	0.905	Data Not Normal					
Shapiro-Wilk (NDs = DL/2)	0.45	0.905	Data Not Normal					

Appendix B
Goodness of Fit Statistics

Shapiro-Wilk (Normal ROS Estimates)	0.99	0.905	Data Appear Normal		
Lilliefors (Detects Only)	0.236	0.425	Data Appear Normal		
Lilliefors (NDs = DL)	0.49	0.192	Data Not Normal		
Lilliefors (NDs = DL/2)	0.501	0.192	Data Not Normal		
Lilliefors (Normal ROS Estimates)	0.0503	0.192	Data Appear Normal		
Gamma GOF Test Results					
	No NDs	NDs = DL	NDs = DL/2	Gamma ROS	
Correlation Coefficient R	N/A	0.698	0.785	0.448	
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)		
Anderson-Darling (Detects Only)	N/A	N/A			
Kolmogorov-Smirnov (Detects Only)	N/A	N/A			
Anderson-Darling (NDs = DL)	5.607	0.741			
Kolmogorov-Smirnov (NDs = DL)	0.498	0.194	Data Not Gamma Distributed		
Anderson-Darling (NDs = DL/2)	5.624	0.746			
Kolmogorov-Smirnov (NDs = DL/2)	0.513	0.195	Data Not Gamma Distributed		
Anderson-Darling (Gamma ROS Estimates)	6.091	0.757			
Kolmogorov-Smirnov (Gamma ROS Est.)	0.53	0.197	Data Not Gamma Distributed		
Lognormal GOF Test Results					
	No NDs	NDs = DL	NDs = DL/2	Log ROS	
Correlation Coefficient R	0.976	0.643	0.666	0.998	
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)		
Shapiro-Wilk (Detects Only)	0.952	0.767	Data Appear Lognormal		
Shapiro-Wilk (NDs = DL)	0.43	0.905	Data Not Lognormal		
Shapiro-Wilk (NDs = DL/2)	0.453	0.905	Data Not Lognormal		
Shapiro-Wilk (Lognormal ROS Estimates)	0.989	0.905	Data Appear Lognormal		
Lilliefors (Detects Only)	0.266	0.425	Data Appear Lognormal		
Lilliefors (NDs = DL)	0.494	0.192	Data Not Lognormal		
Lilliefors (NDs = DL/2)	0.506	0.192	Data Not Lognormal		
Lilliefors (Lognormal ROS Estimates)	0.053	0.192	Data Appear Lognormal		
Note: Substitution methods such as DL or DL/2 are not recommended.					
Mercury (mw-63)					

Appendix B
Goodness of Fit Statistics

	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs
Raw Statistics	30	10	20	0	20	100.00%

Warning: All observations are Non-Detects (NDs), therefore all statistics and estimates should also be NDs!
Specifically, sample mean, UCLs, UPLs, and other statistics are also NDs lying below the largest detection limit!
The Project Team may decide to use alternative site specific values to estimate environmental parameters (e.g., EPC, BTV).

The data set for variable Mercury (mw-63) was not processed!

Mercury (mw-64)

	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs
Raw Statistics	30	10	20	0	20	100.00%

Warning: All observations are Non-Detects (NDs), therefore all statistics and estimates should also be NDs!
Specifically, sample mean, UCLs, UPLs, and other statistics are also NDs lying below the largest detection limit!
The Project Team may decide to use alternative site specific values to estimate environmental parameters (e.g., EPC, BTV).

The data set for variable Mercury (mw-64) was not processed!

Mercury (mw-65)

	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs
Raw Statistics	30	10	20	0	20	100.00%

Warning: All observations are Non-Detects (NDs), therefore all statistics and estimates should also be NDs!
Specifically, sample mean, UCLs, UPLs, and other statistics are also NDs lying below the largest detection limit!
The Project Team may decide to use alternative site specific values to estimate environmental parameters (e.g., EPC, BTV).

The data set for variable Mercury (mw-65) was not processed!

Mercury (mw-71)

Appendix B
Goodness of Fit Statistics

	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs
Raw Statistics	31	7	24	0	24	100.00%

Warning: All observations are Non-Detects (NDs), therefore all statistics and estimates should also be NDs!
Specifically, sample mean, UCLs, UPLs, and other statistics are also NDs lying below the largest detection limit!
The Project Team may decide to use alternative site specific values to estimate environmental parameters (e.g., EPC, BTV).

The data set for variable Mercury (mw-71) was not processed!

Mercury (mw-72)

	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs
Raw Statistics	31	7	24	0	24	100.00%

Warning: All observations are Non-Detects (NDs), therefore all statistics and estimates should also be NDs!
Specifically, sample mean, UCLs, UPLs, and other statistics are also NDs lying below the largest detection limit!
The Project Team may decide to use alternative site specific values to estimate environmental parameters (e.g., EPC, BTV).

The data set for variable Mercury (mw-72) was not processed!

Mercury (mw-73)

	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs
Raw Statistics	25	6	19	0	19	100.00%

Warning: All observations are Non-Detects (NDs), therefore all statistics and estimates should also be NDs!
Specifically, sample mean, UCLs, UPLs, and other statistics are also NDs lying below the largest detection limit!
The Project Team may decide to use alternative site specific values to estimate environmental parameters (e.g., EPC, BTV).

The data set for variable Mercury (mw-73) was not processed!

Molybdenum (mw-62)

Appendix B
Goodness of Fit Statistics

	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs
Raw Statistics	31	11	20	19	1	5.00%

	Number	Minimum	Maximum	Mean	Median	SD
Statistics (Non-Detects Only)	1	0.002	0.002	0.002	0.002	N/A
Statistics (Non-Detects Only)	19	0.0012	0.012	0.00347	0.003	0.00218
Statistics (All: NDs treated as DL value)	20	0.0012	0.012	0.0034	0.00295	0.00214
Statistics (All: NDs treated as DL/2 value)	20	0.001	0.012	0.00335	0.00295	0.00219
Statistics (Normal ROS Imputed Data)	20	4.2498E-4	0.012	0.00332	0.00295	0.00223
Statistics (Gamma ROS Imputed Data)	20	0.0012	0.012	0.0038	0.003	0.00257
Statistics (Lognormal ROS Imputed Data)	20	0.0012	0.012	0.00337	0.00295	0.00216

	K hat	K Star	Theta hat	Log Mean	Log Stdv	Log CV
Statistics (Non-Detects Only)	4.987	4.235	6.9547E-4	-5.768	0.421	-0.073
Statistics (NDs = DL)	4.943	4.235	6.8681E-4	-5.79	0.422	-0.0729
Statistics (NDs = DL/2)	4.18	3.586	8.0028E-4	-5.825	0.483	-0.0829
Statistics (Gamma ROS Estimates)	3.85	3.306	9.8571E-4	-5.71	0.485	-0.085
Statistics (Lognormal ROS Estimates)	--	--	--	-5.804	0.441	-0.076

Normal GOF Test Results

	No NDs	NDs = DL	NDs = DL/2	Normal ROS
Correlation Coefficient R	0.701	0.709	0.732	0.746

	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)
Shapiro-Wilk (Detects Only)	0.528	0.901	Data Not Normal
Shapiro-Wilk (NDs = DL)	0.538	0.905	Data Not Normal
Shapiro-Wilk (NDs = DL/2)	0.57	0.905	Data Not Normal
Shapiro-Wilk (Normal ROS Estimates)	0.594	0.905	Data Not Normal
Lilliefors (Detects Only)	0.318	0.197	Data Not Normal
Lilliefors (NDs = DL)	0.312	0.192	Data Not Normal
Lilliefors (NDs = DL/2)	0.304	0.192	Data Not Normal
Lilliefors (Normal ROS Estimates)	0.299	0.192	Data Not Normal

Gamma GOF Test Results

	No NDs	NDs = DL	NDs = DL/2	Gamma ROS
Correlation Coefficient R	0.788	0.794	0.813	0.857

Appendix B
Goodness of Fit Statistics

	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)
Anderson-Darling (Detects Only)	2.118	0.742	
Kolmogorov-Smirnov (Detects Only)	0.25	0.199	Data Not Gamma Distributed
Anderson-Darling (NDs = DL)	1.946	0.745	
Kolmogorov-Smirnov (NDs = DL)	0.242	0.194	Data Not Gamma Distributed
Anderson-Darling (NDs = DL/2)	1.834	0.745	
Kolmogorov-Smirnov (NDs = DL/2)	0.226	0.195	Data Not Gamma Distributed
Anderson-Darling (Gamma ROS Estimates)	2.345	0.746	
Kolmogorov-Smirnov (Gamma ROS Est.)	0.273	0.195	Data Not Gamma Distributed

Lognormal GOF Test Results

	No NDs	NDs = DL	NDs = DL/2	Log ROS
Correlation Coefficient R	0.859	0.879	0.888	0.889

	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)
Shapiro-Wilk (Detects Only)	0.781	0.901	Data Not Lognormal
Shapiro-Wilk (NDs = DL)	0.81	0.905	Data Not Lognormal
Shapiro-Wilk (NDs = DL/2)	0.821	0.905	Data Not Lognormal
Shapiro-Wilk (Lognormal ROS Estimates)	0.825	0.905	Data Not Lognormal
Lilliefors (Detects Only)	0.215	0.197	Data Not Lognormal
Lilliefors (NDs = DL)	0.207	0.192	Data Not Lognormal
Lilliefors (NDs = DL/2)	0.226	0.192	Data Not Lognormal
Lilliefors (Lognormal ROS Estimates)	0.201	0.192	Data Not Lognormal

Note: Substitution methods such as DL or DL/2 are not recommended.

Molybdenum (mw-63)

Raw Statistics	
Number of Valid Observations	20
Number of Missing Observations	10
Number of Distinct Observations	14
Minimum	0.0019
Maximum	0.017
Mean of Raw Data	0.00349
Standard Deviation of Raw Data	0.00329
Khat	3.099

Appendix B
Goodness of Fit Statistics

Theta hat	0.00113
Kstar	2.667
Theta star	0.00131
Mean of Log Transformed Data	-5.828
Standard Deviation of Log Transformed Data	0.481
Normal GOF Test Results	
Correlation Coefficient R	0.626
Shapiro Wilk Test Statistic	0.421
Shapiro Wilk Critical (0.05) Value	0.905
Approximate Shapiro Wilk P Value	1.9200E-9
Lilliefors Test Statistic	0.387
Lilliefors Critical (0.05) Value	0.192
Data not Normal at (0.05) Significance Level	
Gamma GOF Test Results	
Correlation Coefficient R	0.759
A-D Test Statistic	3.024
A-D Critical (0.05) Value	0.747
K-S Test Statistic	0.305
K-S Critical(0.05) Value	0.195
Data not Gamma Distributed at (0.05) Significance Level	
Lognormal GOF Test Results	
Correlation Coefficient R	0.805
Shapiro Wilk Test Statistic	0.672
Shapiro Wilk Critical (0.05) Value	0.905
Approximate Shapiro Wilk P Value	4.0557E-6
Lilliefors Test Statistic	0.257
Lilliefors Critical (0.05) Value	0.192
Data not Lognormal at (0.05) Significance Level	
Non-parametric GOF Test Results	
Data do not follow a discernible distribution at (0.05) Level of Significance	

Appendix B
Goodness of Fit Statistics

Molybdenum (mw-64)	
Raw Statistics	
Number of Valid Observations	20
Number of Missing Observations	10
Number of Distinct Observations	11
Minimum	0.0042
Maximum	0.0073
Mean of Raw Data	0.00501
Standard Deviation of Raw Data	6.3735E-4
Khat	75.8
Theta hat	6.6097E-5
Kstar	64.46
Theta star	7.7721E-5
Mean of Log Transformed Data	-5.303
Standard Deviation of Log Transformed Data	0.114
Normal GOF Test Results	
Correlation Coefficient R	0.848
Shapiro Wilk Test Statistic	0.747
Shapiro Wilk Critical (0.05) Value	0.905
Approximate Shapiro Wilk P Value	6.0004E-5
Lilliefors Test Statistic	0.283
Lilliefors Critical (0.05) Value	0.192
Data not Normal at (0.05) Significance Level	
Gamma GOF Test Results	
Correlation Coefficient R	0.869
A-D Test Statistic	1.139
A-D Critical (0.05) Value	0.74
K-S Test Statistic	0.258
K-S Critical(0.05) Value	0.193
Data not Gamma Distributed at (0.05) Significance Level	
Lognormal GOF Test Results	
Correlation Coefficient R	0.892

Appendix B
Goodness of Fit Statistics

Shapiro Wilk Test Statistic	0.822
Shapiro Wilk Critical (0.05) Value	0.905
Approximate Shapiro Wilk P Value	0.00121
Lilliefors Test Statistic	0.25
Lilliefors Critical (0.05) Value	0.192
Data not Lognormal at (0.05) Significance Level	
Non-parametric GOF Test Results	
Data do not follow a discernible distribution at (0.05) Level of Significance	
Molybdenum (mw-65)	
Raw Statistics	
Number of Valid Observations	20
Number of Missing Observations	10
Number of Distinct Observations	16
Minimum	0.0066
Maximum	0.013
Mean of Raw Data	0.0086
Standard Deviation of Raw Data	0.0014
Khat	44.36
Theta hat	1.9388E-4
Kstar	37.74
Theta star	2.2789E-4
Mean of Log Transformed Data	-4.767
Standard Deviation of Log Transformed Data	0.151
Normal GOF Test Results	
Correlation Coefficient R	0.928
Shapiro Wilk Test Statistic	0.879
Shapiro Wilk Critical (0.05) Value	0.905
Approximate Shapiro Wilk P Value	0.0154
Lilliefors Test Statistic	0.157
Lilliefors Critical (0.05) Value	0.192
Data appear Approximate Normal at (0.05) Significance Level	
Gamma GOF Test Results	

Appendix B
Goodness of Fit Statistics

Correlation Coefficient R	0.946						
A-D Test Statistic	0.451						
A-D Critical (0.05) Value	0.74						
K-S Test Statistic	0.142						
K-S Critical(0.05) Value	0.193						
Data appear Gamma Distributed at (0.05) Significance Level							
Lognormal GOF Test Results							
Correlation Coefficient R	0.963						
Shapiro Wilk Test Statistic	0.94						
Shapiro Wilk Critical (0.05) Value	0.905						
Approximate Shapiro Wilk P Value	0.236						
Lilliefors Test Statistic	0.132						
Lilliefors Critical (0.05) Value	0.192						
Data appear Lognormal at (0.05) Significance Level							

Molybdenum (mw-71)

	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs
Raw Statistics	31	5	26	10	16	61.54%

	Number	Minimum	Maximum	Mean	Median	SD
Statistics (Non-Detects Only)	16	0.001	0.01	0.003	0.002	0.00242
Statistics (Non-Detects Only)	10	5.2000E-4	0.0028	0.00132	0.00105	8.1459E-4
Statistics (All: NDs treated as DL value)	26	5.2000E-4	0.01	0.00235	0.002	0.00211
Statistics (All: NDs treated as DL/2 value)	26	5.0000E-4	0.005	0.00143	0.001	0.00106
Statistics (Normal ROS Imputed Data)	26	1.1033E-4	0.0028	0.00106	9.0751E-4	6.4679E-4
Statistics (Gamma ROS Imputed Data)	26	5.2000E-4	0.01	0.00666	0.01	0.00434
Statistics (Lognormal ROS Imputed Data)	26	4.3941E-4	0.0028	0.00104	8.1575E-4	5.9214E-4

	K hat	K Star	Theta hat	Log Mean	Log Stdv	Log CV
Statistics (Non-Detects Only)	3.166	2.283	4.1560E-4	-6.799	0.603	-0.0887
Statistics (NDs = DL)	1.868	1.678	0.00126	-6.343	0.752	-0.119
Statistics (NDs = DL/2)	2.435	2.18	5.8699E-4	-6.77	0.656	-0.0969
Statistics (Gamma ROS Estimates)	1.284	1.162	0.00519	-5.449	1.147	-0.211
Statistics (Lognormal ROS Estimates)	--	--	--	-6.995	0.488	-0.0697

Appendix B
Goodness of Fit Statistics

Normal GOF Test Results					
	No NDs	NDs = DL	NDs = DL/2	Normal ROS	
Correlation Coefficient R	0.937	0.849	0.882	0.963	
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)		
Shapiro-Wilk (Detects Only)	0.863	0.842	Data Appear Normal		
Shapiro-Wilk (NDs = DL)	0.735	0.92	Data Not Normal		
Shapiro-Wilk (NDs = DL/2)	0.786	0.92	Data Not Normal		
Shapiro-Wilk (Normal ROS Estimates)	0.928	0.92	Data Appear Normal		
Lilliefors (Detects Only)	0.241	0.262	Data Appear Normal		
Lilliefors (NDs = DL)	0.297	0.17	Data Not Normal		
Lilliefors (NDs = DL/2)	0.272	0.17	Data Not Normal		
Lilliefors (Normal ROS Estimates)	0.121	0.17	Data Appear Normal		
Gamma GOF Test Results					
	No NDs	NDs = DL	NDs = DL/2	Gamma ROS	
Correlation Coefficient R	0.976	0.951	0.959	0.666	
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)		
Anderson-Darling (Detects Only)	0.44	0.732			
Kolmogorov-Smirnov (Detects Only)	0.239	0.268	Detected Data Appear Gamma Distributed		
Anderson-Darling (NDs = DL)	0.934	0.758			
Kolmogorov-Smirnov (NDs = DL)	0.218	0.174	Data Not Gamma Distributed		
Anderson-Darling (NDs = DL/2)	1.1	0.754			
Kolmogorov-Smirnov (NDs = DL/2)	0.235	0.173	Data Not Gamma Distributed		
Anderson-Darling (Gamma ROS Estimates)	3.833	0.767			
Kolmogorov-Smirnov (Gamma ROS Est.)	0.398	0.175	Data Not Gamma Distributed		
Lognormal GOF Test Results					
	No NDs	NDs = DL	NDs = DL/2	Log ROS	
Correlation Coefficient R	0.971	0.976	0.962	0.981	
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)		
Shapiro-Wilk (Detects Only)	0.922	0.842	Data Appear Lognormal		
Shapiro-Wilk (NDs = DL)	0.949	0.92	Data Appear Lognormal		
Shapiro-Wilk (NDs = DL/2)	0.913	0.92	Data Not Lognormal		

Appendix B
Goodness of Fit Statistics

Shapiro-Wilk (Lognormal ROS Estimates)	0.955	0.92	Data Appear Lognormal					
Lilliefors (Detects Only)	0.216	0.262	Data Appear Lognormal					
Lilliefors (NDs = DL)	0.163	0.17	Data Appear Lognormal					
Lilliefors (NDs = DL/2)	0.199	0.17	Data Not Lognormal					
Lilliefors (Lognormal ROS Estimates)	0.12	0.17	Data Appear Lognormal					
Note: Substitution methods such as DL or DL/2 are not recommended.								
Molybdenum (mw-72)								
	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs		
Raw Statistics	31	5	26	14	12	46.15%		
	Number	Minimum	Maximum	Mean	Median	SD		
Statistics (Non-Detects Only)	12	0.001	0.01	0.00325	0.002	0.0026		
Statistics (Non-Detects Only)	14	5.5000E-4	0.011	0.00371	0.00125	0.00403		
Statistics (All: NDs treated as DL value)	26	5.5000E-4	0.011	0.0035	0.002	0.00339		
Statistics (All: NDs treated as DL/2 value)	26	5.0000E-4	0.011	0.00275	0.001	0.00321		
Statistics (Normal ROS Imputed Data)	26	-0.00185	0.011	0.00257	0.00149	0.00337		
Statistics (Gamma ROS Imputed Data)	26	5.5000E-4	0.011	0.00661	0.01	0.00432		
Statistics (Lognormal ROS Imputed Data)	26	3.8956E-4	0.011	0.00251	0.0011	0.00321		
	K hat	K Star	Theta hat	Log Mean	Log Stdv	Log CV		
Statistics (Non-Detects Only)	0.996	0.83	0.00373	-6.177	1.113	-0.18		
Statistics (NDs = DL)	1.32	1.194	0.00265	-6.08	0.932	-0.153		
Statistics (NDs = DL/2)	1.132	1.027	0.00243	-6.4	0.958	-0.15		
Statistics (Gamma ROS Estimates)	1.297	1.173	0.0051	-5.451	1.132	-0.208		
Statistics (Lognormal ROS Estimates)	--	--	--	-6.521	0.951	-0.146		
Normal GOF Test Results								
	No NDs	NDs = DL	NDs = DL/2	Normal ROS				
Correlation Coefficient R	0.872	0.882	0.827	0.898				
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)					
Shapiro-Wilk (Detects Only)	0.744	0.874	Data Not Normal					
Shapiro-Wilk (NDs = DL)	0.766	0.92	Data Not Normal					
Shapiro-Wilk (NDs = DL/2)	0.68	0.92	Data Not Normal					
Shapiro-Wilk (Normal ROS Estimates)	0.806	0.92	Data Not Normal					

Appendix B
Goodness of Fit Statistics

Lilliefors (Detects Only)	0.307	0.226	Data Not Normal		
Lilliefors (NDs = DL)	0.325	0.17	Data Not Normal		
Lilliefors (NDs = DL/2)	0.3	0.17	Data Not Normal		
Lilliefors (Normal ROS Estimates)	0.247	0.17	Data Not Normal		
Gamma GOF Test Results					
	No NDs	NDs = DL	NDs = DL/2	Gamma ROS	
Correlation Coefficient R	0.937	0.956	0.953	0.728	
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)		
Anderson-Darling (Detects Only)	1.177	0.76			
Kolmogorov-Smirnov (Detects Only)	0.256	0.235	Data Not Gamma Distributed		
Anderson-Darling (NDs = DL)	1.317	0.766			
Kolmogorov-Smirnov (NDs = DL)	0.266	0.175	Data Not Gamma Distributed		
Anderson-Darling (NDs = DL/2)	2.047	0.77			
Kolmogorov-Smirnov (NDs = DL/2)	0.273	0.176	Data Not Gamma Distributed		
Anderson-Darling (Gamma ROS Estimates)	3.408	0.766			
Kolmogorov-Smirnov (Gamma ROS Est.)	0.335	0.175	Data Not Gamma Distributed		
Lognormal GOF Test Results					
	No NDs	NDs = DL	NDs = DL/2	Log ROS	
Correlation Coefficient R	0.932	0.962	0.94	0.937	
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)		
Shapiro-Wilk (Detects Only)	0.846	0.874	Data Not Lognormal		
Shapiro-Wilk (NDs = DL)	0.908	0.92	Data Not Lognormal		
Shapiro-Wilk (NDs = DL/2)	0.87	0.92	Data Not Lognormal		
Shapiro-Wilk (Lognormal ROS Estimates)	0.869	0.92	Data Not Lognormal		
Lilliefors (Detects Only)	0.216	0.226	Data Appear Lognormal		
Lilliefors (NDs = DL)	0.211	0.17	Data Not Lognormal		
Lilliefors (NDs = DL/2)	0.244	0.17	Data Not Lognormal		
Lilliefors (Lognormal ROS Estimates)	0.175	0.17	Data Not Lognormal		
Note: Substitution methods such as DL or DL/2 are not recommended.					
Molybdenum (mw-73)					

Appendix B
Goodness of Fit Statistics

	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs
Raw Statistics	25	4	21	14	7	33.33%

	Number	Minimum	Maximum	Mean	Median	SD
Statistics (Non-Detects Only)	7	0.002	0.01	0.00486	0.005	0.00267
Statistics (Non-Detects Only)	14	9.3000E-4	0.0086	0.00263	0.00215	0.002
Statistics (All: NDs treated as DL value)	21	9.3000E-4	0.01	0.00337	0.0024	0.00243
Statistics (All: NDs treated as DL/2 value)	21	9.3000E-4	0.0086	0.00256	0.0024	0.00177
Statistics (Normal ROS Imputed Data)	21	5.8120E-4	0.0086	0.00239	0.002	0.00175
Statistics (Gamma ROS Imputed Data)	21	9.3000E-4	0.01	0.00509	0.0035	0.00391
Statistics (Lognormal ROS Imputed Data)	21	9.3000E-4	0.0086	0.00235	0.00196	0.0017

	K hat	K Star	Theta hat	Log Mean	Log Stdv	Log CV
Statistics (Non-Detects Only)	2.692	2.162	9.7740E-4	-6.138	0.621	-0.101
Statistics (NDs = DL)	2.425	2.11	0.00139	-5.912	0.675	-0.114
Statistics (NDs = DL/2)	2.986	2.591	8.5854E-4	-6.143	0.591	-0.0962
Statistics (Gamma ROS Estimates)	1.592	1.397	0.00319	-5.627	0.894	-0.159
Statistics (Lognormal ROS Estimates)	--	--	--	-6.222	0.556	-0.0893

Normal GOF Test Results

	No NDs	NDs = DL	NDs = DL/2	Normal ROS
Correlation Coefficient R	0.859	0.913	0.875	0.87

	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)
Shapiro-Wilk (Detects Only)	0.756	0.874	Data Not Normal
Shapiro-Wilk (NDs = DL)	0.835	0.908	Data Not Normal
Shapiro-Wilk (NDs = DL/2)	0.78	0.908	Data Not Normal
Shapiro-Wilk (Normal ROS Estimates)	0.776	0.908	Data Not Normal
Lilliefors (Detects Only)	0.22	0.226	Data Appear Normal
Lilliefors (NDs = DL)	0.196	0.188	Data Not Normal
Lilliefors (NDs = DL/2)	0.254	0.188	Data Not Normal
Lilliefors (Normal ROS Estimates)	0.197	0.188	Data Not Normal

Gamma GOF Test Results

	No NDs	NDs = DL	NDs = DL/2	Gamma ROS
Correlation Coefficient R	0.949	0.978	0.955	0.857

Appendix B
Goodness of Fit Statistics

	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)
Anderson-Darling (Detects Only)	0.418	0.744	
Kolmogorov-Smirnov (Detects Only)	0.141	0.231	Detected Data Appear Gamma Distributed
Anderson-Darling (NDs = DL)	0.467	0.752	
Kolmogorov-Smirnov (NDs = DL)	0.138	0.191	Data Appear Gamma Distributed
Anderson-Darling (NDs = DL/2)	0.552	0.749	
Kolmogorov-Smirnov (NDs = DL/2)	0.175	0.191	Data Appear Gamma Distributed
Anderson-Darling (Gamma ROS Estimates)	1.395	0.757	
Kolmogorov-Smirnov (Gamma ROS Est.)	0.221	0.193	Data Not Gamma Distributed

Lognormal GOF Test Results

	No NDs	NDs = DL	NDs = DL/2	Log ROS
Correlation Coefficient R	0.976	0.985	0.974	0.969

	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)
Shapiro-Wilk (Detects Only)	0.952	0.874	Data Appear Lognormal
Shapiro-Wilk (NDs = DL)	0.961	0.908	Data Appear Lognormal
Shapiro-Wilk (NDs = DL/2)	0.945	0.908	Data Appear Lognormal
Shapiro-Wilk (Lognormal ROS Estimates)	0.94	0.908	Data Appear Lognormal
Lilliefors (Detects Only)	0.114	0.226	Data Appear Lognormal
Lilliefors (NDs = DL)	0.104	0.188	Data Appear Lognormal
Lilliefors (NDs = DL/2)	0.135	0.188	Data Appear Lognormal
Lilliefors (Lognormal ROS Estimates)	0.103	0.188	Data Appear Lognormal

Note: Substitution methods such as DL or DL/2 are not recommended.

Total Radium (mw-62)

	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs
Raw Statistics	31	9	22	14	8	36.36%

	Number	Minimum	Maximum	Mean	Median	SD
Statistics (Non-Detects Only)	8	0.6	0.7	0.638	0.6	0.0518
Statistics (Non-Detects Only)	14	0.6	1.9	1.143	1.05	0.372
Statistics (All: NDs treated as DL value)	22	0.6	1.9	0.959	0.9	0.385
Statistics (All: NDs treated as DL/2 value)	22	0.3	1.9	0.843	0.9	0.501
Statistics (Normal ROS Imputed Data)	22	-0.176	1.9	0.804	0.9	0.561
Statistics (Gamma ROS Imputed Data)	22	0.0923	1.9	0.855	0.9	0.497

Appendix B
Goodness of Fit Statistics

Statistics (Lognormal ROS Imputed Data)	22	0.347	1.9	0.907	0.9	0.437		
	K hat	K Star	Theta hat	Log Mean	Log Stdv	Log CV		
Statistics (Non-Detects Only)	10.42	8.231	0.11	0.085	0.325	3.827		
Statistics (NDs = DL)	7.403	6.423	0.13	-0.111	0.371	-3.357		
Statistics (NDs = DL/2)	2.755	2.409	0.306	-0.363	0.66	-1.819		
Statistics (Gamma ROS Estimates)	2.46	2.155	0.347	-0.374	0.754	-2.018		
Statistics (Lognormal ROS Estimates)	--	--	--	-0.209	0.487	-2.33		
Normal GOF Test Results								
	No NDs	NDs = DL	NDs = DL/2	Normal ROS				
Correlation Coefficient R	0.974	0.93	0.955	0.993				
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)					
Shapiro-Wilk (Detects Only)	0.946	0.874	Data Appear Normal					
Shapiro-Wilk (NDs = DL)	0.857	0.911	Data Not Normal					
Shapiro-Wilk (NDs = DL/2)	0.899	0.911	Data Not Normal					
Shapiro-Wilk (Normal ROS Estimates)	0.98	0.911	Data Appear Normal					
Lilliefors (Detects Only)	0.189	0.226	Data Appear Normal					
Lilliefors (NDs = DL)	0.204	0.184	Data Not Normal					
Lilliefors (NDs = DL/2)	0.201	0.184	Data Not Normal					
Lilliefors (Normal ROS Estimates)	0.114	0.184	Data Appear Normal					
Gamma GOF Test Results								
	No NDs	NDs = DL	NDs = DL/2	Gamma ROS				
Correlation Coefficient R	0.987	0.97	0.97	0.978				
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)					
Anderson-Darling (Detects Only)	0.273	0.735						
Kolmogorov-Smirnov (Detects Only)	0.151	0.229	Detected Data Appear Gamma Distributed					
Anderson-Darling (NDs = DL)	0.89	0.745						
Kolmogorov-Smirnov (NDs = DL)	0.209	0.186	Data Not Gamma Distributed					
Anderson-Darling (NDs = DL/2)	0.958	0.751						
Kolmogorov-Smirnov (NDs = DL/2)	0.219	0.187	Data Not Gamma Distributed					
Anderson-Darling (Gamma ROS Estimates)	0.265	0.753						
Kolmogorov-Smirnov (Gamma ROS Est.)	0.161	0.187	Data Appear Gamma Distributed					

Appendix B
Goodness of Fit Statistics

Lognormal GOF Test Results

	No NDs	NDs = DL	NDs = DL/2	Log ROS
Correlation Coefficient R	0.987	0.954	0.944	0.989

	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)
Shapiro-Wilk (Detects Only)	0.971	0.874	Data Appear Lognormal
Shapiro-Wilk (NDs = DL)	0.896	0.911	Data Not Lognormal
Shapiro-Wilk (NDs = DL/2)	0.872	0.911	Data Not Lognormal
Shapiro-Wilk (Lognormal ROS Estimates)	0.967	0.911	Data Appear Lognormal
Lilliefors (Detects Only)	0.136	0.226	Data Appear Lognormal
Lilliefors (NDs = DL)	0.201	0.184	Data Not Lognormal
Lilliefors (NDs = DL/2)	0.215	0.184	Data Not Lognormal
Lilliefors (Lognormal ROS Estimates)	0.13	0.184	Data Appear Lognormal

Note: Substitution methods such as DL or DL/2 are not recommended.

Total Radium (mw-63)

	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs
Raw Statistics	30	8	22	12	10	45.45%

	Number	Minimum	Maximum	Mean	Median	SD
Statistics (Non-Detects Only)	10	0.6	0.8	0.67	0.7	0.0675
Statistics (Non-Detects Only)	12	0.4	2.1	0.958	0.8	0.521
Statistics (All: NDs treated as DL value)	22	0.4	2.1	0.827	0.7	0.407
Statistics (All: NDs treated as DL/2 value)	22	0.3	2.1	0.675	0.45	0.494
Statistics (Normal ROS Imputed Data)	22	-0.15	2.1	0.634	0.55	0.55
Statistics (Gamma ROS Imputed Data)	22	0.01	2.1	0.646	0.524	0.528
Statistics (Lognormal ROS Imputed Data)	22	0.272	2.1	0.714	0.552	0.471

	K hat	K Star	Theta hat	Log Mean	Log Stdv	Log CV
Statistics (Non-Detects Only)	4.447	3.39	0.215	-0.159	0.49	-3.076
Statistics (NDs = DL)	6.313	5.483	0.131	-0.271	0.382	-1.409
Statistics (NDs = DL/2)	2.747	2.403	0.246	-0.586	0.599	-1.022
Statistics (Gamma ROS Estimates)	1.152	1.025	0.56	-0.93	1.355	-1.457
Statistics (Lognormal ROS Estimates)	--	--	--	-0.495	0.545	-1.101

Normal GOF Test Results

Appendix B
Goodness of Fit Statistics

	No NDs	NDs = DL	NDs = DL/2	Normal ROS	
Correlation Coefficient R	0.916	0.823	0.866	0.948	
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)		
Shapiro-Wilk (Detects Only)	0.839	0.859	Data Not Normal		
Shapiro-Wilk (NDs = DL)	0.691	0.911	Data Not Normal		
Shapiro-Wilk (NDs = DL/2)	0.753	0.911	Data Not Normal		
Shapiro-Wilk (Normal ROS Estimates)	0.903	0.911	Data Not Normal		
Lilliefors (Detects Only)	0.286	0.243	Data Not Normal		
Lilliefors (NDs = DL)	0.345	0.184	Data Not Normal		
Lilliefors (NDs = DL/2)	0.224	0.184	Data Not Normal		
Lilliefors (Normal ROS Estimates)	0.199	0.184	Data Not Normal		
Gamma GOF Test Results					
	No NDs	NDs = DL	NDs = DL/2	Gamma ROS	
Correlation Coefficient R	0.967	0.894	0.959	0.986	
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)		
Anderson-Darling (Detects Only)	0.502	0.734			
Kolmogorov-Smirnov (Detects Only)	0.249	0.246	Detected Data appear Approximate Gamma Distribution		
Anderson-Darling (NDs = DL)	1.897	0.746			
Kolmogorov-Smirnov (NDs = DL)	0.298	0.186	Data Not Gamma Distributed		
Anderson-Darling (NDs = DL/2)	1.213	0.751			
Kolmogorov-Smirnov (NDs = DL/2)	0.222	0.187	Data Not Gamma Distributed		
Anderson-Darling (Gamma ROS Estimates)	0.617	0.767			
Kolmogorov-Smirnov (Gamma ROS Est.)	0.156	0.19	Data Appear Gamma Distributed		
Lognormal GOF Test Results					
	No NDs	NDs = DL	NDs = DL/2	Log ROS	
Correlation Coefficient R	0.975	0.914	0.943	0.976	
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)		
Shapiro-Wilk (Detects Only)	0.949	0.859	Data Appear Lognormal		
Shapiro-Wilk (NDs = DL)	0.846	0.911	Data Not Lognormal		
Shapiro-Wilk (NDs = DL/2)	0.878	0.911	Data Not Lognormal		
Shapiro-Wilk (Lognormal ROS Estimates)	0.948	0.911	Data Appear Lognormal		

Appendix B
Goodness of Fit Statistics

Lilliefors (Detects Only)	0.218	0.243	Data Appear Lognormal					
Lilliefors (NDs = DL)	0.268	0.184	Data Not Lognormal					
Lilliefors (NDs = DL/2)	0.209	0.184	Data Not Lognormal					
Lilliefors (Lognormal ROS Estimates)	0.127	0.184	Data Appear Lognormal					
Note: Substitution methods such as DL or DL/2 are not recommended.								
Total Radium (mw-64)								
	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs		
Raw Statistics	30	8	22	6	16	72.73%		
	Number	Minimum	Maximum	Mean	Median	SD		
Statistics (Non-Detects Only)	16	0.5	0.8	0.65	0.6	0.0816		
Statistics (Non-Detects Only)	6	0.731	1.7	1.089	0.8	0.474		
Statistics (All: NDs treated as DL value)	22	0.5	1.7	0.77	0.7	0.314		
Statistics (All: NDs treated as DL/2 value)	22	0.25	1.7	0.533	0.35	0.419		
Statistics (Normal ROS Imputed Data)	22	-1.575	1.7	-0.0891	-0.169	0.896		
Statistics (Gamma ROS Imputed Data)	22	0.01	1.7	0.336	0.01	0.531		
Statistics (Lognormal ROS Imputed Data)	22	0.103	1.7	0.499	0.345	0.447		
	K hat	K Star	Theta hat	Log Mean	Log Stdv	Log CV		
Statistics (Non-Detects Only)	7.134	3.678	0.153	0.0131	0.402	30.76		
Statistics (NDs = DL)	9.572	8.297	0.0804	-0.315	0.303	-0.962		
Statistics (NDs = DL/2)	2.782	2.433	0.192	-0.819	0.567	-0.692		
Statistics (Gamma ROS Estimates)	0.377	0.356	0.89	-2.852	2.1	-0.736		
Statistics (Lognormal ROS Estimates)	--	--	--	-0.996	0.767	-0.77		
Normal GOF Test Results								
	No NDs	NDs = DL	NDs = DL/2	Normal ROS				
Correlation Coefficient R	0.838	0.756	0.786	0.983				
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)					
Shapiro-Wilk (Detects Only)	0.681	0.788	Data Not Normal					
Shapiro-Wilk (NDs = DL)	0.583	0.911	Data Not Normal					
Shapiro-Wilk (NDs = DL/2)	0.622	0.911	Data Not Normal					
Shapiro-Wilk (Normal ROS Estimates)	0.96	0.911	Data Appear Normal					
Lilliefors (Detects Only)	0.395	0.325	Data Not Normal					

Appendix B
Goodness of Fit Statistics

Lilliefors (NDs = DL)	0.37	0.184	Data Not Normal					
Lilliefors (NDs = DL/2)	0.352	0.184	Data Not Normal					
Lilliefors (Normal ROS Estimates)	0.0927	0.184	Data Appear Normal					
Gamma GOF Test Results								
	No NDs	NDs = DL	NDs = DL/2	Gamma ROS				
Correlation Coefficient R	0.87	0.819	0.896	0.95				
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)					
Anderson-Darling (Detects Only)	1.069	0.698						
Kolmogorov-Smirnov (Detects Only)	0.41	0.333	Data Not Gamma Distributed					
Anderson-Darling (NDs = DL)	2.69	0.744						
Kolmogorov-Smirnov (NDs = DL)	0.319	0.185	Data Not Gamma Distributed					
Anderson-Darling (NDs = DL/2)	2.699	0.751						
Kolmogorov-Smirnov (NDs = DL/2)	0.327	0.187	Data Not Gamma Distributed					
Anderson-Darling (Gamma ROS Estimates)	2.343	0.831						
Kolmogorov-Smirnov (Gamma ROS Est.)	0.339	0.199	Data Not Gamma Distributed					
Lognormal GOF Test Results								
	No NDs	NDs = DL	NDs = DL/2	Log ROS				
Correlation Coefficient R	0.85	0.842	0.87	0.984				
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)					
Shapiro-Wilk (Detects Only)	0.703	0.788	Data Not Lognormal					
Shapiro-Wilk (NDs = DL)	0.719	0.911	Data Not Lognormal					
Shapiro-Wilk (NDs = DL/2)	0.755	0.911	Data Not Lognormal					
Shapiro-Wilk (Lognormal ROS Estimates)	0.961	0.911	Data Appear Lognormal					
Lilliefors (Detects Only)	0.388	0.325	Data Not Lognormal					
Lilliefors (NDs = DL)	0.29	0.184	Data Not Lognormal					
Lilliefors (NDs = DL/2)	0.295	0.184	Data Not Lognormal					
Lilliefors (Lognormal ROS Estimates)	0.0868	0.184	Data Appear Lognormal					
Note: Substitution methods such as DL or DL/2 are not recommended.								
Total Radium (mw-65)								
	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs		

Appendix B
Goodness of Fit Statistics

Raw Statistics	30	8	22	6	16	72.73%		
	Number	Minimum	Maximum	Mean	Median	SD		
Statistics (Non-Detects Only)	16	0.4	0.8	0.613	0.6	0.102		
Statistics (Non-Detects Only)	6	0.478	1.9	0.98	0.85	0.504		
Statistics (All: NDs treated as DL value)	22	0.4	1.9	0.713	0.6	0.31		
Statistics (All: NDs treated as DL/2 value)	22	0.2	1.9	0.49	0.3	0.396		
Statistics (Normal ROS Imputed Data)	22	-1.005	1.9	0.148	0.137	0.676		
Statistics (Gamma ROS Imputed Data)	22	0.01	1.9	0.354	0.182	0.48		
Statistics (Lognormal ROS Imputed Data)	22	0.117	1.9	0.485	0.376	0.409		
	K hat	K Star	Theta hat	Log Mean	Log Stdv	Log CV		
Statistics (Non-Detects Only)	5.24	2.731	0.187	-0.119	0.476	-4.005		
Statistics (NDs = DL)	8.494	7.366	0.0839	-0.399	0.325	-0.816		
Statistics (NDs = DL/2)	2.796	2.445	0.175	-0.903	0.563	-0.623		
Statistics (Gamma ROS Estimates)	0.477	0.443	0.741	-2.379	1.999	-0.84		
Statistics (Lognormal ROS Estimates)	--	--	--	-0.968	0.684	-0.706		
Normal GOF Test Results								
	No NDs	NDs = DL	NDs = DL/2	Normal ROS				
Correlation Coefficient R	0.927	0.797	0.788	0.981				
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)					
Shapiro-Wilk (Detects Only)	0.873	0.788	Data Appear Normal					
Shapiro-Wilk (NDs = DL)	0.66	0.911	Data Not Normal					
Shapiro-Wilk (NDs = DL/2)	0.638	0.911	Data Not Normal					
Shapiro-Wilk (Normal ROS Estimates)	0.968	0.911	Data Appear Normal					
Lilliefors (Detects Only)	0.239	0.325	Data Appear Normal					
Lilliefors (NDs = DL)	0.289	0.184	Data Not Normal					
Lilliefors (NDs = DL/2)	0.317	0.184	Data Not Normal					
Lilliefors (Normal ROS Estimates)	0.1	0.184	Data Appear Normal					
Gamma GOF Test Results								
	No NDs	NDs = DL	NDs = DL/2	Gamma ROS				
Correlation Coefficient R	0.974	0.864	0.909	0.993				
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)					

Appendix B
Goodness of Fit Statistics

Anderson-Darling (Detects Only)	0.298	0.698						
Kolmogorov-Smirnov (Detects Only)	0.219	0.333	Detected Data Appear Gamma Distributed					
Anderson-Darling (NDs = DL)	1.646	0.744						
Kolmogorov-Smirnov (NDs = DL)	0.248	0.185	Data Not Gamma Distributed					
Anderson-Darling (NDs = DL/2)	2.251	0.751						
Kolmogorov-Smirnov (NDs = DL/2)	0.277	0.187	Data Not Gamma Distributed					
Anderson-Darling (Gamma ROS Estimates)	1.189	0.809						
Kolmogorov-Smirnov (Gamma ROS Est.)	0.265	0.196	Data Not Gamma Distributed					
Lognormal GOF Test Results								
	No NDs	NDs = DL	NDs = DL/2	Log ROS				
Correlation Coefficient R	0.977	0.908	0.9	0.986				
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)					
Shapiro-Wilk (Detects Only)	0.963	0.788	Data Appear Lognormal					
Shapiro-Wilk (NDs = DL)	0.844	0.911	Data Not Lognormal					
Shapiro-Wilk (NDs = DL/2)	0.815	0.911	Data Not Lognormal					
Shapiro-Wilk (Lognormal ROS Estimates)	0.973	0.911	Data Appear Lognormal					
Lilliefors (Detects Only)	0.191	0.325	Data Appear Lognormal					
Lilliefors (NDs = DL)	0.226	0.184	Data Not Lognormal					
Lilliefors (NDs = DL/2)	0.249	0.184	Data Not Lognormal					
Lilliefors (Lognormal ROS Estimates)	0.102	0.184	Data Appear Lognormal					
Note: Substitution methods such as DL or DL/2 are not recommended.								
Total Radium (mw-71)								
	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs		
Raw Statistics	31	2	29	22	7	24.14%		
	Number	Minimum	Maximum	Mean	Median	SD		
Statistics (Non-Detects Only)	7	0.5	0.8	0.686	0.7	0.107		
Statistics (Non-Detects Only)	22	0.4	3.2	1.53	1.6	0.729		
Statistics (All: NDs treated as DL value)	29	0.4	3.2	1.326	1.2	0.732		
Statistics (All: NDs treated as DL/2 value)	29	0.25	3.2	1.243	1.2	0.816		
Statistics (Normal ROS Imputed Data)	29	-0.173	3.2	1.208	1.2	0.866		
Statistics (Gamma ROS Imputed Data)	29	0.213	3.2	1.262	1.2	0.799		
Statistics (Lognormal ROS Imputed Data)	29	0.378	3.2	1.283	1.2	0.774		

Appendix B
Goodness of Fit Statistics

	K hat	K Star	Theta hat	Log Mean	Log Stdv	Log CV		
Statistics (Non-Detects Only)	4.072	3.547	0.376	0.297	0.549	1.845		
Statistics (NDs = DL)	3.481	3.144	0.381	0.132	0.567	4.297		
Statistics (NDs = DL/2)	2.125	1.928	0.585	-0.0354	0.77	-21.72		
Statistics (Gamma ROS Estimates)	2.31	2.094	0.546	5.8595E-4	0.738	1259		
Statistics (Lognormal ROS Estimates)	--	--	--	0.0571	0.65	11.38		
Normal GOF Test Results								
	No NDs	NDs = DL	NDs = DL/2	Normal ROS				
Correlation Coefficient R	0.984	0.957	0.963	0.986				
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)					
Shapiro-Wilk (Detects Only)	0.966	0.911	Data Appear Normal					
Shapiro-Wilk (NDs = DL)	0.909	0.926	Data Not Normal					
Shapiro-Wilk (NDs = DL/2)	0.917	0.926	Data Not Normal					
Shapiro-Wilk (Normal ROS Estimates)	0.964	0.926	Data Appear Normal					
Lilliefors (Detects Only)	0.129	0.184	Data Appear Normal					
Lilliefors (NDs = DL)	0.178	0.161	Data Not Normal					
Lilliefors (NDs = DL/2)	0.129	0.161	Data Appear Normal					
Lilliefors (Normal ROS Estimates)	0.1	0.161	Data Appear Normal					
Gamma GOF Test Results								
	No NDs	NDs = DL	NDs = DL/2	Gamma ROS				
Correlation Coefficient R	0.983	0.984	0.973	0.979				
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)					
Anderson-Darling (Detects Only)	0.343	0.747						
Kolmogorov-Smirnov (Detects Only)	0.147	0.186	Detected Data Appear Gamma Distributed					
Anderson-Darling (NDs = DL)	0.669	0.752						
Kolmogorov-Smirnov (NDs = DL)	0.167	0.164	Detected Data appear Approximate Gamma Distribution					
Anderson-Darling (NDs = DL/2)	0.761	0.757						
Kolmogorov-Smirnov (NDs = DL/2)	0.15	0.165	Detected Data appear Approximate Gamma Distribution					
Anderson-Darling (Gamma ROS Estimates)	0.481	0.756						
Kolmogorov-Smirnov (Gamma ROS Est.)	0.137	0.164	Data Appear Gamma Distributed					
Lognormal GOF Test Results								

Appendix B
Goodness of Fit Statistics

	No NDs	NDs = DL	NDs = DL/2	Log ROS
Correlation Coefficient R	0.976	0.981	0.966	0.974

	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)
Shapiro-Wilk (Detects Only)	0.949	0.911	Data Appear Lognormal
Shapiro-Wilk (NDs = DL)	0.95	0.926	Data Appear Lognormal
Shapiro-Wilk (NDs = DL/2)	0.916	0.926	Data Not Lognormal
Shapiro-Wilk (Lognormal ROS Estimates)	0.93	0.926	Data Appear Lognormal
Lilliefors (Detects Only)	0.169	0.184	Data Appear Lognormal
Lilliefors (NDs = DL)	0.148	0.161	Data Appear Lognormal
Lilliefors (NDs = DL/2)	0.158	0.161	Data Appear Lognormal
Lilliefors (Lognormal ROS Estimates)	0.151	0.161	Data Appear Lognormal

Note: Substitution methods such as DL or DL/2 are not recommended.

Total Radium (mw-72)

	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs
Raw Statistics	31	3	28	27	1	3.57%

	Number	Minimum	Maximum	Mean	Median	SD
Statistics (Non-Detects Only)	1	0.8	0.8	0.8	0.8	N/A
Statistics (Non-Detects Only)	27	1.2	4.2	2.763	2.8	0.888
Statistics (All: NDs treated as DL value)	28	0.8	4.2	2.693	2.8	0.947
Statistics (All: NDs treated as DL/2 value)	28	0.4	4.2	2.679	2.8	0.979
Statistics (Normal ROS Imputed Data)	28	0.537	4.2	2.684	2.8	0.968
Statistics (Gamma ROS Imputed Data)	28	1.021	4.2	2.701	2.8	0.932
Statistics (Lognormal ROS Imputed Data)	28	1.099	4.2	2.704	2.8	0.927

	K hat	K Star	Theta hat	Log Mean	Log Stdv	Log CV
Statistics (Non-Detects Only)	9.132	8.142	0.303	0.961	0.352	0.366
Statistics (NDs = DL)	7.076	6.341	0.381	0.918	0.412	0.448
Statistics (NDs = DL/2)	5.61	5.033	0.478	0.894	0.495	0.554
Statistics (Gamma ROS Estimates)	7.678	6.879	0.352	0.927	0.388	0.419
Statistics (Lognormal ROS Estimates)	--	--	--	0.93	0.382	0.411

Normal GOF Test Results

Appendix B
Goodness of Fit Statistics

	No NDs	NDs = DL	NDs = DL/2	Normal ROS	
Correlation Coefficient R	0.984	0.987	0.986	0.987	
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)		
Shapiro-Wilk (Detects Only)	0.953	0.923	Data Appear Normal		
Shapiro-Wilk (NDs = DL)	0.962	0.924	Data Appear Normal		
Shapiro-Wilk (NDs = DL/2)	0.965	0.924	Data Appear Normal		
Shapiro-Wilk (Normal ROS Estimates)	0.965	0.924	Data Appear Normal		
Lilliefors (Detects Only)	0.103	0.167	Data Appear Normal		
Lilliefors (NDs = DL)	0.0937	0.164	Data Appear Normal		
Lilliefors (NDs = DL/2)	0.0907	0.164	Data Appear Normal		
Lilliefors (Normal ROS Estimates)	0.0918	0.164	Data Appear Normal		
Gamma GOF Test Results					
	No NDs	NDs = DL	NDs = DL/2	Gamma ROS	
Correlation Coefficient R	0.969	0.963	0.951	0.966	
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)		
Anderson-Darling (Detects Only)	0.427	0.744			
Kolmogorov-Smirnov (Detects Only)	0.115	0.168	Detected Data Appear Gamma Distributed		
Anderson-Darling (NDs = DL)	0.431	0.747			
Kolmogorov-Smirnov (NDs = DL)	0.126	0.166	Data Appear Gamma Distributed		
Anderson-Darling (NDs = DL/2)	0.591	0.748			
Kolmogorov-Smirnov (NDs = DL/2)	0.133	0.166	Data Appear Gamma Distributed		
Anderson-Darling (Gamma ROS Estimates)	0.433	0.747			
Kolmogorov-Smirnov (Gamma ROS Est.)	0.123	0.166	Data Appear Gamma Distributed		
Lognormal GOF Test Results					
	No NDs	NDs = DL	NDs = DL/2	Log ROS	
Correlation Coefficient R	0.975	0.962	0.907	0.972	
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)		
Shapiro-Wilk (Detects Only)	0.939	0.923	Data Appear Lognormal		
Shapiro-Wilk (NDs = DL)	0.924	0.924	Data Not Lognormal		
Shapiro-Wilk (NDs = DL/2)	0.838	0.924	Data Not Lognormal		
Shapiro-Wilk (Lognormal ROS Estimates)	0.932	0.924	Data Appear Lognormal		
Lilliefors (Detects Only)	0.133	0.167	Data Appear Lognormal		

Appendix B
Goodness of Fit Statistics

Lilliefors (NDs = DL)	0.142	0.164	Data Appear Lognormal					
Lilliefors (NDs = DL/2)	0.144	0.164	Data Appear Lognormal					
Lilliefors (Lognormal ROS Estimates)	0.139	0.164	Data Appear Lognormal					
Note: Substitution methods such as DL or DL/2 are not recommended.								
Total Radium (mw-73)								
	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs		
Raw Statistics	25	2	23	22	1	4.35%		
	Number	Minimum	Maximum	Mean	Median	SD		
Statistics (Non-Detects Only)	1	0.6	0.6	0.6	0.6	N/A		
Statistics (Non-Detects Only)	22	0.8	4.9	2.323	2.4	0.976		
Statistics (All: NDs treated as DL value)	23	0.6	4.9	2.248	2.3	1.019		
Statistics (All: NDs treated as DL/2 value)	23	0.3	4.9	2.235	2.3	1.043		
Statistics (Normal ROS Imputed Data)	23	-0.0716	4.9	2.219	2.3	1.076		
Statistics (Gamma ROS Imputed Data)	23	0.538	4.9	2.245	2.3	1.023		
Statistics (Lognormal ROS Imputed Data)	23	0.694	4.9	2.252	2.3	1.012		
	K hat	K Star	Theta hat	Log Mean	Log Stdv	Log CV		
Statistics (Non-Detects Only)	5.571	4.842	0.417	0.75	0.458	0.61		
Statistics (NDs = DL)	4.528	3.966	0.496	0.695	0.519	0.746		
Statistics (NDs = DL/2)	3.761	3.299	0.594	0.665	0.605	0.91		
Statistics (Gamma ROS Estimates)	4.398	3.853	0.511	0.691	0.531	0.768		
Statistics (Lognormal ROS Estimates)	--	--	--	0.702	0.504	0.719		
Normal GOF Test Results								
	No NDs	NDs = DL	NDs = DL/2	Normal ROS				
Correlation Coefficient R	0.974	0.978	0.982	0.982				
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)					
Shapiro-Wilk (Detects Only)	0.953	0.911	Data Appear Normal					
Shapiro-Wilk (NDs = DL)	0.959	0.914	Data Appear Normal					
Shapiro-Wilk (NDs = DL/2)	0.97	0.914	Data Appear Normal					
Shapiro-Wilk (Normal ROS Estimates)	0.976	0.914	Data Appear Normal					
Lilliefors (Detects Only)	0.113	0.184	Data Appear Normal					
Lilliefors (NDs = DL)	0.105	0.18	Data Appear Normal					

Appendix B
Goodness of Fit Statistics

Lilliefors (NDs = DL/2)	0.0974	0.18	Data Appear Normal					
Lilliefors (Normal ROS Estimates)	0.0968	0.18	Data Appear Normal					
Gamma GOF Test Results								
	No NDs	NDs = DL	NDs = DL/2	Gamma ROS				
Correlation Coefficient R	0.979	0.977	0.971	0.976				
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)					
Anderson-Darling (Detects Only)	0.35	0.746						
Kolmogorov-Smirnov (Detects Only)	0.133	0.186	Detected Data Appear Gamma Distributed					
Anderson-Darling (NDs = DL)	0.384	0.748						
Kolmogorov-Smirnov (NDs = DL)	0.13	0.182	Data Appear Gamma Distributed					
Anderson-Darling (NDs = DL/2)	0.464	0.749						
Kolmogorov-Smirnov (NDs = DL/2)	0.131	0.182	Data Appear Gamma Distributed					
Anderson-Darling (Gamma ROS Estimates)	0.386	0.748						
Kolmogorov-Smirnov (Gamma ROS Est.)	0.129	0.182	Data Appear Gamma Distributed					
Lognormal GOF Test Results								
	No NDs	NDs = DL	NDs = DL/2	Log ROS				
Correlation Coefficient R	0.977	0.972	0.937	0.974				
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)					
Shapiro-Wilk (Detects Only)	0.954	0.911	Data Appear Lognormal					
Shapiro-Wilk (NDs = DL)	0.945	0.914	Data Appear Lognormal					
Shapiro-Wilk (NDs = DL/2)	0.892	0.914	Data Not Lognormal					
Shapiro-Wilk (Lognormal ROS Estimates)	0.945	0.914	Data Appear Lognormal					
Lilliefors (Detects Only)	0.141	0.184	Data Appear Lognormal					
Lilliefors (NDs = DL)	0.143	0.18	Data Appear Lognormal					
Lilliefors (NDs = DL/2)	0.139	0.18	Data Appear Lognormal					
Lilliefors (Lognormal ROS Estimates)	0.143	0.18	Data Appear Lognormal					
Note: Substitution methods such as DL or DL/2 are not recommended.								
Selenium (mw-62)								
	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs		
Raw Statistics	31	11	20	5	15	75.00%		

Appendix B
Goodness of Fit Statistics

	Number	Minimum	Maximum	Mean	Median	SD
Statistics (Non-Detects Only)	15	5.0000E-4	0.005	0.00142	8.0000E-4	0.00129
Statistics (Non-Detects Only)	5	5.4000E-4	0.002	0.00104	9.3000E-4	5.6153E-4
Statistics (All: NDs treated as DL value)	20	5.0000E-4	0.005	0.00132	8.6500E-4	0.00115
Statistics (All: NDs treated as DL/2 value)	20	2.5000E-4	0.0025	7.9200E-4	6.6000E-4	6.2621E-4
Statistics (Normal ROS Imputed Data)	20	-0.00122	0.002	1.0999E-4	5.4768E-5	7.3828E-4
Statistics (Gamma ROS Imputed Data)	20	5.4000E-4	0.01	0.00776	0.01	0.00399
Statistics (Lognormal ROS Imputed Data)	20	1.3233E-4	0.002	5.2064E-4	4.0086E-4	4.1865E-4

	K hat	K Star	Theta hat	Log Mean	Log Stdv	Log CV
Statistics (Non-Detects Only)	5.238	2.228	1.9817E-4	-6.969	0.478	-0.0685
Statistics (NDs = DL)	1.962	1.701	6.7525E-4	-6.903	0.728	-0.105
Statistics (NDs = DL/2)	1.925	1.67	4.1144E-4	-7.423	0.775	-0.104
Statistics (Gamma ROS Estimates)	1.629	1.418	0.00476	-5.196	1.073	-0.206
Statistics (Lognormal ROS Estimates)	--	--	--	-7.774	0.639	-0.0822

Normal GOF Test Results

	No NDs	NDs = DL	NDs = DL/2	Normal ROS
Correlation Coefficient R	0.886	0.851	0.904	0.979

	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)
Shapiro-Wilk (Detects Only)	0.807	0.762	Data Appear Normal
Shapiro-Wilk (NDs = DL)	0.733	0.905	Data Not Normal
Shapiro-Wilk (NDs = DL/2)	0.816	0.905	Data Not Normal
Shapiro-Wilk (Normal ROS Estimates)	0.967	0.905	Data Appear Normal
Lilliefors (Detects Only)	0.369	0.343	Data Not Normal
Lilliefors (NDs = DL)	0.261	0.192	Data Not Normal
Lilliefors (NDs = DL/2)	0.22	0.192	Data Not Normal
Lilliefors (Normal ROS Estimates)	0.13	0.192	Data Appear Normal

Gamma GOF Test Results

	No NDs	NDs = DL	NDs = DL/2	Gamma ROS
Correlation Coefficient R	0.944	0.955	0.977	0.571

	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)
Anderson-Darling (Detects Only)	0.445	0.681	

Appendix B
Goodness of Fit Statistics

Kolmogorov-Smirnov (Detects Only)	0.33	0.358	Detected Data Appear Gamma Distributed			
Anderson-Darling (NDs = DL)	1.352	0.753				
Kolmogorov-Smirnov (NDs = DL)	0.202	0.196	Data Not Gamma Distributed			
Anderson-Darling (NDs = DL/2)	0.942	0.753				
Kolmogorov-Smirnov (NDs = DL/2)	0.211	0.196	Data Not Gamma Distributed			
Anderson-Darling (Gamma ROS Estimates)	4.533	0.756				
Kolmogorov-Smirnov (Gamma ROS Est.)	0.475	0.197	Data Not Gamma Distributed			
Lognormal GOF Test Results						
	No NDs	NDs = DL	NDs = DL/2	Log ROS		
Correlation Coefficient R	0.947	0.928	0.944	0.983		
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)			
Shapiro-Wilk (Detects Only)	0.918	0.762	Data Appear Lognormal			
Shapiro-Wilk (NDs = DL)	0.849	0.905	Data Not Lognormal			
Shapiro-Wilk (NDs = DL/2)	0.874	0.905	Data Not Lognormal			
Shapiro-Wilk (Lognormal ROS Estimates)	0.973	0.905	Data Appear Lognormal			
Lilliefors (Detects Only)	0.301	0.343	Data Appear Lognormal			
Lilliefors (NDs = DL)	0.203	0.192	Data Not Lognormal			
Lilliefors (NDs = DL/2)	0.22	0.192	Data Not Lognormal			
Lilliefors (Lognormal ROS Estimates)	0.13	0.192	Data Appear Lognormal			
Note: Substitution methods such as DL or DL/2 are not recommended.						
Selenium (mw-63)						
	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs
Raw Statistics	30	10	20	4	16	80.00%
	Number	Minimum	Maximum	Mean	Median	SD
Statistics (Non-Detects Only)	16	5.0000E-4	0.005	0.00134	5.0000E-4	0.00127
Statistics (Non-Detects Only)	4	5.1000E-4	0.0013	8.1250E-4	7.2000E-4	3.4131E-4
Statistics (All: NDs treated as DL value)	20	5.0000E-4	0.005	0.00124	5.9500E-4	0.00116
Statistics (All: NDs treated as DL/2 value)	20	2.5000E-4	0.0025	7.0000E-4	5.0500E-4	5.8501E-4
Statistics (Normal ROS Imputed Data)	20	-0.00101	0.0013	3.5234E-5	1.3910E-5	5.5607E-4
Statistics (Gamma ROS Imputed Data)	20	5.1000E-4	0.01	0.00816	0.01	0.00377
Statistics (Lognormal ROS Imputed Data)	20	9.5451E-5	0.0013	3.8469E-4	3.0714E-4	2.8108E-4

Appendix B
Goodness of Fit Statistics

	K hat	K Star	Theta hat	Log Mean	Log Stdv	Log CV
Statistics (Non-Detects Only)	8.478	2.286	9.5831E-5	-7.176	0.391	-0.0545
Statistics (NDs = DL)	1.79	1.555	6.9115E-4	-6.999	0.748	-0.107
Statistics (NDs = DL/2)	1.878	1.63	3.7275E-4	-7.554	0.767	-0.102
Statistics (Gamma ROS Estimates)	1.756	1.526	0.00465	-5.119	1.066	-0.208
Statistics (Lognormal ROS Estimates)	--	--	--	-8.064	0.636	-0.0788

Normal GOF Test Results

	No NDs	NDs = DL	NDs = DL/2	Normal ROS
Correlation Coefficient R	0.935	0.826	0.879	0.99

	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)
Shapiro-Wilk (Detects Only)	0.886	0.748	Data Appear Normal
Shapiro-Wilk (NDs = DL)	0.693	0.905	Data Not Normal
Shapiro-Wilk (NDs = DL/2)	0.778	0.905	Data Not Normal
Shapiro-Wilk (Normal ROS Estimates)	0.985	0.905	Data Appear Normal
Lilliefors (Detects Only)	0.311	0.375	Data Appear Normal
Lilliefors (NDs = DL)	0.263	0.192	Data Not Normal
Lilliefors (NDs = DL/2)	0.229	0.192	Data Not Normal
Lilliefors (Normal ROS Estimates)	0.107	0.192	Data Appear Normal

Gamma GOF Test Results

	No NDs	NDs = DL	NDs = DL/2	Gamma ROS
Correlation Coefficient R	0.976	0.951	0.972	0.524

	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)
Anderson-Darling (Detects Only)	0.323	0.658	
Kolmogorov-Smirnov (Detects Only)	0.281	0.395	Detected Data Appear Gamma Distributed
Anderson-Darling (NDs = DL)	1.918	0.755	
Kolmogorov-Smirnov (NDs = DL)	0.279	0.197	Data Not Gamma Distributed
Anderson-Darling (NDs = DL/2)	1.315	0.754	
Kolmogorov-Smirnov (NDs = DL/2)	0.278	0.196	Data Not Gamma Distributed
Anderson-Darling (Gamma ROS Estimates)	5.242	0.755	
Kolmogorov-Smirnov (Gamma ROS Est.)	0.501	0.197	Data Not Gamma Distributed

Lognormal GOF Test Results

Appendix B
Goodness of Fit Statistics

	No NDs	NDs = DL	NDs = DL/2	Log ROS			
Correlation Coefficient R	0.97	0.895	0.923	0.992			
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)				
Shapiro-Wilk (Detects Only)	0.953	0.748	Data Appear Lognormal				
Shapiro-Wilk (NDs = DL)	0.79	0.905	Data Not Lognormal				
Shapiro-Wilk (NDs = DL/2)	0.836	0.905	Data Not Lognormal				
Shapiro-Wilk (Lognormal ROS Estimates)	0.987	0.905	Data Appear Lognormal				
Lilliefors (Detects Only)	0.257	0.375	Data Appear Lognormal				
Lilliefors (NDs = DL)	0.282	0.192	Data Not Lognormal				
Lilliefors (NDs = DL/2)	0.283	0.192	Data Not Lognormal				
Lilliefors (Lognormal ROS Estimates)	0.107	0.192	Data Appear Lognormal				
Note: Substitution methods such as DL or DL/2 are not recommended.							
Selenium (mw-64)							
	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs	
Raw Statistics	30	10	20	1	19	95.00%	
Warning: Only one distinct data value was detected! ProUCL (or any other software) should not be used on such a data set!							
It is suggested to use alternative site specific values determined by the Project Team to estimate environmental parameters (e.g., EPC, BTV).							
The data set for variable Selenium (mw-64) was not processed!							
Selenium (mw-65)							
	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs	
Raw Statistics	30	10	20	1	19	95.00%	
Warning: Only one distinct data value was detected! ProUCL (or any other software) should not be used on such a data set!							
It is suggested to use alternative site specific values determined by the Project Team to estimate environmental parameters (e.g., EPC, BTV).							
The data set for variable Selenium (mw-65) was not processed!							

Appendix B
Goodness of Fit Statistics

Selenium (mw-71)	
Raw Statistics	
Number of Valid Observations	26
Number of Missing Observations	5
Number of Distinct Observations	14
Minimum	0.15
Maximum	0.37
Mean of Raw Data	0.253
Standard Deviation of Raw Data	0.0595
Khat	19.16
Theta hat	0.0132
Kstar	16.98
Theta star	0.0149
Mean of Log Transformed Data	-1.402
Standard Deviation of Log Transformed Data	0.234
Normal GOF Test Results	
Correlation Coefficient R	0.973
Shapiro Wilk Test Statistic	0.938
Shapiro Wilk Critical (0.05) Value	0.92
Approximate Shapiro Wilk P Value	0.13
Lilliefors Test Statistic	0.148
Lilliefors Critical (0.05) Value	0.17
Data appear Normal at (0.05) Significance Level	
Gamma GOF Test Results	
Correlation Coefficient R	0.98
A-D Test Statistic	0.483
A-D Critical (0.05) Value	0.744
K-S Test Statistic	0.145
K-S Critical(0.05) Value	0.171
Data appear Gamma Distributed at (0.05) Significance Level	
Lognormal GOF Test Results	
Correlation Coefficient R	0.982

Appendix B
Goodness of Fit Statistics

Shapiro Wilk Test Statistic	0.958							
Shapiro Wilk Critical (0.05) Value	0.92							
Approximate Shapiro Wilk P Value	0.386							
Lilliefors Test Statistic	0.136							
Lilliefors Critical (0.05) Value	0.17							
Data appear Lognormal at (0.05) Significance Level								
Selenium (mw-72)								
	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs		
Raw Statistics	31	5	26	25	1	3.85%		
	Number	Minimum	Maximum	Mean	Median	SD		
Statistics (Non-Detects Only)	1	0.003	0.003	0.003	0.003	N/A		
Statistics (Non-Detects Only)	25	0.064	0.39	0.127	0.11	0.0595		
Statistics (All: NDs treated as DL value)	26	0.003	0.39	0.122	0.11	0.0632		
Statistics (All: NDs treated as DL/2 value)	26	0.0015	0.39	0.122	0.11	0.0633		
Statistics (Normal ROS Imputed Data)	26	0.0188	0.39	0.123	0.11	0.062		
Statistics (Gamma ROS Imputed Data)	26	0.0367	0.39	0.124	0.11	0.0609		
Statistics (Lognormal ROS Imputed Data)	26	0.0595	0.39	0.124	0.11	0.0598		
	K hat	K Star	Theta hat	Log Mean	Log Stdv	Log CV		
Statistics (Non-Detects Only)	8.38	7.401	0.0152	-2.124	0.318	-0.15		
Statistics (NDs = DL)	3.2	2.857	0.0382	-2.266	0.787	-0.347		
Statistics (NDs = DL/2)	2.78	2.485	0.044	-2.292	0.914	-0.398		
Statistics (Gamma ROS Estimates)	6.527	5.799	0.0189	-2.17	0.389	-0.179		
Statistics (Lognormal ROS Estimates)	--	--	--	-2.151	0.34	-0.158		
Normal GOF Test Results								
	No NDs	NDs = DL	NDs = DL/2	Normal ROS				
Correlation Coefficient R	0.722	0.778	0.778	0.771				
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)					
Shapiro-Wilk (Detects Only)	0.557	0.918	Data Not Normal					
Shapiro-Wilk (NDs = DL)	0.649	0.92	Data Not Normal					
Shapiro-Wilk (NDs = DL/2)	0.65	0.92	Data Not Normal					
Shapiro-Wilk (Normal ROS Estimates)	0.636	0.92	Data Not Normal					
Lilliefors (Detects Only)	0.32	0.173	Data Not Normal					

Appendix B
Goodness of Fit Statistics

Lilliefors (NDs = DL)	0.297	0.17	Data Not Normal					
Lilliefors (NDs = DL/2)	0.297	0.17	Data Not Normal					
Lilliefors (Normal ROS Estimates)	0.3	0.17	Data Not Normal					
Gamma GOF Test Results								
	No NDs	NDs = DL	NDs = DL/2	Gamma ROS				
Correlation Coefficient R	0.792	0.842	0.845	0.823				
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)					
Anderson-Darling (Detects Only)	2.153	0.746						
Kolmogorov-Smirnov (Detects Only)	0.268	0.175	Data Not Gamma Distributed					
Anderson-Darling (NDs = DL)	3.177	0.75						
Kolmogorov-Smirnov (NDs = DL)	0.289	0.172	Data Not Gamma Distributed					
Anderson-Darling (NDs = DL/2)	3.472	0.752						
Kolmogorov-Smirnov (NDs = DL/2)	0.306	0.173	Data Not Gamma Distributed					
Anderson-Darling (Gamma ROS Estimates)	1.957	0.746						
Kolmogorov-Smirnov (Gamma ROS Est.)	0.243	0.171	Data Not Gamma Distributed					
Lognormal GOF Test Results								
	No NDs	NDs = DL	NDs = DL/2	Log ROS				
Correlation Coefficient R	0.874	0.699	0.664	0.898				
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)					
Shapiro-Wilk (Detects Only)	0.799	0.918	Data Not Lognormal					
Shapiro-Wilk (NDs = DL)	0.533	0.92	Data Not Lognormal					
Shapiro-Wilk (NDs = DL/2)	0.485	0.92	Data Not Lognormal					
Shapiro-Wilk (Lognormal ROS Estimates)	0.837	0.92	Data Not Lognormal					
Lilliefors (Detects Only)	0.236	0.173	Data Not Lognormal					
Lilliefors (NDs = DL)	0.34	0.17	Data Not Lognormal					
Lilliefors (NDs = DL/2)	0.358	0.17	Data Not Lognormal					
Lilliefors (Lognormal ROS Estimates)	0.219	0.17	Data Not Lognormal					
Note: Substitution methods such as DL or DL/2 are not recommended.								
Selenium (mw-73)								
	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs		

Appendix B
Goodness of Fit Statistics

Raw Statistics	25	4	21	19	2	9.52%		
	Number	Minimum	Maximum	Mean	Median	SD		
Statistics (Non-Detects Only)	2	0.005	0.005	0.005	0.005	0		
Statistics (Non-Detects Only)	19	0.0038	0.048	0.0171	0.015	0.0126		
Statistics (All: NDs treated as DL value)	21	0.0038	0.048	0.0159	0.011	0.0125		
Statistics (All: NDs treated as DL/2 value)	21	0.0025	0.048	0.0157	0.011	0.0127		
Statistics (Normal ROS Imputed Data)	21	-0.00879	0.048	0.0149	0.011	0.0139		
Statistics (Gamma ROS Imputed Data)	21	0.0038	0.048	0.0164	0.011	0.0121		
Statistics (Lognormal ROS Imputed Data)	21	0.00295	0.048	0.0158	0.011	0.0126		
	K hat	K Star	Theta hat	Log Mean	Log Stdv	Log CV		
Statistics (Non-Detects Only)	2.347	2.012	0.00728	-4.297	0.688	-0.16		
Statistics (NDs = DL)	2.124	1.852	0.00751	-4.392	0.718	-0.164		
Statistics (NDs = DL/2)	1.791	1.567	0.00877	-4.458	0.828	-0.186		
Statistics (Gamma ROS Estimates)	2.459	2.139	0.00668	-4.326	0.659	-0.152		
Statistics (Lognormal ROS Estimates)	--	--	--	-4.428	0.774	-0.175		
Normal GOF Test Results								
	No NDs	NDs = DL	NDs = DL/2	Normal ROS				
Correlation Coefficient R	0.914	0.906	0.92	0.956				
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)					
Shapiro-Wilk (Detects Only)	0.834	0.901	Data Not Normal					
Shapiro-Wilk (NDs = DL)	0.82	0.908	Data Not Normal					
Shapiro-Wilk (NDs = DL/2)	0.843	0.908	Data Not Normal					
Shapiro-Wilk (Normal ROS Estimates)	0.918	0.908	Data Appear Normal					
Lilliefors (Detects Only)	0.229	0.197	Data Not Normal					
Lilliefors (NDs = DL)	0.213	0.188	Data Not Normal					
Lilliefors (NDs = DL/2)	0.207	0.188	Data Not Normal					
Lilliefors (Normal ROS Estimates)	0.192	0.188	Data Not Normal					
Gamma GOF Test Results								
	No NDs	NDs = DL	NDs = DL/2	Gamma ROS				
Correlation Coefficient R	0.98	0.98	0.985	0.974				
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)					

Appendix B
Goodness of Fit Statistics

Anderson-Darling (Detects Only)	0.458	0.751						
Kolmogorov-Smirnov (Detects Only)	0.141	0.201	Detected Data Appear Gamma Distributed					
Anderson-Darling (NDs = DL)	0.504	0.753						
Kolmogorov-Smirnov (NDs = DL)	0.133	0.192	Data Appear Gamma Distributed					
Anderson-Darling (NDs = DL/2)	0.292	0.756						
Kolmogorov-Smirnov (NDs = DL/2)	0.114	0.192	Data Appear Gamma Distributed					
Anderson-Darling (Gamma ROS Estimates)	0.636	0.752						
Kolmogorov-Smirnov (Gamma ROS Est.)	0.168	0.191	Data Appear Gamma Distributed					
Lognormal GOF Test Results								
	No NDs	NDs = DL	NDs = DL/2	Log ROS				
Correlation Coefficient R	0.988	0.988	0.989	0.992				
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)					
Shapiro-Wilk (Detects Only)	0.971	0.901	Data Appear Lognormal					
Shapiro-Wilk (NDs = DL)	0.967	0.908	Data Appear Lognormal					
Shapiro-Wilk (NDs = DL/2)	0.97	0.908	Data Appear Lognormal					
Shapiro-Wilk (Lognormal ROS Estimates)	0.977	0.908	Data Appear Lognormal					
Lilliefors (Detects Only)	0.103	0.197	Data Appear Lognormal					
Lilliefors (NDs = DL)	0.098	0.188	Data Appear Lognormal					
Lilliefors (NDs = DL/2)	0.0988	0.188	Data Appear Lognormal					
Lilliefors (Lognormal ROS Estimates)	0.0921	0.188	Data Appear Lognormal					
Note: Substitution methods such as DL or DL/2 are not recommended.								
Thallium (mw-62)								
	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs		
Raw Statistics	31	11	20	1	19	95.00%		
Warning: Only one distinct data value was detected! ProUCL (or any other software) should not be used on such a data set!								
It is suggested to use alternative site specific values determined by the Project Team to estimate environmental parameters (e.g., EPC, BTV).								
The data set for variable Thallium (mw-62) was not processed!								
Thallium (mw-63)								

Appendix B
Goodness of Fit Statistics

	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs
Raw Statistics	30	10	20	2	18	90.00%

	Number	Minimum	Maximum	Mean	Median	SD
Statistics (Non-Detects Only)	18	1.0000E-4	0.001	2.7778E-4	1.0000E-4	2.9616E-4
Statistics (Non-Detects Only)	2	1.1000E-4	1.5000E-4	1.3000E-4	1.3000E-4	2.8284E-5
Statistics (All: NDs treated as DL value)	20	1.0000E-4	0.001	2.6300E-4	1.0000E-4	2.8388E-4
Statistics (All: NDs treated as DL/2 value)	20	5.0000E-5	5.0000E-4	1.3800E-4	5.0000E-5	1.4025E-4
Statistics (Normal ROS Imputed Data)	20	-1.898E-4	1.5000E-4	-2.765E-5	-2.868E-5	8.3422E-5
Statistics (Gamma ROS Imputed Data)	20	N/A	N/A	N/A	N/A	N/A
Statistics (Lognormal ROS Imputed Data)	20	1.0762E-5	1.5000E-4	4.6418E-5	3.7532E-5	3.3688E-5

	K hat	K Star	Theta hat	Log Mean	Log Stdv	Log CV
Statistics (Non-Detects Only)	N/A	N/A	N/A	N/A	N/A	N/A
Statistics (NDs = DL)	1.43	1.249	1.8386E-4	-8.632	0.825	-0.0955
Statistics (NDs = DL/2)	1.505	1.313	9.1673E-5	-9.256	0.823	-0.0889
Statistics (Gamma ROS Estimates)	N/A	N/A	N/A	N/A	N/A	N/A
Statistics (Lognormal ROS Estimates)	--	--	--	-10.18	0.647	-0.0635

Normal GOF Test Results

	No NDs	NDs = DL	NDs = DL/2	Normal ROS
Correlation Coefficient R	1	0.796	0.821	0.994

	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)
Shapiro-Wilk (NDs = DL)	0.634	0.905	Data Not Normal
Shapiro-Wilk (NDs = DL/2)	0.674	0.905	Data Not Normal
Shapiro-Wilk (Normal ROS Estimates)	0.99	0.905	Data Appear Normal
Lilliefors (Detects Only)	N/A	N/A	
Lilliefors (NDs = DL)	0.305	0.192	Data Not Normal
Lilliefors (NDs = DL/2)	0.285	0.192	Data Not Normal
Lilliefors (Normal ROS Estimates)	0.105	0.192	Data Appear Normal

Gamma GOF Test Results

	No NDs	NDs = DL	NDs = DL/2	Gamma ROS
Correlation Coefficient R	N/A	0.931	0.943	0.376

Appendix B
Goodness of Fit Statistics

	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)
Anderson-Darling (Detects Only)	N/A	N/A	
Kolmogorov-Smirnov (Detects Only)	N/A	N/A	
Anderson-Darling (NDs = DL)	2.662	0.759	
Kolmogorov-Smirnov (NDs = DL)	0.33	0.198	Data Not Gamma Distributed
Anderson-Darling (NDs = DL/2)	2.072	0.758	
Kolmogorov-Smirnov (NDs = DL/2)	0.331	0.197	Data Not Gamma Distributed
Anderson-Darling (Gamma ROS Estimates)	N/A	0.74	
Kolmogorov-Smirnov (Gamma ROS Est.)	N/A	0.193	

Lognormal GOF Test Results

	No NDs	NDs = DL	NDs = DL/2	Log ROS
Correlation Coefficient R	1	0.856	0.885	N/A

	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)
Shapiro-Wilk (NDs = DL)	0.721	0.905	Data Not Lognormal
Shapiro-Wilk (NDs = DL/2)	0.769	0.905	Data Not Lognormal
Shapiro-Wilk (Lognormal ROS Estimates)	0.99	0.905	Data Appear Lognormal
Lilliefors (Detects Only)	N/A	N/A	
Lilliefors (NDs = DL)	0.321	0.192	Data Not Lognormal
Lilliefors (NDs = DL/2)	0.334	0.192	Data Not Lognormal
Lilliefors (Lognormal ROS Estimates)	0.105	0.192	Data Appear Lognormal

Note: Substitution methods such as DL or DL/2 are not recommended.

Thallium (mw-64)

	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs
Raw Statistics	30	10	20	10	10	50.00%

	Number	Minimum	Maximum	Mean	Median	SD
Statistics (Non-Detects Only)	10	1.0000E-4	0.001	3.3000E-4	3.0000E-4	2.8304E-4
Statistics (Non-Detects Only)	10	1.1000E-4	4.1000E-4	1.5600E-4	1.2000E-4	9.3119E-5
Statistics (All: NDs treated as DL value)	20	1.0000E-4	0.001	2.4300E-4	1.2500E-4	2.2366E-4
Statistics (All: NDs treated as DL/2 value)	20	5.0000E-5	5.0000E-4	1.6050E-4	1.2000E-4	1.1669E-4
Statistics (Normal ROS Imputed Data)	20	-7.082E-5	4.1000E-4	1.0184E-4	1.1000E-4	9.7858E-5
Statistics (Gamma ROS Imputed Data)	20	1.1000E-4	0.01	0.00508	0.00521	0.00505
Statistics (Lognormal ROS Imputed Data)	20	4.8098E-5	4.1000E-4	1.2240E-4	1.1000E-4	7.5491E-5

Appendix B
Goodness of Fit Statistics

	K hat	K Star	Theta hat	Log Mean	Log Stdv	Log CV
Statistics (Non-Detects Only)	5.237	3.732	2.9790E-5	-8.864	0.413	-0.0466
Statistics (NDs = DL)	1.958	1.698	1.2411E-4	-8.599	0.703	-0.0818
Statistics (NDs = DL/2)	2.553	2.204	6.2855E-5	-8.946	0.654	-0.0731
Statistics (Gamma ROS Estimates)	0.446	0.412	0.0114	-6.735	2.203	-0.327
Statistics (Lognormal ROS Estimates)	--	--	--	-9.122	0.452	-0.0496

Normal GOF Test Results

	No NDs	NDs = DL	NDs = DL/2	Normal ROS
Correlation Coefficient R	0.724	0.812	0.883	0.908

	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)
Shapiro-Wilk (Detects Only)	0.551	0.842	Data Not Normal
Shapiro-Wilk (NDs = DL)	0.673	0.905	Data Not Normal
Shapiro-Wilk (NDs = DL/2)	0.786	0.905	Data Not Normal
Shapiro-Wilk (Normal ROS Estimates)	0.85	0.905	Data Not Normal
Lilliefors (Detects Only)	0.41	0.262	Data Not Normal
Lilliefors (NDs = DL)	0.293	0.192	Data Not Normal
Lilliefors (NDs = DL/2)	0.253	0.192	Data Not Normal
Lilliefors (Normal ROS Estimates)	0.237	0.192	Data Not Normal

Gamma GOF Test Results

	No NDs	NDs = DL	NDs = DL/2	Gamma ROS
Correlation Coefficient R	0.827	0.935	0.961	0.63

	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)
Anderson-Darling (Detects Only)	1.754	0.729	
Kolmogorov-Smirnov (Detects Only)	0.401	0.267	Data Not Gamma Distributed
Anderson-Darling (NDs = DL)	1.914	0.753	
Kolmogorov-Smirnov (NDs = DL)	0.306	0.196	Data Not Gamma Distributed
Anderson-Darling (NDs = DL/2)	0.725	0.75	
Kolmogorov-Smirnov (NDs = DL/2)	0.195	0.196	Data Appear Gamma Distributed
Anderson-Darling (Gamma ROS Estimates)	3.149	0.814	
Kolmogorov-Smirnov (Gamma ROS Est.)	0.339	0.206	Data Not Gamma Distributed

Lognormal GOF Test Results

Appendix B
Goodness of Fit Statistics

	No NDs	NDs = DL	NDs = DL/2	Log ROS			
Correlation Coefficient R	0.793	0.901	0.965	0.933			
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)				
Shapiro-Wilk (Detects Only)	0.647	0.842	Data Not Lognormal				
Shapiro-Wilk (NDs = DL)	0.804	0.905	Data Not Lognormal				
Shapiro-Wilk (NDs = DL/2)	0.924	0.905	Data Appear Lognormal				
Shapiro-Wilk (Lognormal ROS Estimates)	0.892	0.905	Data Not Lognormal				
Lilliefors (Detects Only)	0.38	0.262	Data Not Lognormal				
Lilliefors (NDs = DL)	0.29	0.192	Data Not Lognormal				
Lilliefors (NDs = DL/2)	0.151	0.192	Data Appear Lognormal				
Lilliefors (Lognormal ROS Estimates)	0.201	0.192	Data Not Lognormal				

Note: Substitution methods such as DL or DL/2 are not recommended.

Thallium (mw-65)

	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs
Raw Statistics	30	10	20	1	19	95.00%

Warning: Only one distinct data value was detected! ProUCL (or any other software) should not be used on such a data set!

It is suggested to use alternative site specific values determined by the Project Team to estimate environmental parameters (e.g., EPC, BTV).

The data set for variable Thallium (mw-65) was not processed!

Thallium (mw-71)

	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs
Raw Statistics	31	5	26	16	10	38.46%

	Number	Minimum	Maximum	Mean	Median	SD
Statistics (Non-Detects Only)	10	4.0000E-4	0.002	8.1000E-4	7.5000E-4	5.0870E-4
Statistics (Non-Detects Only)	16	2.3000E-4	6.5000E-4	3.6750E-4	3.7000E-4	1.0485E-4
Statistics (All: NDs treated as DL value)	26	2.3000E-4	0.002	5.3769E-4	4.0000E-4	3.8465E-4
Statistics (All: NDs treated as DL/2 value)	26	2.0000E-4	0.001	3.8192E-4	3.7000E-4	1.7387E-4
Statistics (Normal ROS Imputed Data)	26	2.3000E-4	6.5000E-4	3.5468E-4	3.4941E-4	8.9908E-5

Appendix B
Goodness of Fit Statistics

Statistics (Gamma ROS Imputed Data)	26	2.3000E-4	0.01	0.00407	4.3000E-4	0.00478		
Statistics (Lognormal ROS Imputed Data)	26	2.3000E-4	6.5000E-4	3.5237E-4	3.3810E-4	8.8965E-5		
	K hat	K Star	Theta hat	Log Mean	Log Stdv	Log CV		
Statistics (Non-Detects Only)	14.33	11.68	2.5649E-5	-7.944	0.271	-0.0341		
Statistics (NDs = DL)	3.317	2.96	1.6210E-4	-7.686	0.523	-0.0681		
Statistics (NDs = DL/2)	6.203	5.513	6.1574E-5	-7.953	0.404	-0.0508		
Statistics (Gamma ROS Estimates)	0.542	0.506	0.00751	-6.66	1.67	-0.251		
Statistics (Lognormal ROS Estimates)	--	--	--	-7.978	0.234	-0.0293		
Normal GOF Test Results								
	No NDs	NDs = DL	NDs = DL/2	Normal ROS				
Correlation Coefficient R	0.948	0.808	0.905	0.947				
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)					
Shapiro-Wilk (Detects Only)	0.908	0.887	Data Appear Normal					
Shapiro-Wilk (NDs = DL)	0.671	0.92	Data Not Normal					
Shapiro-Wilk (NDs = DL/2)	0.833	0.92	Data Not Normal					
Shapiro-Wilk (Normal ROS Estimates)	0.909	0.92	Data Not Normal					
Lilliefors (Detects Only)	0.151	0.213	Data Appear Normal					
Lilliefors (NDs = DL)	0.308	0.17	Data Not Normal					
Lilliefors (NDs = DL/2)	0.172	0.17	Data Not Normal					
Lilliefors (Normal ROS Estimates)	0.0941	0.17	Data Appear Normal					
Gamma GOF Test Results								
	No NDs	NDs = DL	NDs = DL/2	Gamma ROS				
Correlation Coefficient R	0.969	0.907	0.953	0.74				
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)					
Anderson-Darling (Detects Only)	0.316	0.738						
Kolmogorov-Smirnov (Detects Only)	0.142	0.215	Detected Data Appear Gamma Distributed					
Anderson-Darling (NDs = DL)	1.984	0.75						
Kolmogorov-Smirnov (NDs = DL)	0.274	0.172	Data Not Gamma Distributed					
Anderson-Darling (NDs = DL/2)	0.476	0.746						
Kolmogorov-Smirnov (NDs = DL/2)	0.125	0.171	Data Appear Gamma Distributed					
Anderson-Darling (Gamma ROS Estimates)	3.974	0.804						
Kolmogorov-Smirnov (Gamma ROS Est.)	0.332	0.181	Data Not Gamma Distributed					

Appendix B
Goodness of Fit Statistics

Lognormal GOF Test Results

	No NDs	NDs = DL	NDs = DL/2	Log ROS
Correlation Coefficient R	0.979	0.929	0.974	0.981

	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)
Shapiro-Wilk (Detects Only)	0.96	0.887	Data Appear Lognormal
Shapiro-Wilk (NDs = DL)	0.866	0.92	Data Not Lognormal
Shapiro-Wilk (NDs = DL/2)	0.945	0.92	Data Appear Lognormal
Shapiro-Wilk (Lognormal ROS Estimates)	0.967	0.92	Data Appear Lognormal
Lilliefors (Detects Only)	0.128	0.213	Data Appear Lognormal
Lilliefors (NDs = DL)	0.242	0.17	Data Not Lognormal
Lilliefors (NDs = DL/2)	0.115	0.17	Data Appear Lognormal
Lilliefors (Lognormal ROS Estimates)	0.0886	0.17	Data Appear Lognormal

Note: Substitution methods such as DL or DL/2 are not recommended.

Thallium (mw-72)

	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs
Raw Statistics	31	5	26	23	3	11.54%

	Number	Minimum	Maximum	Mean	Median	SD
Statistics (Non-Detects Only)	3	1.1000E-4	0.002	0.00104	0.001	9.4553E-4
Statistics (Non-Detects Only)	23	5.6000E-4	0.0012	9.4826E-4	9.5000E-4	1.4862E-4
Statistics (All: NDs treated as DL value)	26	1.1000E-4	0.002	9.5846E-4	9.5500E-4	3.0297E-4
Statistics (All: NDs treated as DL/2 value)	26	5.5000E-5	0.0012	8.9865E-4	9.5000E-4	2.3862E-4
Statistics (Normal ROS Imputed Data)	26	5.6000E-4	0.0012	9.3103E-4	9.4500E-4	1.5474E-4
Statistics (Gamma ROS Imputed Data)	26	5.6000E-4	0.01	0.00199	9.8000E-4	0.00295
Statistics (Lognormal ROS Imputed Data)	26	5.6000E-4	0.0012	9.3086E-4	9.4500E-4	1.5321E-4

	K hat	K Star	Theta hat	Log Mean	Log Stdv	Log CV
Statistics (Non-Detects Only)	35.82	31.18	2.6472E-5	-6.975	0.18	-0.0258
Statistics (NDs = DL)	6.81	6.05	1.4074E-4	-7.025	0.482	-0.0686
Statistics (NDs = DL/2)	5.671	5.042	1.5848E-4	-7.105	0.59	-0.083
Statistics (Gamma ROS Estimates)	1.173	1.064	0.0017	-6.701	0.79	-0.118
Statistics (Lognormal ROS Estimates)	--	--	--	-6.995	0.185	-0.0265

Appendix B
Goodness of Fit Statistics

Normal GOF Test Results					
	No NDs	NDs = DL	NDs = DL/2	Normal ROS	
Correlation Coefficient R	0.928	0.853	0.867	0.94	
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)		
Shapiro-Wilk (Detects Only)	0.87	0.914	Data Not Normal		
Shapiro-Wilk (NDs = DL)	0.772	0.92	Data Not Normal		
Shapiro-Wilk (NDs = DL/2)	0.772	0.92	Data Not Normal		
Shapiro-Wilk (Normal ROS Estimates)	0.887	0.92	Data Not Normal		
Lilliefors (Detects Only)	0.193	0.18	Data Not Normal		
Lilliefors (NDs = DL)	0.244	0.17	Data Not Normal		
Lilliefors (NDs = DL/2)	0.277	0.17	Data Not Normal		
Lilliefors (Normal ROS Estimates)	0.178	0.17	Data Not Normal		
Gamma GOF Test Results					
	No NDs	NDs = DL	NDs = DL/2	Gamma ROS	
Correlation Coefficient R	0.912	0.853	0.786	0.811	
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)		
Anderson-Darling (Detects Only)	1.475	0.742			
Kolmogorov-Smirnov (Detects Only)	0.219	0.181	Data Not Gamma Distributed		
Anderson-Darling (NDs = DL)	3.134	0.746			
Kolmogorov-Smirnov (NDs = DL)	0.31	0.171	Data Not Gamma Distributed		
Anderson-Darling (NDs = DL/2)	3.819	0.746			
Kolmogorov-Smirnov (NDs = DL/2)	0.344	0.172	Data Not Gamma Distributed		
Anderson-Darling (Gamma ROS Estimates)	6.372	0.769			
Kolmogorov-Smirnov (Gamma ROS Est.)	0.458	0.176	Data Not Gamma Distributed		
Lognormal GOF Test Results					
	No NDs	NDs = DL	NDs = DL/2	Log ROS	
Correlation Coefficient R	0.883	0.739	0.663	0.911	
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)		
Shapiro-Wilk (Detects Only)	0.791	0.914	Data Not Lognormal		
Shapiro-Wilk (NDs = DL)	0.589	0.92	Data Not Lognormal		
Shapiro-Wilk (NDs = DL/2)	0.472	0.92	Data Not Lognormal		

Appendix B
Goodness of Fit Statistics

Shapiro-Wilk (Lognormal ROS Estimates)	0.834	0.92	Data Not Lognormal					
Lilliefors (Detects Only)	0.237	0.18	Data Not Lognormal					
Lilliefors (NDs = DL)	0.338	0.17	Data Not Lognormal					
Lilliefors (NDs = DL/2)	0.355	0.17	Data Not Lognormal					
Lilliefors (Lognormal ROS Estimates)	0.22	0.17	Data Not Lognormal					
Note: Substitution methods such as DL or DL/2 are not recommended.								
Thallium (mw-73)								
	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs		
Raw Statistics	25	4	21	11	10	47.62%		
	Number	Minimum	Maximum	Mean	Median	SD		
Statistics (Non-Detects Only)	10	4.0000E-4	0.002	8.0000E-4	7.0000E-4	5.1640E-4		
Statistics (Non-Detects Only)	11	2.0000E-4	2.6000E-4	2.2818E-4	2.3000E-4	2.0405E-5		
Statistics (All: NDs treated as DL value)	21	2.0000E-4	0.002	5.0048E-4	2.6000E-4	4.5370E-4		
Statistics (All: NDs treated as DL/2 value)	21	2.0000E-4	0.001	3.1000E-4	2.3000E-4	1.9478E-4		
Statistics (Normal ROS Imputed Data)	21	2.0000E-4	2.6000E-4	2.2818E-4	2.2818E-4	1.7792E-5		
Statistics (Gamma ROS Imputed Data)	21	2.0000E-4	0.01	0.00488	2.6000E-4	0.005		
Statistics (Lognormal ROS Imputed Data)	21	2.0000E-4	2.6000E-4	2.2801E-4	2.2735E-4	1.7801E-5		
	K hat	K Star	Theta hat	Log Mean	Log Stdv	Log CV		
Statistics (Non-Detects Only)	137.1	99.75	1.6646E-6	-8.389	0.0898	-0.0107		
Statistics (NDs = DL)	2.01	1.755	2.4894E-4	-7.869	0.689	-0.0876		
Statistics (NDs = DL/2)	4.328	3.742	7.1622E-5	-8.199	0.452	-0.0551		
Statistics (Gamma ROS Estimates)	0.502	0.462	0.00973	-6.587	1.937	-0.294		
Statistics (Lognormal ROS Estimates)	--	--	--	-8.389	0.0782	-0.00933		
Normal GOF Test Results								
	No NDs	NDs = DL	NDs = DL/2	Normal ROS				
Correlation Coefficient R	0.982	0.812	0.769	0.987				
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)					
Shapiro-Wilk (Detects Only)	0.946	0.85	Data Appear Normal					
Shapiro-Wilk (NDs = DL)	0.671	0.908	Data Not Normal					
Shapiro-Wilk (NDs = DL/2)	0.606	0.908	Data Not Normal					
Shapiro-Wilk (Normal ROS Estimates)	0.962	0.908	Data Appear Normal					

Appendix B
Goodness of Fit Statistics

Lilliefors (Detects Only)	0.13	0.251	Data Appear Normal		
Lilliefors (NDs = DL)	0.35	0.188	Data Not Normal		
Lilliefors (NDs = DL/2)	0.363	0.188	Data Not Normal		
Lilliefors (Normal ROS Estimates)	0.109	0.188	Data Appear Normal		
Gamma GOF Test Results					
	No NDs	NDs = DL	NDs = DL/2	Gamma ROS	
Correlation Coefficient R	0.98	0.93	0.87	0.664	
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)		
Anderson-Darling (Detects Only)	0.273	0.726			
Kolmogorov-Smirnov (Detects Only)	0.14	0.254	Detected Data Appear Gamma Distributed		
Anderson-Darling (NDs = DL)	2.003	0.754			
Kolmogorov-Smirnov (NDs = DL)	0.288	0.192	Data Not Gamma Distributed		
Anderson-Darling (NDs = DL/2)	2.788	0.747			
Kolmogorov-Smirnov (NDs = DL/2)	0.338	0.19	Data Not Gamma Distributed		
Anderson-Darling (Gamma ROS Estimates)	3.552	0.805			
Kolmogorov-Smirnov (Gamma ROS Est.)	0.342	0.2	Data Not Gamma Distributed		
Lognormal GOF Test Results					
	No NDs	NDs = DL	NDs = DL/2	Log ROS	
Correlation Coefficient R	0.982	0.906	0.845	0.987	
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)		
Shapiro-Wilk (Detects Only)	0.944	0.85	Data Appear Lognormal		
Shapiro-Wilk (NDs = DL)	0.816	0.908	Data Not Lognormal		
Shapiro-Wilk (NDs = DL/2)	0.716	0.908	Data Not Lognormal		
Shapiro-Wilk (Lognormal ROS Estimates)	0.963	0.908	Data Appear Lognormal		
Lilliefors (Detects Only)	0.128	0.251	Data Appear Lognormal		
Lilliefors (NDs = DL)	0.236	0.188	Data Not Lognormal		
Lilliefors (NDs = DL/2)	0.311	0.188	Data Not Lognormal		
Lilliefors (Lognormal ROS Estimates)	0.109	0.188	Data Appear Lognormal		
Note: Substitution methods such as DL or DL/2 are not recommended.					
	Goodness-of-Fit Test Statistics for Data Sets with Non-Detects				
User Selected Options					
Date/Time of Computation	ProUCL 5.18/15/2023 3:14:42 PM				

Appendix B
Goodness of Fit Statistics

From File	ProUCLUpload_FC_CWTP_AppxIV_ProUCL_20230809_a.xls							
Full Precision	OFF							
Confidence Coefficient	0.95							
Arsenic (background)								
	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs		
Raw Statistics	87	14	73	44	29	39.73%		
	Number	Minimum	Maximum	Mean	Median	SD		
Statistics (Non-Detects Only)	29	5.0000E-4	0.01	0.00303	0.002	0.00262		
Statistics (Non-Detects Only)	44	7.0000E-4	0.016	0.00507	0.00465	0.00338		
Statistics (All: NDs treated as DL value)	73	5.0000E-4	0.016	0.00426	0.004	0.00324		
Statistics (All: NDs treated as DL/2 value)	73	2.5000E-4	0.016	0.00366	0.0026	0.00325		
Statistics (Normal ROS Imputed Data)	73	-0.00568	0.016	0.00277	0.0028	0.00423		
Statistics (Gamma ROS Imputed Data)	73	7.0000E-4	0.016	0.00703	0.0072	0.00357		
Statistics (Lognormal ROS Imputed Data)	73	3.7298E-4	0.016	0.00358	0.0026	0.00324		
	K hat	K Star	Theta hat	Log Mean	Log Stdv	Log CV		
Statistics (Non-Detects Only)	2.234	2.097	0.00227	-5.524	0.753	-0.136		
Statistics (NDs = DL)	1.728	1.666	0.00247	-5.774	0.855	-0.148		
Statistics (NDs = DL/2)	1.279	1.235	0.00286	-6.049	1.029	-0.17		
Statistics (Gamma ROS Estimates)	2.637	2.538	0.00267	-5.159	0.737	-0.143		
Statistics (Lognormal ROS Estimates)	--	--	--	-6.033	0.937	-0.155		
Normal GOF Test Results								
	No NDs	NDs = DL	NDs = DL/2	Normal ROS				
Correlation Coefficient R	0.956	0.942	0.926	0.99				
	Apr. Test	P Value	Conclusion with Alpha(0.05)					
Shapiro-Wilk (NDs = DL)	0.884	1.7661E-7	Data Not Normal					
Shapiro-Wilk (NDs = DL/2)	0.856	1.4799E-9	Data Not Normal					
Shapiro-Wilk (Normal ROS Estimates)	0.978	0.53	Data Appear Normal					
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)					
Shapiro-Wilk (Detects Only)	0.913	0.944	Data Not Normal					
Lilliefors (Detects Only)	0.132	0.132	Data Not Normal					
Lilliefors (NDs = DL)	0.142	0.104	Data Not Normal					

Appendix B
Goodness of Fit Statistics

Lilliefors (NDs = DL/2)	0.158	0.104	Data Not Normal					
Lilliefors (Normal ROS Estimates)	0.0692	0.104	Data Appear Normal					
Gamma GOF Test Results								
	No NDs	NDs = DL	NDs = DL/2	Gamma ROS				
Correlation Coefficient R	0.996	0.992	0.995	0.882				
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)					
Anderson-Darling (Detects Only)	0.194	0.759						
Kolmogorov-Smirnov (Detects Only)	0.0604	0.135	Detected Data Appear Gamma Distributed					
Anderson-Darling (NDs = DL)	0.938	0.767						
Kolmogorov-Smirnov (NDs = DL)	0.105	0.106	Detected Data appear Approximate Gamma Distribution					
Anderson-Darling (NDs = DL/2)	0.729	0.774						
Kolmogorov-Smirnov (NDs = DL/2)	0.101	0.107	Data Appear Gamma Distributed					
Anderson-Darling (Gamma ROS Estimates)	4.116	0.76						
Kolmogorov-Smirnov (Gamma ROS Est.)	0.243	0.105	Data Not Gamma Distributed					
Lognormal GOF Test Results								
	No NDs	NDs = DL	NDs = DL/2	Log ROS				
Correlation Coefficient R	0.984	0.979	0.979	0.99				
	Apr. Test	P Value	Conclusion with Alpha(0.05)					
Shapiro-Wilk (NDs = DL)	0.94	0.00268	Data Not Lognormal					
Shapiro-Wilk (NDs = DL/2)	0.939	0.00241	Data Not Lognormal					
Shapiro-Wilk (Lognormal ROS Estimates)	0.96	0.0605	Data Appear Lognormal					
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)					
Shapiro-Wilk (Detects Only)	0.957	0.944	Data Appear Lognormal					
Lilliefors (Detects Only)	0.0975	0.132	Data Appear Lognormal					
Lilliefors (NDs = DL)	0.143	0.104	Data Not Lognormal					
Lilliefors (NDs = DL/2)	0.153	0.104	Data Not Lognormal					
Lilliefors (Lognormal ROS Estimates)	0.0892	0.104	Data Appear Lognormal					
Note: Substitution methods such as DL or DL/2 are not recommended.								
Barium (background)								
	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs		

Appendix B
Goodness of Fit Statistics

Raw Statistics	87	14	73	71	2	2.74%
	Number	Minimum	Maximum	Mean	Median	SD
Statistics (Non-Detects Only)	2	0.01	0.01	0.01	0.01	0
Statistics (Non-Detects Only)	71	0.0045	0.051	0.0161	0.012	0.00929
Statistics (All: NDs treated as DL value)	73	0.0045	0.051	0.016	0.012	0.00921
Statistics (All: NDs treated as DL/2 value)	73	0.0045	0.051	0.0158	0.012	0.00934
Statistics (Normal ROS Imputed Data)	73	0.0045	0.051	0.0159	0.012	0.00926
Statistics (Gamma ROS Imputed Data)	73	0.0045	0.051	0.016	0.012	0.00921
Statistics (Lognormal ROS Imputed Data)	73	0.0045	0.051	0.0159	0.012	0.00924
	K hat	K Star	Theta hat	Log Mean	Log Stdv	Log CV
Statistics (Non-Detects Only)	3.636	3.491	0.00443	-4.272	0.53	-0.124
Statistics (NDs = DL)	3.668	3.526	0.00435	-4.281	0.526	-0.123
Statistics (NDs = DL/2)	3.429	3.297	0.00461	-4.3	0.55	-0.128
Statistics (Gamma ROS Estimates)	3.668	3.526	0.00435	-4.281	0.526	-0.123
Statistics (Lognormal ROS Estimates)	--	--	--	-4.285	0.53	-0.124
Normal GOF Test Results						
	No NDs	NDs = DL	NDs = DL/2	Normal ROS		
Correlation Coefficient R	0.926	0.922	0.929	0.925		
	Apr. Test	P Value	Conclusion with Alpha(0.05)			
Shapiro-Wilk (Detects Only)	0.858	4.4409E-9	Data Not Normal			
Shapiro-Wilk (NDs = DL)	0.852	7.127E-10	Data Not Normal			
Shapiro-Wilk (NDs = DL/2)	0.863	5.1353E-9	Data Not Normal			
Shapiro-Wilk (Normal ROS Estimates)	0.856	1.5890E-9	Data Not Normal			
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)			
Lilliefors (Detects Only)	0.192	0.105	Data Not Normal			
Lilliefors (NDs = DL)	0.2	0.104	Data Not Normal			
Lilliefors (NDs = DL/2)	0.193	0.104	Data Not Normal			
Lilliefors (Normal ROS Estimates)	0.197	0.104	Data Not Normal			
Gamma GOF Test Results						
	No NDs	NDs = DL	NDs = DL/2	Gamma ROS		
Correlation Coefficient R	0.983	0.982	0.985	0.982		

Appendix B
Goodness of Fit Statistics

	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)			
Anderson-Darling (Detects Only)	1.917	0.756				
Kolmogorov-Smirnov (Detects Only)	0.168	0.106	Data Not Gamma Distributed			
Anderson-Darling (NDs = DL)	2.131	0.757				
Kolmogorov-Smirnov (NDs = DL)	0.18	0.105	Data Not Gamma Distributed			
Anderson-Darling (NDs = DL/2)	1.712	0.757				
Kolmogorov-Smirnov (NDs = DL/2)	0.165	0.105	Data Not Gamma Distributed			
Anderson-Darling (Gamma ROS Estimates)	2.131	0.757				
Kolmogorov-Smirnov (Gamma ROS Est.)	0.18	0.105	Data Not Gamma Distributed			
Lognormal GOF Test Results						
	No NDs	NDs = DL	NDs = DL/2	Log ROS		
Correlation Coefficient R	0.975	0.974	0.981	0.973		
	Apr. Test	P Value	Conclusion with Alpha(0.05)			
Shapiro-Wilk (Detects Only)	0.942	0.00454	Data Not Lognormal			
Shapiro-Wilk (NDs = DL)	0.939	0.00249	Data Not Lognormal			
Shapiro-Wilk (NDs = DL/2)	0.95	0.0149	Data Not Lognormal			
Shapiro-Wilk (Lognormal ROS Estimates)	0.938	0.0019	Data Not Lognormal			
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)			
Lilliefors (Detects Only)	0.158	0.105	Data Not Lognormal			
Lilliefors (NDs = DL)	0.17	0.104	Data Not Lognormal			
Lilliefors (NDs = DL/2)	0.149	0.104	Data Not Lognormal			
Lilliefors (Lognormal ROS Estimates)	0.165	0.104	Data Not Lognormal			
Note: Substitution methods such as DL or DL/2 are not recommended.						
Cobalt (background)						
	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs
Raw Statistics	87	14	73	48	25	34.25%
	Number	Minimum	Maximum	Mean	Median	SD
Statistics (Non-Detects Only)	25	5.0000E-4	0.01	0.0035	0.002	0.00303
Statistics (Non-Detects Only)	48	1.3000E-4	0.019	0.00399	0.00285	0.00306
Statistics (All: NDs treated as DL value)	73	1.3000E-4	0.019	0.00382	0.0027	0.00304
Statistics (All: NDs treated as DL/2 value)	73	1.3000E-4	0.019	0.00322	0.0025	0.00283
Statistics (Normal ROS Imputed Data)	73	-0.00336	0.019	0.0027	0.0025	0.00333

Appendix B
Goodness of Fit Statistics

Statistics (Gamma ROS Imputed Data)	73	1.3000E-4	0.019	0.00605	0.0058	0.00379		
Statistics (Lognormal ROS Imputed Data)	73	1.3000E-4	0.019	0.00305	0.0024	0.00286		
	K hat	K Star	Theta hat	Log Mean	Log Stdv	Log CV		
Statistics (Non-Detects Only)	1.897	1.793	0.0021	-5.81	0.884	-0.152		
Statistics (NDs = DL)	1.667	1.607	0.00229	-5.896	0.915	-0.155		
Statistics (NDs = DL/2)	1.406	1.358	0.00229	-6.133	1.013	-0.165		
Statistics (Gamma ROS Estimates)	1.877	1.809	0.00322	-5.398	0.918	-0.17		
Statistics (Lognormal ROS Estimates)	--	--	--	-6.193	0.974	-0.157		
Normal GOF Test Results								
	No NDs	NDs = DL	NDs = DL/2	Normal ROS				
Correlation Coefficient R	0.868	0.909	0.876	0.94				
	Apr. Test	P Value	Conclusion with Alpha(0.05)					
Shapiro-Wilk (NDs = DL)	0.846	2.713E-10	Data Not Normal					
Shapiro-Wilk (NDs = DL/2)	0.795	5.551E-14	Data Not Normal					
Shapiro-Wilk (Normal ROS Estimates)	0.91	1.7486E-5	Data Not Normal					
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)					
Shapiro-Wilk (Detects Only)	0.783	0.947	Data Not Normal					
Lilliefors (Detects Only)	0.181	0.127	Data Not Normal					
Lilliefors (NDs = DL)	0.167	0.104	Data Not Normal					
Lilliefors (NDs = DL/2)	0.203	0.104	Data Not Normal					
Lilliefors (Normal ROS Estimates)	0.12	0.104	Data Not Normal					
Gamma GOF Test Results								
	No NDs	NDs = DL	NDs = DL/2	Gamma ROS				
Correlation Coefficient R	0.945	0.978	0.958	0.902				
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)					
Anderson-Darling (Detects Only)	1.143	0.763						
Kolmogorov-Smirnov (Detects Only)	0.166	0.13	Data Not Gamma Distributed					
Anderson-Darling (NDs = DL)	0.542	0.767						
Kolmogorov-Smirnov (NDs = DL)	0.109	0.106	Detected Data appear Approximate Gamma Distribution					
Anderson-Darling (NDs = DL/2)	1.234	0.771						
Kolmogorov-Smirnov (NDs = DL/2)	0.164	0.107	Data Not Gamma Distributed					
Anderson-Darling (Gamma ROS Estimates)	2.842	0.765						

Appendix B
Goodness of Fit Statistics

Kolmogorov-Smirnov (Gamma ROS Est.)	0.194	0.106	Data Not Gamma Distributed					
Lognormal GOF Test Results								
	No NDs	NDs = DL	NDs = DL/2	Log ROS				
Correlation Coefficient R	0.92	0.968	0.959	0.984				
	Apr. Test	P Value	Conclusion with Alpha(0.05)					
Shapiro-Wilk (NDs = DL)	0.942	0.00369	Data Not Lognormal					
Shapiro-Wilk (NDs = DL/2)	0.917	6.1599E-5	Data Not Lognormal					
Shapiro-Wilk (Lognormal ROS Estimates)	0.967	0.162	Data Appear Lognormal					
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)					
Shapiro-Wilk (Detects Only)	0.866	0.947	Data Not Lognormal					
Lilliefors (Detects Only)	0.218	0.127	Data Not Lognormal					
Lilliefors (NDs = DL)	0.158	0.104	Data Not Lognormal					
Lilliefors (NDs = DL/2)	0.222	0.104	Data Not Lognormal					
Lilliefors (Lognormal ROS Estimates)	0.15	0.104	Data Not Lognormal					
Note: Substitution methods such as DL or DL/2 are not recommended.								
Lithium (background)								
	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs		
Raw Statistics	87	14	73	68	5	6.85%		
	Number	Minimum	Maximum	Mean	Median	SD		
Statistics (Non-Detects Only)	5	0.2	0.8	0.36	0.2	0.261		
Statistics (Non-Detects Only)	68	0.21	0.89	0.357	0.35	0.106		
Statistics (All: NDs treated as DL value)	73	0.2	0.89	0.358	0.35	0.119		
Statistics (All: NDs treated as DL/2 value)	73	0.1	0.89	0.345	0.35	0.116		
Statistics (Normal ROS Imputed Data)	73	0.116	0.89	0.348	0.35	0.111		
Statistics (Gamma ROS Imputed Data)	73	0.156	0.89	0.349	0.35	0.109		
Statistics (Lognormal ROS Imputed Data)	73	0.187	0.89	0.35	0.35	0.107		
	K hat	K Star	Theta hat	Log Mean	Log Stdv	Log CV		
Statistics (Non-Detects Only)	15.44	14.77	0.0231	-1.062	0.245	-0.231		
Statistics (NDs = DL)	12	11.51	0.0298	-1.071	0.28	-0.262		
Statistics (NDs = DL/2)	9.313	8.94	0.0371	-1.118	0.349	-0.312		
Statistics (Gamma ROS Estimates)	12.94	12.42	0.027	-1.092	0.276	-0.252		

Appendix B
Goodness of Fit Statistics

Statistics (Lognormal ROS Estimates)	--	--	--	-1.086	0.261	-0.241		
Normal GOF Test Results								
	No NDs	NDs = DL	NDs = DL/2	Normal ROS				
Correlation Coefficient R	0.839	0.853	0.884	0.872				
	Apr. Test	P Value	Conclusion with Alpha(0.05)					
Shapiro-Wilk (Detects Only)	0.733	1.110E-16	Data Not Normal					
Shapiro-Wilk (NDs = DL)	0.745	0	Data Not Normal					
Shapiro-Wilk (NDs = DL/2)	0.812	7.991E-13	Data Not Normal					
Shapiro-Wilk (Normal ROS Estimates)	0.793	3.997E-14	Data Not Normal					
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)					
Lilliefors (Detects Only)	0.226	0.107	Data Not Normal					
Lilliefors (NDs = DL)	0.237	0.104	Data Not Normal					
Lilliefors (NDs = DL/2)	0.208	0.104	Data Not Normal					
Lilliefors (Normal ROS Estimates)	0.21	0.104	Data Not Normal					
Gamma GOF Test Results								
	No NDs	NDs = DL	NDs = DL/2	Gamma ROS				
Correlation Coefficient R	0.875	0.891	0.904	0.894				
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)					
Anderson-Darling (Detects Only)	2.787	0.75						
Kolmogorov-Smirnov (Detects Only)	0.178	0.108	Data Not Gamma Distributed					
Anderson-Darling (NDs = DL)	3.057	0.75						
Kolmogorov-Smirnov (NDs = DL)	0.188	0.104	Data Not Gamma Distributed					
Anderson-Darling (NDs = DL/2)	3.662	0.751						
Kolmogorov-Smirnov (NDs = DL/2)	0.176	0.104	Data Not Gamma Distributed					
Anderson-Darling (Gamma ROS Estimates)	2.766	0.75						
Kolmogorov-Smirnov (Gamma ROS Est.)	0.167	0.104	Data Not Gamma Distributed					
Lognormal GOF Test Results								
	No NDs	NDs = DL	NDs = DL/2	Log ROS				
Correlation Coefficient R	0.934	0.942	0.903	0.944				
	Apr. Test	P Value	Conclusion with Alpha(0.05)					

Appendix B
Goodness of Fit Statistics

Shapiro-Wilk (Detects Only)	0.888	1.3303E-6	Data Not Lognormal					
Shapiro-Wilk (NDs = DL)	0.891	6.7019E-7	Data Not Lognormal					
Shapiro-Wilk (NDs = DL/2)	0.837	5.409E-11	Data Not Lognormal					
Shapiro-Wilk (Lognormal ROS Estimates)	0.906	8.0068E-6	Data Not Lognormal					
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)					
Lilliefors (Detects Only)	0.159	0.107	Data Not Lognormal					
Lilliefors (NDs = DL)	0.167	0.104	Data Not Lognormal					
Lilliefors (NDs = DL/2)	0.188	0.104	Data Not Lognormal					
Lilliefors (Lognormal ROS Estimates)	0.149	0.104	Data Not Lognormal					
Note: Substitution methods such as DL or DL/2 are not recommended.								
Molybdenum (background)								
	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs		
Raw Statistics	87	14	73	38	35	47.95%		
	Number	Minimum	Maximum	Mean	Median	SD		
Statistics (Non-Detects Only)	35	0.001	0.01	0.00346	0.002	0.00256		
Statistics (Non-Detects Only)	38	5.2000E-4	0.011	0.00268	0.0015	0.00286		
Statistics (All: NDs treated as DL value)	73	5.2000E-4	0.011	0.00305	0.002	0.00273		
Statistics (All: NDs treated as DL/2 value)	73	5.0000E-4	0.011	0.00223	0.0012	0.00228		
Statistics (Normal ROS Imputed Data)	73	-0.00211	0.011	0.00188	0.0013	0.00247		
Statistics (Gamma ROS Imputed Data)	73	5.2000E-4	0.011	0.00619	0.01	0.00421		
Statistics (Lognormal ROS Imputed Data)	73	3.2500E-4	0.011	0.00194	0.0012	0.00223		
	K hat	K Star	Theta hat	Log Mean	Log Stdv	Log CV		
Statistics (Non-Detects Only)	1.377	1.286	0.00195	-6.326	0.861	-0.136		
Statistics (NDs = DL)	1.644	1.585	0.00186	-6.125	0.81	-0.132		
Statistics (NDs = DL/2)	1.575	1.52	0.00141	-6.458	0.794	-0.123		
Statistics (Gamma ROS Estimates)	1.343	1.297	0.00461	-5.501	1.063	-0.193		
Statistics (Lognormal ROS Estimates)	--	--	--	-6.613	0.787	-0.119		
Normal GOF Test Results								
	No NDs	NDs = DL	NDs = DL/2	Normal ROS				
Correlation Coefficient R	0.839	0.88	0.825	0.896				
	Apr. Test	P Value	Conclusion with Alpha(0.05)					

Appendix B
Goodness of Fit Statistics

Shapiro-Wilk (NDs = DL)	0.763	3.331E-16	Data Not Normal		
Shapiro-Wilk (NDs = DL/2)	0.683	0	Data Not Normal		
Shapiro-Wilk (Normal ROS Estimates)	0.81	6.281E-13	Data Not Normal		
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)		
Shapiro-Wilk (Detects Only)	0.701	0.938	Data Not Normal		
Lilliefors (Detects Only)	0.248	0.142	Data Not Normal		
Lilliefors (NDs = DL)	0.267	0.104	Data Not Normal		
Lilliefors (NDs = DL/2)	0.26	0.104	Data Not Normal		
Lilliefors (Normal ROS Estimates)	0.167	0.104	Data Not Normal		
Gamma GOF Test Results					
	No NDs	NDs = DL	NDs = DL/2	Gamma ROS	
Correlation Coefficient R	0.96	0.965	0.953	0.744	
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)		
Anderson-Darling (Detects Only)	1.656	0.769			
Kolmogorov-Smirnov (Detects Only)	0.152	0.146	Data Not Gamma Distributed		
Anderson-Darling (NDs = DL)	2.379	0.768			
Kolmogorov-Smirnov (NDs = DL)	0.21	0.106	Data Not Gamma Distributed		
Anderson-Darling (NDs = DL/2)	2.928	0.768			
Kolmogorov-Smirnov (NDs = DL/2)	0.189	0.106	Data Not Gamma Distributed		
Anderson-Darling (Gamma ROS Estimates)	7.58	0.773			
Kolmogorov-Smirnov (Gamma ROS Est.)	0.318	0.107	Data Not Gamma Distributed		
Lognormal GOF Test Results					
	No NDs	NDs = DL	NDs = DL/2	Log ROS	
Correlation Coefficient R	0.972	0.977	0.97	0.976	
	Apr. Test	P Value	Conclusion with Alpha(0.05)		
Shapiro-Wilk (NDs = DL)	0.933	8.3045E-4	Data Not Lognormal		
Shapiro-Wilk (NDs = DL/2)	0.92	9.8918E-5	Data Not Lognormal		
Shapiro-Wilk (Lognormal ROS Estimates)	0.94	0.00297	Data Not Lognormal		
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)		
Shapiro-Wilk (Detects Only)	0.927	0.938	Data Not Lognormal		
Lilliefors (Detects Only)	0.112	0.142	Data Appear Lognormal		
Lilliefors (NDs = DL)	0.16	0.104	Data Not Lognormal		
Lilliefors (NDs = DL/2)	0.167	0.104	Data Not Lognormal		

Appendix B
Goodness of Fit Statistics

Lilliefors (Lognormal ROS Estimates)	0.0886	0.104	Data Appear Lognormal					
Note: Substitution methods such as DL or DL/2 are not recommended.								
Total Radium (background)								
	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs		
Raw Statistics	87	7	80	71	9	11.25%		
	Number	Minimum	Maximum	Mean	Median	SD		
Statistics (Non-Detects Only)	9	0.5	0.8	0.689	0.7	0.105		
Statistics (Non-Detects Only)	71	0.4	4.9	2.245	2.1	1.002		
Statistics (All: NDs treated as DL value)	80	0.4	4.9	2.07	1.9	1.066		
Statistics (All: NDs treated as DL/2 value)	80	0.25	4.9	2.031	1.9	1.12		
Statistics (Normal ROS Imputed Data)	80	-0.224	4.9	2.01	1.9	1.157		
Statistics (Gamma ROS Imputed Data)	80	0.4	4.9	2.068	1.9	1.069		
Statistics (Lognormal ROS Imputed Data)	80	0.4	4.9	2.071	1.9	1.064		
	K hat	K Star	Theta hat	Log Mean	Log Stdv	Log CV		
Statistics (Non-Detects Only)	4.377	4.202	0.513	0.69	0.526	0.763		
Statistics (NDs = DL)	3.319	3.202	0.624	0.569	0.604	1.061		
Statistics (NDs = DL/2)	2.455	2.372	0.827	0.491	0.751	1.529		
Statistics (Gamma ROS Estimates)	3.262	3.148	0.634	0.565	0.612	1.082		
Statistics (Lognormal ROS Estimates)	--	--	--	0.572	0.6	1.049		
Normal GOF Test Results								
	No NDs	NDs = DL	NDs = DL/2	Normal ROS				
Correlation Coefficient R	0.992	0.984	0.988	0.995				
	Apr. Test	P Value	Conclusion with Alpha(0.05)					
Shapiro-Wilk (Detects Only)	0.972	0.316	Data Appear Normal					
Shapiro-Wilk (NDs = DL)	0.951	0.0114	Data Not Normal					
Shapiro-Wilk (NDs = DL/2)	0.958	0.0334	Data Not Normal					
Shapiro-Wilk (Normal ROS Estimates)	0.976	0.395	Data Appear Normal					
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)					
Lilliefors (Detects Only)	0.0852	0.105	Data Appear Normal					
Lilliefors (NDs = DL)	0.0803	0.0991	Data Appear Normal					
Lilliefors (NDs = DL/2)	0.0663	0.0991	Data Appear Normal					

Appendix B
Goodness of Fit Statistics

Lilliefors (Normal ROS Estimates)	0.0652	0.0991	Data Appear Normal					
Gamma GOF Test Results								
	No NDs	NDs = DL	NDs = DL/2	Gamma ROS				
Correlation Coefficient R	0.986	0.981	0.967	0.981				
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)					
Anderson-Darling (Detects Only)	0.444	0.755						
Kolmogorov-Smirnov (Detects Only)	0.0902	0.106	Detected Data Appear Gamma Distributed					
Anderson-Darling (NDs = DL)	0.845	0.758						
Kolmogorov-Smirnov (NDs = DL)	0.0908	0.1	Detected Data appear Approximate Gamma Distribution					
Anderson-Darling (NDs = DL/2)	1.512	0.761						
Kolmogorov-Smirnov (NDs = DL/2)	0.119	0.101	Data Not Gamma Distributed					
Anderson-Darling (Gamma ROS Estimates)	0.801	0.758						
Kolmogorov-Smirnov (Gamma ROS Est.)	0.0882	0.1	Detected Data appear Approximate Gamma Distribution					
Lognormal GOF Test Results								
	No NDs	NDs = DL	NDs = DL/2	Log ROS				
Correlation Coefficient R	0.975	0.976	0.948	0.976				
	Apr. Test	P Value	Conclusion with Alpha(0.05)					
Shapiro-Wilk (Detects Only)	0.944	0.0061	Data Not Lognormal					
Shapiro-Wilk (NDs = DL)	0.934	5.2845E-4	Data Not Lognormal					
Shapiro-Wilk (NDs = DL/2)	0.881	1.7101E-8	Data Not Lognormal					
Shapiro-Wilk (Lognormal ROS Estimates)	0.936	7.7268E-4	Data Not Lognormal					
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)					
Lilliefors (Detects Only)	0.0994	0.105	Data Appear Lognormal					
Lilliefors (NDs = DL)	0.112	0.0991	Data Not Lognormal					
Lilliefors (NDs = DL/2)	0.164	0.0991	Data Not Lognormal					
Lilliefors (Lognormal ROS Estimates)	0.11	0.0991	Data Not Lognormal					
Note: Substitution methods such as DL or DL/2 are not recommended.								
Selenium (background)								
	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs		
Raw Statistics	87	14	73	70	3	4.11%		

Appendix B
Goodness of Fit Statistics

	Number	Minimum	Maximum	Mean	Median	SD
Statistics (Non-Detects Only)	3	0.003	0.005	0.00433	0.005	0.00115
Statistics (Non-Detects Only)	70	0.0038	0.39	0.144	0.125	0.107
Statistics (All: NDs treated as DL value)	73	0.003	0.39	0.138	0.12	0.109
Statistics (All: NDs treated as DL/2 value)	73	0.0015	0.39	0.138	0.12	0.109
Statistics (Normal ROS Imputed Data)	73	-0.129	0.39	0.134	0.12	0.117
Statistics (Gamma ROS Imputed Data)	73	0.0038	0.39	0.139	0.12	0.108
Statistics (Lognormal ROS Imputed Data)	73	0.0038	0.39	0.138	0.12	0.109

	K hat	K Star	Theta hat	Log Mean	Log Stdv	Log CV
Statistics (Non-Detects Only)	1.124	1.085	0.128	-2.446	1.253	-0.512
Statistics (NDs = DL)	0.98	0.949	0.141	-2.57	1.368	-0.532
Statistics (NDs = DL/2)	0.941	0.911	0.147	-2.598	1.435	-0.552
Statistics (Gamma ROS Estimates)	1.095	1.059	0.127	-2.495	1.25	-0.501
Statistics (Lognormal ROS Estimates)	--	--	--	-2.559	1.345	-0.526

Normal GOF Test Results

	No NDs	NDs = DL	NDs = DL/2	Normal ROS
Correlation Coefficient R	0.971	0.966	0.967	0.987

	Apr. Test	P Value	Conclusion with Alpha(0.05)
Shapiro-Wilk (Detects Only)	0.918	1.1276E-4	Data Not Normal
Shapiro-Wilk (NDs = DL)	0.909	1.4857E-5	Data Not Normal
Shapiro-Wilk (NDs = DL/2)	0.91	1.8746E-5	Data Not Normal
Shapiro-Wilk (Normal ROS Estimates)	0.961	0.0717	Data Appear Normal
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)
Lilliefors (Detects Only)	0.123	0.106	Data Not Normal
Lilliefors (NDs = DL)	0.119	0.104	Data Not Normal
Lilliefors (NDs = DL/2)	0.118	0.104	Data Not Normal
Lilliefors (Normal ROS Estimates)	0.101	0.104	Data Appear Normal

Gamma GOF Test Results

	No NDs	NDs = DL	NDs = DL/2	Gamma ROS
Correlation Coefficient R	0.945	0.939	0.936	0.947

	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)

Appendix B
Goodness of Fit Statistics

Anderson-Darling (Detects Only)	2.08	0.778						
Kolmogorov-Smirnov (Detects Only)	0.171	0.109	Data Not Gamma Distributed					
Anderson-Darling (NDs = DL)	2.275	0.782						
Kolmogorov-Smirnov (NDs = DL)	0.175	0.108	Data Not Gamma Distributed					
Anderson-Darling (NDs = DL/2)	2.226	0.784						
Kolmogorov-Smirnov (NDs = DL/2)	0.181	0.108	Data Not Gamma Distributed					
Anderson-Darling (Gamma ROS Estimates)	1.857	0.779						
Kolmogorov-Smirnov (Gamma ROS Est.)	0.159	0.107	Data Not Gamma Distributed					
Lognormal GOF Test Results								
	No NDs	NDs = DL	NDs = DL/2	Log ROS				
Correlation Coefficient R	0.931	0.932	0.93	0.932				
	Apr. Test	P Value	Conclusion with Alpha(0.05)					
Shapiro-Wilk (Detects Only)	0.849	1.2561E-9	Data Not Lognormal					
Shapiro-Wilk (NDs = DL)	0.847	3.333E-10	Data Not Lognormal					
Shapiro-Wilk (NDs = DL/2)	0.848	4.042E-10	Data Not Lognormal					
Shapiro-Wilk (Lognormal ROS Estimates)	0.846	2.476E-10	Data Not Lognormal					
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)					
Lilliefors (Detects Only)	0.231	0.106	Data Not Lognormal					
Lilliefors (NDs = DL)	0.235	0.104	Data Not Lognormal					
Lilliefors (NDs = DL/2)	0.239	0.104	Data Not Lognormal					
Lilliefors (Lognormal ROS Estimates)	0.233	0.104	Data Not Lognormal					
Note: Substitution methods such as DL or DL/2 are not recommended.								
Thallium (background)								
	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs		
Raw Statistics	87	14	73	50	23	31.51%		
	Number	Minimum	Maximum	Mean	Median	SD		
Statistics (Non-Detects Only)	23	1.1000E-4	0.002	8.3522E-4	0.001	5.5011E-4		
Statistics (Non-Detects Only)	50	2.0000E-4	0.0012	6.0400E-4	4.5000E-4	3.4492E-4		
Statistics (All: NDs treated as DL value)	73	1.1000E-4	0.002	6.7685E-4	5.0000E-4	4.3026E-4		
Statistics (All: NDs treated as DL/2 value)	73	5.5000E-5	0.0012	5.4527E-4	4.7000E-4	3.3419E-4		
Statistics (Normal ROS Imputed Data)	73	-2.568E-4	0.0012	5.2586E-4	4.2000E-4	3.3731E-4		
Statistics (Gamma ROS Imputed Data)	73	2.0000E-4	0.01	0.00356	9.4000E-4	0.0044		

Appendix B
Goodness of Fit Statistics

Statistics (Lognormal ROS Imputed Data)	73	1.0143E-4	0.0012	5.2383E-4	3.9000E-4	3.2013E-4		
	K hat	K Star	Theta hat	Log Mean	Log Stdv	Log CV		
Statistics (Non-Detects Only)	2.87	2.711	2.1045E-4	-7.596	0.633	-0.0833		
Statistics (NDs = DL)	2.589	2.491	2.6146E-4	-7.503	0.664	-0.0885		
Statistics (NDs = DL/2)	2.562	2.466	2.1280E-4	-7.722	0.676	-0.0875		
Statistics (Gamma ROS Estimates)	0.607	0.591	0.00588	-6.654	1.493	-0.224		
Statistics (Lognormal ROS Estimates)	--	--	--	-7.741	0.621	-0.0802		
Normal GOF Test Results								
	No NDs	NDs = DL	NDs = DL/2	Normal ROS				
Correlation Coefficient R	0.927	0.921	0.932	0.963				
	Apr. Test	P Value	Conclusion with Alpha(0.05)					
Shapiro-Wilk (NDs = DL)	0.841	1.135E-10	Data Not Normal					
Shapiro-Wilk (NDs = DL/2)	0.845	2.140E-10	Data Not Normal					
Shapiro-Wilk (Normal ROS Estimates)	0.915	3.8595E-5	Data Not Normal					
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)					
Shapiro-Wilk (Detects Only)	0.831	0.947	Data Not Normal					
Lilliefors (Detects Only)	0.193	0.125	Data Not Normal					
Lilliefors (NDs = DL)	0.196	0.104	Data Not Normal					
Lilliefors (NDs = DL/2)	0.184	0.104	Data Not Normal					
Lilliefors (Normal ROS Estimates)	0.146	0.104	Data Not Normal					
Gamma GOF Test Results								
	No NDs	NDs = DL	NDs = DL/2	Gamma ROS				
Correlation Coefficient R	0.914	0.951	0.933	0.782				
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)					
Anderson-Darling (Detects Only)	2.776	0.758						
Kolmogorov-Smirnov (Detects Only)	0.208	0.126	Data Not Gamma Distributed					
Anderson-Darling (NDs = DL)	2.727	0.76						
Kolmogorov-Smirnov (NDs = DL)	0.179	0.105	Data Not Gamma Distributed					
Anderson-Darling (NDs = DL/2)	2.803	0.76						
Kolmogorov-Smirnov (NDs = DL/2)	0.164	0.105	Data Not Gamma Distributed					
Anderson-Darling (Gamma ROS Estimates)	7.669	0.807						
Kolmogorov-Smirnov (Gamma ROS Est.)	0.294	0.11	Data Not Gamma Distributed					

Appendix B
Goodness of Fit Statistics

Lognormal GOF Test Results							
	No NDs	NDs = DL	NDs = DL/2	Log ROS			
Correlation Coefficient R	0.937	0.963	0.951	0.968			
	Apr. Test	P Value	Conclusion with Alpha(0.05)				
Shapiro-Wilk (NDs = DL)	0.915	4.2063E-5	Data Not Lognormal				
Shapiro-Wilk (NDs = DL/2)	0.896	1.6315E-6	Data Not Lognormal				
Shapiro-Wilk (Lognormal ROS Estimates)	0.918	6.8033E-5	Data Not Lognormal				
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)				
Shapiro-Wilk (Detects Only)	0.847	0.947	Data Not Lognormal				
Lilliefors (Detects Only)	0.212	0.125	Data Not Lognormal				
Lilliefors (NDs = DL)	0.198	0.104	Data Not Lognormal				
Lilliefors (NDs = DL/2)	0.16	0.104	Data Not Lognormal				
Lilliefors (Lognormal ROS Estimates)	0.146	0.104	Data Not Lognormal				
Note: Substitution methods such as DL or DL/2 are not recommended.							
	Goodness-of-Fit Test Statistics for Data Sets with Non-Detects						
User Selected Options							
Date/Time of Computation	ProUCL 5.18/19/2023 7:33:29 PM						
From File	ProUCLUpload_FC_CWTP_AppxIV_ProUCL_20230809_b.xls						
Full Precision	OFF						
Confidence Coefficient	0.95						
Arsenic (mw-62)							
	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs	
Raw Statistics	31	11	20	14	6	30.00%	
	Number	Minimum	Maximum	Mean	Median	SD	
Statistics (Non-Detects Only)	6	5.0000E-4	0.005	0.00207	0.00195	0.00156	
Statistics (Non-Detects Only)	14	6.2000E-4	0.012	0.00365	0.0018	0.00442	
Statistics (All: NDs treated as DL value)	20	5.0000E-4	0.012	0.00318	0.00195	0.00381	
Statistics (All: NDs treated as DL/2 value)	20	2.5000E-4	0.012	0.00287	0.001	0.00388	
Statistics (Normal ROS Imputed Data)	20	-0.00538	0.012	0.00234	0.0012	0.00439	
Statistics (Gamma ROS Imputed Data)	20	6.2000E-4	0.012	0.00556	0.0028	0.00472	
Statistics (Lognormal ROS Imputed Data)	20	1.5771E-4	0.012	0.00276	0.00103	0.00391	

Appendix B
Goodness of Fit Statistics

	K hat	K Star	Theta hat	Log Mean	Log Stdv	Log CV
Statistics (Non-Detects Only)	0.969	0.809	0.00377	-6.21	1.091	-0.176
Statistics (NDs = DL)	1.097	0.966	0.0029	-6.272	0.991	-0.158
Statistics (NDs = DL/2)	0.93	0.824	0.00308	-6.48	1.073	-0.166
Statistics (Gamma ROS Estimates)	1.069	0.942	0.0052	-5.729	1.176	-0.205
Statistics (Lognormal ROS Estimates)	--	--	--	-6.581	1.134	-0.172

Normal GOF Test Results

	No NDs	NDs = DL	NDs = DL/2	Normal ROS
Correlation Coefficient R	0.823	0.813	0.782	0.876

	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)
Shapiro-Wilk (Detects Only)	0.667	0.874	Data Not Normal
Shapiro-Wilk (NDs = DL)	0.657	0.905	Data Not Normal
Shapiro-Wilk (NDs = DL/2)	0.611	0.905	Data Not Normal
Shapiro-Wilk (Normal ROS Estimates)	0.777	0.905	Data Not Normal
Lilliefors (Detects Only)	0.336	0.226	Data Not Normal
Lilliefors (NDs = DL)	0.32	0.192	Data Not Normal
Lilliefors (NDs = DL/2)	0.338	0.192	Data Not Normal
Lilliefors (Normal ROS Estimates)	0.285	0.192	Data Not Normal

Gamma GOF Test Results

	No NDs	NDs = DL	NDs = DL/2	Gamma ROS
Correlation Coefficient R	0.915	0.929	0.915	0.837

	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)
Anderson-Darling (Detects Only)	1.139	0.761	
Kolmogorov-Smirnov (Detects Only)	0.214	0.235	Detected Data appear Approximate Gamma Distribution
Anderson-Darling (NDs = DL)	1.274	0.766	
Kolmogorov-Smirnov (NDs = DL)	0.216	0.199	Data Not Gamma Distributed
Anderson-Darling (NDs = DL/2)	1.552	0.771	
Kolmogorov-Smirnov (NDs = DL/2)	0.24	0.2	Data Not Gamma Distributed
Anderson-Darling (Gamma ROS Estimates)	1.581	0.767	
Kolmogorov-Smirnov (Gamma ROS Est.)	0.287	0.199	Data Not Gamma Distributed

Lognormal GOF Test Results

Appendix B
Goodness of Fit Statistics

	No NDs	NDs = DL	NDs = DL/2	Log ROS
Correlation Coefficient R	0.941	0.959	0.957	0.953

	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)
Shapiro-Wilk (Detects Only)	0.863	0.874	Data Not Lognormal
Shapiro-Wilk (NDs = DL)	0.907	0.905	Data Appear Lognormal
Shapiro-Wilk (NDs = DL/2)	0.91	0.905	Data Appear Lognormal
Shapiro-Wilk (Lognormal ROS Estimates)	0.909	0.905	Data Appear Lognormal
Lilliefors (Detects Only)	0.167	0.226	Data Appear Lognormal
Lilliefors (NDs = DL)	0.139	0.192	Data Appear Lognormal
Lilliefors (NDs = DL/2)	0.205	0.192	Data Not Lognormal
Lilliefors (Lognormal ROS Estimates)	0.191	0.192	Data Appear Lognormal

Note: Substitution methods such as DL or DL/2 are not recommended.

Arsenic (mw-63)

	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs
Raw Statistics	30	10	20	6	14	70.00%

	Number	Minimum	Maximum	Mean	Median	SD
Statistics (Non-Detects Only)	14	5.0000E-4	0.005	0.00163	0.001	0.00154
Statistics (Non-Detects Only)	6	5.9000E-4	0.0012	9.0500E-4	9.0500E-4	2.6957E-4
Statistics (All: NDs treated as DL value)	20	5.0000E-4	0.005	0.00141	0.001	0.00133
Statistics (All: NDs treated as DL/2 value)	20	2.5000E-4	0.0025	8.4150E-4	6.4000E-4	6.5293E-4
Statistics (Normal ROS Imputed Data)	20	-5.873E-5	0.0012	5.6462E-4	5.5832E-4	3.4083E-4
Statistics (Gamma ROS Imputed Data)	20	5.9000E-4	0.01	0.00727	0.01	0.00428
Statistics (Lognormal ROS Imputed Data)	20	2.9265E-4	0.0012	6.3686E-4	5.8803E-4	2.5918E-4

	K hat	K Star	Theta hat	Log Mean	Log Stdv	Log CV
Statistics (Non-Detects Only)	12.95	6.587	6.9874E-5	-7.047	0.31	-0.0441
Statistics (NDs = DL)	1.926	1.67	7.3300E-4	-6.845	0.711	-0.104
Statistics (NDs = DL/2)	2.155	1.865	3.9042E-4	-7.33	0.724	-0.0987
Statistics (Gamma ROS Estimates)	1.351	1.181	0.00538	-5.338	1.159	-0.217
Statistics (Lognormal ROS Estimates)	--	--	--	-7.432	0.387	-0.052

Normal GOF Test Results

Appendix B
Goodness of Fit Statistics

	No NDs	NDs = DL	NDs = DL/2	Normal ROS	
Correlation Coefficient R	0.958	0.812	0.885	0.992	
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)		
Shapiro-Wilk (Detects Only)	0.885	0.788	Data Appear Normal		
Shapiro-Wilk (NDs = DL)	0.664	0.905	Data Not Normal		
Shapiro-Wilk (NDs = DL/2)	0.783	0.905	Data Not Normal		
Shapiro-Wilk (Normal ROS Estimates)	0.977	0.905	Data Appear Normal		
Lilliefors (Detects Only)	0.196	0.325	Data Appear Normal		
Lilliefors (NDs = DL)	0.284	0.192	Data Not Normal		
Lilliefors (NDs = DL/2)	0.204	0.192	Data Not Normal		
Lilliefors (Normal ROS Estimates)	0.0739	0.192	Data Appear Normal		
Gamma GOF Test Results					
	No NDs	NDs = DL	NDs = DL/2	Gamma ROS	
Correlation Coefficient R	0.944	0.923	0.955	0.598	
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)		
Anderson-Darling (Detects Only)	0.385	0.698			
Kolmogorov-Smirnov (Detects Only)	0.209	0.332	Detected Data Appear Gamma Distributed		
Anderson-Darling (NDs = DL)	1.21	0.753			
Kolmogorov-Smirnov (NDs = DL)	0.198	0.196	Data Not Gamma Distributed		
Anderson-Darling (NDs = DL/2)	0.626	0.752			
Kolmogorov-Smirnov (NDs = DL/2)	0.142	0.196	Data Appear Gamma Distributed		
Anderson-Darling (Gamma ROS Estimates)	4.099	0.761			
Kolmogorov-Smirnov (Gamma ROS Est.)	0.45	0.198	Data Not Gamma Distributed		
Lognormal GOF Test Results					
	No NDs	NDs = DL	NDs = DL/2	Log ROS	
Correlation Coefficient R	0.958	0.943	0.964	0.991	
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)		
Shapiro-Wilk (Detects Only)	0.887	0.788	Data Appear Lognormal		
Shapiro-Wilk (NDs = DL)	0.879	0.905	Data Not Lognormal		
Shapiro-Wilk (NDs = DL/2)	0.916	0.905	Data Appear Lognormal		
Shapiro-Wilk (Lognormal ROS Estimates)	0.974	0.905	Data Appear Lognormal		
Lilliefors (Detects Only)	0.184	0.325	Data Appear Lognormal		

Appendix B
Goodness of Fit Statistics

Lilliefors (NDs = DL)	0.144	0.192	Data Appear Lognormal					
Lilliefors (NDs = DL/2)	0.159	0.192	Data Appear Lognormal					
Lilliefors (Lognormal ROS Estimates)	0.104	0.192	Data Appear Lognormal					
Note: Substitution methods such as DL or DL/2 are not recommended.								
Arsenic (mw-64)								
	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs		
Raw Statistics	30	10	20	3	17	85.00%		
	Number	Minimum	Maximum	Mean	Median	SD		
Statistics (Non-Detects Only)	17	5.0000E-4	0.005	0.00141	9.6000E-4	0.00146		
Statistics (Non-Detects Only)	3	5.6000E-4	0.001	7.5333E-4	7.0000E-4	2.2480E-4		
Statistics (All: NDs treated as DL value)	20	5.0000E-4	0.005	0.00131	8.3000E-4	0.00136		
Statistics (All: NDs treated as DL/2 value)	20	2.5000E-4	0.0025	7.1200E-4	5.0000E-4	6.7454E-4		
Statistics (Normal ROS Imputed Data)	20	-4.506E-4	0.001	1.8437E-4	1.5505E-4	3.4801E-4		
Statistics (Gamma ROS Imputed Data)	20	5.6000E-4	0.01	0.00861	0.01	0.00339		
Statistics (Lognormal ROS Imputed Data)	20	1.5446E-4	0.001	3.8839E-4	3.3792E-4	1.9742E-4		
	K hat	K Star	Theta hat	Log Mean	Log Stdv	Log CV		
Statistics (Non-Detects Only)	N/A	N/A	N/A	N/A	N/A	N/A		
Statistics (NDs = DL)	1.653	1.438	7.9308E-4	-6.969	0.756	-0.108		
Statistics (NDs = DL/2)	1.757	1.527	4.0512E-4	-7.558	0.762	-0.101		
Statistics (Gamma ROS Estimates)	2.211	1.912	0.0039	-4.997	0.963	-0.193		
Statistics (Lognormal ROS Estimates)	--	--	--	-7.955	0.45	-0.0565		
Normal GOF Test Results								
	No NDs	NDs = DL	NDs = DL/2	Normal ROS				
Correlation Coefficient R	0.979	0.788	0.826	0.99				
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)					
Shapiro-Wilk (Detects Only)	0.958	0.767	Data Appear Normal					
Shapiro-Wilk (NDs = DL)	0.625	0.905	Data Not Normal					
Shapiro-Wilk (NDs = DL/2)	0.684	0.905	Data Not Normal					
Shapiro-Wilk (Normal ROS Estimates)	0.984	0.905	Data Appear Normal					
Lilliefors (Detects Only)	0.26	0.425	Data Appear Normal					
Lilliefors (NDs = DL)	0.34	0.192	Data Not Normal					

Appendix B
Goodness of Fit Statistics

Lilliefors (NDs = DL/2)	0.247	0.192	Data Not Normal					
Lilliefors (Normal ROS Estimates)	0.111	0.192	Data Appear Normal					
Gamma GOF Test Results								
	No NDs	NDs = DL	NDs = DL/2	Gamma ROS				
Correlation Coefficient R	N/A	0.918	0.934	0.483				
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)					
Anderson-Darling (Detects Only)	N/A	N/A						
Kolmogorov-Smirnov (Detects Only)	N/A	N/A						
Anderson-Darling (NDs = DL)	1.904	0.756						
Kolmogorov-Smirnov (NDs = DL)	0.276	0.197	Data Not Gamma Distributed					
Anderson-Darling (NDs = DL/2)	1.343	0.755						
Kolmogorov-Smirnov (NDs = DL/2)	0.219	0.197	Data Not Gamma Distributed					
Anderson-Darling (Gamma ROS Estimates)	5.97	0.751						
Kolmogorov-Smirnov (Gamma ROS Est.)	0.524	0.196	Data Not Gamma Distributed					
Lognormal GOF Test Results								
	No NDs	NDs = DL	NDs = DL/2	Log ROS				
Correlation Coefficient R	0.991	0.901	0.928	0.989				
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)					
Shapiro-Wilk (Detects Only)	0.983	0.767	Data Appear Lognormal					
Shapiro-Wilk (NDs = DL)	0.801	0.905	Data Not Lognormal					
Shapiro-Wilk (NDs = DL/2)	0.846	0.905	Data Not Lognormal					
Shapiro-Wilk (Lognormal ROS Estimates)	0.983	0.905	Data Appear Lognormal					
Lilliefors (Detects Only)	0.227	0.425	Data Appear Lognormal					
Lilliefors (NDs = DL)	0.218	0.192	Data Not Lognormal					
Lilliefors (NDs = DL/2)	0.233	0.192	Data Not Lognormal					
Lilliefors (Lognormal ROS Estimates)	0.11	0.192	Data Appear Lognormal					
Note: Substitution methods such as DL or DL/2 are not recommended.								
Arsenic (mw-65)								
	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs		
Raw Statistics	30	10	20	3	17	85.00%		

Appendix B
Goodness of Fit Statistics

	Number	Minimum	Maximum	Mean	Median	SD
Statistics (Non-Detects Only)	17	5.0000E-4	0.005	0.00115	5.0000E-4	0.00114
Statistics (Non-Detects Only)	3	5.9000E-4	0.0013	8.6667E-4	7.1000E-4	3.8004E-4
Statistics (All: NDs treated as DL value)	20	5.0000E-4	0.005	0.0011	6.5000E-4	0.00106
Statistics (All: NDs treated as DL/2 value)	20	2.5000E-4	0.0025	6.1725E-4	4.9750E-4	5.4915E-4
Statistics (Normal ROS Imputed Data)	20	-0.00129	0.0013	-1.535E-4	-2.003E-4	6.1618E-4
Statistics (Gamma ROS Imputed Data)	20	5.9000E-4	0.01	0.00863	0.01	0.00335
Statistics (Lognormal ROS Imputed Data)	20	7.7697E-5	0.0013	3.3813E-4	2.5478E-4	2.7853E-4

	K hat	K Star	Theta hat	Log Mean	Log Stdv	Log CV
Statistics (Non-Detects Only)	N/A	N/A	N/A	N/A	N/A	N/A
Statistics (NDs = DL)	2.091	1.811	5.2816E-4	-7.066	0.662	-0.0936
Statistics (NDs = DL/2)	2.037	1.765	3.0297E-4	-7.655	0.702	-0.0917
Statistics (Gamma ROS Estimates)	2.342	2.024	0.00368	-4.981	0.928	-0.186
Statistics (Lognormal ROS Estimates)	--	--	--	-8.224	0.673	-0.0818

Normal GOF Test Results

	No NDs	NDs = DL	NDs = DL/2	Normal ROS
Correlation Coefficient R	0.934	0.77	0.828	0.988

	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)
Shapiro-Wilk (Detects Only)	0.873	0.767	Data Appear Normal
Shapiro-Wilk (NDs = DL)	0.613	0.905	Data Not Normal
Shapiro-Wilk (NDs = DL/2)	0.699	0.905	Data Not Normal
Shapiro-Wilk (Normal ROS Estimates)	0.981	0.905	Data Appear Normal
Lilliefors (Detects Only)	0.327	0.425	Data Appear Normal
Lilliefors (NDs = DL)	0.289	0.192	Data Not Normal
Lilliefors (NDs = DL/2)	0.252	0.192	Data Not Normal
Lilliefors (Normal ROS Estimates)	0.114	0.192	Data Appear Normal

Gamma GOF Test Results

	No NDs	NDs = DL	NDs = DL/2	Gamma ROS
Correlation Coefficient R	N/A	0.905	0.946	0.489

	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)
Anderson-Darling (Detects Only)	N/A	N/A	

Appendix B
Goodness of Fit Statistics

Kolmogorov-Smirnov (Detects Only)	N/A	N/A					
Anderson-Darling (NDs = DL)	1.755	0.752					
Kolmogorov-Smirnov (NDs = DL)	0.229	0.196	Data Not Gamma Distributed				
Anderson-Darling (NDs = DL/2)	1.365	0.752					
Kolmogorov-Smirnov (NDs = DL/2)	0.259	0.196	Data Not Gamma Distributed				
Anderson-Darling (Gamma ROS Estimates)	5.911	0.751					
Kolmogorov-Smirnov (Gamma ROS Est.)	0.523	0.196	Data Not Gamma Distributed				
Lognormal GOF Test Results							
	No NDs	NDs = DL	NDs = DL/2	Log ROS			
Correlation Coefficient R	0.956	0.898	0.921	0.988			
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)				
Shapiro-Wilk (Detects Only)	0.914	0.767	Data Appear Lognormal				
Shapiro-Wilk (NDs = DL)	0.803	0.905	Data Not Lognormal				
Shapiro-Wilk (NDs = DL/2)	0.839	0.905	Data Not Lognormal				
Shapiro-Wilk (Lognormal ROS Estimates)	0.982	0.905	Data Appear Lognormal				
Lilliefors (Detects Only)	0.299	0.425	Data Appear Lognormal				
Lilliefors (NDs = DL)	0.241	0.192	Data Not Lognormal				
Lilliefors (NDs = DL/2)	0.269	0.192	Data Not Lognormal				
Lilliefors (Lognormal ROS Estimates)	0.114	0.192	Data Appear Lognormal				
Note: Substitution methods such as DL or DL/2 are not recommended.							

	Goodness-of-Fit Test Statistics for Data Sets with Non-Detects
User Selected Options	
Date/Time of Computation	ProUCL 5.18/18/2023 4:51:57 PM
From File	ProUCLUpload_FC_CWTP_AppxIV_ProUCL_20230809_b.xls
Full Precision	OFF
Confidence Coefficient	0.95

Barium (mw-62)							
Raw Statistics							
Number of Valid Observations	20						
Number of Missing Observations	11						
Number of Distinct Observations	13						
Minimum	0.015						

Appendix B
Goodness of Fit Statistics

Maximum	0.043
Mean of Raw Data	0.0258
Standard Deviation of Raw Data	0.0063
Khat	18.22
Theta hat	0.00142
Kstar	15.52
Theta star	0.00166
Mean of Log Transformed Data	-3.685
Standard Deviation of Log Transformed Data	0.242
Normal GOF Test Results	
Correlation Coefficient R	0.961
Shapiro Wilk Test Statistic	0.938
Shapiro Wilk Critical (0.05) Value	0.905
Approximate Shapiro Wilk P Value	0.209
Lilliefors Test Statistic	0.175
Lilliefors Critical (0.05) Value	0.192
Data appear Normal at (0.05) Significance Level	
Gamma GOF Test Results	
Correlation Coefficient R	0.975
A-D Test Statistic	0.383
A-D Critical (0.05) Value	0.741
K-S Test Statistic	0.142
K-S Critical(0.05) Value	0.194
Data appear Gamma Distributed at (0.05) Significance Level	
Lognormal GOF Test Results	
Correlation Coefficient R	0.975
Shapiro Wilk Test Statistic	0.961
Shapiro Wilk Critical (0.05) Value	0.905
Approximate Shapiro Wilk P Value	0.542
Lilliefors Test Statistic	0.131
Lilliefors Critical (0.05) Value	0.192
Data appear Lognormal at (0.05) Significance Level	

Appendix B
Goodness of Fit Statistics

Barium (mw-63)	
Raw Statistics	
Number of Valid Observations	20
Number of Missing Observations	10
Number of Distinct Observations	11
Minimum	0.014
Maximum	0.033
Mean of Raw Data	0.0197
Standard Deviation of Raw Data	0.00409
Khat	27.79
Theta hat	7.0892E-4
Kstar	23.65
Theta star	8.3284E-4
Mean of Log Transformed Data	-3.945
Standard Deviation of Log Transformed Data	0.19
Normal GOF Test Results	
Correlation Coefficient R	0.912
Shapiro Wilk Test Statistic	0.851
Shapiro Wilk Critical (0.05) Value	0.905
Approximate Shapiro Wilk P Value	0.00434
Lilliefors Test Statistic	0.187
Lilliefors Critical (0.05) Value	0.192
Data appear Approximate Normal at (0.05) Significance Level	
Gamma GOF Test Results	
Correlation Coefficient R	0.932
A-D Test Statistic	0.529
A-D Critical (0.05) Value	0.74
K-S Test Statistic	0.156
K-S Critical(0.05) Value	0.193
Data appear Gamma Distributed at (0.05) Significance Level	
Lognormal GOF Test Results	
Correlation Coefficient R	0.956

Appendix B
Goodness of Fit Statistics

Shapiro Wilk Test Statistic	0.929
Shapiro Wilk Critical (0.05) Value	0.905
Approximate Shapiro Wilk P Value	0.146
Lilliefors Test Statistic	0.15
Lilliefors Critical (0.05) Value	0.192
Data appear Lognormal at (0.05) Significance Level	
Barium (mw-64)	
Raw Statistics	
Number of Valid Observations	20
Number of Missing Observations	10
Number of Distinct Observations	9
Minimum	0.022
Maximum	0.035
Mean of Raw Data	0.0267
Standard Deviation of Raw Data	0.00356
Khat	62.89
Theta hat	4.2372E-4
Kstar	53.49
Theta star	4.9819E-4
Mean of Log Transformed Data	-3.633
Standard Deviation of Log Transformed Data	0.128
Normal GOF Test Results	
Correlation Coefficient R	0.942
Shapiro Wilk Test Statistic	0.886
Shapiro Wilk Critical (0.05) Value	0.905
Approximate Shapiro Wilk P Value	0.0226
Lilliefors Test Statistic	0.261
Lilliefors Critical (0.05) Value	0.192
Data not Normal at (0.05) Significance Level	
Gamma GOF Test Results	
Correlation Coefficient R	0.954
A-D Test Statistic	0.759
A-D Critical (0.05) Value	0.74

Appendix B
Goodness of Fit Statistics

K-S Test Statistic	0.242
K-S Critical(0.05) Value	0.193
Data not Gamma Distributed at (0.05) Significance Level	
Lognormal GOF Test Results	
Correlation Coefficient R	0.959
Shapiro Wilk Test Statistic	0.916
Shapiro Wilk Critical (0.05) Value	0.905
Approximate Shapiro Wilk P Value	0.0892
Lilliefors Test Statistic	0.235
Lilliefors Critical (0.05) Value	0.192
Data appear Approximate_Lognormal at (0.05) Significance Level	
Barium (mw-65)	
Raw Statistics	
Number of Valid Observations	20
Number of Missing Observations	10
Number of Distinct Observations	13
Minimum	0.012
Maximum	0.042
Mean of Raw Data	0.0186
Standard Deviation of Raw Data	0.0074
Khat	8.689
Theta hat	0.00214
Kstar	7.419
Theta star	0.00251
Mean of Log Transformed Data	-4.043
Standard Deviation of Log Transformed Data	0.333
Normal GOF Test Results	
Correlation Coefficient R	0.882
Shapiro Wilk Test Statistic	0.789
Shapiro Wilk Critical (0.05) Value	0.905
Approximate Shapiro Wilk P Value	3.3452E-4
Lilliefors Test Statistic	0.186
Lilliefors Critical (0.05) Value	0.192

Appendix B
Goodness of Fit Statistics

Data appear Approximate Normal at (0.05) Significance Level	
Gamma GOF Test Results	
Correlation Coefficient R	0.937
A-D Test Statistic	0.737
A-D Critical (0.05) Value	0.743
K-S Test Statistic	0.153
K-S Critical(0.05) Value	0.194
Data appear Gamma Distributed at (0.05) Significance Level	
Lognormal GOF Test Results	
Correlation Coefficient R	0.952
Shapiro Wilk Test Statistic	0.905
Shapiro Wilk Critical (0.05) Value	0.905
Approximate Shapiro Wilk P Value	0.0529
Lilliefors Test Statistic	0.151
Lilliefors Critical (0.05) Value	0.192
Data appear Approximate_Lognormal at (0.05) Significance Level	
Goodness-of-Fit Test Statistics for Data Sets with Non-Detects	
User Selected Options	
Date/Time of Computation	ProUCL 5.18/18/2023 4:59:03 PM
From File	ProUCLUpload_FC_CWTP_AppxIV_ProUCL_20230809_b.xls
Full Precision	OFF
Confidence Coefficient	0.95
Cobalt (mw-62)	
Raw Statistics	
Number of Valid Observations	20
Number of Missing Observations	11
Number of Distinct Observations	17
Minimum	6.5000E-4
Maximum	0.014
Mean of Raw Data	0.00654
Standard Deviation of Raw Data	0.00328
Khat	2.949

Appendix B
Goodness of Fit Statistics

Theta hat	0.00222							
Kstar	2.54							
Theta star	0.00257							
Mean of Log Transformed Data	-5.209							
Standard Deviation of Log Transformed Data	0.72							
Normal GOF Test Results								
Correlation Coefficient R	0.98							
Shapiro Wilk Test Statistic	0.963							
Shapiro Wilk Critical (0.05) Value	0.905							
Approximate Shapiro Wilk P Value	0.599							
Lilliefors Test Statistic	0.158							
Lilliefors Critical (0.05) Value	0.192							
Data appear Normal at (0.05) Significance Level								
Gamma GOF Test Results								
Correlation Coefficient R	0.97							
A-D Test Statistic	0.709							
A-D Critical (0.05) Value	0.748							
K-S Test Statistic	0.231							
K-S Critical(0.05) Value	0.195							
Data follow Appr. Gamma Distribution at (0.05) Significance Level								
Lognormal GOF Test Results								
Correlation Coefficient R	0.91							
Shapiro Wilk Test Statistic	0.842							
Shapiro Wilk Critical (0.05) Value	0.905							
Approximate Shapiro Wilk P Value	0.00289							
Lilliefors Test Statistic	0.261							
Lilliefors Critical (0.05) Value	0.192							
Data not Lognormal at (0.05) Significance Level								
Cobalt (mw-63)								
	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs		
Raw Statistics	30	10	20	19	1	5.00%		

Appendix B
Goodness of Fit Statistics

	Number	Minimum	Maximum	Mean	Median	SD
Statistics (Non-Detects Only)	1	0.001	0.001	0.001	0.001	N/A
Statistics (Non-Detects Only)	19	6.2000E-4	0.0086	0.00486	0.0056	0.00221
Statistics (All: NDs treated as DL value)	20	6.2000E-4	0.0086	0.00467	0.00555	0.00232
Statistics (All: NDs treated as DL/2 value)	20	5.0000E-4	0.0086	0.00465	0.00555	0.00236
Statistics (Normal ROS Imputed Data)	20	6.2000E-4	0.0086	0.00465	0.00555	0.00235
Statistics (Gamma ROS Imputed Data)	20	6.2000E-4	0.01	0.00512	0.00565	0.00244
Statistics (Lognormal ROS Imputed Data)	20	6.2000E-4	0.0086	0.00468	0.00555	0.0023

	K hat	K Star	Theta hat	Log Mean	Log Stdv	Log CV
Statistics (Non-Detects Only)	3.073	2.623	0.00158	-5.497	0.707	-0.129
Statistics (NDs = DL)	2.637	2.275	0.00177	-5.568	0.757	-0.136
Statistics (NDs = DL/2)	2.32	2.005	0.002	-5.602	0.833	-0.149
Statistics (Gamma ROS Estimates)	2.961	2.55	0.00173	-5.453	0.716	-0.131
Statistics (Lognormal ROS Estimates)	--	--	--	-5.56	0.743	-0.134

Normal GOF Test Results

	No NDs	NDs = DL	NDs = DL/2	Normal ROS
Correlation Coefficient R	0.952	0.952	0.952	0.951

	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)
Shapiro-Wilk (Detects Only)	0.903	0.901	Data Appear Normal
Shapiro-Wilk (NDs = DL)	0.898	0.905	Data Not Normal
Shapiro-Wilk (NDs = DL/2)	0.897	0.905	Data Not Normal
Shapiro-Wilk (Normal ROS Estimates)	0.896	0.905	Data Not Normal
Lilliefors (Detects Only)	0.227	0.197	Data Not Normal
Lilliefors (NDs = DL)	0.223	0.192	Data Not Normal
Lilliefors (NDs = DL/2)	0.225	0.192	Data Not Normal
Lilliefors (Normal ROS Estimates)	0.225	0.192	Data Not Normal

Gamma GOF Test Results

	No NDs	NDs = DL	NDs = DL/2	Gamma ROS
Correlation Coefficient R	0.883	0.883	0.873	0.924

	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)
Anderson-Darling (Detects Only)	1.531	0.748	

Appendix B
Goodness of Fit Statistics

Kolmogorov-Smirnov (Detects Only)	0.279	0.2	Data Not Gamma Distributed					
Anderson-Darling (NDs = DL)	1.549	0.749						
Kolmogorov-Smirnov (NDs = DL)	0.275	0.195	Data Not Gamma Distributed					
Anderson-Darling (NDs = DL/2)	1.613	0.751						
Kolmogorov-Smirnov (NDs = DL/2)	0.28	0.196	Data Not Gamma Distributed					
Anderson-Darling (Gamma ROS Estimates)	1.304	0.748						
Kolmogorov-Smirnov (Gamma ROS Est.)	0.263	0.195	Data Not Gamma Distributed					
Lognormal GOF Test Results								
	No NDs	NDs = DL	NDs = DL/2	Log ROS				
Correlation Coefficient R	0.884	0.898	0.886	0.899				
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)					
Shapiro-Wilk (Detects Only)	0.786	0.901	Data Not Lognormal					
Shapiro-Wilk (NDs = DL)	0.804	0.905	Data Not Lognormal					
Shapiro-Wilk (NDs = DL/2)	0.783	0.905	Data Not Lognormal					
Shapiro-Wilk (Lognormal ROS Estimates)	0.807	0.905	Data Not Lognormal					
Lilliefors (Detects Only)	0.295	0.197	Data Not Lognormal					
Lilliefors (NDs = DL)	0.289	0.192	Data Not Lognormal					
Lilliefors (NDs = DL/2)	0.292	0.192	Data Not Lognormal					
Lilliefors (Lognormal ROS Estimates)	0.288	0.192	Data Not Lognormal					
Note: Substitution methods such as DL or DL/2 are not recommended.								
Cobalt (mw-64)								
	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs		
Raw Statistics	30	10	20	16	4	20.00%		
	Number	Minimum	Maximum	Mean	Median	SD		
Statistics (Non-Detects Only)	4	0.002	0.005	0.00275	0.002	0.0015		
Statistics (Non-Detects Only)	16	8.3000E-4	0.0018	0.00138	0.00135	3.0225E-4		
Statistics (All: NDs treated as DL value)	20	8.3000E-4	0.005	0.00166	0.0015	8.6143E-4		
Statistics (All: NDs treated as DL/2 value)	20	8.3000E-4	0.0025	0.00138	0.0012	4.0119E-4		
Statistics (Normal ROS Imputed Data)	20	8.3000E-4	0.0018	0.00138	0.00138	2.7824E-4		
Statistics (Gamma ROS Imputed Data)	20	8.3000E-4	0.01	0.00311	0.0015	0.00355		
Statistics (Lognormal ROS Imputed Data)	20	8.3000E-4	0.0018	0.00138	0.00135	2.7874E-4		

Appendix B
Goodness of Fit Statistics

	K hat	K Star	Theta hat	Log Mean	Log Stdv	Log CV
Statistics (Non-Detects Only)	21.4	17.43	6.4639E-5	-6.607	0.227	-0.0344
Statistics (NDs = DL)	6.441	5.509	2.5716E-4	-6.483	0.373	-0.0575
Statistics (NDs = DL/2)	13.78	11.75	1.0024E-4	-6.621	0.274	-0.0413
Statistics (Gamma ROS Estimates)	1.298	1.137	0.00239	-6.207	0.846	-0.136
Statistics (Lognormal ROS Estimates)	--	--	--	-6.607	0.209	-0.0317

Normal GOF Test Results

	No NDs	NDs = DL	NDs = DL/2	Normal ROS
Correlation Coefficient R	0.959	0.768	0.942	0.972

	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)
Shapiro-Wilk (Detects Only)	0.906	0.887	Data Appear Normal
Shapiro-Wilk (NDs = DL)	0.62	0.905	Data Not Normal
Shapiro-Wilk (NDs = DL/2)	0.895	0.905	Data Not Normal
Shapiro-Wilk (Normal ROS Estimates)	0.935	0.905	Data Appear Normal
Lilliefors (Detects Only)	0.228	0.213	Data Not Normal
Lilliefors (NDs = DL)	0.295	0.192	Data Not Normal
Lilliefors (NDs = DL/2)	0.225	0.192	Data Not Normal
Lilliefors (Normal ROS Estimates)	0.195	0.192	Data Not Normal

Gamma GOF Test Results

	No NDs	NDs = DL	NDs = DL/2	Gamma ROS
Correlation Coefficient R	0.95	0.837	0.966	0.86

	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)
Anderson-Darling (Detects Only)	0.699	0.736	
Kolmogorov-Smirnov (Detects Only)	0.215	0.215	Detected Data appear Approximate Gamma Distribution
Anderson-Darling (NDs = DL)	1.153	0.744	
Kolmogorov-Smirnov (NDs = DL)	0.216	0.194	Data Not Gamma Distributed
Anderson-Darling (NDs = DL/2)	0.596	0.741	
Kolmogorov-Smirnov (NDs = DL/2)	0.213	0.194	Detected Data appear Approximate Gamma Distribution
Anderson-Darling (Gamma ROS Estimates)	3.397	0.762	
Kolmogorov-Smirnov (Gamma ROS Est.)	0.404	0.198	Data Not Gamma Distributed

Lognormal GOF Test Results

Appendix B
Goodness of Fit Statistics

	No NDs	NDs = DL	NDs = DL/2	Log ROS			
Correlation Coefficient R	0.955	0.915	0.972	0.967			
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)				
Shapiro-Wilk (Detects Only)	0.905	0.887	Data Appear Lognormal				
Shapiro-Wilk (NDs = DL)	0.861	0.905	Data Not Lognormal				
Shapiro-Wilk (NDs = DL/2)	0.947	0.905	Data Appear Lognormal				
Shapiro-Wilk (Lognormal ROS Estimates)	0.931	0.905	Data Appear Lognormal				
Lilliefors (Detects Only)	0.199	0.213	Data Appear Lognormal				
Lilliefors (NDs = DL)	0.186	0.192	Data Appear Lognormal				
Lilliefors (NDs = DL/2)	0.198	0.192	Data Not Lognormal				
Lilliefors (Lognormal ROS Estimates)	0.164	0.192	Data Appear Lognormal				
Note: Substitution methods such as DL or DL/2 are not recommended.							
Cobalt (mw-65)							
	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs	
Raw Statistics	30	10	20	17	3	15.00%	
	Number	Minimum	Maximum	Mean	Median	SD	
Statistics (Non-Detects Only)	3	0.002	0.002	0.002	0.002	0	
Statistics (Non-Detects Only)	17	0.001	0.0029	0.00148	0.0012	5.2468E-4	
Statistics (All: NDs treated as DL value)	20	0.001	0.0029	0.00156	0.0013	5.1748E-4	
Statistics (All: NDs treated as DL/2 value)	20	0.001	0.0029	0.00141	0.0012	5.1289E-4	
Statistics (Normal ROS Imputed Data)	20	0.001	0.0029	0.00146	0.0012	4.9314E-4	
Statistics (Gamma ROS Imputed Data)	20	0.001	0.01	0.00276	0.0013	0.00316	
Statistics (Lognormal ROS Imputed Data)	20	0.001	0.0029	0.00146	0.0012	4.9136E-4	
	K hat	K Star	Theta hat	Log Mean	Log Stdv	Log CV	
Statistics (Non-Detects Only)	10.25	8.48	1.4463E-4	-6.564	0.312	-0.0475	
Statistics (NDs = DL)	10.52	8.977	1.4825E-4	-6.511	0.313	-0.0481	
Statistics (NDs = DL/2)	9.94	8.482	1.4185E-4	-6.615	0.313	-0.0472	
Statistics (Gamma ROS Estimates)	1.469	1.282	0.00188	-6.27	0.772	-0.123	
Statistics (Lognormal ROS Estimates)	--	--	--	-6.576	0.293	-0.0446	
Normal GOF Test Results							
	No NDs	NDs = DL	NDs = DL/2	Normal ROS			

Appendix B
Goodness of Fit Statistics

Correlation Coefficient R	0.893	0.923	0.879	0.899			
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)				
Shapiro-Wilk (Detects Only)	0.802	0.892	Data Not Normal				
Shapiro-Wilk (NDs = DL)	0.851	0.905	Data Not Normal				
Shapiro-Wilk (NDs = DL/2)	0.775	0.905	Data Not Normal				
Shapiro-Wilk (Normal ROS Estimates)	0.814	0.905	Data Not Normal				
Lilliefors (Detects Only)	0.293	0.207	Data Not Normal				
Lilliefors (NDs = DL)	0.257	0.192	Data Not Normal				
Lilliefors (NDs = DL/2)	0.309	0.192	Data Not Normal				
Lilliefors (Normal ROS Estimates)	0.252	0.192	Data Not Normal				
Gamma GOF Test Results							
	No NDs	NDs = DL	NDs = DL/2	Gamma ROS			
Correlation Coefficient R	0.941	0.952	0.932	0.873			
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)				
Anderson-Darling (Detects Only)	1.211	0.739					
Kolmogorov-Smirnov (Detects Only)	0.296	0.209	Data Not Gamma Distributed				
Anderson-Darling (NDs = DL)	1.19	0.742					
Kolmogorov-Smirnov (NDs = DL)	0.261	0.194	Data Not Gamma Distributed				
Anderson-Darling (NDs = DL/2)	1.52	0.742					
Kolmogorov-Smirnov (NDs = DL/2)	0.301	0.194	Data Not Gamma Distributed				
Anderson-Darling (Gamma ROS Estimates)	3.004	0.758					
Kolmogorov-Smirnov (Gamma ROS Est.)	0.293	0.198	Data Not Gamma Distributed				
Lognormal GOF Test Results							
	No NDs	NDs = DL	NDs = DL/2	Log ROS			
Correlation Coefficient R	0.925	0.94	0.916	0.931			
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)				
Shapiro-Wilk (Detects Only)	0.852	0.892	Data Not Lognormal				
Shapiro-Wilk (NDs = DL)	0.875	0.905	Data Not Lognormal				
Shapiro-Wilk (NDs = DL/2)	0.834	0.905	Data Not Lognormal				
Shapiro-Wilk (Lognormal ROS Estimates)	0.865	0.905	Data Not Lognormal				
Lilliefors (Detects Only)	0.286	0.207	Data Not Lognormal				
Lilliefors (NDs = DL)	0.253	0.192	Data Not Lognormal				

Appendix B
Goodness of Fit Statistics

Lilliefors (NDs = DL/2)	0.288	0.192	Data Not Lognormal					
Lilliefors (Lognormal ROS Estimates)	0.244	0.192	Data Not Lognormal					
Note: Substitution methods such as DL or DL/2 are not recommended.								
	Goodness-of-Fit Test Statistics for Data Sets with Non-Detects							
User Selected Options								
Date/Time of Computation	ProUCL 5.18/19/2023 7:24:04 PM							
From File	ProUCLUpload_FC_CWTP_AppxIV_ProUCL_20230809_b.xls							
Full Precision	OFF							
Confidence Coefficient	0.95							
Molybdenum (mw-62)								
	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs		
Raw Statistics	31	12	19	18	1	5.26%		
	Number	Minimum	Maximum	Mean	Median	SD		
Statistics (Non-Detects Only)	1	0.002	0.002	0.002	0.002	N/A		
Statistics (Non-Detects Only)	18	0.0012	0.0044	0.00299	0.00295	7.0500E-4		
Statistics (All: NDs treated as DL value)	19	0.0012	0.0044	0.00294	0.0029	7.2212E-4		
Statistics (All: NDs treated as DL/2 value)	19	0.001	0.0044	0.00289	0.0029	8.2388E-4		
Statistics (Normal ROS Imputed Data)	19	0.0012	0.0044	0.00292	0.0029	7.5047E-4		
Statistics (Gamma ROS Imputed Data)	19	0.0012	0.01	0.00336	0.003	0.00175		
Statistics (Lognormal ROS Imputed Data)	19	0.0012	0.0044	0.00293	0.0029	7.4038E-4		
	K hat	K Star	Theta hat	Log Mean	Log Stdv	Log CV		
Statistics (Non-Detects Only)	16.11	13.46	1.8592E-4	-5.842	0.275	-0.047		
Statistics (NDs = DL)	15.17	12.81	1.9395E-4	-5.862	0.28	-0.0478		
Statistics (NDs = DL/2)	9.825	8.309	2.9410E-4	-5.898	0.362	-0.0614		
Statistics (Gamma ROS Estimates)	6.232	5.283	5.3966E-4	-5.777	0.39	-0.0675		
Statistics (Lognormal ROS Estimates)	--	--	--	-5.868	0.29	-0.0494		
Normal GOF Test Results								
	No NDs	NDs = DL	NDs = DL/2	Normal ROS				
Correlation Coefficient R	0.941	0.958	0.943	0.958				
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)					

Appendix B
Goodness of Fit Statistics

Shapiro-Wilk (Detects Only)	0.906	0.897	Data Appear Normal		
Shapiro-Wilk (NDs = DL)	0.934	0.901	Data Appear Normal		
Shapiro-Wilk (NDs = DL/2)	0.9	0.901	Data Not Normal		
Shapiro-Wilk (Normal ROS Estimates)	0.93	0.901	Data Appear Normal		
Lilliefors (Detects Only)	0.171	0.202	Data Appear Normal		
Lilliefors (NDs = DL)	0.158	0.197	Data Appear Normal		
Lilliefors (NDs = DL/2)	0.199	0.197	Data Not Normal		
Lilliefors (Normal ROS Estimates)	0.172	0.197	Data Appear Normal		
Gamma GOF Test Results					
	No NDs	NDs = DL	NDs = DL/2	Gamma ROS	
Correlation Coefficient R	0.939	0.954	0.925	0.823	
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)		
Anderson-Darling (Detects Only)	0.948	0.739			
Kolmogorov-Smirnov (Detects Only)	0.206	0.203	Data Not Gamma Distributed		
Anderson-Darling (NDs = DL)	0.761	0.741			
Kolmogorov-Smirnov (NDs = DL)	0.193	0.198	Detected Data appear Approximate Gamma Distribution		
Anderson-Darling (NDs = DL/2)	1.365	0.741			
Kolmogorov-Smirnov (NDs = DL/2)	0.248	0.199	Data Not Gamma Distributed		
Anderson-Darling (Gamma ROS Estimates)	1.773	0.742			
Kolmogorov-Smirnov (Gamma ROS Est.)	0.232	0.199	Data Not Gamma Distributed		
Lognormal GOF Test Results					
	No NDs	NDs = DL	NDs = DL/2	Log ROS	
Correlation Coefficient R	0.886	0.917	0.876	0.919	
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)		
Shapiro-Wilk (Detects Only)	0.814	0.897	Data Not Lognormal		
Shapiro-Wilk (NDs = DL)	0.863	0.901	Data Not Lognormal		
Shapiro-Wilk (NDs = DL/2)	0.781	0.901	Data Not Lognormal		
Shapiro-Wilk (Lognormal ROS Estimates)	0.864	0.901	Data Not Lognormal		
Lilliefors (Detects Only)	0.23	0.202	Data Not Lognormal		
Lilliefors (NDs = DL)	0.215	0.197	Data Not Lognormal		
Lilliefors (NDs = DL/2)	0.272	0.197	Data Not Lognormal		
Lilliefors (Lognormal ROS Estimates)	0.226	0.197	Data Not Lognormal		

Appendix B
Goodness of Fit Statistics

Note: Substitution methods such as DL or DL/2 are not recommended.	
Molybdenum (mw-63)	
Raw Statistics	
Number of Valid Observations	19
Number of Missing Observations	11
Number of Distinct Observations	13
Minimum	0.0019
Maximum	0.0058
Mean of Raw Data	0.00278
Standard Deviation of Raw Data	8.6383E-4
Khat	14.7
Theta hat	1.8903E-4
Kstar	12.41
Theta star	2.2384E-4
Mean of Log Transformed Data	-5.92
Standard Deviation of Log Transformed Data	0.253
Normal GOF Test Results	
Correlation Coefficient R	0.846
Shapiro Wilk Test Statistic	0.739
Shapiro Wilk Critical (0.05) Value	0.901
Approximate Shapiro Wilk P Value	6.5331E-5
Lilliefors Test Statistic	0.214
Lilliefors Critical (0.05) Value	0.197
Data not Normal at (0.05) Significance Level	
Gamma GOF Test Results	
Correlation Coefficient R	0.893
A-D Test Statistic	0.902
A-D Critical (0.05) Value	0.741
K-S Test Statistic	0.197
K-S Critical(0.05) Value	0.198
Data follow Appr. Gamma Distribution at (0.05) Significance Level	
Lognormal GOF Test Results	

Appendix B
Goodness of Fit Statistics

Correlation Coefficient R	0.929
Shapiro Wilk Test Statistic	0.88
Shapiro Wilk Critical (0.05) Value	0.901
Approximate Shapiro Wilk P Value	0.0179
Lilliefors Test Statistic	0.182
Lilliefors Critical (0.05) Value	0.197
Data appear Approximate_Lognormal at (0.05) Significance Level	
Molybdenum (mw-64)	
Raw Statistics	
Number of Valid Observations	20
Number of Missing Observations	10
Number of Distinct Observations	11
Minimum	0.0042
Maximum	0.0073
Mean of Raw Data	0.00501
Standard Deviation of Raw Data	6.3735E-4
Khat	75.8
Theta hat	6.6097E-5
Kstar	64.46
Theta star	7.7721E-5
Mean of Log Transformed Data	-5.303
Standard Deviation of Log Transformed Data	0.114
Normal GOF Test Results	
Correlation Coefficient R	0.848
Shapiro Wilk Test Statistic	0.747
Shapiro Wilk Critical (0.05) Value	0.905
Approximate Shapiro Wilk P Value	6.0004E-5
Lilliefors Test Statistic	0.283
Lilliefors Critical (0.05) Value	0.192
Data not Normal at (0.05) Significance Level	
Gamma GOF Test Results	
Correlation Coefficient R	0.869

Appendix B
Goodness of Fit Statistics

A-D Test Statistic	1.139
A-D Critical (0.05) Value	0.74
K-S Test Statistic	0.258
K-S Critical(0.05) Value	0.193
Data not Gamma Distributed at (0.05) Significance Level	
Lognormal GOF Test Results	
Correlation Coefficient R	0.892
Shapiro Wilk Test Statistic	0.822
Shapiro Wilk Critical (0.05) Value	0.905
Approximate Shapiro Wilk P Value	0.00121
Lilliefors Test Statistic	0.25
Lilliefors Critical (0.05) Value	0.192
Data not Lognormal at (0.05) Significance Level	
Non-parametric GOF Test Results	
Data do not follow a discernible distribution at (0.05) Level of Significance	
Molybdenum (mw-65)	
Raw Statistics	
Number of Valid Observations	18
Number of Missing Observations	12
Number of Distinct Observations	14
Minimum	0.0066
Maximum	0.0098
Mean of Raw Data	0.00828
Standard Deviation of Raw Data	9.0395E-4
Khat	87.62
Theta hat	9.4478E-5
Kstar	73.05
Theta star	1.1332E-4
Mean of Log Transformed Data	-4.8
Standard Deviation of Log Transformed Data	0.111
Normal GOF Test Results	

Appendix B
Goodness of Fit Statistics

Correlation Coefficient R	0.988							
Shapiro Wilk Test Statistic	0.969							
Shapiro Wilk Critical (0.05) Value	0.897							
Approximate Shapiro Wilk P Value	0.79							
Lilliefors Test Statistic	0.113							
Lilliefors Critical (0.05) Value	0.202							
Data appear Normal at (0.05) Significance Level								
Gamma GOF Test Results								
Correlation Coefficient R	0.986							
A-D Test Statistic	0.269							
A-D Critical (0.05) Value	0.738							
K-S Test Statistic	0.111							
K-S Critical(0.05) Value	0.203							
Data appear Gamma Distributed at (0.05) Significance Level								
Lognormal GOF Test Results								
Correlation Coefficient R	0.986							
Shapiro Wilk Test Statistic	0.966							
Shapiro Wilk Critical (0.05) Value	0.897							
Approximate Shapiro Wilk P Value	0.738							
Lilliefors Test Statistic	0.121							
Lilliefors Critical (0.05) Value	0.202							
Data appear Lognormal at (0.05) Significance Level								

	Goodness-of-Fit Test Statistics for Data Sets with Non-Detects
User Selected Options	
Date/Time of Computation	ProUCL 5.18/21/2023 7:30:23 AM
From File	ProUCLUpload_FC_CWTP_AppxIV_ProUCL_20230809_b.xls
Full Precision	OFF
Confidence Coefficient	0.95

Total Radium (mw-62)

	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs
Raw Statistics	31	9	22	14	8	36.36%

Appendix B
Goodness of Fit Statistics

	Number	Minimum	Maximum	Mean	Median	SD
Statistics (Non-Detects Only)	8	0.6	0.7	0.638	0.6	0.0518
Statistics (Non-Detects Only)	14	0.6	1.9	1.143	1.05	0.372
Statistics (All: NDs treated as DL value)	22	0.6	1.9	0.959	0.9	0.385
Statistics (All: NDs treated as DL/2 value)	22	0.3	1.9	0.843	0.9	0.501
Statistics (Normal ROS Imputed Data)	22	-0.176	1.9	0.804	0.9	0.561
Statistics (Gamma ROS Imputed Data)	22	0.0923	1.9	0.855	0.9	0.497
Statistics (Lognormal ROS Imputed Data)	22	0.347	1.9	0.907	0.9	0.437

	K hat	K Star	Theta hat	Log Mean	Log Stdv	Log CV
Statistics (Non-Detects Only)	10.42	8.231	0.11	0.085	0.325	3.827
Statistics (NDs = DL)	7.403	6.423	0.13	-0.111	0.371	-3.357
Statistics (NDs = DL/2)	2.755	2.409	0.306	-0.363	0.66	-1.819
Statistics (Gamma ROS Estimates)	2.46	2.155	0.347	-0.374	0.754	-2.018
Statistics (Lognormal ROS Estimates)	--	--	--	-0.209	0.487	-2.33

Normal GOF Test Results

	No NDs	NDs = DL	NDs = DL/2	Normal ROS
Correlation Coefficient R	0.974	0.93	0.955	0.993

	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)
Shapiro-Wilk (Detects Only)	0.946	0.874	Data Appear Normal
Shapiro-Wilk (NDs = DL)	0.857	0.911	Data Not Normal
Shapiro-Wilk (NDs = DL/2)	0.899	0.911	Data Not Normal
Shapiro-Wilk (Normal ROS Estimates)	0.98	0.911	Data Appear Normal
Lilliefors (Detects Only)	0.189	0.226	Data Appear Normal
Lilliefors (NDs = DL)	0.204	0.184	Data Not Normal
Lilliefors (NDs = DL/2)	0.201	0.184	Data Not Normal
Lilliefors (Normal ROS Estimates)	0.114	0.184	Data Appear Normal

Gamma GOF Test Results

	No NDs	NDs = DL	NDs = DL/2	Gamma ROS
Correlation Coefficient R	0.987	0.97	0.97	0.978

	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)
Anderson-Darling (Detects Only)	0.273	0.735	
Kolmogorov-Smirnov (Detects Only)	0.151	0.229	Detected Data Appear Gamma Distributed

Appendix B
Goodness of Fit Statistics

Anderson-Darling (NDs = DL)	0.89	0.745						
Kolmogorov-Smirnov (NDs = DL)	0.209	0.186	Data Not Gamma Distributed					
Anderson-Darling (NDs = DL/2)	0.958	0.751						
Kolmogorov-Smirnov (NDs = DL/2)	0.219	0.187	Data Not Gamma Distributed					
Anderson-Darling (Gamma ROS Estimates)	0.265	0.753						
Kolmogorov-Smirnov (Gamma ROS Est.)	0.161	0.187	Data Appear Gamma Distributed					
Lognormal GOF Test Results								
	No NDs	NDs = DL	NDs = DL/2	Log ROS				
Correlation Coefficient R	0.987	0.954	0.944	0.989				
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)					
Shapiro-Wilk (Detects Only)	0.971	0.874	Data Appear Lognormal					
Shapiro-Wilk (NDs = DL)	0.896	0.911	Data Not Lognormal					
Shapiro-Wilk (NDs = DL/2)	0.872	0.911	Data Not Lognormal					
Shapiro-Wilk (Lognormal ROS Estimates)	0.967	0.911	Data Appear Lognormal					
Lilliefors (Detects Only)	0.136	0.226	Data Appear Lognormal					
Lilliefors (NDs = DL)	0.201	0.184	Data Not Lognormal					
Lilliefors (NDs = DL/2)	0.215	0.184	Data Not Lognormal					
Lilliefors (Lognormal ROS Estimates)	0.13	0.184	Data Appear Lognormal					
Note: Substitution methods such as DL or DL/2 are not recommended.								
Total Radium (mw-63)								
	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs		
Raw Statistics	30	8	22	12	10	45.45%		
	Number	Minimum	Maximum	Mean	Median	SD		
Statistics (Non-Detects Only)	10	0.6	0.8	0.67	0.7	0.0675		
Statistics (Non-Detects Only)	12	0.4	2.1	0.958	0.8	0.521		
Statistics (All: NDs treated as DL value)	22	0.4	2.1	0.827	0.7	0.407		
Statistics (All: NDs treated as DL/2 value)	22	0.3	2.1	0.675	0.45	0.494		
Statistics (Normal ROS Imputed Data)	22	-0.15	2.1	0.634	0.55	0.55		
Statistics (Gamma ROS Imputed Data)	22	0.01	2.1	0.646	0.524	0.528		
Statistics (Lognormal ROS Imputed Data)	22	0.272	2.1	0.714	0.552	0.471		
	K hat	K Star	Theta hat	Log Mean	Log Stdv	Log CV		

Appendix B
Goodness of Fit Statistics

Statistics (Non-Detects Only)	4.447	3.39	0.215	-0.159	0.49	-3.076		
Statistics (NDs = DL)	6.313	5.483	0.131	-0.271	0.382	-1.409		
Statistics (NDs = DL/2)	2.747	2.403	0.246	-0.586	0.599	-1.022		
Statistics (Gamma ROS Estimates)	1.152	1.025	0.56	-0.93	1.355	-1.457		
Statistics (Lognormal ROS Estimates)	--	--	--	-0.495	0.545	-1.101		
Normal GOF Test Results								
	No NDs	NDs = DL	NDs = DL/2	Normal ROS				
Correlation Coefficient R	0.916	0.823	0.866	0.948				
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)					
Shapiro-Wilk (Detects Only)	0.839	0.859	Data Not Normal					
Shapiro-Wilk (NDs = DL)	0.691	0.911	Data Not Normal					
Shapiro-Wilk (NDs = DL/2)	0.753	0.911	Data Not Normal					
Shapiro-Wilk (Normal ROS Estimates)	0.903	0.911	Data Not Normal					
Lilliefors (Detects Only)	0.286	0.243	Data Not Normal					
Lilliefors (NDs = DL)	0.345	0.184	Data Not Normal					
Lilliefors (NDs = DL/2)	0.224	0.184	Data Not Normal					
Lilliefors (Normal ROS Estimates)	0.199	0.184	Data Not Normal					
Gamma GOF Test Results								
	No NDs	NDs = DL	NDs = DL/2	Gamma ROS				
Correlation Coefficient R	0.967	0.894	0.959	0.986				
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)					
Anderson-Darling (Detects Only)	0.502	0.734						
Kolmogorov-Smirnov (Detects Only)	0.249	0.246	Detected Data appear Approximate Gamma Distribution					
Anderson-Darling (NDs = DL)	1.897	0.746						
Kolmogorov-Smirnov (NDs = DL)	0.298	0.186	Data Not Gamma Distributed					
Anderson-Darling (NDs = DL/2)	1.213	0.751						
Kolmogorov-Smirnov (NDs = DL/2)	0.222	0.187	Data Not Gamma Distributed					
Anderson-Darling (Gamma ROS Estimates)	0.617	0.767						
Kolmogorov-Smirnov (Gamma ROS Est.)	0.156	0.19	Data Appear Gamma Distributed					
Lognormal GOF Test Results								
	No NDs	NDs = DL	NDs = DL/2	Log ROS				

Appendix B
Goodness of Fit Statistics

Correlation Coefficient R	0.975	0.914	0.943	0.976		
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)			
Shapiro-Wilk (Detects Only)	0.949	0.859	Data Appear Lognormal			
Shapiro-Wilk (NDs = DL)	0.846	0.911	Data Not Lognormal			
Shapiro-Wilk (NDs = DL/2)	0.878	0.911	Data Not Lognormal			
Shapiro-Wilk (Lognormal ROS Estimates)	0.948	0.911	Data Appear Lognormal			
Lilliefors (Detects Only)	0.218	0.243	Data Appear Lognormal			
Lilliefors (NDs = DL)	0.268	0.184	Data Not Lognormal			
Lilliefors (NDs = DL/2)	0.209	0.184	Data Not Lognormal			
Lilliefors (Lognormal ROS Estimates)	0.127	0.184	Data Appear Lognormal			
Note: Substitution methods such as DL or DL/2 are not recommended.						
Total Radium (mw-64)						
	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs
Raw Statistics	30	8	22	6	16	72.73%
	Number	Minimum	Maximum	Mean	Median	SD
Statistics (Non-Detects Only)	16	0.5	0.8	0.65	0.6	0.0816
Statistics (Non-Detects Only)	6	0.731	1.7	1.089	0.8	0.474
Statistics (All: NDs treated as DL value)	22	0.5	1.7	0.77	0.7	0.314
Statistics (All: NDs treated as DL/2 value)	22	0.25	1.7	0.533	0.35	0.419
Statistics (Normal ROS Imputed Data)	22	-1.575	1.7	-0.0891	-0.169	0.896
Statistics (Gamma ROS Imputed Data)	22	0.01	1.7	0.336	0.01	0.531
Statistics (Lognormal ROS Imputed Data)	22	0.103	1.7	0.499	0.345	0.447
	K hat	K Star	Theta hat	Log Mean	Log Stdv	Log CV
Statistics (Non-Detects Only)	7.134	3.678	0.153	0.0131	0.402	30.76
Statistics (NDs = DL)	9.572	8.297	0.0804	-0.315	0.303	-0.962
Statistics (NDs = DL/2)	2.782	2.433	0.192	-0.819	0.567	-0.692
Statistics (Gamma ROS Estimates)	0.377	0.356	0.89	-2.852	2.1	-0.736
Statistics (Lognormal ROS Estimates)	--	--	--	-0.996	0.767	-0.77
Normal GOF Test Results						
	No NDs	NDs = DL	NDs = DL/2	Normal ROS		
Correlation Coefficient R	0.838	0.756	0.786	0.983		

Appendix B
Goodness of Fit Statistics

	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)		
Shapiro-Wilk (Detects Only)	0.681	0.788	Data Not Normal		
Shapiro-Wilk (NDs = DL)	0.583	0.911	Data Not Normal		
Shapiro-Wilk (NDs = DL/2)	0.622	0.911	Data Not Normal		
Shapiro-Wilk (Normal ROS Estimates)	0.96	0.911	Data Appear Normal		
Lilliefors (Detects Only)	0.395	0.325	Data Not Normal		
Lilliefors (NDs = DL)	0.37	0.184	Data Not Normal		
Lilliefors (NDs = DL/2)	0.352	0.184	Data Not Normal		
Lilliefors (Normal ROS Estimates)	0.0927	0.184	Data Appear Normal		
Gamma GOF Test Results					
	No NDs	NDs = DL	NDs = DL/2	Gamma ROS	
Correlation Coefficient R	0.87	0.819	0.896	0.95	
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)		
Anderson-Darling (Detects Only)	1.069	0.698			
Kolmogorov-Smirnov (Detects Only)	0.41	0.333	Data Not Gamma Distributed		
Anderson-Darling (NDs = DL)	2.69	0.744			
Kolmogorov-Smirnov (NDs = DL)	0.319	0.185	Data Not Gamma Distributed		
Anderson-Darling (NDs = DL/2)	2.699	0.751			
Kolmogorov-Smirnov (NDs = DL/2)	0.327	0.187	Data Not Gamma Distributed		
Anderson-Darling (Gamma ROS Estimates)	2.343	0.831			
Kolmogorov-Smirnov (Gamma ROS Est.)	0.339	0.199	Data Not Gamma Distributed		
Lognormal GOF Test Results					
	No NDs	NDs = DL	NDs = DL/2	Log ROS	
Correlation Coefficient R	0.85	0.842	0.87	0.984	
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)		
Shapiro-Wilk (Detects Only)	0.703	0.788	Data Not Lognormal		
Shapiro-Wilk (NDs = DL)	0.719	0.911	Data Not Lognormal		
Shapiro-Wilk (NDs = DL/2)	0.755	0.911	Data Not Lognormal		
Shapiro-Wilk (Lognormal ROS Estimates)	0.961	0.911	Data Appear Lognormal		
Lilliefors (Detects Only)	0.388	0.325	Data Not Lognormal		
Lilliefors (NDs = DL)	0.29	0.184	Data Not Lognormal		
Lilliefors (NDs = DL/2)	0.295	0.184	Data Not Lognormal		

Appendix B
Goodness of Fit Statistics

Lilliefors (Lognormal ROS Estimates)	0.0868	0.184	Data Appear Lognormal					
Note: Substitution methods such as DL or DL/2 are not recommended.								
Total Radium (mw-65)								
	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs		
Raw Statistics	30	8	22	6	16	72.73%		
	Number	Minimum	Maximum	Mean	Median	SD		
Statistics (Non-Detects Only)	16	0.4	0.8	0.613	0.6	0.102		
Statistics (Non-Detects Only)	6	0.478	1.9	0.98	0.85	0.504		
Statistics (All: NDs treated as DL value)	22	0.4	1.9	0.713	0.6	0.31		
Statistics (All: NDs treated as DL/2 value)	22	0.2	1.9	0.49	0.3	0.396		
Statistics (Normal ROS Imputed Data)	22	-1.005	1.9	0.148	0.137	0.676		
Statistics (Gamma ROS Imputed Data)	22	0.01	1.9	0.354	0.182	0.48		
Statistics (Lognormal ROS Imputed Data)	22	0.117	1.9	0.485	0.376	0.409		
	K hat	K Star	Theta hat	Log Mean	Log Stdv	Log CV		
Statistics (Non-Detects Only)	5.24	2.731	0.187	-0.119	0.476	-4.005		
Statistics (NDs = DL)	8.494	7.366	0.0839	-0.399	0.325	-0.816		
Statistics (NDs = DL/2)	2.796	2.445	0.175	-0.903	0.563	-0.623		
Statistics (Gamma ROS Estimates)	0.477	0.443	0.741	-2.379	1.999	-0.84		
Statistics (Lognormal ROS Estimates)	--	--	--	-0.968	0.684	-0.706		
Normal GOF Test Results								
	No NDs	NDs = DL	NDs = DL/2	Normal ROS				
Correlation Coefficient R	0.927	0.797	0.788	0.981				
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)					
Shapiro-Wilk (Detects Only)	0.873	0.788	Data Appear Normal					
Shapiro-Wilk (NDs = DL)	0.66	0.911	Data Not Normal					
Shapiro-Wilk (NDs = DL/2)	0.638	0.911	Data Not Normal					
Shapiro-Wilk (Normal ROS Estimates)	0.968	0.911	Data Appear Normal					
Lilliefors (Detects Only)	0.239	0.325	Data Appear Normal					
Lilliefors (NDs = DL)	0.289	0.184	Data Not Normal					
Lilliefors (NDs = DL/2)	0.317	0.184	Data Not Normal					
Lilliefors (Normal ROS Estimates)	0.1	0.184	Data Appear Normal					

Appendix B
Goodness of Fit Statistics

Gamma GOF Test Results					
	No NDs	NDs = DL	NDs = DL/2	Gamma ROS	
Correlation Coefficient R	0.974	0.864	0.909	0.993	
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)		
Anderson-Darling (Detects Only)	0.298	0.698			
Kolmogorov-Smirnov (Detects Only)	0.219	0.333	Detected Data Appear Gamma Distributed		
Anderson-Darling (NDs = DL)	1.646	0.744			
Kolmogorov-Smirnov (NDs = DL)	0.248	0.185	Data Not Gamma Distributed		
Anderson-Darling (NDs = DL/2)	2.251	0.751			
Kolmogorov-Smirnov (NDs = DL/2)	0.277	0.187	Data Not Gamma Distributed		
Anderson-Darling (Gamma ROS Estimates)	1.189	0.809			
Kolmogorov-Smirnov (Gamma ROS Est.)	0.265	0.196	Data Not Gamma Distributed		
Lognormal GOF Test Results					
	No NDs	NDs = DL	NDs = DL/2	Log ROS	
Correlation Coefficient R	0.977	0.908	0.9	0.986	
	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)		
Shapiro-Wilk (Detects Only)	0.963	0.788	Data Appear Lognormal		
Shapiro-Wilk (NDs = DL)	0.844	0.911	Data Not Lognormal		
Shapiro-Wilk (NDs = DL/2)	0.815	0.911	Data Not Lognormal		
Shapiro-Wilk (Lognormal ROS Estimates)	0.973	0.911	Data Appear Lognormal		
Lilliefors (Detects Only)	0.191	0.325	Data Appear Lognormal		
Lilliefors (NDs = DL)	0.226	0.184	Data Not Lognormal		
Lilliefors (NDs = DL/2)	0.249	0.184	Data Not Lognormal		
Lilliefors (Lognormal ROS Estimates)	0.102	0.184	Data Appear Lognormal		
Note: Substitution methods such as DL or DL/2 are not recommended.					

Appendix B
Outlier Statistics

			Outlier Tests for Selected Uncensored Variables								
User Selected Options											
Date/Time of Computation	ProUCL 5.18/15/2023 3:48:05 PM										
From File	ProUCLUpload_FC_CWTP_AppxIV_ProUCL_20230809_a.xls										
Full Precision	OFF										
Rosner's Outlier Test for Arsenic (background)											
Mean	**0.00426**										
Standard Deviation	**0.00324**										
Number of data	**73**										
Number of suspected outliers	**1**										
			Potential	Obs.	Test	Critical	Critical				
#	Mean	sd	outlier	Number	value	value (5%)	value (1%)				
1	0.00426	0.00322	0.016	1	3.645	3.275	3.635				
For 5% Significance Level, there is 1 Potential Outlier											
Potential outliers is: 0.016											
For 1% Significance Level, there is 1 Potential Outlier											
Potential outliers is: 0.016											
Rosner's Outlier Test for Cobalt (background)											
Mean	**0.00382**										
Standard Deviation	**0.00304**										
Number of data	**73**										
Number of suspected outliers	**1**										
			Potential	Obs.	Test	Critical	Critical				
#	Mean	sd	outlier	Number	value	value (5%)	value (1%)				
1	0.00382	0.00302	0.019	27	5.028	3.275	3.635				
For 5% Significance Level, there is 1 Potential Outlier											
Potential outliers is: 0.019											

Appendix B
Outlier Statistics

For 1% Significance Level, there is 1 Potential Outlier

Potential outliers is: 0.019

Rosner's Outlier Test for Total Radium (background)

Mean	**2.07**
Standard Deviation	**1.066**
Number of data	**80**
Number of suspected outliers	**1**

#	Mean	sd	Potential outlier	Obs. Number	Test value	Critical value (5%)	Critical value (1%)
1	2.07	1.059	4.9	78	2.673	3.31	3.67

For 5% Significance Level, there is no Potential Outlier

For 1% Significance Level, there is no Potential Outlier

Rosner's Outlier Test for Selenium (background)

Mean	**0.138**
Standard Deviation	**0.109**
Number of data	**73**
Number of suspected outliers	**1**

#	Mean	sd	Potential outlier	Obs. Number	Test value	Critical value (5%)	Critical value (1%)
1	0.138	0.108	0.39	29	2.331	3.275	3.635

For 5% Significance Level, there is no Potential Outlier

For 1% Significance Level, there is no Potential Outlier

Appendix B
Outlier Statistics

	Outlier Tests for Selected Uncensored Variables
User Selected Options	
Date/Time of Computation	ProUCL 5.18/18/2023 4:50:09 PM
From File	ProUCLUpload_FC_CWTP_AppxIV_ProUCL_20230809_b.xls
Full Precision	OFF

Dixon's Outlier Test for Barium (mw-62)

Number of Observations = 20
10% critical value: 0.401
5% critical value: 0.45
1% critical value: 0.535

1. Observation Value 0.043 is a Potential Outlier (Upper Tail)?

Test Statistic: 0.455

For 10% significance level, 0.043 is an outlier.
For 5% significance level, 0.043 is an outlier.
For 1% significance level, 0.043 is not an outlier.

2. Observation Value 0.015 is a Potential Outlier (Lower Tail)?

Test Statistic: 0.333

For 10% significance level, 0.015 is not an outlier.
For 5% significance level, 0.015 is not an outlier.
For 1% significance level, 0.015 is not an outlier.

Dixon's Outlier Test for Barium (mw-63)

Number of Observations = 20
10% critical value: 0.401
5% critical value: 0.45
1% critical value: 0.535

1. Observation Value 0.033 is a Potential Outlier (Upper Tail)?

Appendix B
Outlier Statistics

Test Statistic: 0.647							
For 10% significance level, 0.033 is an outlier.							
For 5% significance level, 0.033 is an outlier.							
For 1% significance level, 0.033 is an outlier.							
2. Observation Value 0.014 is a Potential Outlier (Lower Tail)?							
Test Statistic: 0.250							
For 10% significance level, 0.014 is not an outlier.							
For 5% significance level, 0.014 is not an outlier.							
For 1% significance level, 0.014 is not an outlier.							
Dixon's Outlier Test for Barium (mw-64)							
Number of Observations = 20							
10% critical value: 0.401							
5% critical value: 0.45							
1% critical value: 0.535							
1. Observation Value 0.035 is a Potential Outlier (Upper Tail)?							
Test Statistic: 0.167							
For 10% significance level, 0.035 is not an outlier.							
For 5% significance level, 0.035 is not an outlier.							
For 1% significance level, 0.035 is not an outlier.							
2. Observation Value 0.022 is a Potential Outlier (Lower Tail)?							
Test Statistic: 0.091							
For 10% significance level, 0.022 is not an outlier.							
For 5% significance level, 0.022 is not an outlier.							
For 1% significance level, 0.022 is not an outlier.							

Appendix B
Outlier Statistics

Dixon's Outlier Test for Barium (mw-65)	
Number of Observations = 20	
10% critical value: 0.401	
5% critical value: 0.45	
1% critical value: 0.535	
1. Observation Value 0.042 is a Potential Outlier (Upper Tail)?	
Test Statistic: 0.633	
For 10% significance level, 0.042 is an outlier.	
For 5% significance level, 0.042 is an outlier.	
For 1% significance level, 0.042 is an outlier.	
2. Observation Value 0.012 is a Potential Outlier (Lower Tail)?	
Test Statistic: 0.000	
For 10% significance level, 0.012 is not an outlier.	
For 5% significance level, 0.012 is not an outlier.	
For 1% significance level, 0.012 is not an outlier.	

	Outlier Tests for Selected Uncensored Variables
User Selected Options	
Date/Time of Computation	ProUCL 5.18/19/2023 8:36:37 PM
From File	ProUCLUpload_FC_CWTP_AppxIV_ProUCL_20230809_b.xls
Full Precision	OFF

Dixon's Outlier Test for Cobalt (mw-62)	
Number of Observations = 20	
10% critical value: 0.401	
5% critical value: 0.45	
1% critical value: 0.535	
1. Observation Value 0.014 is a Potential Outlier (Upper Tail)?	

Appendix B
Outlier Statistics

Test Statistic: 0.270							
For 10% significance level, 0.014 is not an outlier.							
For 5% significance level, 0.014 is not an outlier.							
For 1% significance level, 0.014 is not an outlier.							
2. Observation Value 0.00065 is a Potential Outlier (Lower Tail)?							
Test Statistic: 0.217							
For 10% significance level, 0.00065 is not an outlier.							
For 5% significance level, 0.00065 is not an outlier.							
For 1% significance level, 0.00065 is not an outlier.							
Dixon's Outlier Test for Cobalt (mw-63)							
Number of Observations = 20							
10% critical value: 0.401							
5% critical value: 0.45							
1% critical value: 0.535							
1. Observation Value 0.0086 is a Potential Outlier (Upper Tail)?							
Test Statistic: 0.230							
For 10% significance level, 0.0086 is not an outlier.							
For 5% significance level, 0.0086 is not an outlier.							
For 1% significance level, 0.0086 is not an outlier.							
2. Observation Value 0.00062 is a Potential Outlier (Lower Tail)?							
Test Statistic: 0.092							
For 10% significance level, 0.00062 is not an outlier.							
For 5% significance level, 0.00062 is not an outlier.							
For 1% significance level, 0.00062 is not an outlier.							

Appendix B
Outlier Statistics

Dixon's Outlier Test for Cobalt (mw-64)
Number of Observations = 20
10% critical value: 0.401
5% critical value: 0.45
1% critical value: 0.535
1. Observation Value 0.005 is a Potential Outlier (Upper Tail)?
Test Statistic: 0.769
For 10% significance level, 0.005 is an outlier.
For 5% significance level, 0.005 is an outlier.
For 1% significance level, 0.005 is an outlier.
2. Observation Value 0.00083 is a Potential Outlier (Lower Tail)?
Test Statistic: 0.231
For 10% significance level, 0.00083 is not an outlier.
For 5% significance level, 0.00083 is not an outlier.
For 1% significance level, 0.00083 is not an outlier.
Dixon's Outlier Test for Cobalt (mw-65)
Number of Observations = 20
10% critical value: 0.401
5% critical value: 0.45
1% critical value: 0.535
1. Observation Value 0.0029 is a Potential Outlier (Upper Tail)?
Test Statistic: 0.500
For 10% significance level, 0.0029 is an outlier.
For 5% significance level, 0.0029 is an outlier.
For 1% significance level, 0.0029 is not an outlier.

Appendix B
Outlier Statistics

2. Observation Value 0.001 is a Potential Outlier (Lower Tail)?	
Test Statistic: 0.100	
For 10% significance level, 0.001 is not an outlier.	
For 5% significance level, 0.001 is not an outlier.	
For 1% significance level, 0.001 is not an outlier.	
	Outlier Tests for Selected Variables excluding nondetects
User Selected Options	
Date/Time of Computation	ProUCL 5.18/19/2023 7:31:58 PM
From File	ProUCLUpload_FC_CWTP_AppxIV_ProUCL_20230809_b.xls
Full Precision	OFF
Dixon's Outlier Test for Molybdenum (mw-62)	
Total N = 19	
Number NDs = 1	
Number Detects = 18	
10% critical value: 0.424	
5% critical value: 0.475	
1% critical value: 0.561	
Note: NDs excluded from Outlier Test	
1. Data Value 0.0044 is a Potential Outlier (Upper Tail)?	
Test Statistic: 0.421	
For 10% significance level, 0.0044 is not an outlier.	
For 5% significance level, 0.0044 is not an outlier.	
For 1% significance level, 0.0044 is not an outlier.	
2. Data Value 0.0012 is a Potential Outlier (Lower Tail)?	
Test Statistic: 0.542	
For 10% significance level, 0.0012 is an outlier.	

Appendix B
Outlier Statistics

For 5% significance level, 0.0012 is an outlier.							
For 1% significance level, 0.0012 is not an outlier.							
Dixon's Outlier Test for Molybdenum (mw-63)							
Total N = 19							
Number NDs = 0							
Number Detects = 19							
10% critical value: 0.412							
5% critical value: 0.462							
1% critical value: 0.547							
Note: NDs excluded from Outlier Test							
1. Data Value 0.0058 is a Potential Outlier (Upper Tail)?							
Test Statistic: 0.639							
For 10% significance level, 0.0058 is an outlier.							
For 5% significance level, 0.0058 is an outlier.							
For 1% significance level, 0.0058 is an outlier.							
2. Data Value 0.0019 is a Potential Outlier (Lower Tail)?							
Test Statistic: 0.188							
For 10% significance level, 0.0019 is not an outlier.							
For 5% significance level, 0.0019 is not an outlier.							
For 1% significance level, 0.0019 is not an outlier.							
Dixon's Outlier Test for Molybdenum (mw-64)							
Total N = 20							
Number NDs = 0							
Number Detects = 20							
10% critical value: 0.401							
5% critical value: 0.45							
1% critical value: 0.535							

Appendix B
Outlier Statistics

Note: NDs excluded from Outlier Test	
1. Data Value 0.0073 is a Potential Outlier (Upper Tail)?	
Test Statistic: 0.750	
For 10% significance level, 0.0073 is an outlier.	
For 5% significance level, 0.0073 is an outlier.	
For 1% significance level, 0.0073 is an outlier.	
2. Data Value 0.0042 is a Potential Outlier (Lower Tail)?	
Test Statistic: 0.300	
For 10% significance level, 0.0042 is not an outlier.	
For 5% significance level, 0.0042 is not an outlier.	
For 1% significance level, 0.0042 is not an outlier.	

	Outlier Tests for Selected Variables excluding nondetects
User Selected Options	
Date/Time of Computation	ProUCL 5.18/19/2023 7:31:58 PM
From File	ProUCLUpload_FC_CWTP_AppxIV_ProUCL_20230809_b.xls
Full Precision	OFF

Dixon's Outlier Test for Molybdenum (mw-62)	
Total N = 19	
Number NDs = 1	
Number Detects = 18	
10% critical value: 0.424	
5% critical value: 0.475	
1% critical value: 0.561	
Note: NDs excluded from Outlier Test	
1. Data Value 0.0044 is a Potential Outlier (Upper Tail)?	
Test Statistic: 0.421	

Appendix B
Outlier Statistics

For 10% significance level, 0.0044 is not an outlier.							
For 5% significance level, 0.0044 is not an outlier.							
For 1% significance level, 0.0044 is not an outlier.							
2. Data Value 0.0012 is a Potential Outlier (Lower Tail)?							
Test Statistic: 0.542							
For 10% significance level, 0.0012 is an outlier.							
For 5% significance level, 0.0012 is an outlier.							
For 1% significance level, 0.0012 is not an outlier.							
Dixon's Outlier Test for Molybdenum (mw-63)							
Total N = 19							
Number NDs = 0							
Number Detects = 19							
10% critical value: 0.412							
5% critical value: 0.462							
1% critical value: 0.547							
Note: NDs excluded from Outlier Test							
1. Data Value 0.0058 is a Potential Outlier (Upper Tail)?							
Test Statistic: 0.639							
For 10% significance level, 0.0058 is an outlier.							
For 5% significance level, 0.0058 is an outlier.							
For 1% significance level, 0.0058 is an outlier.							
2. Data Value 0.0019 is a Potential Outlier (Lower Tail)?							
Test Statistic: 0.188							
For 10% significance level, 0.0019 is not an outlier.							
For 5% significance level, 0.0019 is not an outlier.							
For 1% significance level, 0.0019 is not an outlier.							

Appendix B
Outlier Statistics

Dixon's Outlier Test for Molybdenum (mw-64)
Total N = 20
Number NDs = 0
Number Detects = 20
10% critical value: 0.401
5% critical value: 0.45
1% critical value: 0.535
Note: NDs excluded from Outlier Test
1. Data Value 0.0073 is a Potential Outlier (Upper Tail)?
Test Statistic: 0.750
For 10% significance level, 0.0073 is an outlier.
For 5% significance level, 0.0073 is an outlier.
For 1% significance level, 0.0073 is an outlier.
2. Data Value 0.0042 is a Potential Outlier (Lower Tail)?
Test Statistic: 0.300
For 10% significance level, 0.0042 is not an outlier.
For 5% significance level, 0.0042 is not an outlier.
For 1% significance level, 0.0042 is not an outlier.
Dixon's Outlier Test for Molybdenum (mw-65)
Total N = 18
Number NDs = 0
Number Detects = 18
10% critical value: 0.424
5% critical value: 0.475
1% critical value: 0.561
Note: NDs excluded from Outlier Test
1. Data Value 0.0098 is a Potential Outlier (Upper Tail)?

Appendix B
Outlier Statistics

Test Statistic: 0.192	
For 10% significance level, 0.0098 is not an outlier.	
For 5% significance level, 0.0098 is not an outlier.	
For 1% significance level, 0.0098 is not an outlier.	
2. Data Value 0.0066 is a Potential Outlier (Lower Tail)?	
Test Statistic: 0.222	
For 10% significance level, 0.0066 is not an outlier.	
For 5% significance level, 0.0066 is not an outlier.	
For 1% significance level, 0.0066 is not an outlier.	
Outlier Tests for Selected Uncensored Variables	
User Selected Options	
Date/Time of Computation	ProUCL 5.18/21/2023 7:34:52 AM
From File	ProUCLUpload_FC_CWTP_AppxIV_ProUCL_20230809_b.xls
Full Precision	OFF
Dixon's Outlier Test for Total Radium (mw-62)	
Number of Observations = 22	
10% critical value: 0.382	
5% critical value: 0.43	
1% critical value: 0.514	
1. Observation Value 1.9 is a Potential Outlier (Upper Tail)?	
Test Statistic: 0.231	
For 10% significance level, 1.9 is not an outlier.	
For 5% significance level, 1.9 is not an outlier.	
For 1% significance level, 1.9 is not an outlier.	
2. Observation Value 0.6 is a Potential Outlier (Lower Tail)?	

Appendix B
Outlier Statistics

Test Statistic: 0.000							
For 10% significance level, 0.6 is not an outlier.							
For 5% significance level, 0.6 is not an outlier.							
For 1% significance level, 0.6 is not an outlier.							
Dixon's Outlier Test for Total Radium (mw-63)							
Number of Observations = 22							
10% critical value: 0.382							
5% critical value: 0.43							
1% critical value: 0.514							
1. Observation Value 2.1 is a Potential Outlier (Upper Tail)?							
Test Statistic: 0.535							
For 10% significance level, 2.1 is an outlier.							
For 5% significance level, 2.1 is an outlier.							
For 1% significance level, 2.1 is an outlier.							
2. Observation Value 0.4 is a Potential Outlier (Lower Tail)?							
Test Statistic: 0.223							
For 10% significance level, 0.4 is not an outlier.							
For 5% significance level, 0.4 is not an outlier.							
For 1% significance level, 0.4 is not an outlier.							
Dixon's Outlier Test for Total Radium (mw-64)							
Number of Observations = 22							
10% critical value: 0.382							
5% critical value: 0.43							
1% critical value: 0.514							
1. Observation Value 1.7 is a Potential Outlier (Upper Tail)?							

Appendix B
Outlier Statistics

Test Statistic: 0.818							
For 10% significance level, 1.7 is an outlier.							
For 5% significance level, 1.7 is an outlier.							
For 1% significance level, 1.7 is an outlier.							
2. Observation Value 0.5 is a Potential Outlier (Lower Tail)?							
Test Statistic: 0.333							
For 10% significance level, 0.5 is not an outlier.							
For 5% significance level, 0.5 is not an outlier.							
For 1% significance level, 0.5 is not an outlier.							
Dixon's Outlier Test for Total Radium (mw-65)							
Number of Observations = 22							
10% critical value: 0.382							
5% critical value: 0.43							
1% critical value: 0.514							
1. Observation Value 1.9 is a Potential Outlier (Upper Tail)?							
Test Statistic: 0.643							
For 10% significance level, 1.9 is an outlier.							
For 5% significance level, 1.9 is an outlier.							
For 1% significance level, 1.9 is an outlier.							
2. Observation Value 0.4 is a Potential Outlier (Lower Tail)?							
Test Statistic: 0.167							
For 10% significance level, 0.4 is not an outlier.							
For 5% significance level, 0.4 is not an outlier.							
For 1% significance level, 0.4 is not an outlier.							

Appendix B
Summary Statistics

General Statistics on Uncensored Data

Date/Time of Computation ProUCL 5.18/10/2023 10:34:01 PM

User Selected Options

From File ProUCLUpload_FC_CWTP_AppxIV_ProUCL_20230809.xls

Full Precision OFF

From File: ProUCLUpload_FC_CWTP_AppxIV_ProUCL_20230809.xls

General Statistics for Censored Data Set (with NDs) using Kaplan Meier Method

Variable	NumObs	# Missing	Num Ds	NumNDs	% NDs	Min ND	Max ND	KM Mean	KM Var	KM SD	KM CV
Antimony (mw-62)	20	11	2	18	90.00%	0.001	0.004	1.1000E-4	0	0	N/A
Antimony (mw-63)	20	10	2	18	90.00%	0.001	0.004	1.3000E-4	0	0	N/A
Antimony (mw-64)	20	10	0	20	100.00%	1.0000E-4	0.004	N/A	N/A	N/A	N/A
Antimony (mw-65)	20	10	0	20	100.00%	1.0000E-4	0.004	N/A	N/A	N/A	N/A
Antimony (mw-71)	24	7	3	21	87.50%	0.001	0.01	1.6667E-4	1.6889E-9	4.1096E-5	0.247
Antimony (mw-72)	24	7	2	22	91.67%	0.001	0.01	2.6500E-4	2.500E-11	5.0000E-6	0.0189
Antimony (mw-73)	19	6	1	18	94.74%	0.001	0.01	1.7000E-4	0	0	N/A
Arsenic (mw-62)	20	11	14	6	30.00%	5.0000E-4	0.005	0.0028	1.4429E-5	0.0038	1.355
Arsenic (mw-63)	20	10	6	14	70.00%	5.0000E-4	0.005	6.9810E-4	6.5758E-8	2.5643E-4	0.367
Arsenic (mw-64)	20	10	3	17	85.00%	5.0000E-4	0.005	5.5760E-4	1.7418E-8	1.3198E-4	0.237
Arsenic (mw-65)	20	10	3	17	85.00%	5.0000E-4	0.005	5.7557E-4	3.8738E-8	1.9682E-4	0.342
Arsenic (mw-71)	26	5	20	6	23.08%	0.001	0.005	0.00572	1.4807E-5	0.00385	0.673
Arsenic (mw-72)	26	5	20	6	23.08%	0.001	0.01	0.00344	5.2806E-6	0.0023	0.668
Arsenic (mw-73)	21	4	4	17	80.95%	5.0000E-4	0.01	8.7292E-4	1.9964E-7	4.4681E-4	0.512
Barium (mw-62)	20	11	20	0	0.00%	N/A	N/A	0.0258	3.9747E-5	0.0063	0.244
Barium (mw-63)	20	10	20	0	0.00%	N/A	N/A	0.0197	1.6747E-5	0.00409	0.208
Barium (mw-64)	20	10	20	0	0.00%	N/A	N/A	0.0267	1.2661E-5	0.00356	0.134
Barium (mw-65)	20	10	20	0	0.00%	N/A	N/A	0.0186	5.4779E-5	0.0074	0.398
Barium (mw-71)	26	5	25	1	3.85%	0.01	0.01	0.0117	1.9122E-5	0.00437	0.373
Barium (mw-72)	26	5	25	1	3.85%	0.01	0.01	0.0134	1.1274E-4	0.0106	0.789
Barium (mw-73)	21	4	21	0	0.00%	N/A	N/A	0.0241	3.4429E-5	0.00587	0.243
Beryllium (mw-62)	20	11	1	19	95.00%	0.001	0.001	8.6000E-5	0	0	N/A
Beryllium (mw-63)	20	10	1	19	95.00%	0.001	0.001	7.3000E-5	0	0	N/A
Beryllium (mw-64)	20	10	1	19	95.00%	0.001	0.001	0.00121	7.9848E-7	8.9357E-4	0.742
Beryllium (mw-65)	20	10	0	20	100.00%	0.001	0.001	N/A	N/A	N/A	N/A

Appendix B
Summary Statistics

User Selected Options

Beryllium (mw-71)	23	8	2	21	91.30%	0.001	0.001	7.0783E-4	1.0121E-7	3.1813E-4	0.449
Beryllium (mw-72)	23	8	1	22	95.65%	0.001	0.005	0.001	4.339E-10	2.0830E-5	0.0207
Beryllium (mw-73)	18	7	1	17	94.44%	0.001	0.001	0.00102	8.3951E-9	9.1625E-5	0.0896
Cadmium (mw-62)	20	11	1	19	95.00%	1.0000E-4	0.001	8.4000E-5	0	0	N/A
Cadmium (mw-63)	20	10	2	18	90.00%	1.0000E-4	0.001	6.9500E-5	3.328E-10	1.8241E-5	0.262
Cadmium (mw-64)	20	10	1	19	95.00%	1.0000E-4	0.001	5.8000E-5	0	0	N/A
Cadmium (mw-65)	20	10	0	20	100.00%	1.0000E-4	0.001	N/A	N/A	N/A	N/A
Cadmium (mw-71)	24	7	6	18	75.00%	1.0000E-4	0.001	1.2444E-4	9.136E-10	3.0225E-5	0.243
Cadmium (mw-72)	24	7	3	21	87.50%	1.0000E-4	0.001	7.4100E-5	3.070E-10	1.7521E-5	0.236
Cadmium (mw-73)	19	6	6	13	68.42%	2.0000E-4	0.001	1.6733E-4	4.907E-10	2.2151E-5	0.132
Chromium (mw-62)	20	11	4	16	80.00%	5.0000E-4	0.01	6.6854E-4	9.6612E-8	3.1083E-4	0.465
Chromium (mw-63)	20	10	2	18	90.00%	5.0000E-4	0.01	4.8125E-4	1.8386E-8	1.3559E-4	0.282
Chromium (mw-64)	20	10	3	17	85.00%	5.0000E-4	0.01	3.7750E-4	6.8294E-8	2.6133E-4	0.692
Chromium (mw-65)	20	10	2	18	90.00%	5.0000E-4	0.004	5.6769E-4	7.2433E-8	2.6913E-4	0.474
Chromium (mw-71)	24	7	1	23	95.83%	5.0000E-4	0.01	5.7000E-4	1.4700E-8	1.2124E-4	0.213
Chromium (mw-72)	24	7	4	20	83.33%	0.001	0.01	7.1373E-4	2.8360E-7	5.3254E-4	0.746
Chromium (mw-73)	19	6	2	17	89.47%	0.001	0.01	9.4063E-4	6.6544E-7	8.1575E-4	0.867
Cobalt (mw-62)	20	11	20	0	0.00%	N/A	N/A	0.00654	1.0780E-5	0.00328	0.502
Cobalt (mw-63)	20	10	19	1	5.00%	0.001	0.001	0.00465	5.2473E-6	0.00229	0.492
Cobalt (mw-64)	20	10	16	4	20.00%	0.002	0.005	0.00138	8.5646E-8	2.9265E-4	0.212
Cobalt (mw-65)	20	10	17	3	15.00%	0.002	0.002	0.00145	2.3670E-7	4.8652E-4	0.335
Cobalt (mw-71)	26	5	8	18	69.23%	5.0000E-4	0.01	8.5468E-4	1.7021E-6	0.0013	1.526
Cobalt (mw-72)	26	5	23	3	11.54%	0.005	0.01	0.00353	1.2010E-5	0.00347	0.981
Cobalt (mw-73)	21	4	17	4	19.05%	0.005	0.01	0.00524	2.0740E-6	0.00144	0.275
Fluoride (mw-62)	31	0	30	1	3.23%	80	80	1.553	0.136	0.369	0.237
Fluoride (mw-63)	30	0	29	1	3.33%	8	8	1.889	0.137	0.37	0.196
Fluoride (mw-64)	30	0	30	0	0.00%	N/A	N/A	1.447	0.00671	0.0819	0.0566
Fluoride (mw-65)	30	0	29	1	3.33%	2	2	1.851	0.0329	0.181	0.098
Fluoride (mw-71)	29	2	2	27	93.10%	0.05	20	0.232	0.492	0.701	3.019
Fluoride (mw-72)	29	2	1	28	96.55%	0.05	20	0.204	0.614	0.784	3.847
Fluoride (mw-73)	23	2	2	21	91.30%	0.4	80	0.0915	8.1225E-4	0.0285	0.311
Lead (mw-62)	20	11	2	18	90.00%	5.0000E-4	0.005	5.0615E-4	4.544E-10	2.1318E-5	0.0421
Lead (mw-63)	20	10	1	19	95.00%	5.0000E-4	0.005	1.5000E-4	0	0	N/A
Lead (mw-64)	20	10	1	19	95.00%	5.0000E-4	0.005	1.6000E-4	0	0	N/A
Lead (mw-65)	20	10	0	20	100.00%	5.0000E-4	0.002	N/A	N/A	N/A	N/A

Appendix B
Summary Statistics

User Selected Options

Lead (mw-71)	24	7	2	22	91.67%	5.0000E-4	0.005	5.3778E-4	5.7951E-9	7.6125E-5	0.142
Lead (mw-72)	24	7	2	22	91.67%	5.0000E-4	0.005	1.8706E-4	5.2091E-8	2.2824E-4	1.22
Lead (mw-73)	19	6	0	19	100.00%	5.0000E-4	0.005	N/A	N/A	N/A	N/A
Lithium (mw-62)	22	9	7	15	68.18%	0.2	0.2	0.131	1.5510E-4	0.0125	0.0948
Lithium (mw-63)	22	8	7	15	68.18%	0.2	0.2	0.061	1.3114E-4	0.0115	0.188
Lithium (mw-64)	22	8	7	15	68.18%	0.2	0.2	0.0216	6.8163E-6	0.00261	0.121
Lithium (mw-65)	22	8	7	15	68.18%	0.2	0.2	0.0563	1.2220E-4	0.0111	0.196
Lithium (mw-71)	26	5	25	1	3.85%	0.4	0.4	0.372	0.00747	0.0864	0.233
Lithium (mw-72)	26	5	24	2	7.69%	0.2	0.8	0.386	0.0117	0.108	0.281
Lithium (mw-73)	21	4	19	2	9.52%	0.2	0.2	0.282	0.00866	0.0931	0.33
Mercury (mw-62)	20	11	3	17	85.00%	2.0000E-4	2.0000E-4	2.2300E-4	3.9210E-9	6.2618E-5	0.281
Mercury (mw-63)	20	10	0	20	100.00%	2.0000E-4	2.0000E-4	N/A	N/A	N/A	N/A
Mercury (mw-64)	20	10	0	20	100.00%	2.0000E-4	2.0000E-4	N/A	N/A	N/A	N/A
Mercury (mw-65)	20	10	0	20	100.00%	2.0000E-4	2.0000E-4	N/A	N/A	N/A	N/A
Mercury (mw-71)	24	7	0	24	100.00%	2.0000E-4	2.0000E-4	N/A	N/A	N/A	N/A
Mercury (mw-72)	24	7	0	24	100.00%	2.0000E-4	2.0000E-4	N/A	N/A	N/A	N/A
Mercury (mw-73)	19	6	0	19	100.00%	2.0000E-4	2.0000E-4	N/A	N/A	N/A	N/A
Molybdenum (mw-62)	20	11	19	1	5.00%	0.002	0.002	0.00336	4.5085E-6	0.00212	0.633
Molybdenum (mw-63)	20	10	20	0	0.00%	N/A	N/A	0.00349	1.0819E-5	0.00329	0.942
Molybdenum (mw-64)	20	10	20	0	0.00%	N/A	N/A	0.00501	4.0621E-7	6.3735E-4	0.127
Molybdenum (mw-65)	20	10	20	0	0.00%	N/A	N/A	0.0086	1.9516E-6	0.0014	0.162
Molybdenum (mw-71)	26	5	10	16	61.54%	0.001	0.01	0.00105	4.0641E-7	6.3750E-4	0.608
Molybdenum (mw-72)	26	5	14	12	46.15%	0.001	0.01	0.00244	1.0215E-5	0.0032	1.307
Molybdenum (mw-73)	21	4	14	7	33.33%	0.002	0.01	0.00238	2.9865E-6	0.00173	0.726
Total Radium (mw-62)	22	9	14	8	36.36%	0.6	0.7	0.946	0.15	0.387	0.41
Total Radium (mw-63)	22	8	12	10	45.45%	0.6	0.8	0.735	0.198	0.445	0.606
Total Radium (mw-64)	22	8	6	16	72.73%	0.5	0.8	0.662	0.12	0.346	0.523
Total Radium (mw-65)	22	8	6	16	72.73%	0.4	0.8	0.588	0.117	0.342	0.583
Total Radium (mw-71)	29	2	22	7	24.14%	0.5	0.8	1.268	0.602	0.776	0.612
Total Radium (mw-72)	28	3	27	1	3.57%	0.8	0.8	2.693	0.865	0.93	0.345
Total Radium (mw-73)	23	2	22	1	4.35%	0.6	0.6	2.248	0.993	0.996	0.443
Selenium (mw-62)	20	11	5	15	75.00%	5.0000E-4	0.005	6.7979E-4	1.2946E-7	3.5981E-4	0.529
Selenium (mw-63)	20	10	4	16	80.00%	5.0000E-4	0.005	5.9196E-4	4.5003E-8	2.1214E-4	0.358
Selenium (mw-64)	20	10	1	19	95.00%	5.0000E-4	0.005	3.3000E-4	0	0	N/A
Selenium (mw-65)	20	10	1	19	95.00%	5.0000E-4	0.005	3.4000E-4	0	0	N/A

Appendix B
Summary Statistics

User Selected Options

Selenium (mw-71)	26	5	26	0	0.00%	N/A	N/A	0.253	0.00354	0.0595	0.235
Selenium (mw-72)	26	5	25	1	3.85%	0.003	0.003	0.122	0.00383	0.0619	0.506
Selenium (mw-73)	21	4	19	2	9.52%	0.005	0.005	0.0158	1.5059E-4	0.0123	0.775
Thallium (mw-62)	20	11	1	19	95.00%	1.0000E-4	0.001	9.8000E-5	0	0	N/A
Thallium (mw-63)	20	10	2	18	90.00%	1.0000E-4	0.001	1.0462E-4	1.787E-10	1.3368E-5	0.128
Thallium (mw-64)	20	10	10	10	50.00%	1.0000E-4	0.001	1.3493E-4	5.0345E-9	7.0954E-5	0.526
Thallium (mw-65)	20	10	1	19	95.00%	1.0000E-4	0.001	7.2000E-5	0	0	N/A
Thallium (mw-71)	26	5	16	10	38.46%	4.0000E-4	0.002	3.5486E-4	9.1683E-9	9.5751E-5	0.27
Thallium (mw-72)	26	5	23	3	11.54%	1.1000E-4	0.002	9.0914E-4	4.8928E-8	2.2120E-4	0.243
Thallium (mw-73)	21	4	11	10	47.62%	4.0000E-4	0.002	2.2818E-4	3.785E-10	1.9455E-5	0.0853

General Statistics for Raw Data Sets using Detected Data Only

Variable	NumObs	# Missing	Minimum	Maximum	Mean	Median	Var	SD	MAD/0.675	Skewness	CV
Antimony (mw-62)	2	11	1.1000E-4	1.1000E-4	1.1000E-4	1.1000E-4	0	0	0	N/A	N/A
Antimony (mw-63)	2	10	1.3000E-4	1.3000E-4	1.3000E-4	1.3000E-4	0	0	0	N/A	N/A
Antimony (mw-64)	0	10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Antimony (mw-65)	0	10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Antimony (mw-71)	3	7	1.2000E-4	2.2000E-4	1.6667E-4	1.6000E-4	2.5333E-9	5.0332E-5	5.9303E-5	0.586	0.302
Antimony (mw-72)	2	7	2.6000E-4	2.7000E-4	2.6500E-4	2.6500E-4	5.000E-11	7.0711E-6	7.4129E-6	N/A	0.0267
Antimony (mw-73)	1	6	1.7000E-4	1.7000E-4	1.7000E-4	1.7000E-4	N/A	N/A	0	N/A	N/A
Arsenic (mw-62)	14	11	6.2000E-4	0.012	0.00365	0.0018	1.9506E-5	0.00442	0.00163	1.456	1.209
Arsenic (mw-63)	6	10	5.9000E-4	0.0012	9.0500E-4	9.0500E-4	7.2670E-8	2.6957E-4	4.2254E-4	-0.0108	0.298
Arsenic (mw-64)	3	10	5.6000E-4	0.001	7.5333E-4	7.0000E-4	5.0533E-8	2.2480E-4	2.0756E-4	1.008	0.298
Arsenic (mw-65)	3	10	5.9000E-4	0.0013	8.6667E-4	7.1000E-4	1.4443E-7	3.8004E-4	1.7791E-4	1.54	0.439
Arsenic (mw-71)	20	5	7.3000E-4	0.016	0.00694	0.0065	1.2604E-5	0.00355	0.00252	0.741	0.511
Arsenic (mw-72)	20	5	7.0000E-4	0.011	0.00394	0.00325	5.3794E-6	0.00232	0.00119	1.787	0.589
Arsenic (mw-73)	4	4	9.2000E-4	0.002	0.00141	0.00135	2.1343E-7	4.6199E-4	4.2995E-4	0.6	0.329
Barium (mw-62)	20	11	0.015	0.043	0.0258	0.026	3.9747E-5	0.0063	0.00519	0.839	0.244
Barium (mw-63)	20	10	0.014	0.033	0.0197	0.02	1.6747E-5	0.00409	0.00297	1.694	0.208
Barium (mw-64)	20	10	0.022	0.035	0.0267	0.0265	1.2661E-5	0.00356	0.00297	1.029	0.134
Barium (mw-65)	20	10	0.012	0.042	0.0186	0.017	5.4779E-5	0.0074	0.00593	1.997	0.398
Barium (mw-71)	25	5	0.0045	0.027	0.0118	0.01	2.0214E-5	0.0045	0.00208	1.916	0.38
Barium (mw-72)	25	5	0.0068	0.051	0.0137	0.0086	1.2087E-4	0.011	0.00163	2.302	0.805
Barium (mw-73)	21	4	0.016	0.043	0.0241	0.023	3.4429E-5	0.00587	0.00445	1.749	0.243

Appendix B
Summary Statistics

User Selected Options

Beryllium (mw-62)	1	11	8.6000E-5	8.6000E-5	8.6000E-5	8.6000E-5	N/A	N/A	0	N/A	N/A
Beryllium (mw-63)	1	10	7.3000E-5	7.3000E-5	7.3000E-5	7.3000E-5	N/A	N/A	0	N/A	N/A
Beryllium (mw-64)	1	10	0.0051	0.0051	0.0051	0.0051	N/A	N/A	0	N/A	N/A
Beryllium (mw-65)	0	10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Beryllium (mw-71)	2	8	6.4000E-4	0.0022	0.00142	0.00142	1.2168E-6	0.0011	0.00116	N/A	0.777
Beryllium (mw-72)	1	8	0.0011	0.0011	0.0011	0.0011	N/A	N/A	0	N/A	N/A
Beryllium (mw-73)	1	7	0.0014	0.0014	0.0014	0.0014	N/A	N/A	0	N/A	N/A
Cadmium (mw-62)	1	11	8.4000E-5	8.4000E-5	8.4000E-5	8.4000E-5	N/A	N/A	0	N/A	N/A
Cadmium (mw-63)	2	10	6.4000E-5	1.3000E-4	9.7000E-5	9.7000E-5	2.1780E-9	4.6669E-5	4.8925E-5	N/A	0.481
Cadmium (mw-64)	1	10	5.8000E-5	5.8000E-5	5.8000E-5	5.8000E-5	N/A	N/A	0	N/A	N/A
Cadmium (mw-65)	0	10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cadmium (mw-71)	6	7	1.0000E-4	1.9000E-4	1.3667E-4	1.3500E-4	1.1067E-9	3.3267E-5	2.9652E-5	0.681	0.243
Cadmium (mw-72)	3	7	6.0000E-5	1.2000E-4	8.6000E-5	7.8000E-5	9.480E-10	3.0790E-5	2.6686E-5	1.09	0.358
Cadmium (mw-73)	6	6	1.3000E-4	2.1000E-4	1.7000E-4	1.7000E-4	6.800E-10	2.6077E-5	1.4826E-5	-2.35E-15	0.153
Chromium (mw-62)	4	11	5.1000E-4	0.0015	0.001	0.001	1.6336E-7	4.0418E-4	3.6323E-4	0.0371	0.403
Chromium (mw-63)	2	10	4.3000E-4	8.4000E-4	6.3500E-4	6.3500E-4	8.4050E-8	2.8991E-4	3.0393E-4	N/A	0.457
Chromium (mw-64)	3	10	2.3000E-4	9.3000E-4	6.2333E-4	7.1000E-4	1.2813E-7	3.5796E-4	3.2617E-4	-1.026	0.574
Chromium (mw-65)	2	10	4.9000E-4	0.0015	9.9500E-4	9.9500E-4	5.1005E-7	7.1418E-4	7.4870E-4	N/A	0.718
Chromium (mw-71)	1	7	7.8000E-4	7.8000E-4	7.8000E-4	7.8000E-4	N/A	N/A	0	N/A	N/A
Chromium (mw-72)	4	7	4.4000E-4	0.0028	0.00114	6.5500E-4	1.2407E-6	0.00111	2.0015E-4	1.94	0.979
Chromium (mw-73)	2	6	7.3000E-4	0.0041	0.00242	0.00242	5.6785E-6	0.00238	0.0025	N/A	0.987
Cobalt (mw-62)	20	11	6.5000E-4	0.014	0.00654	0.0063	1.0780E-5	0.00328	0.00252	0.339	0.502
Cobalt (mw-63)	19	10	6.2000E-4	0.0086	0.00486	0.0056	4.8797E-6	0.00221	0.00119	-0.655	0.454
Cobalt (mw-64)	16	10	8.3000E-4	0.0018	0.00138	0.00135	9.1356E-8	3.0225E-4	3.7064E-4	-0.0462	0.219
Cobalt (mw-65)	17	10	0.001	0.0029	0.00148	0.0012	2.7529E-7	5.2468E-4	1.4826E-4	1.466	0.354
Cobalt (mw-71)	8	5	1.3000E-4	0.0049	0.00186	0.0012	3.4286E-6	0.00185	0.00149	0.793	0.995
Cobalt (mw-72)	23	5	0.0013	0.019	0.00365	0.0025	1.3925E-5	0.00373	2.9652E-4	3.589	1.022
Cobalt (mw-73)	17	4	0.0027	0.0078	0.00545	0.0058	2.2126E-6	0.00149	0.00193	-0.155	0.273
Fluoride (mw-62)	30	0	1.2	3.3	1.553	1.5	0.141	0.375	0.148	3.68	0.241
Fluoride (mw-63)	29	0	0.28	2.5	1.889	1.9	0.142	0.377	0.148	-2.734	0.199
Fluoride (mw-64)	30	0	1.3	1.6	1.447	1.4	0.00671	0.0819	0.148	0.114	0.0566
Fluoride (mw-65)	29	0	1.4	2.1	1.855	1.9	0.034	0.184	0.148	-0.933	0.0994
Fluoride (mw-71)	2	2	0.14	3.8	1.97	1.97	6.698	2.588	2.713	N/A	1.314
Fluoride (mw-72)	1	2	4.2	4.2	4.2	4.2	N/A	N/A	0	N/A	N/A
Fluoride (mw-73)	2	2	0.063	0.12	0.0915	0.0915	0.00162	0.0403	0.0423	N/A	0.44

Appendix B
Summary Statistics

User Selected Options

Lead (mw-62)	2	11	5.0000E-4	5.8000E-4	5.4000E-4	5.4000E-4	3.2000E-9	5.6569E-5	5.9303E-5	N/A	0.105
Lead (mw-63)	1	10	1.5000E-4	1.5000E-4	1.5000E-4	1.5000E-4	N/A	N/A	0	N/A	N/A
Lead (mw-64)	1	10	1.6000E-4	1.6000E-4	1.6000E-4	1.6000E-4	N/A	N/A	0	N/A	N/A
Lead (mw-65)	0	10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Lead (mw-71)	2	7	6.1000E-4	7.3000E-4	6.7000E-4	6.7000E-4	7.2000E-9	8.4853E-5	8.8955E-5	N/A	0.127
Lead (mw-72)	2	7	1.3000E-4	0.0011	6.1500E-4	6.1500E-4	4.7045E-7	6.8589E-4	7.1905E-4	N/A	1.115
Lead (mw-73)	0	6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Lithium (mw-62)	7	9	0.11	0.15	0.131	0.13	1.8095E-4	0.0135	0.0148	-0.352	0.102
Lithium (mw-63)	7	8	0.045	0.085	0.061	0.058	1.5300E-4	0.0124	0.00445	1.177	0.203
Lithium (mw-64)	7	8	0.019	0.027	0.0216	0.021	7.9524E-6	0.00282	0.00297	1.3	0.131
Lithium (mw-65)	7	8	0.045	0.081	0.0563	0.053	1.4257E-4	0.0119	0.00445	1.812	0.212
Lithium (mw-71)	25	5	0.28	0.75	0.373	0.35	0.00801	0.0895	0.0445	3.316	0.24
Lithium (mw-72)	24	5	0.33	0.89	0.394	0.37	0.0116	0.108	0.0148	4.602	0.273
Lithium (mw-73)	19	4	0.21	0.65	0.291	0.27	0.00928	0.0963	0.0593	3.112	0.332
Mercury (mw-62)	3	11	2.5000E-4	4.4000E-4	3.5333E-4	3.7000E-4	9.2333E-9	9.6090E-5	1.0378E-4	-0.757	0.272
Mercury (mw-63)	0	10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mercury (mw-64)	0	10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mercury (mw-65)	0	10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mercury (mw-71)	0	7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mercury (mw-72)	0	7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mercury (mw-73)	0	6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Molybdenum (mw-62)	19	11	0.0012	0.012	0.00347	0.003	4.7378E-6	0.00218	4.4477E-4	3.649	0.628
Molybdenum (mw-63)	20	10	0.0019	0.017	0.00349	0.00255	1.0819E-5	0.00329	5.1890E-4	4.038	0.942
Molybdenum (mw-64)	20	10	0.0042	0.0073	0.00501	0.00495	4.0621E-7	6.3735E-4	3.7064E-4	2.55	0.127
Molybdenum (mw-65)	20	10	0.0066	0.013	0.0086	0.0083	1.9516E-6	0.0014	0.00119	1.578	0.162
Molybdenum (mw-71)	10	5	5.2000E-4	0.0028	0.00132	0.00105	6.6356E-7	8.1459E-4	6.0786E-4	0.926	0.619
Molybdenum (mw-72)	14	5	5.5000E-4	0.011	0.00371	0.00125	1.6244E-5	0.00403	8.7472E-4	1.074	1.086
Molybdenum (mw-73)	14	4	9.3000E-4	0.0086	0.00263	0.00215	3.9851E-6	0.002	0.00148	2.262	0.759
Total Radium (mw-62)	14	9	0.6	1.9	1.143	1.05	0.138	0.372	0.297	0.613	0.325
Total Radium (mw-63)	12	8	0.4	2.1	0.958	0.8	0.272	0.521	0.297	1.358	0.544
Total Radium (mw-64)	6	8	0.731	1.7	1.089	0.8	0.225	0.474	0.0511	0.954	0.436
Total Radium (mw-65)	6	8	0.478	1.9	0.98	0.85	0.254	0.504	0.297	1.433	0.514
Total Radium (mw-71)	22	2	0.4	3.2	1.53	1.6	0.531	0.729	0.815	0.381	0.476
Total Radium (mw-72)	27	3	1.2	4.2	2.763	2.8	0.789	0.888	1.038	-0.0368	0.321
Total Radium (mw-73)	22	2	0.8	4.9	2.323	2.4	0.952	0.976	1.038	0.576	0.42

Appendix B
Summary Statistics

User Selected Options

Selenium (mw-62)	5	11	5.4000E-4	0.002	0.00104	9.3000E-4	3.1532E-7	5.6153E-4	2.2239E-4	1.759	0.541
Selenium (mw-63)	4	10	5.1000E-4	0.0013	8.1250E-4	7.2000E-4	1.1649E-7	3.4131E-4	1.8532E-4	1.437	0.42
Selenium (mw-64)	1	10	3.3000E-4	3.3000E-4	3.3000E-4	3.3000E-4	N/A	N/A	0	N/A	N/A
Selenium (mw-65)	1	10	3.4000E-4	3.4000E-4	3.4000E-4	3.4000E-4	N/A	N/A	0	N/A	N/A
Selenium (mw-71)	26	5	0.15	0.37	0.253	0.25	0.00354	0.0595	0.0667	0.496	0.235
Selenium (mw-72)	25	5	0.064	0.39	0.127	0.11	0.00354	0.0595	0.0148	3.854	0.468
Selenium (mw-73)	19	4	0.0038	0.048	0.0171	0.015	1.5791E-4	0.0126	0.00949	1.391	0.735
Thallium (mw-62)	1	11	9.8000E-5	9.8000E-5	9.8000E-5	9.8000E-5	N/A	N/A	0	N/A	N/A
Thallium (mw-63)	2	10	1.1000E-4	1.5000E-4	1.3000E-4	1.3000E-4	8.000E-10	2.8284E-5	2.9652E-5	N/A	0.218
Thallium (mw-64)	10	10	1.1000E-4	4.1000E-4	1.5600E-4	1.2000E-4	8.6711E-9	9.3119E-5	1.4826E-5	2.753	0.597
Thallium (mw-65)	1	10	7.2000E-5	7.2000E-5	7.2000E-5	7.2000E-5	N/A	N/A	0	N/A	N/A
Thallium (mw-71)	16	5	2.3000E-4	6.5000E-4	3.6750E-4	3.7000E-4	1.0993E-8	1.0485E-4	8.8955E-5	1.152	0.285
Thallium (mw-72)	23	5	5.6000E-4	0.0012	9.4826E-4	9.5000E-4	2.2088E-8	1.4862E-4	7.4129E-5	-1.23	0.157
Thallium (mw-73)	11	4	2.0000E-4	2.6000E-4	2.2818E-4	2.3000E-4	4.164E-10	2.0405E-5	2.9652E-5	0.0399	0.0894

Percentiles using all Detects (Ds) and Non-Detects (NDs)

Variable	NumObs	# Missing	10%ile	20%ile	25%ile(Q1)	50%ile(Q2)	75%ile(Q3)	80%ile	90%ile	95%ile	99%ile
Antimony (mw-62)	20	11	9.1100E-4	0.001	0.001	0.001	0.0025	0.0028	0.004	0.004	0.004
Antimony (mw-63)	20	10	9.1300E-4	0.001	0.001	0.0015	0.0025	0.0028	0.004	0.004	0.004
Antimony (mw-64)	20	10	9.1000E-4	0.001	0.001	0.0015	0.0025	0.0028	0.004	0.004	0.004
Antimony (mw-65)	20	10	9.1000E-4	0.001	0.001	0.001	0.00213	0.0025	0.004	0.004	0.004
Antimony (mw-71)	24	7	4.5400E-4	0.001	0.001	0.00225	0.004	0.004	0.01	0.01	0.01
Antimony (mw-72)	24	7	0.001	0.001	0.001	0.002	0.004	0.004	0.0082	0.01	0.01
Antimony (mw-73)	19	6	0.001	0.0016	0.002	0.004	0.004	0.0064	0.01	0.01	0.01
Arsenic (mw-62)	20	11	6.4700E-4	7.1800E-4	9.1750E-4	0.00195	0.00265	0.00348	0.0111	0.012	0.012
Arsenic (mw-63)	20	10	5.0000E-4	5.0000E-4	5.6750E-4	0.001	0.00148	0.002	0.0023	0.005	0.005
Arsenic (mw-64)	20	10	5.0000E-4	5.0000E-4	5.0000E-4	8.3000E-4	0.00125	0.002	0.0023	0.005	0.005
Arsenic (mw-65)	20	10	5.0000E-4	5.0000E-4	5.0000E-4	6.5000E-4	0.00108	0.00144	0.002	0.00215	0.00443
Arsenic (mw-71)	26	5	0.001	0.0046	0.0048	0.0058	0.00698	0.0072	0.0108	0.012	0.015
Arsenic (mw-72)	26	5	0.001	0.0023	0.0026	0.00325	0.00493	0.005	0.00685	0.0096	0.0108
Arsenic (mw-73)	21	4	9.2000E-4	0.001	0.001	0.002	0.002	0.005	0.005	0.005	0.009
Barium (mw-62)	20	11	0.0205	0.0218	0.022	0.026	0.0273	0.0286	0.0331	0.0345	0.0413
Barium (mw-63)	20	10	0.0159	0.0168	0.017	0.02	0.022	0.022	0.0221	0.0235	0.0311
Barium (mw-64)	20	10	0.0229	0.024	0.024	0.0265	0.027	0.0274	0.033	0.0331	0.0346

Appendix B
Summary Statistics

User Selected Options

Barium (mw-65)	20	10	0.012	0.013	0.0138	0.017	0.021	0.0212	0.0239	0.0325	0.0401
Barium (mw-71)	26	5	0.0088	0.0092	0.00943	0.01	0.012	0.013	0.0165	0.0198	0.0253
Barium (mw-72)	26	5	0.0073	0.0075	0.0077	0.0086	0.0148	0.018	0.027	0.0348	0.047
Barium (mw-73)	21	4	0.018	0.02	0.021	0.023	0.026	0.027	0.029	0.033	0.041
Beryllium (mw-62)	20	11	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Beryllium (mw-63)	20	10	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Beryllium (mw-64)	20	10	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.00121	0.00432
Beryllium (mw-65)	20	10	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Beryllium (mw-71)	23	8	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.00194
Beryllium (mw-72)	23	8	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.00109	0.00414
Beryllium (mw-73)	18	7	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.00106	0.00133
Cadmium (mw-62)	20	11	1.0000E-4	1.0000E-4	1.0000E-4	1.0000E-4	4.0000E-4	4.0000E-4	5.5000E-4	0.001	0.001
Cadmium (mw-63)	20	10	1.0000E-4	1.0000E-4	1.0000E-4	1.0000E-4	4.0000E-4	4.2000E-4	0.001	0.001	0.001
Cadmium (mw-64)	20	10	1.0000E-4	1.0000E-4	1.0000E-4	1.0000E-4	4.0000E-4	4.2000E-4	0.001	0.001	0.001
Cadmium (mw-65)	20	10	1.0000E-4	1.0000E-4	1.0000E-4	1.0000E-4	4.0000E-4	4.0000E-4	5.5000E-4	0.001	0.001
Cadmium (mw-71)	24	7	1.0000E-4	1.1600E-4	1.4250E-4	2.0000E-4	4.2500E-4	7.0000E-4	0.001	0.001	0.001
Cadmium (mw-72)	24	7	1.0000E-4	1.0000E-4	1.0000E-4	2.0000E-4	4.0000E-4	4.4000E-4	0.001	0.001	0.001
Cadmium (mw-73)	19	6	1.6800E-4	1.7600E-4	1.9000E-4	4.0000E-4	7.0000E-4	0.001	0.001	0.001	0.001
Chromium (mw-62)	20	11	5.0000E-4	9.0200E-4	0.001	0.001	0.002	0.0021	0.0031	0.0043	0.00886
Chromium (mw-63)	20	10	5.0000E-4	5.0000E-4	5.0000E-4	0.001	0.002	0.0021	0.0031	0.0043	0.00886
Chromium (mw-64)	20	10	5.0000E-4	5.0000E-4	5.0000E-4	0.001	0.002	0.0021	0.0031	0.0043	0.00886
Chromium (mw-65)	20	10	5.0000E-4	5.0000E-4	5.0000E-4	0.001	0.002	0.002	0.00255	0.00305	0.00381
Chromium (mw-71)	24	7	5.8400E-4	0.001	0.001	0.002	0.004	0.004	0.0047	0.00925	0.01
Chromium (mw-72)	24	7	7.9700E-4	0.001	0.001	0.002	0.00325	0.004	0.004	0.00485	0.00885
Chromium (mw-73)	19	6	0.001	0.001	0.0015	0.002	0.004	0.00404	0.006	0.01	0.01
Cobalt (mw-62)	20	11	0.00275	0.00418	0.0047	0.0063	0.00758	0.00872	0.011	0.0112	0.0134
Cobalt (mw-63)	20	10	0.00118	0.00206	0.0025	0.00555	0.00608	0.00632	0.0069	0.00699	0.00828
Cobalt (mw-64)	20	10	0.0011	0.00118	0.0012	0.0015	0.0018	0.00184	0.002	0.00215	0.00443
Cobalt (mw-65)	20	10	0.0011	0.0011	0.0011	0.0013	0.002	0.002	0.00202	0.00224	0.00277
Cobalt (mw-71)	26	5	4.0000E-4	5.0000E-4	0.001	0.0012	0.0026	0.0041	0.005	0.005	0.00875
Cobalt (mw-72)	26	5	0.00225	0.0023	0.00233	0.0025	0.00328	0.005	0.008	0.00968	0.0168
Cobalt (mw-73)	21	4	0.004	0.0042	0.0042	0.005	0.0067	0.0067	0.0073	0.0078	0.00956
Fluoride (mw-62)	31	0	1.2	1.4	1.4	1.5	1.6	1.6	1.8	2.65	56.99
Fluoride (mw-63)	30	0	1.6	1.78	1.8	1.95	2.1	2.1	2.22	2.455	6.405
Fluoride (mw-64)	30	0	1.39	1.4	1.4	1.4	1.5	1.5	1.51	1.6	1.6

Appendix B
Summary Statistics

User Selected Options

Fluoride (mw-65)	30	0	1.59	1.7	1.8	1.9	2	2	2	2.055	2.1
Fluoride (mw-71)	29	2	0.4	0.4	0.8	0.8	2	2	2.36	9.32	18.04
Fluoride (mw-72)	29	2	0.4	0.4	0.8	0.8	2	2	2.44	9.48	18.04
Fluoride (mw-73)	23	2	0.4	0.8	0.8	0.8	0.8	0.8	4.16	18.5	66.8
Lead (mw-62)	20	11	5.0000E-4	5.0000E-4	5.0000E-4	5.0000E-4	0.001	0.0012	0.002	0.00215	0.00443
Lead (mw-63)	20	10	5.0000E-4	5.0000E-4	5.0000E-4	5.0000E-4	0.001	0.0012	0.002	0.00215	0.00443
Lead (mw-64)	20	10	5.0000E-4	5.0000E-4	5.0000E-4	5.0000E-4	0.001	0.001	0.002	0.00215	0.00443
Lead (mw-65)	20	10	5.0000E-4	5.0000E-4	5.0000E-4	5.0000E-4	0.001	0.001	0.002	0.002	0.002
Lead (mw-71)	24	7	5.0000E-4	5.0000E-4	5.0000E-4	0.001	0.002	0.002	0.0041	0.005	0.005
Lead (mw-72)	24	7	5.0000E-4	5.0000E-4	5.0000E-4	0.001	0.002	0.002	0.002	0.00455	0.005
Lead (mw-73)	19	6	5.0000E-4	5.0000E-4	7.5000E-4	0.001	0.002	0.002	0.005	0.005	0.005
Lithium (mw-62)	22	9	0.13	0.14	0.143	0.2	0.2	0.2	0.2	0.2	0.2
Lithium (mw-63)	22	8	0.0571	0.062	0.0708	0.2	0.2	0.2	0.2	0.2	0.2
Lithium (mw-64)	22	8	0.0201	0.0222	0.024	0.2	0.2	0.2	0.2	0.2	0.2
Lithium (mw-65)	22	8	0.0503	0.0554	0.066	0.2	0.2	0.2	0.2	0.2	0.2
Lithium (mw-71)	26	5	0.32	0.32	0.323	0.355	0.398	0.4	0.43	0.45	0.675
Lithium (mw-72)	26	5	0.345	0.35	0.36	0.37	0.388	0.39	0.415	0.705	0.868
Lithium (mw-73)	21	4	0.21	0.22	0.23	0.26	0.31	0.31	0.34	0.34	0.588
Mercury (mw-62)	20	11	2.0000E-4	2.0000E-4	2.0000E-4	2.0000E-4	2.0000E-4	2.0000E-4	2.6200E-4	3.7350E-4	4.2670E-4
Mercury (mw-63)	20	10	2.0000E-4	2.0000E-4	2.0000E-4	2.0000E-4	2.0000E-4	2.0000E-4	2.0000E-4	2.0000E-4	2.0000E-4
Mercury (mw-64)	20	10	2.0000E-4	2.0000E-4	2.0000E-4	2.0000E-4	2.0000E-4	2.0000E-4	2.0000E-4	2.0000E-4	2.0000E-4
Mercury (mw-65)	20	10	2.0000E-4	2.0000E-4	2.0000E-4	2.0000E-4	2.0000E-4	2.0000E-4	2.0000E-4	2.0000E-4	2.0000E-4
Mercury (mw-71)	24	7	2.0000E-4	2.0000E-4	2.0000E-4	2.0000E-4	2.0000E-4	2.0000E-4	2.0000E-4	2.0000E-4	2.0000E-4
Mercury (mw-72)	24	7	2.0000E-4	2.0000E-4	2.0000E-4	2.0000E-4	2.0000E-4	2.0000E-4	2.0000E-4	2.0000E-4	2.0000E-4
Mercury (mw-73)	19	6	2.0000E-4	2.0000E-4	2.0000E-4	2.0000E-4	2.0000E-4	2.0000E-4	2.0000E-4	2.0000E-4	2.0000E-4
Molybdenum (mw-62)	20	11	0.00227	0.00266	0.0027	0.00295	0.00325	0.00344	0.00431	0.00478	0.0106
Molybdenum (mw-63)	20	10	0.00218	0.00228	0.00238	0.00255	0.00303	0.00318	0.00382	0.00636	0.0149
Molybdenum (mw-64)	20	10	0.0045	0.00458	0.00468	0.00495	0.00513	0.0052	0.00525	0.00578	0.007
Molybdenum (mw-65)	20	10	0.00718	0.0077	0.00795	0.0083	0.0093	0.00938	0.00982	0.0102	0.0124
Molybdenum (mw-71)	26	5	7.2000E-4	0.001	0.001	0.002	0.00238	0.0028	0.005	0.005	0.00875
Molybdenum (mw-72)	26	5	8.2500E-4	9.5000E-4	0.001	0.002	0.005	0.0052	0.00965	0.0108	0.011
Molybdenum (mw-73)	21	4	0.0011	0.0016	0.0017	0.0024	0.005	0.005	0.005	0.0086	0.00972
Total Radium (mw-62)	22	9	0.6	0.6	0.625	0.9	1.1	1.26	1.58	1.604	1.838
Total Radium (mw-63)	22	8	0.6	0.6	0.6	0.7	0.8	0.8	1.268	1.775	2.037
Total Radium (mw-64)	22	8	0.6	0.6	0.6	0.7	0.8	0.8	0.8	1.655	1.7

Appendix B
Summary Statistics

User Selected Options											
Total Radium (mw-65)	22	8	0.5	0.6	0.6	0.6	0.7	0.78	0.98	1.095	1.732
Total Radium (mw-71)	29	2	0.58	0.7	0.7	1.2	1.9	1.94	2.2	2.5	3.06
Total Radium (mw-72)	28	3	1.58	1.9	1.9	2.8	3.5	3.62	3.93	4	4.146
Total Radium (mw-73)	23	2	0.94	1.44	1.55	2.3	2.85	3.02	3.2	3.38	4.57
Selenium (mw-62)	20	11	5.0000E-4	5.0000E-4	5.0000E-4	8.6500E-4	0.002	0.002	0.0021	0.0031	0.00462
Selenium (mw-63)	20	10	5.0000E-4	5.0000E-4	5.0000E-4	5.9500E-4	0.002	0.002	0.0021	0.0031	0.00462
Selenium (mw-64)	20	10	5.0000E-4	5.0000E-4	5.0000E-4	5.0000E-4	0.002	0.002	0.0021	0.0031	0.00462
Selenium (mw-65)	20	10	5.0000E-4	5.0000E-4	5.0000E-4	5.0000E-4	0.00125	0.002	0.0021	0.0031	0.00462
Selenium (mw-71)	26	5	0.195	0.2	0.2	0.25	0.28	0.28	0.35	0.36	0.368
Selenium (mw-72)	26	5	0.091	0.1	0.1	0.11	0.13	0.13	0.15	0.175	0.338
Selenium (mw-73)	21	4	0.005	0.0069	0.0072	0.011	0.019	0.019	0.033	0.043	0.047
Thallium (mw-62)	20	11	1.0000E-4	1.0000E-4	1.0000E-4	1.0000E-4	4.0000E-4	4.2000E-4	0.001	0.001	0.001
Thallium (mw-63)	20	10	1.0000E-4	1.0000E-4	1.0000E-4	1.0000E-4	4.0000E-4	4.0000E-4	5.5000E-4	0.001	0.001
Thallium (mw-64)	20	10	1.0000E-4	1.0800E-4	1.1000E-4	1.2500E-4	4.0000E-4	4.0000E-4	4.1900E-4	5.2500E-4	9.0500E-4
Thallium (mw-65)	20	10	1.0000E-4	1.0000E-4	1.0000E-4	1.0000E-4	4.0000E-4	4.0000E-4	5.5000E-4	0.001	0.001
Thallium (mw-71)	26	5	2.7000E-4	3.1000E-4	3.2500E-4	4.0000E-4	4.9250E-4	6.5000E-4	0.001	0.001	0.00175
Thallium (mw-72)	26	5	6.9500E-4	8.9000E-4	9.1000E-4	9.5500E-4	0.001	0.0011	0.0011	0.00118	0.0018
Thallium (mw-73)	21	4	2.1000E-4	2.2000E-4	2.3000E-4	2.6000E-4	4.0000E-4	0.001	0.001	0.001	0.0018

General Statistics on Uncensored Data

Date/Time of Computation ProUCL 5.18/14/2023 11:30:59 PM

User Selected Options

From File ProUCLUpload_FC_CWTP_AppxIV_ProUCL_20230809_a.xls

Full Precision OFF

From File: ProUCLUpload_FC_CWTP_AppxIV_ProUCL_20230809_a.xls

General Statistics for Censored Data Set (with NDs) using Kaplan Meier Method

Variable	NumObs	# Missing	Num Ds	NumNDs	% NDs	Min ND	Max ND	KM Mean	KM Var	KM SD	KM CV
Antimony (background)	67	20	6	61	91.04%	0.001	0.01	2.0000E-4	2.9667E-9	5.4467E-5	0.272
Arsenic (background)	73	14	44	29	39.73%	5.0000E-4	0.01	0.00356	1.0905E-5	0.0033	0.927
Barium (background)	73	14	71	2	2.74%	0.01	0.01	0.0159	8.4365E-5	0.00919	0.578
Beryllium (background)	64	23	4	60	93.75%	0.001	0.005	6.8413E-4	4.9208E-8	2.2183E-4	0.324
Cadmium (background)	67	20	15	52	77.61%	1.0000E-4	0.001	1.1027E-4	2.1429E-9	4.6292E-5	0.42
Chromium (background)	67	20	7	60	89.55%	5.0000E-4	0.01	6.8321E-4	3.3101E-7	5.7534E-4	0.842

Appendix B
Summary Statistics

User Selected Options

Cobalt (background)	73	14	48	25	34.25%	5.0000E-4	0.01	0.00302	8.6511E-6	0.00294	0.975
Fluoride (background)	81	6	5	76	93.83%	0.05	80	0.19	0.406	0.637	3.345
Lead (background)	67	20	4	63	94.03%	5.0000E-4	0.005	1.9893E-4	4.2709E-8	2.0666E-4	1.039
Lithium (background)	73	14	68	5	6.85%	0.2	0.8	0.35	0.0114	0.107	0.305
Mercury (background)	67	20	0	67	100.00%	2.0000E-4	2.0000E-4	N/A	N/A	N/A	N/A
Molybdenum (background)	73	14	38	35	47.95%	0.001	0.01	0.00193	5.0399E-6	0.00224	1.164
Total Radium (background)	80	7	71	9	11.25%	0.5	0.8	2.042	1.202	1.096	0.537
Selenium (background)	73	14	70	3	4.11%	0.003	0.005	0.138	0.0117	0.108	0.783
Thallium (background)	73	14	50	23	31.51%	1.1000E-4	0.002	5.2663E-4	1.1119E-7	3.3345E-4	0.633

General Statistics for Raw Data Sets using Detected Data Only

Variable	NumObs	# Missing	Minimum	Maximum	Mean	Median	Var	SD	MAD/0.675	Skewness	CV
Antimony (background)	6	20	1.2000E-4	2.7000E-4	2.0000E-4	1.9500E-4	3.5600E-9	5.9666E-5	7.4129E-5	-0.0508	0.298
Arsenic (background)	44	14	7.0000E-4	0.016	0.00507	0.00465	1.1433E-5	0.00338	0.00297	1.159	0.666
Barium (background)	71	14	0.0045	0.051	0.0161	0.012	8.6239E-5	0.00929	0.00667	1.381	0.576
Beryllium (background)	4	23	6.4000E-4	0.0022	0.00134	0.00125	4.3023E-7	6.5592E-4	5.6338E-4	0.706	0.491
Cadmium (background)	15	20	6.0000E-5	2.1000E-4	1.3987E-4	1.5000E-4	1.7888E-9	4.2295E-5	4.4477E-5	-0.275	0.302
Chromium (background)	7	20	4.4000E-4	0.0041	0.00145	7.3000E-4	2.0171E-6	0.00142	1.9274E-4	1.49	0.979
Cobalt (background)	48	14	1.3000E-4	0.019	0.00399	0.00285	9.3772E-6	0.00306	0.00185	2.653	0.768
Fluoride (background)	5	6	0.063	4.2	1.665	0.14	4.566	2.137	0.114	0.628	1.284
Lead (background)	4	20	1.3000E-4	0.0011	6.4250E-4	6.7000E-4	1.6023E-7	4.0028E-4	3.6323E-4	-0.397	0.623
Lithium (background)	68	14	0.21	0.89	0.357	0.35	0.0112	0.106	0.0445	2.846	0.296
Mercury (background)	0	20	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Molybdenum (background)	38	14	5.2000E-4	0.011	0.00268	0.0015	8.1745E-6	0.00286	0.00107	1.948	1.066
Total Radium (background)	71	7	0.4	4.9	2.245	2.1	1.004	1.002	1.038	0.304	0.446
Selenium (background)	70	14	0.0038	0.39	0.144	0.125	0.0115	0.107	0.126	0.464	0.747
Thallium (background)	50	14	2.0000E-4	0.0012	6.0400E-4	4.5000E-4	1.1897E-7	3.4492E-4	3.4099E-4	0.238	0.571

Percentiles using all Detects (Ds) and Non-Detects (NDs)

Variable	NumObs	# Missing	10%ile	20%ile	25%ile(Q1)	50%ile(Q2)	75%ile(Q3)	80%ile	90%ile	95%ile	99%ile
Antimony (background)	67	20	0.001	0.001	0.001	0.002	0.004	0.004	0.01	0.01	0.01
Arsenic (background)	73	14	0.001	0.00108	0.0015	0.004	0.0053	0.00636	0.0092	0.0104	0.0131
Barium (background)	73	14	0.0077	0.0086	0.0092	0.012	0.022	0.023	0.027	0.0334	0.0452

Appendix B
Summary Statistics

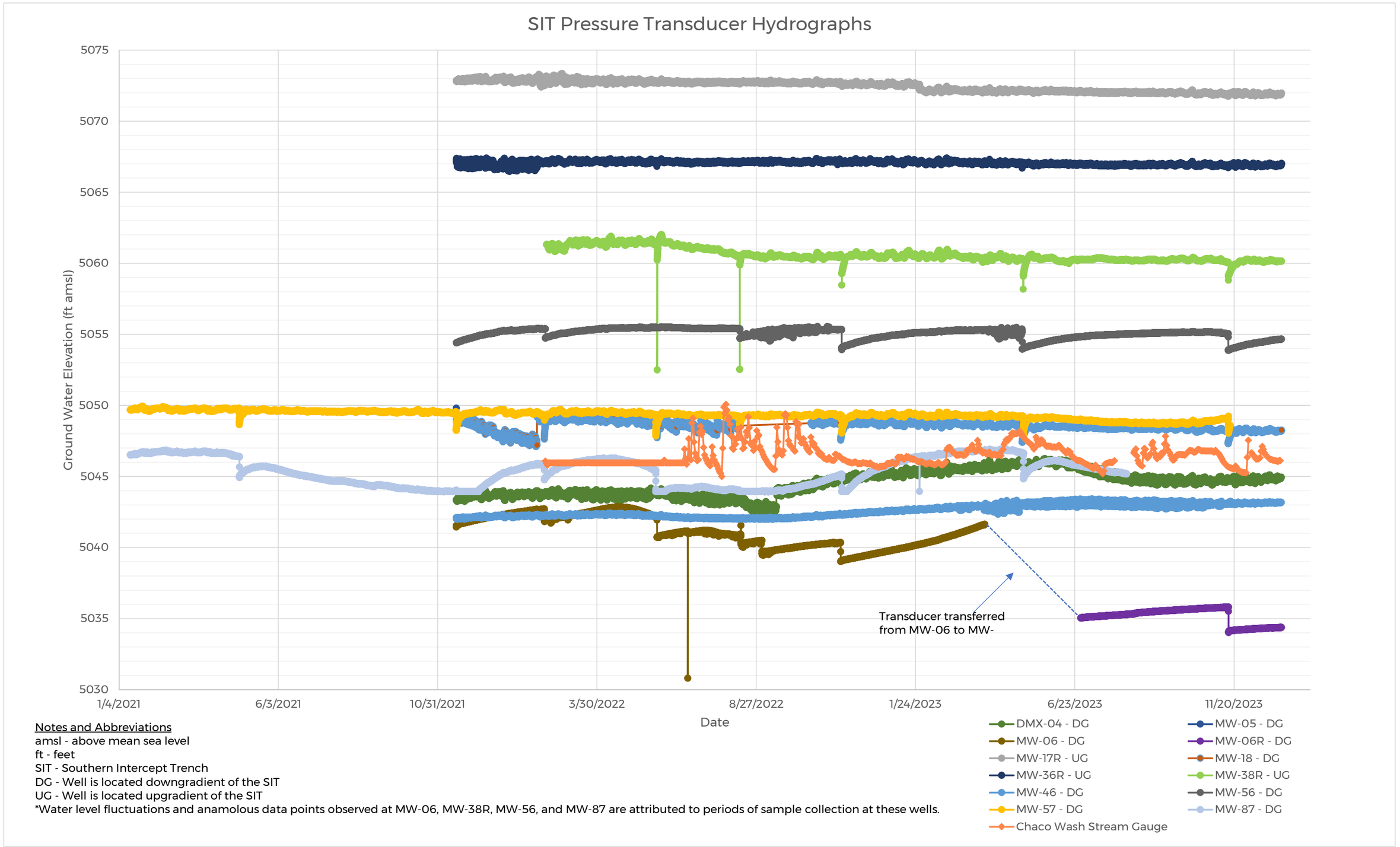
User Selected Options

Beryllium (background)	64	23	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.00109	0.00324
Cadmium (background)	67	20	1.0000E-4	1.1200E-4	1.4000E-4	2.0000E-4	4.0000E-4	9.0000E-4	0.001	0.001	0.001
Chromium (background)	67	20	7.6000E-4	0.001	0.001	0.002	0.004	0.004	0.005	0.01	0.01
Cobalt (background)	73	14	0.001	0.00158	0.002	0.0027	0.005	0.00548	0.00718	0.00922	0.0125
Fluoride (background)	81	6	0.4	0.4	0.8	0.8	2	2	3.8	13	32
Lead (background)	67	20	5.0000E-4	5.0000E-4	5.0000E-4	0.001	0.002	0.002	0.005	0.005	0.005
Lithium (background)	73	14	0.232	0.284	0.31	0.35	0.38	0.39	0.41	0.53	0.825
Mercury (background)	67	20	2.0000E-4	2.0000E-4	2.0000E-4	2.0000E-4	2.0000E-4	2.0000E-4	2.0000E-4	2.0000E-4	2.0000E-4
Molybdenum (background)	73	14	8.0600E-4	0.001	0.0011	0.002	0.005	0.005	0.00592	0.01	0.011
Total Radium (background)	80	7	0.7	0.98	1.2	1.9	2.8	3.1	3.5	3.905	4.347
Selenium (background)	73	14	0.00788	0.0164	0.029	0.12	0.21	0.246	0.28	0.348	0.376
Thallium (background)	73	14	2.3000E-4	2.7200E-4	3.1000E-4	5.0000E-4	0.001	0.001	0.00108	0.00114	0.002

APPENDIX

H

SIT PRESSURE TRANDUCER HYDROGRAPHS



Notes and Abbreviations
amsl - above mean sea level
ft - feet
SIT - Southern Intercept Trench
DG - Well is located downgradient of the SIT
UG - Well is located upgradient of the SIT
*Water level fluctuations and anamolous data points observed at MW-06, MW-38R, MW-56, and MW-87 are attributed to periods of sample collection at these wells.

APPENDIX

I

CALIBRATION AND UTILIZATION UPDATE ON THE GROUNDWATER MODEL SUPPORTING URS REMEDY SELECTION

TECHNICAL MEMORANDUM

To:	Arizona Public Service Company 400 N. 5th Street Phoenix, Arizona 85004	**Project No.**	14-2022-2030
By:	Vivek Patil, Ph.D.	**Reviewed by:**	Rebecca Weaver, PE
Date:	August 18, 2023		
Re:	**CALIBRATION AND UTILIZATION UPDATE ON THE GROUNDWATER MODEL FOR THE URS CORRECTIVE MEASURES ASSESSMENT** Four Corners Power Plant – Fruitland, New Mexico		

1 INTRODUCTION

This Technical Memorandum (Tech Memo) has been prepared by WSP USA Environment & Infrastructure, Inc. (WSP) (formerly Wood Environment & Infrastructure Solutions Inc. [Wood E&I]) to document the updated calibration and utilization of a three-dimensional (3-D) groundwater flow and transport model representing near-surface hydrogeologic conditions in the vicinity of the former Upper Retention Sump (URS), a coal combustion residuals (CCR) unit at the Arizona Public Service Company (APS) Four Corners Power Plant in Fruitland, New Mexico (the Site).

The model was developed to serve as a quantitative tool to evaluate potential corrective measures to address the elevated concentrations of fluoride, a CCR Rule constituent observed in the Pictured Cliffs Sandstone hydrostratigraphic unit downgradient from the former URS. The development, calibration and predictive results of the original model are documented in a previous technical memo from 2019 prepared by Wood E&I (Wood 2019). This Tech Memo documents the updates made to the original model, including newer data and information calibration, and the updated model predictions regarding the assessment of the corrective measures being implemented for the URS. Also included are those details of the original model as required to provide a context to the new updates and results.

2 METHODOLOGY

This section describes the building blocks of the model, including approach, computational platform, model structure, model parameters and calibration data.

2.1 MODELING APPROACH

The URS, which was a source of groundwater recharge and fluoride in the underlying sandstone unit, was removed from service and demolished between June and December of 2018. The original model, developed after the URS was closed, was used to simulate the impact of extraction wells on the groundwater surface, pumping rates and placement of extraction wells. The steady state conditions in the original model were calibrated to March 2019 and then a transient solute transport model was developed. The transient solute transport model was used for forecasting the fate and migration of the fluoride plume associated with the URS under 3 different remediation scenarios, consisting of a natural attenuation, a single-well and a two-well extraction system analysis. The original

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model predicted that a two-well extraction system would be the most effective (least amount of time) in remediating the fluoride plume.

The updated model described in this Tech Memo was built on the original model. Between March 2019 and current conditions, two extraction wells were installed and became operational in February 2022. In the updated model, steady state was calibrated to conditions prior to February 2022. A transient flow and solute transport run was calibrated for the period of February-November 2022 to the head and concentration data acquired from the monitoring wells in the vicinity of the URS. A second transient predictive flow and transport run was conducted to forecast the fate and migration of the fluoride plume based on the current extraction system.

2.2 MODELING PLATFORM

WSP developed the original model using MODFLOW 2005 (Harbaugh 2017), a standard and widely-used USGS modeling code, with the PCG2 solver. Contaminant transport was simulated using MT3DMS (Zheng 1999) with the finite difference solver, which has the advantage of being mass conservative. The same versions of MODFLOW and MT3DMS were maintained in the updated model described in this report. Groundwater Vistas version 8 was used as a graphical user interface to facilitate modeling and visualization. Calibration of the model parameters using observed data was performed using PEST (Doherty 2010).

MODFLOW is a program that uses the finite difference method to solve a 3-D groundwater flow equation. The groundwater flow equation uses transmissivity (in unconfined aquifers, this is the product of hydraulic conductivity and saturated thickness), volumetric flux of water, and storage to solve for the change in head over time. MODFLOW solves the groundwater flow equation numerically by dividing the model domain into grid cells and calculating the head at the center of each cell. A complete discussion of the equations used in MODFLOW is available in the USGS open-file report 00-92, "MODFLOW-2000, the U.S. Geological Survey Modular Ground-Water Model – User Guide to Modularization Concepts and the Ground-Water Flow Process". MT3DMS is a program for simulating advection, dispersion/diffusion, and chemical reactions of contaminants in groundwater flow systems under general hydrogeologic conditions. The advection-dispersion equation uses porosity, dispersivity, and groundwater velocity to solve for the change in concentration over time. MT3DMS solves the advection-dispersion equation numerically using the groundwater flow field from the MODFLOW simulation and a finer discretization of time than what is used in the groundwater flow model to calculate the concentration in the center of each cell at each time step.

Groundwater Vistas (Environmental Simulations, Inc. 2020) is a proprietary graphical user interface that facilitates the modeling process by generating the input files required by MODFLOW 2005 and MT3DMS, and by displaying the modeling environment graphically. While this software is not required to run the model, the pre- and post-processing tools within this software package allow flow and transport models to be quickly constructed, run, and processed for evaluation. Additional tools for processing and visualizing model input and output data include Microsoft Excel and ArcGIS Pro.

2.3 MODEL STRUCTURE

2.3.1 DOMAIN AND GRID DISCRETIZATION

The domain size (0.8 square miles), grid discretization (154 rows, 127 columns), grid orientation (33 degrees from N) and depth discretization (single layer) of the updated model were maintained identical to the original model (**Figure 1**). These details are provided in the memo that documents the original model (Wood 2019).

2.3.2 MODEL BOUNDARIES

The boundary types in the updated model are retained from the original model as the same type and locations. The north boundary was set as constant head type and the other three boundaries were set as general head types. The

head values for these boundaries may involve some uncertainty due to limited hydrogeologic information for the area within these boundaries.

One data gap in estimating the boundary types is that the average observed water level elevation of the Morgan Lake (which is assumed to be constraining the constant head boundary to the North) in the month of November 2021 was 5326.35 feet above sea level (ft asl). However, several of the monitoring wells immediately upgradient to the lake have head values consistently above 5329 ft asl (**Figure 2**). Relative to the overall head gradient across the North-South boundary of the model domain, this sudden drop of almost 4 ft is due to some poorly understood hydrogeologic phenomena that are causing this anomalous head gradient. Using the actual lake level as the head value of the constant head boundary produced highly unrealistic model output that was not possible to improve by any amount of calibration attempts. Hence, in this model, the constant head boundary was assumed to be close to the head values observed in the number of monitoring wells (e.g., MW-83, MW-63, MW-64, etc.) adjacent to the boundary. A head value of 5329 ft asl for the northern constant head boundary produced realistic results (based on the observation data from the monitoring well) and was employed throughout the suite of simulations presented here.

Similarly, the general head boundary values representing the east, west and south boundaries of the model are ambiguous to a certain extent owing to lack of data in the region. Typically, general head boundaries are used to represent physically known constant head boundaries (e.g., streams, lakes, etc.) that are situated outside the model domain at a certain distance from the boundary. However, there are no such features noted in the documentation of the original model that were used to assign the general head boundaries. Those values were instead calibrated based on heads from nearby wells such that they produced realistic model output.

For the purposes of this model update, it was decided to continue with the usage of the general head boundaries from the original model and use the model calibration as a tool to produce model output realistically close to the actual field data. The general heads were uniformly adjusted and manually calibrated until a realistic output was achieved. Reducing the heads of the general head boundary cells by 1 ft. delivered acceptable model calibration.

2.3.3 MODEL PROPERTIES

Model properties are intrinsic hydrogeologic properties of the aquifer system that determine the flow output predicted by the model.

HYDRAULIC CONDUCTIVITY

The hydraulic conductivity (K) values were assigned in the original model in zones based on pumping tests, slug tests and values typical for similar sandstone formations from literature. Horizontal hydraulic conductivity was assumed to be isotropic (Kx = Ky) and vertical hydraulic conductivity was assumed to be an order of magnitude lower than the horizontal (Kz = 0.1 Kx, Ky) as is typical in clean sandstone units. The range of Kx values achieved after calibration in the original model was 1 to 6 ft/d. However, pumping tests conducted in 2020 at extraction wells CM-01, CM-02 suggested higher K values in the range of 20-60 ft/d (Wood 2021). Therefore, in the updated model, the Kx, Ky values were recalibrated using PEST within a user specified range of 1-60 ft/d. The resulting horizontal K field is shown in **Figure 3**. The model was insensitive to changes in vertical K values and the final Kz field was assigned to be 0.1 times the resulting Kx, Ky field. Once the calibrated K values were assigned to the model in the steady state run, these values were carried forward unchanged during the transient runs and calibrations, as hydraulic conductivity is not expected to change over the time of the simulations.

STORAGE PROPERTIES

The transient flow simulations require additional storage properties to be assigned for the aquifer. Initial values assigned for specific storage (Ss), specific yield (Sy) and porosity and their respective user specified ranges for

calibration were adopted from literature (Freeze 1979) and are provided in **Table 1**. Porosity remained unchanged after the transient flow calibrations.

SOLUTE TRANSPORT PROPERTIES

Given the timeframe of the model and the geochemical environment of the system, the contaminant transport of fluoride was assumed to be conservative (non-adsorbing and non-reactive). Therefore, the only required parameter specific to the solute transport properties apart from porosity was dispersivity. The range of typical values for dispersivity is quite large. Lab derived dispersivity values can be orders of magnitude away from values obtained from field observations. It is typically observed that field estimates of dispersivities tend to be higher than lab measured estimates (Freeze 1979). Due to lack of site-specific information, the strategy employed in this study was to assign a typical value and calibrate it to concentration data from monitoring wells as needed. The values for longitudinal and transverse dispersivities assigned in the original model were maintained in the updated version and are provided in **Table 1**.

Table 1: Flow and Transport Parameter Summary

PROPERTY	INITIAL VALUE	CALIBRATION RANGE	FINAL VALUE
Hydraulic conductivity	1-6 ft/d	1-60 ft/d	1-60 ft/d
Specific storage (Ss)	10^{-4} per ft	10^{-3} to 10^{-6} per ft	10^{-6} per ft
Specific yield (Sy)	0.3	0.01-0.3	0.06
Porosity	0.3	0.1-0.4	0.3
Longitudinal dispersivity	265 ft	0.03-300 ft	265 ft
Transverse dispersivity	200 ft	0.03-300 ft	200 ft

2.4 MODEL INITIALIZATION AND CALIBRATION

Between URS closure in the Fall of 2018 and the completion of the extraction wells in February 2022, there was no subsurface activity in the vicinity of the URS except biannual groundwater monitoring and pumping tests at the extraction wells of CM-01 and CM-02 in July 2020. Since February 13, 2022, groundwater has been continuously extracted via wells CM-01 and CM-02 for the purpose of fluoride remediation. Therefore, relative to the dynamic nature of the groundwater hydraulics under the continuous extraction system, the conditions prior to February 2022 can be considered to be steady state.

The steady state model was built based on conditions prior to February 2022, before groundwater extraction began. The transient model run was simulated in two stress periods. The first transient stress period was 254 days long and represented the period of groundwater extraction from February 13 to October 25, 2022, which was the period extraction rate and monitoring data were available for model calibration. For the sake of simplicity, CM-01 and CM-02 were combined as a single extraction well and an average uniform pumping rate was assigned based on totalizer readings from that period.

The second transient stress period was 10,950 days (30 years) long and represented the predictive phase of the model. The purpose of this phase was to predict the fate and migration of the fluoride plume in the future. It was utilized in forecasting the time required to bring the fluoride concentration in groundwater in the vicinity of the URS below the Groundwater Protection Standard (GWPS) of 4 milligrams per liter (mg/L). This phase was not calibrated and the validity of the results from this phase is based on best possible calibration achieved in the earlier stages of the model. The best possible calibration was determined from all available data and professional judgement

related to the boundary conditions. To achieve a better calibration would require either more data or more hydrogeologic understanding into refining the boundary conditions which was not available for this effort.

There were 18 monitoring wells (referred to as 'targets') that provided the entire calibration data for the model (see **Figure 1** and **Table 2**). Head and fluoride concentration values from the monitoring activities in Q4 of 2021 were used to calibrate the steady state flow and transport model. Transient flow and concentration data was available from monitoring in Q2 of 2022 from all these locations. In addition, 7 of these locations also provided continuous hourly head readings which were all included in the calibration of the transient flow model. Details of the stress periods and calibration details are presented in **Table 3**.

Table 2: Calibration targets.

WELL NAME	EASTING	NORTHING	F CONC. DATA	TRANDUCER DATA
MW-62	2534532.685	2071562.932		
MW-63	2534981.812	2071996.943		
MW-64	2535675.131	2071564.591		
MW-65	2535315.836	2071367.378		
MW-66	2534260.177	2070329.351	Yes	Yes
MW-67	2534124.252	2070194.411	Yes	Yes
MW-68	2534176.268	2070059.507	Yes	Yes
MW-69	2534353.918	2069878.011	Yes	
MW-70	2534558.226	2070090.579	Yes	
MW-71	2533344.718	2069273.328	Yes	
MW-72	2534270.977	2069248.071	Yes	
MW-73	2531266.172	2070657.999	Yes	
MW-83	2533647.781	2071872.334	Yes	
MW-84	2534044.644	2070510.116	Yes	Yes
MW-85	2533808.627	2070175.546	Yes	Yes
MW-86	2534508.885	2070725.02	Yes	
CM-03	2534183	2070150	Yes	Yes
CM-04	2534271	2070135	Yes	Yes

Note: Monitoring data was acquired in Q4 2021 and Q2 2022. Groundwater elevations were measured at all wells listed. The locations marked 'yes' provided fluoride (F) concentration (Conc.) data and transducer data.

Table 3: Simulation details.

STRESS PERIOD	LENGTH	EXTRACTION RATE	NO. OF TARGETS	NO. OF DATA POINTS	PARAMETERS TUNED
Steady state (prior to February 2022)	--	No pumping	18	18 (head); 14 (concentration)	Hydraulic conductivity
Transient (Feb 13 – Oct 25, 2022)	254 (day)	329.4 ft^3/d (1.7 gpm)	18	29,654 (head); 25 (concentration)	Ss, Sy, porosity, dispersivity
Transient (Nov 2022 – Nov 2052)	10,950 (day)	385.9 ft^3/d (2 gpm)	--	--	--

Note: gpm = gallons per minute; ft^3/d = cubic feet per day

Root Mean Square Error (RMSE) is a standard statistic used to quantify the overall difference between the observed and the simulated groundwater head or contaminant concentration values. RMSE tells us how different the model results are from observed reality. The benchmark used for acceptable model calibration statistics is an industry standard value of Scaled RMSE of 10% or less (Environmental Simulations, Inc. 2020). Other criteria for acceptable model output are accurately simulated groundwater flow directions and head and concentration gradients based on field observation data.

3 RESULTS

3.1 STEADY STATE FLOW AND TRANSPORT

The simulated groundwater flow direction matches the overall observed groundwater flow direction. **Figure 4** shows simulated steady state groundwater potentiometric surface. The best possible steady state flow calibration statistic achieved by PEST was a scaled RMSE value of 21.5%. This high RMSE value in the steady state calibration is likely due to lack of information about the general head boundaries and the uneven clustering of target locations (e.g., targets are generally clustered in the center of the domain and spread to the north, but the southern half of the domain has no targets). Another cause may be that the relatively narrow range of head variations across the model (a total of 5 feet) can pose a challenge to numerically overcome the inherent noise in the data and lower the RMSE to less than 10%. Overall, since the model would be further calibrated in the transient phase, it was considered as an acceptable steady state calibration and the hydraulic conductivity parameters were updated.

3.2 TRANSIENT FLOW AND TRANSPORT

Simulated groundwater potentiometric surface and concentration contours of the fluoride plume at the end of the first transient stress period (October 2022) are shown on **Figures 5** and **6** respectively. The head contours clearly show a cone of depression around the pumping well location, which is expected to capture the fluoride plume.

The transient run calibration, due to the significantly larger data provided for calibration, altered the Ss, Sy parameters to further reduce the scaled RMSE of the flow model from 21.5% to 9.1%. However, the resulting Sy value of 0.017 was considered too low for the type of aquifer being simulated. Heath (Heath 1983) suggested a typical Sy value of 0.06 for semi-consolidated sandstones. The final value of Sy was set at 0.06, and the resulting scaled RMSE achieved was 11.1%, which was considered acceptable (close to 10%).

The concentration data from the monitoring wells from Q4 2021 and Q2 2022 were imported as concentration targets. A pre-calibration comparison showed that the solute transport model results were already at a scaled RMSE value of 6.4% (less than 10%). Hence, given the limited quantity of concentration data points, it was deemed unnecessary to run a PEST calibration for the transport model.

The final calibration statistics for each of the model phases are presented in **Table 4**.

Table 4: Summary of calibration statistics.

STATISTICS	STEADY STATE FLOW	TRANSIENT FLOW	F TRANSPORT
Number of Targets	18	29653	25
Range in Observed Values	1.96	4.21	20
Minimum Residual	-0.549295	-2.43005	-3.47955
Maximum Residual	0.971401	1.019087	3.58639
Sum of Squared Residuals	3.20E+00	6.52E+03	4.08E+01
RMSE	0.42143	0.468781	1.277179
Residual Mean	0.090887	-0.2921	-0.14784
Absolute Residual Mean	0.335713	0.391288	0.669818
Standard Deviation	0.411512	0.36665	1.268594
Scaled Residual Mean	0.046371	-0.06938	-0.00739
Scaled Absolute Residual Mean	0.171282	0.092943	0.033491
Scaled Standard Deviation	0.209955	0.08709	0.06343
Scaled RMSE (%)	21.5015	11.1349	6.3859

Head values have units of feet and concentration values have units of mg/L

3.3 30-YEAR FLOW AND TRANSPORT FORECAST

3.3.1 CURRENT EXTRACTION SYSTEM

The calibrated flow and transport model was used to forecast the fate and migration of the fluoride plume over the next 30 years at a projected extraction rate of 2 gpm (see **Figure 7** and **Figure 8**). The objective was to estimate the time it will take for the fluoride concentrations to drop below the GWPS of 4 mg/L. Fluoride concentrations above 4 mg/L were estimated at 6 out of the 18 monitoring well locations. **Figure 9** shows concentration hydrographs predicted at these 6 monitoring locations**. Table 5** presents the approximate time in years it would take for the concentration of fluoride to drop below the 4 mg/L at each of those locations.

Table 5: Time forecast for concentration to drop below 4 mg/L.

WELL NAME	TIME IN YEARS
MW-66	11.8
MW-67	12.3
MW-68	16.4
MW-69	4.4
CM-03	15.6
CM-04	18.3

Note: List includes only the monitoring well locations where the concentration of fluoride was found above 4 mg/L.

3.3.2 ADDITIONAL EXTRACTION WELLS

The impact of drilling two additional extraction wells to the north of the URS pond site was estimated using the updated model. Model simulations were created by placing two additional extraction wells (EX-01 and EX-02) along the abandoned road to the north of the URS pond. EX-01 is located north of the northwestern edge of the pond and EX-02 north of the northeastern edge of the pond. Two simulations were created with CM-02, EX-01 and EX-02 each pumping at 2 gpm and 1 gpm, respectively. The model cells around the vicinity of the extraction wells go dry (meaning predicted head is lower than the bottom elevation of the model cell) in all three simulations within 30 years.
With each well pumping at

- 2 gpm: the model cells go dry after about 1.2 years
- 1 gpm: the model goes dry after about 4 years

Having additional extraction wells leads to an expanded capture zone around the former URS pond location. **Figure 10** shows the simulated potentiometric surface at 1.2 years from present day, just before the model predicts dry conditions near the extraction wells.

Groundwater in the aquifer depth considered in this investigation under the URS site has partially originated from the operations of the URS. Therefore, this prediction of the model cells 'drying up' is favorable for the goal of remediating the plume of fluoride dissolved in the groundwater.

4 CONCLUSIONS

The following conclusions can be made from the work completed with this updated model;

- Updating transient flow and concentration data helped improve model calibration over the previous model version to an acceptable RMSE value of 11.1% for the flow model and 6.4% for the transport model.
- The calibrated model predicted that the current pump and treat system in place will be effective in reducing the fluoride concentrations in groundwater in the vicinity of the URS below 4 mg/L (GWPS) in approximately 20 years.
- Additional simulations of the model predict that placing additional extraction wells to the north of the URS pond will lead to an expanded capture zone and will dry up the near-surface groundwater system under the URS site that contains the fluoride plume.

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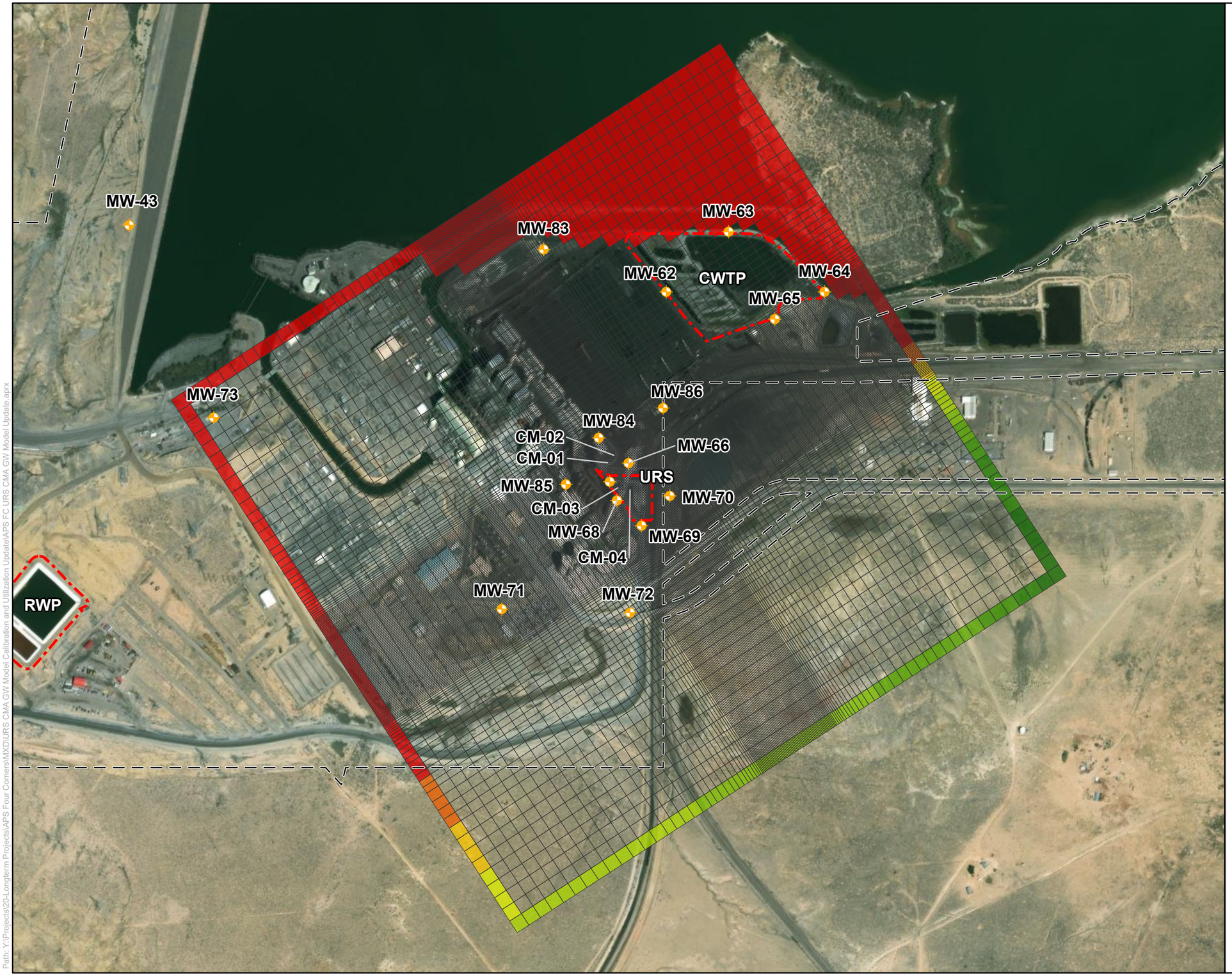
ATTACHMENTS:

Figure 1 – Model Grid & Well Locations
Figure 2 – URS Fluoride Iso-Concentration Map 2022
Figure 3 – Hydraulic Conductivity Zone and their calibrated values
Figure 4 – Simulated Potentiometric Surface Steady State
Figure 5 – Simulated Potentiometric Surface First Transient Stress Period
Figure 6 – Simulated Fluoride Concentration Contours First Transient Stress Period
Figure 7 - Simulated Potentiometric Surface Second Transient Stress Period
Figure 8 - Simulated Fluoride Concentration Contours Second Transient Stress Period
Figure 9 - Simulated Fluoride Concentration Hydrographs
Figure 10 – Simulated Potentiometric Surface with additional extraction wells pumping at 2 gpm

Please be advised that, effective September 21, 2022, Wood Environment & Infrastructure Solutions, Inc. was acquired by WSP. due to the acquisition, we have changed our name to WSP USA Environment & Infrastructure Inc. no other aspects of our legal entity or capabilities have changed for this report, including our Federal Tax ID which remains 91-1641772. correspondence for this report should continue to be addressed to the undersigned.

ATTACHMENT

FIGURES



Legend

- CCR Monitoring Well Location
- CCR Unit Boundary
- Four Corners Power Plant Lease Boundary
- Groundwater Model Grid

Head Elevation (ft NAVD 88)

- 5330.0 - 5330.5
- 5330.6 - 5331.0
- 5331.1 - 5331.5
- 5331.6 - 5332.0
- 5332.1 - 5332.5
- 5332.6 - 5333.0
- 5333.1 - 5333.5
- 5333.6 - 5334.0
- 5334.1 - 5334.5
- 5334.6 - 5335.0
- 5335.1 - 5335.5
- 5335.6 - 5336.0

Notes and Abbreviations:

MW-62	Well Identification
ft	Feet
NAVD 88	North American Vertical Datum of 1988
CCR	Coal Combustion Residuals
FCCP	Four Corners Power Plant

0 700 1,400 Feet

N

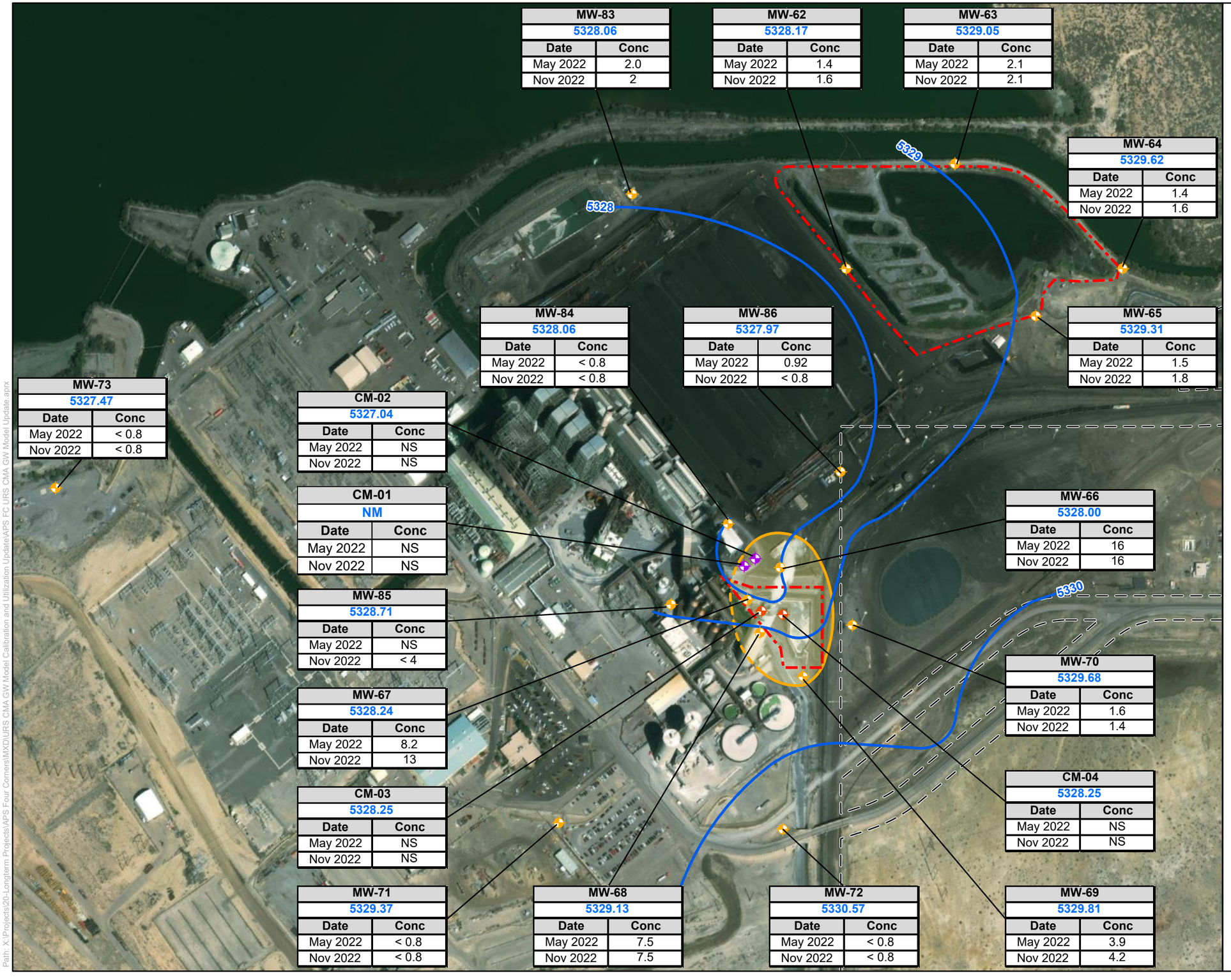
Arizona Public Service
Four Corners Power Plant
Fruitland, New Mexico

FIGURE **1** **Model Grid, Boundary Head Values, & Well Locations**

Job No.	14-2022-2030
PM:	MBH
Date:	12/21/2023
Scale:	1" = 700 feet

The map shown here has been created with all due and reasonable care and is strictly for use with WSP USA Project Number 14-2022-2006. This map has not been certified by a licensed land surveyor, and any third party use of this map comes without warranties of any kind. WSP USA assumes no liability, direct or indirect, whatsoever for any such third party or unintended use.

Path: Y:\Projects\20-Longterm Projects\APS Four Corners\MXD\URS CMA GW Model Calibration and Utilization Update\APS FC URS CMA GW Model Update.aprx



MW-83	
5328.06	
Date	Conc
May 2022	2.0
Nov 2022	2

MW-62	
5328.17	
Date	Conc
May 2022	1.4
Nov 2022	1.6

MW-63	
5329.05	
Date	Conc
May 2022	2.1
Nov 2022	2.1

MW-64	
5329.62	
Date	Conc
May 2022	1.4
Nov 2022	1.6

MW-84	
5328.06	
Date	Conc
May 2022	< 0.8
Nov 2022	< 0.8

MW-86	
5327.97	
Date	Conc
May 2022	0.92
Nov 2022	< 0.8

MW-65	
5329.31	
Date	Conc
May 2022	1.5
Nov 2022	1.8

MW-73	
5327.47	
Date	Conc
May 2022	< 0.8
Nov 2022	< 0.8

CM-02	
5327.04	
Date	Conc
May 2022	NS
Nov 2022	NS

CM-01	
NM	
Date	Conc
May 2022	NS
Nov 2022	NS

MW-66	
5328.00	
Date	Conc
May 2022	16
Nov 2022	16

MW-85	
5328.71	
Date	Conc
May 2022	NS
Nov 2022	< 4

MW-70	
5329.68	
Date	Conc
May 2022	1.6
Nov 2022	1.4

MW-67	
5328.24	
Date	Conc
May 2022	8.2
Nov 2022	13

CM-04	
5328.25	
Date	Conc
May 2022	NS
Nov 2022	NS

CM-03	
5328.25	
Date	Conc
May 2022	NS
Nov 2022	NS

MW-71	
5329.37	
Date	Conc
May 2022	< 0.8
Nov 2022	< 0.8

MW-68	
5329.13	
Date	Conc
May 2022	7.5
Nov 2022	7.5

MW-72	
5330.57	
Date	Conc
May 2022	< 0.8
Nov 2022	< 0.8

MW-69	
5329.81	
Date	Conc
May 2022	3.9
Nov 2022	4.2

Legend

- CCR Monitoring Well Location
- Extraction Well Location
- CM Pre-Design Well Location
- CCR Unit Boundary
- Four Corners Power Plant Lease Boundary
- North Intercept Trench
- South Intercept Trench
- Approximate Extent of High Flow Zone
- Groundwater Elevation Contour (ft amsl) 1-Foot Contour Interval (Dashed Where Inferred)
- FlowDirection

Fluoride Concentration in Groundwater (November 2022)

- 4
- GWPS (4 mg/L; Dashed Where Inferred)

Notes and Abbreviations:

MW-62	Well Identification
5328.17	Groundwater Elevation (ft amsl) November 2022
1.4	Fluoride concentration (mg/L)
NM	Not Measured
NS	Not Sampled
ft amsl	Feet above mean sea level
mg/L	Milligrams per Liter
CCR	Coal Combustion Residuals
FCCP	Four Corners Power Plant
GWPS	Groundwater Protection Standard

0 200 400 800 Feet

N

Arizona Public Service
Four Corners Power Plant
Fruitland, New Mexico

FIGURE 2

URS Fluoride Iso-Concentration Map 2022

Job No. 14-2022-2030
PM: MBH
Date: 6/14/2023
Scale: 1" = 400 feet

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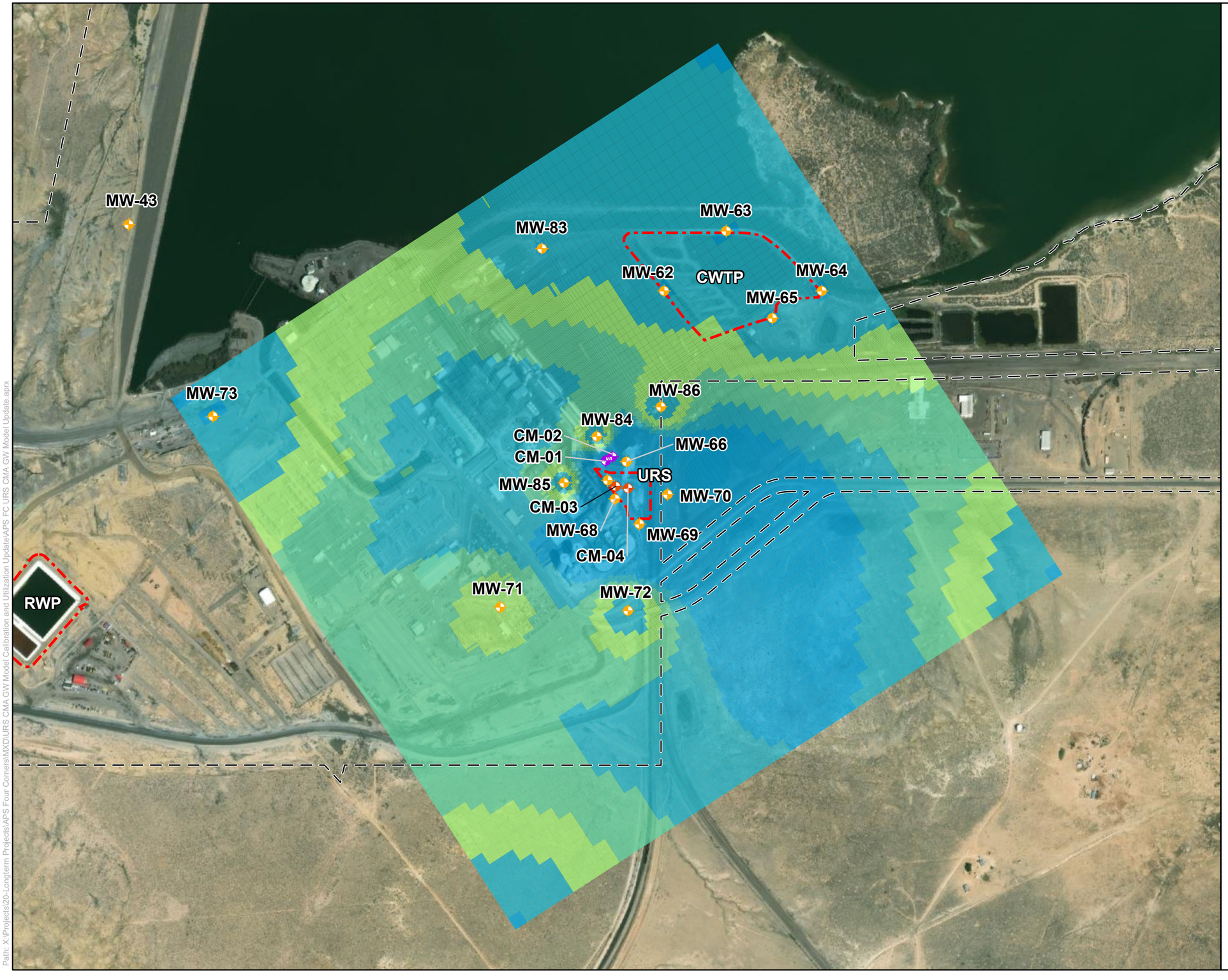

Legend

- CCR Monitoring Well Location
- Extraction Well Location
- CM Pre-Design Well Location
- CCR Unit Boundary
- Four Corners Power Plant Lease Boundary
- Groundwater Model Grid

Hydraluc Conductivity
ft/d

- 1 - 10
- 10 - 20
- 20 - 30
- 30 - 40
- 40 - 50
- 50 - 60

Notes and Abbreviations:

MW-62	Well Identification
ft/d	Feet per Day
CCR	Coal Combustion Residuals
FCCP	Four Corners Power Plant

0 700 1,400 Feet

N

Arizona Public Service
Four Corners Power Plant
Fruitland, New Mexico

FIGURE **3**

Hydraulic Conductivity Zones and their Calibrated Values

Job No.	14-2022-2030
PM:	MBH
Date:	6/14/2023
Scale:	1" = 700 feet

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Legend

- CCR Monitoring Well Location
- Supplementary Site Monitoring Well Location
- Extraction Well Location
- CM Pre-Design Well Location
- CCR Unit Boundary
- Four Corners Power Plant Lease Boundary
- Groundwater Elevation Contour (ft amsl) 2022 Q2 1-Foot Contour Interval (Dashed Where Inferred)
- Simulated Potentiometric Surface for Assumed Steady State Conditions Prior to February 2022

Notes and Abbreviations:

MW-62	Well Identification
5330	Groundwater Contour Elevation (ft amsl)
ft amsl	Feet above mean sea level
CCR	Coal Combustion Residuals
FCCP	Four Corners Power Plant

0 350 700 Feet

N

Arizona Public Service
Four Corners Power Plant
Fruitland, New Mexico

FIGURE **4**

Simulated Potentiometric Surface Steady State

Job No.	14-2022-2030
PM:	MBH
Date:	12/13/2023
Scale:	1" = 700 feet

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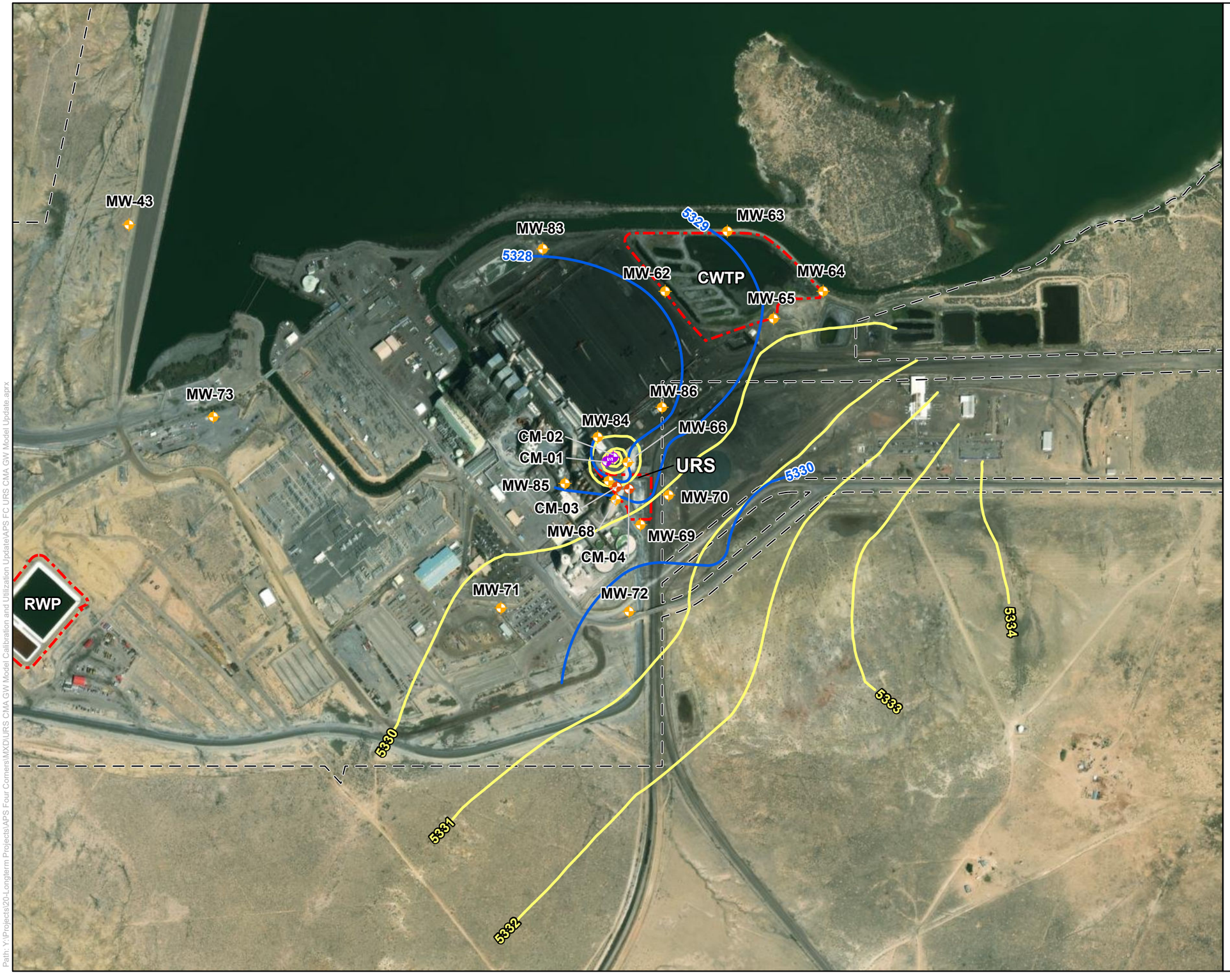

Legend

- CCR Monitoring Well Location
- Extraction Well Location
- CM Pre-Design Well Location
- CCR Unit Boundary
- Four Corners Power Plant Lease Boundary
- Groundwater Elevation Contour (ft amsl) 2022 Q4 1-Foot Contour Interval (Dashed Where Inferred)
- Simulated Potentiometric Surface at the End of the First Transient Period Representing Conditions from October 2022

Notes and Abbreviations:

MW-62	Well Identification
5330	Groundwater Contour Elevation (ft amsl)
ft amsl	Feet above mean sea level
CCR	Coal Combustion Residuals
FCCP	Four Corners Power Plant

0 350 700
Feet

N

Arizona Public Service
Four Corners Power Plant
Fruitland, New Mexico

FIGURE **5**

Simulated Potentiometric Surface First Transient Stress Period

Job No.	14-2022-2030
PM:	MBH
Date:	12/13/2023
Scale:	1" = 700 feet

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Legend

- CCR Monitoring Well Location
- Extraction Well Location
- CM Pre-Design Well Location
- CCR Unit Boundary
- Four Corners Power Plant Lease Boundary

Fluoride Concentration in Groundwater (November 2022)

- 4 mg/L; Dashed Where Inferred

Simulated Fluoride Concentrations at the End of the First Transient Period Representing Conditions from October 2022

- 4 mg/L
- 8 mg/L
- 12 mg/L

Notes and Abbreviations:

MW-62	Well Identification
mg/L	Milligrams per Liter
CCR	Coal Combustion Residuals
FCCP	Four Corners Power Plant

0 100 200 Feet

N

Arizona Public Service
Four Corners Power Plant
Fruitland, New Mexico

FIGURE **6** — **Simulated Fluoride Concentration Contours First Transient Stress Period**

Job No.	14-2022-2030
PM:	MBH
Date:	12/14/2023
Scale:	1" = 200 feet

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Legend

- CCR Monitoring Well Location
- Extraction Well Location
- CM Pre-Design Well Location
- CCR Unit Boundary
- Four Corners Power Plant Lease Boundary
- Simulated Potentiometric Surface at the End of the Second Transient Period Representing Conditions 30 Years from Present Day (October 2052)

Notes and Abbreviations:

MW-62	Well Identification
5330	Groundwater Contour Elevation (ft amsl)
ft amsl	Feet above mean sea level
CCR	Coal Combustion Residuals
FCCP	Four Corners Power Plant

0 100 200 400 Feet

N

Arizona Public Service
Four Corners Power Plant
Fruitland, New Mexico

FIGURE **7**

Simulated Potentiometric Surface Second Transient Stress Period

Job No.	14-2022-2030
PM:	MBH
Date:	6/14/2023
Scale:	1" = 200 feet

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Legend

- CCR Monitoring Well Location
- Supplementary Site Monitoring Well Location
- Extraction Well Location
- CM Pre-Design Well Location
- CCR Unit Boundary
- Four Corners Power Plant Lease Boundary

Simulated Fluoride Concentrations at the End of the Second Transient Period Representing Conditions 30 Years from Present Day (October 2052)

- 1 mg/L
- 2 mg/L
- 3 mg/L
- 4 mg/L

Notes and Abbreviations:

MW-62	Well Identification
mg/L	Milligrams per Liter
CCR	Coal Combustion Residuals
FCCP	Four Corners Power Plant

0 100 200 400 Feet

N

Arizona Public Service
Four Corners Power Plant
Fruitland, New Mexico

FIGURE **8** — **Simulated Fluoride Concentration Contours Second Transient Stress Period**

Job No.	14-2022-2030
PM:	MBH
Date:	6/14/2023
Scale:	1" = 200 feet

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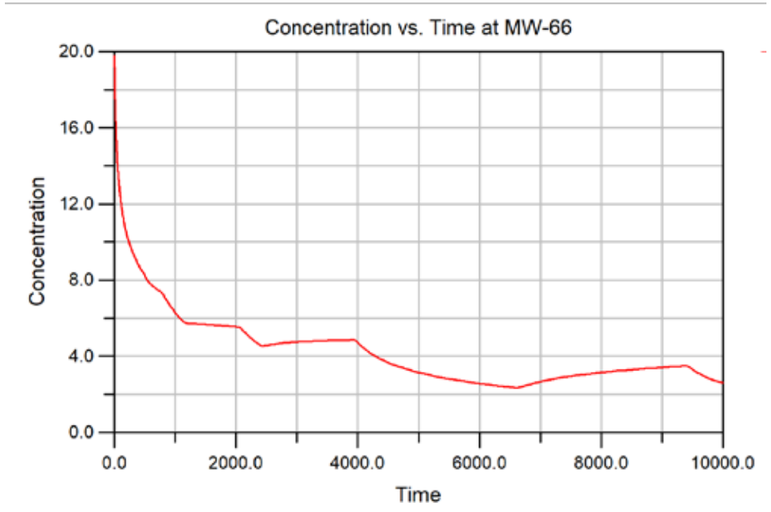

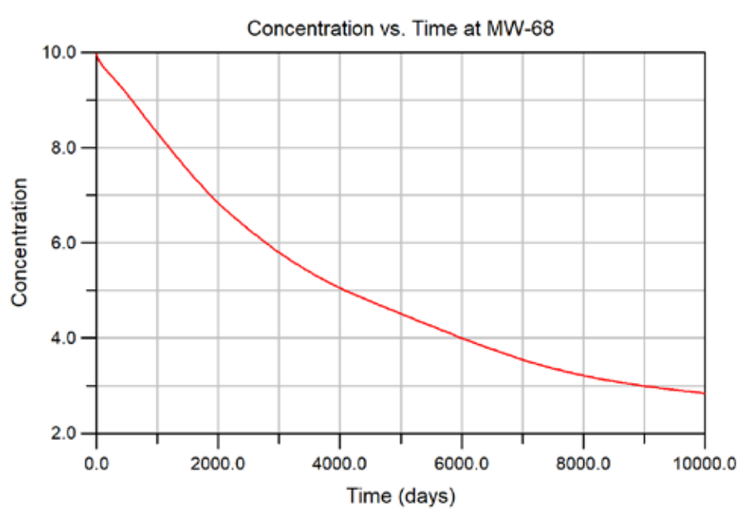

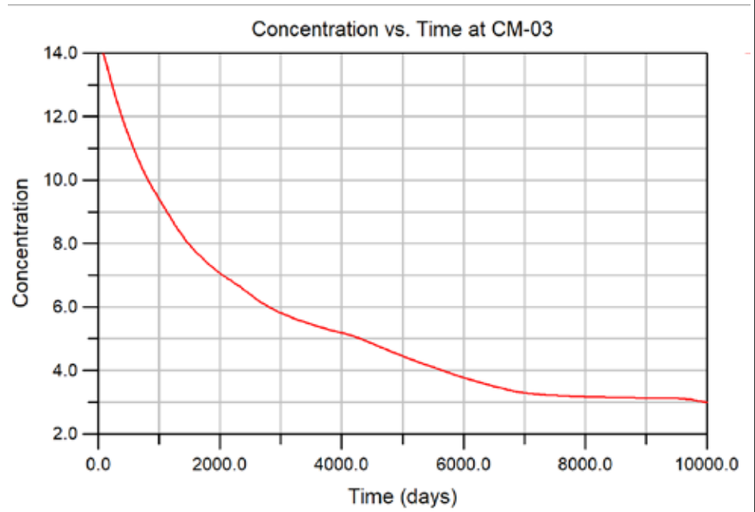

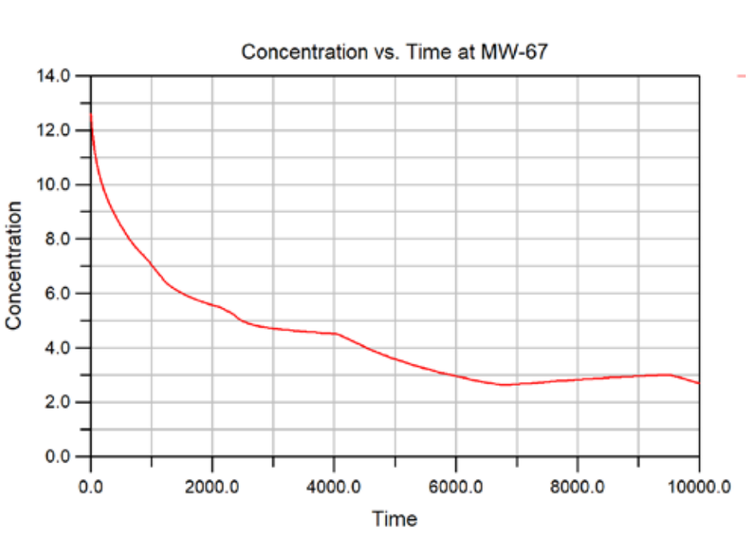

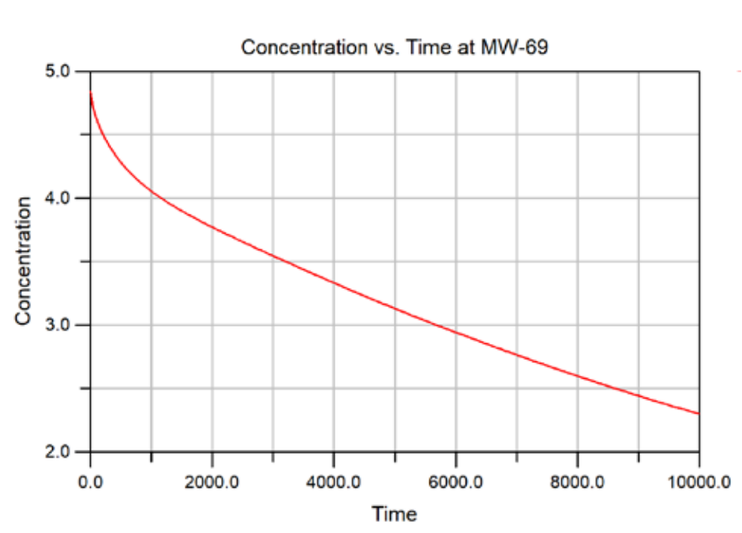

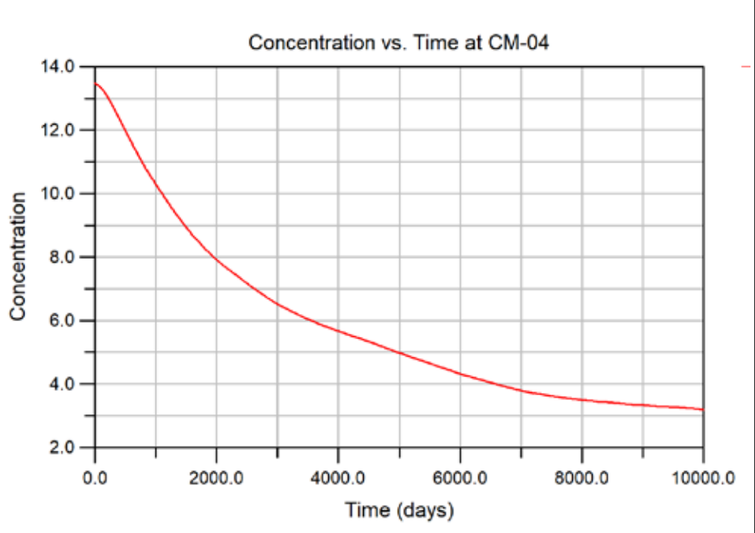

Job No.:	14-2022-2030
PM:	MBH
Date:	6/14/2023
Scale:	As Shown

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Four Corners Power Plant
Fruitland, New Mexico

Stimulated Fluoride Concentration Hydrographs

Figure **9**

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Legend

- CCR Monitoring Well Location
- Extraction Well Location
- CM Pre-Design Well Location
- URS Additional Extraction Wells
- CCR Unit Boundary
- Four Corners Power Plant Lease Boundary
- Simulated Potentiometric Surface during the Second Transient Period Representing Conditions 1.2 Years from Present Day

Notes and Abbreviations:

MW-62	Well Identification
5330	Groundwater Contour Elevation (ft amsl)
ft amsl	Feet above mean sea level
gpm	Gallons per minute
CCR	Coal Combustion Residuals
FCCP	Four Corners Power Plant

0 100 200 400 Feet

N

Arizona Public Service
Four Corners Power Plant
Fruitland, New Mexico

FIGURE **10**

Simulated Potentiometric Surface with Additional Extraction Wells Pumping at 2gpm

Job No.	14-2022-2030
PM:	MBH
Date:	6/16/2023
Scale:	1" = 200 feet

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APPENDIX

J

SEMI-ANNUAL REPORT DOCUMENTING PROGRESS ON REMEDY SELECTION MULTIUNIT 1 AND THE UPPER RETENTION SUMP

2023-07-15

Arizona Public Service Company
400 N. 5th Street
Phoenix, Arizona 85004

Subject: Semiannual Report Documenting Progress In Remedy Selection
Multiunit 1 And The Upper Retention Sump
Four Corners Power Plant - Fruitland, New Mexico

In accordance with 40 Code of Federal Regulations (CFR) Section (§) 257.97(a) of the Coal Combustion Residuals (CCR) Rule, this Semiannual Remedy Selection Progress Report (Semiannual Report) has been prepared on behalf of Arizona Public Service Company (APS) to document progress in selection of remedies for CCR units which have been identified as potentially impacting groundwater at the APS Four Corners Power Plant, located in Fruitland, New Mexico (the Site). Applicable Site CCR units include Multiunit 1 (comprised of the Lined Ash Impoundment and the Lined Decant Water Pond) and the Upper Retention Sump (URS). Semiannual progress reporting to support remedy selection began on July 15, 2019. The most recent update was provided in the *Annual Groundwater Monitoring and Corrective Action Report (GMCAR) for 2022*, dated January 31, 2023. This Semiannual Report serves as the ninth update on remedy selection progress at the site and documents activities completed to date in 2023.

SUMMARY OF ACTIVITIES COMPLETED IN 2023

Activities completed by APS in the first half of 2023 in support of remedy selection for Multiunit 1 and the URS include the following:

- *Groundwater Monitoring at Multiunit 1 and the URS*. Monitoring requirements pursuant to CFR § 257.95 have continued at both Multiunit 1 and the URS at a minimum on a semiannual basis.
- *Ongoing Operation of Extraction Wells at the URS*. In 2019 two extraction wells (CM-01, CM-02) were installed downgradient of the URS. This system is considered an interim corrective measure to evaluate the effectiveness of targeted extraction of groundwater downgradient of the URS with elevated fluoride concentrations. Transducers were installed in several wells around the URS and extraction system to monitor water level changes and evaluate performance in 2023. A performance evaluation and annual contaminant mass removal estimates from the seepage collection system will be included in the 2023 GMCAR. Additionally, the performance evaluation is expected to be included in remedy selection report.
- *Ongoing Operation of Seepage Collection Systems Downgradient of Multiunit 1*. Operation of the existing seepage intercept trench and extraction well systems has continued into 2023 and will continue throughout the year as part of interim response measures at Multiunit 1. Annual contaminant mass removal estimates from the seepage collection system will be calculated and included in the 2023 GMCAR.

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- *Replacement of Select Seepage Collection System Extraction Wells.* Following a well inspection program and operational assessment, select seepage collection system extraction wells were abandoned and replaced in June 2023 to improve the efficiency of this system.
- *Remedy Selection Report for the Multiunit 1 and the URS.* Preparation of a remedy selection report continued through the beginning of 2023 to document how the selected remedy will meet the requirements of 40 CFR §257.97(b).

FUTURE PLANNED ACTIVITIES

APS plans to perform the following activities in support of remedy selection during the second half of 2023 (and in upcoming years, as noted):

- *Continued Operation of the Extraction System at URS*. The extraction well system at URS will continue to serve as part of interim response measures until remedial activities begin. The seepage collection system will also likely be a part of final selected remedy.
- Integration of Additional Extraction Wells into Seepage Collection System Operations at the URS. Installation of additional extraction wells as part of the seepage collection system at the URS is planned for the second half of 2023.
- *Continued Operation of the Seepage Collection Systems Downgradient of Multiunit 1.* The seepage intercept system downgradient of Multiunit 1 will continue to serve as part of interim response measures until remedial activities begin. The seepage collection system will also likely be a part of final selected remedy.
- *Remedy Selection Reports for the URS and Multiunit 1.* Preparation of a remedy selection report documenting how the selected remedy will meet the requirements of 40 CFR §257.97(b) will continue during the second half of 2023.
- *Initiation of Remedial Activities.* Upon completion of the Multiunit 1 and URS Remedy Selection Reports, within 90 days APS will initiate and begin documentation of remedial activities for each CCR unit pursuant to 40 CFR §257.98(a).

Respectfully submitted,

WSP USA Environment & Infrastructure Inc.

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WSP ref.: 1420232011