TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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TestAmerica Job ID: 550-91513-2
TestAmerica Sample Delivery Group: Cholla
Client Project/Site: CCR

For:
Arizona Public Service Company
4801 Cholla Lake Rd
Joseph City, Arizona 86032

Attn: Doug Lavarnway

Authorized for release by:
11/16/2017 3:18:53 PM

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Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: Arizona Public Service Company
Project/Site: CCR

TestAmerica Job ID: 550-91513-2
SDG: Cholla

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
D1	Sample required dilution due to matrix.
M2	Matrix spike recovery was low, the associated blank spike recovery was acceptable.
R13	MS/MSD RPD exceeded the method acceptance limit. Matrix spike recovery was outside acceptance criteria. Batch precision and accuracy were demonstrated.
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
B1	Target analyte detected in method blank at or above the method reporting limit.
B3	Target analyte detected in calibration blank at or above the method reporting limit.
M1	Matrix spike recovery was high, the associated blank spike recovery was acceptable.
D1	Sample required dilution due to matrix.

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
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)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
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)

Job ID: 550-91513-2

Laboratory: TestAmerica Phoenix

Narrative

Job Narrative
550-91513-2

Comments
No additional comments.

Receipt
The samples were received on 10/14/2017 10:01 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 4 coolers at receipt time were 1.6º C, 2.0º C, 2.3º C and 3.1º C.

HPLC/IC
Method(s) 300.0: The matrix spike duplicate (MSD) recovery and the matrix spike / matrix spike duplicate (MS/MSD) precision for analytical batch 550-131532 were outside control limits. The multi-anion spike was inadvertently not added to the MSD during sample preparation. The associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) recoveries and precision were within acceptance limits. As such, these data have been reported and qualified.

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

Metals
Method(s) 200.7 Rev 4.4: The continuing calibration blank (CCB) and method blank for analytical batch 550-131241 contained Beryllium above the reporting limit (RL). All reported samples associated with this CCB were either ND for this analyte or contained this analyte at a concentration greater than 10X the value found in the CCB; therefore, re-analysis of samples was not performed.

Method(s) 200.8 LL: The continuing calibration verification (CCV) associated with batch 550-130679 recovered above the upper control limit for Cd, Co, Pb, Sb, Cr. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method(s) 200.8 LL: The continuing calibration verification (CCV) associated with batch 550-130679 recovered above the upper control limit for Pb, Sb. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method(s) 200.8 LL: The continuing calibration verification (CCV) associated with batch 550-130679 recovered above the upper control limit for Cd, Pb, Sb, Cr. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

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

TestAmerica Job ID: 550-91513-2
SDG: Cholla

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
550-91513-1	FC-CCR-MW7-101217	Water	10/12/17 15:23	10/14/17 10:01
550-91513-2	FC-CCR-MW49A-101217	Water	10/12/17 16:16	10/14/17 10:01
550-91513-3	FC-CCR-MW60-101217	Water	10/12/17 12:35	10/14/17 10:01
550-91513-4	FC-CCR-MW61-101217	Water	10/12/17 13:28	10/14/17 10:01
550-91513-5	FC-CCR-MW62-101317	Water	10/13/17 10:24	10/14/17 10:01
550-91513-6	FC-CCR-MW63-101317	Water	10/13/17 11:05	10/14/17 10:01
550-91513-7	FC-CCR-MW64-101317	Water	10/13/17 11:51	10/14/17 10:01
550-91513-8	FC-CCR-MW65-101317	Water	10/13/17 09:27	10/14/17 10:01
550-91513-9	FC-CCR-FD02-101317	Water	10/13/17 09:27	10/14/17 10:01
550-91513-10	FC-CCR-MW66-101317	Water	10/13/17 09:58	10/14/17 10:01
550-91513-11	FC-CCR-MW67-101317	Water	10/13/17 15:31	10/14/17 10:01
550-91513-12	FC-CCR-MW68-101317	Water	10/13/17 15:06	10/14/17 10:01
550-91513-13	FC-CCR-MW69-101317	Water	10/13/17 14:30	10/14/17 10:01
550-91513-14	FC-CCR-MW70-101317	Water	10/13/17 12:13	10/14/17 10:01
550-91513-15	FC-CCR-MW71-101317	Water	10/13/17 13:47	10/14/17 10:01
550-91513-16	FC-CCR-MW72-101317	Water	10/13/17 13:09	10/14/17 10:01
550-91513-17	FC-CCR-MW73-101217	Water	10/12/17 10:53	10/14/17 10:01
550-91513-18	FC-CCR-FD01-101217	Water	10/12/17 10:53	10/14/17 10:01
550-91513-19	FC-CCR-MW74-101117	Water	10/11/17 13:58	10/14/17 10:01
550-91513-20	FC-CCR-MW75-101217	Water	10/12/17 14:41	10/14/17 10:01

Detection Summary

Client: Arizona Public Service Company
Project/Site: CCR

TestAmerica Job ID: 550-91513-2
SDG: Cholla

Client Sample ID: FC-CCR-MW7-101217 — Lab Sample ID: 550-91513-1

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Lithium	0.81		0.20	mg/L	1		200.7 Rev 4.4	Total/NA
Arsenic	0.00079		0.00050	mg/L	1		200.8 LL	Total/NA
Barium	0.013		0.00050	mg/L	1		200.8 LL	Total/NA
Molybdenum	0.0031		0.00050	mg/L	1		200.8 LL	Total/NA
Selenium	0.015	M1	0.00050	mg/L	1		200.8 LL	Total/NA
Thallium	0.00010		0.00010	mg/L	1		200.8 LL	Total/NA

Client Sample ID: FC-CCR-MW49A-101217 — Lab Sample ID: 550-91513-2

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Lithium	0.92		0.20	mg/L	1		200.7 Rev 4.4	Total/NA
Barium	0.019		0.0020	mg/L	4		200.8 LL	Total/NA
Molybdenum	0.032		0.0020	mg/L	4		200.8 LL	Total/NA
Thallium	0.0013		0.00040	mg/L	4		200.8 LL	Total/NA

Client Sample ID: FC-CCR-MW60-101217 — Lab Sample ID: 550-91513-3

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Fluoride	7.0	D1	0.80	mg/L	2		300.0	Total/NA
Lithium	0.75		0.20	mg/L	1		200.7 Rev 4.4	Total/NA
Barium	0.017		0.0020	mg/L	4		200.8 LL	Total/NA
Cadmium	0.0016		0.00040	mg/L	4		200.8 LL	Total/NA
Cobalt	0.36	D1	0.0050	mg/L	10		200.8 LL	Total/NA
Molybdenum	0.15		0.0020	mg/L	4		200.8 LL	Total/NA

Client Sample ID: FC-CCR-MW61-101217 — Lab Sample ID: 550-91513-4

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Fluoride	1.2		0.40	mg/L	1		300.0	Total/NA
Lithium	0.35		0.20	mg/L	1		200.7 Rev 4.4	Total/NA
Barium	0.013		0.0020	mg/L	4		200.8 LL	Total/NA
Cadmium	0.00097		0.00040	mg/L	4		200.8 LL	Total/NA
Cobalt	0.016		0.0050	mg/L	10		200.8 LL	Total/NA
Molybdenum	0.070		0.0020	mg/L	4		200.8 LL	Total/NA

Client Sample ID: FC-CCR-MW62-101317 — Lab Sample ID: 550-91513-5

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Fluoride	1.5		0.40	mg/L	1		300.0	Total/NA
Barium	0.028		0.0020	mg/L	4		200.8 LL	Total/NA
Cobalt	0.010	D1	0.0050	mg/L	10		200.8 LL	Total/NA
Molybdenum	0.0031		0.0020	mg/L	4		200.8 LL	Total/NA

Client Sample ID: FC-CCR-MW63-101317 — Lab Sample ID: 550-91513-6

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Fluoride	2.0		0.40	mg/L	1		300.0	Total/NA
Barium	0.022		0.0020	mg/L	4		200.8 LL	Total/NA
Cobalt	0.0069	D1	0.0050	mg/L	10		200.8 LL	Total/NA
Molybdenum	0.0029		0.0020	mg/L	4		200.8 LL	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Arizona Public Service Company
Project/Site: CCR

TestAmerica Job ID: 550-91513-2
SDG: Cholla

Client Sample ID: FC-CCR-MW64-101317 — Lab Sample ID: 550-91513-7

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Fluoride	1.4		0.40	mg/L	1		300.0	Total/NA
Barium	0.029		0.0020	mg/L	4		200.8 LL	Total/NA
Molybdenum	0.0051		0.0020	mg/L	4		200.8 LL	Total/NA

Client Sample ID: FC-CCR-MW65-101317 — Lab Sample ID: 550-91513-8

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Fluoride	1.9		0.40	mg/L	1		300.0	Total/NA
Barium	0.013		0.00050	mg/L	1		200.8 LL	Total/NA
Cobalt	0.0011		0.00050	mg/L	1		200.8 LL	Total/NA
Molybdenum	0.0093		0.00050	mg/L	1		200.8 LL	Total/NA

Client Sample ID: FC-CCR-FD02-101317 — Lab Sample ID: 550-91513-9

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Fluoride	1.9		0.40	mg/L	1		300.0	Total/NA
Barium	0.013		0.00050	mg/L	1		200.8 LL	Total/NA
Cobalt	0.0012		0.00050	mg/L	1		200.8 LL	Total/NA
Molybdenum	0.0094		0.00050	mg/L	1		200.8 LL	Total/NA

Client Sample ID: FC-CCR-MW66-101317 — Lab Sample ID: 550-91513-10

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Fluoride	26	D2	2.0	mg/L	5		300.0	Total/NA
Lithium	0.34		0.20	mg/L	1		200.7 Rev 4.4	Total/NA
Arsenic	0.0021		0.00050	mg/L	1		200.8 LL	Total/NA
Barium	0.021		0.00050	mg/L	1		200.8 LL	Total/NA
Cobalt	0.0075		0.00050	mg/L	1		200.8 LL	Total/NA
Molybdenum	0.023		0.00050	mg/L	1		200.8 LL	Total/NA
Selenium	0.0021		0.00050	mg/L	1		200.8 LL	Total/NA
Thallium	0.00036		0.00010	mg/L	1		200.8 LL	Total/NA

Client Sample ID: FC-CCR-MW67-101317 — Lab Sample ID: 550-91513-11

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Fluoride	25	D2	2.0	mg/L	5		300.0	Total/NA
Lithium	0.49		0.20	mg/L	1		200.7 Rev 4.4	Total/NA
Arsenic	0.0027		0.00050	mg/L	1		200.8 LL	Total/NA
Barium	0.022		0.00050	mg/L	1		200.8 LL	Total/NA
Cadmium	0.00016		0.00010	mg/L	1		200.8 LL	Total/NA
Cobalt	0.0064		0.00050	mg/L	1		200.8 LL	Total/NA
Molybdenum	0.045		0.00050	mg/L	1		200.8 LL	Total/NA
Selenium	0.038		0.00050	mg/L	1		200.8 LL	Total/NA
Thallium	0.00054		0.00010	mg/L	1		200.8 LL	Total/NA

Client Sample ID: FC-CCR-MW68-101317 — Lab Sample ID: 550-91513-12

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Fluoride	10	D2	2.0	mg/L	5		300.0	Total/NA
Lithium	0.37		0.20	mg/L	1		200.7 Rev 4.4	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Arizona Public Service Company
Project/Site: CCR

TestAmerica Job ID: 550-91513-2
SDG: Cholla

Client Sample ID: FC-CCR-MW68-101317 (Continued) — Lab Sample ID: 550-91513-12

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.0097		0.00050	mg/L	1		200.8 LL	Total/NA
Barium	0.0078		0.00050	mg/L	1		200.8 LL	Total/NA
Cadmium	0.00011		0.00010	mg/L	1		200.8 LL	Total/NA
Cobalt	0.0019		0.00050	mg/L	1		200.8 LL	Total/NA
Molybdenum	0.0063		0.00050	mg/L	1		200.8 LL	Total/NA
Selenium	0.37		0.00050	mg/L	1		200.8 LL	Total/NA
Thallium	0.00069		0.00010	mg/L	1		200.8 LL	Total/NA

Client Sample ID: FC-CCR-MW69-101317 — Lab Sample ID: 550-91513-13

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Fluoride	20	D2	2.0	mg/L	5		300.0	Total/NA
Lithium	0.50		0.20	mg/L	1		200.7 Rev 4.4	Total/NA
Arsenic	0.0078		0.00050	mg/L	1		200.8 LL	Total/NA
Barium	0.019		0.00050	mg/L	1		200.8 LL	Total/NA
Cobalt	0.0051		0.00050	mg/L	1		200.8 LL	Total/NA
Molybdenum	0.015		0.00050	mg/L	1		200.8 LL	Total/NA
Selenium	0.023		0.00050	mg/L	1		200.8 LL	Total/NA
Thallium	0.00022		0.00010	mg/L	1		200.8 LL	Total/NA

Client Sample ID: FC-CCR-MW70-101317 — Lab Sample ID: 550-91513-14

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Fluoride	1.0	D1	0.80	mg/L	2		300.0	Total/NA
Lithium	0.31		0.20	mg/L	1		200.7 Rev 4.4	Total/NA
Arsenic	0.0062	D1	0.0050	mg/L	10		200.8 LL	Total/NA
Barium	0.011	D1	0.0050	mg/L	10		200.8 LL	Total/NA
Selenium	0.21	D1	0.0050	mg/L	10		200.8 LL	Total/NA

Client Sample ID: FC-CCR-MW71-101317 — Lab Sample ID: 550-91513-15

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Lithium	0.33		0.20	mg/L	1		200.7 Rev 4.4	Total/NA
Barium	0.012	D1	0.0050	mg/L	10		200.8 LL	Total/NA
Selenium	0.20	D1	0.0050	mg/L	10		200.8 LL	Total/NA

Client Sample ID: FC-CCR-MW72-101317 — Lab Sample ID: 550-91513-16

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Lithium	0.38		0.20	mg/L	1		200.7 Rev 4.4	Total/NA
Arsenic	0.0052	D1	0.0050	mg/L	10		200.8 LL	Total/NA
Barium	0.011	D1	0.0050	mg/L	10		200.8 LL	Total/NA
Selenium	0.11	D1	0.0050	mg/L	10		200.8 LL	Total/NA
Thallium	0.0010	D1	0.0010	mg/L	10		200.8 LL	Total/NA

Client Sample ID: FC-CCR-MW73-101217 — Lab Sample ID: 550-91513-17

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.024	D1	0.0050	mg/L	10		200.8 LL	Total/NA
Selenium	0.048	D1	0.0050	mg/L	10		200.8 LL	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Arizona Public Service Company
Project/Site: CCR

TestAmerica Job ID: 550-91513-2
SDG: Cholla

Client Sample ID: FC-CCR-FD01-101217 — Lab Sample ID: 550-91513-18

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.024	D1	0.0050	mg/L	10		200.8 LL	Total/NA
Selenium	0.047	D1	0.0050	mg/L	10		200.8 LL	Total/NA

Client Sample ID: FC-CCR-MW74-101117 — Lab Sample ID: 550-91513-19

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Fluoride	2.1	D1	0.80	mg/L	2		300.0	Total/NA
Lithium	0.48		0.20	mg/L	1		200.7 Rev 4.4	Total/NA
Barium	0.023	D1	0.0050	mg/L	10		200.8 LL	Total/NA
Molybdenum	0.023	D1	0.0050	mg/L	10		200.8 LL	Total/NA
Selenium	0.081	D1	0.0050	mg/L	10		200.8 LL	Total/NA

Client Sample ID: FC-CCR-MW75-101217 — Lab Sample ID: 550-91513-20

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Lithium	0.41		0.20	mg/L	1		200.7 Rev 4.4	Total/NA
Barium	0.020	D1	0.0050	mg/L	10		200.8 LL	Total/NA
Cadmium	0.0023	D1	0.0010	mg/L	10		200.8 LL	Total/NA
Cobalt	0.049	D1	0.0050	mg/L	10		200.8 LL	Total/NA
Molybdenum	0.18	D1	0.0050	mg/L	10		200.8 LL	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Arizona Public Service Company
Project/Site: CCR

TestAmerica Job ID: 550-91513-2
SDG: Cholla

Client Sample ID: FC-CCR-MW7-101217

Lab Sample ID: 550-91513-1
Date Collected: 10/12/17 15:23
Matrix: Water
Date Received: 10/14/17 10:01

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND	D1 M2 R13	0.80	mg/L			11/01/17 18:38	2

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND	B1 B3	0.0010	mg/L		10/17/17 05:53	10/30/17 03:13	1
Lithium	**0.81**		0.20	mg/L		10/17/17 05:53	10/23/17 21:15	1

Method: 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.0010	mg/L		10/17/17 05:42	11/07/17 22:00	1
Arsenic	**0.00079**		0.00050	mg/L		10/17/17 05:42	11/07/17 22:00	1
Barium	**0.013**		0.00050	mg/L		10/17/17 05:42	11/07/17 22:00	1
Cadmium	ND		0.00010	mg/L		10/17/17 05:42	11/07/17 22:00	1
Chromium	ND		0.0010	mg/L		10/17/17 05:42	11/07/17 22:00	1
Cobalt	ND		0.00050	mg/L		10/17/17 05:42	11/07/17 22:00	1
Lead	ND		0.00050	mg/L		10/17/17 05:42	11/07/17 22:00	1
Molybdenum	**0.0031**		0.00050	mg/L		10/17/17 05:42	11/07/17 22:00	1
Selenium	**0.015**	**M1**	0.00050	mg/L		10/17/17 05:42	11/07/17 22:00	1
Thallium	**0.00010**		0.00010	mg/L		10/17/17 05:42	11/07/17 22:00	1

Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	ND		0.00020	mg/L		10/17/17 11:45	10/18/17 16:37	1

Client Sample ID: FC-CCR-MW49A-101217

Lab Sample ID: 550-91513-2
Date Collected: 10/12/17 16:16
Matrix: Water
Date Received: 10/14/17 10:01

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND	D1 D5	4.0	mg/L			10/31/17 16:50	10

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND	B1 B3	0.0010	mg/L		10/17/17 05:53	10/30/17 03:25	1
Lithium	**0.92**		0.20	mg/L		10/17/17 05:53	10/23/17 21:21	1

Method: 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.0040	mg/L		10/17/17 05:42	11/06/17 19:53	4
Arsenic	ND	D1	0.0050	mg/L		11/10/17 11:39	11/13/17 17:11	10
Barium	**0.019**		0.0020	mg/L		10/17/17 05:42	11/06/17 19:53	4
Cadmium	ND		0.00040	mg/L		10/17/17 05:42	11/06/17 19:53	4
Chromium	ND	D1	0.010	mg/L		11/10/17 11:39	11/13/17 17:11	10
Cobalt	ND	D1	0.0050	mg/L		11/10/17 11:39	11/13/17 17:11	10
Lead	ND	D1	0.0050	mg/L		11/10/17 11:39	11/13/17 17:11	10
Molybdenum	**0.032**		0.0020	mg/L		10/17/17 05:42	11/06/17 19:53	4
Selenium	ND		0.0020	mg/L		10/17/17 05:42	11/06/17 19:53	4
Thallium	**0.0013**		0.00040	mg/L		10/17/17 05:42	11/06/17 19:53	4

Client Sample Results

Client: Arizona Public Service Company
Project/Site: CCR

TestAmerica Job ID: 550-91513-2
SDG: Cholla

Client Sample ID: FC-CCR-MW49A-101217

Lab Sample ID: 550-91513-2
Date Collected: 10/12/17 16:16
Matrix: Water
Date Received: 10/14/17 10:01

Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	ND		0.00020	mg/L		10/17/17 11:45	10/18/17 16:38	1

Client Sample ID: FC-CCR-MW60-101217

Lab Sample ID: 550-91513-3
Date Collected: 10/12/17 12:35
Matrix: Water
Date Received: 10/14/17 10:01

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**7.0**	**D1**	0.80	mg/L			11/01/17 21:05	2

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND	B1 B3	0.0010	mg/L		10/17/17 05:53	10/30/17 03:31	1
Lithium	**0.75**		0.20	mg/L		10/17/17 05:53	10/23/17 21:27	1

Method: 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.0040	mg/L		10/17/17 05:42	11/06/17 19:58	4
Arsenic	ND	D1	0.0050	mg/L		11/10/17 11:39	11/13/17 17:16	10
Barium	**0.017**		0.0020	mg/L		10/17/17 05:42	11/06/17 19:58	4
Cadmium	**0.0016**		0.00040	mg/L		10/17/17 05:42	11/06/17 19:58	4
Chromium	ND	D1	0.010	mg/L		11/10/17 11:39	11/13/17 17:16	10
Cobalt	**0.36**	**D1**	0.0050	mg/L		11/10/17 11:39	11/13/17 17:16	10
Lead	ND	D1	0.0050	mg/L		11/10/17 11:39	11/13/17 17:16	10
Molybdenum	**0.15**		0.0020	mg/L		10/17/17 05:42	11/06/17 19:58	4
Selenium	ND		0.0020	mg/L		10/17/17 05:42	11/06/17 19:58	4
Thallium	ND		0.00040	mg/L		10/17/17 05:42	11/06/17 19:58	4

Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	ND		0.00020	mg/L		10/17/17 11:45	10/18/17 16:40	1

Client Sample ID: FC-CCR-MW61-101217

Lab Sample ID: 550-91513-4
Date Collected: 10/12/17 13:28
Matrix: Water
Date Received: 10/14/17 10:01

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**1.2**		0.40	mg/L			11/01/17 21:42	1

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND	B1 B3	0.0010	mg/L		10/17/17 05:53	10/30/17 03:37	1
Lithium	**0.35**		0.20	mg/L		10/17/17 05:53	10/23/17 21:33	1

Method: 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.0040	mg/L		10/17/17 05:42	11/06/17 20:03	4
Arsenic	ND		0.0050	mg/L		11/10/17 11:39	11/13/17 16:47	10
Barium	**0.013**		0.0020	mg/L		10/17/17 05:42	11/06/17 20:03	4
Cadmium	**0.00097**		0.00040	mg/L		10/17/17 05:42	11/06/17 20:03	4

Client Sample Results

Client: Arizona Public Service Company
Project/Site: CCR

TestAmerica Job ID: 550-91513-2
SDG: Cholla

Client Sample ID: FC-CCR-MW61-101217

Lab Sample ID: 550-91513-4
Date Collected: 10/12/17 13:28
Matrix: Water
Date Received: 10/14/17 10:01

Method: 200.8 LL - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		0.010	mg/L		11/10/17 11:39	11/13/17 16:47	10
Cobalt	**0.016**		0.0050	mg/L		11/10/17 11:39	11/13/17 16:47	10
Lead	ND		0.0050	mg/L		11/10/17 11:39	11/13/17 16:47	10
Molybdenum	**0.070**		0.0020	mg/L		10/17/17 05:42	11/06/17 20:03	4
Selenium	ND		0.0020	mg/L		10/17/17 05:42	11/06/17 20:03	4
Thallium	ND		0.0010	mg/L		11/10/17 11:39	11/13/17 16:47	10

Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	ND		0.00020	mg/L		10/17/17 11:45	10/18/17 16:41	1

Client Sample ID: FC-CCR-MW62-101317

Lab Sample ID: 550-91513-5
Date Collected: 10/13/17 10:24
Matrix: Water
Date Received: 10/14/17 10:01

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**1.5**		0.40	mg/L			11/01/17 22:19	1

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND	B1 B3	0.0010	mg/L		10/17/17 05:53	10/30/17 03:42	1
Lithium	ND		0.20	mg/L		10/17/17 05:53	10/23/17 21:38	1

Method: 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.0040	mg/L		10/17/17 05:42	11/06/17 20:08	4
Arsenic	ND	D1	0.0050	mg/L		11/10/17 11:39	11/13/17 17:25	10
Barium	**0.028**		0.0020	mg/L		10/17/17 05:42	11/06/17 20:08	4
Cadmium	ND	D1	0.0010	mg/L		11/10/17 11:39	11/13/17 17:25	10
Chromium	ND	D1	0.010	mg/L		11/10/17 11:39	11/13/17 17:25	10
Cobalt	**0.010**	**D1**	0.0050	mg/L		11/10/17 11:39	11/13/17 17:25	10
Lead	ND	D1	0.0050	mg/L		11/10/17 11:39	11/13/17 17:25	10
Molybdenum	**0.0031**		0.0020	mg/L		10/17/17 05:42	11/06/17 20:08	4
Selenium	ND		0.0020	mg/L		10/17/17 05:42	11/06/17 20:08	4
Thallium	ND	D1	0.0010	mg/L		11/10/17 11:39	11/13/17 17:25	10

Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	ND		0.00020	mg/L		10/17/17 11:45	10/18/17 16:43	1

Client Sample ID: FC-CCR-MW63-101317

Lab Sample ID: 550-91513-6
Date Collected: 10/13/17 11:05
Matrix: Water
Date Received: 10/14/17 10:01

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**2.0**		0.40	mg/L			11/01/17 23:33	1

Client Sample Results

Client: Arizona Public Service Company
Project/Site: CCR

TestAmerica Job ID: 550-91513-2
SDG: Cholla

Client Sample ID: FC-CCR-MW63-101317

Lab Sample ID: 550-91513-6
Date Collected: 10/13/17 11:05
Matrix: Water
Date Received: 10/14/17 10:01

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND	B1 B3	0.0010	mg/L		10/17/17 05:53	10/30/17 03:48	1
Lithium	ND		0.20	mg/L		10/17/17 05:53	10/23/17 21:44	1

Method: 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.0040	mg/L		10/17/17 05:42	11/06/17 20:13	4
Arsenic	ND	D1	0.0050	mg/L		11/10/17 11:39	11/13/17 17:30	10
Barium	**0.022**		0.0020	mg/L		10/17/17 05:42	11/06/17 20:13	4
Cadmium	ND	D1	0.0010	mg/L		11/10/17 11:39	11/13/17 17:30	10
Chromium	ND	D1	0.010	mg/L		11/10/17 11:39	11/13/17 17:30	10
Cobalt	**0.0069**	**D1**	0.0050	mg/L		11/10/17 11:39	11/13/17 17:30	10
Lead	ND	D1	0.0050	mg/L		11/10/17 11:39	11/13/17 17:30	10
Molybdenum	**0.0029**		0.0020	mg/L		10/17/17 05:42	11/06/17 20:13	4
Selenium	ND		0.0020	mg/L		10/17/17 05:42	11/06/17 20:13	4
Thallium	ND	D1	0.0010	mg/L		11/10/17 11:39	11/13/17 17:30	10

Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	ND		0.00020	mg/L		10/17/17 11:45	10/18/17 16:44	1

Client Sample ID: FC-CCR-MW64-101317

Lab Sample ID: 550-91513-7
Date Collected: 10/13/17 11:51
Matrix: Water
Date Received: 10/14/17 10:01

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**1.4**		0.40	mg/L			11/02/17 00:10	1

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND	B1 B3	0.0010	mg/L		10/17/17 05:53	10/30/17 03:54	1
Lithium	ND		0.20	mg/L		10/17/17 05:53	10/23/17 21:50	1

Method: 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.0040	mg/L		10/17/17 05:42	11/06/17 20:17	4
Arsenic	ND	D1	0.0050	mg/L		11/10/17 11:39	11/13/17 17:35	10
Barium	**0.029**		0.0020	mg/L		10/17/17 05:42	11/06/17 20:17	4
Cadmium	ND	D1	0.0010	mg/L		11/10/17 11:39	11/13/17 17:35	10
Chromium	ND	D1	0.010	mg/L		11/10/17 11:39	11/13/17 17:35	10
Cobalt	ND	D1	0.0050	mg/L		11/10/17 11:39	11/13/17 17:35	10
Lead	ND	D1	0.0050	mg/L		11/10/17 11:39	11/13/17 17:35	10
Molybdenum	**0.0051**		0.0020	mg/L		10/17/17 05:42	11/06/17 20:17	4
Selenium	ND		0.0020	mg/L		10/17/17 05:42	11/06/17 20:17	4
Thallium	ND		0.00040	mg/L		10/17/17 05:42	11/06/17 20:17	4

Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	ND		0.00020	mg/L		10/17/17 11:45	10/18/17 16:46	1

Client Sample Results

Client: Arizona Public Service Company
Project/Site: CCR

TestAmerica Job ID: 550-91513-2
SDG: Cholla

Client Sample ID: FC-CCR-MW65-101317

Lab Sample ID: 550-91513-8
Date Collected: 10/13/17 09:27
Matrix: Water
Date Received: 10/14/17 10:01

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**1.9**		0.40		mg/L			11/02/17 00:46	1

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND	B1 B3	0.0010		mg/L		10/17/17 05:53	10/30/17 03:57	1
Lithium	ND		0.20		mg/L		10/17/17 05:53	10/23/17 21:53	1

Method: 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.0010		mg/L		10/17/17 05:42	11/07/17 22:14	1
Arsenic	ND		0.00050		mg/L		10/17/17 05:42	11/07/17 22:14	1
Barium	**0.013**		0.00050		mg/L		10/17/17 05:42	11/07/17 22:14	1
Cadmium	ND		0.00010		mg/L		10/17/17 05:42	11/07/17 22:14	1
Chromium	ND		0.0010		mg/L		10/17/17 05:42	11/07/17 22:14	1
Cobalt	**0.0011**		0.00050		mg/L		10/17/17 05:42	11/07/17 22:14	1
Lead	ND		0.00050		mg/L		10/17/17 05:42	11/07/17 22:14	1
Molybdenum	**0.0093**		0.00050		mg/L		10/17/17 05:42	11/07/17 22:14	1
Selenium	ND		0.00050		mg/L		10/17/17 05:42	11/07/17 22:14	1
Thallium	ND		0.00010		mg/L		10/17/17 05:42	11/07/17 22:14	1

Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Hg	ND		0.00020		mg/L		10/17/17 11:45	10/18/17 16:48	1

Client Sample ID: FC-CCR-FD02-101317

Lab Sample ID: 550-91513-9
Date Collected: 10/13/17 09:27
Matrix: Water
Date Received: 10/14/17 10:01

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**1.9**		0.40		mg/L			11/02/17 01:23	1

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND	B1 B3	0.0010		mg/L		10/17/17 05:53	10/30/17 04:05	1
Lithium	ND		0.20		mg/L		10/17/17 05:53	10/23/17 21:56	1

Method: 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.0010		mg/L		10/17/17 05:42	11/07/17 22:19	1
Arsenic	ND		0.00050		mg/L		10/17/17 05:42	11/07/17 22:19	1
Barium	**0.013**		0.00050		mg/L		10/17/17 05:42	11/07/17 22:19	1
Cadmium	ND		0.00010		mg/L		10/17/17 05:42	11/07/17 22:19	1
Chromium	ND		0.0010		mg/L		10/17/17 05:42	11/07/17 22:19	1
Cobalt	**0.0012**		0.00050		mg/L		10/17/17 05:42	11/07/17 22:19	1
Lead	ND		0.00050		mg/L		10/17/17 05:42	11/07/17 22:19	1
Molybdenum	**0.0094**		0.00050		mg/L		10/17/17 05:42	11/07/17 22:19	1
Selenium	ND		0.00050		mg/L		10/17/17 05:42	11/07/17 22:19	1
Thallium	ND		0.00010		mg/L		10/17/17 05:42	11/07/17 22:19	1

Client Sample Results

Client: Arizona Public Service Company
Project/Site: CCR

TestAmerica Job ID: 550-91513-2
SDG: Cholla

Client Sample ID: FC-CCR-FD02-101317

Lab Sample ID: 550-91513-9
Date Collected: 10/13/17 09:27
Matrix: Water
Date Received: 10/14/17 10:01

Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	ND		0.00020	mg/L		10/17/17 11:45	10/18/17 16:49	1

Client Sample ID: FC-CCR-MW66-101317

Lab Sample ID: 550-91513-10
Date Collected: 10/13/17 09:58
Matrix: Water
Date Received: 10/14/17 10:01

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**26**	**D2**	2.0	mg/L			11/02/17 02:00	5

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND	B1 B3	0.0010	mg/L		10/17/17 05:53	10/30/17 04:14	1
Lithium	**0.34**		0.20	mg/L		10/17/17 05:53	10/23/17 21:58	1

Method: 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.0010	mg/L		10/17/17 05:42	11/07/17 22:24	1
Arsenic	**0.0021**		0.00050	mg/L		10/17/17 05:42	11/07/17 22:24	1
Barium	**0.021**		0.00050	mg/L		10/17/17 05:42	11/07/17 22:24	1
Cadmium	ND		0.00010	mg/L		10/17/17 05:42	11/07/17 22:24	1
Chromium	ND		0.0010	mg/L		10/17/17 05:42	11/07/17 22:24	1
Cobalt	**0.0075**		0.00050	mg/L		10/17/17 05:42	11/07/17 22:24	1
Lead	ND		0.00050	mg/L		10/17/17 05:42	11/07/17 22:24	1
Molybdenum	**0.023**		0.00050	mg/L		10/17/17 05:42	11/07/17 22:24	1
Selenium	**0.0021**		0.00050	mg/L		10/17/17 05:42	11/07/17 22:24	1
Thallium	**0.00036**		0.00010	mg/L		10/17/17 05:42	11/07/17 22:24	1

Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	ND		0.00020	mg/L		10/17/17 11:45	10/18/17 16:51	1

Client Sample ID: FC-CCR-MW67-101317

Lab Sample ID: 550-91513-11
Date Collected: 10/13/17 15:31
Matrix: Water
Date Received: 10/14/17 10:01

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**25**	**D2**	2.0	mg/L			11/02/17 03:14	5

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND	B1 B3	0.0010	mg/L		10/17/17 05:53	10/30/17 04:26	1
Lithium	**0.49**		0.20	mg/L		10/17/17 05:53	10/23/17 22:10	1

Method: 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.0010	mg/L		10/17/17 05:42	11/07/17 22:28	1
Arsenic	**0.0027**		0.00050	mg/L		10/17/17 05:42	11/07/17 22:28	1
Barium	**0.022**		0.00050	mg/L		10/17/17 05:42	11/07/17 22:28	1
Cadmium	**0.00016**		0.00010	mg/L		10/17/17 05:42	11/07/17 22:28	1

Client Sample ID: FC-CCR-MW67-101317

Lab Sample ID: 550-91513-11
Date Collected: 10/13/17 15:31
Matrix: Water
Date Received: 10/14/17 10:01

Method: 200.8 LL - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		0.0010	mg/L		10/17/17 05:42	11/07/17 22:28	1
Cobalt	**0.0064**		0.00050	mg/L		10/17/17 05:42	11/07/17 22:28	1
Lead	ND		0.00050	mg/L		10/17/17 05:42	11/07/17 22:28	1
Molybdenum	**0.045**		0.00050	mg/L		10/17/17 05:42	11/07/17 22:28	1
Selenium	**0.038**		0.00050	mg/L		10/17/17 05:42	11/07/17 22:28	1
Thallium	**0.00054**		0.00010	mg/L		10/17/17 05:42	11/07/17 22:28	1

Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	ND		0.00020	mg/L		10/17/17 11:45	10/18/17 16:56	1

Client Sample ID: FC-CCR-MW68-101317

Lab Sample ID: 550-91513-12
Date Collected: 10/13/17 15:06
Matrix: Water
Date Received: 10/14/17 10:01

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**10**	**D2**	2.0	mg/L			11/02/17 03:50	5

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND	B1 B3	0.0010	mg/L		10/17/17 05:53	10/30/17 04:37	1
Lithium	**0.37**		0.20	mg/L		10/17/17 05:53	10/23/17 22:16	1

Method: 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.0010	mg/L		10/17/17 05:42	11/07/17 22:33	1
Arsenic	**0.0097**		0.00050	mg/L		10/17/17 05:42	11/07/17 22:33	1
Barium	**0.0078**		0.00050	mg/L		10/17/17 05:42	11/07/17 22:33	1
Cadmium	**0.00011**		0.00010	mg/L		10/17/17 05:42	11/07/17 22:33	1
Chromium	ND		0.0010	mg/L		10/17/17 05:42	11/07/17 22:33	1
Cobalt	**0.0019**		0.00050	mg/L		10/17/17 05:42	11/07/17 22:33	1
Lead	ND		0.00050	mg/L		10/17/17 05:42	11/07/17 22:33	1
Molybdenum	**0.0063**		0.00050	mg/L		10/17/17 05:42	11/07/17 22:33	1
Selenium	**0.37**		0.00050	mg/L		10/17/17 05:42	11/07/17 22:33	1
Thallium	**0.00069**		0.00010	mg/L		10/17/17 05:42	11/07/17 22:33	1

Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	ND		0.00020	mg/L		10/17/17 11:45	10/18/17 16:57	1

Client Sample ID: FC-CCR-MW69-101317

Lab Sample ID: 550-91513-13
Date Collected: 10/13/17 14:30
Matrix: Water
Date Received: 10/14/17 10:01

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**20**	**D2**	2.0	mg/L			11/02/17 04:27	5

Client Sample Results

Client: Arizona Public Service Company
Project/Site: CCR

TestAmerica Job ID: 550-91513-2
SDG: Cholla

Client Sample ID: FC-CCR-MW69-101317

Lab Sample ID: 550-91513-13
Date Collected: 10/13/17 14:30
Matrix: Water
Date Received: 10/14/17 10:01

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND	B1 B3	0.0010	mg/L		10/17/17 05:53	10/30/17 04:49	1
Lithium	**0.50**		0.20	mg/L		10/17/17 05:53	10/23/17 22:22	1

Method: 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.0010	mg/L		10/17/17 05:42	11/07/17 22:38	1
Arsenic	**0.0078**		0.00050	mg/L		10/17/17 05:42	11/07/17 22:38	1
Barium	**0.019**		0.00050	mg/L		10/17/17 05:42	11/07/17 22:38	1
Cadmium	ND		0.00010	mg/L		10/17/17 05:42	11/07/17 22:38	1
Chromium	ND		0.0010	mg/L		10/17/17 05:42	11/07/17 22:38	1
Cobalt	**0.0051**		0.00050	mg/L		10/17/17 05:42	11/07/17 22:38	1
Lead	ND		0.00050	mg/L		10/17/17 05:42	11/07/17 22:38	1
Molybdenum	**0.015**		0.00050	mg/L		10/17/17 05:42	11/07/17 22:38	1
Selenium	**0.023**		0.00050	mg/L		10/17/17 05:42	11/07/17 22:38	1
Thallium	**0.00022**		0.00010	mg/L		10/17/17 05:42	11/07/17 22:38	1

Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	ND		0.00020	mg/L		10/17/17 11:45	10/18/17 17:00	1

Client Sample ID: FC-CCR-MW70-101317

Lab Sample ID: 550-91513-14
Date Collected: 10/13/17 12:13
Matrix: Water
Date Received: 10/14/17 10:01

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**1.0**	**D1**	0.80	mg/L			11/02/17 05:04	2

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND	B1 B3	0.0010	mg/L		10/17/17 05:53	10/30/17 05:07	1
Lithium	**0.31**		0.20	mg/L		10/17/17 05:53	10/23/17 22:28	1

Method: 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND	D1	0.010	mg/L		11/10/17 11:39	11/14/17 09:48	10
Arsenic	**0.0062**	**D1**	0.0050	mg/L		11/10/17 11:39	11/14/17 09:48	10
Barium	**0.011**	**D1**	0.0050	mg/L		11/10/17 11:39	11/14/17 09:48	10
Cadmium	ND	D1	0.0010	mg/L		11/10/17 11:39	11/14/17 09:48	10
Chromium	ND	D1	0.010	mg/L		11/10/17 11:39	11/14/17 09:48	10
Cobalt	ND	D1	0.0050	mg/L		11/10/17 11:39	11/14/17 09:48	10
Lead	ND	D1	0.0050	mg/L		11/10/17 11:39	11/14/17 09:48	10
Molybdenum	ND	D1	0.0050	mg/L		11/10/17 11:39	11/14/17 09:48	10
Selenium	**0.21**	**D1**	0.0050	mg/L		11/10/17 11:39	11/14/17 09:48	10
Thallium	ND	D1	0.0010	mg/L		11/10/17 11:39	11/14/17 09:48	10

Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	ND		0.00020	mg/L		10/17/17 11:45	10/18/17 16:59	1

Client Sample Results

Client: Arizona Public Service Company
Project/Site: CCR

TestAmerica Job ID: 550-91513-2
SDG: Cholla

Client Sample ID: FC-CCR-MW71-101317

Lab Sample ID: 550-91513-15
Date Collected: 10/13/17 13:47
Matrix: Water
Date Received: 10/14/17 10:01

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND	D1 D5	2.0	mg/L			11/02/17 05:41	5

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND	B1 B3	0.0010	mg/L		10/17/17 05:53	10/30/17 05:18	1
Lithium	**0.33**		0.20	mg/L		10/17/17 05:53	10/23/17 22:34	1

Method: 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND	D1	0.010	mg/L		11/10/17 11:39	11/14/17 09:53	10
Arsenic	ND	D1	0.0050	mg/L		11/10/17 11:39	11/14/17 09:53	10
Barium	**0.012**	**D1**	0.0050	mg/L		11/10/17 11:39	11/14/17 09:53	10
Cadmium	ND	D1	0.0010	mg/L		11/10/17 11:39	11/14/17 09:53	10
Chromium	ND	D1	0.010	mg/L		11/10/17 11:39	11/14/17 09:53	10
Cobalt	ND	D1	0.0050	mg/L		11/10/17 11:39	11/14/17 09:53	10
Lead	ND	D1	0.0050	mg/L		11/10/17 11:39	11/14/17 09:53	10
Molybdenum	ND	D1	0.0050	mg/L		11/10/17 11:39	11/14/17 09:53	10
Selenium	**0.20**	**D1**	0.0050	mg/L		11/10/17 11:39	11/14/17 09:53	10
Thallium	ND	D1	0.0010	mg/L		11/10/17 11:39	11/14/17 09:53	10

Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	ND		0.00020	mg/L		10/17/17 11:45	10/18/17 17:02	1

Client Sample ID: FC-CCR-MW72-101317

Lab Sample ID: 550-91513-16
Date Collected: 10/13/17 13:09
Matrix: Water
Date Received: 10/14/17 10:01

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND	D1 D5	2.0	mg/L			11/02/17 06:54	5

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND	B1 B3	0.0010	mg/L		10/17/17 05:53	10/30/17 05:30	1
Lithium	**0.38**		0.20	mg/L		10/17/17 05:53	10/23/17 22:40	1

Method: 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND	D1	0.010	mg/L		11/10/17 11:39	11/14/17 09:58	10
Arsenic	**0.0052**	**D1**	0.0050	mg/L		11/10/17 11:39	11/14/17 09:58	10
Barium	**0.011**	**D1**	0.0050	mg/L		11/10/17 11:39	11/14/17 09:58	10
Cadmium	ND	D1	0.0010	mg/L		11/10/17 11:39	11/14/17 09:58	10
Chromium	ND	D1	0.010	mg/L		11/10/17 11:39	11/14/17 09:58	10
Cobalt	ND	D1	0.0050	mg/L		11/10/17 11:39	11/14/17 09:58	10
Lead	ND	D1	0.0050	mg/L		11/10/17 11:39	11/14/17 09:58	10
Molybdenum	ND	D1	0.0050	mg/L		11/10/17 11:39	11/14/17 09:58	10
Selenium	**0.11**	**D1**	0.0050	mg/L		11/10/17 11:39	11/14/17 09:58	10
Thallium	**0.0010**	**D1**	0.0010	mg/L		11/10/17 11:39	11/14/17 09:58	10

Client Sample Results

Client: Arizona Public Service Company
Project/Site: CCR

TestAmerica Job ID: 550-91513-2
SDG: Cholla

Client Sample ID: FC-CCR-MW72-101317
Lab Sample ID: 550-91513-16
Date Collected: 10/13/17 13:09
Matrix: Water
Date Received: 10/14/17 10:01

Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	ND		0.00020	mg/L		10/17/17 11:45	10/18/17 17:03	1

Client Sample ID: FC-CCR-MW73-101217
Lab Sample ID: 550-91513-17
Date Collected: 10/12/17 10:53
Matrix: Water
Date Received: 10/14/17 10:01

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND	D1 D5	0.80	mg/L			11/02/17 07:31	2

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND	B1 B3	0.0010	mg/L		10/17/17 05:53	10/30/17 05:36	1
Lithium	ND		0.20	mg/L		10/17/17 05:53	10/23/17 22:46	1

Method: 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND	D1	0.010	mg/L		11/10/17 11:39	11/14/17 10:07	10
Arsenic	ND	D1	0.0050	mg/L		11/10/17 11:39	11/14/17 10:07	10
Barium	**0.024**	**D1**	0.0050	mg/L		11/10/17 11:39	11/14/17 10:07	10
Cadmium	ND	D1	0.0010	mg/L		11/10/17 11:39	11/14/17 10:07	10
Chromium	ND	D1	0.010	mg/L		11/10/17 11:39	11/14/17 10:07	10
Cobalt	ND	D1	0.0050	mg/L		11/10/17 11:39	11/14/17 10:07	10
Lead	ND	D1	0.0050	mg/L		11/10/17 11:39	11/14/17 10:07	10
Molybdenum	ND	D1	0.0050	mg/L		11/10/17 11:39	11/14/17 10:07	10
Selenium	**0.048**	**D1**	0.0050	mg/L		11/10/17 11:39	11/14/17 10:07	10
Thallium	ND	D1	0.0010	mg/L		11/10/17 11:39	11/14/17 10:07	10

Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	ND		0.00020	mg/L		10/17/17 11:45	10/18/17 17:05	1

Client Sample ID: FC-CCR-FD01-101217
Lab Sample ID: 550-91513-18
Date Collected: 10/12/17 10:53
Matrix: Water
Date Received: 10/14/17 10:01

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND	D1 D5	0.80	mg/L			11/02/17 04:56	2

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND	B1 B3	0.0010	mg/L		10/17/17 05:53	10/30/17 05:42	1
Lithium	ND		0.20	mg/L		10/17/17 05:53	10/23/17 22:51	1

Method: 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND	D1	0.010	mg/L		11/10/17 11:39	11/14/17 10:12	10
Arsenic	ND	D1	0.0050	mg/L		11/10/17 11:39	11/14/17 10:12	10
Barium	**0.024**	**D1**	0.0050	mg/L		11/10/17 11:39	11/14/17 10:12	10
Cadmium	ND	D1	0.0010	mg/L		11/10/17 11:39	11/14/17 10:12	10

Client Sample ID: FC-CCR-FD01-101217

Lab Sample ID: 550-91513-18
Date Collected: 10/12/17 10:53
Matrix: Water
Date Received: 10/14/17 10:01

Method: 200.8 LL - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND	D1	0.010	mg/L		11/10/17 11:39	11/14/17 10:12	10
Cobalt	ND	D1	0.0050	mg/L		11/10/17 11:39	11/14/17 10:12	10
Lead	ND	D1	0.0050	mg/L		11/10/17 11:39	11/14/17 10:12	10
Molybdenum	ND	D1	0.0050	mg/L		11/10/17 11:39	11/14/17 10:12	10
Selenium	**0.047**	**D1**	0.0050	mg/L		11/10/17 11:39	11/14/17 10:12	10
Thallium	ND	D1	0.0010	mg/L		11/10/17 11:39	11/14/17 10:12	10

Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	ND		0.00020	mg/L		10/17/17 11:45	10/18/17 17:06	1

Client Sample ID: FC-CCR-MW74-101117

Lab Sample ID: 550-91513-19
Date Collected: 10/11/17 13:58
Matrix: Water
Date Received: 10/14/17 10:01

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**2.1**	**D1**	0.80	mg/L			11/02/17 05:50	2

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND	B1 B3	0.0010	mg/L		10/17/17 05:53	10/30/17 05:53	1
Lithium	**0.48**		0.20	mg/L		10/17/17 05:53	10/23/17 22:57	1

Method: 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND	D1	0.010	mg/L		11/10/17 11:39	11/14/17 10:17	10
Arsenic	ND	D1	0.0050	mg/L		11/10/17 11:39	11/14/17 10:17	10
Barium	**0.023**	**D1**	0.0050	mg/L		11/10/17 11:39	11/14/17 10:17	10
Cadmium	ND	D1	0.0010	mg/L		11/10/17 11:39	11/14/17 10:17	10
Chromium	ND	D1	0.010	mg/L		11/10/17 11:39	11/14/17 10:17	10
Cobalt	ND	D1	0.0050	mg/L		11/10/17 11:39	11/14/17 10:17	10
Lead	ND	D1	0.0050	mg/L		11/10/17 11:39	11/14/17 10:17	10
Molybdenum	**0.023**	**D1**	0.0050	mg/L		11/10/17 11:39	11/14/17 10:17	10
Selenium	**0.081**	**D1**	0.0050	mg/L		11/10/17 11:39	11/14/17 10:17	10
Thallium	ND	D1	0.0010	mg/L		11/10/17 11:39	11/14/17 10:17	10

Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	ND		0.00020	mg/L		10/17/17 11:45	10/18/17 17:08	1

Client Sample ID: FC-CCR-MW75-101217

Lab Sample ID: 550-91513-20
Date Collected: 10/12/17 14:41
Matrix: Water
Date Received: 10/14/17 10:01

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND	D1 D5	2.0	mg/L			11/02/17 07:13	5

Client Sample Results

Client: Arizona Public Service Company
Project/Site: CCR

TestAmerica Job ID: 550-91513-2
SDG: Cholla

Client Sample ID: FC-CCR-MW75-101217

Lab Sample ID: 550-91513-20

Date Collected: 10/12/17 14:41
Matrix: Water
Date Received: 10/14/17 10:01

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND	B1 B3	0.0010		mg/L		10/17/17 05:53	10/30/17 05:59	1
Lithium	**0.41**		0.20		mg/L		10/17/17 05:53	10/23/17 23:03	1

Method: 200.8 LL - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND	D1	0.010		mg/L		11/10/17 11:39	11/14/17 10:21	10
Arsenic	ND	D1	0.0050		mg/L		11/10/17 11:39	11/14/17 10:21	10
Barium	**0.020**	**D1**	0.0050		mg/L		11/10/17 11:39	11/14/17 10:21	10
Cadmium	**0.0023**	**D1**	0.0010		mg/L		11/10/17 11:39	11/14/17 10:21	10
Chromium	ND	D1	0.010		mg/L		11/10/17 11:39	11/14/17 10:21	10
Cobalt	**0.049**	**D1**	0.0050		mg/L		11/10/17 11:39	11/14/17 10:21	10
Lead	ND	D1	0.0050		mg/L		11/10/17 11:39	11/14/17 10:21	10
Molybdenum	**0.18**	**D1**	0.0050		mg/L		11/10/17 11:39	11/14/17 10:21	10
Selenium	ND	D1	0.0050		mg/L		11/10/17 11:39	11/14/17 10:21	10
Thallium	ND	D1	0.0010		mg/L		11/10/17 11:39	11/14/17 10:21	10

Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Hg	ND		0.00020		mg/L		10/17/17 11:45	10/18/17 17:09	1

QC Sample Results

Client: Arizona Public Service Company
Project/Site: CCR

TestAmerica Job ID: 550-91513-2
SDG: Cholla

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 550-131383/2 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 131383

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.40		mg/L			10/31/17 02:25	1

Lab Sample ID: LCS 550-131383/5 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 131383

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Fluoride			4.00	3.92		mg/L		98	90 - 110		

Lab Sample ID: LCSD 550-131383/6 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 131383

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride			4.00	3.90		mg/L		97	90 - 110	0	20

Lab Sample ID: 550-91108-A-1 MS ^100 — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 131383

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Fluoride	ND		400	432		mg/L		107	80 - 120		

Lab Sample ID: 550-91108-A-1 MSD ^100 — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 131383

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	ND		400	419		mg/L		103	80 - 120	3	20

Lab Sample ID: MB 550-131532/60 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 131532

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.40		mg/L			11/02/17 10:27	1

Lab Sample ID: LCS 550-131532/62 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 131532

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Fluoride			4.00	4.12		mg/L		103	90 - 110		

Lab Sample ID: LCSD 550-131532/63 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 131532

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride			4.00	4.12		mg/L		103	90 - 110	0	20

QC Sample Results

Client: Arizona Public Service Company
Project/Site: CCR

TestAmerica Job ID: 550-91513-2
SDG: Cholla

Lab Sample ID: 550-91513-1 MS — **Client Sample ID: FC-CCR-MW7-101217**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 131532

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Fluoride	ND	R13 M2 D1	8.00	8.12	D1	mg/L		97	80 - 120		

Lab Sample ID: 550-91513-1 MSD — **Client Sample ID: FC-CCR-MW7-101217**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 131532

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	ND	R13 M2 D1	8.00	ND	D1 M2 R13	mg/L		0.09	80 - 120	184	20

Lab Sample ID: MB 550-131568/2 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 131568

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.40		mg/L			11/01/17 15:41	1

Lab Sample ID: LCS 550-131568/5 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 131568

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Fluoride			4.00	4.25		mg/L		106	90 - 110		

Lab Sample ID: LCSD 550-131568/6 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 131568

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride			4.00	4.25		mg/L		106	90 - 110	0	20

Lab Sample ID: MB 550-131634/2 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 131634

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.40		mg/L			11/02/17 14:42	1

Lab Sample ID: LCS 550-131634/5 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 131634

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Fluoride			4.00	4.13		mg/L		103	90 - 110		

Lab Sample ID: LCSD 550-131634/6 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 131634

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride			4.00	4.14		mg/L		103	90 - 110	0	20

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 550-131712/2 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 131712

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.40		mg/L			11/03/17 16:59	1

Lab Sample ID: LCS 550-131712/5 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 131712

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Fluoride			4.00	4.11		mg/L		103	90 - 110		

Lab Sample ID: LCSD 550-131712/6 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 131712

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride			4.00	4.10		mg/L		102	90 - 110	0	20

Lab Sample ID: 550-91677-A-1 DU — **Client Sample ID: Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 131712

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Fluoride	3.6			3.57		mg/L				0.4	20

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 550-130097/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 130717 — **Prep Batch: 130097**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	ND		0.20		mg/L		10/17/17 05:53	10/23/17 20:55	1

Lab Sample ID: MB 550-130097/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 131241 — **Prep Batch: 130097**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	0.00103	B1	0.0010		mg/L		10/17/17 05:53	10/30/17 02:53	1
Lithium	ND		0.20		mg/L		10/17/17 05:53	10/30/17 02:53	1

Lab Sample ID: LCS 550-130097/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 130717 — **Prep Batch: 130097**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Lithium			1.00	0.952		mg/L		95	85 - 115		

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: LCS 550-130097/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 131241 — **Prep Batch: 130097**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Beryllium	1.00	0.938		mg/L		94	85 - 115
Lithium	1.00	0.940		mg/L		94	85 - 115

Lab Sample ID: LCSD 550-130097/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 130717 — **Prep Batch: 130097**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lithium	1.00	0.957		mg/L		96	85 - 115	1	20

Lab Sample ID: LCSD 550-130097/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 131241 — **Prep Batch: 130097**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Beryllium	1.00	0.937		mg/L		94	85 - 115	0	20
Lithium	1.00	0.945		mg/L		94	85 - 115	1	20

Lab Sample ID: 550-91513-1 MS — **Client Sample ID: FC-CCR-MW7-101217**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 130717 — **Prep Batch: 130097**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Lithium	0.81		1.00	1.77		mg/L		96	70 - 130

Lab Sample ID: 550-91513-1 MS — **Client Sample ID: FC-CCR-MW7-101217**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 131241 — **Prep Batch: 130097**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Beryllium	ND	B1 B3	1.00	0.892		mg/L		89	70 - 130

Lab Sample ID: 550-91513-1 MSD — **Client Sample ID: FC-CCR-MW7-101217**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 130717 — **Prep Batch: 130097**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lithium	0.81		1.00	1.75		mg/L		94	70 - 130	1	20

Lab Sample ID: 550-91513-1 MSD — **Client Sample ID: FC-CCR-MW7-101217**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 131241 — **Prep Batch: 130097**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Beryllium	ND	B1 B3	1.00	0.902		mg/L		90	70 - 130	1	20

Method: 200.8 LL - Metals (ICP/MS)

Lab Sample ID: MB 550-130095/1-A
Matrix: Water
Analysis Batch: 131843

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 130095

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.0010	mg/L		10/17/17 05:42	11/06/17 19:32	1
Barium	ND		0.00050	mg/L		10/17/17 05:42	11/06/17 19:32	1
Cadmium	ND		0.00010	mg/L		10/17/17 05:42	11/06/17 19:32	1
Lead	ND		0.00050	mg/L		10/17/17 05:42	11/06/17 19:32	1
Molybdenum	ND		0.00050	mg/L		10/17/17 05:42	11/06/17 19:32	1
Selenium	ND		0.00050	mg/L		10/17/17 05:42	11/06/17 19:32	1
Thallium	ND		0.00010	mg/L		10/17/17 05:42	11/06/17 19:32	1

Lab Sample ID: MB 550-130095/1-A
Matrix: Water
Analysis Batch: 131951

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 130095

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.0010	mg/L		10/17/17 05:42	11/07/17 21:46	1
Arsenic	ND		0.00050	mg/L		10/17/17 05:42	11/07/17 21:46	1
Barium	ND		0.00050	mg/L		10/17/17 05:42	11/07/17 21:46	1
Cadmium	ND		0.00010	mg/L		10/17/17 05:42	11/07/17 21:46	1
Chromium	ND		0.0010	mg/L		10/17/17 05:42	11/07/17 21:46	1
Cobalt	ND		0.00050	mg/L		10/17/17 05:42	11/07/17 21:46	1
Lead	ND		0.00050	mg/L		10/17/17 05:42	11/07/17 21:46	1
Molybdenum	ND		0.00050	mg/L		10/17/17 05:42	11/07/17 21:46	1
Selenium	ND		0.00050	mg/L		10/17/17 05:42	11/07/17 21:46	1
Thallium	ND		0.00010	mg/L		10/17/17 05:42	11/07/17 21:46	1

Lab Sample ID: LCS 550-130095/2-A
Matrix: Water
Analysis Batch: 131843

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 130095

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.100	0.0977		mg/L		98	85 - 115
Barium	0.100	0.0948		mg/L		95	85 - 115
Cadmium	0.100	0.0960		mg/L		96	85 - 115
Lead	0.100	0.0911		mg/L		91	85 - 115
Molybdenum	0.100	0.0910		mg/L		91	85 - 115
Selenium	0.100	0.108		mg/L		108	85 - 115
Thallium	0.100	0.0921		mg/L		92	85 - 115

Lab Sample ID: LCS 550-130095/2-A
Matrix: Water
Analysis Batch: 131951

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 130095

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.100	0.0960		mg/L		96	85 - 115
Arsenic	0.100	0.0971		mg/L		97	85 - 115
Barium	0.100	0.0951		mg/L		95	85 - 115
Cadmium	0.100	0.0948		mg/L		95	85 - 115
Chromium	0.100	0.0952		mg/L		95	85 - 115
Cobalt	0.100	0.0948		mg/L		95	85 - 115
Lead	0.100	0.0953		mg/L		95	85 - 115

Method: 200.8 LL - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 550-130095/2-A
Matrix: Water
Analysis Batch: 131951

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 130095

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Molybdenum	0.100	0.0946		mg/L		95	85 - 115
Selenium	0.100	0.0970		mg/L		97	85 - 115
Thallium	0.100	0.0943		mg/L		94	85 - 115

Lab Sample ID: LCSD 550-130095/3-A
Matrix: Water
Analysis Batch: 131843

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 130095

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	0.100	0.107		mg/L		107	85 - 115	9	20
Barium	0.100	0.103		mg/L		103	85 - 115	8	20
Cadmium	0.100	0.104		mg/L		104	85 - 115	8	20
Lead	0.100	0.0992		mg/L		99	85 - 115	9	20
Molybdenum	0.100	0.0994		mg/L		99	85 - 115	9	20
Selenium	0.100	0.115		mg/L		115	85 - 115	6	20
Thallium	0.100	0.0999		mg/L		100	85 - 115	8	20

Lab Sample ID: LCSD 550-130095/3-A
Matrix: Water
Analysis Batch: 131951

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 130095

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	5	20
Arsenic	0.100	0.104		mg/L		104	85 - 115	6	20
Barium	0.100	0.101		mg/L		101	85 - 115	6	20
Cadmium	0.100	0.101		mg/L		101	85 - 115	6	20
Chromium	0.100	0.101		mg/L		101	85 - 115	6	20
Cobalt	0.100	0.101		mg/L		101	85 - 115	6	20
Lead	0.100	0.101		mg/L		101	85 - 115	6	20
Molybdenum	0.100	0.0996		mg/L		100	85 - 115	5	20
Selenium	0.100	0.102		mg/L		102	85 - 115	5	20
Thallium	0.100	0.100		mg/L		100	85 - 115	6	20

Lab Sample ID: 550-91513-1 MS
Matrix: Water
Analysis Batch: 131951

Client Sample ID: FC-CCR-MW7-101217
Prep Type: Total/NA
Prep Batch: 130095

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	ND		0.100	0.101		mg/L		100	70 - 130
Arsenic	0.00079		0.100	0.114		mg/L		113	70 - 130
Barium	0.013		0.100	0.112		mg/L		98	70 - 130
Cadmium	ND		0.100	0.0904		mg/L		90	70 - 130
Chromium	ND		0.100	0.101		mg/L		100	70 - 130
Cobalt	ND		0.100	0.0916		mg/L		91	70 - 130
Lead	ND		0.100	0.0843		mg/L		84	70 - 130
Molybdenum	0.0031		0.100	0.104		mg/L		101	70 - 130
Selenium	0.015	M1	0.100	0.157	M1	mg/L		142	70 - 130
Thallium	0.00010		0.100	0.0860		mg/L		86	70 - 130

Method: 200.8 LL - Metals (ICP/MS) (Continued)

Lab Sample ID: 550-91513-1 MSD — **Client Sample ID: FC-CCR-MW7-101217**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 131951 — **Prep Batch: 130095**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	ND		0.100	0.0998		mg/L		100	70 - 130	1	20
Arsenic	0.00079		0.100	0.111		mg/L		110	70 - 130	2	20
Barium	0.013		0.100	0.110		mg/L		97	70 - 130	1	20
Cadmium	ND		0.100	0.0893		mg/L		89	70 - 130	1	20
Chromium	ND		0.100	0.0968		mg/L		96	70 - 130	4	20
Cobalt	ND		0.100	0.0896		mg/L		89	70 - 130	2	20
Lead	ND		0.100	0.0836		mg/L		84	70 - 130	1	20
Molybdenum	0.0031		0.100	0.102		mg/L		99	70 - 130	2	20
Selenium	0.015	M1	0.100	0.148	M1	mg/L		133	70 - 130	6	20
Thallium	0.00010		0.100	0.0855		mg/L		85	70 - 130	1	20

Lab Sample ID: MB 550-132200/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 132393 — **Prep Batch: 132200**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.00050	mg/L		11/10/17 11:39	11/13/17 16:28	1
Cadmium	ND		0.00010	mg/L		11/10/17 11:39	11/13/17 16:28	1
Chromium	ND		0.0010	mg/L		11/10/17 11:39	11/13/17 16:28	1
Cobalt	ND		0.00050	mg/L		11/10/17 11:39	11/13/17 16:28	1
Lead	ND		0.00050	mg/L		11/10/17 11:39	11/13/17 16:28	1
Molybdenum	ND		0.00050	mg/L		11/10/17 11:39	11/13/17 16:28	1
Thallium	ND		0.00010	mg/L		11/10/17 11:39	11/13/17 16:28	1

Lab Sample ID: LCS 550-132200/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 132393 — **Prep Batch: 132200**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.100	0.0977		mg/L		98	85 - 115
Cadmium	0.100	0.0980		mg/L		98	85 - 115
Chromium	0.100	0.0989		mg/L		99	85 - 115
Cobalt	0.100	0.0989		mg/L		99	85 - 115
Lead	0.100	0.0981		mg/L		98	85 - 115
Molybdenum	0.100	0.0982		mg/L		98	85 - 115
Thallium	0.100	0.0988		mg/L		99	85 - 115

Lab Sample ID: LCSD 550-132200/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 132393 — **Prep Batch: 132200**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	0.100	0.102		mg/L		102	85 - 115	4	20
Cadmium	0.100	0.101		mg/L		101	85 - 115	3	20
Chromium	0.100	0.101		mg/L		101	85 - 115	2	20
Cobalt	0.100	0.101		mg/L		101	85 - 115	3	20
Lead	0.100	0.101		mg/L		101	85 - 115	3	20
Molybdenum	0.100	0.100		mg/L		100	85 - 115	2	20
Thallium	0.100	0.102		mg/L		102	85 - 115	3	20

QC Sample Results

Client: Arizona Public Service Company
Project/Site: CCR

TestAmerica Job ID: 550-91513-2
SDG: Cholla

Lab Sample ID: 550-91513-4 MS — **Client Sample ID: FC-CCR-MW61-101217**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 132393 — **Prep Batch: 132200**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	ND		0.100	0.101		mg/L		101	70 - 130
Cadmium	0.0010		0.100	0.0977		mg/L		97	70 - 130
Chromium	ND		0.100	0.0982		mg/L		98	70 - 130
Cobalt	0.016		0.100	0.113		mg/L		97	70 - 130
Lead	ND		0.100	0.0946		mg/L		95	70 - 130
Molybdenum	0.084		0.100	0.183		mg/L		99	70 - 130
Thallium	ND		0.100	0.0941		mg/L		94	70 - 130

Lab Sample ID: 550-91513-4 MSD — **Client Sample ID: FC-CCR-MW61-101217**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 132393 — **Prep Batch: 132200**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	ND		0.100	0.107		mg/L		107	70 - 130	6	20
Cadmium	0.0010		0.100	0.100		mg/L		99	70 - 130	2	20
Chromium	ND		0.100	0.102		mg/L		102	70 - 130	4	20
Cobalt	0.016		0.100	0.118		mg/L		102	70 - 130	4	20
Lead	ND		0.100	0.0962		mg/L		96	70 - 130	2	20
Molybdenum	0.084		0.100	0.189		mg/L		105	70 - 130	3	20
Thallium	ND		0.100	0.0968		mg/L		96	70 - 130	3	20

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 550-130139/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 130298 — **Prep Batch: 130139**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	ND		0.00020	mg/L		10/17/17 11:45	10/18/17 16:29	1

Lab Sample ID: LCS 550-130139/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 130298 — **Prep Batch: 130139**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Hg	0.0100	0.0109		mg/L		109	85 - 115

Lab Sample ID: LCSD 550-130139/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 130298 — **Prep Batch: 130139**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Hg	0.0100	0.0112		mg/L		112	85 - 115	2	20

Lab Sample ID: 550-91513-1 MS — **Client Sample ID: FC-CCR-MW7-101217**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 130298 — **Prep Batch: 130139**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Hg	ND		0.0100	0.00892		mg/L		89	70 - 130

Method: 245.1 - Mercury (CVAA) (Continued)

Lab Sample ID: 550-91513-1 MSD | **Client Sample ID: FC-CCR-MW7-101217**
Matrix: Water | **Prep Type: Total/NA**
Analysis Batch: 130298 | **Prep Batch: 130139**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Hg	ND		0.0100	0.00921		mg/L		92	70 - 130	3	20

QC Association Summary

Client: Arizona Public Service Company
Project/Site: CCR

TestAmerica Job ID: 550-91513-2
SDG: Cholla

HPLC/IC

Analysis Batch: 131383

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-91513-2	FC-CCR-MW49A-101217	Total/NA	Water	300.0	
MB 550-131383/2	Method Blank	Total/NA	Water	300.0	
LCS 550-131383/5	Lab Control Sample	Total/NA	Water	300.0	
LCSD 550-131383/6	Lab Control Sample Dup	Total/NA	Water	300.0	
550-91108-A-1 MS ^100	Matrix Spike	Total/NA	Water	300.0	
550-91108-A-1 MSD ^100	Matrix Spike Duplicate	Total/NA	Water	300.0	

Analysis Batch: 131532

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-91513-1	FC-CCR-MW7-101217	Total/NA	Water	300.0	
550-91513-3	FC-CCR-MW60-101217	Total/NA	Water	300.0	
550-91513-4	FC-CCR-MW61-101217	Total/NA	Water	300.0	
550-91513-5	FC-CCR-MW62-101317	Total/NA	Water	300.0	
550-91513-6	FC-CCR-MW63-101317	Total/NA	Water	300.0	
550-91513-7	FC-CCR-MW64-101317	Total/NA	Water	300.0	
550-91513-8	FC-CCR-MW65-101317	Total/NA	Water	300.0	
550-91513-9	FC-CCR-FD02-101317	Total/NA	Water	300.0	
550-91513-10	FC-CCR-MW66-101317	Total/NA	Water	300.0	
550-91513-11	FC-CCR-MW67-101317	Total/NA	Water	300.0	
550-91513-12	FC-CCR-MW68-101317	Total/NA	Water	300.0	
550-91513-13	FC-CCR-MW69-101317	Total/NA	Water	300.0	
550-91513-14	FC-CCR-MW70-101317	Total/NA	Water	300.0	
550-91513-15	FC-CCR-MW71-101317	Total/NA	Water	300.0	
550-91513-16	FC-CCR-MW72-101317	Total/NA	Water	300.0	
550-91513-17	FC-CCR-MW73-101217	Total/NA	Water	300.0	
MB 550-131532/60	Method Blank	Total/NA	Water	300.0	
LCS 550-131532/62	Lab Control Sample	Total/NA	Water	300.0	
LCSD 550-131532/63	Lab Control Sample Dup	Total/NA	Water	300.0	
550-91513-1 MS	FC-CCR-MW7-101217	Total/NA	Water	300.0	
550-91513-1 MSD	FC-CCR-MW7-101217	Total/NA	Water	300.0	

Analysis Batch: 131568

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-91513-18	FC-CCR-FD01-101217	Total/NA	Water	300.0	
550-91513-19	FC-CCR-MW74-101117	Total/NA	Water	300.0	
550-91513-20	FC-CCR-MW75-101217	Total/NA	Water	300.0	
MB 550-131568/2	Method Blank	Total/NA	Water	300.0	
LCS 550-131568/5	Lab Control Sample	Total/NA	Water	300.0	
LCSD 550-131568/6	Lab Control Sample Dup	Total/NA	Water	300.0	

Analysis Batch: 131634

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 550-131634/2	Method Blank	Total/NA	Water	300.0	
LCS 550-131634/5	Lab Control Sample	Total/NA	Water	300.0	
LCSD 550-131634/6	Lab Control Sample Dup	Total/NA	Water	300.0	

Analysis Batch: 131712

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 550-131712/2	Method Blank	Total/NA	Water	300.0	
LCS 550-131712/5	Lab Control Sample	Total/NA	Water	300.0	
LCSD 550-131712/6	Lab Control Sample Dup	Total/NA	Water	300.0	

HPLC/IC (Continued)

Analysis Batch: 131712 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-91677-A-1 DU	Duplicate	Total/NA	Water	300.0	

Metals

Prep Batch: 130095

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-91513-1	FC-CCR-MW7-101217	Total/NA	Water	200.8	
550-91513-2	FC-CCR-MW49A-101217	Total/NA	Water	200.8	
550-91513-3	FC-CCR-MW60-101217	Total/NA	Water	200.8	
550-91513-4	FC-CCR-MW61-101217	Total/NA	Water	200.8	
550-91513-5	FC-CCR-MW62-101317	Total/NA	Water	200.8	
550-91513-6	FC-CCR-MW63-101317	Total/NA	Water	200.8	
550-91513-7	FC-CCR-MW64-101317	Total/NA	Water	200.8	
550-91513-8	FC-CCR-MW65-101317	Total/NA	Water	200.8	
550-91513-9	FC-CCR-FD02-101317	Total/NA	Water	200.8	
550-91513-10	FC-CCR-MW66-101317	Total/NA	Water	200.8	
550-91513-11	FC-CCR-MW67-101317	Total/NA	Water	200.8	
550-91513-12	FC-CCR-MW68-101317	Total/NA	Water	200.8	
550-91513-13	FC-CCR-MW69-101317	Total/NA	Water	200.8	
MB 550-130095/1-A	Method Blank	Total/NA	Water	200.8	
LCS 550-130095/2-A	Lab Control Sample	Total/NA	Water	200.8	
LCSD 550-130095/3-A	Lab Control Sample Dup	Total/NA	Water	200.8	
550-91513-1 MS	FC-CCR-MW7-101217	Total/NA	Water	200.8	
550-91513-1 MSD	FC-CCR-MW7-101217	Total/NA	Water	200.8	

Prep Batch: 130097

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-91513-1	FC-CCR-MW7-101217	Total/NA	Water	200.7	
550-91513-2	FC-CCR-MW49A-101217	Total/NA	Water	200.7	
550-91513-3	FC-CCR-MW60-101217	Total/NA	Water	200.7	
550-91513-4	FC-CCR-MW61-101217	Total/NA	Water	200.7	
550-91513-5	FC-CCR-MW62-101317	Total/NA	Water	200.7	
550-91513-6	FC-CCR-MW63-101317	Total/NA	Water	200.7	
550-91513-7	FC-CCR-MW64-101317	Total/NA	Water	200.7	
550-91513-8	FC-CCR-MW65-101317	Total/NA	Water	200.7	
550-91513-9	FC-CCR-FD02-101317	Total/NA	Water	200.7	
550-91513-10	FC-CCR-MW66-101317	Total/NA	Water	200.7	
550-91513-11	FC-CCR-MW67-101317	Total/NA	Water	200.7	
550-91513-12	FC-CCR-MW68-101317	Total/NA	Water	200.7	
550-91513-13	FC-CCR-MW69-101317	Total/NA	Water	200.7	
550-91513-14	FC-CCR-MW70-101317	Total/NA	Water	200.7	
550-91513-15	FC-CCR-MW71-101317	Total/NA	Water	200.7	
550-91513-16	FC-CCR-MW72-101317	Total/NA	Water	200.7	
550-91513-17	FC-CCR-MW73-101217	Total/NA	Water	200.7	
550-91513-18	FC-CCR-FD01-101217	Total/NA	Water	200.7	
550-91513-19	FC-CCR-MW74-101117	Total/NA	Water	200.7	
550-91513-20	FC-CCR-MW75-101217	Total/NA	Water	200.7	
MB 550-130097/1-A	Method Blank	Total/NA	Water	200.7	
LCS 550-130097/2-A	Lab Control Sample	Total/NA	Water	200.7	
LCSD 550-130097/3-A	Lab Control Sample Dup	Total/NA	Water	200.7	

Metals (Continued)

Prep Batch: 130097 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-91513-1 MS	FC-CCR-MW7-101217	Total/NA	Water	200.7	
550-91513-1 MSD	FC-CCR-MW7-101217	Total/NA	Water	200.7	

Prep Batch: 130139

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-91513-1	FC-CCR-MW7-101217	Total/NA	Water	245.1	
550-91513-2	FC-CCR-MW49A-101217	Total/NA	Water	245.1	
550-91513-3	FC-CCR-MW60-101217	Total/NA	Water	245.1	
550-91513-4	FC-CCR-MW61-101217	Total/NA	Water	245.1	
550-91513-5	FC-CCR-MW62-101317	Total/NA	Water	245.1	
550-91513-6	FC-CCR-MW63-101317	Total/NA	Water	245.1	
550-91513-7	FC-CCR-MW64-101317	Total/NA	Water	245.1	
550-91513-8	FC-CCR-MW65-101317	Total/NA	Water	245.1	
550-91513-9	FC-CCR-FD02-101317	Total/NA	Water	245.1	
550-91513-10	FC-CCR-MW66-101317	Total/NA	Water	245.1	
550-91513-11	FC-CCR-MW67-101317	Total/NA	Water	245.1	
550-91513-12	FC-CCR-MW68-101317	Total/NA	Water	245.1	
550-91513-13	FC-CCR-MW69-101317	Total/NA	Water	245.1	
550-91513-14	FC-CCR-MW70-101317	Total/NA	Water	245.1	
550-91513-15	FC-CCR-MW71-101317	Total/NA	Water	245.1	
550-91513-16	FC-CCR-MW72-101317	Total/NA	Water	245.1	
550-91513-17	FC-CCR-MW73-101217	Total/NA	Water	245.1	
550-91513-18	FC-CCR-FD01-101217	Total/NA	Water	245.1	
550-91513-19	FC-CCR-MW74-101117	Total/NA	Water	245.1	
550-91513-20	FC-CCR-MW75-101217	Total/NA	Water	245.1	
MB 550-130139/1-A	Method Blank	Total/NA	Water	245.1	
LCS 550-130139/2-A	Lab Control Sample	Total/NA	Water	245.1	
LCSD 550-130139/3-A	Lab Control Sample Dup	Total/NA	Water	245.1	
550-91513-1 MS	FC-CCR-MW7-101217	Total/NA	Water	245.1	
550-91513-1 MSD	FC-CCR-MW7-101217	Total/NA	Water	245.1	

Analysis Batch: 130298

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-91513-1	FC-CCR-MW7-101217	Total/NA	Water	245.1	130139
550-91513-2	FC-CCR-MW49A-101217	Total/NA	Water	245.1	130139
550-91513-3	FC-CCR-MW60-101217	Total/NA	Water	245.1	130139
550-91513-4	FC-CCR-MW61-101217	Total/NA	Water	245.1	130139
550-91513-5	FC-CCR-MW62-101317	Total/NA	Water	245.1	130139
550-91513-6	FC-CCR-MW63-101317	Total/NA	Water	245.1	130139
550-91513-7	FC-CCR-MW64-101317	Total/NA	Water	245.1	130139
550-91513-8	FC-CCR-MW65-101317	Total/NA	Water	245.1	130139
550-91513-9	FC-CCR-FD02-101317	Total/NA	Water	245.1	130139
550-91513-10	FC-CCR-MW66-101317	Total/NA	Water	245.1	130139
550-91513-11	FC-CCR-MW67-101317	Total/NA	Water	245.1	130139
550-91513-12	FC-CCR-MW68-101317	Total/NA	Water	245.1	130139
550-91513-13	FC-CCR-MW69-101317	Total/NA	Water	245.1	130139
550-91513-14	FC-CCR-MW70-101317	Total/NA	Water	245.1	130139
550-91513-15	FC-CCR-MW71-101317	Total/NA	Water	245.1	130139
550-91513-16	FC-CCR-MW72-101317	Total/NA	Water	245.1	130139
550-91513-17	FC-CCR-MW73-101217	Total/NA	Water	245.1	130139
550-91513-18	FC-CCR-FD01-101217	Total/NA	Water	245.1	130139

Metals (Continued)

Analysis Batch: 130298 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-91513-19	FC-CCR-MW74-101117	Total/NA	Water	245.1	130139
550-91513-20	FC-CCR-MW75-101217	Total/NA	Water	245.1	130139
MB 550-130139/1-A	Method Blank	Total/NA	Water	245.1	130139
LCS 550-130139/2-A	Lab Control Sample	Total/NA	Water	245.1	130139
LCSD 550-130139/3-A	Lab Control Sample Dup	Total/NA	Water	245.1	130139
550-91513-1 MS	FC-CCR-MW7-101217	Total/NA	Water	245.1	130139
550-91513-1 MSD	FC-CCR-MW7-101217	Total/NA	Water	245.1	130139

Analysis Batch: 130717

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-91513-1	FC-CCR-MW7-101217	Total/NA	Water	200.7 Rev 4.4	130097
550-91513-2	FC-CCR-MW49A-101217	Total/NA	Water	200.7 Rev 4.4	130097
550-91513-3	FC-CCR-MW60-101217	Total/NA	Water	200.7 Rev 4.4	130097
550-91513-4	FC-CCR-MW61-101217	Total/NA	Water	200.7 Rev 4.4	130097
550-91513-5	FC-CCR-MW62-101317	Total/NA	Water	200.7 Rev 4.4	130097
550-91513-6	FC-CCR-MW63-101317	Total/NA	Water	200.7 Rev 4.4	130097
550-91513-7	FC-CCR-MW64-101317	Total/NA	Water	200.7 Rev 4.4	130097
550-91513-8	FC-CCR-MW65-101317	Total/NA	Water	200.7 Rev 4.4	130097
550-91513-9	FC-CCR-FD02-101317	Total/NA	Water	200.7 Rev 4.4	130097
550-91513-10	FC-CCR-MW66-101317	Total/NA	Water	200.7 Rev 4.4	130097
550-91513-11	FC-CCR-MW67-101317	Total/NA	Water	200.7 Rev 4.4	130097
550-91513-12	FC-CCR-MW68-101317	Total/NA	Water	200.7 Rev 4.4	130097
550-91513-13	FC-CCR-MW69-101317	Total/NA	Water	200.7 Rev 4.4	130097
550-91513-14	FC-CCR-MW70-101317	Total/NA	Water	200.7 Rev 4.4	130097
550-91513-15	FC-CCR-MW71-101317	Total/NA	Water	200.7 Rev 4.4	130097
550-91513-16	FC-CCR-MW72-101317	Total/NA	Water	200.7 Rev 4.4	130097
550-91513-17	FC-CCR-MW73-101217	Total/NA	Water	200.7 Rev 4.4	130097
550-91513-18	FC-CCR-FD01-101217	Total/NA	Water	200.7 Rev 4.4	130097
550-91513-19	FC-CCR-MW74-101117	Total/NA	Water	200.7 Rev 4.4	130097
550-91513-20	FC-CCR-MW75-101217	Total/NA	Water	200.7 Rev 4.4	130097
MB 550-130097/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	130097
LCS 550-130097/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	130097
LCSD 550-130097/3-A	Lab Control Sample Dup	Total/NA	Water	200.7 Rev 4.4	130097
550-91513-1 MS	FC-CCR-MW7-101217	Total/NA	Water	200.7 Rev 4.4	130097
550-91513-1 MSD	FC-CCR-MW7-101217	Total/NA	Water	200.7 Rev 4.4	130097

Analysis Batch: 131241

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-91513-1	FC-CCR-MW7-101217	Total/NA	Water	200.7 Rev 4.4	130097
550-91513-2	FC-CCR-MW49A-101217	Total/NA	Water	200.7 Rev 4.4	130097
550-91513-3	FC-CCR-MW60-101217	Total/NA	Water	200.7 Rev 4.4	130097
550-91513-4	FC-CCR-MW61-101217	Total/NA	Water	200.7 Rev 4.4	130097
550-91513-5	FC-CCR-MW62-101317	Total/NA	Water	200.7 Rev 4.4	130097
550-91513-6	FC-CCR-MW63-101317	Total/NA	Water	200.7 Rev 4.4	130097
550-91513-7	FC-CCR-MW64-101317	Total/NA	Water	200.7 Rev 4.4	130097
550-91513-8	FC-CCR-MW65-101317	Total/NA	Water	200.7 Rev 4.4	130097
550-91513-9	FC-CCR-FD02-101317	Total/NA	Water	200.7 Rev 4.4	130097
550-91513-10	FC-CCR-MW66-101317	Total/NA	Water	200.7 Rev 4.4	130097
550-91513-11	FC-CCR-MW67-101317	Total/NA	Water	200.7 Rev 4.4	130097
550-91513-12	FC-CCR-MW68-101317	Total/NA	Water	200.7 Rev 4.4	130097
550-91513-13	FC-CCR-MW69-101317	Total/NA	Water	200.7 Rev 4.4	130097

Metals (Continued)

Analysis Batch: 131241 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-91513-14	FC-CCR-MW70-101317	Total/NA	Water	200.7 Rev 4.4	130097
550-91513-15	FC-CCR-MW71-101317	Total/NA	Water	200.7 Rev 4.4	130097
550-91513-16	FC-CCR-MW72-101317	Total/NA	Water	200.7 Rev 4.4	130097
550-91513-17	FC-CCR-MW73-101217	Total/NA	Water	200.7 Rev 4.4	130097
550-91513-18	FC-CCR-FD01-101217	Total/NA	Water	200.7 Rev 4.4	130097
550-91513-19	FC-CCR-MW74-101117	Total/NA	Water	200.7 Rev 4.4	130097
550-91513-20	FC-CCR-MW75-101217	Total/NA	Water	200.7 Rev 4.4	130097
MB 550-130097/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	130097
LCS 550-130097/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	130097
LCSD 550-130097/3-A	Lab Control Sample Dup	Total/NA	Water	200.7 Rev 4.4	130097
550-91513-1 MS	FC-CCR-MW7-101217	Total/NA	Water	200.7 Rev 4.4	130097
550-91513-1 MSD	FC-CCR-MW7-101217	Total/NA	Water	200.7 Rev 4.4	130097

Analysis Batch: 131843

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-91513-2	FC-CCR-MW49A-101217	Total/NA	Water	200.8 LL	130095
550-91513-3	FC-CCR-MW60-101217	Total/NA	Water	200.8 LL	130095
550-91513-4	FC-CCR-MW61-101217	Total/NA	Water	200.8 LL	130095
550-91513-5	FC-CCR-MW62-101317	Total/NA	Water	200.8 LL	130095
550-91513-6	FC-CCR-MW63-101317	Total/NA	Water	200.8 LL	130095
550-91513-7	FC-CCR-MW64-101317	Total/NA	Water	200.8 LL	130095
MB 550-130095/1-A	Method Blank	Total/NA	Water	200.8 LL	130095
LCS 550-130095/2-A	Lab Control Sample	Total/NA	Water	200.8 LL	130095
LCSD 550-130095/3-A	Lab Control Sample Dup	Total/NA	Water	200.8 LL	130095

Analysis Batch: 131951

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-91513-1	FC-CCR-MW7-101217	Total/NA	Water	200.8 LL	130095
550-91513-8	FC-CCR-MW65-101317	Total/NA	Water	200.8 LL	130095
550-91513-9	FC-CCR-FD02-101317	Total/NA	Water	200.8 LL	130095
550-91513-10	FC-CCR-MW66-101317	Total/NA	Water	200.8 LL	130095
550-91513-11	FC-CCR-MW67-101317	Total/NA	Water	200.8 LL	130095
550-91513-12	FC-CCR-MW68-101317	Total/NA	Water	200.8 LL	130095
550-91513-13	FC-CCR-MW69-101317	Total/NA	Water	200.8 LL	130095
MB 550-130095/1-A	Method Blank	Total/NA	Water	200.8 LL	130095
LCS 550-130095/2-A	Lab Control Sample	Total/NA	Water	200.8 LL	130095
LCSD 550-130095/3-A	Lab Control Sample Dup	Total/NA	Water	200.8 LL	130095
550-91513-1 MS	FC-CCR-MW7-101217	Total/NA	Water	200.8 LL	130095
550-91513-1 MSD	FC-CCR-MW7-101217	Total/NA	Water	200.8 LL	130095

Prep Batch: 132200

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-91513-2	FC-CCR-MW49A-101217	Total/NA	Water	200.8	
550-91513-3	FC-CCR-MW60-101217	Total/NA	Water	200.8	
550-91513-4	FC-CCR-MW61-101217	Total/NA	Water	200.8	
550-91513-5	FC-CCR-MW62-101317	Total/NA	Water	200.8	
550-91513-6	FC-CCR-MW63-101317	Total/NA	Water	200.8	
550-91513-7	FC-CCR-MW64-101317	Total/NA	Water	200.8	
550-91513-14	FC-CCR-MW70-101317	Total/NA	Water	200.8	
550-91513-15	FC-CCR-MW71-101317	Total/NA	Water	200.8	
550-91513-16	FC-CCR-MW72-101317	Total/NA	Water	200.8	

Metals (Continued)

Prep Batch: 132200 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-91513-17	FC-CCR-MW73-101217	Total/NA	Water	200.8	
550-91513-18	FC-CCR-FD01-101217	Total/NA	Water	200.8	
550-91513-19	FC-CCR-MW74-101117	Total/NA	Water	200.8	
550-91513-20	FC-CCR-MW75-101217	Total/NA	Water	200.8	
MB 550-132200/1-A	Method Blank	Total/NA	Water	200.8	
LCS 550-132200/2-A	Lab Control Sample	Total/NA	Water	200.8	
LCSD 550-132200/3-A	Lab Control Sample Dup	Total/NA	Water	200.8	
550-91513-4 MS	FC-CCR-MW61-101217	Total/NA	Water	200.8	
550-91513-4 MSD	FC-CCR-MW61-101217	Total/NA	Water	200.8	

Analysis Batch: 132393

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-91513-2	FC-CCR-MW49A-101217	Total/NA	Water	200.8 LL	132200
550-91513-3	FC-CCR-MW60-101217	Total/NA	Water	200.8 LL	132200
550-91513-4	FC-CCR-MW61-101217	Total/NA	Water	200.8 LL	132200
550-91513-5	FC-CCR-MW62-101317	Total/NA	Water	200.8 LL	132200
550-91513-6	FC-CCR-MW63-101317	Total/NA	Water	200.8 LL	132200
550-91513-7	FC-CCR-MW64-101317	Total/NA	Water	200.8 LL	132200
MB 550-132200/1-A	Method Blank	Total/NA	Water	200.8 LL	132200
LCS 550-132200/2-A	Lab Control Sample	Total/NA	Water	200.8 LL	132200
LCSD 550-132200/3-A	Lab Control Sample Dup	Total/NA	Water	200.8 LL	132200
550-91513-4 MS	FC-CCR-MW61-101217	Total/NA	Water	200.8 LL	132200
550-91513-4 MSD	FC-CCR-MW61-101217	Total/NA	Water	200.8 LL	132200

Analysis Batch: 132414

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-91513-14	FC-CCR-MW70-101317	Total/NA	Water	200.8 LL	132200
550-91513-15	FC-CCR-MW71-101317	Total/NA	Water	200.8 LL	132200
550-91513-16	FC-CCR-MW72-101317	Total/NA	Water	200.8 LL	132200
550-91513-17	FC-CCR-MW73-101217	Total/NA	Water	200.8 LL	132200
550-91513-18	FC-CCR-FD01-101217	Total/NA	Water	200.8 LL	132200
550-91513-19	FC-CCR-MW74-101117	Total/NA	Water	200.8 LL	132200
550-91513-20	FC-CCR-MW75-101217	Total/NA	Water	200.8 LL	132200

Lab Chronicle

Client: Arizona Public Service Company
Project/Site: CCR

TestAmerica Job ID: 550-91513-2
SDG: Cholla

Client Sample ID: FC-CCR-MW7-101217 — Lab Sample ID: 550-91513-1

Date Collected: 10/12/17 15:23 — **Matrix: Water**
Date Received: 10/14/17 10:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		2	131532	11/01/17 18:38	JAE	TAL PHX
Total/NA	Prep	200.7			130097	10/17/17 05:53	SGO	TAL PHX
Total/NA	Analysis	200.7 Rev 4.4		1	130717	10/23/17 21:15	ARE	TAL PHX
Total/NA	Prep	200.7			130097	10/17/17 05:53	SGO	TAL PHX
Total/NA	Analysis	200.7 Rev 4.4		1	131241	10/30/17 03:13	ARE	TAL PHX
Total/NA	Prep	200.8			130095	10/17/17 05:42	SGO	TAL PHX
Total/NA	Analysis	200.8 LL		1	131951	11/07/17 22:00	TEK	TAL PHX
Total/NA	Prep	245.1			130139	10/17/17 11:45	JTG	TAL PHX
Total/NA	Analysis	245.1		1	130298	10/18/17 16:37	JTG	TAL PHX

Client Sample ID: FC-CCR-MW49A-101217 — Lab Sample ID: 550-91513-2

Date Collected: 10/12/17 16:16 — **Matrix: Water**
Date Received: 10/14/17 10:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		10	131383	10/31/17 16:50	JAE	TAL PHX
Total/NA	Prep	200.7			130097	10/17/17 05:53	SGO	TAL PHX
Total/NA	Analysis	200.7 Rev 4.4		1	130717	10/23/17 21:21	ARE	TAL PHX
Total/NA	Prep	200.7			130097	10/17/17 05:53	SGO	TAL PHX
Total/NA	Analysis	200.7 Rev 4.4		1	131241	10/30/17 03:25	ARE	TAL PHX
Total/NA	Prep	200.8			130095	10/17/17 05:42	SGO	TAL PHX
Total/NA	Analysis	200.8 LL		4	131843	11/06/17 19:53	TEK	TAL PHX
Total/NA	Prep	200.8			132200	11/10/17 11:39	EXZ	TAL PHX
Total/NA	Analysis	200.8 LL		10	132393	11/13/17 17:11	TEK	TAL PHX
Total/NA	Prep	245.1			130139	10/17/17 11:45	JTG	TAL PHX
Total/NA	Analysis	245.1		1	130298	10/18/17 16:38	JTG	TAL PHX

Client Sample ID: FC-CCR-MW60-101217 — Lab Sample ID: 550-91513-3

Date Collected: 10/12/17 12:35 — **Matrix: Water**
Date Received: 10/14/17 10:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		2	131532	11/01/17 21:05	JAE	TAL PHX
Total/NA	Prep	200.7			130097	10/17/17 05:53	SGO	TAL PHX
Total/NA	Analysis	200.7 Rev 4.4		1	130717	10/23/17 21:27	ARE	TAL PHX
Total/NA	Prep	200.7			130097	10/17/17 05:53	SGO	TAL PHX
Total/NA	Analysis	200.7 Rev 4.4		1	131241	10/30/17 03:31	ARE	TAL PHX
Total/NA	Prep	200.8			130095	10/17/17 05:42	SGO	TAL PHX
Total/NA	Analysis	200.8 LL		4	131843	11/06/17 19:58	TEK	TAL PHX
Total/NA	Prep	200.8			132200	11/10/17 11:39	EXZ	TAL PHX
Total/NA	Analysis	200.8 LL		10	132393	11/13/17 17:16	TEK	TAL PHX
Total/NA	Prep	245.1			130139	10/17/17 11:45	JTG	TAL PHX
Total/NA	Analysis	245.1		1	130298	10/18/17 16:40	JTG	TAL PHX

Lab Chronicle

Client: Arizona Public Service Company
Project/Site: CCR

TestAmerica Job ID: 550-91513-2
SDG: Cholla

Client Sample ID: FC-CCR-MW61-101217 — Lab Sample ID: 550-91513-4

Date Collected: 10/12/17 13:28 — **Matrix: Water**
Date Received: 10/14/17 10:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	131532	11/01/17 21:42	JAE	TAL PHX
Total/NA	Prep	200.7			130097	10/17/17 05:53	SGO	TAL PHX
Total/NA	Analysis	200.7 Rev 4.4		1	130717	10/23/17 21:33	ARE	TAL PHX
Total/NA	Prep	200.7			130097	10/17/17 05:53	SGO	TAL PHX
Total/NA	Analysis	200.7 Rev 4.4		1	131241	10/30/17 03:37	ARE	TAL PHX
Total/NA	Prep	200.8			130095	10/17/17 05:42	SGO	TAL PHX
Total/NA	Analysis	200.8 LL		4	131843	11/06/17 20:03	TEK	TAL PHX
Total/NA	Prep	200.8			132200	11/10/17 11:39	EXZ	TAL PHX
Total/NA	Analysis	200.8 LL		10	132393	11/13/17 16:47	TEK	TAL PHX
Total/NA	Prep	245.1			130139	10/17/17 11:45	JTG	TAL PHX
Total/NA	Analysis	245.1		1	130298	10/18/17 16:41	JTG	TAL PHX

Client Sample ID: FC-CCR-MW62-101317 — Lab Sample ID: 550-91513-5

Date Collected: 10/13/17 10:24 — **Matrix: Water**
Date Received: 10/14/17 10:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	131532	11/01/17 22:19	JAE	TAL PHX
Total/NA	Prep	200.7			130097	10/17/17 05:53	SGO	TAL PHX
Total/NA	Analysis	200.7 Rev 4.4		1	130717	10/23/17 21:38	ARE	TAL PHX
Total/NA	Prep	200.7			130097	10/17/17 05:53	SGO	TAL PHX
Total/NA	Analysis	200.7 Rev 4.4		1	131241	10/30/17 03:42	ARE	TAL PHX
Total/NA	Prep	200.8			130095	10/17/17 05:42	SGO	TAL PHX
Total/NA	Analysis	200.8 LL		4	131843	11/06/17 20:08	TEK	TAL PHX
Total/NA	Prep	200.8			132200	11/10/17 11:39	EXZ	TAL PHX
Total/NA	Analysis	200.8 LL		10	132393	11/13/17 17:25	TEK	TAL PHX
Total/NA	Prep	245.1			130139	10/17/17 11:45	JTG	TAL PHX
Total/NA	Analysis	245.1		1	130298	10/18/17 16:43	JTG	TAL PHX

Client Sample ID: FC-CCR-MW63-101317 — Lab Sample ID: 550-91513-6

Date Collected: 10/13/17 11:05 — **Matrix: Water**
Date Received: 10/14/17 10:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	131532	11/01/17 23:33	JAE	TAL PHX
Total/NA	Prep	200.7			130097	10/17/17 05:53	SGO	TAL PHX
Total/NA	Analysis	200.7 Rev 4.4		1	130717	10/23/17 21:44	ARE	TAL PHX
Total/NA	Prep	200.7			130097	10/17/17 05:53	SGO	TAL PHX
Total/NA	Analysis	200.7 Rev 4.4		1	131241	10/30/17 03:48	ARE	TAL PHX
Total/NA	Prep	200.8			130095	10/17/17 05:42	SGO	TAL PHX
Total/NA	Analysis	200.8 LL		4	131843	11/06/17 20:13	TEK	TAL PHX
Total/NA	Prep	200.8			132200	11/10/17 11:39	EXZ	TAL PHX
Total/NA	Analysis	200.8 LL		10	132393	11/13/17 17:30	TEK	TAL PHX

Lab Chronicle

Client: Arizona Public Service Company
Project/Site: CCR

TestAmerica Job ID: 550-91513-2
SDG: Cholla

Client Sample ID: FC-CCR-MW63-101317 — Lab Sample ID: 550-91513-6

Date Collected: 10/13/17 11:05 — **Matrix: Water**
Date Received: 10/14/17 10:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	245.1			130139	10/17/17 11:45	JTG	TAL PHX
Total/NA	Analysis	245.1		1	130298	10/18/17 16:44	JTG	TAL PHX

Client Sample ID: FC-CCR-MW64-101317 — Lab Sample ID: 550-91513-7

Date Collected: 10/13/17 11:51 — **Matrix: Water**
Date Received: 10/14/17 10:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	131532	11/02/17 00:10	JAE	TAL PHX
Total/NA	Prep	200.7			130097	10/17/17 05:53	SGO	TAL PHX
Total/NA	Analysis	200.7 Rev 4.4		1	130717	10/23/17 21:50	ARE	TAL PHX
Total/NA	Prep	200.7			130097	10/17/17 05:53	SGO	TAL PHX
Total/NA	Analysis	200.7 Rev 4.4		1	131241	10/30/17 03:54	ARE	TAL PHX
Total/NA	Prep	200.8			130095	10/17/17 05:42	SGO	TAL PHX
Total/NA	Analysis	200.8 LL		4	131843	11/06/17 20:17	TEK	TAL PHX
Total/NA	Prep	200.8			132200	11/10/17 11:39	EXZ	TAL PHX
Total/NA	Analysis	200.8 LL		10	132393	11/13/17 17:35	TEK	TAL PHX
Total/NA	Prep	245.1			130139	10/17/17 11:45	JTG	TAL PHX
Total/NA	Analysis	245.1		1	130298	10/18/17 16:46	JTG	TAL PHX

Client Sample ID: FC-CCR-MW65-101317 — Lab Sample ID: 550-91513-8

Date Collected: 10/13/17 09:27 — **Matrix: Water**
Date Received: 10/14/17 10:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	131532	11/02/17 00:46	JAE	TAL PHX
Total/NA	Prep	200.7			130097	10/17/17 05:53	SGO	TAL PHX
Total/NA	Analysis	200.7 Rev 4.4		1	130717	10/23/17 21:53	ARE	TAL PHX
Total/NA	Prep	200.7			130097	10/17/17 05:53	SGO	TAL PHX
Total/NA	Analysis	200.7 Rev 4.4		1	131241	10/30/17 03:57	ARE	TAL PHX
Total/NA	Prep	200.8			130095	10/17/17 05:42	SGO	TAL PHX
Total/NA	Analysis	200.8 LL		1	131951	11/07/17 22:14	TEK	TAL PHX
Total/NA	Prep	245.1			130139	10/17/17 11:45	JTG	TAL PHX
Total/NA	Analysis	245.1		1	130298	10/18/17 16:48	JTG	TAL PHX

Client Sample ID: FC-CCR-FD02-101317 — Lab Sample ID: 550-91513-9

Date Collected: 10/13/17 09:27 — **Matrix: Water**
Date Received: 10/14/17 10:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	131532	11/02/17 01:23	JAE	TAL PHX
Total/NA	Prep	200.7			130097	10/17/17 05:53	SGO	TAL PHX
Total/NA	Analysis	200.7 Rev 4.4		1	130717	10/23/17 21:56	ARE	TAL PHX

Lab Chronicle

Client: Arizona Public Service Company
Project/Site: CCR

TestAmerica Job ID: 550-91513-2
SDG: Cholla

Client Sample ID: FC-CCR-FD02-101317 — Lab Sample ID: 550-91513-9

Date Collected: 10/13/17 09:27 — **Matrix: Water**
Date Received: 10/14/17 10:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.7			130097	10/17/17 05:53	SGO	TAL PHX
Total/NA	Analysis	200.7 Rev 4.4		1	131241	10/30/17 04:05	ARE	TAL PHX
Total/NA	Prep	200.8			130095	10/17/17 05:42	SGO	TAL PHX
Total/NA	Analysis	200.8 LL		1	131951	11/07/17 22:19	TEK	TAL PHX
Total/NA	Prep	245.1			130139	10/17/17 11:45	JTG	TAL PHX
Total/NA	Analysis	245.1		1	130298	10/18/17 16:49	JTG	TAL PHX

Client Sample ID: FC-CCR-MW66-101317 — Lab Sample ID: 550-91513-10

Date Collected: 10/13/17 09:58 — **Matrix: Water**
Date Received: 10/14/17 10:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		5	131532	11/02/17 02:00	JAE	TAL PHX
Total/NA	Prep	200.7			130097	10/17/17 05:53	SGO	TAL PHX
Total/NA	Analysis	200.7 Rev 4.4		1	130717	10/23/17 21:58	ARE	TAL PHX
Total/NA	Prep	200.7			130097	10/17/17 05:53	SGO	TAL PHX
Total/NA	Analysis	200.7 Rev 4.4		1	131241	10/30/17 04:14	ARE	TAL PHX
Total/NA	Prep	200.8			130095	10/17/17 05:42	SGO	TAL PHX
Total/NA	Analysis	200.8 LL		1	131951	11/07/17 22:24	TEK	TAL PHX
Total/NA	Prep	245.1			130139	10/17/17 11:45	JTG	TAL PHX
Total/NA	Analysis	245.1		1	130298	10/18/17 16:51	JTG	TAL PHX

Client Sample ID: FC-CCR-MW67-101317 — Lab Sample ID: 550-91513-11

Date Collected: 10/13/17 15:31 — **Matrix: Water**
Date Received: 10/14/17 10:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		5	131532	11/02/17 03:14	JAE	TAL PHX
Total/NA	Prep	200.7			130097	10/17/17 05:53	SGO	TAL PHX
Total/NA	Analysis	200.7 Rev 4.4		1	130717	10/23/17 22:10	ARE	TAL PHX
Total/NA	Prep	200.7			130097	10/17/17 05:53	SGO	TAL PHX
Total/NA	Analysis	200.7 Rev 4.4		1	131241	10/30/17 04:26	ARE	TAL PHX
Total/NA	Prep	200.8			130095	10/17/17 05:42	SGO	TAL PHX
Total/NA	Analysis	200.8 LL		1	131951	11/07/17 22:28	TEK	TAL PHX
Total/NA	Prep	245.1			130139	10/17/17 11:45	JTG	TAL PHX
Total/NA	Analysis	245.1		1	130298	10/18/17 16:56	JTG	TAL PHX

Client Sample ID: FC-CCR-MW68-101317 — Lab Sample ID: 550-91513-12

Date Collected: 10/13/17 15:06 — **Matrix: Water**
Date Received: 10/14/17 10:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		5	131532	11/02/17 03:50	JAE	TAL PHX

Lab Chronicle

Client: Arizona Public Service Company
Project/Site: CCR

TestAmerica Job ID: 550-91513-2
SDG: Cholla

Client Sample ID: FC-CCR-MW68-101317 — Lab Sample ID: 550-91513-12

Date Collected: 10/13/17 15:06 — **Matrix: Water**
Date Received: 10/14/17 10:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.7			130097	10/17/17 05:53	SGO	TAL PHX
Total/NA	Analysis	200.7 Rev 4.4		1	130717	10/23/17 22:16	ARE	TAL PHX
Total/NA	Prep	200.7			130097	10/17/17 05:53	SGO	TAL PHX
Total/NA	Analysis	200.7 Rev 4.4		1	131241	10/30/17 04:37	ARE	TAL PHX
Total/NA	Prep	200.8			130095	10/17/17 05:42	SGO	TAL PHX
Total/NA	Analysis	200.8 LL		1	131951	11/07/17 22:33	TEK	TAL PHX
Total/NA	Prep	245.1			130139	10/17/17 11:45	JTG	TAL PHX
Total/NA	Analysis	245.1		1	130298	10/18/17 16:57	JTG	TAL PHX

Client Sample ID: FC-CCR-MW69-101317 — Lab Sample ID: 550-91513-13

Date Collected: 10/13/17 14:30 — **Matrix: Water**
Date Received: 10/14/17 10:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		5	131532	11/02/17 04:27	JAE	TAL PHX
Total/NA	Prep	200.7			130097	10/17/17 05:53	SGO	TAL PHX
Total/NA	Analysis	200.7 Rev 4.4		1	130717	10/23/17 22:22	ARE	TAL PHX
Total/NA	Prep	200.7			130097	10/17/17 05:53	SGO	TAL PHX
Total/NA	Analysis	200.7 Rev 4.4		1	131241	10/30/17 04:49	ARE	TAL PHX
Total/NA	Prep	200.8			130095	10/17/17 05:42	SGO	TAL PHX
Total/NA	Analysis	200.8 LL		1	131951	11/07/17 22:38	TEK	TAL PHX
Total/NA	Prep	245.1			130139	10/17/17 11:45	JTG	TAL PHX
Total/NA	Analysis	245.1		1	130298	10/18/17 17:00	JTG	TAL PHX

Client Sample ID: FC-CCR-MW70-101317 — Lab Sample ID: 550-91513-14

Date Collected: 10/13/17 12:13 — **Matrix: Water**
Date Received: 10/14/17 10:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		2	131532	11/02/17 05:04	JAE	TAL PHX
Total/NA	Prep	200.7			130097	10/17/17 05:53	SGO	TAL PHX
Total/NA	Analysis	200.7 Rev 4.4		1	130717	10/23/17 22:28	ARE	TAL PHX
Total/NA	Prep	200.7			130097	10/17/17 05:53	SGO	TAL PHX
Total/NA	Analysis	200.7 Rev 4.4		1	131241	10/30/17 05:07	ARE	TAL PHX
Total/NA	Prep	200.8			132200	11/10/17 11:39	EXZ	TAL PHX
Total/NA	Analysis	200.8 LL		10	132414	11/14/17 09:48	TEK	TAL PHX
Total/NA	Prep	245.1			130139	10/17/17 11:45	JTG	TAL PHX
Total/NA	Analysis	245.1		1	130298	10/18/17 16:59	JTG	TAL PHX

Lab Chronicle

Client: Arizona Public Service Company
Project/Site: CCR

TestAmerica Job ID: 550-91513-2
SDG: Cholla

Client Sample ID: FC-CCR-MW71-101317 — Lab Sample ID: 550-91513-15

Date Collected: 10/13/17 13:47 — **Matrix: Water**
Date Received: 10/14/17 10:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		5	131532	11/02/17 05:41	JAE	TAL PHX
Total/NA	Prep	200.7			130097	10/17/17 05:53	SGO	TAL PHX
Total/NA	Analysis	200.7 Rev 4.4		1	130717	10/23/17 22:34	ARE	TAL PHX
Total/NA	Prep	200.7			130097	10/17/17 05:53	SGO	TAL PHX
Total/NA	Analysis	200.7 Rev 4.4		1	131241	10/30/17 05:18	ARE	TAL PHX
Total/NA	Prep	200.8			132200	11/10/17 11:39	EXZ	TAL PHX
Total/NA	Analysis	200.8 LL		10	132414	11/14/17 09:53	TEK	TAL PHX
Total/NA	Prep	245.1			130139	10/17/17 11:45	JTG	TAL PHX
Total/NA	Analysis	245.1		1	130298	10/18/17 17:02	JTG	TAL PHX

Client Sample ID: FC-CCR-MW72-101317 — Lab Sample ID: 550-91513-16

Date Collected: 10/13/17 13:09 — **Matrix: Water**
Date Received: 10/14/17 10:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		5	131532	11/02/17 06:54	JAE	TAL PHX
Total/NA	Prep	200.7			130097	10/17/17 05:53	SGO	TAL PHX
Total/NA	Analysis	200.7 Rev 4.4		1	130717	10/23/17 22:40	ARE	TAL PHX
Total/NA	Prep	200.7			130097	10/17/17 05:53	SGO	TAL PHX
Total/NA	Analysis	200.7 Rev 4.4		1	131241	10/30/17 05:30	ARE	TAL PHX
Total/NA	Prep	200.8			132200	11/10/17 11:39	EXZ	TAL PHX
Total/NA	Analysis	200.8 LL		10	132414	11/14/17 09:58	TEK	TAL PHX
Total/NA	Prep	245.1			130139	10/17/17 11:45	JTG	TAL PHX
Total/NA	Analysis	245.1		1	130298	10/18/17 17:03	JTG	TAL PHX

Client Sample ID: FC-CCR-MW73-101217 — Lab Sample ID: 550-91513-17

Date Collected: 10/12/17 10:53 — **Matrix: Water**
Date Received: 10/14/17 10:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		2	131532	11/02/17 07:31	JAE	TAL PHX
Total/NA	Prep	200.7			130097	10/17/17 05:53	SGO	TAL PHX
Total/NA	Analysis	200.7 Rev 4.4		1	130717	10/23/17 22:46	ARE	TAL PHX
Total/NA	Prep	200.7			130097	10/17/17 05:53	SGO	TAL PHX
Total/NA	Analysis	200.7 Rev 4.4		1	131241	10/30/17 05:36	ARE	TAL PHX
Total/NA	Prep	200.8			132200	11/10/17 11:39	EXZ	TAL PHX
Total/NA	Analysis	200.8 LL		10	132414	11/14/17 10:07	TEK	TAL PHX
Total/NA	Prep	245.1			130139	10/17/17 11:45	JTG	TAL PHX
Total/NA	Analysis	245.1		1	130298	10/18/17 17:05	JTG	TAL PHX

Lab Chronicle

Client: Arizona Public Service Company
Project/Site: CCR

TestAmerica Job ID: 550-91513-2
SDG: Cholla

Client Sample ID: FC-CCR-FD01-101217 — Lab Sample ID: 550-91513-18

Date Collected: 10/12/17 10:53 — **Matrix: Water**
Date Received: 10/14/17 10:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		2	131568	11/02/17 04:56	JAE	TAL PHX
Total/NA	Prep	200.7			130097	10/17/17 05:53	SGO	TAL PHX
Total/NA	Analysis	200.7 Rev 4.4		1	130717	10/23/17 22:51	ARE	TAL PHX
Total/NA	Prep	200.7			130097	10/17/17 05:53	SGO	TAL PHX
Total/NA	Analysis	200.7 Rev 4.4		1	131241	10/30/17 05:42	ARE	TAL PHX
Total/NA	Prep	200.8			132200	11/10/17 11:39	EXZ	TAL PHX
Total/NA	Analysis	200.8 LL		10	132414	11/14/17 10:12	TEK	TAL PHX
Total/NA	Prep	245.1			130139	10/17/17 11:45	JTG	TAL PHX
Total/NA	Analysis	245.1		1	130298	10/18/17 17:06	JTG	TAL PHX

Client Sample ID: FC-CCR-MW74-101117 — Lab Sample ID: 550-91513-19

Date Collected: 10/11/17 13:58 — **Matrix: Water**
Date Received: 10/14/17 10:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		2	131568	11/02/17 05:50	JAE	TAL PHX
Total/NA	Prep	200.7			130097	10/17/17 05:53	SGO	TAL PHX
Total/NA	Analysis	200.7 Rev 4.4		1	130717	10/23/17 22:57	ARE	TAL PHX
Total/NA	Prep	200.7			130097	10/17/17 05:53	SGO	TAL PHX
Total/NA	Analysis	200.7 Rev 4.4		1	131241	10/30/17 05:53	ARE	TAL PHX
Total/NA	Prep	200.8			132200	11/10/17 11:39	EXZ	TAL PHX
Total/NA	Analysis	200.8 LL		10	132414	11/14/17 10:17	TEK	TAL PHX
Total/NA	Prep	245.1			130139	10/17/17 11:45	JTG	TAL PHX
Total/NA	Analysis	245.1		1	130298	10/18/17 17:08	JTG	TAL PHX

Client Sample ID: FC-CCR-MW75-101217 — Lab Sample ID: 550-91513-20

Date Collected: 10/12/17 14:41 — **Matrix: Water**
Date Received: 10/14/17 10:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		5	131568	11/02/17 07:13	JAE	TAL PHX
Total/NA	Prep	200.7			130097	10/17/17 05:53	SGO	TAL PHX
Total/NA	Analysis	200.7 Rev 4.4		1	130717	10/23/17 23:03	ARE	TAL PHX
Total/NA	Prep	200.7			130097	10/17/17 05:53	SGO	TAL PHX
Total/NA	Analysis	200.7 Rev 4.4		1	131241	10/30/17 05:59	ARE	TAL PHX
Total/NA	Prep	200.8			132200	11/10/17 11:39	EXZ	TAL PHX
Total/NA	Analysis	200.8 LL		10	132414	11/14/17 10:21	TEK	TAL PHX
Total/NA	Prep	245.1			130139	10/17/17 11:45	JTG	TAL PHX
Total/NA	Analysis	245.1		1	130298	10/18/17 17:09	JTG	TAL PHX

Laboratory References:

TAL PHX = TestAmerica Phoenix, 4625 East Cotton Ctr Blvd, Suite 189, Phoenix, AZ 85040, TEL (602)437-3340

Accreditation/Certification Summary

Client: Arizona Public Service Company
Project/Site: CCR

TestAmerica Job ID: 550-91513-2
SDG: Cholla

Laboratory: TestAmerica Phoenix

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Arizona	State Program	9	AZ0728	06-09-18

Method Summary

Client: Arizona Public Service Company
Project/Site: CCR

TestAmerica Job ID: 550-91513-2
SDG: Cholla

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	MCAWW	TAL PHX
200.7 Rev 4.4	Metals (ICP)	40CFR136A	TAL PHX
200.8 LL	Metals (ICP/MS)	EPA	TAL PHX
245.1	Mercury (CVAA)	EPA	TAL 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
MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

Laboratory References:

TAL PHX = TestAmerica Phoenix, 4625 East Cotton Ctr Blvd, 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

91513

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Regulatory Program: CCR

TestAmerica Laboratories, Inc.:

Client Contact	Doug Lavarnway	Doug Lavarnway	10/14/2017
APS Four Corners	928-587-0319	**Lab Contact:**	**Carrier:**
End of County Road 6675	**Analysis Turnaround Time**		
Fruitland, New Mexico 87416			
(928) 587-0319 Phone	TAT if different from Below _____		
(xxx) xxx-xxxx FAX			
Project Name: CCR			
Site: Cholla			
P O #			

COC No: 3 of 6 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 200.7 (Be, Li)	200.8 (Sb, As, Ba, Cd, Cr, Co, Pb, Mo, Se, Tl)	EPA 245.1 (Hg)	EPA 300.0 (F)	Sample Specific Notes:
FC-CCR-MW7-101217	10/12/2017	1523	G	W	2	N	x	x	x	x	x	
FC-CCR-MW49A-101217	10/12/2017	1616	G	W	2	N	x	x	x	x	x	
FC-CCR-MW60-101217	10/12/2017	1235	G	W	2	N	x	x	x	x	x	
FC-CCR-MW61-101217	10/12/2017	1328	G	W	2	N	x	x	x	x	x	
FC-CCR-MW62-101317	10/13/2017	1024	G	W	2	N	x	x	x	x	x	
FC-CCR-MW63-101317	10/13/2017	1105	G	W	2	N	x	x	x	x	x	
FC-CCR-MW64-101317	10/13/2017	1151	G	W	2	N	x	x	x	x	x	
FC-CCR-MW65-101317	10/13/2017	927	G	W	2	N	x	x	x	x	x	
FC-CCR-FD02-101317	10/13/2017	927	G	W	2	N	x	x	x	x	x	

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:

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd:_____ Corr'd:_____ Therm ID No.:_____

Relinquished by: Doug Lavarnway	Company: APS	Date/Time: 10/14 1500	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:	Date/Time: 10-14-17 1000

11/16/2017

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

Chain of Custody Record

9313

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Regulatory Program: CCR

TestAmerica Laboratories, Inc.

Client Contact	**Doug Lavarnway**	**Doug Lavarnway**	**10/14/2017**
APS Four Corners	928-587-0319	**Lab Contact:**	**Carrier:**
End of County Road 6675	**Analysis Turnaround Time**		
Fruitland, New Mexico 87416			
(928) 587-0319 Phone	TAT if different from Below _____		
(xxx) xxx-xxxx FAX			
Project Name: CCR			
Site: Cholla			
P O #			

COC No: 4 of 6 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 200.7 (Be, Li)	200.8 (Sb, As, Ba, Cd, Cr, Co, Pb, Mo, Se, Tl)	EPA 245.1 (Hg)	EPA 300.0 (F)	Sample Specific Notes:
FC-CCR-MW66-101317	10/13/2017	958	G	W	2	N	x	x	x	x	x	
FC-CCR-MW67-101317	10/13/2017	1531	G	W	2	N	x	x	x	x	x	
FC-CCR-MW68-101317	10/13/2017	1506	G	W	2	N	x	x	x	x	x	
FC-CCR-MW69-101317	10/13/2017	1430	G	W	2	N	x	x	x	x	x	
FC-CCR-MW70-101317	10/13/2017	1213	G	W	2	N	x	x	x	x	x	
FC-CCR-MW71-101317	10/13/2017	1347	G	W	2	N	x	x	x	x	x	
FC-CCR-MW72-101317	10/13/2017	1309	G	W	2	N	x	x	x	x	x	
FC-CCR-MW73-101217	10/12/2017	1053	G	W	2	N	x	x	x	x	x	
FC-CCR-FD01-101217	10/12/2017	1053	G	W	2	N	x	x	x	x	x	
FC-CCR-MW74-101117	10/11/2017	1358	G	W	2	N	x	x	x	x	x	
FC-CCR-MW75-101217	10/12/2017	1441	G	W	2	N	x	x	x	x	x	

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:

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:
Doug Lavarnway	APL	10/14 1001			
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time: 10/14/17 1001

11/16/2017

Login Sample Receipt Checklist

Client: Arizona Public Service Company

Job Number: 550-91513-2
SDG Number: Cholla

Login Number: 91513
List Number: 1
Creator: Doerr, Bret C

List Source: TestAmerica 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?	False	
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.