TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

# ANALYTICAL REPORT

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TestAmerica Job ID: 550-71659-1
TestAmerica SDG: Four Corners (FC) Power Plant
Client Project/Site: CCR

For:
Arizona Public Service Company
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Joseph City, Arizona 86032

Attn: Doug Lavarnway

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*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*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: 550-71659-1
SDG: Four Corners (FC) Power Plant

## Qualifiers

### HPLC/IC

| Qualifier | Qualifier Description |
|---|---|
| D2 | Sample required dilution due to high concentration of analyte. |

## 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, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC | Decision level concentration |
| MDA | Minimum detectable activity |
| EDL | Estimated Detection Limit |
| MDC | Minimum detectable concentration |
| 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 |
| 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: 550-71659-1

### Laboratory: TestAmerica Phoenix

**Narrative**

**Job Narrative**
**550-71659-1**

**Comments**
No additional comments.

**Receipt**
The samples were received on 10/22/2016 10:51 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 4 coolers at receipt time were 2.1º C, 2.6º C, 2.6º C and 2.6º C.

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

**Metals**
Method(s) 200.8 LL: The following sample was diluted due to the nature of the sample matrix: FC-CCR-MW49A-1016 (550-71659-2). Elevated reporting limits (RLs) are provided.

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

# Sample Summary

Client: Arizona Public Service Company
Project/Site: CCR

TestAmerica Job ID: 550-71659-1
SDG: Four Corners (FC) Power Plant

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received |
|---|---|---|---|---|
| 550-71659-1 | FC-CCR-MW7-1016 | Water | 10/20/16 10:43 | 10/22/16 10:51 |
| 550-71659-2 | FC-CCR-MW49A-1016 | Water | 10/20/16 08:17 | 10/22/16 10:51 |
| 550-71659-3 | FC-CCR-MW60-1016 | Water | 10/20/16 09:45 | 10/22/16 10:51 |
| 550-71659-4 | FC-CCR-MW61-1016 | Water | 10/20/16 09:07 | 10/22/16 10:51 |
| 550-71659-5 | FC-CCR-MW62-1016 | Water | 10/19/16 16:41 | 10/22/16 10:51 |
| 550-71659-6 | FC-CCR-MW63-1016 | Water | 10/19/16 12:29 | 10/22/16 10:51 |
| 550-71659-7 | FC-CCR-MW64-1016 | Water | 10/19/16 11:58 | 10/22/16 10:51 |
| 550-71659-8 | FC-CCR-MW65-1016 | Water | 10/19/16 15:46 | 10/22/16 10:51 |
| 550-71659-9 | FC-CCR-MW66-1016 | Water | 10/19/16 17:22 | 10/22/16 10:51 |
| 550-71659-10 | FC-CCR-MW67-1016 | Water | 10/20/16 12:51 | 10/22/16 10:51 |
| 550-71659-11 | FC-CCR-MW68-1016 | Water | 10/20/16 13:41 | 10/22/16 10:51 |
| 550-71659-12 | FC-CCR-MW69-1016 | Water | 10/20/16 14:16 | 10/22/16 10:51 |
| 550-71659-13 | FC-CCR-MW70-1016 | Water | 10/19/16 14:29 | 10/22/16 10:51 |
| 550-71659-14 | FC-CCR-MW71-1016 | Water | 10/20/16 11:30 | 10/22/16 10:51 |
| 550-71659-15 | FC-CCR-MW72-1016 | Water | 10/20/16 12:07 | 10/22/16 10:51 |
| 550-71659-16 | FC-CCR-MW100-1016 | Water | 10/20/16 09:07 | 10/22/16 10:51 |
| 550-71659-17 | FC-CCR-MW101-1016 | Water | 10/19/16 12:29 | 10/22/16 10:51 |

# Detection Summary

Client: Arizona Public Service Company
Project/Site: CCR

TestAmerica Job ID: 550-71659-1
SDG: Four Corners (FC) Power Plant

## Client Sample ID: FC-CCR-MW7-1016 — Lab Sample ID: 550-71659-1

| Analyte | Result | Qualifier | RL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|
| Lithium | 0.93 | | 0.20 | mg/L | 1 | | 200.7 Rev 4.4 | Total/NA |
| Arsenic | 0.00033 | | 0.00020 | mg/L | 1 | | 200.8 LL | Total Recoverable |
| Barium | 0.015 | | 0.00020 | mg/L | 1 | | 200.8 LL | Total Recoverable |
| Cadmium | 0.00010 | | 0.00010 | mg/L | 1 | | 200.8 LL | Total Recoverable |
| Cobalt | 0.00083 | | 0.00020 | mg/L | 1 | | 200.8 LL | Total Recoverable |
| Molybdenum | 0.016 | | 0.00020 | mg/L | 1 | | 200.8 LL | Total Recoverable |
| Selenium | 0.0049 | | 0.00060 | mg/L | 1 | | 200.8 LL | Total Recoverable |
| Thallium | 0.00015 | | 0.00010 | mg/L | 1 | | 200.8 LL | Total Recoverable |

## Client Sample ID: FC-CCR-MW49A-1016 — Lab Sample ID: 550-71659-2

| Analyte | Result | Qualifier | RL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|
| Lithium | 1.2 | | 0.20 | mg/L | 1 | | 200.7 Rev 4.4 | Total/NA |
| Barium | 0.022 | | 0.0020 | mg/L | 10 | | 200.8 LL | Total Recoverable |
| Cobalt | 0.0036 | | 0.0020 | mg/L | 10 | | 200.8 LL | Total Recoverable |
| Molybdenum | 0.036 | | 0.0020 | mg/L | 10 | | 200.8 LL | Total Recoverable |
| Thallium | 0.0020 | | 0.0010 | mg/L | 10 | | 200.8 LL | Total Recoverable |

## Client Sample ID: FC-CCR-MW60-1016 — Lab Sample ID: 550-71659-3

| Analyte | Result | Qualifier | RL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|
| Fluoride | 5.3 | | 0.40 | mg/L | 1 | | 300.0 | Total/NA |
| Lithium | 0.81 | | 0.20 | mg/L | 1 | | 200.7 Rev 4.4 | Total/NA |
| Arsenic | 0.00045 | | 0.00020 | mg/L | 1 | | 200.8 LL | Total Recoverable |
| Barium | 0.019 | | 0.00020 | mg/L | 1 | | 200.8 LL | Total Recoverable |
| Cadmium | 0.0031 | | 0.00010 | mg/L | 1 | | 200.8 LL | Total Recoverable |
| Chromium | 0.0019 | | 0.00050 | mg/L | 1 | | 200.8 LL | Total Recoverable |
| Cobalt | 0.29 | | 0.00020 | mg/L | 1 | | 200.8 LL | Total Recoverable |
| Lead | 0.00095 | | 0.00010 | mg/L | 1 | | 200.8 LL | Total Recoverable |
| Molybdenum | 0.18 | | 0.00020 | mg/L | 1 | | 200.8 LL | Total Recoverable |
| Selenium | 0.0013 | | 0.00060 | mg/L | 1 | | 200.8 LL | Total Recoverable |
| Thallium | 0.00024 | | 0.00010 | mg/L | 1 | | 200.8 LL | Total Recoverable |

## Client Sample ID: FC-CCR-MW61-1016 — Lab Sample ID: 550-71659-4

This Detection Summary does not include radiochemical test results.

# Detection Summary

Client: Arizona Public Service Company
Project/Site: CCR

TestAmerica Job ID: 550-71659-1
SDG: Four Corners (FC) Power Plant

## Client Sample ID: FC-CCR-MW61-1016 (Continued) — Lab Sample ID: 550-71659-4

| Analyte | Result | Qualifier | RL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|
| Fluoride | 1.1 | | 0.40 | mg/L | 1 | | 300.0 | Total/NA |
| Lithium | 0.39 | | 0.20 | mg/L | 1 | | 200.7 Rev 4.4 | Total/NA |
| Arsenic | 0.00042 | | 0.00020 | mg/L | 1 | | 200.8 LL | Total Recoverable |
| Barium | 0.014 | | 0.00020 | mg/L | 1 | | 200.8 LL | Total Recoverable |
| Cadmium | 0.00094 | | 0.00010 | mg/L | 1 | | 200.8 LL | Total Recoverable |
| Cobalt | 0.012 | | 0.00020 | mg/L | 1 | | 200.8 LL | Total Recoverable |
| Lead | 0.00092 | | 0.00010 | mg/L | 1 | | 200.8 LL | Total Recoverable |
| Molybdenum | 0.080 | | 0.00020 | mg/L | 1 | | 200.8 LL | Total Recoverable |
| Selenium | 0.00076 | | 0.00060 | mg/L | 1 | | 200.8 LL | Total Recoverable |
| Thallium | 0.00014 | | 0.00010 | mg/L | 1 | | 200.8 LL | Total Recoverable |

## Client Sample ID: FC-CCR-MW62-1016 — Lab Sample ID: 550-71659-5

| Analyte | Result | Qualifier | RL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|
| Fluoride | 1.5 | | 0.40 | mg/L | 1 | | 300.0 | Total/NA |
| Arsenic | 0.0035 | | 0.00020 | mg/L | 1 | | 200.8 LL | Total Recoverable |
| Barium | 0.026 | | 0.00020 | mg/L | 1 | | 200.8 LL | Total Recoverable |
| Cobalt | 0.0061 | | 0.00020 | mg/L | 1 | | 200.8 LL | Total Recoverable |
| Molybdenum | 0.0031 | | 0.00020 | mg/L | 1 | | 200.8 LL | Total Recoverable |

## Client Sample ID: FC-CCR-MW63-1016 — Lab Sample ID: 550-71659-6

| Analyte | Result | Qualifier | RL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|
| Fluoride | 1.9 | | 0.40 | mg/L | 1 | | 300.0 | Total/NA |
| Arsenic | 0.00062 | | 0.00020 | mg/L | 1 | | 200.8 LL | Total Recoverable |
| Barium | 0.021 | | 0.00020 | mg/L | 1 | | 200.8 LL | Total Recoverable |
| Cobalt | 0.0062 | | 0.00020 | mg/L | 1 | | 200.8 LL | Total Recoverable |
| Molybdenum | 0.0031 | | 0.00020 | mg/L | 1 | | 200.8 LL | Total Recoverable |

## Client Sample ID: FC-CCR-MW64-1016 — Lab Sample ID: 550-71659-7

| Analyte | Result | Qualifier | RL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|
| Fluoride | 1.5 | | 0.40 | mg/L | 1 | | 300.0 | Total/NA |
| Arsenic | 0.00024 | | 0.00020 | mg/L | 1 | | 200.8 LL | Total Recoverable |
| Barium | 0.025 | | 0.00020 | mg/L | 1 | | 200.8 LL | Total Recoverable |
| Cobalt | 0.0012 | | 0.00020 | mg/L | 1 | | 200.8 LL | Total Recoverable |

This Detection Summary does not include radiochemical test results.

# Detection Summary

Client: Arizona Public Service Company
Project/Site: CCR

TestAmerica Job ID: 550-71659-1
SDG: Four Corners (FC) Power Plant

## Client Sample ID: FC-CCR-MW64-1016 (Continued) — Lab Sample ID: 550-71659-7

| Analyte | Result | Qualifier | RL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|
| Molybdenum | 0.0049 | | 0.00020 | mg/L | 1 | | 200.8 LL | Total Recoverable |

## Client Sample ID: FC-CCR-MW65-1016 — Lab Sample ID: 550-71659-8

| Analyte | Result | Qualifier | RL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|
| Fluoride | 2.0 | | 0.40 | mg/L | 1 | | 300.0 | Total/NA |
| Arsenic | 0.00032 | | 0.00020 | mg/L | 1 | | 200.8 LL | Total Recoverable |
| Barium | 0.013 | | 0.00020 | mg/L | 1 | | 200.8 LL | Total Recoverable |
| Cobalt | 0.0011 | | 0.00020 | mg/L | 1 | | 200.8 LL | Total Recoverable |
| Molybdenum | 0.0089 | | 0.00020 | mg/L | 1 | | 200.8 LL | Total Recoverable |

## Client Sample ID: FC-CCR-MW66-1016 — Lab Sample ID: 550-71659-9

| Analyte | Result | Qualifier | RL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|
| Fluoride | 19 | D2 | 0.80 | mg/L | 2 | | 300.0 | Total/NA |
| Lithium | 0.28 | | 0.20 | mg/L | 1 | | 200.7 Rev 4.4 | Total/NA |
| Arsenic | 0.0010 | | 0.00020 | mg/L | 1 | | 200.8 LL | Total Recoverable |
| Barium | 0.022 | | 0.00020 | mg/L | 1 | | 200.8 LL | Total Recoverable |
| Chromium | 0.00085 | | 0.00050 | mg/L | 1 | | 200.8 LL | Total Recoverable |
| Cobalt | 0.0057 | | 0.00020 | mg/L | 1 | | 200.8 LL | Total Recoverable |
| Molybdenum | 0.022 | | 0.00020 | mg/L | 1 | | 200.8 LL | Total Recoverable |
| Selenium | 0.0019 | | 0.00060 | mg/L | 1 | | 200.8 LL | Total Recoverable |
| Thallium | 0.00036 | | 0.00010 | mg/L | 1 | | 200.8 LL | Total Recoverable |

## Client Sample ID: FC-CCR-MW67-1016 — Lab Sample ID: 550-71659-10

| Analyte | Result | Qualifier | RL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|
| Fluoride | 15 | | 0.40 | mg/L | 1 | | 300.0 | Total/NA |
| Lithium | 0.34 | | 0.20 | mg/L | 1 | | 200.7 Rev 4.4 | Total/NA |
| Arsenic | 0.0014 | | 0.00020 | mg/L | 1 | | 200.8 LL | Total Recoverable |
| Barium | 0.020 | | 0.00020 | mg/L | 1 | | 200.8 LL | Total Recoverable |
| Cobalt | 0.0050 | | 0.00020 | mg/L | 1 | | 200.8 LL | Total Recoverable |
| Molybdenum | 0.045 | | 0.00020 | mg/L | 1 | | 200.8 LL | Total Recoverable |
| Selenium | 0.062 | | 0.00060 | mg/L | 1 | | 200.8 LL | Total Recoverable |
| Thallium | 0.00034 | | 0.00010 | mg/L | 1 | | 200.8 LL | Total Recoverable |

This Detection Summary does not include radiochemical test results.

# Detection Summary

Client: Arizona Public Service Company
Project/Site: CCR

TestAmerica Job ID: 550-71659-1
SDG: Four Corners (FC) Power Plant

## Client Sample ID: FC-CCR-MW68-1016 — Lab Sample ID: 550-71659-11

| Analyte | Result | Qualifier | RL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|
| Fluoride | 5.5 | | 0.40 | mg/L | 1 | | 300.0 | Total/NA |
| Lithium | 0.32 | | 0.20 | mg/L | 1 | | 200.7 Rev 4.4 | Total/NA |
| Arsenic | 0.00060 | | 0.00020 | mg/L | 1 | | 200.8 LL | Total Recoverable |
| Barium | 0.0071 | | 0.00020 | mg/L | 1 | | 200.8 LL | Total Recoverable |
| Cobalt | 0.0022 | | 0.00020 | mg/L | 1 | | 200.8 LL | Total Recoverable |
| Molybdenum | 0.0086 | | 0.00020 | mg/L | 1 | | 200.8 LL | Total Recoverable |
| Selenium | 0.15 | | 0.00060 | mg/L | 1 | | 200.8 LL | Total Recoverable |
| Thallium | 0.00059 | | 0.00010 | mg/L | 1 | | 200.8 LL | Total Recoverable |

## Client Sample ID: FC-CCR-MW69-1016 — Lab Sample ID: 550-71659-12

| Analyte | Result | Qualifier | RL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|
| Fluoride | 9.6 | | 0.40 | mg/L | 1 | | 300.0 | Total/NA |
| Lithium | 0.36 | | 0.20 | mg/L | 1 | | 200.7 Rev 4.4 | Total/NA |
| Arsenic | 0.0067 | | 0.00020 | mg/L | 1 | | 200.8 LL | Total Recoverable |
| Barium | 0.016 | | 0.00020 | mg/L | 1 | | 200.8 LL | Total Recoverable |
| Cobalt | 0.0037 | | 0.00020 | mg/L | 1 | | 200.8 LL | Total Recoverable |
| Molybdenum | 0.015 | | 0.00020 | mg/L | 1 | | 200.8 LL | Total Recoverable |
| Selenium | 0.019 | | 0.00060 | mg/L | 1 | | 200.8 LL | Total Recoverable |
| Thallium | 0.00014 | | 0.00010 | mg/L | 1 | | 200.8 LL | Total Recoverable |

## Client Sample ID: FC-CCR-MW70-1016 — Lab Sample ID: 550-71659-13

| Analyte | Result | Qualifier | RL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|
| Lithium | 0.31 | | 0.20 | mg/L | 1 | | 200.7 Rev 4.4 | Total/NA |
| Arsenic | 0.00049 | | 0.00020 | mg/L | 1 | | 200.8 LL | Total Recoverable |
| Barium | 0.0078 | | 0.00020 | mg/L | 1 | | 200.8 LL | Total Recoverable |
| Cobalt | 0.0022 | | 0.00020 | mg/L | 1 | | 200.8 LL | Total Recoverable |
| Molybdenum | 0.0027 | | 0.00020 | mg/L | 1 | | 200.8 LL | Total Recoverable |
| Selenium | 0.16 | | 0.00060 | mg/L | 1 | | 200.8 LL | Total Recoverable |
| Thallium | 0.00039 | | 0.00010 | mg/L | 1 | | 200.8 LL | Total Recoverable |

## Client Sample ID: FC-CCR-MW71-1016 — Lab Sample ID: 550-71659-14

| 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 |

This Detection Summary does not include radiochemical test results.

# Detection Summary

Client: Arizona Public Service Company
Project/Site: CCR

TestAmerica Job ID: 550-71659-1
SDG: Four Corners (FC) Power Plant

## Client Sample ID: FC-CCR-MW71-1016 (Continued) — Lab Sample ID: 550-71659-14

| Analyte | Result | Qualifier | RL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|
| Arsenic | 0.00031 | | 0.00020 | mg/L | 1 | | 200.8 LL | Total Recoverable |
| Barium | 0.0090 | | 0.00020 | mg/L | 1 | | 200.8 LL | Total Recoverable |
| Molybdenum | 0.00062 | | 0.00020 | mg/L | 1 | | 200.8 LL | Total Recoverable |
| Selenium | 0.19 | | 0.00060 | mg/L | 1 | | 200.8 LL | Total Recoverable |
| Thallium | 0.00020 | | 0.00010 | mg/L | 1 | | 200.8 LL | Total Recoverable |

## Client Sample ID: FC-CCR-MW72-1016 — Lab Sample ID: 550-71659-15

| Analyte | Result | Qualifier | RL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|
| Lithium | 0.39 | | 0.20 | mg/L | 1 | | 200.7 Rev 4.4 | Total/NA |
| Arsenic | 0.00023 | | 0.00020 | mg/L | 1 | | 200.8 LL | Total Recoverable |
| Barium | 0.0090 | | 0.00020 | mg/L | 1 | | 200.8 LL | Total Recoverable |
| Cobalt | 0.0024 | | 0.00020 | mg/L | 1 | | 200.8 LL | Total Recoverable |
| Molybdenum | 0.0011 | | 0.00020 | mg/L | 1 | | 200.8 LL | Total Recoverable |
| Selenium | 0.11 | | 0.00060 | mg/L | 1 | | 200.8 LL | Total Recoverable |
| Thallium | 0.00087 | | 0.00010 | mg/L | 1 | | 200.8 LL | Total Recoverable |

## Client Sample ID: FC-CCR-MW100-1016 — Lab Sample ID: 550-71659-16

| Analyte | Result | Qualifier | RL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|
| Fluoride | 1.8 | | 0.40 | mg/L | 1 | | 300.0 | Total/NA |
| Arsenic | 0.00061 | | 0.00020 | mg/L | 1 | | 200.8 LL | Total Recoverable |
| Barium | 0.021 | | 0.00020 | mg/L | 1 | | 200.8 LL | Total Recoverable |
| Cobalt | 0.0056 | | 0.00020 | mg/L | 1 | | 200.8 LL | Total Recoverable |
| Molybdenum | 0.0029 | | 0.00020 | mg/L | 1 | | 200.8 LL | Total Recoverable |

## Client Sample ID: FC-CCR-MW101-1016 — Lab Sample ID: 550-71659-17

| Analyte | Result | Qualifier | RL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|
| Fluoride | 1.0 | | 0.40 | mg/L | 1 | | 300.0 | Total/NA |
| Lithium | 0.39 | | 0.20 | mg/L | 1 | | 200.7 Rev 4.4 | Total/NA |
| Arsenic | 0.00043 | | 0.00020 | mg/L | 1 | | 200.8 LL | Total Recoverable |
| Barium | 0.014 | | 0.00020 | mg/L | 1 | | 200.8 LL | Total Recoverable |
| Cadmium | 0.00084 | | 0.00010 | mg/L | 1 | | 200.8 LL | Total Recoverable |
| Cobalt | 0.012 | | 0.00020 | mg/L | 1 | | 200.8 LL | Total Recoverable |

This Detection Summary does not include radiochemical test results.

# Detection Summary

Client: Arizona Public Service Company
Project/Site: CCR

TestAmerica Job ID: 550-71659-1
SDG: Four Corners (FC) Power Plant

## Client Sample ID: FC-CCR-MW101-1016 (Continued) — Lab Sample ID: 550-71659-17

| Analyte | Result | Qualifier | RL | | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Lead | 0.00069 | | 0.00010 | | mg/L | 1 | | 200.8 LL | Total Recoverable |
| Molybdenum | 0.073 | | 0.00020 | | mg/L | 1 | | 200.8 LL | Total Recoverable |
| Selenium | 0.0011 | | 0.00060 | | mg/L | 1 | | 200.8 LL | Total Recoverable |
| Thallium | 0.00013 | | 0.00010 | | mg/L | 1 | | 200.8 LL | Total Recoverable |

This Detection Summary does not include radiochemical test results.

# Client Sample Results

Client: Arizona Public Service Company
Project/Site: CCR

TestAmerica Job ID: 550-71659-1
SDG: Four Corners (FC) Power Plant

## Client Sample ID: FC-CCR-MW7-1016

**Lab Sample ID: 550-71659-1**
**Date Collected: 10/20/16 10:43**
**Matrix: Water**
**Date Received: 10/22/16 10:51**

### Method: 300.0 - Anions, Ion Chromatography

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|
| Fluoride | ND | | 0.40 | mg/L | | | 11/01/16 00:33 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|
| Beryllium | ND | | 0.0010 | mg/L | | 10/25/16 16:54 | 11/03/16 23:43 | 1 |
| **Lithium** | **0.93** | | 0.20 | mg/L | | 10/25/16 16:54 | 11/03/16 23:43 | 1 |

### Method: 200.8 LL - Metals (ICP/MS) - Total Recoverable

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|
| Antimony | ND | | 0.00050 | mg/L | | 10/27/16 11:20 | 10/29/16 23:52 | 1 |
| **Arsenic** | **0.00033** | | 0.00020 | mg/L | | 10/27/16 11:20 | 10/29/16 23:52 | 1 |
| **Barium** | **0.015** | | 0.00020 | mg/L | | 10/27/16 11:20 | 10/29/16 23:52 | 1 |
| **Cadmium** | **0.00010** | | 0.00010 | mg/L | | 10/27/16 11:20 | 10/29/16 23:52 | 1 |
| Chromium | ND | | 0.00050 | mg/L | | 10/27/16 11:20 | 10/29/16 23:52 | 1 |
| **Cobalt** | **0.00083** | | 0.00020 | mg/L | | 10/27/16 11:20 | 10/29/16 23:52 | 1 |
| Lead | ND | | 0.00010 | mg/L | | 10/27/16 11:20 | 10/29/16 23:52 | 1 |
| **Molybdenum** | **0.016** | | 0.00020 | mg/L | | 10/27/16 11:20 | 10/29/16 23:52 | 1 |
| **Selenium** | **0.0049** | | 0.00060 | mg/L | | 10/27/16 11:20 | 10/29/16 23:52 | 1 |
| **Thallium** | **0.00015** | | 0.00010 | mg/L | | 10/27/16 11:20 | 10/29/16 23:52 | 1 |

### Method: 245.1 - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|
| Hg | ND | | 0.00020 | mg/L | | 10/24/16 11:11 | 10/25/16 14:32 | 1 |

## Client Sample ID: FC-CCR-MW49A-1016

**Lab Sample ID: 550-71659-2**
**Date Collected: 10/20/16 08:17**
**Matrix: Water**
**Date Received: 10/22/16 10:51**

### Method: 300.0 - Anions, Ion Chromatography

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|
| Fluoride | ND | | 0.40 | mg/L | | | 11/01/16 00:51 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|
| Beryllium | ND | | 0.0010 | mg/L | | 10/25/16 16:54 | 11/03/16 23:49 | 1 |
| **Lithium** | **1.2** | | 0.20 | mg/L | | 10/25/16 16:54 | 11/03/16 23:49 | 1 |

### Method: 200.8 LL - Metals (ICP/MS) - Total Recoverable

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|
| Antimony | ND | | 0.0050 | mg/L | | 10/27/16 11:20 | 10/30/16 00:00 | 10 |
| Arsenic | ND | | 0.0020 | mg/L | | 10/27/16 11:20 | 10/30/16 00:00 | 10 |
| **Barium** | **0.022** | | 0.0020 | mg/L | | 10/27/16 11:20 | 10/30/16 00:00 | 10 |
| Cadmium | ND | | 0.0010 | mg/L | | 10/27/16 11:20 | 10/30/16 00:00 | 10 |
| Chromium | ND | | 0.0050 | mg/L | | 10/27/16 11:20 | 10/30/16 00:00 | 10 |
| **Cobalt** | **0.0036** | | 0.0020 | mg/L | | 10/27/16 11:20 | 10/30/16 00:00 | 10 |
| Lead | ND | | 0.0010 | mg/L | | 10/27/16 11:20 | 10/30/16 00:00 | 10 |
| **Molybdenum** | **0.036** | | 0.0020 | mg/L | | 10/27/16 11:20 | 10/30/16 00:00 | 10 |
| Selenium | ND | | 0.0060 | mg/L | | 10/27/16 11:20 | 10/30/16 00:00 | 10 |
| **Thallium** | **0.0020** | | 0.0010 | mg/L | | 10/27/16 11:20 | 10/30/16 00:00 | 10 |

# Client Sample Results

Client: Arizona Public Service Company
Project/Site: CCR

TestAmerica Job ID: 550-71659-1
SDG: Four Corners (FC) Power Plant

## Client Sample ID: FC-CCR-MW49A-1016

**Lab Sample ID: 550-71659-2**
**Date Collected: 10/20/16 08:17**
**Matrix: Water**
**Date Received: 10/22/16 10:51**

### Method: 245.1 - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|
| Hg | ND | | 0.00020 | mg/L | | 10/24/16 11:11 | 10/25/16 14:33 | 1 |

## Client Sample ID: FC-CCR-MW60-1016

**Lab Sample ID: 550-71659-3**
**Date Collected: 10/20/16 09:45**
**Matrix: Water**
**Date Received: 10/22/16 10:51**

### Method: 300.0 - Anions, Ion Chromatography

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|
| **Fluoride** | **5.3** | | 0.40 | mg/L | | | 11/01/16 01:10 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|
| Beryllium | ND | | 0.0010 | mg/L | | 10/25/16 16:54 | 11/03/16 23:55 | 1 |
| **Lithium** | **0.81** | | 0.20 | mg/L | | 10/25/16 16:54 | 11/03/16 23:55 | 1 |

### Method: 200.8 LL - Metals (ICP/MS) - Total Recoverable

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|
| Antimony | ND | | 0.00050 | mg/L | | 10/27/16 11:20 | 10/30/16 00:03 | 1 |
| **Arsenic** | **0.00045** | | 0.00020 | mg/L | | 10/27/16 11:20 | 10/30/16 00:03 | 1 |
| **Barium** | **0.019** | | 0.00020 | mg/L | | 10/27/16 11:20 | 10/30/16 00:03 | 1 |
| **Cadmium** | **0.0031** | | 0.00010 | mg/L | | 10/27/16 11:20 | 10/30/16 00:03 | 1 |
| **Chromium** | **0.0019** | | 0.00050 | mg/L | | 10/27/16 11:20 | 10/30/16 00:03 | 1 |
| **Cobalt** | **0.29** | | 0.00020 | mg/L | | 10/27/16 11:20 | 10/30/16 00:03 | 1 |
| **Lead** | **0.00095** | | 0.00010 | mg/L | | 10/27/16 11:20 | 10/30/16 00:03 | 1 |
| **Molybdenum** | **0.18** | | 0.00020 | mg/L | | 10/27/16 11:20 | 10/30/16 00:03 | 1 |
| **Selenium** | **0.0013** | | 0.00060 | mg/L | | 10/27/16 11:20 | 10/30/16 00:03 | 1 |
| **Thallium** | **0.00024** | | 0.00010 | mg/L | | 10/27/16 11:20 | 10/30/16 00:03 | 1 |

### Method: 245.1 - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|
| Hg | ND | | 0.00020 | mg/L | | 10/24/16 11:11 | 10/25/16 14:35 | 1 |

## Client Sample ID: FC-CCR-MW61-1016

**Lab Sample ID: 550-71659-4**
**Date Collected: 10/20/16 09:07**
**Matrix: Water**
**Date Received: 10/22/16 10:51**

### Method: 300.0 - Anions, Ion Chromatography

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|
| **Fluoride** | **1.1** | | 0.40 | mg/L | | | 11/01/16 01:28 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|
| Beryllium | ND | | 0.0010 | mg/L | | 10/25/16 16:54 | 11/04/16 00:01 | 1 |
| **Lithium** | **0.39** | | 0.20 | mg/L | | 10/25/16 16:54 | 11/04/16 00:01 | 1 |

### Method: 200.8 LL - Metals (ICP/MS) - Total Recoverable

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|
| Antimony | ND | | 0.00050 | mg/L | | 10/27/16 11:20 | 10/30/16 00:06 | 1 |
| **Arsenic** | **0.00042** | | 0.00020 | mg/L | | 10/27/16 11:20 | 10/30/16 00:06 | 1 |
| **Barium** | **0.014** | | 0.00020 | mg/L | | 10/27/16 11:20 | 10/30/16 00:06 | 1 |
| **Cadmium** | **0.00094** | | 0.00010 | mg/L | | 10/27/16 11:20 | 10/30/16 00:06 | 1 |

# Client Sample Results

Client: Arizona Public Service Company
Project/Site: CCR

TestAmerica Job ID: 550-71659-1
SDG: Four Corners (FC) Power Plant

## Client Sample ID: FC-CCR-MW61-1016

**Lab Sample ID: 550-71659-4**
**Date Collected: 10/20/16 09:07**
**Matrix: Water**
**Date Received: 10/22/16 10:51**

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|
| Chromium | ND | | 0.00050 | mg/L | | 10/27/16 11:20 | 10/30/16 00:06 | 1 |
| **Cobalt** | **0.012** | | 0.00020 | mg/L | | 10/27/16 11:20 | 10/30/16 00:06 | 1 |
| **Lead** | **0.00092** | | 0.00010 | mg/L | | 10/27/16 11:20 | 10/30/16 00:06 | 1 |
| **Molybdenum** | **0.080** | | 0.00020 | mg/L | | 10/27/16 11:20 | 10/30/16 00:06 | 1 |
| **Selenium** | **0.00076** | | 0.00060 | mg/L | | 10/27/16 11:20 | 10/30/16 00:06 | 1 |
| **Thallium** | **0.00014** | | 0.00010 | mg/L | | 10/27/16 11:20 | 10/30/16 00:06 | 1 |

### Method: 245.1 - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|
| Hg | ND | | 0.00020 | mg/L | | 10/24/16 11:11 | 10/25/16 14:37 | 1 |

## Client Sample ID: FC-CCR-MW62-1016

**Lab Sample ID: 550-71659-5**
**Date Collected: 10/19/16 16:41**
**Matrix: Water**
**Date Received: 10/22/16 10:51**

### Method: 300.0 - Anions, Ion Chromatography

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|
| **Fluoride** | **1.5** | | 0.40 | mg/L | | | 11/01/16 01:47 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|
| Beryllium | ND | | 0.0010 | mg/L | | 10/25/16 16:54 | 11/04/16 00:06 | 1 |
| Lithium | ND | | 0.20 | mg/L | | 10/25/16 16:54 | 11/04/16 00:06 | 1 |

### Method: 200.8 LL - Metals (ICP/MS) - Total Recoverable

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|
| Antimony | ND | | 0.00050 | mg/L | | 10/27/16 11:20 | 10/30/16 00:19 | 1 |
| **Arsenic** | **0.0035** | | 0.00020 | mg/L | | 10/27/16 11:20 | 10/30/16 00:19 | 1 |
| **Barium** | **0.026** | | 0.00020 | mg/L | | 10/27/16 11:20 | 10/30/16 00:19 | 1 |
| Cadmium | ND | | 0.00010 | mg/L | | 10/27/16 11:20 | 10/30/16 00:19 | 1 |
| Chromium | ND | | 0.00050 | mg/L | | 10/27/16 11:20 | 10/30/16 00:19 | 1 |
| **Cobalt** | **0.0061** | | 0.00020 | mg/L | | 10/27/16 11:20 | 10/30/16 00:19 | 1 |
| Lead | ND | | 0.00010 | mg/L | | 10/27/16 11:20 | 10/30/16 00:19 | 1 |
| **Molybdenum** | **0.0031** | | 0.00020 | mg/L | | 10/27/16 11:20 | 10/30/16 00:19 | 1 |
| Selenium | ND | | 0.00060 | mg/L | | 10/27/16 11:20 | 10/30/16 00:19 | 1 |
| Thallium | ND | | 0.00010 | mg/L | | 10/27/16 11:20 | 10/30/16 00:19 | 1 |

### Method: 245.1 - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|
| Hg | ND | | 0.00020 | mg/L | | 10/24/16 11:11 | 10/25/16 14:17 | 1 |

## Client Sample ID: FC-CCR-MW63-1016

**Lab Sample ID: 550-71659-6**
**Date Collected: 10/19/16 12:29**
**Matrix: Water**
**Date Received: 10/22/16 10:51**

### Method: 300.0 - Anions, Ion Chromatography

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|
| **Fluoride** | **1.9** | | 0.40 | mg/L | | | 11/01/16 03:19 | 1 |

# Client Sample Results

Client: Arizona Public Service Company
Project/Site: CCR

TestAmerica Job ID: 550-71659-1
SDG: Four Corners (FC) Power Plant

## Client Sample ID: FC-CCR-MW63-1016

**Lab Sample ID: 550-71659-6**
**Date Collected: 10/19/16 12:29**
**Matrix: Water**
**Date Received: 10/22/16 10:51**

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|
| Beryllium | ND | | 0.0010 | mg/L | | 10/25/16 16:54 | 11/04/16 00:12 | 1 |
| Lithium | ND | | 0.20 | mg/L | | 10/25/16 16:54 | 11/04/16 00:12 | 1 |

### Method: 200.8 LL - Metals (ICP/MS) - Total Recoverable

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|
| Antimony | ND | | 0.00050 | mg/L | | 10/27/16 11:20 | 10/30/16 00:22 | 1 |
| **Arsenic** | **0.00062** | | 0.00020 | mg/L | | 10/27/16 11:20 | 10/30/16 00:22 | 1 |
| **Barium** | **0.021** | | 0.00020 | mg/L | | 10/27/16 11:20 | 10/30/16 00:22 | 1 |
| Cadmium | ND | | 0.00010 | mg/L | | 10/27/16 11:20 | 10/30/16 00:22 | 1 |
| Chromium | ND | | 0.00050 | mg/L | | 10/27/16 11:20 | 10/30/16 00:22 | 1 |
| **Cobalt** | **0.0062** | | 0.00020 | mg/L | | 10/27/16 11:20 | 10/30/16 00:22 | 1 |
| Lead | ND | | 0.00010 | mg/L | | 10/27/16 11:20 | 10/30/16 00:22 | 1 |
| **Molybdenum** | **0.0031** | | 0.00020 | mg/L | | 10/27/16 11:20 | 10/30/16 00:22 | 1 |
| Selenium | ND | | 0.00060 | mg/L | | 10/27/16 11:20 | 10/30/16 00:22 | 1 |
| Thallium | ND | | 0.00010 | mg/L | | 10/27/16 11:20 | 10/30/16 00:22 | 1 |

### Method: 245.1 - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|
| Hg | ND | | 0.00020 | mg/L | | 10/24/16 11:11 | 10/25/16 14:19 | 1 |

## Client Sample ID: FC-CCR-MW64-1016

**Lab Sample ID: 550-71659-7**
**Date Collected: 10/19/16 11:58**
**Matrix: Water**
**Date Received: 10/22/16 10:51**

### Method: 300.0 - Anions, Ion Chromatography

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|
| **Fluoride** | **1.5** | | 0.40 | mg/L | | | 11/01/16 03:37 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|
| Beryllium | ND | | 0.0010 | mg/L | | 10/25/16 16:54 | 11/04/16 00:18 | 1 |
| Lithium | ND | | 0.20 | mg/L | | 10/25/16 16:54 | 11/04/16 00:18 | 1 |

### Method: 200.8 LL - Metals (ICP/MS) - Total Recoverable

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|
| Antimony | ND | | 0.00050 | mg/L | | 10/27/16 11:20 | 10/30/16 00:24 | 1 |
| **Arsenic** | **0.00024** | | 0.00020 | mg/L | | 10/27/16 11:20 | 10/30/16 00:24 | 1 |
| **Barium** | **0.025** | | 0.00020 | mg/L | | 10/27/16 11:20 | 10/30/16 00:24 | 1 |
| Cadmium | ND | | 0.00010 | mg/L | | 10/27/16 11:20 | 10/30/16 00:24 | 1 |
| Chromium | ND | | 0.00050 | mg/L | | 10/27/16 11:20 | 10/30/16 00:24 | 1 |
| **Cobalt** | **0.0012** | | 0.00020 | mg/L | | 10/27/16 11:20 | 10/30/16 00:24 | 1 |
| Lead | ND | | 0.00010 | mg/L | | 10/27/16 11:20 | 10/30/16 00:24 | 1 |
| **Molybdenum** | **0.0049** | | 0.00020 | mg/L | | 10/27/16 11:20 | 10/30/16 00:24 | 1 |
| Selenium | ND | | 0.00060 | mg/L | | 10/27/16 11:20 | 10/30/16 00:24 | 1 |
| Thallium | ND | | 0.00010 | mg/L | | 10/27/16 11:20 | 10/30/16 00:24 | 1 |

### Method: 245.1 - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|
| Hg | ND | | 0.00020 | mg/L | | 10/24/16 11:11 | 10/25/16 14:20 | 1 |

# Client Sample Results

Client: Arizona Public Service Company
Project/Site: CCR

TestAmerica Job ID: 550-71659-1
SDG: Four Corners (FC) Power Plant

## Client Sample ID: FC-CCR-MW65-1016

**Lab Sample ID: 550-71659-8**
**Date Collected: 10/19/16 15:46**
**Matrix: Water**
**Date Received: 10/22/16 10:51**

### Method: 300.0 - Anions, Ion Chromatography

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|
| **Fluoride** | **2.0** | | 0.40 | mg/L | | | 11/01/16 03:55 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|
| Beryllium | ND | | 0.0010 | mg/L | | 10/31/16 10:47 | 11/04/16 01:02 | 1 |
| Lithium | ND | | 0.20 | mg/L | | 10/31/16 10:47 | 11/04/16 01:02 | 1 |

### Method: 200.8 LL - Metals (ICP/MS) - Total Recoverable

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|
| Antimony | ND | | 0.00050 | mg/L | | 10/27/16 11:20 | 10/30/16 00:27 | 1 |
| **Arsenic** | **0.00032** | | 0.00020 | mg/L | | 10/27/16 11:20 | 10/30/16 00:27 | 1 |
| **Barium** | **0.013** | | 0.00020 | mg/L | | 10/27/16 11:20 | 10/30/16 00:27 | 1 |
| Cadmium | ND | | 0.00010 | mg/L | | 10/27/16 11:20 | 10/30/16 00:27 | 1 |
| Chromium | ND | | 0.00050 | mg/L | | 10/27/16 11:20 | 10/30/16 00:27 | 1 |
| **Cobalt** | **0.0011** | | 0.00020 | mg/L | | 10/27/16 11:20 | 10/30/16 00:27 | 1 |
| Lead | ND | | 0.00010 | mg/L | | 10/27/16 11:20 | 10/30/16 00:27 | 1 |
| **Molybdenum** | **0.0089** | | 0.00020 | mg/L | | 10/27/16 11:20 | 10/30/16 00:27 | 1 |
| Selenium | ND | | 0.00060 | mg/L | | 10/27/16 11:20 | 10/30/16 00:27 | 1 |
| Thallium | ND | | 0.00010 | mg/L | | 10/27/16 11:20 | 10/30/16 00:27 | 1 |

### Method: 245.1 - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|
| Hg | ND | | 0.00020 | mg/L | | 10/24/16 11:11 | 10/25/16 14:22 | 1 |

## Client Sample ID: FC-CCR-MW66-1016

**Lab Sample ID: 550-71659-9**
**Date Collected: 10/19/16 17:22**
**Matrix: Water**
**Date Received: 10/22/16 10:51**

### Method: 300.0 - Anions, Ion Chromatography

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|
| **Fluoride** | **19** | **D2** | 0.80 | mg/L | | | 11/01/16 04:14 | 2 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|
| Beryllium | ND | | 0.0010 | mg/L | | 10/31/16 10:47 | 11/04/16 01:05 | 1 |
| **Lithium** | **0.28** | | 0.20 | mg/L | | 10/31/16 10:47 | 11/04/16 01:05 | 1 |

### Method: 200.8 LL - Metals (ICP/MS) - Total Recoverable

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|
| Antimony | ND | | 0.00050 | mg/L | | 10/27/16 11:20 | 10/30/16 00:30 | 1 |
| **Arsenic** | **0.0010** | | 0.00020 | mg/L | | 10/27/16 11:20 | 10/30/16 00:30 | 1 |
| **Barium** | **0.022** | | 0.00020 | mg/L | | 10/27/16 11:20 | 10/30/16 00:30 | 1 |
| Cadmium | ND | | 0.00010 | mg/L | | 10/27/16 11:20 | 10/30/16 00:30 | 1 |
| **Chromium** | **0.00085** | | 0.00050 | mg/L | | 10/27/16 11:20 | 10/30/16 00:30 | 1 |
| **Cobalt** | **0.0057** | | 0.00020 | mg/L | | 10/27/16 11:20 | 10/30/16 00:30 | 1 |
| Lead | ND | | 0.00010 | mg/L | | 10/27/16 11:20 | 10/30/16 00:30 | 1 |
| **Molybdenum** | **0.022** | | 0.00020 | mg/L | | 10/27/16 11:20 | 10/30/16 00:30 | 1 |
| **Selenium** | **0.0019** | | 0.00060 | mg/L | | 10/27/16 11:20 | 10/30/16 00:30 | 1 |
| **Thallium** | **0.00036** | | 0.00010 | mg/L | | 10/27/16 11:20 | 10/30/16 00:30 | 1 |

# Client Sample Results

Client: Arizona Public Service Company
Project/Site: CCR

TestAmerica Job ID: 550-71659-1
SDG: Four Corners (FC) Power Plant

## Client Sample ID: FC-CCR-MW66-1016 — Lab Sample ID: 550-71659-9

**Date Collected: 10/19/16 17:22** — **Matrix: Water**
**Date Received: 10/22/16 10:51**

### Method: 245.1 - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|
| Hg | ND | | 0.00020 | mg/L | | 10/24/16 11:11 | 10/25/16 14:24 | 1 |

## Client Sample ID: FC-CCR-MW67-1016 — Lab Sample ID: 550-71659-10

**Date Collected: 10/20/16 12:51** — **Matrix: Water**
**Date Received: 10/22/16 10:51**

### Method: 300.0 - Anions, Ion Chromatography

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|
| **Fluoride** | **15** | | 0.40 | mg/L | | | 11/01/16 17:40 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|
| Beryllium | ND | | 0.0010 | mg/L | | 10/31/16 10:47 | 11/04/16 01:16 | 1 |
| **Lithium** | **0.34** | | 0.20 | mg/L | | 10/31/16 10:47 | 11/04/16 01:16 | 1 |

### Method: 200.8 LL - Metals (ICP/MS) - Total Recoverable

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|
| Antimony | ND | | 0.00050 | mg/L | | 10/27/16 11:20 | 10/30/16 00:32 | 1 |
| **Arsenic** | **0.0014** | | 0.00020 | mg/L | | 10/27/16 11:20 | 10/30/16 00:32 | 1 |
| **Barium** | **0.020** | | 0.00020 | mg/L | | 10/27/16 11:20 | 10/30/16 00:32 | 1 |
| Cadmium | ND | | 0.00010 | mg/L | | 10/27/16 11:20 | 10/30/16 00:32 | 1 |
| Chromium | ND | | 0.00050 | mg/L | | 10/27/16 11:20 | 10/30/16 00:32 | 1 |
| **Cobalt** | **0.0050** | | 0.00020 | mg/L | | 10/27/16 11:20 | 10/30/16 00:32 | 1 |
| Lead | ND | | 0.00010 | mg/L | | 10/27/16 11:20 | 10/30/16 00:32 | 1 |
| **Molybdenum** | **0.045** | | 0.00020 | mg/L | | 10/27/16 11:20 | 10/30/16 00:32 | 1 |
| **Selenium** | **0.062** | | 0.00060 | mg/L | | 10/27/16 11:20 | 10/30/16 00:32 | 1 |
| **Thallium** | **0.00034** | | 0.00010 | mg/L | | 10/27/16 11:20 | 10/30/16 00:32 | 1 |

### Method: 245.1 - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|
| Hg | ND | | 0.00020 | mg/L | | 10/24/16 11:11 | 10/25/16 14:38 | 1 |

## Client Sample ID: FC-CCR-MW68-1016 — Lab Sample ID: 550-71659-11

**Date Collected: 10/20/16 13:41** — **Matrix: Water**
**Date Received: 10/22/16 10:51**

### Method: 300.0 - Anions, Ion Chromatography

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|
| **Fluoride** | **5.5** | | 0.40 | mg/L | | | 11/01/16 17:59 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|
| Beryllium | ND | | 0.0010 | mg/L | | 10/31/16 10:47 | 11/04/16 01:22 | 1 |
| **Lithium** | **0.32** | | 0.20 | mg/L | | 10/31/16 10:47 | 11/04/16 01:22 | 1 |

### Method: 200.8 LL - Metals (ICP/MS) - Total Recoverable

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|
| Antimony | ND | | 0.00050 | mg/L | | 10/27/16 11:20 | 10/30/16 00:54 | 1 |
| **Arsenic** | **0.00060** | | 0.00020 | mg/L | | 10/27/16 11:20 | 10/30/16 00:54 | 1 |
| **Barium** | **0.0071** | | 0.00020 | mg/L | | 10/27/16 11:20 | 10/30/16 00:54 | 1 |
| Cadmium | ND | | 0.00010 | mg/L | | 10/27/16 11:20 | 10/30/16 00:54 | 1 |

# Client Sample Results

Client: Arizona Public Service Company
Project/Site: CCR

TestAmerica Job ID: 550-71659-1
SDG: Four Corners (FC) Power Plant

## Client Sample ID: FC-CCR-MW68-1016

**Lab Sample ID: 550-71659-11**
**Date Collected: 10/20/16 13:41**
**Matrix: Water**
**Date Received: 10/22/16 10:51**

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|
| Chromium | ND | | 0.00050 | mg/L | | 10/27/16 11:20 | 10/30/16 00:54 | 1 |
| **Cobalt** | **0.0022** | | 0.00020 | mg/L | | 10/27/16 11:20 | 10/30/16 00:54 | 1 |
| Lead | ND | | 0.00010 | mg/L | | 10/27/16 11:20 | 10/30/16 00:54 | 1 |
| **Molybdenum** | **0.0086** | | 0.00020 | mg/L | | 10/27/16 11:20 | 10/30/16 00:54 | 1 |
| **Selenium** | **0.15** | | 0.00060 | mg/L | | 10/27/16 11:20 | 10/30/16 00:54 | 1 |
| **Thallium** | **0.00059** | | 0.00010 | mg/L | | 10/27/16 11:20 | 10/30/16 00:54 | 1 |

### Method: 245.1 - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|
| Hg | ND | | 0.00020 | mg/L | | 10/24/16 11:11 | 10/25/16 14:40 | 1 |

## Client Sample ID: FC-CCR-MW69-1016

**Lab Sample ID: 550-71659-12**
**Date Collected: 10/20/16 14:16**
**Matrix: Water**
**Date Received: 10/22/16 10:51**

### Method: 300.0 - Anions, Ion Chromatography

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|
| **Fluoride** | **9.6** | | 0.40 | mg/L | | | 11/01/16 18:17 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|
| Beryllium | ND | | 0.0010 | mg/L | | 10/31/16 10:47 | 11/04/16 01:28 | 1 |
| **Lithium** | **0.36** | | 0.20 | mg/L | | 10/31/16 10:47 | 11/04/16 01:28 | 1 |

### Method: 200.8 LL - Metals (ICP/MS) - Total Recoverable

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|
| Antimony | ND | | 0.00050 | mg/L | | 10/27/16 11:20 | 10/30/16 00:35 | 1 |
| **Arsenic** | **0.0067** | | 0.00020 | mg/L | | 10/27/16 11:20 | 10/30/16 00:35 | 1 |
| **Barium** | **0.016** | | 0.00020 | mg/L | | 10/27/16 11:20 | 10/30/16 00:35 | 1 |
| Cadmium | ND | | 0.00010 | mg/L | | 10/27/16 11:20 | 10/30/16 00:35 | 1 |
| Chromium | ND | | 0.00050 | mg/L | | 10/27/16 11:20 | 10/30/16 00:35 | 1 |
| **Cobalt** | **0.0037** | | 0.00020 | mg/L | | 10/27/16 11:20 | 10/30/16 00:35 | 1 |
| Lead | ND | | 0.00010 | mg/L | | 10/27/16 11:20 | 10/30/16 00:35 | 1 |
| **Molybdenum** | **0.015** | | 0.00020 | mg/L | | 10/27/16 11:20 | 10/30/16 00:35 | 1 |
| **Selenium** | **0.019** | | 0.00060 | mg/L | | 10/27/16 11:20 | 10/30/16 00:35 | 1 |
| **Thallium** | **0.00014** | | 0.00010 | mg/L | | 10/27/16 11:20 | 10/30/16 00:35 | 1 |

### Method: 245.1 - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|
| Hg | ND | | 0.00020 | mg/L | | 10/24/16 11:11 | 10/25/16 14:41 | 1 |

## Client Sample ID: FC-CCR-MW70-1016

**Lab Sample ID: 550-71659-13**
**Date Collected: 10/19/16 14:29**
**Matrix: Water**
**Date Received: 10/22/16 10:51**

### Method: 300.0 - Anions, Ion Chromatography

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|
| Fluoride | ND | | 0.40 | mg/L | | | 11/01/16 18:45 | 1 |

# Client Sample Results

Client: Arizona Public Service Company
Project/Site: CCR

TestAmerica Job ID: 550-71659-1
SDG: Four Corners (FC) Power Plant

## Client Sample ID: FC-CCR-MW70-1016

**Lab Sample ID: 550-71659-13**
**Date Collected: 10/19/16 14:29**
**Matrix: Water**
**Date Received: 10/22/16 10:51**

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|
| Beryllium | ND | | 0.0010 | mg/L | | 10/31/16 10:47 | 11/04/16 01:34 | 1 |
| **Lithium** | **0.31** | | 0.20 | mg/L | | 10/31/16 10:47 | 11/04/16 01:34 | 1 |

### Method: 200.8 LL - Metals (ICP/MS) - Total Recoverable

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|
| Antimony | ND | | 0.00050 | mg/L | | 10/27/16 11:20 | 10/30/16 00:57 | 1 |
| **Arsenic** | **0.00049** | | 0.00020 | mg/L | | 10/27/16 11:20 | 10/30/16 00:57 | 1 |
| **Barium** | **0.0078** | | 0.00020 | mg/L | | 10/27/16 11:20 | 10/30/16 00:57 | 1 |
| Cadmium | ND | | 0.00010 | mg/L | | 10/27/16 11:20 | 10/30/16 00:57 | 1 |
| Chromium | ND | | 0.00050 | mg/L | | 10/27/16 11:20 | 10/30/16 00:57 | 1 |
| **Cobalt** | **0.0022** | | 0.00020 | mg/L | | 10/27/16 11:20 | 10/30/16 00:57 | 1 |
| Lead | ND | | 0.00010 | mg/L | | 10/27/16 11:20 | 10/30/16 00:57 | 1 |
| **Molybdenum** | **0.0027** | | 0.00020 | mg/L | | 10/27/16 11:20 | 10/30/16 00:57 | 1 |
| **Selenium** | **0.16** | | 0.00060 | mg/L | | 10/27/16 11:20 | 10/30/16 00:57 | 1 |
| **Thallium** | **0.00039** | | 0.00010 | mg/L | | 10/27/16 11:20 | 10/30/16 00:57 | 1 |

### Method: 245.1 - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|
| Hg | ND | | 0.00020 | mg/L | | 10/24/16 11:11 | 10/25/16 14:29 | 1 |

## Client Sample ID: FC-CCR-MW71-1016

**Lab Sample ID: 550-71659-14**
**Date Collected: 10/20/16 11:30**
**Matrix: Water**
**Date Received: 10/22/16 10:51**

### Method: 300.0 - Anions, Ion Chromatography

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|
| Fluoride | ND | | 0.40 | mg/L | | | 11/01/16 20:18 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|
| Beryllium | ND | | 0.0010 | mg/L | | 10/31/16 10:47 | 11/04/16 01:40 | 1 |
| **Lithium** | **0.33** | | 0.20 | mg/L | | 10/31/16 10:47 | 11/04/16 01:40 | 1 |

### Method: 200.8 LL - Metals (ICP/MS) - Total Recoverable

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|
| Antimony | ND | | 0.00050 | mg/L | | 10/27/16 11:20 | 10/30/16 00:59 | 1 |
| **Arsenic** | **0.00031** | | 0.00020 | mg/L | | 10/27/16 11:20 | 10/30/16 00:59 | 1 |
| **Barium** | **0.0090** | | 0.00020 | mg/L | | 10/27/16 11:20 | 10/30/16 00:59 | 1 |
| Cadmium | ND | | 0.00010 | mg/L | | 10/27/16 11:20 | 10/30/16 00:59 | 1 |
| Chromium | ND | | 0.00050 | mg/L | | 10/27/16 11:20 | 10/30/16 00:59 | 1 |
| Cobalt | ND | | 0.00020 | mg/L | | 10/27/16 11:20 | 10/30/16 00:59 | 1 |
| Lead | ND | | 0.00010 | mg/L | | 10/27/16 11:20 | 10/30/16 00:59 | 1 |
| **Molybdenum** | **0.00062** | | 0.00020 | mg/L | | 10/27/16 11:20 | 10/30/16 00:59 | 1 |
| **Selenium** | **0.19** | | 0.00060 | mg/L | | 10/27/16 11:20 | 10/30/16 00:59 | 1 |
| **Thallium** | **0.00020** | | 0.00010 | mg/L | | 10/27/16 11:20 | 10/30/16 00:59 | 1 |

### Method: 245.1 - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|
| Hg | ND | | 0.00020 | mg/L | | 10/24/16 12:02 | 10/25/16 15:28 | 1 |

# Client Sample Results

Client: Arizona Public Service Company
Project/Site: CCR

TestAmerica Job ID: 550-71659-1
SDG: Four Corners (FC) Power Plant

## Client Sample ID: FC-CCR-MW72-1016

**Lab Sample ID: 550-71659-15**
**Date Collected: 10/20/16 12:07**
**Matrix: Water**
**Date Received: 10/22/16 10:51**

### Method: 300.0 - Anions, Ion Chromatography

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|
| Fluoride | ND | | 0.40 | mg/L | | | 11/01/16 20:36 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|
| Beryllium | ND | | 0.0010 | mg/L | | 10/31/16 10:47 | 11/04/16 01:46 | 1 |
| **Lithium** | **0.39** | | 0.20 | mg/L | | 10/31/16 10:47 | 11/04/16 01:46 | 1 |

### Method: 200.8 LL - Metals (ICP/MS) - Total Recoverable

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|
| Antimony | ND | | 0.00050 | mg/L | | 10/27/16 11:20 | 10/30/16 01:02 | 1 |
| **Arsenic** | **0.00023** | | 0.00020 | mg/L | | 10/27/16 11:20 | 10/30/16 01:02 | 1 |
| **Barium** | **0.0090** | | 0.00020 | mg/L | | 10/27/16 11:20 | 10/30/16 01:02 | 1 |
| Cadmium | ND | | 0.00010 | mg/L | | 10/27/16 11:20 | 10/30/16 01:02 | 1 |
| Chromium | ND | | 0.00050 | mg/L | | 10/27/16 11:20 | 10/30/16 01:02 | 1 |
| **Cobalt** | **0.0024** | | 0.00020 | mg/L | | 10/27/16 11:20 | 10/30/16 01:02 | 1 |
| Lead | ND | | 0.00010 | mg/L | | 10/27/16 11:20 | 10/30/16 01:02 | 1 |
| **Molybdenum** | **0.0011** | | 0.00020 | mg/L | | 10/27/16 11:20 | 10/30/16 01:02 | 1 |
| **Selenium** | **0.11** | | 0.00060 | mg/L | | 10/27/16 11:20 | 10/30/16 01:02 | 1 |
| **Thallium** | **0.00087** | | 0.00010 | mg/L | | 10/27/16 11:20 | 10/30/16 01:02 | 1 |

### Method: 245.1 - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|
| Hg | ND | | 0.00020 | mg/L | | 10/24/16 12:02 | 10/25/16 15:30 | 1 |

## Client Sample ID: FC-CCR-MW100-1016

**Lab Sample ID: 550-71659-16**
**Date Collected: 10/20/16 09:07**
**Matrix: Water**
**Date Received: 10/22/16 10:51**

### Method: 300.0 - Anions, Ion Chromatography

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|
| **Fluoride** | **1.8** | | 0.40 | mg/L | | | 11/01/16 20:55 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|
| Beryllium | ND | | 0.0010 | mg/L | | 10/31/16 10:47 | 11/04/16 01:52 | 1 |
| Lithium | ND | | 0.20 | mg/L | | 10/31/16 10:47 | 11/04/16 01:52 | 1 |

### Method: 200.8 LL - Metals (ICP/MS) - Total Recoverable

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|
| Antimony | ND | | 0.00050 | mg/L | | 10/27/16 11:20 | 10/30/16 01:05 | 1 |
| **Arsenic** | **0.00061** | | 0.00020 | mg/L | | 10/27/16 11:20 | 10/30/16 01:05 | 1 |
| **Barium** | **0.021** | | 0.00020 | mg/L | | 10/27/16 11:20 | 10/30/16 01:05 | 1 |
| Cadmium | ND | | 0.00010 | mg/L | | 10/27/16 11:20 | 10/30/16 01:05 | 1 |
| Chromium | ND | | 0.00050 | mg/L | | 10/27/16 11:20 | 10/30/16 01:05 | 1 |
| **Cobalt** | **0.0056** | | 0.00020 | mg/L | | 10/27/16 11:20 | 10/30/16 01:05 | 1 |
| Lead | ND | | 0.00010 | mg/L | | 10/27/16 11:20 | 10/30/16 01:05 | 1 |
| **Molybdenum** | **0.0029** | | 0.00020 | mg/L | | 10/27/16 11:20 | 10/30/16 01:05 | 1 |
| Selenium | ND | | 0.00060 | mg/L | | 10/27/16 11:20 | 10/30/16 01:05 | 1 |
| Thallium | ND | | 0.00010 | mg/L | | 10/27/16 11:20 | 10/30/16 01:05 | 1 |

# Client Sample Results

Client: Arizona Public Service Company
Project/Site: CCR

TestAmerica Job ID: 550-71659-1
SDG: Four Corners (FC) Power Plant

## Client Sample ID: FC-CCR-MW100-1016

**Lab Sample ID: 550-71659-16**
**Date Collected: 10/20/16 09:07**
**Matrix: Water**
**Date Received: 10/22/16 10:51**

### Method: 245.1 - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|
| Hg | ND | | 0.00020 | mg/L | | 10/24/16 12:02 | 10/25/16 15:31 | 1 |

## Client Sample ID: FC-CCR-MW101-1016

**Lab Sample ID: 550-71659-17**
**Date Collected: 10/19/16 12:29**
**Matrix: Water**
**Date Received: 10/22/16 10:51**

### Method: 300.0 - Anions, Ion Chromatography

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|
| **Fluoride** | **1.0** | | 0.40 | mg/L | | | 11/01/16 21:13 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|
| Beryllium | ND | | 0.0010 | mg/L | | 10/31/16 10:47 | 11/04/16 01:57 | 1 |
| **Lithium** | **0.39** | | 0.20 | mg/L | | 10/31/16 10:47 | 11/04/16 01:57 | 1 |

### Method: 200.8 LL - Metals (ICP/MS) - Total Recoverable

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|
| Antimony | ND | | 0.00050 | mg/L | | 10/27/16 11:20 | 10/30/16 01:07 | 1 |
| **Arsenic** | **0.00043** | | 0.00020 | mg/L | | 10/27/16 11:20 | 10/30/16 01:07 | 1 |
| **Barium** | **0.014** | | 0.00020 | mg/L | | 10/27/16 11:20 | 10/30/16 01:07 | 1 |
| **Cadmium** | **0.00084** | | 0.00010 | mg/L | | 10/27/16 11:20 | 10/30/16 01:07 | 1 |
| Chromium | ND | | 0.00050 | mg/L | | 10/27/16 11:20 | 10/30/16 01:07 | 1 |
| **Cobalt** | **0.012** | | 0.00020 | mg/L | | 10/27/16 11:20 | 10/30/16 01:07 | 1 |
| **Lead** | **0.00069** | | 0.00010 | mg/L | | 10/27/16 11:20 | 10/30/16 01:07 | 1 |
| **Molybdenum** | **0.073** | | 0.00020 | mg/L | | 10/27/16 11:20 | 10/30/16 01:07 | 1 |
| **Selenium** | **0.0011** | | 0.00060 | mg/L | | 10/27/16 11:20 | 10/30/16 01:07 | 1 |
| **Thallium** | **0.00013** | | 0.00010 | mg/L | | 10/27/16 11:20 | 10/30/16 01:07 | 1 |

### Method: 245.1 - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|
| Hg | ND | | 0.00020 | mg/L | | 10/24/16 11:11 | 10/25/16 14:30 | 1 |

# QC Sample Results

Client: Arizona Public Service Company
Project/Site: CCR

TestAmerica Job ID: 550-71659-1
SDG: Four Corners (FC) Power Plant

## Method: 300.0 - Anions, Ion Chromatography

**Lab Sample ID: MB 550-101976/2** — **Client Sample ID: Method Blank**
**Matrix: Water** — **Prep Type: Total/NA**
**Analysis Batch: 101976**

| Analyte | MB Result | MB Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Fluoride | ND | | 0.40 | | mg/L | | | 10/31/16 13:25 | 1 |

**Lab Sample ID: LCS 550-101976/5** — **Client Sample ID: Lab Control Sample**
**Matrix: Water** — **Prep Type: Total/NA**
**Analysis Batch: 101976**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Fluoride | | | 4.00 | 3.79 | | mg/L | | 95 | 90 - 110 | | |

**Lab Sample ID: LCSD 550-101976/6** — **Client Sample ID: Lab Control Sample Dup**
**Matrix: Water** — **Prep Type: Total/NA**
**Analysis Batch: 101976**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Fluoride | | | 4.00 | 3.81 | | mg/L | | 95 | 90 - 110 | 0 | 20 |

**Lab Sample ID: 550-71825-A-1 MS** — **Client Sample ID: Matrix Spike**
**Matrix: Water** — **Prep Type: Total/NA**
**Analysis Batch: 101976**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Fluoride | 2.3 | | 4.00 | 6.20 | | mg/L | | 97 | 80 - 120 | | |

**Lab Sample ID: 550-71825-A-1 MSD** — **Client Sample ID: Matrix Spike Duplicate**
**Matrix: Water** — **Prep Type: Total/NA**
**Analysis Batch: 101976**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Fluoride | 2.3 | | 4.00 | 6.30 | | mg/L | | 100 | 80 - 120 | 2 | 20 |

**Lab Sample ID: MB 550-102104/2** — **Client Sample ID: Method Blank**
**Matrix: Water** — **Prep Type: Total/NA**
**Analysis Batch: 102104**

| Analyte | MB Result | MB Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Fluoride | ND | | 0.40 | | mg/L | | | 11/01/16 10:15 | 1 |

**Lab Sample ID: LCS 550-102104/5** — **Client Sample ID: Lab Control Sample**
**Matrix: Water** — **Prep Type: Total/NA**
**Analysis Batch: 102104**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Fluoride | | | 4.00 | 3.97 | | mg/L | | 99 | 90 - 110 | | |

**Lab Sample ID: LCSD 550-102104/6** — **Client Sample ID: Lab Control Sample Dup**
**Matrix: Water** — **Prep Type: Total/NA**
**Analysis Batch: 102104**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Fluoride | | | 4.00 | 3.96 | | mg/L | | 99 | 90 - 110 | 0 | 20 |

**Lab Sample ID: 550-71659-6 MS** — **Client Sample ID: FC-CCR-MW63-1016**
**Matrix: Water** — **Prep Type: Total/NA**
**Analysis Batch: 102104**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Fluoride | 1.8 | | 4.00 | 5.42 | | mg/L | | 91 | 80 - 120 |

**Lab Sample ID: 550-71659-6 MSD** — **Client Sample ID: FC-CCR-MW63-1016**
**Matrix: Water** — **Prep Type: Total/NA**
**Analysis Batch: 102104**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Fluoride | 1.8 | | 4.00 | 5.48 | | mg/L | | 93 | 80 - 120 | 1 | 20 |

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

**Lab Sample ID: MB 550-101437/1-A** — **Client Sample ID: Method Blank**
**Matrix: Water** — **Prep Type: Total/NA**
**Analysis Batch: 102384** — **Prep Batch: 101437**

| Analyte | MB Result | MB Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|
| Beryllium | ND | | 0.0010 | mg/L | | 10/25/16 16:54 | 11/03/16 22:34 | 1 |
| Lithium | ND | | 0.20 | mg/L | | 10/25/16 16:54 | 11/03/16 22:34 | 1 |

**Lab Sample ID: LCS 550-101437/2-A** — **Client Sample ID: Lab Control Sample**
**Matrix: Water** — **Prep Type: Total/NA**
**Analysis Batch: 102384** — **Prep Batch: 101437**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Beryllium | 1.00 | 1.00 | | mg/L | | 100 | 85 - 115 |
| Lithium | 1.00 | 1.05 | | mg/L | | 105 | 85 - 115 |

**Lab Sample ID: LCSD 550-101437/3-A** — **Client Sample ID: Lab Control Sample Dup**
**Matrix: Water** — **Prep Type: Total/NA**
**Analysis Batch: 102384** — **Prep Batch: 101437**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Beryllium | 1.00 | 1.01 | | mg/L | | 101 | 85 - 115 | 1 | 20 |
| Lithium | 1.00 | 1.05 | | mg/L | | 105 | 85 - 115 | 0 | 20 |

**Lab Sample ID: 550-71152-D-1-D MS** — **Client Sample ID: Matrix Spike**
**Matrix: Water** — **Prep Type: Total/NA**
**Analysis Batch: 102384** — **Prep Batch: 101437**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Beryllium | ND | | 1.00 | 1.00 | | mg/L | | 100 | 70 - 130 |
| Lithium | ND | | 1.00 | 1.07 | | mg/L | | 105 | 70 - 130 |

**Lab Sample ID: 550-71152-D-1-E MSD** — **Client Sample ID: Matrix Spike Duplicate**
**Matrix: Water** — **Prep Type: Total/NA**
**Analysis Batch: 102384** — **Prep Batch: 101437**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Beryllium | ND | | 1.00 | 1.00 | | mg/L | | 100 | 70 - 130 | 0 | 20 |
| Lithium | ND | | 1.00 | 1.08 | | mg/L | | 105 | 70 - 130 | 0 | 20 |

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

**Lab Sample ID: MB 550-101869/1-A** — **Client Sample ID: Method Blank**
**Matrix: Water** — **Prep Type: Total/NA**
**Analysis Batch: 102385** — **Prep Batch: 101869**

| Analyte | MB Result | MB Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Beryllium | ND | | 0.0010 | | mg/L | | 10/31/16 10:47 | 11/04/16 00:26 | 1 |
| Lithium | ND | | 0.20 | | mg/L | | 10/31/16 10:47 | 11/04/16 00:26 | 1 |

**Lab Sample ID: LCS 550-101869/2-A** — **Client Sample ID: Lab Control Sample**
**Matrix: Water** — **Prep Type: Total/NA**
**Analysis Batch: 102385** — **Prep Batch: 101869**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Beryllium | | | 1.00 | 0.992 | | mg/L | | 99 | 85 - 115 | | |
| Lithium | | | 1.00 | 1.02 | | mg/L | | 102 | 85 - 115 | | |

**Lab Sample ID: LCSD 550-101869/3-A** — **Client Sample ID: Lab Control Sample Dup**
**Matrix: Water** — **Prep Type: Total/NA**
**Analysis Batch: 102385** — **Prep Batch: 101869**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Beryllium | | | 1.00 | 0.973 | | mg/L | | 97 | 85 - 115 | 2 | 20 |
| Lithium | | | 1.00 | 1.01 | | mg/L | | 101 | 85 - 115 | 1 | 20 |

**Lab Sample ID: 550-71701-G-1-D MS** — **Client Sample ID: Matrix Spike**
**Matrix: Water** — **Prep Type: Total/NA**
**Analysis Batch: 102385** — **Prep Batch: 101869**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Beryllium | ND | | 1.00 | 0.987 | | mg/L | | 99 | 70 - 130 | | |
| Lithium | ND | | 1.00 | 1.09 | | mg/L | | 101 | 70 - 130 | | |

**Lab Sample ID: 550-71701-G-1-E MSD** — **Client Sample ID: Matrix Spike Duplicate**
**Matrix: Water** — **Prep Type: Total/NA**
**Analysis Batch: 102385** — **Prep Batch: 101869**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Beryllium | ND | | 1.00 | 1.01 | | mg/L | | 101 | 70 - 130 | 2 | 20 |
| Lithium | ND | | 1.00 | 1.10 | | mg/L | | 102 | 70 - 130 | 1 | 20 |

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

**Lab Sample ID: MB 440-365247/1-A** — **Client Sample ID: Method Blank**
**Matrix: Water** — **Prep Type: Total Recoverable**
**Analysis Batch: 365849** — **Prep Batch: 365247**

| Analyte | MB Result | MB Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | ND | | 0.00050 | | mg/L | | 10/27/16 11:20 | 10/29/16 23:44 | 1 |
| Arsenic | ND | | 0.00020 | | mg/L | | 10/27/16 11:20 | 10/29/16 23:44 | 1 |
| Barium | ND | | 0.00020 | | mg/L | | 10/27/16 11:20 | 10/29/16 23:44 | 1 |
| Cadmium | ND | | 0.00010 | | mg/L | | 10/27/16 11:20 | 10/29/16 23:44 | 1 |
| Chromium | ND | | 0.00050 | | mg/L | | 10/27/16 11:20 | 10/29/16 23:44 | 1 |
| Cobalt | ND | | 0.00020 | | mg/L | | 10/27/16 11:20 | 10/29/16 23:44 | 1 |
| Lead | ND | | 0.00010 | | mg/L | | 10/27/16 11:20 | 10/29/16 23:44 | 1 |

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

**Lab Sample ID: MB 440-365247/1-A**
**Matrix: Water**
**Analysis Batch: 365849**

**Client Sample ID: Method Blank**
**Prep Type: Total Recoverable**
**Prep Batch: 365247**

| Analyte | MB Result | MB Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Molybdenum | ND | | 0.00020 | | mg/L | | 10/27/16 11:20 | 10/29/16 23:44 | 1 |
| Selenium | ND | | 0.00060 | | mg/L | | 10/27/16 11:20 | 10/29/16 23:44 | 1 |
| Thallium | ND | | 0.00010 | | mg/L | | 10/27/16 11:20 | 10/29/16 23:44 | 1 |

**Lab Sample ID: LCS 440-365247/2-A**
**Matrix: Water**
**Analysis Batch: 365849**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total Recoverable**
**Prep Batch: 365247**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Antimony | 0.0800 | 0.0834 | | mg/L | | 104 | 85 - 115 |
| Arsenic | 0.0800 | 0.0790 | | mg/L | | 99 | 85 - 115 |
| Barium | 0.0800 | 0.0804 | | mg/L | | 100 | 85 - 115 |
| Cadmium | 0.0800 | 0.0784 | | mg/L | | 98 | 85 - 115 |
| Chromium | 0.0800 | 0.0778 | | mg/L | | 97 | 85 - 115 |
| Cobalt | 0.0800 | 0.0789 | | mg/L | | 99 | 85 - 115 |
| Lead | 0.0800 | 0.0763 | | mg/L | | 95 | 85 - 115 |
| Molybdenum | 0.0800 | 0.0782 | | mg/L | | 98 | 85 - 115 |
| Selenium | 0.0800 | 0.0761 | | mg/L | | 95 | 85 - 115 |
| Thallium | 0.0800 | 0.0770 | | mg/L | | 96 | 85 - 115 |

**Lab Sample ID: LCSD 440-365247/3-A**
**Matrix: Water**
**Analysis Batch: 365849**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total Recoverable**
**Prep Batch: 365247**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | 0.0800 | 0.0843 | | mg/L | | 105 | 85 - 115 | 1 | 20 |
| Arsenic | 0.0800 | 0.0812 | | mg/L | | 102 | 85 - 115 | 3 | 20 |
| Barium | 0.0800 | 0.0813 | | mg/L | | 102 | 85 - 115 | 1 | 20 |
| Cadmium | 0.0800 | 0.0789 | | mg/L | | 99 | 85 - 115 | 1 | 20 |
| Chromium | 0.0800 | 0.0779 | | mg/L | | 97 | 85 - 115 | 0 | 20 |
| Cobalt | 0.0800 | 0.0790 | | mg/L | | 99 | 85 - 115 | 0 | 20 |
| Lead | 0.0800 | 0.0785 | | mg/L | | 98 | 85 - 115 | 3 | 20 |
| Molybdenum | 0.0800 | 0.0794 | | mg/L | | 99 | 85 - 115 | 1 | 20 |
| Selenium | 0.0800 | 0.0761 | | mg/L | | 95 | 85 - 115 | 0 | 20 |
| Thallium | 0.0800 | 0.0799 | | mg/L | | 100 | 85 - 115 | 4 | 20 |

**Lab Sample ID: 550-71659-1 MS**
**Matrix: Water**
**Analysis Batch: 365849**

**Client Sample ID: FC-CCR-MW7-1016**
**Prep Type: Total Recoverable**
**Prep Batch: 365247**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | ND | | 0.0800 | 0.0873 | | mg/L | | 109 | 70 - 130 |
| Arsenic | 0.00033 | | 0.0800 | 0.0872 | | mg/L | | 109 | 70 - 130 |
| Barium | 0.015 | | 0.0800 | 0.0984 | | mg/L | | 105 | 70 - 130 |
| Cadmium | 0.00010 | | 0.0800 | 0.0751 | | mg/L | | 94 | 70 - 130 |
| Chromium | ND | | 0.0800 | 0.0763 | | mg/L | | 95 | 70 - 130 |
| Cobalt | 0.00083 | | 0.0800 | 0.0739 | | mg/L | | 91 | 70 - 130 |
| Lead | ND | | 0.0800 | 0.0692 | | mg/L | | 86 | 70 - 130 |
| Molybdenum | 0.016 | | 0.0800 | 0.104 | | mg/L | | 109 | 70 - 130 |

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

**Lab Sample ID: 550-71659-1 MS** — **Client Sample ID: FC-CCR-MW7-1016**
**Matrix: Water** — **Prep Type: Total Recoverable**
**Analysis Batch: 365849** — **Prep Batch: 365247**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Selenium | 0.0049 | | 0.0800 | 0.0931 | | mg/L | | 110 | 70 - 130 | | |
| Thallium | 0.00015 | | 0.0800 | 0.0667 | | mg/L | | 83 | 70 - 130 | | |

**Lab Sample ID: 550-71659-1 MSD** — **Client Sample ID: FC-CCR-MW7-1016**
**Matrix: Water** — **Prep Type: Total Recoverable**
**Analysis Batch: 365849** — **Prep Batch: 365247**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Antimony | ND | | 0.0800 | 0.0861 | | mg/L | | 107 | 70 - 130 | 1 | 20 |
| Arsenic | 0.00033 | | 0.0800 | 0.0857 | | mg/L | | 107 | 70 - 130 | 2 | 20 |
| Barium | 0.015 | | 0.0800 | 0.0966 | | mg/L | | 103 | 70 - 130 | 2 | 20 |
| Cadmium | 0.00010 | | 0.0800 | 0.0742 | | mg/L | | 93 | 70 - 130 | 1 | 20 |
| Chromium | ND | | 0.0800 | 0.0736 | | mg/L | | 92 | 70 - 130 | 4 | 20 |
| Cobalt | 0.00083 | | 0.0800 | 0.0715 | | mg/L | | 88 | 70 - 130 | 3 | 20 |
| Lead | ND | | 0.0800 | 0.0666 | | mg/L | | 83 | 70 - 130 | 4 | 20 |
| Molybdenum | 0.016 | | 0.0800 | 0.103 | | mg/L | | 109 | 70 - 130 | 1 | 20 |
| Selenium | 0.0049 | | 0.0800 | 0.0925 | | mg/L | | 109 | 70 - 130 | 1 | 20 |
| Thallium | 0.00015 | | 0.0800 | 0.0644 | | mg/L | | 80 | 70 - 130 | 3 | 20 |

**Lab Sample ID: 550-71659-12 MS** — **Client Sample ID: FC-CCR-MW69-1016**
**Matrix: Water** — **Prep Type: Total Recoverable**
**Analysis Batch: 365849** — **Prep Batch: 365247**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Antimony | ND | | 0.0800 | 0.0895 | | mg/L | | 112 | 70 - 130 | | |
| Arsenic | 0.0067 | | 0.0800 | 0.100 | | mg/L | | 117 | 70 - 130 | | |
| Barium | 0.016 | | 0.0800 | 0.106 | | mg/L | | 112 | 70 - 130 | | |
| Cadmium | ND | | 0.0800 | 0.0763 | | mg/L | | 95 | 70 - 130 | | |
| Chromium | ND | | 0.0800 | 0.0784 | | mg/L | | 97 | 70 - 130 | | |
| Cobalt | 0.0037 | | 0.0800 | 0.0787 | | mg/L | | 94 | 70 - 130 | | |
| Lead | ND | | 0.0800 | 0.0720 | | mg/L | | 90 | 70 - 130 | | |
| Molybdenum | 0.015 | | 0.0800 | 0.106 | | mg/L | | 114 | 70 - 130 | | |
| Selenium | 0.019 | | 0.0800 | 0.120 | | mg/L | | 126 | 70 - 130 | | |
| Thallium | 0.00014 | | 0.0800 | 0.0700 | | mg/L | | 87 | 70 - 130 | | |

**Lab Sample ID: 550-71659-12 MSD** — **Client Sample ID: FC-CCR-MW69-1016**
**Matrix: Water** — **Prep Type: Total Recoverable**
**Analysis Batch: 365849** — **Prep Batch: 365247**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Antimony | ND | | 0.0800 | 0.0877 | | mg/L | | 109 | 70 - 130 | 2 | 20 |
| Arsenic | 0.0067 | | 0.0800 | 0.0995 | | mg/L | | 116 | 70 - 130 | 1 | 20 |
| Barium | 0.016 | | 0.0800 | 0.104 | | mg/L | | 110 | 70 - 130 | 2 | 20 |
| Cadmium | ND | | 0.0800 | 0.0757 | | mg/L | | 95 | 70 - 130 | 1 | 20 |
| Chromium | ND | | 0.0800 | 0.0780 | | mg/L | | 97 | 70 - 130 | 0 | 20 |
| Cobalt | 0.0037 | | 0.0800 | 0.0783 | | mg/L | | 93 | 70 - 130 | 0 | 20 |
| Lead | ND | | 0.0800 | 0.0709 | | mg/L | | 89 | 70 - 130 | 2 | 20 |
| Molybdenum | 0.015 | | 0.0800 | 0.104 | | mg/L | | 111 | 70 - 130 | 2 | 20 |
| Selenium | 0.019 | | 0.0800 | 0.117 | | mg/L | | 122 | 70 - 130 | 3 | 20 |

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

**Lab Sample ID: 550-71659-12 MSD** — **Client Sample ID: FC-CCR-MW69-1016**
**Matrix: Water** — **Prep Type: Total Recoverable**
**Analysis Batch: 365849** — **Prep Batch: 365247**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Thallium | 0.00014 | | 0.0800 | 0.0697 | | mg/L | | 87 | 70 - 130 | 0 | 20 |

## Method: 245.1 - Mercury (CVAA)

**Lab Sample ID: MB 550-101296/1-A** — **Client Sample ID: Method Blank**
**Matrix: Water** — **Prep Type: Total/NA**
**Analysis Batch: 101433** — **Prep Batch: 101296**

| Analyte | MB Result | MB Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Hg | ND | | 0.00020 | | mg/L | | 10/24/16 11:11 | 10/25/16 14:01 | 1 |

**Lab Sample ID: LCS 550-101296/2-A** — **Client Sample ID: Lab Control Sample**
**Matrix: Water** — **Prep Type: Total/NA**
**Analysis Batch: 101433** — **Prep Batch: 101296**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Hg | | | 0.0100 | 0.0106 | | mg/L | | 106 | 85 - 115 | | |

**Lab Sample ID: LCSD 550-101296/3-A** — **Client Sample ID: Lab Control Sample Dup**
**Matrix: Water** — **Prep Type: Total/NA**
**Analysis Batch: 101433** — **Prep Batch: 101296**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Hg | | | 0.0100 | 0.0107 | | mg/L | | 107 | 85 - 115 | 1 | 20 |

# QC Association Summary

Client: Arizona Public Service Company
Project/Site: CCR

TestAmerica Job ID: 550-71659-1
SDG: Four Corners (FC) Power Plant

## HPLC/IC

### Analysis Batch: 101976

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 550-71659-1 | FC-CCR-MW7-1016 | Total/NA | Water | 300.0 | |
| 550-71659-2 | FC-CCR-MW49A-1016 | Total/NA | Water | 300.0 | |
| 550-71659-3 | FC-CCR-MW60-1016 | Total/NA | Water | 300.0 | |
| 550-71659-4 | FC-CCR-MW61-1016 | Total/NA | Water | 300.0 | |
| 550-71659-5 | FC-CCR-MW62-1016 | Total/NA | Water | 300.0 | |
| 550-71659-6 | FC-CCR-MW63-1016 | Total/NA | Water | 300.0 | |
| 550-71659-7 | FC-CCR-MW64-1016 | Total/NA | Water | 300.0 | |
| 550-71659-8 | FC-CCR-MW65-1016 | Total/NA | Water | 300.0 | |
| 550-71659-9 | FC-CCR-MW66-1016 | Total/NA | Water | 300.0 | |
| MB 550-101976/2 | Method Blank | Total/NA | Water | 300.0 | |
| LCS 550-101976/5 | Lab Control Sample | Total/NA | Water | 300.0 | |
| LCSD 550-101976/6 | Lab Control Sample Dup | Total/NA | Water | 300.0 | |
| 550-71825-A-1 MS | Matrix Spike | Total/NA | Water | 300.0 | |
| 550-71825-A-1 MSD | Matrix Spike Duplicate | Total/NA | Water | 300.0 | |

### Analysis Batch: 102104

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 550-71659-10 | FC-CCR-MW67-1016 | Total/NA | Water | 300.0 | |
| 550-71659-11 | FC-CCR-MW68-1016 | Total/NA | Water | 300.0 | |
| 550-71659-12 | FC-CCR-MW69-1016 | Total/NA | Water | 300.0 | |
| 550-71659-13 | FC-CCR-MW70-1016 | Total/NA | Water | 300.0 | |
| 550-71659-14 | FC-CCR-MW71-1016 | Total/NA | Water | 300.0 | |
| 550-71659-15 | FC-CCR-MW72-1016 | Total/NA | Water | 300.0 | |
| 550-71659-16 | FC-CCR-MW100-1016 | Total/NA | Water | 300.0 | |
| 550-71659-17 | FC-CCR-MW101-1016 | Total/NA | Water | 300.0 | |
| MB 550-102104/2 | Method Blank | Total/NA | Water | 300.0 | |
| LCS 550-102104/5 | Lab Control Sample | Total/NA | Water | 300.0 | |
| LCSD 550-102104/6 | Lab Control Sample Dup | Total/NA | Water | 300.0 | |
| 550-71659-6 MS | FC-CCR-MW63-1016 | Total/NA | Water | 300.0 | |
| 550-71659-6 MSD | FC-CCR-MW63-1016 | Total/NA | Water | 300.0 | |

## Metals

### Prep Batch: 101296

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 550-71659-1 | FC-CCR-MW7-1016 | Total/NA | Water | 245.1 | |
| 550-71659-2 | FC-CCR-MW49A-1016 | Total/NA | Water | 245.1 | |
| 550-71659-3 | FC-CCR-MW60-1016 | Total/NA | Water | 245.1 | |
| 550-71659-4 | FC-CCR-MW61-1016 | Total/NA | Water | 245.1 | |
| 550-71659-5 | FC-CCR-MW62-1016 | Total/NA | Water | 245.1 | |
| 550-71659-6 | FC-CCR-MW63-1016 | Total/NA | Water | 245.1 | |
| 550-71659-7 | FC-CCR-MW64-1016 | Total/NA | Water | 245.1 | |
| 550-71659-8 | FC-CCR-MW65-1016 | Total/NA | Water | 245.1 | |
| 550-71659-9 | FC-CCR-MW66-1016 | Total/NA | Water | 245.1 | |
| 550-71659-10 | FC-CCR-MW67-1016 | Total/NA | Water | 245.1 | |
| 550-71659-11 | FC-CCR-MW68-1016 | Total/NA | Water | 245.1 | |
| 550-71659-12 | FC-CCR-MW69-1016 | Total/NA | Water | 245.1 | |
| 550-71659-13 | FC-CCR-MW70-1016 | Total/NA | Water | 245.1 | |
| 550-71659-17 | FC-CCR-MW101-1016 | Total/NA | Water | 245.1 | |
| MB 550-101296/1-A | Method Blank | Total/NA | Water | 245.1 | |

## Metals (Continued)

### Prep Batch: 101296 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| LCS 550-101296/2-A | Lab Control Sample | Total/NA | Water | 245.1 | |
| LCSD 550-101296/3-A | Lab Control Sample Dup | Total/NA | Water | 245.1 | |

### Prep Batch: 101313

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 550-71659-14 | FC-CCR-MW71-1016 | Total/NA | Water | 245.1 | |
| 550-71659-15 | FC-CCR-MW72-1016 | Total/NA | Water | 245.1 | |
| 550-71659-16 | FC-CCR-MW100-1016 | Total/NA | Water | 245.1 | |

### Analysis Batch: 101433

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 550-71659-1 | FC-CCR-MW7-1016 | Total/NA | Water | 245.1 | 101296 |
| 550-71659-2 | FC-CCR-MW49A-1016 | Total/NA | Water | 245.1 | 101296 |
| 550-71659-3 | FC-CCR-MW60-1016 | Total/NA | Water | 245.1 | 101296 |
| 550-71659-4 | FC-CCR-MW61-1016 | Total/NA | Water | 245.1 | 101296 |
| 550-71659-5 | FC-CCR-MW62-1016 | Total/NA | Water | 245.1 | 101296 |
| 550-71659-6 | FC-CCR-MW63-1016 | Total/NA | Water | 245.1 | 101296 |
| 550-71659-7 | FC-CCR-MW64-1016 | Total/NA | Water | 245.1 | 101296 |
| 550-71659-8 | FC-CCR-MW65-1016 | Total/NA | Water | 245.1 | 101296 |
| 550-71659-9 | FC-CCR-MW66-1016 | Total/NA | Water | 245.1 | 101296 |
| 550-71659-10 | FC-CCR-MW67-1016 | Total/NA | Water | 245.1 | 101296 |
| 550-71659-11 | FC-CCR-MW68-1016 | Total/NA | Water | 245.1 | 101296 |
| 550-71659-12 | FC-CCR-MW69-1016 | Total/NA | Water | 245.1 | 101296 |
| 550-71659-13 | FC-CCR-MW70-1016 | Total/NA | Water | 245.1 | 101296 |
| 550-71659-17 | FC-CCR-MW101-1016 | Total/NA | Water | 245.1 | 101296 |
| MB 550-101296/1-A | Method Blank | Total/NA | Water | 245.1 | 101296 |
| LCS 550-101296/2-A | Lab Control Sample | Total/NA | Water | 245.1 | 101296 |
| LCSD 550-101296/3-A | Lab Control Sample Dup | Total/NA | Water | 245.1 | 101296 |

### Prep Batch: 101437

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 550-71659-1 | FC-CCR-MW7-1016 | Total/NA | Water | 200.7 | |
| 550-71659-2 | FC-CCR-MW49A-1016 | Total/NA | Water | 200.7 | |
| 550-71659-3 | FC-CCR-MW60-1016 | Total/NA | Water | 200.7 | |
| 550-71659-4 | FC-CCR-MW61-1016 | Total/NA | Water | 200.7 | |
| 550-71659-5 | FC-CCR-MW62-1016 | Total/NA | Water | 200.7 | |
| 550-71659-6 | FC-CCR-MW63-1016 | Total/NA | Water | 200.7 | |
| 550-71659-7 | FC-CCR-MW64-1016 | Total/NA | Water | 200.7 | |
| MB 550-101437/1-A | Method Blank | Total/NA | Water | 200.7 | |
| LCS 550-101437/2-A | Lab Control Sample | Total/NA | Water | 200.7 | |
| LCSD 550-101437/3-A | Lab Control Sample Dup | Total/NA | Water | 200.7 | |
| 550-71152-D-1-D MS | Matrix Spike | Total/NA | Water | 200.7 | |
| 550-71152-D-1-E MSD | Matrix Spike Duplicate | Total/NA | Water | 200.7 | |

### Analysis Batch: 101438

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 550-71659-14 | FC-CCR-MW71-1016 | Total/NA | Water | 245.1 | 101313 |
| 550-71659-15 | FC-CCR-MW72-1016 | Total/NA | Water | 245.1 | 101313 |
| 550-71659-16 | FC-CCR-MW100-1016 | Total/NA | Water | 245.1 | 101313 |

## Metals (Continued)

### Prep Batch: 101869

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 550-71659-8 | FC-CCR-MW65-1016 | Total/NA | Water | 200.7 | |
| 550-71659-9 | FC-CCR-MW66-1016 | Total/NA | Water | 200.7 | |
| 550-71659-10 | FC-CCR-MW67-1016 | Total/NA | Water | 200.7 | |
| 550-71659-11 | FC-CCR-MW68-1016 | Total/NA | Water | 200.7 | |
| 550-71659-12 | FC-CCR-MW69-1016 | Total/NA | Water | 200.7 | |
| 550-71659-13 | FC-CCR-MW70-1016 | Total/NA | Water | 200.7 | |
| 550-71659-14 | FC-CCR-MW71-1016 | Total/NA | Water | 200.7 | |
| 550-71659-15 | FC-CCR-MW72-1016 | Total/NA | Water | 200.7 | |
| 550-71659-16 | FC-CCR-MW100-1016 | Total/NA | Water | 200.7 | |
| 550-71659-17 | FC-CCR-MW101-1016 | Total/NA | Water | 200.7 | |
| MB 550-101869/1-A | Method Blank | Total/NA | Water | 200.7 | |
| LCS 550-101869/2-A | Lab Control Sample | Total/NA | Water | 200.7 | |
| LCSD 550-101869/3-A | Lab Control Sample Dup | Total/NA | Water | 200.7 | |
| 550-71701-G-1-D MS | Matrix Spike | Total/NA | Water | 200.7 | |
| 550-71701-G-1-E MSD | Matrix Spike Duplicate | Total/NA | Water | 200.7 | |

### Analysis Batch: 102384

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 550-71659-1 | FC-CCR-MW7-1016 | Total/NA | Water | 200.7 Rev 4.4 | 101437 |
| 550-71659-2 | FC-CCR-MW49A-1016 | Total/NA | Water | 200.7 Rev 4.4 | 101437 |
| 550-71659-3 | FC-CCR-MW60-1016 | Total/NA | Water | 200.7 Rev 4.4 | 101437 |
| 550-71659-4 | FC-CCR-MW61-1016 | Total/NA | Water | 200.7 Rev 4.4 | 101437 |
| 550-71659-5 | FC-CCR-MW62-1016 | Total/NA | Water | 200.7 Rev 4.4 | 101437 |
| 550-71659-6 | FC-CCR-MW63-1016 | Total/NA | Water | 200.7 Rev 4.4 | 101437 |
| 550-71659-7 | FC-CCR-MW64-1016 | Total/NA | Water | 200.7 Rev 4.4 | 101437 |
| MB 550-101437/1-A | Method Blank | Total/NA | Water | 200.7 Rev 4.4 | 101437 |
| LCS 550-101437/2-A | Lab Control Sample | Total/NA | Water | 200.7 Rev 4.4 | 101437 |
| LCSD 550-101437/3-A | Lab Control Sample Dup | Total/NA | Water | 200.7 Rev 4.4 | 101437 |
| 550-71152-D-1-D MS | Matrix Spike | Total/NA | Water | 200.7 Rev 4.4 | 101437 |
| 550-71152-D-1-E MSD | Matrix Spike Duplicate | Total/NA | Water | 200.7 Rev 4.4 | 101437 |

### Analysis Batch: 102385

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 550-71659-8 | FC-CCR-MW65-1016 | Total/NA | Water | 200.7 Rev 4.4 | 101869 |
| 550-71659-9 | FC-CCR-MW66-1016 | Total/NA | Water | 200.7 Rev 4.4 | 101869 |
| 550-71659-10 | FC-CCR-MW67-1016 | Total/NA | Water | 200.7 Rev 4.4 | 101869 |
| 550-71659-11 | FC-CCR-MW68-1016 | Total/NA | Water | 200.7 Rev 4.4 | 101869 |
| 550-71659-12 | FC-CCR-MW69-1016 | Total/NA | Water | 200.7 Rev 4.4 | 101869 |
| 550-71659-13 | FC-CCR-MW70-1016 | Total/NA | Water | 200.7 Rev 4.4 | 101869 |
| 550-71659-14 | FC-CCR-MW71-1016 | Total/NA | Water | 200.7 Rev 4.4 | 101869 |
| 550-71659-15 | FC-CCR-MW72-1016 | Total/NA | Water | 200.7 Rev 4.4 | 101869 |
| 550-71659-16 | FC-CCR-MW100-1016 | Total/NA | Water | 200.7 Rev 4.4 | 101869 |
| 550-71659-17 | FC-CCR-MW101-1016 | Total/NA | Water | 200.7 Rev 4.4 | 101869 |
| MB 550-101869/1-A | Method Blank | Total/NA | Water | 200.7 Rev 4.4 | 101869 |
| LCS 550-101869/2-A | Lab Control Sample | Total/NA | Water | 200.7 Rev 4.4 | 101869 |
| LCSD 550-101869/3-A | Lab Control Sample Dup | Total/NA | Water | 200.7 Rev 4.4 | 101869 |
| 550-71701-G-1-D MS | Matrix Spike | Total/NA | Water | 200.7 Rev 4.4 | 101869 |
| 550-71701-G-1-E MSD | Matrix Spike Duplicate | Total/NA | Water | 200.7 Rev 4.4 | 101869 |

## Metals (Continued)

### Prep Batch: 365247

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 550-71659-1 | FC-CCR-MW7-1016 | Total Recoverable | Water | 200.2 | |
| 550-71659-2 | FC-CCR-MW49A-1016 | Total Recoverable | Water | 200.2 | |
| 550-71659-3 | FC-CCR-MW60-1016 | Total Recoverable | Water | 200.2 | |
| 550-71659-4 | FC-CCR-MW61-1016 | Total Recoverable | Water | 200.2 | |
| 550-71659-5 | FC-CCR-MW62-1016 | Total Recoverable | Water | 200.2 | |
| 550-71659-6 | FC-CCR-MW63-1016 | Total Recoverable | Water | 200.2 | |
| 550-71659-7 | FC-CCR-MW64-1016 | Total Recoverable | Water | 200.2 | |
| 550-71659-8 | FC-CCR-MW65-1016 | Total Recoverable | Water | 200.2 | |
| 550-71659-9 | FC-CCR-MW66-1016 | Total Recoverable | Water | 200.2 | |
| 550-71659-10 | FC-CCR-MW67-1016 | Total Recoverable | Water | 200.2 | |
| 550-71659-11 | FC-CCR-MW68-1016 | Total Recoverable | Water | 200.2 | |
| 550-71659-12 | FC-CCR-MW69-1016 | Total Recoverable | Water | 200.2 | |
| 550-71659-13 | FC-CCR-MW70-1016 | Total Recoverable | Water | 200.2 | |
| 550-71659-14 | FC-CCR-MW71-1016 | Total Recoverable | Water | 200.2 | |
| 550-71659-15 | FC-CCR-MW72-1016 | Total Recoverable | Water | 200.2 | |
| 550-71659-16 | FC-CCR-MW100-1016 | Total Recoverable | Water | 200.2 | |
| 550-71659-17 | FC-CCR-MW101-1016 | Total Recoverable | Water | 200.2 | |
| MB 440-365247/1-A | Method Blank | Total Recoverable | Water | 200.2 | |
| LCS 440-365247/2-A | Lab Control Sample | Total Recoverable | Water | 200.2 | |
| LCSD 440-365247/3-A | Lab Control Sample Dup | Total Recoverable | Water | 200.2 | |
| 550-71659-1 MS | FC-CCR-MW7-1016 | Total Recoverable | Water | 200.2 | |
| 550-71659-1 MSD | FC-CCR-MW7-1016 | Total Recoverable | Water | 200.2 | |
| 550-71659-12 MS | FC-CCR-MW69-1016 | Total Recoverable | Water | 200.2 | |
| 550-71659-12 MSD | FC-CCR-MW69-1016 | Total Recoverable | Water | 200.2 | |

### Analysis Batch: 365849

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 550-71659-1 | FC-CCR-MW7-1016 | Total Recoverable | Water | 200.8 LL | 365247 |
| 550-71659-2 | FC-CCR-MW49A-1016 | Total Recoverable | Water | 200.8 LL | 365247 |
| 550-71659-3 | FC-CCR-MW60-1016 | Total Recoverable | Water | 200.8 LL | 365247 |
| 550-71659-4 | FC-CCR-MW61-1016 | Total Recoverable | Water | 200.8 LL | 365247 |
| 550-71659-5 | FC-CCR-MW62-1016 | Total Recoverable | Water | 200.8 LL | 365247 |
| 550-71659-6 | FC-CCR-MW63-1016 | Total Recoverable | Water | 200.8 LL | 365247 |
| 550-71659-7 | FC-CCR-MW64-1016 | Total Recoverable | Water | 200.8 LL | 365247 |
| 550-71659-8 | FC-CCR-MW65-1016 | Total Recoverable | Water | 200.8 LL | 365247 |
| 550-71659-9 | FC-CCR-MW66-1016 | Total Recoverable | Water | 200.8 LL | 365247 |
| 550-71659-10 | FC-CCR-MW67-1016 | Total Recoverable | Water | 200.8 LL | 365247 |
| 550-71659-11 | FC-CCR-MW68-1016 | Total Recoverable | Water | 200.8 LL | 365247 |
| 550-71659-12 | FC-CCR-MW69-1016 | Total Recoverable | Water | 200.8 LL | 365247 |
| 550-71659-13 | FC-CCR-MW70-1016 | Total Recoverable | Water | 200.8 LL | 365247 |
| 550-71659-14 | FC-CCR-MW71-1016 | Total Recoverable | Water | 200.8 LL | 365247 |
| 550-71659-15 | FC-CCR-MW72-1016 | Total Recoverable | Water | 200.8 LL | 365247 |
| 550-71659-16 | FC-CCR-MW100-1016 | Total Recoverable | Water | 200.8 LL | 365247 |
| 550-71659-17 | FC-CCR-MW101-1016 | Total Recoverable | Water | 200.8 LL | 365247 |
| MB 440-365247/1-A | Method Blank | Total Recoverable | Water | 200.8 LL | 365247 |
| LCS 440-365247/2-A | Lab Control Sample | Total Recoverable | Water | 200.8 LL | 365247 |
| LCSD 440-365247/3-A | Lab Control Sample Dup | Total Recoverable | Water | 200.8 LL | 365247 |
| 550-71659-1 MS | FC-CCR-MW7-1016 | Total Recoverable | Water | 200.8 LL | 365247 |
| 550-71659-1 MSD | FC-CCR-MW7-1016 | Total Recoverable | Water | 200.8 LL | 365247 |
| 550-71659-12 MS | FC-CCR-MW69-1016 | Total Recoverable | Water | 200.8 LL | 365247 |
| 550-71659-12 MSD | FC-CCR-MW69-1016 | Total Recoverable | Water | 200.8 LL | 365247 |

# Lab Chronicle

Client: Arizona Public Service Company
Project/Site: CCR

TestAmerica Job ID: 550-71659-1
SDG: Four Corners (FC) Power Plant

## Client Sample ID: FC-CCR-MW7-1016 — Lab Sample ID: 550-71659-1

**Date Collected: 10/20/16 10:43** — **Matrix: Water**
**Date Received: 10/22/16 10:51**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 300.0 | | 1 | 101976 | 11/01/16 00:33 | BCB | TAL PHX |
| Total/NA | Prep | 200.7 | | | 101437 | 10/25/16 16:54 | EXZ | TAL PHX |
| Total/NA | Analysis | 200.7 Rev 4.4 | | 1 | 102384 | 11/03/16 23:43 | CJD | TAL PHX |
| Total Recoverable | Prep | 200.2 | | | 365247 | 10/27/16 11:20 | Q1N | TAL IRV |
| Total Recoverable | Analysis | 200.8 LL | | 1 | 365849 | 10/29/16 23:52 | RC | TAL IRV |
| Total/NA | Prep | 245.1 | | | 101296 | 10/24/16 11:11 | JTG | TAL PHX |
| Total/NA | Analysis | 245.1 | | 1 | 101433 | 10/25/16 14:32 | JTG | TAL PHX |

## Client Sample ID: FC-CCR-MW49A-1016 — Lab Sample ID: 550-71659-2

**Date Collected: 10/20/16 08:17** — **Matrix: Water**
**Date Received: 10/22/16 10:51**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 300.0 | | 1 | 101976 | 11/01/16 00:51 | BCB | TAL PHX |
| Total/NA | Prep | 200.7 | | | 101437 | 10/25/16 16:54 | EXZ | TAL PHX |
| Total/NA | Analysis | 200.7 Rev 4.4 | | 1 | 102384 | 11/03/16 23:49 | CJD | TAL PHX |
| Total Recoverable | Prep | 200.2 | | | 365247 | 10/27/16 11:20 | Q1N | TAL IRV |
| Total Recoverable | Analysis | 200.8 LL | | 10 | 365849 | 10/30/16 00:00 | RC | TAL IRV |
| Total/NA | Prep | 245.1 | | | 101296 | 10/24/16 11:11 | JTG | TAL PHX |
| Total/NA | Analysis | 245.1 | | 1 | 101433 | 10/25/16 14:33 | JTG | TAL PHX |

## Client Sample ID: FC-CCR-MW60-1016 — Lab Sample ID: 550-71659-3

**Date Collected: 10/20/16 09:45** — **Matrix: Water**
**Date Received: 10/22/16 10:51**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 300.0 | | 1 | 101976 | 11/01/16 01:10 | BCB | TAL PHX |
| Total/NA | Prep | 200.7 | | | 101437 | 10/25/16 16:54 | EXZ | TAL PHX |
| Total/NA | Analysis | 200.7 Rev 4.4 | | 1 | 102384 | 11/03/16 23:55 | CJD | TAL PHX |
| Total Recoverable | Prep | 200.2 | | | 365247 | 10/27/16 11:20 | Q1N | TAL IRV |
| Total Recoverable | Analysis | 200.8 LL | | 1 | 365849 | 10/30/16 00:03 | RC | TAL IRV |
| Total/NA | Prep | 245.1 | | | 101296 | 10/24/16 11:11 | JTG | TAL PHX |
| Total/NA | Analysis | 245.1 | | 1 | 101433 | 10/25/16 14:35 | JTG | TAL PHX |

## Client Sample ID: FC-CCR-MW61-1016 — Lab Sample ID: 550-71659-4

**Date Collected: 10/20/16 09:07** — **Matrix: Water**
**Date Received: 10/22/16 10:51**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 300.0 | | 1 | 101976 | 11/01/16 01:28 | BCB | TAL PHX |
| Total/NA | Prep | 200.7 | | | 101437 | 10/25/16 16:54 | EXZ | TAL PHX |
| Total/NA | Analysis | 200.7 Rev 4.4 | | 1 | 102384 | 11/04/16 00:01 | CJD | TAL PHX |

# Lab Chronicle

Client: Arizona Public Service Company
Project/Site: CCR

TestAmerica Job ID: 550-71659-1
SDG: Four Corners (FC) Power Plant

## Client Sample ID: FC-CCR-MW61-1016 — Lab Sample ID: 550-71659-4

**Date Collected: 10/20/16 09:07** — **Matrix: Water**
**Date Received: 10/22/16 10:51**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total Recoverable | Prep | 200.2 | | | 365247 | 10/27/16 11:20 | Q1N | TAL IRV |
| Total Recoverable | Analysis | 200.8 LL | | 1 | 365849 | 10/30/16 00:06 | RC | TAL IRV |
| Total/NA | Prep | 245.1 | | | 101296 | 10/24/16 11:11 | JTG | TAL PHX |
| Total/NA | Analysis | 245.1 | | 1 | 101433 | 10/25/16 14:37 | JTG | TAL PHX |

## Client Sample ID: FC-CCR-MW62-1016 — Lab Sample ID: 550-71659-5

**Date Collected: 10/19/16 16:41** — **Matrix: Water**
**Date Received: 10/22/16 10:51**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 300.0 | | 1 | 101976 | 11/01/16 01:47 | BCB | TAL PHX |
| Total/NA | Prep | 200.7 | | | 101437 | 10/25/16 16:54 | EXZ | TAL PHX |
| Total/NA | Analysis | 200.7 Rev 4.4 | | 1 | 102384 | 11/04/16 00:06 | CJD | TAL PHX |
| Total Recoverable | Prep | 200.2 | | | 365247 | 10/27/16 11:20 | Q1N | TAL IRV |
| Total Recoverable | Analysis | 200.8 LL | | 1 | 365849 | 10/30/16 00:19 | RC | TAL IRV |
| Total/NA | Prep | 245.1 | | | 101296 | 10/24/16 11:11 | JTG | TAL PHX |
| Total/NA | Analysis | 245.1 | | 1 | 101433 | 10/25/16 14:17 | JTG | TAL PHX |

## Client Sample ID: FC-CCR-MW63-1016 — Lab Sample ID: 550-71659-6

**Date Collected: 10/19/16 12:29** — **Matrix: Water**
**Date Received: 10/22/16 10:51**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 300.0 | | 1 | 101976 | 11/01/16 03:19 | BCB | TAL PHX |
| Total/NA | Prep | 200.7 | | | 101437 | 10/25/16 16:54 | EXZ | TAL PHX |
| Total/NA | Analysis | 200.7 Rev 4.4 | | 1 | 102384 | 11/04/16 00:12 | CJD | TAL PHX |
| Total Recoverable | Prep | 200.2 | | | 365247 | 10/27/16 11:20 | Q1N | TAL IRV |
| Total Recoverable | Analysis | 200.8 LL | | 1 | 365849 | 10/30/16 00:22 | RC | TAL IRV |
| Total/NA | Prep | 245.1 | | | 101296 | 10/24/16 11:11 | JTG | TAL PHX |
| Total/NA | Analysis | 245.1 | | 1 | 101433 | 10/25/16 14:19 | JTG | TAL PHX |

## Client Sample ID: FC-CCR-MW64-1016 — Lab Sample ID: 550-71659-7

**Date Collected: 10/19/16 11:58** — **Matrix: Water**
**Date Received: 10/22/16 10:51**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 300.0 | | 1 | 101976 | 11/01/16 03:37 | BCB | TAL PHX |
| Total/NA | Prep | 200.7 | | | 101437 | 10/25/16 16:54 | EXZ | TAL PHX |
| Total/NA | Analysis | 200.7 Rev 4.4 | | 1 | 102384 | 11/04/16 00:18 | CJD | TAL PHX |
| Total Recoverable | Prep | 200.2 | | | 365247 | 10/27/16 11:20 | Q1N | TAL IRV |
| Total Recoverable | Analysis | 200.8 LL | | 1 | 365849 | 10/30/16 00:24 | RC | TAL IRV |
| Total/NA | Prep | 245.1 | | | 101296 | 10/24/16 11:11 | JTG | TAL PHX |
| Total/NA | Analysis | 245.1 | | 1 | 101433 | 10/25/16 14:20 | JTG | TAL PHX |

# Lab Chronicle

Client: Arizona Public Service Company
Project/Site: CCR

TestAmerica Job ID: 550-71659-1
SDG: Four Corners (FC) Power Plant

## Client Sample ID: FC-CCR-MW65-1016 — Lab Sample ID: 550-71659-8

**Date Collected: 10/19/16 15:46** — **Matrix: Water**
**Date Received: 10/22/16 10:51**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 300.0 | | 1 | 101976 | 11/01/16 03:55 | BCB | TAL PHX |
| Total/NA | Prep | 200.7 | | | 101869 | 10/31/16 10:47 | SGO | TAL PHX |
| Total/NA | Analysis | 200.7 Rev 4.4 | | 1 | 102385 | 11/04/16 01:02 | CJD | TAL PHX |
| Total Recoverable | Prep | 200.2 | | | 365247 | 10/27/16 11:20 | Q1N | TAL IRV |
| Total Recoverable | Analysis | 200.8 LL | | 1 | 365849 | 10/30/16 00:27 | RC | TAL IRV |
| Total/NA | Prep | 245.1 | | | 101296 | 10/24/16 11:11 | JTG | TAL PHX |
| Total/NA | Analysis | 245.1 | | 1 | 101433 | 10/25/16 14:22 | JTG | TAL PHX |

## Client Sample ID: FC-CCR-MW66-1016 — Lab Sample ID: 550-71659-9

**Date Collected: 10/19/16 17:22** — **Matrix: Water**
**Date Received: 10/22/16 10:51**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 300.0 | | 2 | 101976 | 11/01/16 04:14 | BCB | TAL PHX |
| Total/NA | Prep | 200.7 | | | 101869 | 10/31/16 10:47 | SGO | TAL PHX |
| Total/NA | Analysis | 200.7 Rev 4.4 | | 1 | 102385 | 11/04/16 01:05 | CJD | TAL PHX |
| Total Recoverable | Prep | 200.2 | | | 365247 | 10/27/16 11:20 | Q1N | TAL IRV |
| Total Recoverable | Analysis | 200.8 LL | | 1 | 365849 | 10/30/16 00:30 | RC | TAL IRV |
| Total/NA | Prep | 245.1 | | | 101296 | 10/24/16 11:11 | JTG | TAL PHX |
| Total/NA | Analysis | 245.1 | | 1 | 101433 | 10/25/16 14:24 | JTG | TAL PHX |

## Client Sample ID: FC-CCR-MW67-1016 — Lab Sample ID: 550-71659-10

**Date Collected: 10/20/16 12:51** — **Matrix: Water**
**Date Received: 10/22/16 10:51**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 300.0 | | 1 | 102104 | 11/01/16 17:40 | BCB | TAL PHX |
| Total/NA | Prep | 200.7 | | | 101869 | 10/31/16 10:47 | SGO | TAL PHX |
| Total/NA | Analysis | 200.7 Rev 4.4 | | 1 | 102385 | 11/04/16 01:16 | CJD | TAL PHX |
| Total Recoverable | Prep | 200.2 | | | 365247 | 10/27/16 11:20 | Q1N | TAL IRV |
| Total Recoverable | Analysis | 200.8 LL | | 1 | 365849 | 10/30/16 00:32 | RC | TAL IRV |
| Total/NA | Prep | 245.1 | | | 101296 | 10/24/16 11:11 | JTG | TAL PHX |
| Total/NA | Analysis | 245.1 | | 1 | 101433 | 10/25/16 14:38 | JTG | TAL PHX |

## Client Sample ID: FC-CCR-MW68-1016 — Lab Sample ID: 550-71659-11

**Date Collected: 10/20/16 13:41** — **Matrix: Water**
**Date Received: 10/22/16 10:51**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 300.0 | | 1 | 102104 | 11/01/16 17:59 | BCB | TAL PHX |
| Total/NA | Prep | 200.7 | | | 101869 | 10/31/16 10:47 | SGO | TAL PHX |
| Total/NA | Analysis | 200.7 Rev 4.4 | | 1 | 102385 | 11/04/16 01:22 | CJD | TAL PHX |
| Total Recoverable | Prep | 200.2 | | | 365247 | 10/27/16 11:20 | Q1N | TAL IRV |

# Lab Chronicle

Client: Arizona Public Service Company
Project/Site: CCR

TestAmerica Job ID: 550-71659-1
SDG: Four Corners (FC) Power Plant

## Client Sample ID: FC-CCR-MW68-1016 — Lab Sample ID: 550-71659-11

**Date Collected: 10/20/16 13:41** — **Matrix: Water**
**Date Received: 10/22/16 10:51**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total Recoverable | Analysis | 200.8 LL | | 1 | 365849 | 10/30/16 00:54 | RC | TAL IRV |
| Total/NA | Prep | 245.1 | | | 101296 | 10/24/16 11:11 | JTG | TAL PHX |
| Total/NA | Analysis | 245.1 | | 1 | 101433 | 10/25/16 14:40 | JTG | TAL PHX |

## Client Sample ID: FC-CCR-MW69-1016 — Lab Sample ID: 550-71659-12

**Date Collected: 10/20/16 14:16** — **Matrix: Water**
**Date Received: 10/22/16 10:51**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 300.0 | | 1 | 102104 | 11/01/16 18:17 | BCB | TAL PHX |
| Total/NA | Prep | 200.7 | | | 101869 | 10/31/16 10:47 | SGO | TAL PHX |
| Total/NA | Analysis | 200.7 Rev 4.4 | | 1 | 102385 | 11/04/16 01:28 | CJD | TAL PHX |
| Total Recoverable | Prep | 200.2 | | | 365247 | 10/27/16 11:20 | Q1N | TAL IRV |
| Total Recoverable | Analysis | 200.8 LL | | 1 | 365849 | 10/30/16 00:35 | RC | TAL IRV |
| Total/NA | Prep | 245.1 | | | 101296 | 10/24/16 11:11 | JTG | TAL PHX |
| Total/NA | Analysis | 245.1 | | 1 | 101433 | 10/25/16 14:41 | JTG | TAL PHX |

## Client Sample ID: FC-CCR-MW70-1016 — Lab Sample ID: 550-71659-13

**Date Collected: 10/19/16 14:29** — **Matrix: Water**
**Date Received: 10/22/16 10:51**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 300.0 | | 1 | 102104 | 11/01/16 18:45 | BCB | TAL PHX |
| Total/NA | Prep | 200.7 | | | 101869 | 10/31/16 10:47 | SGO | TAL PHX |
| Total/NA | Analysis | 200.7 Rev 4.4 | | 1 | 102385 | 11/04/16 01:34 | CJD | TAL PHX |
| Total Recoverable | Prep | 200.2 | | | 365247 | 10/27/16 11:20 | Q1N | TAL IRV |
| Total Recoverable | Analysis | 200.8 LL | | 1 | 365849 | 10/30/16 00:57 | RC | TAL IRV |
| Total/NA | Prep | 245.1 | | | 101296 | 10/24/16 11:11 | JTG | TAL PHX |
| Total/NA | Analysis | 245.1 | | 1 | 101433 | 10/25/16 14:29 | JTG | TAL PHX |

## Client Sample ID: FC-CCR-MW71-1016 — Lab Sample ID: 550-71659-14

**Date Collected: 10/20/16 11:30** — **Matrix: Water**
**Date Received: 10/22/16 10:51**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 300.0 | | 1 | 102104 | 11/01/16 20:18 | BCB | TAL PHX |
| Total/NA | Prep | 200.7 | | | 101869 | 10/31/16 10:47 | SGO | TAL PHX |
| Total/NA | Analysis | 200.7 Rev 4.4 | | 1 | 102385 | 11/04/16 01:40 | CJD | TAL PHX |
| Total Recoverable | Prep | 200.2 | | | 365247 | 10/27/16 11:20 | Q1N | TAL IRV |
| Total Recoverable | Analysis | 200.8 LL | | 1 | 365849 | 10/30/16 00:59 | RC | TAL IRV |
| Total/NA | Prep | 245.1 | | | 101313 | 10/24/16 12:02 | JTG | TAL PHX |
| Total/NA | Analysis | 245.1 | | 1 | 101438 | 10/25/16 15:28 | JTG | TAL PHX |

# Lab Chronicle

Client: Arizona Public Service Company
Project/Site: CCR

TestAmerica Job ID: 550-71659-1
SDG: Four Corners (FC) Power Plant

## Client Sample ID: FC-CCR-MW72-1016 — Lab Sample ID: 550-71659-15

**Date Collected: 10/20/16 12:07** — **Matrix: Water**
**Date Received: 10/22/16 10:51**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 300.0 | | 1 | 102104 | 11/01/16 20:36 | BCB | TAL PHX |
| Total/NA | Prep | 200.7 | | | 101869 | 10/31/16 10:47 | SGO | TAL PHX |
| Total/NA | Analysis | 200.7 Rev 4.4 | | 1 | 102385 | 11/04/16 01:46 | CJD | TAL PHX |
| Total Recoverable | Prep | 200.2 | | | 365247 | 10/27/16 11:20 | Q1N | TAL IRV |
| Total Recoverable | Analysis | 200.8 LL | | 1 | 365849 | 10/30/16 01:02 | RC | TAL IRV |
| Total/NA | Prep | 245.1 | | | 101313 | 10/24/16 12:02 | JTG | TAL PHX |
| Total/NA | Analysis | 245.1 | | 1 | 101438 | 10/25/16 15:30 | JTG | TAL PHX |

## Client Sample ID: FC-CCR-MW100-1016 — Lab Sample ID: 550-71659-16

**Date Collected: 10/20/16 09:07** — **Matrix: Water**
**Date Received: 10/22/16 10:51**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 300.0 | | 1 | 102104 | 11/01/16 20:55 | BCB | TAL PHX |
| Total/NA | Prep | 200.7 | | | 101869 | 10/31/16 10:47 | SGO | TAL PHX |
| Total/NA | Analysis | 200.7 Rev 4.4 | | 1 | 102385 | 11/04/16 01:52 | CJD | TAL PHX |
| Total Recoverable | Prep | 200.2 | | | 365247 | 10/27/16 11:20 | Q1N | TAL IRV |
| Total Recoverable | Analysis | 200.8 LL | | 1 | 365849 | 10/30/16 01:05 | RC | TAL IRV |
| Total/NA | Prep | 245.1 | | | 101313 | 10/24/16 12:02 | JTG | TAL PHX |
| Total/NA | Analysis | 245.1 | | 1 | 101438 | 10/25/16 15:31 | JTG | TAL PHX |

## Client Sample ID: FC-CCR-MW101-1016 — Lab Sample ID: 550-71659-17

**Date Collected: 10/19/16 12:29** — **Matrix: Water**
**Date Received: 10/22/16 10:51**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 300.0 | | 1 | 102104 | 11/01/16 21:13 | BCB | TAL PHX |
| Total/NA | Prep | 200.7 | | | 101869 | 10/31/16 10:47 | SGO | TAL PHX |
| Total/NA | Analysis | 200.7 Rev 4.4 | | 1 | 102385 | 11/04/16 01:57 | CJD | TAL PHX |
| Total Recoverable | Prep | 200.2 | | | 365247 | 10/27/16 11:20 | Q1N | TAL IRV |
| Total Recoverable | Analysis | 200.8 LL | | 1 | 365849 | 10/30/16 01:07 | RC | TAL IRV |
| Total/NA | Prep | 245.1 | | | 101296 | 10/24/16 11:11 | JTG | TAL PHX |
| Total/NA | Analysis | 245.1 | | 1 | 101433 | 10/25/16 14:30 | JTG | TAL PHX |

**Laboratory References:**

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

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

# Certification Summary

Client: Arizona Public Service Company
Project/Site: CCR

TestAmerica Job ID: 550-71659-1
SDG: Four Corners (FC) Power Plant

## Laboratory: TestAmerica Phoenix

The certifications listed below are applicable to this report.

| Authority | Program | EPA Region | Certification ID | Expiration Date |
|---|---|---|---|---|
| Arizona | State Program | 9 | AZ0728 | 06-09-17 |

## Laboratory: TestAmerica Irvine

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

| Authority | Program | EPA Region | Certification ID | Expiration Date |
|---|---|---|---|---|
| Arizona | State Program | 9 | AZ0671 | 10-14-17 |

The following analytes are included in this report, but certification is not offered by the governing authority:

| Analysis Method | Prep Method | Matrix | Analyte |
|---|---|---|---|
| 200.8 LL | 200.2 | Water | Antimony |
| 200.8 LL | 200.2 | Water | Arsenic |
| 200.8 LL | 200.2 | Water | Barium |
| 200.8 LL | 200.2 | Water | Cadmium |
| 200.8 LL | 200.2 | Water | Chromium |
| 200.8 LL | 200.2 | Water | Cobalt |
| 200.8 LL | 200.2 | Water | Lead |
| 200.8 LL | 200.2 | Water | Molybdenum |
| 200.8 LL | 200.2 | Water | Selenium |
| 200.8 LL | 200.2 | Water | Thallium |

# Method Summary

Client: Arizona Public Service Company
Project/Site: CCR

TestAmerica Job ID: 550-71659-1
SDG: Four Corners (FC) Power Plant

| 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 IRV |
| 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 IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022
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

71659

**Regulatory Program:** CCR

**TestAmerica Laboratories, Inc.**

| | | | |
|---|---|---|---|
| **Client Contact** | Doug Lavarnway | Doug Lavarnway | Date: 10/21/16 |
| 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: Four Corners (FC) Power Plant | | | |
| P O # | | | |

COC No: 3 of 6 COCs

Sampler:

**For Lab Use Only:**
Walk-in Client:
Sampling:
SDG No.:

550-71659 Chain of Custody

| Sample Identification | Sample Date | Sample Time | Sample Type (C=Comp, G=Grab) | Matrix | # of Cont. | Filtered Sample (Y/N) | Perform MS/MSD (Y/N) | EPA 200.7 (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-MW7-1016 | 10/20/16 | 1043 | G | W | 5 | N | x | x | x | x | x | -01 |
| FC-CCR-MW49A-1016 | 10/20/16 | 817 | G | W | 5 | N | x | x | x | x | x | -02 |
| FC-CCR-MW60-1016 | 10/20/16 | 945 | G | W | 5 | N | x | x | x | x | x | -03 |
| FC-CCR-MW61-1016 | 10/20/16 | 907 | G | W | 5 | N | x | x | x | x | x | -04 |
| FC-CCR-MW62-1016 | 10/19/16 | 1641 | G | W | 5 | N | x | x | x | x | x | -05 |
| FC-CCR-MW63-1016 | 10/19/16 | 1229 | G | W | 5 | N | x | x | x | x | x | -06 |
| FC-CCR-MW64-1016 | 10/19/16 | 1158 | G | W | 5 | N | x | x | x | x | x | -07 |
| FC-CCR-MW65-1016 | 10/19/16 | 1546 | G | W | 5 | N | x | x | x | x | x | -08 |
| FC-CCR-MW66-1016 | 10/19/16 | 1722 | G | W | 5 | N | x | x | x | x | x | -09 |
| FC-CCR-MW67-1016 | 10/20/16 | 1251 | G | W | 5 | N | x | x | x | x | x | -10 |
| FC-CCR-MW68-1016 | 10/20/16 | 1341 | G | W | 5 | N | x | x | x | x | x | -11 |

**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.

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

**Special Instructions/QC Requirements & Comments:**

**Method 200.8 with collision cell**

2.6°C, 2.6°C, 2.6°C, 2.1°C

Custody Seals Intact: 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 | APS | 10/21 1245 | D Rogers | Rad J | 10/21/16 12:45 |
| Relinquished by: | Company: | Date/Time: | Received by: | Company: | Date/Time: |
| | | | | | |
| Relinquished by: | Company: | Date/Time: | Received in Laboratory by: | Company: | Date/Time: |
| [illegible] | AEA J | 10:51 | [illegible] | TA | 10-22-16 1051 |

RC.

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

# Chain of Custody Record

71659

11/7/2016

**Regulatory Program:** CCR

**TestAmerica Laboratories, Inc.**

| | | | |
|---|---|---|---|
| **Client Contact** | Doug Lavarnway | Doug Lavarnway | Date: 10/21/16 |
| 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: Four Corners (FC) Power Plant | | | |
| 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-MW69-1016 | 10/20/16 | 1416 | G | W | 5 | N | x | x | x | x | x | -12 |
| FC-CCR-MW70-1016 | 10/19/16 | 1429 | G | W | 5 | N | x | x | x | x | x | -13 |
| FC-CCR-MW71-1016 | 10/20/16 | 1130 | G | W | 5 | N | x | x | x | x | x | -14 |
| FC-CCR-MW72-1016 | 10/20/16 | 1207 | G | W | 5 | N | x | x | x | x | x | -15 |
| FC-CCR-MW100-1016 | 10/20/16 | 907 | G | W | 5 | N | x | x | x | x | x | -16 |
| FC-CCR-MW101-1016 | 10/19/16 | 1229 | G | W | 5 | N | x | x | x | x | x | -17 |

**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.

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

**Special Instructions/QC Requirements & Comments:**

**Method 200.8 with collision cell**

Custody Seals Intact: 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 | APS | 10/21 1245 | D Rogers | Rad J | 10/21/16 12:45 |
| Relinquished by: | Company: | Date/Time: | Received by: | Company: | Date/Time: |
| | | | | | |
| Relinquished by: | Company: | Date/Time: | Received in Laboratory by: | Company: | Date/Time: |
| [illegible] | MEG J | 10:57 | [illegible] | TA | 10-22-16 1051 |

P.C.

**TestAmerica Phoenix**
4625 East Cotton Ctr Blvd Suite 189
Phoenix, AZ 85040
Phone (602) 437-3340 Fax (602) 454-9303

# Chain of Custody Record

TestAmerica

| Client Information (Sub Contract Lab) | Sampler: | Lab PM: Baker, Ken | Carrier Tracking No(s) | COC No. 550-15041.1 |
|---|---|---|---|---|
| Client Contact: Shipping/Receiving | Phone: | E-Mail: ken.baker@testamericainc.com | State of Origin: New Mexico | Page: Page 1 of 2 |
| Company: TestAmerica Laboratories, Inc | | Accreditations Required (See note): State Program - Arizona | | Job #: 550-71659-1 |
| Address: 17461 Derian Ave, Suite 100, | Due Date Requested: 11/1/2016 | | | |
| City: Irvine | TAT Requested (days): | | | |
| State, Zip: CA, 92614-5817 | | | | |
| Phone: 949-261-1022(Tel) 949-260-3297(Fax) | PO #: | | | |
| Email: | WO #: | | | |
| Project Name: CCR | Project #: 55002330 | | | |
| Site: | SSOW#: | | | |

**Analysis Requested**

**Preservation Codes:**

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

| Sample Identification - Client ID (Lab ID) | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | 200.8_CWA_LL/200.2 200.8-Appendix IV CCR | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | | | |
| FC-CCR-MW7-1016 (550-71659-1) | 10/20/16 | 10:43 Arizona | | Water | | | X | 1 | AZ Sample |
| FC-CCR-MW49A-1016 (550-71659-2) | 10/20/16 | 08:17 Arizona | | Water | | | X | 1 | AZ Sample |
| FC-CCR-MW60-1016 (550-71659-3) | 10/20/16 | 09:45 Arizona | | Water | | | X | 1 | AZ Sample |
| FC-CCR-MW61-1016 (550-71659-4) | 10/20/16 | 09:07 Arizona | | Water | | | X | 1 | AZ Sample |
| FC-CCR-MW62-1016 (550-71659-5) | 10/19/16 | 16:41 Arizona | | Water | | | X | 1 | AZ Sample |
| FC-CCR-MW63-1016 (550-71659-6) | 10/19/16 | 12:29 Arizona | | Water | | | X | 1 | AZ Sample |
| FC-CCR-MW64-1016 (550-71659-7) | 10/19/16 | 11:58 Arizona | | Water | | | X | 1 | AZ Sample |
| FC-CCR-MW65-1016 (550-71659-8) | 10/19/16 | 15:46 Arizona | | Water | | | X | 1 | AZ Sample |
| FC-CCR-MW66-1016 (550-71659-9) | 10/19/16 | 17:22 Arizona | | Water | | | X | 1 | AZ Sample |

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

***Possible Hazard Identification***
*Unconfirmed*

***Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)***
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2

Special Instructions/QC Requirements:

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
|---|---|---|---|---|---|
| [illegible] | 10-24-16 17:00 | TA-Pha | LAB [illegible] | 10/25/16 9:40 | |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: 2.1°/1.5 IR-74

IR# - 6715 7620 4489

**TestAmerica Phoenix**
4625 East Cotton Ctr Blvd Suite 189
Phoenix, AZ 85040
Phone (602) 437-3340 Fax (602) 454-9303

# Chain of Custody Record

TestAmerica

| Client Information (Sub Contract Lab) | Sampler: | Lab PM: Baker, Ken | Carrier Tracking No(s): | COC No: 550-15041.2 |
|---|---|---|---|---|
| Client Contact: Shipping/Receiving | Phone: | E-Mail: ken.baker@testamericainc.com | State of Origin: New Mexico | Page: Page 2 of 2 |
| Company: TestAmerica Laboratories, Inc | | Accreditations Required (See note): State Program - Arizona | | Job #: 550-71659-1 |
| Address: 17461 Derian Ave, Suite 100, | Due Date Requested: 11/1/2016 | | | |
| City: Irvine | TAT Requested (days): | | | |
| State, Zip: CA, 92614-5817 | | | | |
| Phone: 949-261-1022(Tel) 949-260-3297(Fax) | PO #: | | | |
| Email: | WO #: | | | |
| Project Name: CCR | Project #: 55002330 | | | |
| Site: | SSOW#: | | | |

**Analysis Requested**

**Preservation Codes:**

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

| Sample Identification - Client ID (Lab ID) | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | 200.8_CWA_LL/200.2 200.8-Appendix IV CCR | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | | | |
| FC-CCR-MW67-1016 (550-71659-10) | 10/20/16 | 12:51 Arizona | | Water | | | X | 1 | AZ Sample |
| FC-CCR-MW68-1016 (550-71659-11) | 10/20/16 | 13:41 Arizona | | Water | | | X | 1 | AZ Sample |
| FC-CCR-MW69-1016 (550-71659-12) | 10/20/16 | 14:16 Arizona | | Water | | | X | 1 | AZ Sample |
| FC-CCR-MW70-1016 (550-71659-13) | 10/19/16 | 14:29 Arizona | | Water | | | X | 1 | AZ Sample |
| FC-CCR-MW71-1016 (550-71659-14) | 10/20/16 | 11:30 Arizona | | Water | | | X | 1 | AZ Sample |
| FC-CCR-MW72-1016 (550-71659-15) | 10/20/16 | 12:07 Arizona | | Water | | | X | 1 | AZ Sample |
| FC-CCR-MW100-1016 (550-71659-16) | 10/20/16 | 09:07 Arizona | | Water | | | X | 1 | AZ Sample |
| FC-CCR-MW101-1016 (550-71659-17) | 10/19/16 | 12:29 Arizona | | Water | | | X | 1 | AZ Sample |

Note. Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. I

***Possible Hazard Identification***
*Unconfirmed*

***Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)***
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2

Special Instructions/QC Requirements:

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| Relinquished by | Date/Time | Company | Received by | Date/Time | Company |
|---|---|---|---|---|---|
| [illegible] 10-24-16 | 17:00 | TA Phx | LAB | 10/25/16 7:40 | |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

Custody Seals Intact: Δ Yes Δ No

Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 21.1/15 IR-74

TK-6 7620 4489

# Login Sample Receipt Checklist

Client: Arizona Public Service Company

Job Number: 550-71659-1
SDG Number: Four Corners (FC) Power Plant

**Login Number: 71659**
**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? | True | |
| There are no discrepancies between the containers received and the COC. | True | |
| Samples are received within Holding Time (excluding tests with immediate HTs) | True | |
| Sample containers have legible labels. | True | |
| Containers are not broken or leaking. | True | |
| Sample collection date/times are provided. | True | |
| Appropriate sample containers are used. | True | |
| Sample bottles are completely filled. | True | |
| Sample Preservation Verified. | True | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| Containers requiring zero headspace have no headspace or bubble is <6mm (1/4"). | True | |
| Multiphasic samples are not present. | True | |
| Samples do not require splitting or compositing. | True | |
| Residual Chlorine Checked. | False | |

# Login Sample Receipt Checklist

Client: Arizona Public Service Company

Job Number: 550-71659-1
SDG Number: Four Corners (FC) Power Plant

**Login Number: 71659**
**List Number: 2**
**Creator: Salas, Margarita**

**List Source: TestAmerica Irvine**
**List Creation: 10/25/16 10:49 AM**

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