# ATTACHMENT C

## ANALYTICAL REPORTS: CONVENTIONAL CHEMISTRIES

# INORGANIC ANALYSIS REPORT

AMERICAN WEST ANALYTICAL LABORATORIES

463 West 3600 South
Salt Lake City, Utah
84115

(801) 263-8686
Toll Free (888) 263-8686
Fax (801) 263-8687

Client: Envirocare of Utah
Date Sampled: July 11, 2000
Project: LARW

Contact: Jeff Low
Date Received: July 12, 2000

Lab Sample ID:
L41937-01B

Field Sample ID:
GW-103A

**TOTAL METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Calcium | mg/L | 7/27/00 | 6010B | 0.10 | **450** |
| Iron | mg/L | 7/27/00 | 6010B | 0.10 | **0.40** |
| Magnesium | mg/L | 7/27/00 | 6010B | 0.10 | **690** |
| Potassium | mg/L | 7/27/00 | 6010B | 0.10 | **470** |
| Sodium | mg/L | 7/27/00 | 6010B | 0.10 | **14,000** |

Released by: Rene D. Li
Laboratory Supervisor

Report Date: August 8, 2000



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Date Sampled: July 11, 2000
Project: LARW

Contact: Jeff Low
Date Received: July 12, 2000

Lab Sample ID:
L41937-01A

Field Sample ID:
GW-103A

**DISSOLVED METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 7/25/00 | 7060A | 0.010 | **0.020** |
| Barium | mg/L | 7/21/00 | 6010B | 0.0040 | **0.013** |
| Beryllium | mg/L | 7/21/00 | 6010B | 0.0020 | < 0.0020 |
| Cadmium | mg/L | 7/21/00 | 6010B | 0.0040 | **0.010** |
| Chromium | mg/L | 7/21/00 | 6010B | 0.020 | **0.020** |
| Copper | mg/L | 7/21/00 | 6010B | 0.0080 | **0.027** |
| Lead | mg/L | 7/25/00 | 7421 | 0.010 | < 0.010 |
| Mercury | mg/L | 7/26/00 | 7470A | 0.0010 | < 0.0010 |
| Molybdenum | mg/L | 7/21/00 | 6010B | 0.040 | **0.12** |
| Nickel | mg/L | 7/21/00 | 6010B | 0.010 | < 0.010 |
| Selenium | mg/L | 7/25/00 | 7740 | 0.010 | < 0.010 |
| Silver | mg/L | 7/21/00 | 6010B | 0.010 | < 0.010 |
| Zinc | mg/L | 7/21/00 | 6010B | 0.10 | < 0.10 |

Released by: Rue D. Gr

Laboratory Supervisor Report Date: August 10, 2000 

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Date Sampled: July 11, 2000
Project: LARW

Contact: Jeff Low
Date Received: July 12, 2000

Lab Sample ID:
L41937-01A

Field Sample ID:
GW-103A

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Bicarbonate (As CaCO3) | mg/L | 7/13/00 | 2320 B | 10 | **270** |
| Carbonate (As CaCO3) | mg/L | 7/13/00 | 2320 B | 10 | < 10 |
| Chloride | mg/L | 7/13/00 | 4500-CL B | 5.0 | **25,000** |
| Conductivity | µmhos/cm | 7/13/00 | 2510B | 10 | **53,000** |
| Cyanide | mg/L | 7/18/00 | 4500-CNE | 0.010 | < 0.010 |
| Fluoride | mg/L | 7/18/00 | 4500-FD | 1.0 | **3.3** |
| Ion Balance | | 7/28/00 | | 0 | -3.8 |
| Nitrate (as N) | mg/L | 7/13/00 | 4500-NO3F | 0.10 | < 0.10 |
| Nitrate/Nitrite (as N) | mg/L | 7/13/00 | 4500-NO3F | 0.10 | < 0.10 |
| pH | pH units | 7/13/00 | 4500/9040B | 0 | **7.40** * |
| Sulfate | mg/L | 7/13/00 | 375.4 | 5.0 | **2,800** |
| TDS | mg/L | 7/13/00 | 2540C | 10 | **31,000** |
| Total Organic Carbon | mg/L | 7/19/00 | 5310C | 1.0 | < 1.0 |
| TOX | mg/L | 7/18/00 | 9020B | 0.050 | < 0.050 |
| TSS | mg/L | 7/13/00 | 2540D | 10 | **5,000** |

* Sample had expired upon receipt.

Released by: _____
Laboratory Supervisor

Report Date: August 8, 2000 Page 1 of 1

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Client: Envirocare of Utah
Date Sampled: July 11, 2000
Project: LARW

Contact: Jeff Low
Date Received: July 12, 2000

Lab Sample ID:
L41937-02A

Field Sample ID:
GW-103B

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Cyanide | mg/L | 7/18/00 | 4500-CNE | 0.010 | < 0.010 |
| Fluoride | mg/L | 7/18/00 | 4500-FD | 1.0 | **3.4** |
| Nitrate/Nitrite (as N) | mg/L | 7/13/00 | 4500-NO3F | 0.10 | < 0.10 |
| pH | pH units | 7/13/00 | 4500/9040B | 0 | **7.40** * |
| TDS | mg/L | 7/13/00 | 2540C | 10 | **37,000** |
| Total Organic Carbon | mg/L | 7/19/00 | 5310C | 1.0 | < 1.0 |
| TOX | mg/L | 7/18/00 | 9020B | 0.050 | < 0.050 |

* Sample had expired upon receipt.

Released by: Paul D Sri
Laboratory Supervisor

Report Date: August 8, 2000



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Date Sampled: July 11, 2000
Project: LARW

Contact: Jeff Low
Date Received: July 12, 2000

Lab Sample ID:
L41937-02A

Field Sample ID:
GW-103B

**DISSOLVED METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 7/25/00 | 7060A | 0.010 | **0.020** |
| Barium | mg/L | 7/21/00 | 6010B | 0.0040 | **0.014** |
| Beryllium | mg/L | 7/21/00 | 6010B | 0.0020 | < 0.0020 |
| Cadmium | mg/L | 7/21/00 | 6010B | 0.0040 | **0.0050** |
| Chromium | mg/L | 7/21/00 | 6010B | 0.020 | **0.030** |
| Copper | mg/L | 7/21/00 | 6010B | 0.0080 | **0.0080** |
| Lead | mg/L | 7/25/00 | 7421 | 0.010 | < 0.010 |
| Mercury | mg/L | 7/26/00 | 7470A | 0.0010 | < 0.0010 |
| Molybdenum | mg/L | 7/21/00 | 6010B | 0.040 | **0.12** |
| Nickel | mg/L | 7/21/00 | 6010B | 0.010 | < 0.010 |
| Selenium | mg/L | 7/25/00 | 7740 | 0.010 | < 0.010 |
| Silver | mg/L | 7/21/00 | 6010B | 0.010 | < 0.010 |
| Zinc | mg/L | 7/21/00 | 6010B | 0.10 | < 0.10 |

Released by: Paul D. Gee
Laboratory Supervisor

Report Date: August 10, 2000



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Client: Envirocare of Utah
Date Sampled: July 11, 2000
Project: LARW

Contact: Jeff Low
Date Received: July 12, 2000

Lab Sample ID:
L41937-03A

Field Sample ID:
GW-103C

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Cyanide | mg/L | 7/18/00 | 4500-CNE | 0.010 | < 0.010 |
| Fluoride | mg/L | 7/18/00 | 4500-FD | 1.0 | **3.3** |
| Nitrate/Nitrite (as N) | mg/L | 7/13/00 | 4500-NO3F | 0.10 | < 0.10 |
| pH | pH units | 7/13/00 | 4500/9040B | 0 | **7.40** * |
| TDS | mg/L | 7/13/00 | 2540C | 10 | **36,000** |
| Total Organic Carbon | mg/L | 7/19/00 | 5310C | 1.0 | **1.6** |
| TOX | mg/L | 7/18/00 | 9020B | 0.050 | < 0.050 |

* Sample had expired upon receipt.

Released by: _____
Laboratory Supervisor

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Client: Envirocare of Utah
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Project: LARW

Contact: Jeff Low
Date Received: July 12, 2000

Lab Sample ID:
L41937-03A

Field Sample ID:
GW-103C

**DISSOLVED METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 7/25/00 | 7060A | 0.010 | **0.020** |
| Barium | mg/L | 7/21/00 | 6010B | 0.0040 | **0.011** |
| Beryllium | mg/L | 7/21/00 | 6010B | 0.0020 | < 0.0020 |
| Cadmium | mg/L | 7/21/00 | 6010B | 0.0040 | **0.0060** |
| Chromium | mg/L | 7/21/00 | 6010B | 0.020 | **0.020** |
| Copper | mg/L | 7/21/00 | 6010B | 0.0080 | **0.019** |
| Lead | mg/L | 7/25/00 | 7421 | 0.010 | < 0.010 |
| Mercury | mg/L | 7/26/00 | 7470A | 0.0010 | < 0.0010 |
| Molybdenum | mg/L | 7/21/00 | 6010B | 0.040 | **0.12** |
| Nickel | mg/L | 7/21/00 | 6010B | 0.010 | < 0.010 |
| Selenium | mg/L | 7/25/00 | 7740 | 0.010 | < 0.010 |
| Silver | mg/L | 7/21/00 | 6010B | 0.010 | < 0.010 |
| Zinc | mg/L | 7/21/00 | 6010B | 0.10 | < 0.10 |

Released by: Paul D. Grant
Laboratory Supervisor

Report Date: August 10, 2000



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Client: Envirocare of Utah
Date Sampled: July 11, 2000
Project: LARW

Contact: Jeff Low
Date Received: July 12, 2000

Lab Sample ID:
L41937-04A

Field Sample ID:
GW-103D

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Cyanide | mg/L | 7/18/00 | 4500-CNE | 0.010 | < 0.010 |
| Fluoride | mg/L | 7/18/00 | 4500-FD | 1.0 | **3.3** |
| Nitrate/Nitrite (as N) | mg/L | 7/13/00 | 4500-NO3F | 0.10 | < 0.10 |
| pH | pH units | 7/13/00 | 4500/9040B | 0 | **7.40** * |
| TDS | mg/L | 7/13/00 | 2540C | 10 | **37,000** |
| Total Organic Carbon | mg/L | 7/19/00 | 5310C | 1.0 | **1.2** |
| TOX | mg/L | 7/18/00 | 9020B | 0.050 | < 0.050 |

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Released by: _____
Laboratory Supervisor

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Project: LARW

Contact: Jeff Low
Date Received: July 12, 2000

Lab Sample ID:
L41937-04A

Field Sample ID:
GW-103D

**DISSOLVED METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 7/25/00 | 7060A | 0.010 | **0.020** |
| Barium | mg/L | 7/21/00 | 6010B | 0.0040 | **0.013** |
| Beryllium | mg/L | 7/21/00 | 6010B | 0.0020 | < 0.0020 |
| Cadmium | mg/L | 7/21/00 | 6010B | 0.0040 | **0.0040** |
| Chromium | mg/L | 7/21/00 | 6010B | 0.020 | **0.020** |
| Copper | mg/L | 7/21/00 | 6010B | 0.0080 | **0.0090** |
| Lead | mg/L | 7/25/00 | 7421 | 0.010 | < 0.010 |
| Mercury | mg/L | 7/26/00 | 7470A | 0.0010 | < 0.0010 |
| Molybdenum | mg/L | 7/21/00 | 6010B | 0.040 | **0.12** |
| Nickel | mg/L | 7/21/00 | 6010B | 0.010 | < 0.010 |
| Selenium | mg/L | 7/25/00 | 7740 | 0.010 | < 0.010 |
| Silver | mg/L | 7/21/00 | 6010B | 0.010 | < 0.010 |
| Zinc | mg/L | 7/21/00 | 6010B | 0.10 | < 0.10 |

Released by: Rick D. G
Laboratory Supervisor

Report Date: August 10, 2000



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Date Sampled: July 12, 2000
Project: LARW

Contact: Jeff Low
Date Received: July 12, 2000

Lab Sample ID:
L41937-05B

Field Sample ID:
GW-104A

**TOTAL METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Calcium | mg/L | 7/27/00 | 6010B | 0.10 | **340** |
| Iron | mg/L | 7/27/00 | 6010B | 0.10 | **0.20** |
| Magnesium | mg/L | 7/27/00 | 6010B | 0.10 | **570** |
| Potassium | mg/L | 7/27/00 | 6010B | 0.10 | **440** |
| Sodium | mg/L | 7/27/00 | 6010B | 0.10 | **14,000** |

Released by: Paul D. Grant
Laboratory Supervisor

Report Date: August 8, 2000 Page 1 of 1

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Date Sampled: July 12, 2000
Project: LARW

Contact: Jeff Low
Date Received: July 12, 2000

Lab Sample ID:
L41937-05A

Field Sample ID:
GW-104A

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Bicarbonate (As CaCO3) | mg/L | 7/13/00 | 2320 B | 10 | **270** |
| Carbonate (As CaCO3) | mg/L | 7/13/00 | 2320 B | 10 | < 10 |
| Chloride | mg/L | 7/13/00 | 4500-CL B | 5.0 | **25,000** |
| Conductivity | µmhos/cm | 7/13/00 | 2510B | 10 | **50,000** |
| Cyanide | mg/L | 7/18/00 | 4500-CNE | 0.010 | < 0.010 |
| Fluoride | mg/L | 7/18/00 | 4500-FD | 1.0 | **2.9** |
| Ion Balance | | 7/28/00 | | 0 | -5.5 |
| Nitrate (as N) | mg/L | 7/13/00 | 4500-NO3F | 0.10 | < 0.10 |
| Nitrate/Nitrite (as N) | mg/L | 7/13/00 | 4500-NO3F | 0.10 | < 0.10 |
| pH | pH units | 7/13/00 | 4500/9040B | 0 | **7.50** |
| Sulfate | mg/L | 7/13/00 | 375.4 | 5.0 | **2,600** |
| TDS | mg/L | 7/13/00 | 2540C | 10 | **29,000** |
| Total Organic Carbon | mg/L | 7/19/00 | 5310C | 1.0 | < 1.0 |
| TOX | mg/L | 7/18/00 | 9020B | 0.050 | < 0.050 |
| TSS | mg/L | 7/13/00 | 2540D | 10 | **5,000** |

Released by: Rue D Sr
Laboratory Supervisor

Report Date: August 8, 2000



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Client: Envirocare of Utah
Date Sampled: July 12, 2000
Project: LARW

Contact: Jeff Low
Date Received: July 12, 2000

Lab Sample ID:
L41937-05A

Field Sample ID:
GW-104A

**DISSOLVED METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 7/25/00 | 7060A | 0.010 | **0.020** |
| Barium | mg/L | 7/21/00 | 6010B | 0.0040 | **0.013** |
| Beryllium | mg/L | 7/21/00 | 6010B | 0.0020 | < 0.0020 |
| Cadmium | mg/L | 7/21/00 | 6010B | 0.0040 | < 0.0040 |
| Chromium | mg/L | 7/21/00 | 6010B | 0.020 | **0.020** |
| Copper | mg/L | 7/21/00 | 6010B | 0.0080 | < 0.0080 |
| Lead | mg/L | 7/25/00 | 7421 | 0.010 | < 0.010 |
| Mercury | mg/L | 7/26/00 | 7470A | 0.0010 | < 0.0010 |
| Molybdenum | mg/L | 7/21/00 | 6010B | 0.040 | **0.10** |
| Nickel | mg/L | 7/21/00 | 6010B | 0.010 | < 0.010 |
| Selenium | mg/L | 7/25/00 | 7740 | 0.010 | < 0.010 |
| Silver | mg/L | 7/21/00 | 6010B | 0.010 | < 0.010 |
| Zinc | mg/L | 7/21/00 | 6010B | 0.10 | < 0.10 |

Released by: Rue D. Gi
Laboratory Supervisor

Report Date: August 10, 2000



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Client: Envirocare of Utah
Date Sampled: July 12, 2000
Project: LARW

Contact: Jeff Low
Date Received: July 12, 2000

Lab Sample ID:
L41937-06A

Field Sample ID:
GW-104B

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Cyanide | mg/L | 7/18/00 | 4500-CNE | 0.010 | < 0.010 |
| Fluoride | mg/L | 7/18/00 | 4500-FD | 1.0 | **2.9** |
| Nitrate/Nitrite (as N) | mg/L | 7/13/00 | 4500-NO3F | 0.10 | < 0.10 |
| pH | pH units | 7/13/00 | 4500/9040B | 0 | **7.50** |
| TDS | mg/L | 7/13/00 | 2540C | 10 | **37,000** |
| Total Organic Carbon | mg/L | 7/19/00 | 5310C | 1.0 | < 1.0 |
| TOX | mg/L | 7/19/00 | 9020B | 0.050 | < 0.050 |

Released by: Rue D. Gr
Laboratory Supervisor

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Project: LARW

Contact: Jeff Low
Date Received: July 12, 2000

Lab Sample ID:
L41937-06A

Field Sample ID:
GW-104B

**DISSOLVED METALS**

| **Analytical Results** | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 7/25/00 | 7060A | 0.010 | **0.020** |
| Barium | mg/L | 7/21/00 | 6010B | 0.0040 | **0.013** |
| Beryllium | mg/L | 7/21/00 | 6010B | 0.0020 | < 0.0020 |
| Cadmium | mg/L | 7/21/00 | 6010B | 0.0040 | < 0.0040 |
| Chromium | mg/L | 7/21/00 | 6010B | 0.020 | **0.020** |
| Copper | mg/L | 7/21/00 | 6010B | 0.0080 | < 0.0080 |
| Lead | mg/L | 7/25/00 | 7421 | 0.010 | < 0.010 |
| Mercury | mg/L | 7/26/00 | 7470A | 0.0010 | < 0.0010 |
| Molybdenum | mg/L | 7/21/00 | 6010B | 0.040 | **0.090** |
| Nickel | mg/L | 7/21/00 | 6010B | 0.010 | < 0.010 |
| Selenium | mg/L | 7/25/00 | 7740 | 0.010 | < 0.010 |
| Silver | mg/L | 7/21/00 | 6010B | 0.010 | < 0.010 |
| Zinc | mg/L | 7/21/00 | 6010B | 0.10 | < 0.10 |

Released by: Rue D. [illegible]
Laboratory Supervisor

Report Date: August 10, 2000



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463 West 3600 South
Salt Lake City, Utah
84115

(801) 263-8686
Toll Free (888) 263-8686
Fax (801) 263-8687

Client: Envirocare of Utah
Date Sampled: July 12, 2000
Project: LARW

Contact: Jeff Low
Date Received: July 12, 2000

Lab Sample ID:
L41937-07A

Field Sample ID:
GW-104C

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Cyanide | mg/L | 7/18/00 | 4500-CNE | 0.010 | < 0.010 |
| Fluoride | mg/L | 7/18/00 | 4500-FD | 1.0 | **2.7** |
| Nitrate/Nitrite (as N) | mg/L | 7/13/00 | 4500-NO3F | 0.10 | < 0.10 |
| pH | pH units | 7/13/00 | 4500/9040B | 0 | **7.50** |
| TDS | mg/L | 7/13/00 | 2540C | 10 | **38,000** |
| Total Organic Carbon | mg/L | 7/19/00 | 5310C | 1.0 | < 1.0 |
| TOX | mg/L | 7/19/00 | 9020B | 0.050 | < 0.050 |

Released by: Rue D. Gr
Laboratory Supervisor

Report Date: August 8, 2000 Page 1 of 1

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Client: Envirocare of Utah
Date Sampled: July 12, 2000
Project: LARW

Contact: Jeff Low
Date Received: July 12, 2000

Lab Sample ID:
L41937-07A

Field Sample ID:
GW-104C

**DISSOLVED METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 7/25/00 | 7060A | 0.010 | **0.020** |
| Barium | mg/L | 7/21/00 | 6010B | 0.0040 | **0.013** |
| Beryllium | mg/L | 7/21/00 | 6010B | 0.0020 | < 0.0020 |
| Cadmium | mg/L | 7/21/00 | 6010B | 0.0040 | < 0.0040 |
| Chromium | mg/L | 7/21/00 | 6010B | 0.020 | **0.020** |
| Copper | mg/L | 7/21/00 | 6010B | 0.0080 | < 0.0080 |
| Lead | mg/L | 7/25/00 | 7421 | 0.010 | < 0.010 |
| Mercury | mg/L | 7/26/00 | 7470A | 0.0010 | < 0.0010 |
| Molybdenum | mg/L | 7/21/00 | 6010B | 0.040 | **0.090** |
| Nickel | mg/L | 7/21/00 | 6010B | 0.010 | < 0.010 |
| Selenium | mg/L | 7/25/00 | 7740 | 0.010 | < 0.010 |
| Silver | mg/L | 7/21/00 | 6010B | 0.010 | < 0.010 |
| Zinc | mg/L | 7/21/00 | 6010B | 0.10 | < 0.10 |

Released by: Rae D. Jr
Laboratory Supervisor

Report Date: August 10, 2000



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Client: Envirocare of Utah
Date Sampled: July 12, 2000
Project: LARW

Contact: Jeff Low
Date Received: July 12, 2000

Lab Sample ID:
L41937-08A

Field Sample ID:
GW-104D

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Cyanide | mg/L | 7/18/00 | 4500-CNE | 0.010 | < 0.010 |
| Fluoride | mg/L | 7/18/00 | 4500-FD | 1.0 | **2.9** |
| Nitrate/Nitrite (as N) | mg/L | 7/13/00 | 4500-NO3F | 0.10 | < 0.10 |
| pH | pH units | 7/13/00 | 4500/9040B | 0 | **7.50** |
| TDS | mg/L | 7/13/00 | 2540C | 10 | **38,000** |
| Total Organic Carbon | mg/L | 7/19/00 | 5310C | 1.0 | < 1.0 |
| TOX | mg/L | 7/19/00 | 9020B | 0.050 | < 0.050 |

Released by: Paul D. Grant
Laboratory Supervisor

Report Date: August 8, 2000



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Client: Envirocare of Utah
Date Sampled: July 12, 2000
Project: LARW

Contact: Jeff Low
Date Received: July 12, 2000

Lab Sample ID:
L41937-08A

Field Sample ID:
GW-104D

**DISSOLVED METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 7/25/00 | 7060A | 0.010 | **0.020** |
| Barium | mg/L | 7/21/00 | 6010B | 0.0040 | **0.013** |
| Beryllium | mg/L | 7/21/00 | 6010B | 0.0020 | < 0.0020 |
| Cadmium | mg/L | 7/21/00 | 6010B | 0.0040 | < 0.0040 |
| Chromium | mg/L | 7/21/00 | 6010B | 0.020 | **0.020** |
| Copper | mg/L | 7/21/00 | 6010B | 0.0080 | < 0.0080 |
| Lead | mg/L | 7/25/00 | 7421 | 0.010 | < 0.010 |
| Mercury | mg/L | 7/26/00 | 7470A | 0.0010 | < 0.0010 |
| Molybdenum | mg/L | 7/21/00 | 6010B | 0.040 | **0.090** |
| Nickel | mg/L | 7/21/00 | 6010B | 0.010 | < 0.010 |
| Selenium | mg/L | 7/25/00 | 7740 | 0.010 | < 0.010 |
| Silver | mg/L | 7/21/00 | 6010B | 0.010 | < 0.010 |
| Zinc | mg/L | 7/21/00 | 6010B | 0.10 | < 0.10 |

Released by: Rod D. Lee
Laboratory Supervisor

Report Date: August 10, 2000



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Client: Envirocare of Utah
Date Sampled: July 12, 2000
Project: LARW

Contact: Jeff Low
Date Received: July 12, 2000

Lab Sample ID:
L41937-09A

Field Sample ID:
GW-104E

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Cyanide | mg/L | 7/18/00 | 4500-CNE | 0.010 | < 0.010 |

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Laboratory Supervisor

Report Date: August 8, 2000



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Client: Envirocare of Utah
Date Sampled: July 12, 2000
Project: LARW

Contact: Jeff Low
Date Received: July 13, 2000

Lab Sample ID:
L41958-01A

Field Sample ID:
GW-105A

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Bicarbonate (As CaCO3) | mg/L | 7/17/00 | 2320 B | 10 | **200** |
| Carbonate (As CaCO3) | mg/L | 7/17/00 | 2320 B | 10 | < 10 |
| Chloride | mg/L | 7/17/00 | 4500-CL B | 5.0 | **23,000** |
| Conductivity | µmhos/cm | 7/14/00 | 2510B | 10 | **51,000** |
| Cyanide | mg/L | 7/19/00 | 4500-CNE | 0.010 | < 0.010 |
| Fluoride | mg/L | 7/18/00 | 4500-FD | 1.0 | **2.9** |
| Ion Balance | | 7/28/00 | | 0 | -4.2 |
| Nitrate (as N) | mg/L | 7/18/00 | 4500-NO3F | 0.10 | **0.72** |
| Nitrate/Nitrite (as N) | mg/L | 7/18/00 | 4500-NO3F | 0.10 | **0.72** |
| pH | pH units | 7/13/00 | 4500/9040B | 0 | **7.50** |
| Sulfate | mg/L | 7/14/00 | 375.4 | 5.0 | **2,400** |
| TDS | mg/L | 7/17/00 | 2540C | 10 | **25,000** |
| Total Organic Carbon | mg/L | 7/19/00 | 5310C | 1.0 | < 1.0 |
| TOX | mg/L | 7/19/00 | 9020B | 0.050 | < 0.050 |
| TSS | mg/L | 7/17/00 | 2540D | 10 | **5,900** |

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Laboratory Supervisor

Report Date: August 10, 2000



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Client: Envirocare of Utah
Date Sampled: July 12, 2000
Project: LARW

Contact: Jeff Low
Date Received: July 13, 2000

Lab Sample ID:
L41958-01B

Field Sample ID:
GW-105A

**TOTAL METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Calcium | mg/L | 7/27/00 | 6010B | 0.10 | **300** |
| Iron | mg/L | 7/27/00 | 6010B | 0.10 | < 0.10 |
| Magnesium | mg/L | 7/27/00 | 6010B | 0.10 | **500** |
| Potassium | mg/L | 7/27/00 | 6010B | 0.10 | **430** |
| Sodium | mg/L | 7/27/00 | 6010B | 0.10 | **13,000** |

Released by: Rae D. G

Laboratory Supervisor

Report Date: August 8, 2000



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Client: Envirocare of Utah
Date Sampled: July 12, 2000
Project: LARW

Contact: Jeff Low
Date Received: July 13, 2000

Lab Sample ID:
L41958-01A

Field Sample ID:
GW-105A

**DISSOLVED METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 7/25/00 | 7060A | 0.010 | **0.020** |
| Barium | mg/L | 7/21/00 | 6010B | 0.0040 | **0.017** |
| Beryllium | mg/L | 7/21/00 | 6010B | 0.0020 | < 0.0020 |
| Cadmium | mg/L | 7/21/00 | 6010B | 0.0040 | < 0.0040 |
| Chromium | mg/L | 7/21/00 | 6010B | 0.020 | **0.020** |
| Copper | mg/L | 7/21/00 | 6010B | 0.0080 | < 0.0080 |
| Fluoride | mg/L | 7/18/00 | 4500-FD | 1.0 | **2.9** |
| Lead | mg/L | 7/25/00 | 7421 | 0.010 | < 0.010 |
| Mercury | mg/L | 7/26/00 | 7470A | 0.0010 | < 0.0010 |
| Molybdenum | mg/L | 7/21/00 | 6010B | 0.040 | **0.080** |
| Nickel | mg/L | 7/21/00 | 6010B | 0.010 | < 0.010 |
| Selenium | mg/L | 7/25/00 | 7740 | 0.010 | **0.020** |
| Silver | mg/L | 7/21/00 | 6010B | 0.010 | < 0.010 |
| Zinc | mg/L | 7/21/00 | 6010B | 0.10 | < 0.10 |

Released by: _____
Laboratory Supervisor

Report Date: August 10, 2000



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Client: Envirocare of Utah
Date Sampled: July 12, 2000
Project: LARW

Contact: Jeff Low
Date Received: July 13, 2000

Lab Sample ID:
L41958-02A

Field Sample ID:
GW-105B

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Cyanide | mg/L | 7/19/00 | 4500-CNE | 0.010 | < 0.010 |
| Fluoride | mg/L | 7/18/00 | 4500-FD | 1.0 | **2.9** |
| Nitrate/Nitrite (as N) | mg/L | 7/18/00 | 4500-NO3F | 0.10 | **0.72** |
| pH | pH units | 7/13/00 | 4500/9040B | 0 | **7.60** |
| TDS | mg/L | 7/17/00 | 2540C | 10 | **35,000** |
| Total Organic Carbon | mg/L | 7/19/00 | 5310C | 1.0 | **1.1** |
| TOX | mg/L | 7/19/00 | 9020B | 0.050 | < 0.050 |

Released by: Paul D. Grant
Laboratory Supervisor

Report Date: August 8, 2000



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Client: Envirocare of Utah
Date Sampled: July 12, 2000
Project: LARW

Contact: Jeff Low
Date Received: July 13, 2000

Lab Sample ID:
L41958-02A

Field Sample ID:
GW-105B

**DISSOLVED METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 7/25/00 | 7060A | 0.010 | **0.020** |
| Barium | mg/L | 7/21/00 | 6010B | 0.0040 | **0.015** |
| Beryllium | mg/L | 7/21/00 | 6010B | 0.0020 | < 0.0020 |
| Cadmium | mg/L | 7/21/00 | 6010B | 0.0040 | < 0.0040 |
| Chromium | mg/L | 7/21/00 | 6010B | 0.020 | **0.020** |
| Copper | mg/L | 7/21/00 | 6010B | 0.0080 | < 0.0080 |
| Fluoride | mg/L | 7/18/00 | 4500-FD | 1.0 | **2.9** |
| Lead | mg/L | 7/25/00 | 7421 | 0.010 | < 0.010 |
| Mercury | mg/L | 7/26/00 | 7470A | 0.0010 | < 0.0010 |
| Molybdenum | mg/L | 7/21/00 | 6010B | 0.040 | **0.080** |
| Nickel | mg/L | 7/21/00 | 6010B | 0.010 | < 0.010 |
| Selenium | mg/L | 7/25/00 | 7740 | 0.010 | **0.020** |
| Silver | mg/L | 7/21/00 | 6010B | 0.010 | < 0.010 |
| Zinc | mg/L | 7/21/00 | 6010B | 0.10 | < 0.10 |

Released by: Paul D. Ei
Laboratory Supervisor

Report Date: August 10, 2000



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Client: Envirocare of Utah
Date Sampled: July 12, 2000
Project: LARW

Contact: Jeff Low
Date Received: July 13, 2000

Lab Sample ID:
L41958-03A

Field Sample ID:
GW-105C

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Cyanide | mg/L | 7/19/00 | 4500-CNE | 0.010 | < 0.010 |
| Fluoride | mg/L | 7/18/00 | 4500-FD | 1.0 | **2.8** |
| Nitrate/Nitrite (as N) | mg/L | 7/18/00 | 4500-NO3F | 0.10 | **0.78** |
| pH | pH units | 7/13/00 | 4500/9040B | 0 | **7.50** |
| TDS | mg/L | 7/17/00 | 2540C | 10 | **35,000** |
| Total Organic Carbon | mg/L | 7/19/00 | 5310C | 1.0 | **1.3** |
| TOX | mg/L | 7/19/00 | 9020B | 0.050 | < 0.050 |

Released by: Paul D. Sl

Laboratory Supervisor Report Date: August 8, 2000 Page 1 of 1

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Client: Envirocare of Utah
Date Sampled: July 12, 2000
Project: LARW

Contact: Jeff Low
Date Received: July 13, 2000

Lab Sample ID:
L41958-03A

Field Sample ID:
GW-105C

**DISSOLVED METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 7/25/00 | 7060A | 0.010 | **0.020** |
| Barium | mg/L | 7/21/00 | 6010B | 0.0040 | **0.017** |
| Beryllium | mg/L | 7/21/00 | 6010B | 0.0020 | < 0.0020 |
| Cadmium | mg/L | 7/21/00 | 6010B | 0.0040 | < 0.0040 |
| Chromium | mg/L | 7/21/00 | 6010B | 0.020 | **0.020** |
| Copper | mg/L | 7/21/00 | 6010B | 0.0080 | < 0.0080 |
| Fluoride | mg/L | 7/18/00 | 4500-FD | 1.0 | **2.8** |
| Lead | mg/L | 7/25/00 | 7421 | 0.010 | < 0.010 |
| Mercury | mg/L | 7/26/00 | 7470A | 0.0010 | < 0.0010 |
| Molybdenum | mg/L | 7/21/00 | 6010B | 0.040 | **0.080** |
| Nickel | mg/L | 7/21/00 | 6010B | 0.010 | < 0.010 |
| Selenium | mg/L | 7/25/00 | 7740 | 0.010 | **0.020** |
| Silver | mg/L | 7/21/00 | 6010B | 0.010 | < 0.010 |
| Zinc | mg/L | 7/21/00 | 6010B | 0.10 | < 0.10 |

Released by: Reed D. Gr

Laboratory Supervisor

Report Date: August 10, 2000



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Client: Envirocare of Utah
Date Sampled: July 12, 2000
Project: LARW

Contact: Jeff Low
Date Received: July 13, 2000

Lab Sample ID:
L41958-04A

Field Sample ID:
GW-105D

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Cyanide | mg/L | 7/19/00 | 4500-CNE | 0.010 | < 0.010 |
| Fluoride | mg/L | 7/18/00 | 4500-FD | 1.0 | **2.8** |
| Nitrate/Nitrite (as N) | mg/L | 7/18/00 | 4500-NO3F | 0.10 | **0.69** |
| pH | pH units | 7/13/00 | 4500/9040B | 0 | **7.50** |
| TDS | mg/L | 7/17/00 | 2540C | 10 | **34,000** |
| Total Organic Carbon | mg/L | 7/19/00 | 5310C | 1.0 | < 1.0 |
| TOX | mg/L | 7/19/00 | 9020B | 0.050 | < 0.050 |

Released by: Rue D. Gr
Laboratory Supervisor

Report Date: August 8, 2000



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Client: Envirocare of Utah
Date Sampled: July 12, 2000
Project: LARW

Contact: Jeff Low
Date Received: July 13, 2000

Lab Sample ID:
L41958-04A

Field Sample ID:
GW-105D

**DISSOLVED METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 7/25/00 | 7060A | 0.010 | **0.020** |
| Barium | mg/L | 7/21/00 | 6010B | 0.0040 | **0.016** |
| Beryllium | mg/L | 7/21/00 | 6010B | 0.0020 | < 0.0020 |
| Cadmium | mg/L | 7/21/00 | 6010B | 0.0040 | < 0.0040 |
| Chromium | mg/L | 7/21/00 | 6010B | 0.020 | **0.020** |
| Copper | mg/L | 7/21/00 | 6010B | 0.0080 | < 0.0080 |
| Fluoride | mg/L | 7/18/00 | 4500-FD | 1.0 | **2.8** |
| Lead | mg/L | 7/25/00 | 7421 | 0.010 | < 0.010 |
| Mercury | mg/L | 7/26/00 | 7470A | 0.0010 | < 0.0010 |
| Molybdenum | mg/L | 7/21/00 | 6010B | 0.040 | **0.080** |
| Nickel | mg/L | 7/21/00 | 6010B | 0.010 | < 0.010 |
| Selenium | mg/L | 7/25/00 | 7740 | 0.010 | **0.030** |
| Silver | mg/L | 7/21/00 | 6010B | 0.010 | < 0.010 |
| Zinc | mg/L | 7/21/00 | 6010B | 0.10 | < 0.10 |

Released by: Paul D. Grant
Laboratory Supervisor

Report Date: August 10, 2000



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# INORGANIC ANALYSIS REPORT

AMERICAN
WEST
ANALYTICAL
LABORATORIES

463 West 3600 South
Salt Lake City, Utah
84115

(801) 263-8686
Toll Free (888) 263-8686
Fax (801) 263-8687

Client: Envirocare of Utah
Date Sampled: July 12, 2000
Project: LARW

Contact: Jeff Low
Date Received: July 13, 2000

Lab Sample ID:
L41958-05A

Field Sample ID:
GW-105E

| **Analytical Results** | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Cyanide | mg/L | 7/19/00 | 4500-CNE | 0.010 | < 0.010 |

Released by: Paul D. Fi
Laboratory Supervisor

Report Date: August 8, 2000



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# INORGANIC ANALYSIS REPORT

AMERICAN
WEST
ANALYTICAL
LABORATORIES

Client: Envirocare of Utah
Date Sampled: July 12, 2000
Project: LARW

Contact: Jeff Low
Date Received: July 13, 2000

Lab Sample ID:
L41958-06A

Field Sample ID:
GW-105F

463 West 3600 South
Salt Lake City, Utah
84115

| **Analytical Results** | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Cyanide | mg/L | 7/19/00 | 4500-CNE | 0.010 | < 0.010 |

(801) 263-8686
Toll Free (888) 263-8686
Fax (801) 263-8687

Released by: Rue D. S

Laboratory Supervisor Report Date: August 8, 2000 

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# INORGANIC ANALYSIS REPORT

AMERICAN
WEST
ANALYTICAL
LABORATORIES

Client: Envirocare of Utah
Date Sampled: July 12, 2000
Project: LARW

Contact: Jeff Low
Date Received: July 13, 2000

Lab Sample ID:
L41958-07A

Field Sample ID:
GW-105G

463 West 3600 South
Salt Lake City, Utah
84115

(801) 263-8686
Toll Free (888) 263-8686
Fax (801) 263-8687

| **Analytical Results** | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Cyanide | mg/L | 7/19/00 | 4500-CNE | 0.010 | < 0.010 |

Released by: Paul D. [illegible]
Laboratory Supervisor

Report Date: August 8, 2000



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463 West 3600 South
Salt Lake City, Utah
84115

(801) 263-8686
Toll Free (888) 263-8686
Fax (801) 263-8687

Client: Envirocare of Utah
Date Sampled: July 12, 2000
Project: LARW

Contact: Jeff Low
Date Received: July 13, 2000

Lab Sample ID:
L41958-08A

Field Sample ID:
GW-105H

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Cyanide | mg/L | 7/19/00 | 4500-CNE | 0.010 | < 0.010 |

Released by: Rue D. Sr

Laboratory Supervisor

Report Date: August 8, 2000



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Mountain States Analytical, Inc.
1645 West 2200 South · Salt Lake City, Utah 84119 · 800-973-6724

| | | | |
|---|---|---|---|
| **Client:** | Mr. Dan Shrum | **Report Number:** | 0007219-1 |
| | Envirocare of Utah, Inc. | **Date Reported:** | 08/22/00 |
| | 46 West Broadway | **Work Order:** | 0007219 |
| | Salt Lake City, UT 84101 | **Lab Sample ID:** | 0007219-01A |
| | (801) 532-1330 Fax: (801) 537-7345 | **Client Sample ID:** | MW-Pond |
| | | **Date Collected:** | 07/19/00 |
| **Project:** | LARW Groundwater Wells | **Date Received:** | 07/19/00 17:30 |
| **Project ID:** | | **Matrix:** | Water |
| **Purchase Order:** | | **COC ID:** | 00936 |

| Parameter | Result | MDL | PQL | Units | DF | Date Analyzed | Analyst |
|---|---|---|---|---|---|---|---|
| **EPA 310.1: Alkalinity as CaCO3, Water** | | | | | | | |
| Bicarbonate | 64.0 | 2 | 10 | mg/L | 1 | 08/02/00 14:00 | AMS |
| Carbonate | 32.0 | 2 | 10 | mg/L | 1 | 08/02/00 14:00 | AMS |
| Hydroxide | U | 2 | 10 | mg/L | 1 | 08/02/00 14:00 | AMS |
| Total alkalinity | 96.0 | 2 | 10 | mg/L | 1 | 08/02/00 14:00 | AMS |
| **EPA 300.0: Anions by I. C. (Br, Cl, F, SO4), Water** | | | | | | | |
| Bromide | U | 4 | 20 | mg/L | 200 | 07/20/00 17:47 | NWL |
| Chloride | 12300 | 560 | 2810 | mg/L | 6250 | 07/20/00 20:17 | NWL |
| Fluoride | 6.71 J | 2 | 10 | mg/L | 200 | 07/20/00 17:47 | NW |
| Sulfate | 1230 | 70 | 350 | mg/L | 1000 | 07/20/00 17:30 | NV |
| **EPA 300.0: Anions by I.C. (NO2, NO3, PO4), Water** | | | | | | | |
| Nitrate Nitrogen | U | 2 | 10 | mg/L | 200 | 07/20/00 17:47 | NWL |
| Nitrite Nitrogen | U | 2 | 10 | mg/L | 1000 | 07/20/00 17:30 | NWL |
| **EPA 150.1: pH, Water** | | | | | | | |
| pH | 9.14 | 0.01 | 0.05 | pH Units | 1 | 07/20/00 16:45 | NWL |
| **EPA 160.1: Solids, Total Dissolved (TDS), Water** | | | | | | | |
| Total dissolved solids | 25600 | 1300 | 6500 | mg/L | 100 | 07/24/00 11:50 | AMS |
| **EPA 160.2: Solids, Total Suspended (TSS), Water** | | | | | | | |
| Total suspended solids | 15.6 J | 5 | 25 | mg/L | 1 | 07/24/00 11:30 | AMS |
| **EPA 120.1: Specific Conductance, Water** | | | | | | | |
| Conductivity | 33600 | 1 | 3 | µmhos/cm | 1 | 07/20/00 09:15 | NWL |

U - Not detected above the MDL
B - Analyte detected in the associated Method Blank
S -Results outside normal recovery limits
J - Analyte detected below the PQL
E - Result is outside of quantitation range
R - RPD outside normal precision limits
* - Result is greater than the associated action level



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1645 West 2200 South · Salt Lake City, Utah 84119 · 800-973-6724

| | | | |
|---|---|---|---|
| **Client:** | Mr. Dan Shrum | **Report Number:** | 0007219-1 |
| | Envirocare of Utah, Inc. | **Date Reported:** | 08/22/00 |
| | 46 West Broadway | **Work Order:** | 0007219 |
| | Salt Lake City, UT 84101 | **Lab Sample ID:** | 0007219-01B |
| | (801) 532-1330 Fax: (801) 537-7345 | **Client Sample ID:** | MW-Pond |
| | | **Date Collected:** | 07/19/00 |
| **Project:** | LARW Groundwater Wells | **Date Received:** | 07/19/00 17:30 |
| **Project ID:** | | **Matrix:** | Water |
| **Purchase Order:** | | **COC ID:** | 00936 |

| Parameter | Result | MDL | PQL | Units | DF | Date Analyzed | Analyst |
|---|---|---|---|---|---|---|---|
| **EPA 415.1: Carbon, Total Organic, Water** | | | | | | | |
| Total Organic Carbon | 10.0 | 0.3 | 1.5 | mg/L | 1 | 07/31/00 10:00 | FLS |
| **SW-846 9020B: Halogen, Total Organic, Water** | | | | | | | |
| Total Halogens | 1290 J | 750 | 2250 | µg/L | 25 | 08/09/00 10:00 | FLS |

Note for 08/09/00 10:00 analysis: Sample diluted 25X and double-rinsed due to high inorganic chlorides.

U - Not detected above the MDL
J - Analyte detected below the PQL
* - Result is greater than the associated action level
B - Analyte detected in the associated Method Blank
E - Result is outside of quantitation range
S -Results outside normal recovery limits
R - RPD outside normal precision limits



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| | | | |
|---|---|---|---|
| Client: | Mr. Dan Shrum | Report Number: | 0007219-1 |
| | Envirocare of Utah, Inc. | Date Reported: | 08/22/00 |
| | 46 West Broadway | Work Order: | 0007219 |
| | Salt Lake City, UT 84101 | Lab Sample ID: | 0007219-01C |
| | (801) 532-1330 Fax: (801) 537-7345 | Client Sample ID: | MW-Pond |
| | | Date Collected: | 07/19/00 |
| Project: | LARW Groundwater Wells | Date Received: | 07/19/00 17:30 |
| Project ID: | | Matrix: | Water |
| Purchase Order: | | COC ID: | 00936 |

| Parameter | Result | MDL | PQL | Units | DF | Date Analyzed | Analyst |
|---|---|---|---|---|---|---|---|
| **SW-846 3005A: Flame/hrICP Prep, Water** | | | | | | | |
| Prep Batch ID: 3490 | | | | | | 08/02/00 14:20 | LC |
| **SW-846 7470A: Mercury by CVAA, Water** | | | | | | | |
| Mercury | U | 0.1 | 0.5 | µg/L | 1 | 08/03/00 14:09 | ITI |
| **SW-846 7470A: Mercury Prep CVAA, Water** | | | | | | | |
| Prep Batch ID: 3494 | | | | | | 08/03/00 08:17 | MM |
| **SW-846 6010B: Metals by hrICP, Water** | | | | | | | |
| Arsenic | U | 0.02 | 0.1 | mg/L | 1 | 08/02/00 19:16 | ITI |
| Barium | 0.351 | 0.003 | 0.015 | mg/L | 1 | 08/02/00 19:16 | ITI |
| Beryllium | U | 0.0002 | 0.001 | mg/L | 1 | 08/02/00 19:16 | ITI |
| Cadmium | 0.00301 J | 0.003 | 0.015 | mg/L | 1 | 08/02/00 19:16 | ITI |
| Chromium | U | 0.01 | 0.05 | mg/L | 1 | 08/02/00 19:16 | ITI |
| Cobalt | U | 0.003 | 0.015 | mg/L | 1 | 08/02/00 19:16 | ITI |
| Copper | U | 0.01 | 0.05 | mg/L | 1 | 08/02/00 19:16 | ITI |
| Iron | U | 0.2 | 1 | mg/L | 1 | 08/02/00 19:16 | ITI |
| Lead | U | 0.02 | 0.1 | mg/L | 1 | 08/02/00 19:16 | ITI |
| Molybdenum | 0.105 | 0.01 | 0.05 | mg/L | 1 | 08/02/00 19:16 | ITI |
| Nickel | 0.0512 | 0.005 | 0.025 | mg/L | 1 | 08/02/00 19:16 | ITI |
| Selenium | U | 0.03 | 0.15 | mg/L | 1 | 08/02/00 19:16 | ITI |
| Silver | U | 0.004 | 0.02 | mg/L | 1 | 08/02/00 19:16 | ITI |
| Zinc | U | 0.05 | 0.25 | mg/L | 1 | 08/02/00 19:16 | ITI |
| **SW-846 6010B: Metals by ICP, Water** | | | | | | | |
| Calcium | 424 | 50 | 250 | mg/L | 50 | 08/03/00 19:53 | DJK |
| Magnesium | 394 | 2.5 | 12.5 | mg/L | 50 | 08/03/00 19:53 | DJK |
| Potassium | 207 | 10 | 50 | mg/L | 50 | 08/03/00 19:53 | DJK |
| Sodium | 7590 | 50 | 250 | mg/L | 50 | 08/03/00 19:53 | DJK |

U - Not detected above the MDL
B - Analyte detected in the associated Method Blank
S -Results outside normal recovery limits
J - Analyte detected below the PQL
E - Result is outside of quantitation range
R - RPD outside normal precision limits
* - Result is greater than the associated action level



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| | | | |
|---|---|---|---|
| **Client:** | Mr. Dan Shrum | **Report Number:** | 0007219-1 |
| | Envirocare of Utah, Inc. | **Date Reported:** | 08/22/00 |
| | 46 West Broadway | **Work Order:** | 0007219 |
| | Salt Lake City, UT 84101 | **Lab Sample ID:** | 0007219-01D |
| | (801) 532-1330 Fax: (801) 537-7345 | **Client Sample ID:** | MW-Pond |
| | | **Date Collected:** | 07/19/00 |
| **Project:** | LARW Groundwater Wells | **Date Received:** | 07/19/00 17:30 |
| **Project ID:** | | **Matrix:** | Water |
| **Purchase Order:** | | **COC ID:** | 00936 |

| Parameter | Result | MDL | PQL | Units | DF | Date Analyzed | Analyst |
|---|---|---|---|---|---|---|---|
| **EPA 335.2: Cyanide, Total, Water** | | | | | | | |
| Cyanide | 0.00900 J | 0.004 | 0.02 | mg/L | 1 | 07/28/00 | FLS |

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E - Result is outside of quantitation range
R - RPD outside normal precision limits
* - Result is greater than the associated action level



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| | | | |
|---|---|---|---|
| **Client:** | Mr. Dan Shrum | **Report Number:** | 0007219-1 |
| | Envirocare of Utah, Inc. | **Date Reported:** | 08/22/00 |
| | 46 West Broadway | **Work Order:** | 0007219 |
| | Salt Lake City, UT 84101 | **Lab Sample ID:** | 0007219-02A |
| | (801) 532-1330 Fax: (801) 537-7345 | **Client Sample ID:** | P3-95 |
| | | **Date Collected:** | 07/19/00 |
| **Project:** | LARW Groundwater Wells | **Date Received:** | 07/19/00 17:30 |
| **Project ID:** | | **Matrix:** | Water |
| **Purchase Order:** | | **COC ID:** | 00936 |

| Parameter | Result | MDL | PQL | Units | DF | Date Analyzed | Analyst |
|---|---|---|---|---|---|---|---|
| **EPA 310.1: Alkalinity as CaCO3, Water** | | | | | | | |
| Bicarbonate | 144 | 2 | 10 | mg/L | 1 | 08/02/00 14:00 | AMS |
| Carbonate | U | 2 | 10 | mg/L | 1 | 08/02/00 14:00 | AMS |
| Hydroxide | U | 2 | 10 | mg/L | 1 | 08/02/00 14:00 | AMS |
| Total alkalinity | 144 | 2 | 10 | mg/L | 1 | 08/02/00 14:00 | AMS |
| **EPA 300.0: Anions by I. C. (Br, Cl, F, SO4), Water** | | | | | | | |
| Bromide | 42.2 | 4 | 20 | mg/L | 200 | 07/20/00 18:20 | NWL |
| Chloride | 33200 | 560 | 2810 | mg/L | 6250 | 07/20/00 20:34 | NWL |
| Fluoride | 8.15 J | 2 | 10 | mg/L | 200 | 07/20/00 18:20 | NWL |
| Sulfate | 2780 | 70 | 350 | mg/L | 1000 | 07/20/00 18:03 | NWL |
| **EPA 300.0: Anions by I.C. (NO2, NO3, PO4), Water** | | | | | | | |
| Nitrate Nitrogen | U | 2 | 10 | mg/L | 200 | 07/20/00 18:20 | NWL |
| Nitrite Nitrogen | U | 2 | 10 | mg/L | 1000 | 07/20/00 18:03 | NWL |
| **EPA 150.1: pH, Water** | | | | | | | |
| pH | 8.35 | 0.01 | 0.05 | pH Units | 1 | 07/20/00 16:45 | NWL |
| **EPA 160.1: Solids, Total Dissolved (TDS), Water** | | | | | | | |
| Total dissolved solids | 57100 | 1300 | 6500 | mg/L | 100 | 07/24/00 11:50 | AMS |
| **EPA 160.2: Solids, Total Suspended (TSS), Water** | | | | | | | |
| Total suspended solids | 42.0 | 5 | 25 | mg/L | 1 | 07/24/00 11:30 | AMS |
| **EPA 120.1: Specific Conductance, Water** | | | | | | | |
| Conductivity | 72300 | 1 | 3 | µmhos/cm | 1 | 07/20/00 09:15 | NWL |

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B - Analyte detected in the associated Method Blank
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E - Result is outside of quantitation range
R - RPD outside normal precision limits
* - Result is greater than the associated action level



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1645 West 2200 South · Salt Lake City, Utah 84119 · 800-973-6724

| | | | |
|---|---|---|---|
| **Client:** | Mr. Dan Shrum | **Report Number:** | 0007219-1 |
| | Envirocare of Utah, Inc. | **Date Reported:** | 08/22/00 |
| | 46 West Broadway | **Work Order:** | 0007219 |
| | Salt Lake City, UT 84101 | **Lab Sample ID:** | 0007219-02B |
| | (801) 532-1330 Fax: (801) 537-7345 | **Client Sample ID:** | P3-95 |
| | | **Date Collected:** | 07/19/00 |
| **Project:** | LARW Groundwater Wells | **Date Received:** | 07/19/00 17:30 |
| **Project ID:** | | **Matrix:** | Water |
| **Purchase Order:** | | **COC ID:** | 00936 |

| Parameter | Result | MDL | PQL | Units | DF | Date Analyzed | Analyst |
|---|---|---|---|---|---|---|---|
| **EPA 415.1: Carbon, Total Organic, Water** | | | | | | | |
| Total Organic Carbon | 6.18 | 0.3 | 1.5 | mg/L | 1 | 07/31/00 10:00 | FLS |
| **SW-846 9020B: Halogen, Total Organic, Water** | | | | | | | |
| Total Halogens | 1830 J | 750 | 2250 | µg/L | 25 | 08/09/00 10:00 | FLS |

Note for 08/09/00 10:00 analysis: Sample diluted 25X and double-rinsed due to high inorganic chlorides.

U - Not detected above the MDL
B - Analyte detected in the associated Method Blank
S -Results outside normal recovery limits
J - Analyte detected below the PQL
E - Result is outside of quantitation range
R - RPD outside normal precision limits
* - Result is greater than the associated action level



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| | | | |
|---|---|---|---|
| **Client:** | Mr. Dan Shrum<br>Envirocare of Utah, Inc.<br>46 West Broadway<br>Salt Lake City, UT 84101<br>(801) 532-1330 Fax: (801) 537-7345 | **Report Number:** | 0007219-1 |
| | | **Date Reported:** | 08/22/00 |
| | | **Work Order:** | 0007219 |
| | | **Lab Sample ID:** | 0007219-02C |
| | | **Client Sample ID:** | P3-95 |
| | | **Date Collected:** | 07/19/00 |
| **Project:** | LARW Groundwater Wells | **Date Received:** | 07/19/00 17:30 |
| **Project ID:** | | **Matrix:** | Water |
| **Purchase Order:** | | **COC ID:** | 00936 |

| Parameter | Result | MDL | PQL | Units | DF | Date Analyzed | Analyst |
|---|---|---|---|---|---|---|---|
| **SW-846 3005A: Flame/hrICP Prep, Water** | | | | | | | |
| Prep Batch ID: 3490 | | | | | | 08/02/00 14:20 | LC |
| **SW-846 7470A: Mercury by CVAA, Water** | | | | | | | |
| Mercury | U | 0.1 | 0.5 | µg/L | 1 | 08/03/00 14:10 | ITI |
| **SW-846 7470A: Mercury Prep CVAA, Water** | | | | | | | |
| Prep Batch ID: 3494 | | | | | | 08/03/00 08:17 | MM |
| **SW-846 6010B: Metals by hrICP, Water** | | | | | | | |
| Arsenic | U | 0.02 | 0.1 | mg/L | 1 | 08/02/00 19:20 | ITI |
| Barium | 0.333 | 0.003 | 0.015 | mg/L | 1 | 08/02/00 19:20 | ITI |
| Beryllium | U | 0.0002 | 0.001 | mg/L | 1 | 08/02/00 19:20 | ITI |
| Cadmium | U | 0.003 | 0.015 | mg/L | 1 | 08/02/00 19:20 | ITI |
| Chromium | U | 0.01 | 0.05 | mg/L | 1 | 08/02/00 19:20 | ITI |
| Cobalt | U | 0.003 | 0.015 | mg/L | 1 | 08/02/00 19:20 | ITI |
| Copper | U | 0.01 | 0.05 | mg/L | 1 | 08/02/00 19:20 | ITI |
| Iron | U | 0.2 | 1 | mg/L | 1 | 08/02/00 19:20 | ITI |
| Lead | U | 0.02 | 0.1 | mg/L | 1 | 08/02/00 19:20 | ITI |
| Molybdenum | 0.232 | 0.01 | 0.05 | mg/L | 1 | 08/02/00 19:20 | ITI |
| Nickel | 0.0361 | 0.005 | 0.025 | mg/L | 1 | 08/02/00 19:20 | ITI |
| Selenium | U | 0.03 | 0.15 | mg/L | 1 | 08/02/00 19:20 | ITI |
| Silver | U | 0.004 | 0.02 | mg/L | 1 | 08/02/00 19:20 | ITI |
| Zinc | U | 0.05 | 0.25 | mg/L | 1 | 08/02/00 19:20 | ITI |
| **SW-846 6010B: Metals by ICP, Water** | | | | | | | |
| Calcium | 910 | 50 | 250 | mg/L | 50 | 08/03/00 19:56 | DJK |
| Magnesium | 1080 | 2.5 | 12.5 | mg/L | 50 | 08/03/00 19:56 | DJK |
| Potassium | 482 | 10 | 50 | mg/L | 50 | 08/03/00 19:56 | DJK |
| Sodium | 17500 | 50 | 250 | mg/L | 50 | 08/03/00 19:56 | DJK |

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S -Results outside normal recovery limits
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E - Result is outside of quantitation range
R - RPD outside normal precision limits
* - Result is greater than the associated action level



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| | | | |
|---|---|---|---|
| **Client:** | Mr. Dan Shrum | **Report Number:** | 0007219-1 |
| | Envirocare of Utah, Inc. | **Date Reported:** | 08/22/00 |
| | 46 West Broadway | **Work Order:** | 0007219 |
| | Salt Lake City, UT 84101 | **Lab Sample ID:** | 0007219-02D |
| | (801) 532-1330 Fax: (801) 537-7345 | **Client Sample ID:** | P3-95 |
| | | **Date Collected:** | 07/19/00 |
| **Project:** | LARW Groundwater Wells | **Date Received:** | 07/19/00 17:30 |
| **Project ID:** | | **Matrix:** | Water |
| **Purchase Order:** | | **COC ID:** | 00936 |

| Parameter | Result | MDL | PQL | Units | DF | Date Analyzed | Analyst |
|---|---|---|---|---|---|---|---|
| **EPA 335.2: Cyanide, Total, Water** | | | | | | | |
| Cyanide | U | 0.004 | 0.02 | mg/L | 1 | 07/28/00 | FLS |

U - Not detected above the MDL
B - Analyte detected in the associated Method Blank
S -Results outside normal recovery limits
J - Analyte detected below the PQL
E - Result is outside of quantitation range
R - RPD outside normal precision limits
* - Result is greater than the associated action level



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# Cation Anion Balance Worksheet

| 0007219 | Sample #: 0007219-01A MW-Pond | | Sample #: 0007219-02A P3-95 | | Sample #: | |
|---|---|---|---|---|---|---|
| Cations | mg/l | meq/l | mg/l | meq/l | mg/l | meq/l |
| Calcium | 424 | 21.2 | 910 | 45.4 | | 0.0 |
| Magnesium | 394 | 32.4 | 1080 | 88.8 | | 0.0 |
| Iron | 0 | 0.0 | 0 | 0.0 | | 0.0 |
| Potassium | 207 | 5.3 | 482 | 12.3 | | 0.0 |
| Sodium | 7590 | 330.2 | 17500 | 761.3 | | 0.0 |
| Cation | Total = | 389.0 | Total = | 907.8 | Total = | 0.0 |
| Anions | mg/l | meq/l | mg/l | meq/l | mg/l | meq/l |
| Chloride | 12300 | 347.0 | 33200 | 936.6 | | 0.0 |
| Bicarbonate | 64 | 1.3 | 144 | 2.9 | | 0.0 |
| Sulfate | 1230 | 25.6 | 2780 | 57.9 | | 0.0 |
| Fluoride | 6.71 | 0.4 | 8.15 | 0.4 | | 0.0 |
| Nitrate | 0 | 0.0 | 0 | 0.0 | | 0.0 |
| Anion | Total = | 374.2 | Total = | 997.8 | Total= | 0.0 |
| Percentage Error = | | 3.88% | | -9.44% | | ERR |

Mountain States Analytical, Inc.
1645 West 2200 South · Salt Lake City, Utah 84119 · 800-973-6724

| | | | |
|---|---|---|---|
| **Client:** | Mr. Dan Shrum | **Report Number:** | 0007235-1 |
| | Envirocare of Utah, Inc. | **Date Reported:** | 08/22/00 |
| | 46 West Broadway | **Work Order:** | 0007235 |
| | Salt Lake City, UT 84101 | **Lab Sample ID:** | 0007235-01A |
| | (801) 532-1330 Fax: (801) 537-7345 | **Client Sample ID:** | P3-97 |
| | | **Date Collected:** | 07/20/00 |
| **Project:** | LARW Groundwater Wells | **Date Received:** | 07/20/00 17:15 |
| **Project ID:** | 00938 | **Matrix:** | Water |
| **Purchase Order:** | | **COC ID:** | 00938 |

| Parameter | Result | MDL | PQL | Units | DF | Date Analyzed | Analyst |
|---|---|---|---|---|---|---|---|
| **EPA 310.1: Alkalinity as CaCO3, Water** | | | | | | | |
| Bicarbonate | 175 | 2 | 10 | mg/L | 1 | 07/27/00 09:25 | AMS |
| Carbonate | U | 2 | 10 | mg/L | 1 | 07/27/00 09:25 | AMS |
| Hydroxide | U | 2 | 10 | mg/L | 1 | 07/27/00 09:25 | AMS |
| Total alkalinity | 175 | 2 | 10 | mg/L | 1 | 07/27/00 09:25 | AMS |
| **EPA 300.0: Anions by I. C. (Br, Cl, F, SO4), Water** | | | | | | | |
| Bromide | 75.0 | 8 | 40 | mg/L | 400 | 07/21/00 17:28 | NWL |
| Chloride | 61000 | 2200 | 11200 | mg/L | 25000 | 07/24/00 11:55 | NWL |
| Fluoride | 13.0 J | 4 | 20 | mg/L | 400 | 07/21/00 17:28 | NWL |
| Sulfate | 5470 | 140 | 700 | mg/L | 2000 | 07/21/00 17:11 | NWL |
| **EPA 300.0: Anions by I.C. (NO2, NO3, PO4), Water** | | | | | | | |
| Nitrate Nitrogen | U | 4 | 20 | mg/L | 400 | 07/21/00 17:28 | NWL |
| Nitrite Nitrogen | U | 25 | 120 | mg/L | 12500 | 07/21/00 17:11 | NWL |
| **EPA 150.1: pH, Water** | | | | | | | |
| pH | 8.12 | 0.01 | 0.05 | pH Units | 1 | 07/21/00 09:00 | RK |
| **EPA 160.1: Solids, Total Dissolved (TDS), Water** | | | | | | | |
| Total dissolved solids | 116000 | 2600 | 13000 | mg/L | 200 | 07/24/00 11:50 | AMS |
| **EPA 160.2: Solids, Total Suspended (TSS), Water** | | | | | | | |
| Total suspended solids | 46.4 | 5 | 25 | mg/L | 1 | 07/24/00 11:30 | AMS |
| **EPA 120.1: Specific Conductance, Water** | | | | | | | |
| Conductivity | 101000 | 1 | 3 | µmhos/cm | 1 | 07/24/00 10:30 | NWL |

U - Not detected above the MDL
B - Analyte detected in the associated Method Blank
S -Results outside normal recovery limits
J - Analyte detected below the PQL
E - Result is outside of quantitation range
R - RPD outside normal precision limits
* - Result is greater than the associated action level



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1645 West 2200 South · Salt Lake City, Utah 84119 · 800-973-6724

| | | | |
|---|---|---|---|
| Client: | Mr. Dan Shrum | Report Number: | 0007235-1 |
| | Envirocare of Utah, Inc. | Date Reported: | 08/22/00 |
| | 46 West Broadway | Work Order: | 0007235 |
| | Salt Lake City, UT 84101 | Lab Sample ID: | 0007235-01B |
| | (801) 532-1330 Fax: (801) 537-7345 | Client Sample ID: | P3-97 |
| | | Date Collected: | 07/20/00 |
| Project: | LARW Groundwater Wells | Date Received: | 07/20/00 17:15 |
| Project ID: | 00938 | Matrix: | Water |
| Purchase Order: | | COC ID: | 00938 |

| Parameter | Result | MDL | PQL | Units | DF | Date Analyzed | Analyst |
|---|---|---|---|---|---|---|---|
| **EPA 415.1: Carbon, Total Organic, Water** | | | | | | | |
| Total Organic Carbon | 9.40 | 0.3 | 1.5 | mg/L | 1 | 07/31/00 10:00 | FLS |
| Note for 07/31/00 10:00 analysis: Due to poor spike recovery, MS/MSD were rerun to confirm matrix interference. MS %Rec. = 0.00 | | | | | | | |
| **SW-846 9020B: Halogen, Total Organic, Water** | | | | | | | |
| Total Halogens | 1200 J | 750 | 2250 | µg/L | 25 | 08/09/00 10:00 | FLS |
| Note for 08/09/00 10:00 analysis: Sample diluted 25X and double-rinsed due to high inorganic chlorides. | | | | | | | |

U - Not detected above the MDL
B - Analyte detected in the associated Method Blank
S -Results outside normal recovery limits
J - Analyte detected below the PQL
E - Result is outside of quantitation range
R - RPD outside normal precision limits
* - Result is greater than the associated action level



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1645 West 2200 South · Salt Lake City, Utah 84119 · 800-973-6724

| | | | |
|---|---|---|---|
| **Client:** | Mr. Dan Shrum | **Report Number:** | 0007235-1 |
| | Envirocare of Utah, Inc. | **Date Reported:** | 08/22/00 |
| | 46 West Broadway | **Work Order:** | 0007235 |
| | Salt Lake City, UT 84101 | **Lab Sample ID:** | 0007235-01C |
| | (801) 532-1330 Fax: (801) 537-7345 | **Client Sample ID:** | P3-97 |
| | | **Date Collected:** | 07/20/00 |
| **Project:** | LARW Groundwater Wells | **Date Received:** | 07/20/00 17:15 |
| **Project ID:** | 00938 | **Matrix:** | Water |
| **Purchase Order:** | | **COC ID:** | 00938 |

| Parameter | Result | MDL | PQL | Units | DF | Date Analyzed | Analyst |
|---|---|---|---|---|---|---|---|
| **SW-846 3005A: Flame/hrICP Prep, Water** | | | | | | | |
| Prep Batch ID: 3513 | | | | | | 08/04/00 14:43 | LC |
| **SW-846 7470A: Mercury by CVAA, Water** | | | | | | | |
| Mercury | 0.140 J | 0.1 | 0.5 | µg/L | 1 | 08/08/00 09:33 | MM |
| **SW-846 7470A: Mercury Prep CVAA, Water** | | | | | | | |
| Prep Batch ID: 3541 | | | | | | 08/07/00 15:24 | MM |
| **SW-846 6010B: Metals by hrICP, Water** | | | | | | | |
| Arsenic | U | 0.02 | 0.1 | mg/L | 1 | 08/07/00 15:41 | ITI |
| Barium | 0.461 | 0.003 | 0.015 | mg/L | 1 | 08/07/00 15:41 | ITI |
| Beryllium | U | 0.0002 | 0.001 | mg/L | 1 | 08/07/00 15:41 | ITI |
| Cadmium | 0.00500 J | 0.003 | 0.015 | mg/L | 1 | 08/07/00 15:41 | ITI |
| Chromium | U | 0.01 | 0.05 | mg/L | 1 | 08/07/00 15:41 | ITI |
| Cobalt | 0.00330 J | 0.003 | 0.015 | mg/L | 1 | 08/07/00 15:41 | ITI |
| Copper | 0.0450 J | 0.01 | 0.05 | mg/L | 1 | 08/07/00 18:39 | ITI |
| Iron | U | 0.2 | 1 | mg/L | 1 | 08/07/00 15:41 | ITI |
| Lead | U | 0.02 | 0.1 | mg/L | 1 | 08/07/00 15:41 | ITI |
| Molybdenum | 0.374 | 0.01 | 0.05 | mg/L | 1 | 08/07/00 15:41 | ITI |
| Nickel | 0.154 | 0.005 | 0.025 | mg/L | 1 | 08/07/00 15:41 | ITI |
| Selenium | U | 0.03 | 0.15 | mg/L | 1 | 08/07/00 15:41 | ITI |
| Silver | 0.00610 J | 0.004 | 0.02 | mg/L | 1 | 08/07/00 15:41 | ITI |
| Zinc | 0.0680 J | 0.05 | 0.25 | mg/L | 1 | 08/07/00 15:41 | ITI |
| **SW-846 6010B: Metals by ICP, Water** | | | | | | | |
| Calcium | 1740 | 50 | 250 | mg/L | 50 | 08/07/00 18:01 | DJK |
| Magnesium | 2150 B | 2.5 | 12.5 | mg/L | 50 | 08/07/00 18:01 | DJK |
| Potassium | 1070 B | 10 | 50 | mg/L | 50 | 08/07/00 18:01 | DJK |
| Sodium | 34600 | 50 | 250 | mg/L | 50 | 08/07/00 18:01 | DJK |

U - Not detected above the MDL
B - Analyte detected in the associated Method Blank
S -Results outside normal recovery limits
J - Analyte detected below the PQL
E - Result is outside of quantitation range
R - RPD outside normal precision limits
* - Result is greater than the associated action level



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1645 West 2200 South · Salt Lake City, Utah 84119 · 800-973-6724

| | | | |
|---|---|---|---|
| **Client:** | Mr. Dan Shrum<br>Envirocare of Utah, Inc.<br>46 West Broadway<br>Salt Lake City, UT 84101<br>(801) 532-1330 Fax: (801) 537-7345 | **Report Number:** | 0007235-1 |
| | | **Date Reported:** | 08/22/00 |
| | | **Work Order:** | 0007235 |
| | | **Lab Sample ID:** | 0007235-01D |
| | | **Client Sample ID:** | P3-97 |
| | | **Date Collected:** | 07/20/00 |
| **Project:** | LARW Groundwater Wells | **Date Received:** | 07/20/00 17:15 |
| **Project ID:** | 00938 | **Matrix:** | Water |
| **Purchase Order:** | | **COC ID:** | 00938 |

| Parameter | Result | MDL | PQL | Units | DF | Date Analyzed | Analyst |
|---|---|---|---|---|---|---|---|
| **EPA 335.2: Cyanide, Total, Water** | | | | | | | |
| Cyanide | U | 0.004 | 0.02 | mg/L | 1 | 07/28/00 | FLS |

U - Not detected above the MDL
B - Analyte detected in the associated Method Blank
S -Results outside normal recovery limits
J - Analyte detected below the PQL
E - Result is outside of quantitation range
R - RPD outside normal precision limits
* - Result is greater than the associated action level



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1645 West 2200 South · Salt Lake City, Utah 84119 · 800-973-6724

| | | | |
|---|---|---|---|
| **Client:** | Mr. Dan Shrum | **Report Number:** | 0007235-1 |
| | Envirocare of Utah, Inc. | **Date Reported:** | 08/22/00 |
| | 46 West Broadway | **Work Order:** | 0007235 |
| | Salt Lake City, UT 84101 | **Lab Sample ID:** | 0007235-02A |
| | (801) 532-1330 Fax: (801) 537-7345 | **Client Sample ID:** | GW-904 |
| | | **Date Collected:** | 07/20/00 |
| **Project:** | LARW Groundwater Wells | **Date Received:** | 07/20/00 17:15 |
| **Project ID:** | 00938 | **Matrix:** | Water |
| **Purchase Order:** | | **COC ID:** | 00938 |

| Parameter | Result | MDL | PQL | Units | DF | Date Analyzed | Analyst |
|---|---|---|---|---|---|---|---|
| **EPA 310.1: Alkalinity as CaCO3, Water** | | | | | | | |
| Bicarbonate | 176 | 2 | 10 | mg/L | 1 | 07/27/00 09:25 | AMS |
| Carbonate | U | 2 | 10 | mg/L | 1 | 07/27/00 09:25 | AMS |
| Hydroxide | U | 2 | 10 | mg/L | 1 | 07/27/00 09:25 | AMS |
| Total alkalinity | 176 | 2 | 10 | mg/L | 1 | 07/27/00 09:25 | AMS |
| **EPA 300.0: Anions by I. C. (Br, Cl, F, SO4), Water** | | | | | | | |
| Bromide | 73.8 | 8 | 40 | mg/L | 400 | 07/21/00 18:51 | NWL |
| Chloride | 55200 | 2200 | 11200 | mg/L | 25000 | 07/24/00 12:45 | NWL |
| Fluoride | 14.0 J | 4 | 20 | mg/L | 400 | 07/21/00 18:51 | NWL |
| Sulfate | 5640 | 140 | 700 | mg/L | 2000 | 07/21/00 18:35 | NWL |
| **EPA 300.0: Anions by LC. (NO2, NO3, PO4), Water** | | | | | | | |
| Nitrate Nitrogen | U | 4 | 20 | mg/L | 400 | 07/21/00 18:51 | NWL |
| Nitrite Nitrogen | U | 25 | 120 | mg/L | 12500 | 07/21/00 18:35 | NWL |
| **EPA 150.1: pH, Water** | | | | | | | |
| pH | 8.13 | 0.01 | 0.05 | pH Units | 1 | 07/21/00 09:00 | RK |
| **EPA 160.1: Solids, Total Dissolved (TDS), Water** | | | | | | | |
| Total dissolved solids | 121000 | 2600 | 13000 | mg/L | 200 | 07/24/00 11:50 | AMS |
| **EPA 160.2: Solids, Total Suspended (TSS), Water** | | | | | | | |
| Total suspended solids | 61.6 | 5 | 25 | mg/L | 1 | 07/24/00 11:30 | AMS |
| **EPA 120.1: Specific Conductance, Water** | | | | | | | |
| Conductivity | 102000 | 1 | 3 | µmhos/cm | 1 | 07/24/00 10:30 | NWL |

U - Not detected above the MDL

J - Analyte detected below the PQL

* - Result is greater than the associated action level

B - Analyte detected in the associated Method Blank

E - Result is outside of quantitation range

S -Results outside normal recovery limits

R - RPD outside normal precision limits



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1645 West 2200 South · Salt Lake City, Utah 84119 · 800-973-6724

| | | | |
|---|---|---|---|
| Client: | Mr. Dan Shrum<br>Envirocare of Utah, Inc.<br>46 West Broadway<br>Salt Lake City, UT 84101<br>(801) 532-1330 Fax: (801) 537-7345 | **Report Number:** | 0007235-1 |
| | | **Date Reported:** | 08/22/00 |
| | | **Work Order:** | 0007235 |
| | | **Lab Sample ID:** | 0007235-02B |
| | | **Client Sample ID:** | GW-904 |
| | | **Date Collected:** | 07/20/00 |
| **Project:** | LARW Groundwater Wells | **Date Received:** | 07/20/00 17:15 |
| **Project ID:** | 00938 | **Matrix:** | Water |
| **Purchase Order:** | | **COC ID:** | 00938 |

| Parameter | Result | MDL | PQL | Units | DF | Date Analyzed | Analyst |
|---|---|---|---|---|---|---|---|
| **EPA 415.1: Carbon, Total Organic, Water** | | | | | | | |
| Total Organic Carbon | 9.08 | 0.3 | 1.5 | mg/L | 1 | 07/31/00 10:00 | FLS |
| **SW-846 9020B: Halogen, Total Organic, Water** | | | | | | | |
| Total Halogens | U | 750 | 2250 | µg/L | 25 | 08/09/00 10:00 | FLS |

Note for 08/09/00 10:00 analysis: Sample diluted 25X and double-rinsed due to high inorganic chlorides.

U - Not detected above the MDL
B - Analyte detected in the associated Method Blank
S -Results outside normal recovery limits
J - Analyte detected below the PQL
E - Result is outside of quantitation range
R - RPD outside normal precision limits
* - Result is greater than the associated action level



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1645 West 2200 South · Salt Lake City, Utah 84119 · 800-973-6724

| | | | |
|---|---|---|---|
| **Client:** | Mr. Dan Shrum | **Report Number:** | 0007235-1 |
| | Envirocare of Utah, Inc. | **Date Reported:** | 08/22/00 |
| | 46 West Broadway | **Work Order:** | 0007235 |
| | Salt Lake City, UT 84101 | **Lab Sample ID:** | 0007235-02C |
| | (801) 532-1330 Fax: (801) 537-7345 | **Client Sample ID:** | GW-904 |
| | | **Date Collected:** | 07/20/00 |
| **Project:** | LARW Groundwater Wells | **Date Received:** | 07/20/00 17:15 |
| **Project ID:** | 00938 | **Matrix:** | Water |
| **Purchase Order:** | | **COC ID:** | 00938 |

| Parameter | Result | MDL | PQL | Units | DF | Date Analyzed | Analyst |
|---|---|---|---|---|---|---|---|
| **SW-846 3005A: Flame/hrICP Prep, Water** | | | | | | | |
| Prep Batch ID: 3513 | | | | | | 08/04/00 14:43 | LC |
| **SW-846 7470A: Mercury by CVAA, Water** | | | | | | | |
| Mercury | U | 0.1 | 0.5 | µg/L | 1 | 08/08/00 09:42 | MM |
| **SW-846 7470A: Mercury Prep CVAA, Water** | | | | | | | |
| Prep Batch ID: 3541 | | | | | | 08/07/00 15:24 | MM |
| **SW-846 6010B: Metals by hrICP, Water** | | | | | | | |
| Arsenic | U | 0.02 | 0.1 | mg/L | 1 | 08/07/00 16:11 | ITI |
| Barium | 0.491 | 0.003 | 0.015 | mg/L | 1 | 08/07/00 16:11 | ITI |
| Beryllium | U | 0.0002 | 0.001 | mg/L | 1 | 08/07/00 16:11 | ITI |
| Cadmium | 0.00500 J | 0.003 | 0.015 | mg/L | 1 | 08/07/00 16:11 | ITI |
| Chromium | U | 0.01 | 0.05 | mg/L | 1 | 08/07/00 16:11 | ITI |
| Cobalt | 0.00380 J | 0.003 | 0.015 | mg/L | 1 | 08/07/00 16:11 | ITI |
| Copper | 0.0440 J | 0.01 | 0.05 | mg/L | 1 | 08/07/00 19:09 | ITI |
| Iron | U | 0.2 | 1 | mg/L | 1 | 08/07/00 16:11 | ITI |
| Lead | U | 0.02 | 0.1 | mg/L | 1 | 08/07/00 16:11 | ITI |
| Molybdenum | 0.370 | 0.01 | 0.05 | mg/L | 1 | 08/07/00 16:11 | ITI |
| Nickel | 0.150 | 0.005 | 0.025 | mg/L | 1 | 08/07/00 16:11 | ITI |
| Selenium | U | 0.03 | 0.15 | mg/L | 1 | 08/07/00 16:11 | ITI |
| Silver | 0.00650 J | 0.004 | 0.02 | mg/L | 1 | 08/07/00 16:11 | ITI |
| Zinc | 0.110 J | 0.05 | 0.25 | mg/L | 1 | 08/07/00 16:11 | ITI |
| **SW-846 6010B: Metals by ICP, Water** | | | | | | | |
| Calcium | 1730 | 50 | 250 | mg/L | 50 | 08/07/00 18:23 | DJK |
| Magnesium | 2130 B | 2.5 | 12.5 | mg/L | 50 | 08/07/00 18:23 | DJK |
| Potassium | 1060 B | 10 | 50 | mg/L | 50 | 08/07/00 18:23 | DJK |
| Sodium | 34100 | 50 | 250 | mg/L | 50 | 08/07/00 18:23 | DJK |

U - Not detected above the MDL
B - Analyte detected in the associated Method Blank
S -Results outside normal recovery limits
J - Analyte detected below the PQL
E - Result is outside of quantitation range
R - RPD outside normal precision limits
* - Result is greater than the associated action level



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1645 West 2200 South · Salt Lake City, Utah 84119 · 800-973-6724

Client: Mr. Dan Shrum
Envirocare of Utah, Inc.
46 West Broadway
Salt Lake City, UT 84101
(801) 532-1330 Fax: (801) 537-7345

Project: LARW Groundwater Wells
Project ID: 00938
Purchase Order:

Report Number: 0007235-1
Date Reported: 08/22/00
Work Order: 0007235
Lab Sample ID: 0007235-02D
Client Sample ID: GW-904
Date Collected: 07/20/00
Date Received: 07/20/00 17:15
Matrix: Water
COC ID: 00938

| Parameter | Result | MDL | PQL | Units | DF | Date Analyzed | Analyst |
|---|---|---|---|---|---|---|---|
| **EPA 335.2: Cyanide, Total, Water** | | | | | | | |
| Cyanide | 0.00400 J | 0.004 | 0.02 | mg/L | 1 | 08/01/00 10:00 | FLS |

U - Not detected above the MDL
J - Analyte detected below the PQL
* - Result is greater than the associated action level
B - Analyte detected in the associated Method Blank
E - Result is outside of quantitation range
S -Results outside normal recovery limits
R - RPD outside normal precision limits



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# Cation Anion Balance Worksheet

| 0007235 | Sample #: 0007235-01A P3-97 | | Sample #: 0007235-02A GW-904 | | Sample #: | |
|---|---|---|---|---|---|---|
| Cations | mg/l | meq/l | mg/l | meq/l | mg/l | meq/l |
| Calcium | 1740 | 86.8 | 1730 | 86.3 | | 0.0 |
| Magnesium | 2150 | 176.9 | 2130 | 175.2 | | 0.0 |
| Iron | 0 | 0.0 | 0 | 0.0 | | 0.0 |
| Potassium | 1070 | 27.4 | 1060 | 27.1 | | 0.0 |
| Sodium | 34600 | 1505.1 | 34100 | 1483.4 | | 0.0 |
| Cation | Total = | 1796.1 | Total = | 1772.0 | Total = | 0.0 |
| Anions | mg/l | meq/l | mg/l | meq/l | mg/l | meq/l |
| Chloride | 61000 | 1720.8 | 55200 | 1557.2 | | 0.0 |
| Bicarbonate | 175 | 3.5 | 176 | 3.5 | | 0.0 |
| Sulfate | 5470 | 113.9 | 5640 | 117.4 | | 0.0 |
| Fluoride | 13 | 0.7 | 14 | 0.7 | | 0.0 |
| Nitrate | 0 | 0.0 | 0 | 0.0 | | 0.0 |
| Anion | Total = | 1838.9 | Total = | 1678.9 | Total= | 0.0 |
| Percentage Error = | | -2.35% | | 5.40% | | ERR |

# INORGANIC ANALYSIS REPORT

AMERICAN
WEST
ANALYTICAL
LABORATORIES

463 West 3600 South
Salt Lake City, Utah
84115

(801) 263-8686
Toll Free (888) 263-8686
Fax (801) 263-8687

Client: Envirocare of Utah
Date Sampled: August 1, 2000
Project: 11e. (2)

Contact: Jeff Low
Date Received: August 2, 2000

Lab Sample ID:
L42179-01C

Field Sample ID:
GW-19A

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Bicarbonate (As CaCO3) | mg/L | 8/3/00 | 2320 B | 10 | **120** |
| Carbonate (As CaCO3) | mg/L | 8/3/00 | 2320 B | 10 | < 10 |
| Chloride | mg/L | 8/3/00 | 4500-CL B | 5.0 | **40,000** |
| Conductivity | µmhos/cm | 8/2/00 | 2510B | 10 | **52,000** |
| Cyanide | mg/L | 8/8/00 | 4500-CNE | 0.0050 | < 0.0050 |
| Fluoride | mg/L | 8/15/00 | 4500-FD | 0.50 | **5.2** |
| Ion Balance | | 8/21/00 | | 0 | -1.2 |
| Nitrate (as N) | mg/L | 8/3/00 | 4500-NO3F | 0.10 | **2.2** |
| Nitrate/Nitrite (as N) | mg/L | 8/3/00 | 4500-NO3F | 0.10 | **2.2** |
| pH | pH units | 8/2/00 | 4500/9040B | 0 | **7.40** |
| Sulfate | mg/L | 8/3/00 | 375.4 | 5.0 | **6,500** |
| TDS | mg/L | 8/2/00 | 2540C | 10 | **66,000** |
| Total Organic Carbon | mg/L | 8/3/00 | 5310C | 1.0 | **8.5** |

Released by: Rue D. Sr

Laboratory Supervisor Report Date: August 22, 2000 Page 1 of 1

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463 West 3600 South
Salt Lake City, Utah
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Client: Envirocare of Utah
Date Sampled: August 1, 2000
Project: 11e. (2)

Contact: Jeff Low
Date Received: August 2, 2000

Lab Sample ID:
L42179-01D

Field Sample ID:
GW-19A

**TOTAL METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Calcium | mg/L | 8/15/00 | 6010B | 0.10 | **1,100** |
| Iron | mg/L | 8/15/00 | 6010B | 0.10 | < 0.10 |
| Magnesium | mg/L | 8/15/00 | 6010B | 0.10 | **1,500** |
| Potassium | mg/L | 8/15/00 | 6010B | 0.10 | **540** |
| Sodium | mg/L | 8/15/00 | 6010B | 0.10 | **24,000** |

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Laboratory Supervisor

Report Date: August 22, 2000



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Client: Envirocare of Utah
Date Sampled: August 1, 2000
Project: 11e. (2)

Contact: Jeff Low
Date Received: August 2, 2000

Lab Sample ID:
L42179-01C

Field Sample ID:
GW-19A

**DISSOLVED METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 8/9/00 | 7060A | 0.010 | **0.015** |
| Barium | mg/L | 8/25/00 | 6010B | 0.0040 | **0.0070** |
| Beryllium | mg/L | 8/25/00 | 6010B | 0.0020 | < 0.0020 |
| Cadmium | mg/L | 8/25/00 | 6010B | 0.0040 | < 0.0040 |
| Chromium | mg/L | 8/25/00 | 6010B | 0.0050 | < 0.0050 |
| Copper | mg/L | 8/25/00 | 6010B | 0.0080 | < 0.0080 |
| Lead | mg/L | 8/8/00 | 7421 | 0.0050 | < 0.0050 |
| Mercury | mg/L | 8/20/00 | 7470A | 0.00020 | < 0.0002 |
| Molybdenum | mg/L | 8/25/00 | 6010B | 0.040 | **0.74** |
| Nickel | mg/L | 8/25/00 | 6010B | 0.010 | < 0.010 |
| Selenium | mg/L | 8/8/00 | 7740 | 0.0050 | < 0.0050 |
| Silver | mg/L | 8/25/00 | 6010B | 0.0050 | < 0.0050 |
| Zinc | mg/L | 8/25/00 | 6010B | 0.10 | < 0.10 |

Released by: Paul D. Sf
Laboratory Supervisor

Report Date: August 25, 2000



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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: August 1, 2000
Received: August 2, 2000

Contact: Jeff Low
Analyzed: August 7, 2000

Analysis Requested: Purge & Trap by GC/MS SW846 #8260B/5030A

Lab Sample ID: L42179-01A
Field Sample ID: **GW-19A**
Site ID: 11e. (2)

**Analytical Results** — **Volatile Organic Compounds**

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Acetone | 20 | < 20 |
| 2-Butanone | 20 | < 20 |
| Carbondisulfide | 2.0 | < 2.0 |
| Chloroform | 2.0 | < 2.0 |
| 1,2-Dichloroethane | 2.0 | < 2.0 |
| Methylene chloride | 2.0 | < 2.0 |
| 1,1,2-Trichloroethane | 50 | < 50 |
| Vinyl chloride | 50 | < 50 |

Released by: Laboratory Supervisor

Report Date: August 22, 2000



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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: August 1, 2000
Received: August 2, 2000

Contact: Jeff Low
Analyzed: August 8, 2000
Extracted: August 7, 2000

Analysis Requested: Semi Volatiles by SW 8270B

Lab Sample ID: L42179-01B
Field Sample ID: **GW-19A**
Site ID: 11e. (2)

**Analytical Results** — **Semi Volatile Organics by GC/MS**

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Benz(a)anthracene | 100 | < 100 |
| Benzo(a)pyrene | 100 | < 100 |
| Benzo(b)fluoranthene | 100 | < 100 |
| Benzo(k)fluoranthene | 100 | < 100 |
| Chrysene | 100 | < 100 |
| Dibenz(a,h)anthracene | 100 | < 100 |
| Diethyl phthalate | 4.0 | < 4.0 |
| 2-Methylnaphthalene | 4.0 | < 4.0 |
| Naphthalene | 4.0 | < 4.0 |

* Low surrogate recoveries observed. Re-extraction and analysis confirm primary analytical results.

Released by: Rue D. K

Laboratory Supervisor Report Date: August 22, 2000 

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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: August 1, 2000
Received: August 2, 2000

Contact: Jeff Low
Analyzed: August 12, 2000
Extracted: August 7, 2000

Analysis Requested: Pesticides by EPA SW-846 #8081/3510B

Lab Sample ID: L42179-01B
Field Sample ID: **GW-19A**
Site ID: 11e. (2)

**Analytical Results** **PESTICIDES**

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Chlordane | 10 | < 10 |

Released by: Paul D. Sl

Laboratory Supervisor Report Date: August 22, 2000 

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Client: Envirocare of Utah
Date Sampled: August 1, 2000
Project: 11e. (2)

Contact: Jeff Low
Date Received: August 2, 2000

Lab Sample ID:
L42179-02C

Field Sample ID:
GW-63

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Bicarbonate (As CaCO3) | mg/L | 8/3/00 | 2320 B | 10 | **160** |
| Carbonate (As CaCO3) | mg/L | 8/3/00 | 2320 B | 10 | < 10 |
| Chloride | mg/L | 8/3/00 | 4500-CL B | 5.0 | **22,000** |
| Conductivity | µmhos/cm | 8/2/00 | 2510B | 10 | **35,000** |
| Cyanide | mg/L | 8/8/00 | 4500-CNE | 0.0050 | < 0.0050 |
| Fluoride | mg/L | 8/15/00 | 4500-FD | 0.50 | **3.1** |
| Ion Balance | | 8/21/00 | | 0 | -2.4 |
| Nitrate (as N) | mg/L | 8/3/00 | 4500-NO3F | 0.10 | **0.23** |
| Nitrate/Nitrite (as N) | mg/L | 8/3/00 | 4500-NO3F | 0.10 | **0.23** |
| pH | pH units | 8/2/00 | 4500/9040B | 0 | **7.50** |
| Sulfate | mg/L | 8/3/00 | 375.4 | 5.0 | **2,900** |
| TDS | mg/L | 8/2/00 | 2540C | 10 | **35,000** |
| Total Organic Carbon | mg/L | 8/3/00 | 5310C | 1.0 | **1.0** |

Released by: Rue D. Gi
Laboratory Supervisor

Report Date: August 22, 2000



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Client: Envirocare of Utah
Date Sampled: August 1, 2000
Project: 11e. (2)

Contact: Jeff Low
Date Received: August 2, 2000

Lab Sample ID:
L42179-02D

Field Sample ID:
GW-63

**TOTAL METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Calcium | mg/L | 8/15/00 | 6010B | 0.10 | **420** |
| Iron | mg/L | 8/15/00 | 6010B | 0.10 | < 0.10 |
| Magnesium | mg/L | 8/15/00 | 6010B | 0.10 | **650** |
| Potassium | mg/L | 8/15/00 | 6010B | 0.10 | **440** |
| Sodium | mg/L | 8/15/00 | 6010B | 0.10 | **13,000** |

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Report Date: August 22, 2000



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Client: Envirocare of Utah
Date Sampled: August 1, 2000
Project: 11e. (2)

Contact: Jeff Low
Date Received: August 2, 2000

Lab Sample ID:
L42179-02C

Field Sample ID:
GW-63

**DISSOLVED METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 8/9/00 | 7060A | 0.010 | **0.012** |
| Barium | mg/L | 8/25/00 | 6010B | 0.0040 | **0.025** |
| Beryllium | mg/L | 8/25/00 | 6010B | 0.0020 | < 0.0020 |
| Cadmium | mg/L | 8/25/00 | 6010B | 0.0040 | < 0.0040 |
| Chromium | mg/L | 8/25/00 | 6010B | 0.0050 | < 0.0050 |
| Copper | mg/L | 8/25/00 | 6010B | 0.0080 | < 0.0080 |
| Lead | mg/L | 8/8/00 | 7421 | 0.0050 | < 0.0050 |
| Mercury | mg/L | 8/20/00 | 7470A | 0.00020 | < 0.0002 |
| Molybdenum | mg/L | 8/25/00 | 6010B | 0.040 | **0.22** |
| Nickel | mg/L | 8/25/00 | 6010B | 0.010 | < 0.010 |
| Selenium | mg/L | 8/8/00 | 7740 | 0.0050 | < 0.0050 |
| Silver | mg/L | 8/25/00 | 6010B | 0.0050 | < 0.0050 |
| Zinc | mg/L | 8/25/00 | 6010B | 0.10 | < 0.10 |

Released by: Paul D. Sf
Laboratory Supervisor

Report Date: August 25, 2000



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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: August 1, 2000
Received: August 2, 2000

Contact: Jeff Low
Analyzed: August 7, 2000

Analysis Requested: Purge & Trap by GC/MS SW846 #8260B/5030A

Lab Sample ID: L42179-02A
Field Sample ID: **GW-63**
Site ID: 11e. (2)

**Analytical Results** — **Volatile Organic Compounds**

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Acetone | 20 | < 20 |
| 2-Butanone | 20 | < 20 |
| Carbondisulfide | 2.0 | < 2.0 |
| Chloroform | 2.0 | < 2.0 |
| 1,2-Dichloroethane | 2.0 | < 2.0 |
| Methylene chloride | 2.0 | < 2.0 |
| 1,1,2-Trichloroethane | 50 | < 50 |
| Vinyl chloride | 50 | < 50 |

Released by: Paul D. Skeen
Laboratory Supervisor

Report Date: August 22, 2000



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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: August 1, 2000
Received: August 2, 2000

Contact: Jeff Low
Analyzed: August 8, 2000
Extracted: August 8, 2000

Analysis Requested: Semi Volatiles by SW 8270B

Lab Sample ID: L42179-02B
Field Sample ID: **GW-63**
Site ID: 11e. (2)

**Analytical Results** — **Semi Volatile Organics by GC/MS**

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Benz(a)anthracene | 100 | < 100 |
| Benzo(a)pyrene | 100 | < 100 |
| Benzo(b)fluoranthene | 100 | < 100 |
| Benzo(k)fluoranthene | 100 | < 100 |
| Chrysene | 100 | < 100 |
| Dibenz(a,h)anthracene | 100 | < 100 |
| Diethyl phthalate | 4.0 | < 4.0 |
| 2-Methylnaphthalene | 4.0 | < 4.0 |
| Naphthalene | 4.0 | < 4.0 |

Released by: Paul D. [illegible]
Laboratory Supervisor

Report Date: August 22, 2000



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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: August 1, 2000
Received: August 2, 2000

Contact: Jeff Low
Analyzed: August 12, 2000
Extracted: August 7, 2000

Analysis Requested: Pesticides by EPA SW-846 #8081/3510B

Lab Sample ID: L42179-02B
Field Sample ID: **GW-63**
Site ID: 11e. (2)

**Analytical Results** **PESTICIDES**

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Chlordane | 10 | < 10 |

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Laboratory Supervisor

Report Date: August 22, 2000 Page 1 of 1

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Client: Envirocare of Utah
Date Sampled: August 1, 2000
Project: 11e. (2)

Contact: Jeff Low
Date Received: August 2, 2000

Lab Sample ID:
L42179-03C

Field Sample ID:
GW-776

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Bicarbonate (As CaCO3) | mg/L | 8/3/00 | 2320 B | 10 | **160** |
| Carbonate (As CaCO3) | mg/L | 8/3/00 | 2320 B | 10 | < 10 |
| Chloride | mg/L | 8/3/00 | 4500-CL B | 5.0 | **22,000** |
| Conductivity | µmhos/cm | 8/2/00 | 2510B | 10 | **37,000** |
| Cyanide | mg/L | 8/8/00 | 4500-CNE | 0.0050 | < 0.0050 |
| Fluoride | mg/L | 8/15/00 | 4500-FD | 0.50 | **3.0** |
| Ion Balance | | 8/21/00 | | 0 | **0.98** |
| Nitrate (as N) | mg/L | 8/3/00 | 4500-NO3F | 0.10 | **0.22** |
| Nitrate/Nitrite (as N) | mg/L | 8/3/00 | 4500-NO3F | 0.10 | **0.22** |
| pH | pH units | 8/2/00 | 4500/9040B | 0 | **7.60** |
| Sulfate | mg/L | 8/3/00 | 375.4 | 5.0 | **2,800** |
| TDS | mg/L | 8/2/00 | 2540C | 10 | **34,000** |
| Total Organic Carbon | mg/L | 8/3/00 | 5310C | 1.0 | < 1.0 |

Released by: Paul D. Gr
Laboratory Supervisor

Report Date: August 22, 2000 Page 1 of 1

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Client: Envirocare of Utah
Date Sampled: August 1, 2000
Project: 11e. (2)

Contact: Jeff Low
Date Received: August 2, 2000

Lab Sample ID:
L42179-03D

Field Sample ID:
GW-776

**TOTAL METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Calcium | mg/L | 8/15/00 | 6010B | 0.10 | **410** |
| Iron | mg/L | 8/15/00 | 6010B | 0.10 | < 0.10 |
| Magnesium | mg/L | 8/15/00 | 6010B | 0.10 | **660** |
| Potassium | mg/L | 8/15/00 | 6010B | 0.10 | **440** |
| Sodium | mg/L | 8/15/00 | 6010B | 0.10 | **14,000** |

Released by: Paul D. [illegible]
Laboratory Supervisor

Report Date: August 22, 2000



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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: August 1, 2000
Project: 11e. (2)

Contact: Jeff Low
Date Received: August 2, 2000

Lab Sample ID:
L42179-03C

Field Sample ID:
GW-776

## DISSOLVED METALS

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 8/9/00 | 7060A | 0.010 | **0.024** |
| Barium | mg/L | 8/25/00 | 6010B | 0.0040 | **0.026** |
| Beryllium | mg/L | 8/25/00 | 6010B | 0.0020 | < 0.0020 |
| Cadmium | mg/L | 8/25/00 | 6010B | 0.0040 | < 0.0040 |
| Chromium | mg/L | 8/25/00 | 6010B | 0.0050 | < 0.0050 |
| Copper | mg/L | 8/25/00 | 6010B | 0.0080 | < 0.0080 |
| Lead | mg/L | 8/8/00 | 7421 | 0.0050 | < 0.0050 |
| Mercury | mg/L | 8/20/00 | 7470A | 0.00020 | < 0.0002 |
| Molybdenum | mg/L | 8/25/00 | 6010B | 0.040 | **0.22** |
| Nickel | mg/L | 8/25/00 | 6010B | 0.010 | < 0.010 |
| Selenium | mg/L | 8/8/00 | 7740 | 0.0050 | < 0.0050 |
| Silver | mg/L | 8/25/00 | 6010B | 0.0050 | < 0.0050 |
| Zinc | mg/L | 8/25/00 | 6010B | 0.10 | < 0.10 |

Released by: Paul D. Jr
Laboratory Supervisor

Report Date: August 25, 2000



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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: August 1, 2000
Received: August 2, 2000

Contact: Jeff Low
Analyzed: August 7, 2000

Analysis Requested: Purge & Trap by GC/MS SW846 #8260B/5030A

Lab Sample ID: L42179-03A
Field Sample ID: **GW-776**
Site ID: 11e. (2)

**Analytical Results** — **Volatile Organic Compounds**

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Acetone | 20 | < 20 |
| 2-Butanone | 20 | < 20 |
| Carbondisulfide | 2.0 | < 2.0 |
| Chloroform | 2.0 | < 2.0 |
| 1,2-Dichloroethane | 2.0 | < 2.0 |
| Methylene chloride | 2.0 | < 2.0 |
| 1,1,2-Trichloroethane | 50 | < 50 |
| Vinyl chloride | 50 | < 50 |

Released by: Rue D. Li
Laboratory Supervisor

Report Date: August 22, 2000



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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: August 1, 2000
Received: August 2, 2000

Contact: Jeff Low
Analyzed: August 8, 2000
Extracted: August 7, 2000

Analysis Requested: Semi Volatiles by SW 8270B

Lab Sample ID: L42179-03B
Field Sample ID: **GW-776**
Site ID: 11e. (2)

**Analytical Results** — **Semi Volatile Organics by GC/MS**

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Benz(a)anthracene | 100 | < 100 |
| Benzo(a)pyrene | 100 | < 100 |
| Benzo(b)fluoranthene | 100 | < 100 |
| Benzo(k)fluoranthene | 100 | < 100 |
| Chrysene | 100 | < 100 |
| Dibenz(a,h)anthracene | 100 | < 100 |
| Diethyl phthalate | 4.0 | < 4.0 |
| 2-Methylnaphthalene | 4.0 | < 4.0 |
| Naphthalene | 4.0 | < 4.0 |

Released by: Rue D. Li
Laboratory Supervisor

Report Date: August 22, 2000



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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: August 1, 2000
Received: August 2, 2000

Contact: Jeff Low
Analyzed: August 12, 2000
Extracted: August 7, 2000

Analysis Requested: Pesticides by EPA SW-846 #8081/3510B

Lab Sample ID: L42179-03B
Field Sample ID: **GW-776**
Site ID: 11e. (2)

**Analytical Results** **PESTICIDES**

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Chlordane | 10 | < 10 |

Released by: _____
Laboratory Supervisor

Report Date: August 22, 2000 Page 1 of 1

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Client: Envirocare of Utah
Date Sampled: August 1, 2000
Project: 11e. (2)

Contact: Jeff Low
Date Received: August 2, 2000

Lab Sample ID:
L42179-04C

Field Sample ID:
GW-60

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Bicarbonate (As CaCO3) | mg/L | 8/3/00 | 2320 B | 10 | **180** |
| Carbonate (As CaCO3) | mg/L | 8/3/00 | 2320 B | 10 | < 10 |
| Chloride | mg/L | 8/3/00 | 4500-CL B | 5.0 | **25,000** |
| Conductivity | µmhos/cm | 8/2/00 | 2510B | 10 | **43,000** |
| Cyanide | mg/L | 8/8/00 | 4500-CNE | 0.0050 | < 0.0050 |
| Fluoride | mg/L | 8/15/00 | 4500-FD | 0.50 | **3.2** |
| Ion Balance | | 8/21/00 | | 0 | -2.1 |
| Nitrate (as N) | mg/L | 8/3/00 | 4500-NO3F | 0.10 | **0.54** |
| Nitrate/Nitrite (as N) | mg/L | 8/3/00 | 4500-NO3F | 0.10 | **0.54** |
| pH | pH units | 8/2/00 | 4500/9040B | 0 | **7.40** |
| Sulfate | mg/L | 8/3/00 | 375.4 | 5.0 | **3,200** |
| TDS | mg/L | 8/2/00 | 2540C | 10 | **39,000** |
| Total Organic Carbon | mg/L | 8/3/00 | 5310C | 1.0 | < 1.0 |

Released by: Rue D. Jr

Laboratory Supervisor

Report Date: August 22, 2000



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Client: Envirocare of Utah
Date Sampled: August 1, 2000
Project: 11e. (2)

Contact: Jeff Low
Date Received: August 2, 2000

Lab Sample ID:
L42179-04D

Field Sample ID:
GW-60

**TOTAL METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Calcium | mg/L | 8/15/00 | 6010B | 0.10 | **470** |
| Iron | mg/L | 8/15/00 | 6010B | 0.10 | < 0.10 |
| Magnesium | mg/L | 8/15/00 | 6010B | 0.10 | **670** |
| Potassium | mg/L | 8/15/00 | 6010B | 0.10 | **460** |
| Sodium | mg/L | 8/15/00 | 6010B | 0.10 | **15,000** |

Released by: Paul D. Grant
Laboratory Supervisor

Report Date: August 22, 2000



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Client: Envirocare of Utah
Date Sampled: August 1, 2000
Project: 11e. (2)

Contact: Jeff Low
Date Received: August 2, 2000

Lab Sample ID:
L42179-04C

Field Sample ID:
GW-60

**DISSOLVED METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 8/9/00 | 7060A | 0.010 | **0.013** |
| Barium | mg/L | 8/25/00 | 6010B | 0.0040 | **0.014** |
| Beryllium | mg/L | 8/25/00 | 6010B | 0.0020 | < 0.0020 |
| Cadmium | mg/L | 8/25/00 | 6010B | 0.0040 | < 0.0040 |
| Chromium | mg/L | 8/25/00 | 6010B | 0.0050 | < 0.0050 |
| Copper | mg/L | 8/25/00 | 6010B | 0.0080 | < 0.0080 |
| Lead | mg/L | 8/8/00 | 7421 | 0.0050 | < 0.0050 |
| Mercury | mg/L | 8/20/00 | 7470A | 0.00020 | < 0.0002 |
| Molybdenum | mg/L | 8/25/00 | 6010B | 0.040 | **0.22** |
| Nickel | mg/L | 8/25/00 | 6010B | 0.010 | < 0.010 |
| Selenium | mg/L | 8/8/00 | 7740 | 0.0050 | < 0.0050 |
| Silver | mg/L | 8/25/00 | 6010B | 0.0050 | < 0.0050 |
| Zinc | mg/L | 8/25/00 | 6010B | 0.10 | < 0.10 |

Released by: Rue D. Si
Laboratory Supervisor

Report Date: August 25, 2000



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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: August 1, 2000
Received: August 2, 2000

Contact: Jeff Low
Analyzed: August 7, 2000

Analysis Requested: Purge & Trap by GC/MS SW846 #8260B/5030A

Lab Sample ID: L42179-04A
Field Sample ID: **GW-60**
Site ID: 11e. (2)

**Analytical Results** — **Volatile Organic Compounds**

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Acetone | 20 | < 20 |
| 2-Butanone | 20 | < 20 |
| Carbondisulfide | 2.0 | < 2.0 |
| Chloroform | 2.0 | < 2.0 |
| 1,2-Dichloroethane | 2.0 | < 2.0 |
| Methylene chloride | 2.0 | < 2.0 |
| 1,1,2-Trichloroethane | 50 | < 50 |
| Vinyl chloride | 50 | < 50 |

Released by: Rue D. Li
Laboratory Supervisor

Report Date: August 22, 2000



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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: August 1, 2000
Received: August 2, 2000

Contact: Jeff Low
Analyzed: August 8, 2000
Extracted: August 8, 2000

Analysis Requested: Semi Volatiles by SW 8270B

Lab Sample ID: L42179-04B
Field Sample ID: **GW-60**
Site ID: 11e. (2)

**Analytical Results** — **Semi Volatile Organics by GC/MS**

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Benz(a)anthracene | 100 | < 100 |
| Benzo(a)pyrene | 100 | < 100 |
| Benzo(b)fluoranthene | 100 | < 100 |
| Benzo(k)fluoranthene | 100 | < 100 |
| Chrysene | 100 | < 100 |
| Dibenz(a,h)anthracene | 100 | < 100 |
| Diethyl phthalate | 4.0 | < 4.0 |
| 2-Methylnaphthalene | 4.0 | < 4.0 |
| Naphthalene | 4.0 | < 4.0 |

Released by: Rae D. Li

Laboratory Supervisor Report Date: August 22, 2000 Page 1 of 1

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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: August 1, 2000
Received: August 2, 2000

Contact: Jeff Low
Analyzed: August 12, 2000
Extracted: August 7, 2000

Analysis Requested: Pesticides by EPA SW-846 #8081/3510B

Lab Sample ID: L42179-04B
Field Sample ID: **GW-60**
Site ID: 11e. (2)

**Analytical Results** **PESTICIDES**

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Chlordane | 10 | < 10 |

Released by: _____
Laboratory Supervisor

Report Date: August 22, 2000



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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: August 1, 2000
Received: August 2, 2000

Contact: Jeff Low
Analyzed: August 7, 2000

Analysis Requested: Purge & Trap by GC/MS SW846 #8260B/5030A

Lab Sample ID: L42179-05A
Field Sample ID: **Trip Blank**
Site ID: 11e. (2)

**Analytical Results** — **Volatile Organic Compounds**

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Acetone | 20 | < 20 |
| 2-Butanone | 20 | < 20 |
| Carbondisulfide | 2.0 | < 2.0 |
| Chloroform | 2.0 | < 2.0 |
| 1,2-Dichloroethane | 2.0 | < 2.0 |
| Methylene chloride | 2.0 | < 2.0 |
| 1,1,2-Trichloroethane | 50 | < 50 |
| Vinyl chloride | 50 | < 50 |

Released by: Rue D. [illegible]
Laboratory Supervisor

Report Date: August 22, 2000



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# INORGANIC ANALYSIS REPORT

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Client: Envirocare of Utah
Date Sampled: August 3, 2000
Project: 11e. (2)

Contact: Jeff Low
Date Received: August 4, 2000

Lab Sample ID:
L42190-01D

Field Sample ID:
GW-58

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**TOTAL METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Calcium | mg/L | 8/15/00 | 6010B | 0.10 | **560** |
| Iron | mg/L | 8/15/00 | 6010B | 0.10 | **0.20** |
| Magnesium | mg/L | 8/15/00 | 6010B | 0.10 | **820** |
| Potassium | mg/L | 8/15/00 | 6010B | 0.10 | **510** |
| Sodium | mg/L | 8/15/00 | 6010B | 0.10 | **17,000** |

Released by: Rue D. Gi
Laboratory Supervisor

Report Date: August 23, 2000



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Client: Envirocare of Utah
Date Sampled: August 3, 2000
Project: 11e. (2)

Contact: Jeff Low
Date Received: August 4, 2000

Lab Sample ID:
L42190-01C

Field Sample ID:
GW-58

**DISSOLVED METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 8/9/00 | 7060A | 0.010 | **0.10** |
| Barium | mg/L | 8/25/00 | 6010B | 0.0040 | **0.020** |
| Beryllium | mg/L | 8/25/00 | 6010B | 0.0020 | < 0.0020 |
| Cadmium | mg/L | 8/25/00 | 6010B | 0.0040 | < 0.0040 |
| Chromium | mg/L | 8/25/00 | 6010B | 0.0050 | < 0.0050 |
| Copper | mg/L | 8/25/00 | 6010B | 0.0080 | < 0.0080 |
| Lead | mg/L | 8/8/00 | 7421 | 0.0050 | < 0.0050 |
| Mercury | mg/L | 8/20/00 | 7470A | 0.00020 | < 0.0002 |
| Molybdenum | mg/L | 8/25/00 | 6010B | 0.040 | **0.32** |
| Nickel | mg/L | 8/25/00 | 6010B | 0.010 | < 0.010 |
| Selenium | mg/L | 8/8/00 | 7740 | 0.0050 | < 0.0050 |
| Silver | mg/L | 8/25/00 | 6010B | 0.0050 | < 0.0050 |
| Zinc | mg/L | 8/25/00 | 6010B | 0.10 | < 0.10 |

Released by: Paul D. Li
Laboratory Supervisor

Report Date: August 25, 2000



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Client: Envirocare of Utah
Date Sampled: August 3, 2000
Project: 11e. (2)

Contact: Jeff Low
Date Received: August 4, 2000

Lab Sample ID:
L42190-01C

Field Sample ID:
GW-58

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Bicarbonate (As CaCO3) | mg/L | 8/4/00 | 2320 B | 10 | **130** |
| Carbonate (As CaCO3) | mg/L | 8/4/00 | 2320 B | 10 | < 10 |
| Chloride | mg/L | 8/4/00 | 4500-CL B | 5.0 | **28,000** |
| Conductivity | µmhos/cm | 8/4/00 | 2510B | 10 | **62,000** |
| Cyanide | mg/L | 8/8/00 | 4500-CNE | 0.0050 | < 0.0050 |
| Fluoride | mg/L | 8/15/00 | 4500-FD | 0.50 | **3.7** |
| Ion Balance | | 8/21/00 | | 0 | -0.75 |
| Nitrate (as N) | mg/L | 8/4/00 | 4500-NO3F | 0.010 | **1.6** |
| Nitrate/Nitrite (as N) | mg/L | 8/4/00 | 4500-NO3F | 0.010 | **1.6** |
| pH | pH units | 8/4/00 | 4500/9040B | 0 | **7.10** |
| Sulfate | mg/L | 8/4/00 | 375.4 | 5.0 | **3,300** |
| TDS | mg/L | 8/4/00 | 2540C | 10 | **48,000** |
| Total Organic Carbon | mg/L | 8/9/00 | 5310C | 1.0 | **1.6** |

Released by: Paul D. Gee
Laboratory Supervisor

Report Date: August 23, 2000 Page 1 of 1

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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: August 3, 2000
Received: August 4, 2000

Contact: Jeff Low
Analyzed: August 7, 2000

Analysis Requested: Purge & Trap by GC/MS SW846 #8260B/5030A

Lab Sample ID: L42190-01A
Field Sample ID: **GW-58**
Site ID: 11e. (2)

**Analytical Results** — **Volatile Organic Compounds**

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Acetone | 20 | < 20 |
| 2-Butanone | 20 | < 20 |
| Carbondisulfide | 2.0 | < 2.0 |
| Chloroform | 2.0 | < 2.0 |
| 1,2-Dichloroethane | 2.0 | < 2.0 |
| Methylene chloride | 2.0 | < 2.0 |
| 1,1,2-Trichloroethane | 50 | < 50 |
| Vinyl chloride | 50 | < 50 |

Released by: Paul D. Y
Laboratory Supervisor

Report Date: August 24, 2000



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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: August 3, 2000
Received: August 4, 2000

Contact: Jeff Low
Analyzed: August 8, 2000
Extracted: August 7, 2000

Analysis Requested: Semi Volatiles by SW 8270B

Lab Sample ID: L42190-01B
Field Sample ID: **GW-58**
Site ID: 11e. (2)

**Analytical Results** — **Semi Volatile Organics by GC/MS**

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Benz(a)anthracene | 100 | < 100 |
| Benzo(a)pyrene | 100 | < 100 |
| Benzo(b)fluoranthene | 100 | < 100 |
| Benzo(k)fluoranthene | 100 | < 100 |
| Chrysene | 100 | < 100 |
| Dibenz(a,h)anthracene | 100 | < 100 |
| Diethyl phthalate | 4.0 | < 4.0 |
| 2-Methylnaphthalene | 4.0 | < 4.0 |
| Naphthalene | 4.0 | < 4.0 |

Released by: Paul D. Gi
Laboratory Supervisor

Report Date: August 24, 2000 

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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: August 3, 2000
Received: August 4, 2000

Contact: Jeff Low
Analyzed: August 12, 2000
Extracted: August 7, 2000

Analysis Requested: Pesticides by EPA SW-846 #8081/3510B

Lab Sample ID: L42190-01B
Field Sample ID: **GW-58**
Site ID: 11e. (2)

**Analytical Results** — **PESTICIDES**

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Chlordane | 10 | < 10 |

Released by: Rue D. Gr
Laboratory Supervisor

Report Date: August 24, 2000



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Client: Envirocare of Utah
Date Sampled: August 3, 2000
Project: 11e. (2)

Contact: Jeff Low
Date Received: August 4, 2000

Lab Sample ID:
L42190-06A

Field Sample ID:
GW-58A

**DISSOLVED METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 8/9/00 | 7060A | 0.010 | **0.094** |
| Barium | mg/L | 8/25/00 | 6010B | 0.0040 | **0.019** |
| Beryllium | mg/L | 8/25/00 | 6010B | 0.0020 | < 0.0020 |
| Cadmium | mg/L | 8/25/00 | 6010B | 0.0040 | < 0.0040 |
| Chromium | mg/L | 8/25/00 | 6010B | 0.0050 | < 0.0050 |
| Copper | mg/L | 8/25/00 | 6010B | 0.0080 | < 0.0080 |
| Lead | mg/L | 8/8/00 | 7421 | 0.0050 | < 0.0050 |
| Mercury | mg/L | 8/20/00 | 7470A | 0.00020 | < 0.0002 |
| Molybdenum | mg/L | 8/25/00 | 6010B | 0.040 | **0.32** |
| Nickel | mg/L | 8/25/00 | 6010B | 0.010 | < 0.010 |
| Selenium | mg/L | 8/8/00 | 7740 | 0.0050 | < 0.0050 |
| Silver | mg/L | 8/25/00 | 6010B | 0.0050 | < 0.0050 |
| Zinc | mg/L | 8/25/00 | 6010B | 0.10 | < 0.10 |

Released by: _____
Laboratory Supervisor

Report Date: August 25, 2000



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Client: Envirocare of Utah
Date Sampled: August 3, 2000
Project: 11e. (2)

Contact: Jeff Low
Date Received: August 4, 2000

Lab Sample ID:
L42190-02D

Field Sample ID:
GW-28

**TOTAL METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Calcium | mg/L | 8/15/00 | 6010B | 0.10 | **480** |
| Iron | mg/L | 8/15/00 | 6010B | 0.10 | < 0.10 |
| Magnesium | mg/L | 8/15/00 | 6010B | 0.10 | **760** |
| Potassium | mg/L | 8/15/00 | 6010B | 0.10 | **510** |
| Sodium | mg/L | 8/15/00 | 6010B | 0.10 | **16,000** |

Released by: Rue D. Sz

Laboratory Supervisor

Report Date: August 23, 2000



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Client: Envirocare of Utah
Date Sampled: August 3, 2000
Project: 11e. (2)

Contact: Jeff Low
Date Received: August 4, 2000

Lab Sample ID:
L42190-02C

Field Sample ID:
GW-28

**DISSOLVED METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 8/9/00 | 7060A | 0.010 | **0.050** |
| Barium | mg/L | 8/25/00 | 6010B | 0.0040 | **0.019** |
| Beryllium | mg/L | 8/25/00 | 6010B | 0.0020 | < 0.0020 |
| Cadmium | mg/L | 8/25/00 | 6010B | 0.0040 | < 0.0040 |
| Chromium | mg/L | 8/25/00 | 6010B | 0.0050 | < 0.0050 |
| Copper | mg/L | 8/25/00 | 6010B | 0.0080 | < 0.0080 |
| Lead | mg/L | 8/8/00 | 7421 | 0.0050 | < 0.0050 |
| Mercury | mg/L | 8/20/00 | 7470A | 0.00020 | < 0.0002 |
| Molybdenum | mg/L | 8/25/00 | 6010B | 0.040 | **0.34** |
| Nickel | mg/L | 8/25/00 | 6010B | 0.010 | < 0.010 |
| Selenium | mg/L | 8/8/00 | 7740 | 0.0050 | < 0.0050 |
| Silver | mg/L | 8/25/00 | 6010B | 0.0050 | < 0.0050 |
| Zinc | mg/L | 8/25/00 | 6010B | 0.10 | < 0.10 |

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Report Date: August 25, 2000



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Client: Envirocare of Utah
Date Sampled: August 3, 2000
Project: 11e. (2)

Contact: Jeff Low
Date Received: August 4, 2000

Lab Sample ID:
L42190-02C

Field Sample ID:
GW-28

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Bicarbonate (As CaCO3) | mg/L | 8/4/00 | 2320 B | 10 | **140** |
| Carbonate (As CaCO3) | mg/L | 8/4/00 | 2320 B | 10 | < 10 |
| Chloride | mg/L | 8/4/00 | 4500-CL B | 5.0 | **27,000** |
| Conductivity | µmhos/cm | 8/4/00 | 2510B | 10 | **62,000** |
| Cyanide | mg/L | 8/8/00 | 4500-CNE | 0.0050 | < 0.0050 |
| Fluoride | mg/L | 8/15/00 | 4500-FD | 0.50 | **3.5** |
| Ion Balance | | 8/21/00 | | 0 | -2.5 |
| Nitrate (as N) | mg/L | 8/4/00 | 4500-NO3F | 0.010 | **0.48** |
| Nitrate/Nitrite (as N) | mg/L | 8/4/00 | 4500-NO3F | 0.010 | **0.48** |
| pH | pH units | 8/4/00 | 4500/9040B | 0 | **7.30** |
| Sulfate | mg/L | 8/4/00 | 375.4 | 5.0 | **3,500** |
| TDS | mg/L | 8/4/00 | 2540C | 10 | **45,000** |
| Total Organic Carbon | mg/L | 8/9/00 | 5310C | 1.0 | **1.7** |

Released by: Paul D. Sf

Laboratory Supervisor

Report Date: August 23, 2000



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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: August 3, 2000
Received: August 4, 2000

Contact: Jeff Low
Analyzed: August 7, 2000

Analysis Requested: Purge & Trap by GC/MS SW846 #8260B/5030A

Lab Sample ID: L42190-02A
Field Sample ID: **GW-28**
Site ID: 11e. (2)

**Analytical Results** — **Volatile Organic Compounds**

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Acetone | 20 | < 20 |
| 2-Butanone | 20 | < 20 |
| Carbondisulfide | 2.0 | < 2.0 |
| Chloroform | 2.0 | < 2.0 |
| 1,2-Dichloroethane | 2.0 | < 2.0 |
| Methylene chloride | 2.0 | < 2.0 |
| 1,1,2-Trichloroethane | 50 | < 50 |
| Vinyl chloride | 50 | < 50 |

Released by: Rue D. Li
Laboratory Supervisor

Report Date: August 24, 2000



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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: August 3, 2000
Received: August 4, 2000

Contact: Jeff Low
Analyzed: August 9, 2000
Extracted: August 7, 2000

Analysis Requested: Semi Volatiles by SW 8270B

Lab Sample ID: L42190-02B
Field Sample ID: **GW-28**
Site ID: 11e. (2)

**Analytical Results** — **Semi Volatile Organics by GC/MS**

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Benz(a)anthracene | 100 | < 100 |
| Benzo(a)pyrene | 100 | < 100 |
| Benzo(b)fluoranthene | 100 | < 100 |
| Benzo(k)fluoranthene | 100 | < 100 |
| Chrysene | 100 | < 100 |
| Dibenz(a,h)anthracene | 100 | < 100 |
| Diethyl phthalate | 4.0 | < 4.0 |
| 2-Methylnaphthalene | 4.0 | < 4.0 |
| Naphthalene | 4.0 | < 4.0 |

Released by: Paul D. Ki
Laboratory Supervisor

Report Date: August 24, 2000 

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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: August 3, 2000
Received: August 4, 2000

Contact: Jeff Low
Analyzed: August 12, 2000
Extracted: August 10, 2000

Analysis Requested: Pesticides by EPA SW-846 #8081/3510B

Lab Sample ID: L42190-02B
Field Sample ID: **GW-28**
Site ID: 11e. (2)

**Analytical Results** — **PESTICIDES**

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Chlordane | 10 | < 10 |

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Report Date: August 24, 2000



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Client: Envirocare of Utah
Date Sampled: August 3, 2000
Project: 11e. (2)

Contact: Jeff Low
Date Received: August 4, 2000

Lab Sample ID:
L42190-07A

Field Sample ID:
GW-28A

**DISSOLVED METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 8/9/00 | 7060A | 0.010 | **0.040** |
| Barium | mg/L | 8/25/00 | 6010B | 0.0040 | **0.019** |
| Beryllium | mg/L | 8/25/00 | 6010B | 0.0020 | < 0.0020 |
| Cadmium | mg/L | 8/25/00 | 6010B | 0.0040 | < 0.0040 |
| Chromium | mg/L | 8/25/00 | 6010B | 0.0050 | < 0.0050 |
| Copper | mg/L | 8/25/00 | 6010B | 0.0080 | < 0.0080 |
| Lead | mg/L | 8/8/00 | 7421 | 0.0050 | < 0.0050 |
| Mercury | mg/L | 8/20/00 | 7470A | 0.00020 | < 0.0002 |
| Molybdenum | mg/L | 8/25/00 | 6010B | 0.040 | **0.35** |
| Nickel | mg/L | 8/25/00 | 6010B | 0.010 | < 0.010 |
| Selenium | mg/L | 8/8/00 | 7740 | 0.0050 | < 0.0050 |
| Silver | mg/L | 8/25/00 | 6010B | 0.0050 | < 0.0050 |
| Zinc | mg/L | 8/25/00 | 6010B | 0.10 | < 0.10 |

Released by: Paul D. Y

Laboratory Supervisor Report Date: August 25, 2000 

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Client: Envirocare of Utah
Date Sampled: August 3, 2000
Project: 11e. (2)

Contact: Jeff Low
Date Received: August 4, 2000

Lab Sample ID:
L42190-03C

Field Sample ID:
GW-57

**DISSOLVED METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 8/9/00 | 7060A | 0.010 | **0.025** |
| Barium | mg/L | 8/25/00 | 6010B | 0.0040 | **0.014** |
| Beryllium | mg/L | 8/25/00 | 6010B | 0.0020 | < 0.0020 |
| Cadmium | mg/L | 8/25/00 | 6010B | 0.0040 | < 0.0040 |
| Chromium | mg/L | 8/25/00 | 6010B | 0.0050 | < 0.0050 |
| Copper | mg/L | 8/25/00 | 6010B | 0.0080 | < 0.0080 |
| Lead | mg/L | 8/8/00 | 7421 | 0.0050 | < 0.0050 |
| Mercury | mg/L | 8/20/00 | 7470A | 0.00020 | < 0.0002 |
| Molybdenum | mg/L | 8/25/00 | 6010B | 0.040 | **0.44** |
| Nickel | mg/L | 8/25/00 | 6010B | 0.010 | < 0.010 |
| Selenium | mg/L | 8/8/00 | 7740 | 0.0050 | < 0.0050 |
| Silver | mg/L | 8/25/00 | 6010B | 0.0050 | < 0.0050 |
| Zinc | mg/L | 8/25/00 | 6010B | 0.10 | < 0.10 |

Released by: Rue D. Li
Laboratory Supervisor

Report Date: August 25, 2000



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Client: Envirocare of Utah
Date Sampled: August 3, 2000
Project: 11e. (2)

Contact: Jeff Low
Date Received: August 4, 2000

Lab Sample ID:
L42190-03D

Field Sample ID:
GW-57

**TOTAL METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Calcium | mg/L | 8/15/00 | 6010B | 0.10 | **810** |
| Iron | mg/L | 8/15/00 | 6010B | 0.10 | < 0.10 |
| Magnesium | mg/L | 8/15/00 | 6010B | 0.10 | **930** |
| Potassium | mg/L | 8/15/00 | 6010B | 0.10 | **540** |
| Sodium | mg/L | 8/15/00 | 6010B | 0.10 | **16,000** |

Released by: Rod D. Lee
Laboratory Supervisor

Report Date: August 23, 2000



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Client: Envirocare of Utah
Date Sampled: August 3, 2000
Project: 11e. (2)

Contact: Jeff Low
Date Received: August 4, 2000

Lab Sample ID:
L42190-03C

Field Sample ID:
GW-57

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Bicarbonate (As CaCO3) | mg/L | 8/4/00 | 2320 B | 10 | **120** |
| Carbonate (As CaCO3) | mg/L | 8/4/00 | 2320 B | 10 | < 10 |
| Chloride | mg/L | 8/4/00 | 4500-CL B | 5.0 | **26,000** |
| Conductivity | µmhos/cm | 8/4/00 | 2510B | 10 | **57,000** |
| Cyanide | mg/L | 8/8/00 | 4500-CNE | 0.0050 | < 0.0050 |
| Fluoride | mg/L | 8/15/00 | 4500-FD | 0.50 | **5.7** |
| Ion Balance | | 8/21/00 | | 0 | -0.14 |
| Nitrate (as N) | mg/L | 8/4/00 | 4500-NO3F | 0.010 | **1.0** |
| Nitrate/Nitrite (as N) | mg/L | 8/4/00 | 4500-NO3F | 0.010 | **1.0** |
| pH | pH units | 8/4/00 | 4500/9040B | 0 | **7.40** |
| Sulfate | mg/L | 8/4/00 | 375.4 | 5.0 | **4,500** |
| TDS | mg/L | 8/4/00 | 2540C | 10 | **46,000** |
| Total Organic Carbon | mg/L | 8/9/00 | 5310C | 1.0 | **1.7** |

Released by: _____
Laboratory Supervisor

Report Date: August 23, 2000



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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: August 3, 2000
Received: August 4, 2000

Contact: Jeff Low
Analyzed: August 7, 2000

Analysis Requested: Purge & Trap by GC/MS SW846 #8260B/5030A

Lab Sample ID: L42190-03A
Field Sample ID: **GW-57**
Site ID: 11e. (2)

**Analytical Results** — **Volatile Organic Compounds**

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Acetone | 20 | < 20 |
| 2-Butanone | 20 | < 20 |
| Carbondisulfide | 2.0 | < 2.0 |
| Chloroform | 2.0 | < 2.0 |
| 1,2-Dichloroethane | 2.0 | < 2.0 |
| Methylene chloride | 2.0 | < 2.0 |
| 1,1,2-Trichloroethane | 50 | < 50 |
| Vinyl chloride | 50 | < 50 |

Released by: _____
Laboratory Supervisor

Report Date: August 24, 2000



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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: August 3, 2000
Received: August 4, 2000

Contact: Jeff Low
Analyzed: August 9, 2000
Extracted: August 7, 2000

Analysis Requested: Semi Volatiles by SW 8270B

Lab Sample ID: L42190-03B
Field Sample ID: **GW-57**
Site ID: 11e. (2)

**Analytical Results** — **Semi Volatile Organics by GC/MS**

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Benz(a)anthracene | 100 | < 100 |
| Benzo(a)pyrene | 100 | < 100 |
| Benzo(b)fluoranthene | 100 | < 100 |
| Benzo(k)fluoranthene | 100 | < 100 |
| Chrysene | 100 | < 100 |
| Dibenz(a,h)anthracene | 100 | < 100 |
| Diethyl phthalate | 4.0 | < 4.0 |
| 2-Methylnaphthalene | 4.0 | < 4.0 |
| Naphthalene | 4.0 | < 4.0 |

Released by: Paul D. Jr
Laboratory Supervisor

Report Date: August 24, 2000



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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: August 3, 2000
Received: August 4, 2000

Contact: Jeff Low
Analyzed: August 12, 2000
Extracted: August 10, 2000

Analysis Requested: Pesticides by EPA SW-846 #8081/3510B

Lab Sample ID: L42190-03B
Field Sample ID: **GW-57**
Site ID: 11e. (2)

**Analytical Results** — **PESTICIDES**

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Chlordane | 10 | < 10 |

Released by: Paul D. Gee
Laboratory Supervisor

Report Date: August 24, 2000



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Client: Envirocare of Utah
Date Sampled: August 3, 2000
Project: 11e. (2)

Contact: Jeff Low
Date Received: August 4, 2000

Lab Sample ID:
L42190-08A

Field Sample ID:
GW-57A

**DISSOLVED METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 8/9/00 | 7060A | 0.010 | **0.020** |
| Barium | mg/L | 8/25/00 | 6010B | 0.0040 | **0.012** |
| Beryllium | mg/L | 8/25/00 | 6010B | 0.0020 | < 0.0020 |
| Cadmium | mg/L | 8/25/00 | 6010B | 0.0040 | < 0.0040 |
| Chromium | mg/L | 8/25/00 | 6010B | 0.0050 | < 0.0050 |
| Copper | mg/L | 8/25/00 | 6010B | 0.0080 | < 0.0080 |
| Lead | mg/L | 8/8/00 | 7421 | 0.0050 | < 0.0050 |
| Mercury | mg/L | 8/20/00 | 7470A | 0.00020 | < 0.0002 |
| Molybdenum | mg/L | 8/25/00 | 6010B | 0.040 | **0.44** |
| Nickel | mg/L | 8/25/00 | 6010B | 0.010 | < 0.010 |
| Selenium | mg/L | 8/8/00 | 7740 | 0.0050 | < 0.0050 |
| Silver | mg/L | 8/25/00 | 6010B | 0.0050 | < 0.0050 |
| Zinc | mg/L | 8/25/00 | 6010B | 0.10 | < 0.10 |

Released by: Paul D. Sl
Laboratory Supervisor

Report Date: August 25, 2000



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Client: Envirocare of Utah
Date Sampled: August 3, 2000
Project: 11e. (2)

Contact: Jeff Low
Date Received: August 4, 2000

Lab Sample ID:
L42190-04C

Field Sample ID:
GW-27

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Bicarbonate (As CaCO3) | mg/L | 8/4/00 | 2320 B | 10 | **150** |
| Carbonate (As CaCO3) | mg/L | 8/4/00 | 2320 B | 10 | < 10 |
| Chloride | mg/L | 8/4/00 | 4500-CL B | 5.0 | **29,000** |
| Conductivity | µmhos/cm | 8/4/00 | 2510B | 10 | **60,000** |
| Cyanide | mg/L | 8/8/00 | 4500-CNE | 0.0050 | < 0.0050 |
| Fluoride | mg/L | 8/15/00 | 4500-FD | 0.50 | **4.2** |
| Ion Balance | | 8/21/00 | | 0 | -0.27 |
| Nitrate (as N) | mg/L | 8/4/00 | 4500-NO3F | 0.010 | **0.65** |
| Nitrate/Nitrite (as N) | mg/L | 8/4/00 | 4500-NO3F | 0.010 | **0.65** |
| pH | pH units | 8/4/00 | 4500/9040B | 0 | **7.30** |
| Sulfate | mg/L | 8/4/00 | 375.4 | 5.0 | **4,700** |
| TDS | mg/L | 8/4/00 | 2540C | 10 | **52,000** |
| Total Organic Carbon | mg/L | 8/9/00 | 5310C | 1.0 | **1.1** |

Released by: Paul D. Gee
Laboratory Supervisor

Report Date: August 23, 2000



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# INORGANIC ANALYSIS REPORT

AMERICAN
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LABORATORIES

Client: Envirocare of Utah
Date Sampled: August 3, 2000
Project: 11e. (2)

Contact: Jeff Low
Date Received: August 4, 2000

Lab Sample ID:
L42190-04D

Field Sample ID:
GW-27

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Fax (801) 263-8687

**TOTAL METALS**

| **Analytical Results** | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Calcium | mg/L | 8/15/00 | 6010B | 0.10 | **680** |
| Iron | mg/L | 8/15/00 | 6010B | 0.10 | < 0.10 |
| Magnesium | mg/L | 8/15/00 | 6010B | 0.10 | **1,000** |
| Potassium | mg/L | 8/15/00 | 6010B | 0.10 | **560** |
| Sodium | mg/L | 8/15/00 | 6010B | 0.10 | **18,000** |

Released by: Reed D. Li
Laboratory Supervisor

Report Date: August 23, 2000



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# INORGANIC ANALYSIS REPORT

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Client: Envirocare of Utah
Date Sampled: August 3, 2000
Project: 11e. (2)

Contact: Jeff Low
Date Received: August 4, 2000

Lab Sample ID:
L42190-04C

Field Sample ID:
GW-27

**DISSOLVED METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 8/9/00 | 7060A | 0.010 | **0.078** |
| Barium | mg/L | 8/25/00 | 6010B | 0.0040 | **0.020** |
| Beryllium | mg/L | 8/25/00 | 6010B | 0.0020 | < 0.0020 |
| Cadmium | mg/L | 8/25/00 | 6010B | 0.0040 | < 0.0040 |
| Chromium | mg/L | 8/25/00 | 6010B | 0.0050 | < 0.0050 |
| Copper | mg/L | 8/25/00 | 6010B | 0.0080 | < 0.0080 |
| Lead | mg/L | 8/8/00 | 7421 | 0.0050 | < 0.0050 |
| Mercury | mg/L | 8/20/00 | 7470A | 0.00020 | < 0.0002 |
| Molybdenum | mg/L | 8/25/00 | 6010B | 0.040 | **0.74** |
| Nickel | mg/L | 8/25/00 | 6010B | 0.010 | < 0.010 |
| Selenium | mg/L | 8/8/00 | 7740 | 0.0050 | < 0.0050 |
| Silver | mg/L | 8/25/00 | 6010B | 0.0050 | < 0.0050 |
| Zinc | mg/L | 8/25/00 | 6010B | 0.10 | < 0.10 |

Released by: Rue D. Gi
Laboratory Supervisor

Report Date: August 25, 2000



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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: August 3, 2000
Received: August 4, 2000

Contact: Jeff Low
Analyzed: August 7, 2000

Analysis Requested: Purge & Trap by GC/MS SW846 #8260B/5030A

Lab Sample ID: L42190-04A
Field Sample ID: **GW-27**
Site ID: 11e. (2)

**Analytical Results** — **Volatile Organic Compounds**

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Acetone | 20 | < 20 |
| 2-Butanone | 20 | < 20 |
| Carbondisulfide | 2.0 | < 2.0 |
| Chloroform | 2.0 | < 2.0 |
| 1,2-Dichloroethane | 2.0 | < 2.0 |
| Methylene chloride | 2.0 | < 2.0 |
| 1,1,2-Trichloroethane | 50 | < 50 |
| Vinyl chloride | 50 | < 50 |

Released by: Paul D. Sl
Laboratory Supervisor

Report Date: August 24, 2000



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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: August 3, 2000
Received: August 4, 2000

Contact: Jeff Low
Analyzed: August 9, 2000
Extracted: August 7, 2000

Analysis Requested: Semi Volatiles by SW 8270B

Lab Sample ID: L42190-04B
Field Sample ID: **GW-27**
Site ID: 11e. (2)

**Analytical Results** — **Semi Volatile Organics by GC/MS**

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Benz(a)anthracene | 100 | < 100 |
| Benzo(a)pyrene | 100 | < 100 |
| Benzo(b)fluoranthene | 100 | < 100 |
| Benzo(k)fluoranthene | 100 | < 100 |
| Chrysene | 100 | < 100 |
| Dibenz(a,h)anthracene | 100 | < 100 |
| Diethyl phthalate | 4.0 | < 4.0 |
| 2-Methylnaphthalene | 4.0 | < 4.0 |
| Naphthalene | 4.0 | < 4.0 |

Released by: _____
Laboratory Supervisor

Report Date: August 24, 2000



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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: August 3, 2000
Received: August 4, 2000

Contact: Jeff Low
Analyzed: August 12, 2000
Extracted: August 7, 2000

Analysis Requested: Pesticides by EPA SW-846 #8081/3510B

Lab Sample ID: L42190-04B
Field Sample ID: **GW-27**
Site ID: 11e. (2)

**Analytical Results** **PESTICIDES**

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Chlordane | 10 | < 10 |

Released by: Paul D. Jr
Laboratory Supervisor

Report Date: August 24, 2000 Page 1 of 1

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Client: Envirocare of Utah
Date Sampled: August 3, 2000
Project: 11e. (2)

Contact: Jeff Low
Date Received: August 4, 2000

Lab Sample ID:
L42190-09A

Field Sample ID:
GW-27A

**DISSOLVED METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 8/9/00 | 7060A | 0.010 | **0.075** |
| Barium | mg/L | 8/25/00 | 6010B | 0.0040 | **0.020** |
| Beryllium | mg/L | 8/25/00 | 6010B | 0.0020 | < 0.0020 |
| Cadmium | mg/L | 8/25/00 | 6010B | 0.0040 | < 0.0040 |
| Chromium | mg/L | 8/25/00 | 6010B | 0.0050 | < 0.0050 |
| Copper | mg/L | 8/25/00 | 6010B | 0.0080 | < 0.0080 |
| Lead | mg/L | 8/8/00 | 7421 | 0.0050 | < 0.0050 |
| Mercury | mg/L | 8/20/00 | 7470A | 0.00020 | < 0.0002 |
| Molybdenum | mg/L | 8/25/00 | 6010B | 0.040 | **0.77** |
| Nickel | mg/L | 8/25/00 | 6010B | 0.010 | < 0.010 |
| Selenium | mg/L | 8/8/00 | 7740 | 0.0050 | < 0.0050 |
| Silver | mg/L | 8/25/00 | 6010B | 0.0050 | < 0.0050 |
| Zinc | mg/L | 8/25/00 | 6010B | 0.10 | < 0.10 |

Released by: Sue D. Gi
Laboratory Supervisor

Report Date: August 25, 2000



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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: August 3, 2000
Received: August 4, 2000

Contact: Jeff Low
Analyzed: August 7, 2000

Analysis Requested: Purge & Trap by GC/MS SW846 #8260B/5030A

Lab Sample ID: L42190-05A
Field Sample ID: **Trip Blank**
Site ID: 11e. (2)

**Analytical Results** — **Volatile Organic Compounds**

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Acetone | 20 | < 20 |
| 2-Butanone | 20 | < 20 |
| Carbondisulfide | 2.0 | < 2.0 |
| Chloroform | 2.0 | < 2.0 |
| 1,2-Dichloroethane | 2.0 | < 2.0 |
| Methylene chloride | 2.0 | < 2.0 |
| 1,1,2-Trichloroethane | 50 | < 50 |
| Vinyl chloride | 50 | < 50 |

Released by: Paul D. Jones
Laboratory Supervisor

Report Date: August 24, 2000



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Client: Envirocare of Utah
Contact: Jeff Low
Date Sampled: August 7, 2000
Date Received: August 8, 2000
Project: 11e (2) Exceedance Samples

Lab Sample ID:
L42221-01A

Field Sample ID:
GW-25A

**DISSOLVED METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 8/9/00 | 7060A | 0.010 | **0.10** |
| Barium | mg/L | 8/25/00 | 6010B | 0.0040 | **0.012** |
| Beryllium | mg/L | 8/25/00 | 6010B | 0.0020 | < 0.0020 |
| Cadmium | mg/L | 8/25/00 | 6010B | 0.0040 | < 0.0040 |
| Chromium | mg/L | 8/25/00 | 6010B | 0.0050 | < 0.0050 |
| Copper | mg/L | 8/25/00 | 6010B | 0.0080 | < 0.0080 |
| Lead | mg/L | 8/10/00 | 7421 | 0.0050 | < 0.0050 |
| Mercury | mg/L | 8/22/00 | 7470A | 0.00020 | < 0.0002 |
| Molybdenum | mg/L | 8/25/00 | 6010B | 0.040 | **0.24** |
| Nickel | mg/L | 8/25/00 | 6010B | 0.010 | < 0.010 |
| Selenium | mg/L | 8/11/00 | 7740 | 0.0050 | < 0.0050 |
| Silver | mg/L | 8/25/00 | 6010B | 0.0050 | < 0.0050 |
| Zinc | mg/L | 8/25/00 | 6010B | 0.10 | < 0.10 |

Released by: Rue Dyer
Laboratory Supervisor

Report Date: August 25, 2000



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Client: Envirocare of Utah
Date Sampled: August 7, 2000
Project: 11e (2) Exceedance Samples

Contact: Jeff Low
Date Received: August 8, 2000

Lab Sample ID:
L42221-02A

Field Sample ID:
GW-26A

**DISSOLVED METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 8/9/00 | 7060A | 0.010 | **0.16** |
| Barium | mg/L | 8/25/00 | 6010B | 0.0040 | **0.0060** |
| Beryllium | mg/L | 8/25/00 | 6010B | 0.0020 | < 0.0020 |
| Cadmium | mg/L | 8/25/00 | 6010B | 0.0040 | < 0.0040 |
| Chromium | mg/L | 8/25/00 | 6010B | 0.0050 | < 0.0050 |
| Copper | mg/L | 8/25/00 | 6010B | 0.0080 | < 0.0080 |
| Lead | mg/L | 8/10/00 | 7421 | 0.0050 | < 0.0050 |
| Mercury | mg/L | 8/22/00 | 7470A | 0.00020 | < 0.0002 |
| Molybdenum | mg/L | 8/25/00 | 6010B | 0.040 | **0.55** |
| Nickel | mg/L | 8/25/00 | 6010B | 0.010 | < 0.010 |
| Selenium | mg/L | 8/11/00 | 7740 | 0.0050 | < 0.0050 |
| Silver | mg/L | 8/25/00 | 6010B | 0.0050 | < 0.0050 |
| Zinc | mg/L | 8/25/00 | 6010B | 0.10 | < 0.10 |

Released by: Rue D. Gr
Laboratory Supervisor

Report Date: August 25, 2000



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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: August 7, 2000
Project: 11e (2)

Contact: Jeff Low
Date Received: August 8, 2000

Lab Sample ID:
L42222-01C

Field Sample ID:
GW-26

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Bicarbonate (As CaCO3) | mg/L | 8/9/00 | 2320 B | 10 | **100** |
| Carbonate (As CaCO3) | mg/L | 8/9/00 | 2320 B | 10 | < 10 |
| Chloride | mg/L | 8/9/00 | 4500-CL B | 5.0 | **29,000** |
| Conductivity | µmhos/cm | 8/8/00 | 2510B | 10 | **51,000** |
| Cyanide | mg/L | 8/9/00 | 4500-CNE | 0.0050 | < 0.0050 |
| Fluoride | mg/L | 8/15/00 | 4500-FD | 0.50 | **4.0** |
| Ion Balance | | 8/22/00 | | 0 | **3.0** |
| Nitrate (as N) | mg/L | 8/9/00 | 4500-NO3F | 0.10 | **2.5** |
| Nitrate/Nitrite (as N) | mg/L | 8/9/00 | 4500-NO3F | 0.10 | **2.5** |
| pH | pH units | 8/8/00 | 4500/9040B | 0 | **7.30** |
| Sulfate | mg/L | 8/10/00 | 375.4 | 5.0 | **5,000** |
| TDS | mg/L | 8/9/00 | 2540C | 10 | **57,000** |
| Total Organic Carbon | mg/L | 8/9/00 | 5310C | 1.0 | **1.8** |

Released by: _____
Laboratory Supervisor

Report Date: September 27, 2000



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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: August 7, 2000
Received: August 8, 2000

Contact: Jeff Low
Analyzed: August 15, 2000
Extracted: August 13, 2000

Analysis Requested: Semi Volatiles by SW 8270B

Lab Sample ID: L42222-01B
Field Sample ID: **GW-26**
Site ID: 11e (2)

**Analytical Results** — **Semi Volatile Organics by GC/MS**

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Benz(a)anthracene | 100 | < 100 |
| Benzo(a)pyrene | 100 | < 100 |
| Benzo(b)fluoranthene | 100 | < 100 |
| Benzo(k)fluoranthene | 100 | < 100 |
| Chrysene | 100 | < 100 |
| Dibenz(a,h)anthracene | 100 | < 100 |
| Diethyl phthalate | 4.0 | < 4.0 |
| 2-Methylnaphthalene | 4.0 | < 4.0 |
| Naphthalene | 4.0 | < 4.0 |

Released by: Paul D. Y
Laboratory Supervisor

Report Date: August 25, 2000



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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: August 7, 2000
Received: August 8, 2000

Contact: Jeff Low
Analyzed: August 16, 2000
Extracted: August 14, 2000

Analysis Requested: Pesticides by EPA SW-846 #8081/3510B

Lab Sample ID: L42222-01B
Field Sample ID: **GW-26**
Site ID: 11e (2)

**Analytical Results** — **PESTICIDES**

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Chlordane | 10 | < 10 |

* Low Quality Control recoveries were observed. Re-extraction and analysis confirmed no target analytes above the detection limits.

Released by: Rue D. Sr

Laboratory Supervisor Report Date: August 24, 2000 

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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: August 7, 2000
Received: August 8, 2000

Contact: Jeff Low
Analyzed: August 21, 2000

Analysis Requested: Purge & Trap by GC/MS SW846 #8260B/5030A

Lab Sample ID: L42222-01A
Field Sample ID: **GW-26**
Site ID: 11e (2)

**Analytical Results** — **Volatile Organic Compounds**

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Acetone | 20 | < 20 |
| 2-Butanone | 20 | < 20 |
| Carbondisulfide | 2.0 | < 2.0 |
| Chloroform | 2.0 | < 2.0 |
| 1,2-Dichloroethane | 2.0 | < 2.0 |
| Methylene chloride | 2.0 | < 2.0 |
| 1,1,2-Trichloroethane | 50 | < 50 |
| Vinyl chloride | 50 | < 50 |

Released by: Paul D. Lv
Laboratory Supervisor

Report Date: August 24, 2000



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Client: Envirocare of Utah
Date Sampled: August 7, 2000
Project: 11e (2)

Contact: Jeff Low
Date Received: August 8, 2000

Lab Sample ID:
L42222-01D

Field Sample ID:
GW-26

**TOTAL METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Calcium | mg/L | 8/15/00 | 6010B | 0.10 | **820** |
| Iron | mg/L | 8/15/00 | 6010B | 0.10 | < 0.10 |
| Magnesium | mg/L | 8/15/00 | 6010B | 0.10 | **1,200** |
| Potassium | mg/L | 8/15/00 | 6010B | 0.10 | **580** |
| Sodium | mg/L | 8/15/00 | 6010B | 0.10 | **19,000** |

Released by: Rue D. E.
Laboratory Supervisor

Report Date: August 24, 2000



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Client: Envirocare of Utah
Date Sampled: August 7, 2000
Project: 11e (2)

Contact: Jeff Low
Date Received: August 8, 2000

Lab Sample ID:
L42222-01C

Field Sample ID:
GW-26

**DISSOLVED METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 8/9/00 | 7060A | 0.010 | **0.17** |
| Barium | mg/L | 8/25/00 | 6010B | 0.0040 | **0.0060** |
| Beryllium | mg/L | 8/25/00 | 6010B | 0.0020 | < 0.0020 |
| Cadmium | mg/L | 8/25/00 | 6010B | 0.0040 | < 0.0040 |
| Chromium | mg/L | 8/25/00 | 6010B | 0.0050 | < 0.0050 |
| Copper | mg/L | 8/25/00 | 6010B | 0.0080 | < 0.0080 |
| Lead | mg/L | 8/10/00 | 7421 | 0.0050 | < 0.0050 |
| Mercury | mg/L | 8/22/00 | 7470A | 0.00020 | < 0.0002 |
| Molybdenum | mg/L | 8/25/00 | 6010B | 0.040 | **0.58** |
| Nickel | mg/L | 8/25/00 | 6010B | 0.010 | < 0.010 |
| Selenium | mg/L | 8/11/00 | 7740 | 0.0050 | < 0.0050 |
| Silver | mg/L | 8/25/00 | 6010B | 0.0050 | < 0.0050 |
| Zinc | mg/L | 8/25/00 | 6010B | 0.10 | < 0.10 |

Released by: Paul D. Y.
Laboratory Supervisor

Report Date: August 25, 2000



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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: August 7, 2000
Project: 11e (2)

Contact: Jeff Low
Date Received: August 8, 2000

Lab Sample ID:
L42222-02C

Field Sample ID:
GW-25

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Bicarbonate (As CaCO3) | mg/L | 8/9/00 | 2320 B | 10 | **200** |
| Carbonate (As CaCO3) | mg/L | 8/9/00 | 2320 B | 10 | < 10 |
| Chloride | mg/L | 8/9/00 | 4500-CL B | 5.0 | **30,000** |
| Conductivity | µmhos/cm | 8/8/00 | 2510B | 10 | **45,000** |
| Cyanide | mg/L | 8/9/00 | 4500-CNE | 0.0050 | < 0.0050 |
| Fluoride | mg/L | 8/15/00 | 4500-FD | 0.50 | **3.8** |
| Ion Balance | | 8/22/00 | | 0 | **0.31** |
| Nitrate (as N) | mg/L | 8/9/00 | 4500-NO3F | 0.10 | < |
| Nitrate/Nitrite (as N) | mg/L | 8/9/00 | 4500-NO3F | 0.10 | < |
| pH | pH units | 8/8/00 | 4500/9040B | 0 | **7.30** |
| Sulfate | mg/L | 8/10/00 | 375.4 | 5.0 | **3,500** |
| TDS | mg/L | 8/9/00 | 2540C | 10 | **43,000** |
| Total Organic Carbon | mg/L | 8/9/00 | 5310C | 1.0 | **1.3** |

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Laboratory Supervisor

Report Date: September 27, 2000



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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: August 7, 2000
Received: August 8, 2000

Contact: Jeff Low
Analyzed: August 15, 2000
Extracted: August 13, 2000

Analysis Requested: Semi Volatiles by SW 8270B

Lab Sample ID: L42222-02B
Field Sample ID: **GW-25**
Site ID: 11e (2)

**Analytical Results** — **Semi Volatile Organics by GC/MS**

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Benz(a)anthracene | 100 | < 100 |
| Benzo(a)pyrene | 100 | < 100 |
| Benzo(b)fluoranthene | 100 | < 100 |
| Benzo(k)fluoranthene | 100 | < 100 |
| Chrysene | 100 | < 100 |
| Dibenz(a,h)anthracene | 100 | < 100 |
| Diethyl phthalate | 4.0 | < 4.0 |
| 2-Methylnaphthalene | 4.0 | < 4.0 |
| Naphthalene | 4.0 | < 4.0 |

Released by: Rue D. Li
Laboratory Supervisor

Report Date: August 25, 2000



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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: August 7, 2000
Received: August 8, 2000

Contact: Jeff Low
Analyzed: August 16, 2000
Extracted: August 14, 2000

Analysis Requested: Pesticides by EPA SW-846 #8081/3510B

Lab Sample ID: L42222-02B
Field Sample ID: **GW-25**
Site ID: 11e (2)

**Analytical Results** — **PESTICIDES**

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Chlordane | 10 | < 10 |

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Report Date: August 24, 2000



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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: August 7, 2000
Received: August 8, 2000

Contact: Jeff Low
Analyzed: August 21, 2000

Analysis Requested: Purge & Trap by GC/MS SW846 #8260B/5030A

Lab Sample ID: L42222-02A
Field Sample ID: **GW-25**
Site ID: 11e (2)

**Analytical Results** — **Volatile Organic Compounds**

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Acetone | 20 | < 20 |
| 2-Butanone | 20 | < 20 |
| Carbondisulfide | 2.0 | < 2.0 |
| Chloroform | 2.0 | < 2.0 |
| 1,2-Dichloroethane | 2.0 | < 2.0 |
| Methylene chloride | 2.0 | < 2.0 |
| 1,1,2-Trichloroethane | 50 | < 50 |
| Vinyl chloride | 50 | < 50 |

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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: August 7, 2000
Received: August 8, 2000

Contact: Jeff Low
Analyzed: August 21, 2000

Analysis Requested: Purge & Trap by GC/MS SW846 #8260B/5030A

Lab Sample ID: L42222-03A
Field Sample ID: **Trip Blank**
Site ID: 11e (2)

**Analytical Results** — **Volatile Organic Compounds**

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Acetone | 20 | < 20 |
| 2-Butanone | 20 | < 20 |
| Carbondisulfide | 2.0 | < 2.0 |
| Chloroform | 2.0 | < 2.0 |
| 1,2-Dichloroethane | 2.0 | < 2.0 |
| Methylene chloride | 2.0 | < 2.0 |
| 1,1,2-Trichloroethane | 50 | < 50 |
| Vinyl chloride | 50 | < 50 |

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Report Date: August 24, 2000



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Client: Envirocare of Utah
Date Sampled: August 7, 2000
Project: 11e (2)

Contact: Jeff Low
Date Received: August 8, 2000

Lab Sample ID:
L42222-02D

Field Sample ID:
GW-25

**TOTAL METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Calcium | mg/L | 8/15/00 | 6010B | 0.10 | **610** |
| Iron | mg/L | 8/15/00 | 6010B | 0.10 | < 0.10 |
| Magnesium | mg/L | 8/15/00 | 6010B | 0.10 | **950** |
| Potassium | mg/L | 8/15/00 | 6010B | 0.10 | **610** |
| Sodium | mg/L | 8/15/00 | 6010B | 0.10 | **18,000** |

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Laboratory Supervisor

Report Date: August 24, 2000



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Client: Envirocare of Utah
Date Sampled: August 7, 2000
Project: 11e (2)

Contact: Jeff Low
Date Received: August 8, 2000

Lab Sample ID:
L42222-02C

Field Sample ID:
GW-25

**DISSOLVED METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 8/9/00 | 7060A | 0.010 | **0.098** |
| Barium | mg/L | 8/25/00 | 6010B | 0.0040 | **0.012** |
| Beryllium | mg/L | 8/25/00 | 6010B | 0.0020 | < 0.0020 |
| Cadmium | mg/L | 8/25/00 | 6010B | 0.0040 | < 0.0040 |
| Chromium | mg/L | 8/25/00 | 6010B | 0.0050 | < 0.0050 |
| Copper | mg/L | 8/25/00 | 6010B | 0.0080 | < 0.0080 |
| Lead | mg/L | 8/10/00 | 7421 | 0.0050 | < 0.0050 |
| Mercury | mg/L | 8/22/00 | 7470A | 0.00020 | < 0.0002 |
| Molybdenum | mg/L | 8/25/00 | 6010B | 0.040 | **0.25** |
| Nickel | mg/L | 8/25/00 | 6010B | 0.010 | < 0.010 |
| Selenium | mg/L | 8/11/00 | 7740 | 0.0050 | < 0.0050 |
| Silver | mg/L | 8/25/00 | 6010B | 0.0050 | < 0.0050 |
| Zinc | mg/L | 8/25/00 | 6010B | 0.10 | < 0.10 |

Released by: Paul D. [illegible]
Laboratory Supervisor

Report Date: August 25, 2000



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Client: Envirocare of Utah
Date Sampled: August 8, 2000
Project: 11e. (2)

Contact: Jeff Low
Date Received: August 8, 2000

Lab Sample ID:
L42241-01A

Field Sample ID:
GW-20

**DISSOLVED METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 8/9/00 | 7060A | 0.010 | **0.028** |
| Barium | mg/L | 8/25/00 | 6010B | 0.0040 | **0.010** |
| Beryllium | mg/L | 8/25/00 | 6010B | 0.0020 | < 0.0020 |
| Cadmium | mg/L | 8/25/00 | 6010B | 0.0040 | < 0.0040 |
| Chromium | mg/L | 8/25/00 | 6010B | 0.0050 | < 0.0050 |
| Copper | mg/L | 8/25/00 | 6010B | 0.0080 | < 0.0080 |
| Lead | mg/L | 8/9/00 | 7421 | 0.0050 | < 0.0050 |
| Mercury | mg/L | 8/23/00 | 7470A | 0.00020 | < 0.0002 |
| Molybdenum | mg/L | 8/25/00 | 6010B | 0.040 | **0.18** |
| Nickel | mg/L | 8/25/00 | 6010B | 0.010 | < 0.010 |
| Selenium | mg/L | 8/9/00 | 7740 | 0.0050 | < 0.0050 |
| Silver | mg/L | 8/25/00 | 6010B | 0.0050 | < 0.0050 |
| Zinc | mg/L | 8/25/00 | 6010B | 0.10 | < 0.10 |

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Laboratory Supervisor

Report Date: August 28, 2000



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Client: Envirocare of Utah
Date Sampled: August 8, 2000
Project: 11e. (2)

Contact: Jeff Low
Date Received: August 8, 2000

Lab Sample ID:
L42241-02A

Field Sample ID:
GW-24

**DISSOLVED METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 8/9/00 | 7060A | 0.010 | **0.026** |
| Barium | mg/L | 8/25/00 | 6010B | 0.0040 | **0.018** |
| Beryllium | mg/L | 8/25/00 | 6010B | 0.0020 | < 0.0020 |
| Cadmium | mg/L | 8/25/00 | 6010B | 0.0040 | < 0.0040 |
| Chromium | mg/L | 8/25/00 | 6010B | 0.0050 | < 0.0050 |
| Copper | mg/L | 8/25/00 | 6010B | 0.0080 | < 0.0080 |
| Lead | mg/L | 8/9/00 | 7421 | 0.0050 | < 0.0050 |
| Mercury | mg/L | 8/23/00 | 7470A | 0.00020 | < 0.0002 |
| Molybdenum | mg/L | 8/25/00 | 6010B | 0.040 | **0.19** |
| Nickel | mg/L | 8/25/00 | 6010B | 0.010 | < 0.010 |
| Selenium | mg/L | 8/9/00 | 7740 | 0.0050 | < 0.0050 |
| Silver | mg/L | 8/25/00 | 6010B | 0.0050 | < 0.0050 |
| Zinc | mg/L | 8/25/00 | 6010B | 0.10 | < 0.10 |

Released by: Paul D. Sz
Laboratory Supervisor

Report Date: August 28, 2000



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Client: Envirocare of Utah
Date Sampled: August 8, 2000
Project: 11e. (2)

Contact: Jeff Low
Date Received: August 8, 2000

Lab Sample ID:
L42242-01C

Field Sample ID:
GW-20

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Bicarbonate (As CaCO3) | mg/L | 8/9/00 | 2320 B | 10 | **180** |
| Carbonate (As CaCO3) | mg/L | 8/9/00 | 2320 B | 10 | < 10 |
| Chloride | mg/L | 8/9/00 | 4500-CL B | 5.0 | **32,000** |
| Conductivity | µmhos/cm | 8/9/00 | 2510B | 10 | **52,000** |
| Cyanide | mg/L | 8/9/00 | 4500-CNE | 0.0050 | < 0.0050 |
| Fluoride | mg/L | 8/15/00 | 4500-FD | 0.50 | **3.6** |
| Ion Balance | | 8/22/00 | | 0 | -3.8 |
| Nitrate (as N) | mg/L | 8/9/00 | 4500-NO3F | 0.10 | **1.9** |
| Nitrate/Nitrite (as N) | mg/L | 8/9/00 | 4500-NO3F | 0.10 | **1.9** |
| pH | pH units | 8/9/00 | 4500/9040B | 0 | **7.30** |
| Sulfate | mg/L | 8/10/00 | 375.4 | 5.0 | **3,500** |
| TDS | mg/L | 8/9/00 | 2540C | 10 | **51,000** |
| Total Organic Carbon | mg/L | 8/9/00 | 5310C | 1.0 | **1.9** |

Released by: Rne D. Sr
Laboratory Supervisor

Report Date: August 24, 2000 

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Client: Envirocare of Utah
Date Sampled: August 8, 2000
Project: 11e. (2)

Contact: Jeff Low
Date Received: August 8, 2000

Lab Sample ID:
L42242-01D

Field Sample ID:
GW-20

**TOTAL METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Calcium | mg/L | 8/9/00 | 6010B | 0.10 | **650** |
| Iron | mg/L | 8/9/00 | 6010B | 0.10 | < 0.10 |
| Magnesium | mg/L | 8/9/00 | 6010B | 0.10 | **930** |
| Potassium | mg/L | 8/9/00 | 6010B | 0.10 | **610** |
| Sodium | mg/L | 8/9/00 | 6010B | 0.10 | **18,000** |

Released by: Paul D. [illegible]
Laboratory Supervisor

Report Date: August 24, 2000



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Client: Envirocare of Utah
Date Sampled: August 8, 2000
Project: 11e. (2)

Contact: Jeff Low
Date Received: August 8, 2000

Lab Sample ID:
L42242-01C

Field Sample ID:
GW-20

**DISSOLVED METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 8/9/00 | 7060A | 0.010 | **0.026** |
| Barium | mg/L | 8/25/00 | 6010B | 0.0040 | **0.010** |
| Beryllium | mg/L | 8/25/00 | 6010B | 0.0020 | < 0.0020 |
| Cadmium | mg/L | 8/25/00 | 6010B | 0.0040 | < 0.0040 |
| Chromium | mg/L | 8/25/00 | 6010B | 0.0050 | < 0.0050 |
| Copper | mg/L | 8/25/00 | 6010B | 0.0080 | < 0.0080 |
| Lead | mg/L | 8/9/00 | 7421 | 0.0050 | < 0.0050 |
| Mercury | mg/L | 8/23/00 | 7470A | 0.00020 | < 0.0002 |
| Molybdenum | mg/L | 8/25/00 | 6010B | 0.040 | **0.17** |
| Nickel | mg/L | 8/25/00 | 6010B | 0.010 | < 0.010 |
| Selenium | mg/L | 8/9/00 | 7740 | 0.0050 | < 0.0050 |
| Silver | mg/L | 8/25/00 | 6010B | 0.0050 | < 0.0050 |
| Zinc | mg/L | 8/25/00 | 6010B | 0.10 | < 0.10 |

Released by: Rae D. [illegible]
Laboratory Supervisor

Report Date: August 28, 2000



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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: August 8, 2000
Received: August 8, 2000

Contact: Jeff Low
Analyzed: August 22, 2000

Analysis Requested: Purge & Trap by GC/MS SW846 #8260B/5030A

Lab Sample ID: L42242-01A
Field Sample ID: **GW-20**
Site ID: 11e. (2)

**Analytical Results** — **Volatile Organic Compounds**

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Acetone | 20 | < 20 |
| 2-Butanone | 20 | < 20 |
| Carbondisulfide | 2.0 | < 2.0 |
| Chloroform | 2.0 | < 2.0 |
| 1,2-Dichloroethane | 2.0 | < 2.0 |
| Methylene chloride | 2.0 | < 2.0 |
| 1,1,2-Trichloroethane | 50 | < 50 |
| Vinyl chloride | 50 | < 50 |

Released by: _____
Laboratory Supervisor

Report Date: August 24, 2000



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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: August 8, 2000
Received: August 8, 2000

Contact: Jeff Low
Analyzed: August 15, 2000
Extracted: August 13, 2000

Analysis Requested: Semi Volatiles by SW 8270B

Lab Sample ID: L42242-01B
Field Sample ID: **GW-20**
Site ID: 11e. (2)

**Analytical Results** — **Semi Volatile Organics by GC/MS**

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Benz(a)anthracene | 100 | < 100 |
| Benzo(a)pyrene | 100 | < 100 |
| Benzo(b)fluoranthene | 100 | < 100 |
| Benzo(k)fluoranthene | 100 | < 100 |
| Chrysene | 100 | < 100 |
| Dibenz(a,h)anthracene | 100 | < 100 |
| Diethyl phthalate | 4.0 | < 4.0 |
| 2-Methylnaphthalene | 4.0 | < 4.0 |
| Naphthalene | 4.0 | < 4.0 |

Released by: _____
Laboratory Supervisor

Report Date: August 24, 2000 

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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: August 8, 2000
Received: August 8, 2000

Contact: Jeff Low
Analyzed: August 16, 2000
Extracted: August 14, 2000

Analysis Requested: Pesticides by EPA SW-846 #8081/3510B

Lab Sample ID: L42242-01B
Field Sample ID: **GW-20**
Site ID: 11e. (2)

**Analytical Results** — **PESTICIDES**

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Chlordane | 10 | < 10 |

Released by: Rue D. Sz
Laboratory Supervisor

Report Date: August 24, 2000

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# INORGANIC ANALYSIS REPORT

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Client: Envirocare of Utah
Date Sampled: August 8, 2000
Project: 11e. (2)

Contact: Jeff Low
Date Received: August 8, 2000

Lab Sample ID:
L42242-02C

Field Sample ID:
GW-24

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Bicarbonate (As CaCO3) | mg/L | 8/9/00 | 2320 B | 10 | **230** |
| Carbonate (As CaCO3) | mg/L | 8/9/00 | 2320 B | 10 | < 10 |
| Chloride | mg/L | 8/9/00 | 4500-CL B | 5.0 | **26,000** |
| Conductivity | µmhos/cm | 8/9/00 | 2510B | 10 | **45,000** |
| Cyanide | mg/L | 8/9/00 | 4500-CNE | 0.0050 | < 0.0050 |
| Fluoride | mg/L | 8/15/00 | 4500-FD | 0.50 | **3.5** |
| Ion Balance | | 8/22/00 | | 0 | -6.8 |
| Nitrate (as N) | mg/L | 8/9/00 | 4500-NO3F | 0.10 | **1.2** |
| Nitrate/Nitrite (as N) | mg/L | 8/9/00 | 4500-NO3F | 0.10 | **1.2** |
| pH | pH units | 8/9/00 | 4500/9040B | 0 | **7.30** |
| Sulfate | mg/L | 8/10/00 | 375.4 | 5.0 | **3,000** |
| TDS | mg/L | 8/9/00 | 2540C | 10 | **39,000** |
| Total Organic Carbon | mg/L | 8/9/00 | 5310C | 1.0 | **1.7** |

Released by: _____
Laboratory Supervisor

Report Date: August 24, 2000



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Client: Envirocare of Utah
Date Sampled: August 8, 2000
Project: 11e. (2)

Contact: Jeff Low
Date Received: August 8, 2000

Lab Sample ID:
L42242-02D

Field Sample ID:
GW-24

**TOTAL METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Calcium | mg/L | 8/9/00 | 6010B | 0.10 | **440** |
| Iron | mg/L | 8/9/00 | 6010B | 0.10 | < 0.10 |
| Magnesium | mg/L | 8/9/00 | 6010B | 0.10 | **660** |
| Potassium | mg/L | 8/9/00 | 6010B | 0.10 | **490** |
| Sodium | mg/L | 8/9/00 | 6010B | 0.10 | **14,000** |

Released by: _____
Laboratory Supervisor

Report Date: August 24, 2000



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Client: Envirocare of Utah
Date Sampled: August 8, 2000
Project: 11e. (2)

Contact: Jeff Low
Date Received: August 8, 2000

Lab Sample ID:
L42242-02C

Field Sample ID:
GW-24

**DISSOLVED METALS**

| **Analytical Results** | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 8/9/00 | 7060A | 0.010 | **0.028** |
| Barium | mg/L | 8/25/00 | 6010B | 0.0040 | **0.016** |
| Beryllium | mg/L | 8/25/00 | 6010B | 0.0020 | < 0.0020 |
| Cadmium | mg/L | 8/25/00 | 6010B | 0.0040 | < 0.0040 |
| Chromium | mg/L | 8/25/00 | 6010B | 0.0050 | < 0.0050 |
| Copper | mg/L | 8/25/00 | 6010B | 0.0080 | < 0.0080 |
| Lead | mg/L | 8/9/00 | 7421 | 0.0050 | < 0.0050 |
| Mercury | mg/L | 8/23/00 | 7470A | 0.00020 | < 0.0002 |
| Molybdenum | mg/L | 8/25/00 | 6010B | 0.040 | **0.19** |
| Nickel | mg/L | 8/25/00 | 6010B | 0.010 | < 0.010 |
| Selenium | mg/L | 8/9/00 | 7740 | 0.0050 | < 0.0050 |
| Silver | mg/L | 8/25/00 | 6010B | 0.0050 | < 0.0050 |
| Zinc | mg/L | 8/25/00 | 6010B | 0.10 | < 0.10 |

Released by: Paul R. Sl
Laboratory Supervisor

Report Date: August 28, 2000



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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: August 8, 2000
Received: August 8, 2000

Contact: Jeff Low
Analyzed: August 22, 2000

Analysis Requested: Purge & Trap by GC/MS SW846 #8260B/5030A

Lab Sample ID: L42242-02A
Field Sample ID: **GW-24**
Site ID: 11e. (2)

**Analytical Results** — **Volatile Organic Compounds**

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Acetone | 20 | < 20 |
| 2-Butanone | 20 | < 20 |
| Carbondisulfide | 2.0 | < 2.0 |
| Chloroform | 2.0 | < 2.0 |
| 1,2-Dichloroethane | 2.0 | < 2.0 |
| Methylene chloride | 2.0 | < 2.0 |
| 1,1,2-Trichloroethane | 50 | < 50 |
| Vinyl chloride | 50 | < 50 |

Released by: Rod D. Lee
Laboratory Supervisor

Report Date: August 24, 2000



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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: August 8, 2000
Received: August 8, 2000

Contact: Jeff Low
Analyzed: August 15, 2000
Extracted: August 13, 2000

Analysis Requested: Semi Volatiles by SW 8270B

Lab Sample ID: L42242-02B
Field Sample ID: **GW-24**
Site ID: 11e. (2)

**Analytical Results** — **Semi Volatile Organics by GC/MS**

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Benz(a)anthracene | 100 | < 100 |
| Benzo(a)pyrene | 100 | < 100 |
| Benzo(b)fluoranthene | 100 | < 100 |
| Benzo(k)fluoranthene | 100 | < 100 |
| Chrysene | 100 | < 100 |
| Dibenz(a,h)anthracene | 100 | < 100 |
| Diethyl phthalate | 4.0 | < 4.0 |
| 2-Methylnaphthalene | 4.0 | < 4.0 |
| Naphthalene | 4.0 | < 4.0 |

Released by: _____
Laboratory Supervisor

Report Date: August 24, 2000



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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: August 8, 2000
Received: August 8, 2000

Contact: Jeff Low
Analyzed: August 16, 2000
Extracted: August 14, 2000

Analysis Requested: Pesticides by EPA SW-846 #8081/3510B

Lab Sample ID: L42242-02B
Field Sample ID: **GW-24**
Site ID: 11e. (2)

**Analytical Results** — **PESTICIDES**

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Chlordane | 10 | < 10 |

Released by: _____
Laboratory Supervisor

Report Date: August 24, 2000 Page 1 of 1

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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: August 8, 2000
Received: August 8, 2000

Contact: Jeff Low
Analyzed: August 22, 2000

Analysis Requested: Purge & Trap by GC/MS SW846 #8260B/5030A

Lab Sample ID: L42242-03A
Field Sample ID: **Trip Blank**
Site ID: 11e. (2)

**Analytical Results** — **Volatile Organic Compounds**

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Acetone | 20 | < 20 |
| 2-Butanone | 20 | < 20 |
| Carbondisulfide | 2.0 | < 2.0 |
| Chloroform | 2.0 | < 2.0 |
| 1,2-Dichloroethane | 2.0 | < 2.0 |
| Methylene chloride | 2.0 | < 2.0 |
| 1,1,2-Trichloroethane | 50 | < 50 |
| Vinyl chloride | 50 | < 50 |

Released by: Paul D. Li
Laboratory Supervisor

Report Date: August 24, 2000



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Client: Envirocare of Utah
Date Sampled: August 10, 2000
Project: 11e. (2)

Contact: Jeff Low
Date Received August 10, 2000

Lab Sample ID:
L42270-01C

Field Sample ID:
GW-29

**DISSOLVED METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 8/16/00 | 7060A | 0.010 | **0.032** |
| Barium | mg/L | 8/25/00 | 6010B | 0.0040 | **0.020** |
| Beryllium | mg/L | 8/25/00 | 6010B | 0.0020 | < 0.0020 |
| Cadmium | mg/L | 8/25/00 | 6010B | 0.0040 | < 0.0040 |
| Chromium | mg/L | 8/25/00 | 6010B | 0.0050 | < 0.0050 |
| Copper | mg/L | 8/25/00 | 6010B | 0.0080 | < 0.0080 |
| Lead | mg/L | 8/16/00 | 7421 | 0.0050 | < 0.0050 |
| Mercury | mg/L | 8/23/00 | 7470A | 0.00020 | < 0.0002 |
| Molybdenum | mg/L | 8/25/00 | 6010B | 0.040 | **0.21** |
| Nickel | mg/L | 8/25/00 | 6010B | 0.010 | < 0.010 |
| Selenium | mg/L | 8/16/00 | 7740 | 0.0050 | < 0.0050 |
| Silver | mg/L | 8/25/00 | 6010B | 0.0050 | < 0.0050 |
| Zinc | mg/L | 8/25/00 | 6010B | 0.10 | < 0.10 |

Released by: Paul Sz

Laboratory Supervisor Report Date: August 30, 2000 

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Client: Envirocare of Utah
Date Sampled: August 10, 2000
Project: 11e. (2)

Contact: Jeff Low
Date Received: August 10, 2000

Lab Sample ID:
L42270-01D

Field Sample ID:
GW-29

**TOTAL METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Calcium | mg/L | 8/15/00 | 6010B | 0.10 | **520** |
| Iron | mg/L | 8/15/00 | 6010B | 0.10 | < 0.10 |
| Magnesium | mg/L | 8/15/00 | 6010B | 0.10 | **800** |
| Potassium | mg/L | 8/15/00 | 6010B | 0.10 | **510** |
| Sodium | mg/L | 8/15/00 | 6010B | 0.10 | **16,000** |

Released by: _____
Laboratory Supervisor

Report Date: August 29, 2000



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Client: Envirocare of Utah
Date Sampled: August 10, 2000
Project: 11e. (2)

Contact: Jeff Low
Date Received: August 10, 2000

Lab Sample ID:
L42270-01C

Field Sample ID:
GW-29

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Bicarbonate (As CaCO3) | mg/L | 8/11/00 | 2320 B | 10 | **290** |
| Carbonate (As CaCO3) | mg/L | 8/11/00 | 2320 B | 10 | < 10 |
| Chloride | mg/L | 8/11/00 | 4500-CL B | 5.0 | **28,000** |
| Conductivity | µmhos/cm | 8/11/00 | 2510B | 10 | **61,000** |
| Cyanide | mg/L | 8/14/00 | 4500-CNE | 0.0050 | < 0.0050 |
| Fluoride | mg/L | 8/15/00 | 4500-FD | 0.50 | **3.7** |
| Ion Balance | | 8/25/00 | | 0 | -3.2 |
| Nitrate (as N) | mg/L | 8/11/00 | 4500-NO3F | 0.10 | < 0.10 |
| Nitrate/Nitrite (as N) | mg/L | 8/11/00 | 4500-NO3F | 0.10 | < 0.10 |
| pH | pH units | 8/11/00 | 4500/9040B | 0 | **7.50** |
| Sulfate | mg/L | 8/11/00 | 375.4 | 5.0 | **2,800** |
| TDS | mg/L | 8/11/00 | 2540C | 10 | **42,000** |
| Total Organic Carbon | mg/L | 8/11/00 | 5310C | 1.0 | **1.3** |

Released by: Paul D. Ei
Laboratory Supervisor

Report Date: August 29, 2000



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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: August 10, 2000
Received: August 10, 2000

Contact: Jeff Low
Analyzed: August 24, 2000

Analysis Requested: Purge & Trap by GC/MS SW846 #8260B/5030A

Lab Sample ID: L42270-01A
Field Sample ID: **GW-29**
Site ID: 11e. (2)

**Analytical Results** — **Volatile Organic Compounds**

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Acetone | 20 | < 20 |
| 2-Butanone | 20 | < 20 |
| Carbondisulfide | 2.0 | < 2.0 |
| Chloroform | 2.0 | < 2.0 |
| 1,2-Dichloroethane | 2.0 | < 2.0 |
| Methylene chloride | 2.0 | < 2.0 |
| 1,1,2-Trichloroethane | 50 | < 50 |
| Vinyl chloride | 50 | < 50 |

Released by: _____
Laboratory Supervisor

Report Date: August 29, 2000



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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: August 10, 2000
Received: August 10, 2000

Contact: Jeff Low
Analyzed: August 24, 2000

Analysis Requested: Purge & Trap by GC/MS SW846 #8260B/5030A

Lab Sample ID: L42270-02A
Field Sample ID: **Trip Blank**
Site ID: 11e. (2)

**Analytical Results** — **Volatile Organic Compounds**

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Acetone | 20 | < 20 |
| 2-Butanone | 20 | < 20 |
| Carbondisulfide | 2.0 | < 2.0 |
| Chloroform | 2.0 | < 2.0 |
| 1,2-Dichloroethane | 2.0 | < 2.0 |
| Methylene chloride | 2.0 | < 2.0 |
| 1,1,2-Trichloroethane | 50 | < 50 |
| Vinyl chloride | 50 | < 50 |

Released by: _____
Laboratory Supervisor

Report Date: August 29, 2000



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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: August 10, 2000
Received: August 10, 2000

Contact: Jeff Low
Analyzed: August 15, 2000
Extracted: August 13, 2000

Analysis Requested: Semi Volatiles by SW 8270B

Lab Sample ID: L42270-01B
Field Sample ID: **GW-29**
Site ID: 11e. (2)

**Analytical Results** — **Semi Volatile Organics by GC/MS**

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Benz(a)anthracene | 100 | < 100 |
| Benzo(a)pyrene | 100 | < 100 |
| Benzo(b)fluoranthene | 100 | < 100 |
| Benzo(k)fluoranthene | 100 | < 100 |
| Chrysene | 100 | < 100 |
| Dibenz(a,h)anthracene | 100 | < 100 |
| Diethyl phthalate | 4.0 | < 4.0 |
| 2-Methylnaphthalene | 4.0 | < 4.0 |
| Naphthalene | 4.0 | < 4.0 |

Released by: Paul D. Grant
Laboratory Supervisor

Report Date: August 29, 2000



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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: August 10, 2000
Received: August 10, 2000

Contact: Jeff Low
Analyzed: August 16, 2000
Extracted: August 14, 2000

Analysis Requested: Pesticides by EPA SW-846 #8081/3510B

Lab Sample ID: L42270-01B
Field Sample ID: **GW-29**
Site ID: 11e. (2)

**Analytical Results** — **PESTICIDES**

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Chlordane | 10 | < 10 |

Released by: Paul D. Jr

Laboratory Supervisor Report Date: August 29, 2000 Page 1 of 1

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Client: Envirocare of Utah
Date Sampled: August 10, 2000
Project: 11e. (2)

Contact: Jeff Low
Date Received August 10, 2000

Lab Sample ID:
L42271-01A

Field Sample ID:
GW-29A

**DISSOLVED METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 8/16/00 | 7060A | 0.010 | **0.031** |
| Barium | mg/L | 8/25/00 | 6010B | 0.0040 | **0.020** |
| Beryllium | mg/L | 8/25/00 | 6010B | 0.0020 | < 0.0020 |
| Cadmium | mg/L | 8/25/00 | 6010B | 0.0040 | < 0.0040 |
| Chromium | mg/L | 8/25/00 | 6010B | 0.0050 | < 0.0050 |
| Copper | mg/L | 8/25/00 | 6010B | 0.0080 | < 0.0080 |
| Lead | mg/L | 8/16/00 | 7421 | 0.0050 | < 0.0050 |
| Mercury | mg/L | 8/23/00 | 7470A | 0.00020 | < 0.0002 |
| Molybdenum | mg/L | 8/25/00 | 6010B | 0.040 | **0.21** |
| Nickel | mg/L | 8/25/00 | 6010B | 0.010 | < 0.010 |
| Selenium | mg/L | 8/16/00 | 7740 | 0.0050 | < 0.0050 |
| Silver | mg/L | 8/25/00 | 6010B | 0.0050 | < 0.0050 |
| Zinc | mg/L | 8/25/00 | 6010B | 0.10 | < 0.10 |

Released by: _____
Laboratory Supervisor

Report Date: August 30, 2000



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463 West 3600 South
Salt Lake City, Utah
84115

(801) 263-8686
Toll Free (888) 263-8686
Fax (801) 263-8687

Client: Envirocare of Utah
Date Sampled: October 3, 2000
Project: LARW / 2nd Semi

Contact: Jeff Low
Date Received October 3, 2000

Lab Sample ID:
L42939-01A

Field Sample ID:
GW-88

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Bicarbonate (As CaCO3) | mg/L | 10/6/00 | 2320 B | 10 | **200** |
| Carbonate (As CaCO3) | mg/L | 10/6/00 | 2320 B | 10 | < 10 |
| Chloride | mg/L | 10/6/00 | 4500-CL B | 5.0 | **22,000** |
| Conductivity | µmhos/cm | 10/4/00 | 2510B | 10 | **47,000** |
| Cyanide | mg/L | 10/10/00 | 4500-CNE | 0.010 | < 0.010 |
| Fluoride | mg/L | 10/10/00 | 4500-FD | 1.0 | **3.8** |
| Ion Balance | | 10/23/00 | | 0 | < 0 |
| Nitrate (as N) | mg/L | 10/4/00 | 4500-NO3F | 0.10 | **1.2** |
| Nitrate/Nitrite (as N) | mg/L | 10/4/00 | 4500-NO3F | 0.10 | **1.2** |
| pH | pH units | 10/4/00 | 4500/9040B | 0 | **7.50** |
| Sulfate | mg/L | 10/6/00 | 375.4 | 5.0 | **3,100** |
| TDS | mg/L | 10/10/00 | 2540C | 10 | **30,000** |
| Total Organic Carbon | mg/L | 10/5/00 | 5310C | 1.0 | < 1.0 |
| TOX | mg/L | 10/4/00 | 9020B | 0.050 | < 0.050 |
| TSS | mg/L | 10/10/00 | 2540D | 10 | **210** |

Released by: _____
Laboratory Supervisor

Report Date: October 30, 2000



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Client: Envirocare of Utah
Date Sampled: October 3, 2000
Project: LARW / 2nd Semi

Contact: Jeff Low
Date Received October 3, 2000

Lab Sample ID:
L42939-01B

Field Sample ID:
GW-88

**TOTAL METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Calcium | mg/L | 10/18/00 | 6010B | 0.10 | **390** |
| Iron | mg/L | 10/18/00 | 6010B | 0.10 | **0.20** |
| Magnesium | mg/L | 10/18/00 | 6010B | 0.10 | **590** |
| Potassium | mg/L | 10/18/00 | 6010B | 0.10 | **520** |
| Sodium | mg/L | 10/18/00 | 6010B | 0.10 | **14,000** |

Released by: Laboratory Supervisor

Report Date: October 30, 2000



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Contact: Jeff Low
Date Received October 3, 2000

Lab Sample ID:
L42939-01A

Field Sample ID:
GW-88

**DISSOLVED METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 10/18/00 | 7060A | 0.010 | **0.020** |
| Barium | mg/L | 10/19/00 | 6010B | 0.0040 | **0.041** |
| Beryllium | mg/L | 10/19/00 | 6010B | 0.0020 | < 0.0020 |
| Cadmium | mg/L | 10/19/00 | 6010B | 0.0040 | < 0.0040 |
| Chromium | mg/L | 10/19/00 | 6010B | 0.020 | < 0.020 |
| Copper | mg/L | 10/19/00 | 6010B | 0.0080 | < 0.0080 |
| Lead | mg/L | 10/17/00 | 7421 | 0.010 | < 0.010 |
| Mercury | mg/L | 10/12/00 | 7470A | 0.0010 | < 0.0010 |
| Molybdenum | mg/L | 10/19/00 | 6010B | 0.040 | **0.10** |
| Nickel | mg/L | 10/19/00 | 6010B | 0.010 | < 0.010 |
| Selenium | mg/L | 10/17/00 | 7740 | 0.010 | **0.020** |
| Silver | mg/L | 10/19/00 | 6010B | 0.010 | < 0.010 |
| Zinc | mg/L | 10/19/00 | 6010B | 0.10 | < 0.10 |

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Laboratory Supervisor

Report Date: October 30, 2000



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Client: Envirocare of Utah
Date Sampled: October 3, 2000
Project: LARW / 2nd Semi

Contact: Jeff Low
Date Received October 3, 2000

Lab Sample ID:
L42939-02B

Field Sample ID:
GW-89

**TOTAL METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Calcium | mg/L | 10/18/00 | 6010B | 0.10 | **430** |
| Iron | mg/L | 10/18/00 | 6010B | 0.10 | **0.20** |
| Magnesium | mg/L | 10/18/00 | 6010B | 0.10 | **620** |
| Potassium | mg/L | 10/18/00 | 6010B | 0.10 | **560** |
| Sodium | mg/L | 10/18/00 | 6010B | 0.10 | **15,000** |

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Laboratory Supervisor

Report Date: October 30, 2000 Page 1 of 1

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Client: Envirocare of Utah
Contact: Jeff Low
Date Sampled: October 3, 2000
Date Received October 3, 2000
Project: LARW / 2nd Semi

Lab Sample ID:
L42939-02A

Field Sample ID:
GW-89

**DISSOLVED METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 10/18/00 | 7060A | 0.010 | **0.020** |
| Barium | mg/L | 10/19/00 | 6010B | 0.0040 | **0.050** |
| Beryllium | mg/L | 10/19/00 | 6010B | 0.0020 | < 0.0020 |
| Cadmium | mg/L | 10/19/00 | 6010B | 0.0040 | < 0.0040 |
| Chromium | mg/L | 10/19/00 | 6010B | 0.020 | < 0.020 |
| Copper | mg/L | 10/19/00 | 6010B | 0.0080 | < 0.0080 |
| Lead | mg/L | 10/17/00 | 7421 | 0.010 | < 0.010 |
| Mercury | mg/L | 10/12/00 | 7470A | 0.0010 | < 0.0010 |
| Molybdenum | mg/L | 10/19/00 | 6010B | 0.040 | **0.060** |
| Nickel | mg/L | 10/19/00 | 6010B | 0.010 | < 0.010 |
| Selenium | mg/L | 10/17/00 | 7740 | 0.010 | < 0.010 |
| Silver | mg/L | 10/19/00 | 6010B | 0.010 | < 0.010 |
| Zinc | mg/L | 10/19/00 | 6010B | 0.10 | < 0.10 |

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Client: Envirocare of Utah
Date Sampled: October 3, 2000
Project: LARW / 2nd Semi

Contact: Jeff Low
Date Received October 3, 2000

Lab Sample ID:
L42939-02A

Field Sample ID:
GW-89

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Bicarbonate (As CaCO3) | mg/L | 10/6/00 | 2320 B | 10 | **220** |
| Carbonate (As CaCO3) | mg/L | 10/6/00 | 2320 B | 10 | < 10 |
| Chloride | mg/L | 10/6/00 | 4500-CL B | 5.0 | **24,000** |
| Conductivity | µmhos/cm | 10/4/00 | 2510B | 10 | **47,000** |
| Cyanide | mg/L | 10/10/00 | 4500-CNE | 0.010 | < 0.010 |
| Fluoride | mg/L | 10/10/00 | 4500-FD | 1.0 | **3.3** |
| Ion Balance | | 10/23/00 | | 0 | **1.2** |
| Nitrate (as N) | mg/L | 10/4/00 | 4500-NO3F | 0.10 | **0.40** |
| Nitrate/Nitrite (as N) | mg/L | 10/4/00 | 4500-NO3F | 0.10 | **0.42** |
| pH | pH units | 10/4/00 | 4500/9040B | 0 | **7.40** |
| Sulfate | mg/L | 10/6/00 | 375.4 | 5.0 | **2,000** |
| TDS | mg/L | 10/10/00 | 2540C | 10 | **39,000** |
| Total Organic Carbon | mg/L | 10/5/00 | 5310C | 1.0 | < 1.0 |
| TOX | mg/L | 10/4/00 | 9020B | 0.050 | < 0.050 |
| TSS | mg/L | 10/10/00 | 2540D | 10 | **200** |

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Laboratory Supervisor

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Client: Envirocare of Utah
Date Sampled: October 3, 2000
Project: LARW / 2nd Semi

Contact: Jeff Low
Date Received October 3, 2000

Lab Sample ID:
L42939-03B

Field Sample ID:
GW-90

**TOTAL METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Calcium | mg/L | 10/18/00 | 6010B | 0.10 | **450** |
| Iron | mg/L | 10/18/00 | 6010B | 0.10 | **0.20** |
| Magnesium | mg/L | 10/18/00 | 6010B | 0.10 | **620** |
| Potassium | mg/L | 10/18/00 | 6010B | 0.10 | **490** |
| Sodium | mg/L | 10/18/00 | 6010B | 0.10 | **13,000** |

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Client: Envirocare of Utah
Date Sampled: October 3, 2000
Project: LARW / 2nd Semi

Contact: Jeff Low
Date Received October 3, 2000

Lab Sample ID:
L42939-03A

Field Sample ID:
GW-90

**DISSOLVED METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 10/18/00 | 7060A | 0.010 | **0.030** |
| Barium | mg/L | 10/19/00 | 6010B | 0.0040 | **0.039** |
| Beryllium | mg/L | 10/19/00 | 6010B | 0.0020 | < 0.0020 |
| Cadmium | mg/L | 10/19/00 | 6010B | 0.0040 | < 0.0040 |
| Chromium | mg/L | 10/19/00 | 6010B | 0.020 | < 0.020 |
| Copper | mg/L | 10/19/00 | 6010B | 0.0080 | < 0.0080 |
| Lead | mg/L | 10/17/00 | 7421 | 0.010 | < 0.010 |
| Mercury | mg/L | 10/12/00 | 7470A | 0.0010 | < 0.0010 |
| Molybdenum | mg/L | 10/19/00 | 6010B | 0.040 | **0.040** |
| Nickel | mg/L | 10/19/00 | 6010B | 0.010 | < 0.010 |
| Selenium | mg/L | 10/17/00 | 7740 | 0.010 | **0.030** |
| Silver | mg/L | 10/19/00 | 6010B | 0.010 | < 0.010 |
| Zinc | mg/L | 10/19/00 | 6010B | 0.10 | < 0.10 |

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Laboratory Supervisor

Report Date: October 30, 2000 Page 1 of 1

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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 3, 2000
Project: LARW / 2nd Semi

Contact: Jeff Low
Date Received October 3, 2000

Lab Sample ID:
L42939-03A

Field Sample ID:
GW-90

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Bicarbonate (As CaCO3) | mg/L | 10/6/00 | 2320 B | 10 | **270** |
| Carbonate (As CaCO3) | mg/L | 10/6/00 | 2320 B | 10 | < 10 |
| Chloride | mg/L | 10/6/00 | 4500-CL B | 5.0 | **22,000** |
| Conductivity | µmhos/cm | 10/4/00 | 2510B | 10 | **44,000** |
| Cyanide | mg/L | 10/10/00 | 4500-CNE | 0.010 | < 0.010 |
| Fluoride | mg/L | 10/10/00 | 4500-FD | 1.0 | **3.7** |
| Ion Balance | | 10/23/00 | | 0 | -1.3 |
| Nitrate (as N) | mg/L | 10/4/00 | 4500-NO3F | 0.10 | **0.39** |
| Nitrate/Nitrite (as N) | mg/L | 10/4/00 | 4500-NO3F | 0.10 | **0.39** |
| pH | pH units | 10/4/00 | 4500/9040B | 0 | **7.30** |
| Sulfate | mg/L | 10/6/00 | 375.4 | 5.0 | **2,100** |
| TDS | mg/L | 10/10/00 | 2540C | 10 | **39,000** |
| Total Organic Carbon | mg/L | 10/5/00 | 5310C | 1.0 | < 1.0 |
| TOX | mg/L | 10/4/00 | 9020B | 0.050 | < 0.050 |
| TSS | mg/L | 10/10/00 | 2540D | 10 | **180** |

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Laboratory Supervisor

Report Date: October 30, 2000



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Client: Envirocare of Utah
Date Sampled: October 3, 2000
Project: LARW / 2nd Semi

Contact: Jeff Low
Date Received October 3, 2000

Lab Sample ID:
L42939-03A

Field Sample ID:
GW-90

**DISSOLVED METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 10/18/00 | 7060A | 0.010 | **0.030** |
| Barium | mg/L | 10/19/00 | 6010B | 0.0040 | **0.039** |
| Beryllium | mg/L | 10/19/00 | 6010B | 0.0020 | < 0.0020 |
| Cadmium | mg/L | 10/19/00 | 6010B | 0.0040 | < 0.0040 |
| Chromium | mg/L | 10/19/00 | 6010B | 0.020 | < 0.020 |
| Copper | mg/L | 10/19/00 | 6010B | 0.0080 | < 0.0080 |
| Lead | mg/L | 10/17/00 | 7421 | 0.010 | < 0.010 |
| Mercury | mg/L | 10/12/00 | 7470A | 0.0010 | < 0.0010 |
| Molybdenum | mg/L | 10/19/00 | 6010B | 0.040 | **0.040** |
| Nickel | mg/L | 10/19/00 | 6010B | 0.010 | < 0.010 |
| Selenium | mg/L | 10/17/00 | 7740 | 0.010 | **0.030** |
| Silver | mg/L | 10/19/00 | 6010B | 0.010 | < 0.010 |
| Zinc | mg/L | 10/19/00 | 6010B | 0.10 | < 0.10 |

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Laboratory Supervisor

Report Date: October 30, 2000



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Client: Envirocare of Utah
Date Sampled: October 3, 2000
Project: LARW / 2nd Semi

Contact: Jeff Low
Date Received October 3, 2000

Lab Sample ID:
L42939-03A

Field Sample ID:
GW-90

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Bicarbonate (As CaCO3) | mg/L | 10/6/00 | 2320 B | 10 | **270** |
| Carbonate (As CaCO3) | mg/L | 10/6/00 | 2320 B | 10 | < 10 |
| Chloride | mg/L | 10/6/00 | 4500-CL B | 5.0 | **22,000** |
| Conductivity | µmhos/cm | 10/4/00 | 2510B | 10 | **44,000** |
| Cyanide | mg/L | 10/10/00 | 4500-CNE | 0.010 | < 0.010 |
| Fluoride | mg/L | 10/10/00 | 4500-FD | 1.0 | **3.7** |
| Ion Balance | | 10/23/00 | | 0 | -1.3 |
| Nitrate (as N) | mg/L | 10/4/00 | 4500-NO3F | 0.10 | **0.39** |
| Nitrate/Nitrite (as N) | mg/L | 10/4/00 | 4500-NO3F | 0.10 | **0.39** |
| pH | pH units | 10/4/00 | 4500/9040B | 0 | **7.30** |
| Sulfate | mg/L | 10/6/00 | 375.4 | 5.0 | **2,100** |
| TDS | mg/L | 10/10/00 | 2540C | 10 | **39,000** |
| Total Organic Carbon | mg/L | 10/5/00 | 5310C | 1.0 | < 1.0 |
| TOX | mg/L | 10/4/00 | 9020B | 0.050 | < 0.050 |
| TSS | mg/L | 10/10/00 | 2540D | 10 | **180** |

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Laboratory Supervisor

Report Date: October 30, 2000



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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 3, 2000
Project: LARW / 2nd Semi

Contact: Jeff Low
Date Received October 3, 2000

Lab Sample ID:
L42939-04B

Field Sample ID:
GW-91

**TOTAL METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Calcium | mg/L | 10/18/00 | 6010B | 0.10 | **550** |
| Iron | mg/L | 10/18/00 | 6010B | 0.10 | **0.20** |
| Magnesium | mg/L | 10/18/00 | 6010B | 0.10 | **740** |
| Potassium | mg/L | 10/18/00 | 6010B | 0.10 | **530** |
| Sodium | mg/L | 10/18/00 | 6010B | 0.10 | **14,000** |

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Laboratory Supervisor

Report Date: October 30, 2000



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# INORGANIC ANALYSIS REPORT

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463 West 3600 South
Salt Lake City, Utah
84115

(801) 263-8686
Toll Free (888) 263-8686
Fax (801) 263-8687

Client: Envirocare of Utah
Date Sampled: October 3, 2000
Project: LARW / 2nd Semi

Contact: Jeff Low
Date Received October 3, 2000

Lab Sample ID:
L42939-04A

Field Sample ID:
GW-91

**DISSOLVED METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 10/18/00 | 7060A | 0.010 | **0.030** |
| Barium | mg/L | 10/19/00 | 6010B | 0.0040 | **0.036** |
| Beryllium | mg/L | 10/19/00 | 6010B | 0.0020 | < 0.0020 |
| Cadmium | mg/L | 10/19/00 | 6010B | 0.0040 | < 0.0040 |
| Chromium | mg/L | 10/19/00 | 6010B | 0.020 | < 0.020 |
| Copper | mg/L | 10/19/00 | 6010B | 0.0080 | < 0.0080 |
| Lead | mg/L | 10/17/00 | 7421 | 0.010 | < 0.010 |
| Mercury | mg/L | 10/12/00 | 7470A | 0.0010 | < 0.0010 |
| Molybdenum | mg/L | 10/19/00 | 6010B | 0.040 | **0.10** |
| Nickel | mg/L | 10/19/00 | 6010B | 0.010 | < 0.010 |
| Selenium | mg/L | 10/17/00 | 7740 | 0.010 | **0.020** |
| Silver | mg/L | 10/19/00 | 6010B | 0.010 | < 0.010 |
| Zinc | mg/L | 10/19/00 | 6010B | 0.10 | < 0.10 |

Released by:

Laboratory Supervisor

Report Date: October 30, 2000



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Client: Envirocare of Utah
Date Sampled: October 3, 2000
Project: LARW / 2nd Semi

Contact: Jeff Low
Date Received October 3, 2000

Lab Sample ID:
L42939-04A

Field Sample ID:
GW-91

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Bicarbonate (As CaCO3) | mg/L | 10/6/00 | 2320 B | 10 | **160** |
| Carbonate (As CaCO3) | mg/L | 10/6/00 | 2320 B | 10 | < 10 |
| Chloride | mg/L | 10/6/00 | 4500-CL B | 5.0 | **26,000** |
| Conductivity | µmhos/cm | 10/4/00 | 2510B | 10 | **47,000** |
| Cyanide | mg/L | 10/10/00 | 4500-CNE | 0.010 | < 0.010 |
| Fluoride | mg/L | 10/10/00 | 4500-FD | 1.0 | **3.8** |
| Ion Balance | | 10/23/00 | | 0 | -2.1 |
| Nitrate (as N) | mg/L | 10/4/00 | 4500-NO3F | 0.10 | **0.34** |
| Nitrate/Nitrite (as N) | mg/L | 10/4/00 | 4500-NO3F | 0.10 | **0.34** |
| pH | pH units | 10/4/00 | 4500/9040B | 0 | **7.50** |
| Sulfate | mg/L | 10/6/00 | 375.4 | 5.0 | **2,800** |
| TDS | mg/L | 10/10/00 | 2540C | 10 | **46,000** |
| Total Organic Carbon | mg/L | 10/5/00 | 5310C | 1.0 | < 1.0 |
| TOX | mg/L | 10/4/00 | 9020B | 0.050 | < 0.050 |
| TSS | mg/L | 10/10/00 | 2540D | 10 | **210** |

Released by: SDM
Laboratory Supervisor

Report Date: October 30, 2000



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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Contact: Jeff Low
Date Sampled: September 19, 2000
Date Received September 19, 2000
Project: 11e. (2) (Probable Out-of-Compliances)

Lab Sample ID:
L42743-01A

Field Sample ID:
GW-19A

## DISSOLVED METALS

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 10/3/00 | 7060A | 0.010 | **0.068** |
| Barium | mg/L | 10/3/00 | 6010B | 0.0040 | < 0.0040 |
| Chromium | mg/L | 10/3/00 | 6010B | 0.0050 | < 0.0050 |
| Selenium | mg/L | 10/6/00 | 7740 | 0.0050 | < 0.0050 |

Released by: _____
Laboratory Supervisor

Report Date: October 26, 2000



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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Contact: Jeff Low
Date Sampled: September 19, 2000
Date Received September 19, 2000
Project: 11e. (2) (Probable Out-of-Compliances)

Lab Sample ID:
L42743-02A

Field Sample ID:
GW-602

## DISSOLVED METALS

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 10/3/00 | 7060A | 0.010 | **0.076** |
| Barium | mg/L | 10/3/00 | 6010B | 0.0040 | < 0.0040 |
| Chromium | mg/L | 10/3/00 | 6010B | 0.0050 | < 0.0050 |
| Selenium | mg/L | 10/6/00 | 7740 | 0.0050 | < 0.0050 |

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Report Date: October 26, 2000 Page 1 of 1

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Client: Envirocare of Utah
Contact: Jeff Low
Date Sampled: September 19, 2000
Date Received September 19, 2000
Project: 11e. (2) (Probable Out-of-Compliances)

Lab Sample ID:
L42743-03A

Field Sample ID:
GW-63

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Total Organic Carbon | mg/L | 9/21/00 | 5310C | 1.0 | < 1.0 |

Released by: Rue D. Li
Laboratory Supervisor

Report Date: October 17, 2000 Page 1 of 1

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Client: Envirocare of Utah
Contact: Jeff Low
Date Sampled: September 19, 2000
Date Received September 19, 2000
Project: 11e. (2) (Probable Out-of-Compliances)

Lab Sample ID:
L42743-03A

Field Sample ID:
GW-63

**DISSOLVED METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Barium | mg/L | 10/3/00 | 6010B | 0.0040 | < 0.0040 |
| Chromium | mg/L | 10/3/00 | 6010B | 0.0050 | < 0.0050 |

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Client: Envirocare of Utah
Contact: Jeff Low
Date Sampled: September 19, 2000
Date Received September 19, 2000
Project: 11e. (2) (Probable Out-of-Compliances)

Lab Sample ID:
L42743-05A

Field Sample ID:
GW-60

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Total Organic Carbon | mg/L | 9/21/00 | 5310C | 1.0 | < 1.0 |

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Laboratory Supervisor

Report Date: October 17, 2000 Page 1 of 1

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Client: Envirocare of Utah
Contact: Jeff Low
Date Sampled: September 19, 2000
Date Received September 19, 2000
Project: 11e. (2) (Probable Out-of-Compliances)

Lab Sample ID:
L42743-05A

Field Sample ID:
GW-60

**DISSOLVED METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Barium | mg/L | 10/3/00 | 6010B | 0.0040 | < 0.0040 |
| Chromium | mg/L | 10/3/00 | 6010B | 0.0050 | < 0.0050 |

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Laboratory Supervisor

Report Date: October 26, 2000 Page 1

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Client: Envirocare of Utah
Contact: Jeff Low
Date Sampled: September 19, 2000
Date Received September 19, 2000
Project: 11e. (2) (Probable Out-of-Compliances)

Lab Sample ID:
L42743-04A

Field Sample ID:
GW-603

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Total Organic Carbon | mg/L | 9/21/00 | 5310C | 1.0 | < 1.0 |

Released by: Rue D. Li
Laboratory Supervisor

Report Date: October 17, 2000



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Contact: Jeff Low
Date Sampled: September 19, 2000
Date Received September 19, 2000
Project: 11e. (2) (Probable Out-of-Compliances)

Lab Sample ID:
L42743-04A

Field Sample ID:
GW-603

**DISSOLVED METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Barium | mg/L | 10/3/00 | 6010B | 0.0040 | < 0.0040 |
| Chromium | mg/L | 10/3/00 | 6010B | 0.0050 | < 0.0050 |

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Laboratory Supervisor

Report Date: October 26, 2000



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Client: Envirocare of Utah
Contact: Jeff Low
Date Sampled: September 19, 2000
Date Received September 19, 2000
Project: 11e. (2) (Probable Out-of-Compliances)

Lab Sample ID:
L42743-06A

Field Sample ID:
GW-26

**DISSOLVED METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 10/3/00 | 7060A | 0.010 | **0.24** |

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Laboratory Supervisor

Report Date: October 26, 2000



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Client: Envirocare of Utah
Contact: Jeff Low
Date Sampled: September 21, 2000
Date Received September 21, 2000
Project: LARW / 11e. (2) Probable Out-of-Complian

Lab Sample ID: L42783-01A

Field Sample ID: GW-37

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Total Organic Carbon | mg/L | 9/22/00 | 5310C | 1.0 | 2.2 |

Released by: _____
Laboratory Supervisor

Report Date: October 3, 2000



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Client: Envirocare of Utah
Contact: Jeff Low
Date Sampled: September 21, 2000
Date Received September 21, 2000
Project: LARW / 11e. (2) Probable Out-of-Complian

Lab Sample ID:
L42783-02A

Field Sample ID:
GW-64

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Total Organic Carbon | mg/L | 9/22/00 | 5310C | 1.0 | **1.5** |

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Laboratory Supervisor

Report Date: October 3, 2000



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Client: Envirocare of Utah
Contact: Jeff Low
Date Sampled: September 21, 2000
Date Received September 21, 2000
Project: LARW / 11e. (2) Probable Out-of-Complian

Lab Sample ID: L42783-03A

Field Sample ID: I-2-30

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Total Organic Carbon | mg/L | 9/22/00 | 5310C | 1.0 | **1.3** |

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Laboratory Supervisor

Report Date: October 3, 2000



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Client: Envirocare of Utah
Date Sampled: October 4, 2000
Project: 11e. (2) Exceedance

Contact: Jeff Low
Date Received October 5, 2000

Lab Sample ID:
L42960-01A

Field Sample ID:
GW-19A

**DISSOLVED METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 10/20/00 | 7060A | 0.010 | **0.050** |
| Chromium | mg/L | 10/20/00 | 6010B | 0.0050 | < 0.0050 |
| Selenium | mg/L | 10/20/00 | 7740 | 0.0050 | < 0.0050 |

Released by: Rue D. Sr
Laboratory Supervisor

Report Date: October 27, 2000



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Client: Envirocare of Utah
Date Sampled: October 4, 2000
Project: 11e. (2) Exceedance

Contact: Jeff Low
Date Received October 5, 2000

Lab Sample ID:
L42960-02A

Field Sample ID:
GW-601

**DISSOLVED METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 10/20/00 | 7060A | 0.010 | **0.050** |
| Chromium | mg/L | 10/20/00 | 6010B | 0.0050 | < 0.0050 |
| Selenium | mg/L | 10/20/00 | 7740 | 0.0050 | < 0.0050 |

Released by: Rue D. Jr

Laboratory Supervisor

Report Date: October 27, 2000



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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 4, 2000
Project: 11e. (2) 4th

Contact: Jeff Low
Date Received: October 5, 2000

Lab Sample ID:
L42961-01C

Field Sample ID:
GW-19A

## DISSOLVED METALS

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 10/18/00 | 7060A | 0.010 | **0.060** |
| Barium | mg/L | 10/19/00 | 6010B | 0.0040 | **0.034** |
| Beryllium | mg/L | 10/19/00 | 6010B | 0.0020 | < 0.0020 |
| Cadmium | mg/L | 10/19/00 | 6010B | 0.0040 | < 0.0040 |
| Chromium | mg/L | 10/19/00 | 6010B | 0.0050 | < 0.0050 |
| Copper | mg/L | 10/19/00 | 6010B | 0.0080 | < 0.0080 |
| Lead | mg/L | 10/17/00 | 7421 | 0.0050 | < 0.0050 |
| Mercury | mg/L | 10/17/00 | 7470A | 0.00020 | < 0.0002 |
| Molybdenum | mg/L | 10/19/00 | 6010B | 0.040 | **0.83** |
| Nickel | mg/L | 10/19/00 | 6010B | 0.010 | < 0.010 |
| Selenium | mg/L | 10/17/00 | 7740 | 0.0050 | **0.030** |
| Silver | mg/L | 10/19/00 | 6010B | 0.0050 | < 0.0050 |
| Zinc | mg/L | 10/19/00 | 6010B | 0.10 | < 0.10 |

Released by: SDH
Laboratory Supervisor

Report Date: November 17, 2000



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Client: Envirocare of Utah
Date Sampled: October 4, 2000
Project: 11e. (2) 4th

Contact: Jeff Low
Date Received October 5, 2000

Lab Sample ID:
L42961-01D

Field Sample ID:
GW-19A

**TOTAL METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Calcium | mg/L | 10/18/00 | 6010B | 0.10 | **1,100** |
| Iron | mg/L | 10/18/00 | 6010B | 0.10 | < 0.10 |
| Magnesium | mg/L | 10/18/00 | 6010B | 0.10 | **1,600** |
| Potassium | mg/L | 10/18/00 | 6010B | 0.10 | **640** |
| Sodium | mg/L | 10/18/00 | 6010B | 0.10 | **21,000** |

Released by: _____
Laboratory Supervisor

Report Date: October 30, 2000



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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 4, 2000
Project: 11e. (2) 4th

Contact: Jeff Low
Date Received October 5, 2000

Lab Sample ID:
L42961-01C

Field Sample ID:
GW-19A

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Bicarbonate (As CaCO3) | mg/L | 10/10/00 | 2320 B | 10 | **120** |
| Carbonate (As CaCO3) | mg/L | 10/10/00 | 2320 B | 10 | < 10 |
| Chloride | mg/L | 10/6/00 | 4500-CL B | 5.0 | **36,000** |
| Conductivity | µmhos/cm | 10/9/00 | 2510B | 10 | **80,000** |
| Cyanide | mg/L | 10/17/00 | 4500-CNE | 0.0050 | < 0.0050 |
| Fluoride | mg/L | 10/10/00 | 4500-FD | 0.50 | **7.4** |
| Ion Balance | | 10/23/00 | | 0 | **4.6** |
| Nitrate (as N) | mg/L | 10/6/00 | 4500-NO3F | 0.10 | **2.1** |
| Nitrate/Nitrite (as N) | mg/L | 10/6/00 | 4500-NO3F | 0.10 | **2.1** |
| pH | pH units | 10/6/00 | 4500/9040B | 0 | **7.10** |
| Sulfate | mg/L | 10/6/00 | 375.4 | 5.0 | **7,000** |
| TDS | mg/L | 10/10/00 | 2540C | 10 | **58,000** |
| Total Organic Carbon | mg/L | 10/10/00 | 5310C | 1.0 | < 1.0 |
| TOX | mg/L | 10/11/00 | 9020B | 0.050 | < 0.050 |
| TSS | mg/L | 10/10/00 | 2540D | 10 | **340** |

R - Reissue of previously generated report. Information has been added, updated, or revised. Information herein supersedes that of previously issued reports.

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Laboratory Supervisor

Report Date: November 30, 2000 Page 1 of 1

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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: October 4, 2000
Received: October 5, 2000

Contact: Jeff Low
Analyzed: October 17, 2000

Analysis Requested: Purge & Trap by GC/MS SW846 #8260B/5030A
Lab Sample ID: L42961-01A
Field Sample ID: **GW-19A**
Site ID: 11e. (2) 4th

**Analytical Results** — **Volatile Organic Compounds**

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Acetone | 20 | < 20 |
| 2-Butanone | 20 | < 20 |
| Carbondisulfide | 2.0 | < 2.0 |
| Chloroform | 2.0 | < 2.0 |
| 1,2-Dichloroethane | 2.0 | < 2.0 |
| Methylene chloride | 2.0 | < 2.0 |
| 1,1,2-Trichloroethane | 50 | < 50 |
| Vinyl chloride | 50 | < 50 |

Released by: _____
Laboratory Supervisor

Report Date: October 30, 2000



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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: October 4, 2000
Received: October 5, 2000

Contact: Jeff Low
Analyzed: October 10, 2000
Extracted: October 7, 2000

Analysis Requested: Pesticides by EPA SW-846 #8081/3510B
Lab Sample ID: L42961-01B
Field Sample ID: **GW-19A**
Site ID: 11e. (2) 4th

**Analytical Results**

## PESTICIDES

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Chlordane | 10 | < 10 |

Released by: SDL
Laboratory Supervisor

Report Date: October 30, 2000



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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: October 4, 2000
Received: October 5, 2000
Analysis Requested: Semi Volatiles by SW 8270B
Lab Sample ID: L42961-01B
Field Sample ID: **GW-19A**
Site ID: 11e. (2) 4th

Contact: Jeff Low
Analyzed: October 12, 2000
Extracted: October 9, 2000

**Analytical Results** — **Semi Volatile Organics by GC/MS**

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Benz(a)anthracene | 100 | < 100 |
| Benzo(a)pyrene | 100 | < 100 |
| Benzo(b)fluoranthene | 100 | < 100 |
| Benzo(k)fluoranthene | 100 | < 100 |
| Chrysene | 100 | < 100 |
| Dibenz(a,h)anthracene | 100 | < 100 |
| Diethyl phthalate | 4.0 | < 4.0 |
| 2-Methylnaphthalene | 4.0 | < 4.0 |
| Naphthalene | 4.0 | < 4.0 |

Released by: _____
Laboratory Supervisor

Report Date: October 30, 2000



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Client: Envirocare of Utah
Date Sampled: October 5, 2000
Project: LARW/11e. (2) 4th

Contact: Jeff Low
Date Received October 5, 2000

Lab Sample ID:
L42982-01C

Field Sample ID:
GW-63

**DISSOLVED METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 10/18/00 | 7060A | 0.010 | **0.040** |
| Barium | mg/L | 10/19/00 | 6010B | 0.0040 | **0.033** |
| Beryllium | mg/L | 10/19/00 | 6010B | 0.0020 | < 0.0020 |
| Cadmium | mg/L | 10/19/00 | 6010B | 0.0040 | < 0.0040 |
| Chromium | mg/L | 10/19/00 | 6010B | 0.0050 | < 0.0050 |
| Copper | mg/L | 10/19/00 | 6010B | 0.0080 | < 0.0080 |
| Lead | mg/L | 10/17/00 | 7421 | 0.0050 | < 0.0050 |
| Mercury | mg/L | 10/16/00 | 7470A | 0.00020 | < 0.0002 |
| Molybdenum | mg/L | 10/19/00 | 6010B | 0.040 | **0.21** |
| Nickel | mg/L | 10/19/00 | 6010B | 0.010 | < 0.010 |
| Selenium | mg/L | 10/17/00 | 7740 | 0.0050 | < 0.0050 |
| Silver | mg/L | 10/19/00 | 6010B | 0.0050 | < 0.0050 |
| Zinc | mg/L | 10/19/00 | 6010B | 0.10 | < 0.10 |

Released by: Paul D. Sf
Laboratory Supervisor

Report Date: November 6, 2000



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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 5, 2000
Project: LARW/11e. (2) 4th

Contact: Jeff Low
Date Received October 5, 2000

Lab Sample ID:
L42982-02C

Field Sample ID:
GW-707

## DISSOLVED METALS

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 10/18/00 | 7060A | 0.010 | **0.040** |
| Barium | mg/L | 10/19/00 | 6010B | 0.0040 | **0.026** |
| Beryllium | mg/L | 10/19/00 | 6010B | 0.0020 | < 0.0020 |
| Cadmium | mg/L | 10/19/00 | 6010B | 0.0040 | < 0.0040 |
| Chromium | mg/L | 10/19/00 | 6010B | 0.0050 | < 0.0050 |
| Copper | mg/L | 10/19/00 | 6010B | 0.0080 | < 0.0080 |
| Lead | mg/L | 10/17/00 | 7421 | 0.0050 | < 0.0050 |
| Mercury | mg/L | 10/16/00 | 7470A | 0.00020 | < 0.0002 |
| Molybdenum | mg/L | 10/19/00 | 6010B | 0.040 | **0.26** |
| Nickel | mg/L | 10/19/00 | 6010B | 0.010 | < 0.010 |
| Selenium | mg/L | 10/17/00 | 7740 | 0.0050 | < 0.0050 |
| Silver | mg/L | 10/19/00 | 6010B | 0.0050 | < 0.0050 |
| Zinc | mg/L | 10/19/00 | 6010B | 0.10 | < 0.10 |

Released by: Reed D. Li
Laboratory Supervisor

Report Date: November 6, 2000



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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 5, 2000
Project: LARW/11e. (2) 4th

Contact: Jeff Low
Date Received October 5, 2000

Lab Sample ID:
L42982-01D

Field Sample ID:
GW-63

## TOTAL METALS

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Calcium | mg/L | 10/18/00 | 6010B | 0.10 | **390** |
| Iron | mg/L | 10/18/00 | 6010B | 0.10 | **0.10** |
| Magnesium | mg/L | 10/18/00 | 6010B | 0.10 | **620** |
| Potassium | mg/L | 10/18/00 | 6010B | 0.10 | **460** |
| Sodium | mg/L | 10/18/00 | 6010B | 0.10 | **12,000** |

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Report Date: October 27, 2000 Page 1 of 1

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Client: Envirocare of Utah
Date Sampled: October 5, 2000
Project: LARW/11e. (2) 4th

Contact: Jeff Low
Date Received October 5, 2000

Lab Sample ID:
L42982-02D

Field Sample ID:
GW-707

**TOTAL METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Calcium | mg/L | 10/18/00 | 6010B | 0.10 | **380** |
| Iron | mg/L | 10/18/00 | 6010B | 0.10 | **0.20** |
| Magnesium | mg/L | 10/18/00 | 6010B | 0.10 | **610** |
| Potassium | mg/L | 10/18/00 | 6010B | 0.10 | **460** |
| Sodium | mg/L | 10/18/00 | 6010B | 0.10 | **12,000** |

Released by: Rae D. Li
Laboratory Supervisor

Report Date: October 27, 2000 Page 1 of 1

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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 5, 2000
Project: LARW/11e. (2) 4th

Contact: Jeff Low
Date Received October 5, 2000

Lab Sample ID:
L42982-01C

Field Sample ID:
GW-63

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Bicarbonate (As CaCO3) | mg/L | 10/10/00 | 2320 B | 10 | **160** |
| Carbonate (As CaCO3) | mg/L | 10/10/00 | 2320 B | 10 | < 10 |
| Chloride | mg/L | 10/9/00 | 4500-CL B | 5.0 | **21,000** |
| Conductivity | µmhos/cm | 10/9/00 | 2510B | 10 | **56,000** |
| Cyanide | mg/L | 10/17/00 | 4500-CNE | 0.0050 | < 0.0050 |
| Fluoride | mg/L | 10/10/00 | 4500-FD | 0.50 | **3.7** |
| Ion Balance | | 10/23/00 | | 0 | -3.6 |
| Nitrate (as N) | mg/L | 10/6/00 | 4500-NO3F | 0.10 | **0.28** |
| Nitrate/Nitrite (as N) | mg/L | 10/6/00 | 4500-NO3F | 0.10 | **0.28** |
| pH | pH units | 10/9/00 | 4500/9040B | 0 | **7.30** |
| Sulfate | mg/L | 10/9/00 | 375.4 | 5.0 | **2,600** |
| TDS | mg/L | 10/10/00 | 2540C | 10 | **34,000** |
| Total Organic Carbon | mg/L | 10/10/00 | 5310C | 1.0 | < 1.0 |
| TOX | mg/L | 10/11/00 | 9020B | 0.050 | < 0.050 |

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Laboratory Supervisor

Report Date: October 27, 2000



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Client: Envirocare of Utah
Date Sampled: October 5, 2000
Project: LARW/11e. (2) 4th

Contact: Jeff Low
Date Received October 5, 2000

Lab Sample ID:
L42982-02C

Field Sample ID:
GW-707

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Bicarbonate (As CaCO3) | mg/L | 10/10/00 | 2320 B | 10 | **160** |
| Carbonate (As CaCO3) | mg/L | 10/10/00 | 2320 B | 10 | < 10 |
| Chloride | mg/L | 10/9/00 | 4500-CL B | 5.0 | **20,000** |
| Conductivity | µmhos/cm | 10/9/00 | 2510B | 10 | **55,000** |
| Cyanide | mg/L | 10/17/00 | 4500-CNE | 0.0050 | < 0.0050 |
| Fluoride | mg/L | 10/10/00 | 4500-FD | 0.50 | **3.8** |
| Ion Balance | | 10/23/00 | | 0 | -1.6 |
| Nitrate (as N) | mg/L | 10/6/00 | 4500-NO3F | 0.10 | **0.27** |
| Nitrate/Nitrite (as N) | mg/L | 10/6/00 | 4500-NO3F | 0.10 | **0.27** |
| pH | pH units | 10/9/00 | 4500/9040B | 0 | **7.50** |
| Sulfate | mg/L | 10/9/00 | 375.4 | 5.0 | **2,700** |
| TDS | mg/L | 10/10/00 | 2540C | 10 | **32,000** |
| Total Organic Carbon | mg/L | 10/10/00 | 5310C | 1.0 | < 1.0 |
| TOX | mg/L | 10/11/00 | 9020B | 0.050 | < 0.050 |

Released by: Rae D. Li
Laboratory Supervisor

Report Date: October 27, 2000



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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: October 5, 2000
Received: October 5, 2000
Contact: Jeff Low
Analyzed: October 17, 2000

Analysis Requested: Purge & Trap by GC/MS SW846 #8260B/5030A
Lab Sample ID: L42982-01A
Field Sample ID: **GW-63**
Site ID: LARW/11e. (2) 4th

**Analytical Results** — **Volatile Organic Compounds**

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Acetone | 20 | < 20 |
| 2-Butanone | 20 | < 20 |
| Carbondisulfide | 2.0 | < 2.0 |
| Chloroform | 2.0 | < 2.0 |
| 1,2-Dichloroethane | 2.0 | < 2.0 |
| Methylene chloride | 2.0 | < 2.0 |
| 1,1,2-Trichloroethane | 50 | < 50 |
| Vinyl chloride | 50 | < 50 |

Released by: Rene D. Li
Laboratory Supervisor

Report Date: October 27, 2000



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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: October 5, 2000
Received: October 5, 2000
Contact: Jeff Low
Analyzed: October 17, 2000

Analysis Requested: Purge & Trap by GC/MS SW846 #8260B/5030A
Lab Sample ID: L42982-02A
Field Sample ID: **GW-707**
Site ID: LARW/11e. (2) 4th

**Analytical Results** — **Volatile Organic Compounds**

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Acetone | 20 | < 20 |
| 2-Butanone | 20 | < 20 |
| Carbondisulfide | 2.0 | < 2.0 |
| Chloroform | 2.0 | < 2.0 |
| 1,2-Dichloroethane | 2.0 | < 2.0 |
| Methylene chloride | 2.0 | < 2.0 |
| 1,1,2-Trichloroethane | 50 | < 50 |
| Vinyl chloride | 50 | < 50 |

Released by: Laboratory Supervisor

Report Date: October 27, 2000



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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: October 5, 2000
Received: October 5, 2000
Analysis Requested: Semi Volatiles by SW 8270B
Lab Sample ID: L42982-01B
Field Sample ID: **GW-63**
Site ID: LARW/11e. (2) 4th

Contact: Jeff Low
Analyzed: October 12, 2000
Extracted: October 9, 2000

## Analytical Results — Semi Volatile Organics by GC/MS

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Benz(a)anthracene | 100 | < 100 |
| Benzo(a)pyrene | 100 | < 100 |
| Benzo(b)fluoranthene | 100 | < 100 |
| Benzo(k)fluoranthene | 100 | < 100 |
| Chrysene | 100 | < 100 |
| Dibenz(a,h)anthracene | 100 | < 100 |
| Diethyl phthalate | 4.0 | < 4.0 |
| 2-Methylnaphthalene | 4.0 | < 4.0 |
| Naphthalene | 4.0 | < 4.0 |

Released by: _____
Laboratory Supervisor

Report Date: October 27, 2000 

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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: October 5, 2000
Received: October 5, 2000
Analysis Requested: Semi Volatiles by SW 8270B
Lab Sample ID: L42982-02B
Field Sample ID: **GW-707**
Site ID: LARW/11e. (2) 4th

Contact: Jeff Low
Analyzed: October 12, 2000
Extracted: October 9, 2000

**Analytical Results** — **Semi Volatile Organics by GC/MS**

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Benz(a)anthracene | 100 | < 100 |
| Benzo(a)pyrene | 100 | < 100 |
| Benzo(b)fluoranthene | 100 | < 100 |
| Benzo(k)fluoranthene | 100 | < 100 |
| Chrysene | 100 | < 100 |
| Dibenz(a,h)anthracene | 100 | < 100 |
| Diethyl phthalate | 4.0 | < 4.0 |
| 2-Methylnaphthalene | 4.0 | < 4.0 |
| Naphthalene | 4.0 | < 4.0 |

Released by: Rae D. Lee
Laboratory Supervisor

Report Date: October 27, 2000



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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: October 5, 2000
Received: October 5, 2000

Contact: Jeff Low
Analyzed: October 10, 2000
Extracted: October 7, 2000

Analysis Requested: Pesticides by EPA SW-846 #8081/3510B
Lab Sample ID: L42982-01B
Field Sample ID: **GW-63**
Site ID: LARW/11e. (2) 4th

**Analytical Results** — **PESTICIDES**

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Chlordane | 10 | < 10 |

Released by: _____
Laboratory Supervisor

Report Date: October 27, 2000 Page 1 of 1

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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: October 5, 2000
Received: October 5, 2000

Contact: Jeff Low
Analyzed: October 10, 2000
Extracted: October 7, 2000

Analysis Requested: Pesticides by EPA SW-846 #8081/3510B

Lab Sample ID: L42982-02B
Field Sample ID: **GW-707**
Site ID: LARW/11e. (2) 4th

**Analytical Results** — **PESTICIDES**

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Chlordane | 10 | < 10 |

Released by: _____
Laboratory Supervisor

Report Date: October 27, 2000



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# INORGANIC ANALYSIS REPORT

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Client: Envirocare of Utah
Contact: Jeff Low
Date Sampled: October 5, 2000
Date Received October 5, 2000
Project: 11e. (2) Exceedance

Lab Sample ID:
L42983-01A

Field Sample ID:
GW-63A

**DISSOLVED METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Barium | mg/L | 10/19/00 | 6010B | 0.0040 | **0.031** |

Released by: Paul D. Jr
Laboratory Supervisor

Report Date: October 30, 2000



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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: October 18, 2000
Received: October 18, 2000
Analysis Requested: 8260B/5030A
Lab Sample ID: L43169-01A
Field Sample ID: **GW-60**
Site ID: 11e. (2) / 4th Sample

Contact: Jeff Low
Analyzed: October 28, 2000

**Analytical Results** — **Volatile Organic Compounds**

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Acetone | 20 | < 20 |
| 2-Butanone | 20 | < 20 |
| Carbondisulfide | 2.0 | < 2.0 |
| Chloroform | 2.0 | < 2.0 |
| 1,2-Dichloroethane | 2.0 | < 2.0 |
| Methylene chloride | 2.0 | < 2.0 |
| 1,1,2-Trichloroethane | 50 | < 50 |
| Vinyl chloride | 50 | < 50 |

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Laboratory Supervisor

Report Date: December 2, 2000 Page 1 of 1

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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: October 18, 2000
Received: October 18, 2000
Analysis Requested: 8270C
Lab Sample ID: L43169-01B
Field Sample ID: **GW-60**
Site ID: 11e. (2) / 4th Sample

Contact: Jeff Low
Analyzed: October 26, 2000
Extracted: October 24, 2000

**Analytical Results** — **Semi Volatile Organics by GC/MS**

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Benz(a)anthracene | 100 | < 100 |
| Benzo(a)pyrene | 100 | < 100 |
| Benzo(b)fluoranthene | 100 | < 100 |
| Benzo(k)fluoranthene | 100 | < 100 |
| Chrysene | 100 | < 100 |
| Dibenz(a,h)anthracene | 100 | < 100 |
| Diethyl phthalate | 4.0 | < 4.0 |
| 2-Methylnaphthalene | 4.0 | < 4.0 |
| Naphthalene | 4.0 | < 4.0 |

Released by: _____
Laboratory Supervisor

Report Date: December 2, 2000 

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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: October 18, 2000
Received: October 18, 2000
Analysis Requested: 8081/3510B
Lab Sample ID: L43169-01B
Field Sample ID: **GW-60**
Site ID: 11e. (2) / 4th Sample

Contact: Jeff Low
Analyzed: October 25, 2000
Extracted: October 23, 2000

**Analytical Results** — **PESTICIDES**

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Chlordane | 10 | < 10 |

Released by: _____
Laboratory Supervisor

Report Date: December 2, 2000 Page 1

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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 18, 2000
Project: 11e. (2) / 4th Sample

Contact: Jeff Low
Date Received October 18, 2000

Lab Sample ID:
L43169-01C

Field Sample ID:
GW-60

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Bicarbonate (As CaCO3) | mg/L | 10/19/00 | 2320 B | 10 | **180** |
| Carbonate (As CaCO3) | mg/L | 10/19/00 | 2320 B | 10 | < 10 |
| Chloride | mg/L | 10/20/00 | 4500-CL B | 5.0 | **24,000** |
| Conductivity | µmhos/cm | 10/19/00 | 2510B | 10 | **72,000** |
| Cyanide | mg/L | 11/1/00 | 4500-CNE | 0.0050 | < 0.0050 |
| Fluoride | mg/L | 10/24/00 | 4500-FD | 0.50 | **2.5** |
| Ion Balance | | 11/20/00 | | 0 | -3.1 |
| Nitrate (as N) | mg/L | 10/19/00 | 4500-NO3F | 0.10 | **0.47** |
| Nitrate/Nitrite (as N) | mg/L | 10/19/00 | 4500-NO3F | 0.10 | **0.47** |
| pH | pH units | 10/19/00 | 4500/9040B | 0 | **7.44** |
| Sulfate | mg/L | 10/20/00 | 375.4 | 5.0 | **3,200** |
| TDS | mg/L | 10/20/00 | 2540C | 10 | **43,000** |
| Total Organic Carbon | mg/L | 10/27/00 | 5310C | 1.0 | < 1.0 |
| TOX | mg/L | 10/25/00 | 9020B | 0.050 | < 0.050 |

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Report Date: December 5, 2000 Page 1 of 1

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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 18, 2000
Project: 11e. (2) / 4th Sample

Contact: Jeff Low
Date Received October 18, 2000

Lab Sample ID:
L43169-01D

Field Sample ID:
GW-60

**TOTAL METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Calcium | mg/L | 11/1/00 | 6010B | 0.10 | **490** |
| Iron | mg/L | 11/1/00 | 6010B | 0.10 | **0.10** |
| Magnesium | mg/L | 11/1/00 | 6010B | 0.10 | **680** |
| Potassium | mg/L | 11/1/00 | 6010B | 0.10 | **480** |
| Sodium | mg/L | 11/1/00 | 6010B | 0.10 | **14,000** |

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Report Date: December 2. 2000 Page 1 of 1

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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Contact: Jeff Low
Date Sampled: October 18, 2000
Date Received October 18, 2000
Project: 11e. (2) / 4th Sample

Lab Sample ID:
L43169-01C

Field Sample ID:
GW-60

**DISSOLVED METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 11/1/00 | 7060A | 0.010 | **0.030** |
| Barium | mg/L | 10/31/00 | 6010B | 0.0040 | **0.020** |
| Beryllium | mg/L | 10/31/00 | 6010B | 0.0020 | < 0.0020 |
| Cadmium | mg/L | 10/31/00 | 6010B | 0.0040 | < 0.0040 |
| Chromium | mg/L | 10/31/00 | 6010B | 0.0050 | < 0.0050 |
| Copper | mg/L | 10/31/00 | 6010B | 0.0080 | **0.013** |
| Lead | mg/L | 10/30/00 | 7421 | 0.0050 | < 0.0050 |
| Mercury | mg/L | 10/30/00 | 7470A | 0.00020 | < 0.0002 |
| Molybdenum | mg/L | 10/31/00 | 6010B | 0.040 | **0.21** |
| Nickel | mg/L | 10/31/00 | 6010B | 0.010 | < 0.010 |
| Selenium | mg/L | 11/7/00 | 7740 | 0.0050 | < 0.0050 |
| Silver | mg/L | 10/31/00 | 6010B | 0.0050 | < 0.0050 |
| Zinc | mg/L | 10/31/00 | 6010B | 0.10 | < 0.10 |

Released by: SDM
Laboratory Supervisor

Report Date: December 2. 2000



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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: October 18, 2000
Received: October 18, 2000
Analysis Requested: 8260B/5030A
Lab Sample ID: L43169-02A
Field Sample ID: **GW-58**
Site ID: 11e. (2) / 4th Sample

Contact: Jeff Low
Analyzed: October 28, 2000

**Analytical Results** — **Volatile Organic Compounds**

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Acetone | 20 | < 20 |
| 2-Butanone | 20 | < 20 |
| Carbondisulfide | 2.0 | < 2.0 |
| Chloroform | 2.0 | < 2.0 |
| 1,2-Dichloroethane | 2.0 | < 2.0 |
| Methylene chloride | 2.0 | < 2.0 |
| 1,1,2-Trichloroethane | 50 | < 50 |
| Vinyl chloride | 50 | < 50 |

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Report Date: December 2, 2000



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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: October 18, 2000
Received: October 18, 2000
Analysis Requested: 8270C
Lab Sample ID: L43169-02B
Field Sample ID: **GW-58**
Site ID: 11e. (2) / 4th Sample

Contact: Jeff Low
Analyzed: October 26, 2000
Extracted: October 24, 2000

**Analytical Results** — **Semi Volatile Organics by GC/MS**

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Benz(a)anthracene | 100 | < 100 |
| Benzo(a)pyrene | 100 | < 100 |
| Benzo(b)fluoranthene | 100 | < 100 |
| Benzo(k)fluoranthene | 100 | < 100 |
| Chrysene | 100 | < 100 |
| Dibenz(a,h)anthracene | 100 | < 100 |
| Diethyl phthalate | 4.0 | < 4.0 |
| 2-Methylnaphthalene | 4.0 | < 4.0 |
| Naphthalene | 4.0 | < 4.0 |

Released by: _____
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Report Date: December 2, 2000 Page 1 of 1

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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: October 18, 2000
Received: October 18, 2000
Analysis Requested: 8081/3510B
Lab Sample ID: L43169-02B
Field Sample ID: **GW-58**
Site ID: 11e. (2) / 4th Sample

Contact: Jeff Low
Analyzed: October 25, 2000
Extracted: October 23, 2000

**Analytical Results** — **PESTICIDES**

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Chlordane | 10 | < 10 |

Released by: _____
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Report Date: December 2, 2000 Page 1 of 1

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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 18, 2000
Project: 11e. (2) / 4th Sample

Contact: Jeff Low
Date Received October 18, 2000

Lab Sample ID:
L43169-02C

Field Sample ID:
GW-58

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Bicarbonate (As CaCO3) | mg/L | 10/19/00 | 2320 B | 10 | **120** |
| Carbonate (As CaCO3) | mg/L | 10/19/00 | 2320 B | 10 | < 10 |
| Chloride | mg/L | 10/20/00 | 4500-CL B | 5.0 | **26,000** |
| Conductivity | µmhos/cm | 10/19/00 | 2510B | 10 | **69,000** |
| Cyanide | mg/L | 11/1/00 | 4500-CNE | 0.0050 | < 0.0050 |
| Fluoride | mg/L | 10/24/00 | 4500-FD | 0.50 | **3.0** |
| Ion Balance | | 11/20/00 | | 0 | -2.9 |
| Nitrate (as N) | mg/L | 10/19/00 | 4500-NO3F | 0.10 | **1.3** |
| Nitrate/Nitrite (as N) | mg/L | 10/19/00 | 4500-NO3F | 0.10 | **1.3** |
| pH | pH units | 10/19/00 | 4500/9040B | 0 | **7.50** |
| Sulfate | mg/L | 10/20/00 | 375.4 | 5.0 | **3,200** |
| TDS | mg/L | 10/20/00 | 2540C | 10 | **40,000** |
| Total Organic Carbon | mg/L | 10/27/00 | 5310C | 1.0 | < 1.0 |
| TOX | mg/L | 10/25/00 | 9020B | 0.050 | < 0.050 |

Released by: _____
Laboratory Supervisor

Report Date: December 2, 2000



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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 18, 2000
Project: 11e. (2) / 4th Sample

Contact: Jeff Low
Date Received October 18, 2000

Lab Sample ID:
L43169-02D

Field Sample ID:
GW-58

| TOTAL METALS<br>Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Calcium | mg/L | 11/1/00 | 6010B | 0.10 | **550** |
| Iron | mg/L | 11/1/00 | 6010B | 0.10 | < 0.10 |
| Magnesium | mg/L | 11/1/00 | 6010B | 0.10 | **770** |
| Potassium | mg/L | 11/1/00 | 6010B | 0.10 | **510** |
| Sodium | mg/L | 11/1/00 | 6010B | 0.10 | **15,000** |

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Report Date: December 2, 2000 Page 1 of 1

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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 18, 2000
Project: 11e. (2) / 4th Sample

Contact: Jeff Low
Date Received October 18, 2000

Lab Sample ID:
L43169-02C

Field Sample ID:
GW-58

## DISSOLVED METALS

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 11/1/00 | 7060A | 0.010 | **0.15** |
| Barium | mg/L | 10/31/00 | 6010B | 0.0040 | **0.023** |
| Beryllium | mg/L | 10/31/00 | 6010B | 0.0020 | < 0.0020 |
| Cadmium | mg/L | 10/31/00 | 6010B | 0.0040 | < 0.0040 |
| Chromium | mg/L | 10/31/00 | 6010B | 0.0050 | < 0.0050 |
| Copper | mg/L | 10/31/00 | 6010B | 0.0080 | **0.015** |
| Lead | mg/L | 10/30/00 | 7421 | 0.0050 | < 0.0050 |
| Mercury | mg/L | 10/30/00 | 7470A | 0.00020 | < 0.0002 |
| Molybdenum | mg/L | 10/31/00 | 6010B | 0.040 | **0.31** |
| Nickel | mg/L | 10/31/00 | 6010B | 0.010 | < 0.010 |
| Selenium | mg/L | 11/7/00 | 7740 | 0.0050 | < 0.0050 |
| Silver | mg/L | 10/31/00 | 6010B | 0.0050 | < 0.0050 |
| Zinc | mg/L | 10/31/00 | 6010B | 0.10 | < 0.10 |

Released by: SDM
Laboratory Supervisor

Report Date: December 2, 2000



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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: October 18, 2000
Received: October 18, 2000
Analysis Requested: 8260B/5030A
Lab Sample ID: L43169-03A
Field Sample ID: **GW-302**
Site ID: 11e. (2) / 4th Sample

Contact: Jeff Low
Analyzed: October 28, 2000

**Analytical Results** — **Volatile Organic Compounds**

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Acetone | 20 | < 20 |
| 2-Butanone | 20 | < 20 |
| Carbondisulfide | 2.0 | < 2.0 |
| Chloroform | 2.0 | < 2.0 |
| 1,2-Dichloroethane | 2.0 | < 2.0 |
| Methylene chloride | 2.0 | < 2.0 |
| 1,1,2-Trichloroethane | 50 | < 50 |
| Vinyl chloride | 50 | < 50 |

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Report Date: December 2, 2000 

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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: October 18, 2000
Received: October 18, 2000
Analysis Requested: 8270C
Lab Sample ID: L43169-03B
Field Sample ID: **GW-302**
Site ID: 11e. (2) / 4th Sample

Contact: Jeff Low
Analyzed: October 26, 2000
Extracted: October 24, 2000

**Analytical Results** — **Semi Volatile Organics by GC/MS**

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Benz(a)anthracene | 100 | < 100 |
| Benzo(a)pyrene | 100 | < 100 |
| Benzo(b)fluoranthene | 100 | < 100 |
| Benzo(k)fluoranthene | 100 | < 100 |
| Chrysene | 100 | < 100 |
| Dibenz(a,h)anthracene | 100 | < 100 |
| Diethyl phthalate | 4.0 | < 4.0 |
| 2-Methylnaphthalene | 4.0 | < 4.0 |
| Naphthalene | 4.0 | < 4.0 |

Released by: _____
Laboratory Supervisor

Report Date: December 2, 2000



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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: October 18, 2000
Received: October 18, 2000
Analysis Requested: 8081/3510B
Lab Sample ID: L43169-03B
Field Sample ID: **GW-302**
Site ID: 11e. (2) / 4th Sample

Contact: Jeff Low
Analyzed: October 31, 2000
Extracted: October 23, 2000

**Analytical Results** — **PESTICIDES**

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Chlordane | 10 | < 10 |

* High recovery(ies) indicate high bias. Data deemed acceptable as no target analytes were observed in the field samples.

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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 18, 2000
Project: 11e. (2) / 4th Sample

Contact: Jeff Low
Date Received October 18, 2000

Lab Sample ID:
L43169-03C

Field Sample ID:
GW-302

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Bicarbonate (As CaCO3) | mg/L | 10/19/00 | 2320 B | 10 | **130** |
| Carbonate (As CaCO3) | mg/L | 10/19/00 | 2320 B | 10 | < 10 |
| Chloride | mg/L | 10/20/00 | 4500-CL B | 5.0 | **29,000** |
| Conductivity | µmhos/cm | 10/19/00 | 2510B | 10 | **65,000** |
| Cyanide | mg/L | 11/1/00 | 4500-CNE | 0.0050 | < 0.0050 |
| Fluoride | mg/L | 10/24/00 | 4500-FD | 0.50 | **3.0** |
| Ion Balance | | 11/20/00 | | 0 | -8.4 |
| Nitrate (as N) | mg/L | 10/19/00 | 4500-NO3F | 0.10 | **1.3** |
| Nitrate/Nitrite (as N) | mg/L | 10/19/00 | 4500-NO3F | 0.10 | **1.3** |
| pH | pH units | 10/19/00 | 4500/9040B | 0 | **7.52** |
| Sulfate | mg/L | 10/20/00 | 375.4 | 5.0 | **3,700** |
| TDS | mg/L | 10/20/00 | 2540C | 10 | **41,000** |
| Total Organic Carbon | mg/L | 10/27/00 | 5310C | 1.0 | < 1.0 |
| TOX | mg/L | 10/25/00 | 9020B | 0.050 | < 0.050 |

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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 18, 2000
Project: 11e. (2) / 4th Sample

Contact: Jeff Low
Date Received October 18, 2000

Lab Sample ID:
L43169-03D

Field Sample ID:
GW-302

**TOTAL METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Calcium | mg/L | 11/1/00 | 6010B | 0.10 | **560** |
| Iron | mg/L | 11/1/00 | 6010B | 0.10 | < 0.10 |
| Magnesium | mg/L | 11/1/00 | 6010B | 0.10 | **780** |
| Potassium | mg/L | 11/1/00 | 6010B | 0.10 | **510** |
| Sodium | mg/L | 11/1/00 | 6010B | 0.10 | **15,000** |

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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 18, 2000
Project: 11e. (2) / 4th Sample

Contact: Jeff Low
Date Received October 18, 2000

Lab Sample ID:
L43169-03C

Field Sample ID:
GW-302

**DISSOLVED METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 11/1/00 | 7060A | 0.010 | **0.15** |
| Barium | mg/L | 10/31/00 | 6010B | 0.0040 | **0.022** |
| Beryllium | mg/L | 10/31/00 | 6010B | 0.0020 | < 0.0020 |
| Cadmium | mg/L | 10/31/00 | 6010B | 0.0040 | < 0.0040 |
| Chromium | mg/L | 10/31/00 | 6010B | 0.0050 | < 0.0050 |
| Copper | mg/L | 10/31/00 | 6010B | 0.0080 | **0.013** |
| Lead | mg/L | 10/30/00 | 7421 | 0.0050 | < 0.0050 |
| Mercury | mg/L | 10/30/00 | 7470A | 0.00020 | < 0.0002 |
| Molybdenum | mg/L | 10/31/00 | 6010B | 0.040 | **0.31** |
| Nickel | mg/L | 10/31/00 | 6010B | 0.010 | < 0.010 |
| Selenium | mg/L | 11/7/00 | 7740 | 0.0050 | < 0.0050 |
| Silver | mg/L | 10/31/00 | 6010B | 0.0050 | < 0.0050 |
| Zinc | mg/L | 10/31/00 | 6010B | 0.10 | < 0.10 |

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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: October 18, 2000
Received: October 18, 2000
Analysis Requested: 8260B/5030A
Lab Sample ID: L43169-04A
Field Sample ID: **GW-28**
Site ID: 11e. (2) / 4th Sample

Contact: Jeff Low
Analyzed: October 28, 2000

**Analytical Results** — **Volatile Organic Compounds**

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Acetone | 20 | < 20 |
| 2-Butanone | 20 | < 20 |
| Carbondisulfide | 2.0 | < 2.0 |
| Chloroform | 2.0 | < 2.0 |
| 1,2-Dichloroethane | 2.0 | < 2.0 |
| Methylene chloride | 2.0 | < 2.0 |
| 1,1,2-Trichloroethane | 50 | < 50 |
| Vinyl chloride | 50 | < 50 |

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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: October 18, 2000
Received: October 18, 2000
Analysis Requested: 8270C
Lab Sample ID: L43169-04B
Field Sample ID: **GW-28**
Site ID: 11e. (2) / 4th Sample

Contact: Jeff Low
Analyzed: October 26, 2000
Extracted: October 24, 2000

**Analytical Results** — **Semi Volatile Organics by GC/MS**

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Benz(a)anthracene | 100 | < 100 |
| Benzo(a)pyrene | 100 | < 100 |
| Benzo(b)fluoranthene | 100 | < 100 |
| Benzo(k)fluoranthene | 100 | < 100 |
| Chrysene | 100 | < 100 |
| Dibenz(a,h)anthracene | 100 | < 100 |
| Diethyl phthalate | 4.0 | < 4.0 |
| 2-Methylnaphthalene | 4.0 | < 4.0 |
| Naphthalene | 4.0 | < 4.0 |

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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: October 18, 2000
Received: October 18, 2000
Analysis Requested: 8081/3510B
Lab Sample ID: L43169-04B
Field Sample ID: **GW-28**
Site ID: 11e. (2) / 4th Sample

Contact: Jeff Low
Analyzed: October 25, 2000
Extracted: October 23, 2000

**Analytical Results** — **PESTICIDES**

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Chlordane | 10 | < 10 |

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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 18, 2000
Project: 11e. (2) / 4th Sample

Contact: Jeff Low
Date Received October 18, 2000

Lab Sample ID:
L43169-04C

Field Sample ID:
GW-28

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Bicarbonate (As CaCO3) | mg/L | 10/19/00 | 2320 B | 10 | **150** |
| Carbonate (As CaCO3) | mg/L | 10/19/00 | 2320 B | 10 | < 10 |
| Chloride | mg/L | 10/20/00 | 4500-CL B | 5.0 | **25,000** |
| Conductivity | µmhos/cm | 10/19/00 | 2510B | 10 | **62,000** |
| Cyanide | mg/L | 11/1/00 | 4500-CNE | 0.0050 | < 0.0050 |
| Fluoride | mg/L | 10/24/00 | 4500-FD | 0.50 | **3.1** |
| Ion Balance | | 11/20/00 | | 0 | -5.4 |
| Nitrate (as N) | mg/L | 10/19/00 | 4500-NO3F | 0.10 | **0.35** |
| Nitrate/Nitrite (as N) | mg/L | 10/19/00 | 4500-NO3F | 0.10 | **0.35** |
| pH | pH units | 10/19/00 | 4500/9040B | 0 | **7.48** |
| Sulfate | mg/L | 10/20/00 | 375.4 | 5.0 | **3,600** |
| TDS | mg/L | 10/20/00 | 2540C | 10 | **43,000** |
| Total Organic Carbon | mg/L | 10/27/00 | 5310C | 1.0 | < 1.0 |
| TOX | mg/L | 10/25/00 | 9020B | 0.050 | < 0.050 |

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Report Date: December 2, 2000 Page 1

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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 18, 2000
Project: 11e. (2) / 4th Sample

Contact: Jeff Low
Date Received October 18, 2000

Lab Sample ID:
L43169-04D

Field Sample ID:
GW-28

**TOTAL METALS**

| **Analytical Results** | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Calcium | mg/L | 11/1/00 | 6010B | 0.10 | **460** |
| Iron | mg/L | 11/1/00 | 6010B | 0.10 | < 0.10 |
| Magnesium | mg/L | 11/1/00 | 6010B | 0.10 | **710** |
| Potassium | mg/L | 11/1/00 | 6010B | 0.10 | **490** |
| Sodium | mg/L | 11/1/00 | 6010B | 0.10 | **14,000** |

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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 18, 2000
Project: 11e. (2) / 4th Sample

Contact: Jeff Low
Date Received October 18, 2000

Lab Sample ID:
L43169-04C

Field Sample ID:
GW-28

## DISSOLVED METALS

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 11/1/00 | 7060A | 0.010 | **0.080** |
| Barium | mg/L | 10/31/00 | 6010B | 0.0040 | **0.020** |
| Beryllium | mg/L | 10/31/00 | 6010B | 0.0020 | < 0.0020 |
| Cadmium | mg/L | 10/31/00 | 6010B | 0.0040 | < 0.0040 |
| Chromium | mg/L | 10/31/00 | 6010B | 0.0050 | < 0.0050 |
| Copper | mg/L | 10/31/00 | 6010B | 0.0080 | < 0.0080 |
| Lead | mg/L | 10/30/00 | 7421 | 0.0050 | < 0.0050 |
| Mercury | mg/L | 10/30/00 | 7470A | 0.00020 | < 0.0002 |
| Molybdenum | mg/L | 10/31/00 | 6010B | 0.040 | **0.32** |
| Nickel | mg/L | 10/31/00 | 6010B | 0.010 | < 0.010 |
| Selenium | mg/L | 11/7/00 | 7740 | 0.0050 | < 0.0050 |
| Silver | mg/L | 10/31/00 | 6010B | 0.0050 | < 0.0050 |
| Zinc | mg/L | 10/31/00 | 6010B | 0.10 | < 0.10 |

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Laboratory Supervisor

Report Date: December 2, 2000



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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: October 18, 2000
Received: October 18, 2000
Analysis Requested: 8260B/5030A
Lab Sample ID: L43169-05A
Field Sample ID: **GW-57**
Site ID: 11e. (2) / 4th Sample

Contact: Jeff Low
Analyzed: October 28, 2000

**Analytical Results** — **Volatile Organic Compounds**

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Acetone | 20 | < 20 |
| 2-Butanone | 20 | < 20 |
| Carbondisulfide | 2.0 | < 2.0 |
| Chloroform | 2.0 | < 2.0 |
| 1,2-Dichloroethane | 2.0 | < 2.0 |
| Methylene chloride | 2.0 | < 2.0 |
| 1,1,2-Trichloroethane | 50 | < 50 |
| Vinyl chloride | 50 | < 50 |

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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: October 18, 2000
Received: October 18, 2000
Analysis Requested: 8270C
Lab Sample ID: L43169-05B
Field Sample ID: **GW-57**
Site ID: 11e. (2) / 4th Sample

Contact: Jeff Low
Analyzed: October 26, 2000
Extracted: October 24, 2000

**Analytical Results** — **Semi Volatile Organics by GC/MS**

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Benz(a)anthracene | 100 | < 100 |
| Benzo(a)pyrene | 100 | < 100 |
| Benzo(b)fluoranthene | 100 | < 100 |
| Benzo(k)fluoranthene | 100 | < 100 |
| Chrysene | 100 | < 100 |
| Dibenz(a,h)anthracene | 100 | < 100 |
| Diethyl phthalate | 4.0 | < 4.0 |
| 2-Methylnaphthalene | 4.0 | < 4.0 |
| Naphthalene | 4.0 | < 4.0 |

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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: October 18, 2000
Received: October 18, 2000
Analysis Requested: 8081/3510B
Lab Sample ID: L43169-05B
Field Sample ID: **GW-57**
Site ID: 11e. (2) / 4th Sample

Contact: Jeff Low
Analyzed: October 25, 2000
Extracted: October 23, 2000

**Analytical Results** — **PESTICIDES**

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Chlordane | 10 | < 10 |

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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Contact: Jeff Low
Date Sampled: October 18, 2000
Date Received October 18, 2000
Project: 11e. (2) / 4th Sample

Lab Sample ID:
L43169-05C

Field Sample ID:
GW-57

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Bicarbonate (As CaCO3) | mg/L | 10/19/00 | 2320 B | 10 | **120** |
| Carbonate (As CaCO3) | mg/L | 10/19/00 | 2320 B | 10 | < 10 |
| Chloride | mg/L | 10/20/00 | 4500-CL B | 5.0 | **25,000** |
| Conductivity | µmhos/cm | 10/19/00 | 2510B | 10 | **59,000** |
| Cyanide | mg/L | 11/1/00 | 4500-CNE | 0.0050 | < 0.0050 |
| Fluoride | mg/L | 10/24/00 | 4500-FD | 0.50 | **3.4** |
| Ion Balance | | 11/20/00 | | 0 | -1.2 |
| Nitrate (as N) | mg/L | 10/19/00 | 4500-NO3F | 0.10 | **0.86** |
| Nitrate/Nitrite (as N) | mg/L | 10/19/00 | 4500-NO3F | 0.10 | **0.86** |
| pH | pH units | 10/19/00 | 4500/9040B | 0 | **7.47** |
| Sulfate | mg/L | 10/20/00 | 375.4 | 5.0 | **4,400** |
| TDS | mg/L | 10/20/00 | 2540C | 10 | **45,000** |
| Total Organic Carbon | mg/L | 10/27/00 | 5310C | 1.0 | < 1.0 |
| TOX | mg/L | 10/25/00 | 9020B | 0.050 | < 0.050 |

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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 18, 2000
Project: 11e. (2) / 4th Sample

Contact: Jeff Low
Date Received October 18, 2000

Lab Sample ID:
L43169-05D

Field Sample ID:
GW-57

**TOTAL METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Calcium | mg/L | 11/1/00 | 6010B | 0.10 | **800** |
| Iron | mg/L | 11/1/00 | 6010B | 0.10 | < 0.10 |
| Magnesium | mg/L | 11/1/00 | 6010B | 0.10 | **890** |
| Potassium | mg/L | 11/1/00 | 6010B | 0.10 | **530** |
| Sodium | mg/L | 11/1/00 | 6010B | 0.10 | **15,000** |

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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 18, 2000
Project: 11e. (2) / 4th Sample

Contact: Jeff Low
Date Received October 18, 2000

Lab Sample ID:
L43169-05C

Field Sample ID:
GW-57

## DISSOLVED METALS

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 11/1/00 | 7060A | 0.010 | **0.050** |
| Barium | mg/L | 10/31/00 | 6010B | 0.0040 | **0.020** |
| Beryllium | mg/L | 10/31/00 | 6010B | 0.0020 | < 0.0020 |
| Cadmium | mg/L | 10/31/00 | 6010B | 0.0040 | < 0.0040 |
| Chromium | mg/L | 10/31/00 | 6010B | 0.0050 | < 0.0050 |
| Copper | mg/L | 10/31/00 | 6010B | 0.0080 | < 0.0080 |
| Lead | mg/L | 10/30/00 | 7421 | 0.0050 | < 0.0050 |
| Mercury | mg/L | 10/30/00 | 7470A | 0.00020 | < 0.0002 |
| Molybdenum | mg/L | 10/31/00 | 6010B | 0.040 | **0.39** |
| Nickel | mg/L | 10/31/00 | 6010B | 0.010 | < 0.010 |
| Selenium | mg/L | 11/7/00 | 7740 | 0.0050 | < 0.0050 |
| Silver | mg/L | 10/31/00 | 6010B | 0.0050 | < 0.0050 |
| Zinc | mg/L | 10/31/00 | 6010B | 0.10 | < 0.10 |

Released by: _____
Laboratory Supervisor

Report Date: December 2, 2000



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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 18, 2000
Project: 11e. (2) Exceedance

Contact: Jeff Low
Date Received October 18, 2000

Lab Sample ID:
L43170-01A

Field Sample ID:
GW-60A

**DISSOLVED METALS**

| **Analytical Results** | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Barium | mg/L | 10/31/00 | 6010B | 0.0040 | **0.018** |

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Report Date: November 30, 2000 Page 1 of 1

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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 18, 2000
Project: 11e. (2) Exceedance

Contact: Jeff Low
Date Received October 18, 2000

Lab Sample ID:
L43170-02A

Field Sample ID:
GW-58A

**DISSOLVED METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Barium | mg/L | 10/31/00 | 6010B | 0.0040 | **0.022** |
| Selenium | mg/L | 11/7/00 | 7740 | 0.0050 | < 0.0050 |

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Laboratory Supervisor

Report Date: November 30, 2000



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Client: Envirocare of Utah
Date Sampled: October 18, 2000
Project: 11e. (2) Exceedance

Contact: Jeff Low
Date Received October 18, 2000

Lab Sample ID:
L43170-03A

Field Sample ID:
GW-28A

**DISSOLVED METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 11/1/00 | 7060A | 0.010 | **0.050** |
| Barium | mg/L | 10/31/00 | 6010B | 0.0040 | **0.020** |
| Silver | mg/L | 10/31/00 | 6010B | 0.0050 | < 0.0050 |

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Report Date: November 30, 2000



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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Contact: Jeff Low
Date Sampled: October 18, 2000
Date Received October 18, 2000
Project: 11e. (2) Exceedance

Lab Sample ID:
L43170-04A

Field Sample ID:
GW-303

**DISSOLVED METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 11/1/00 | 7060A | 0.010 | **0.050** |
| Barium | mg/L | 10/31/00 | 6010B | 0.0040 | **0.020** |
| Silver | mg/L | 10/31/00 | 6010B | 0.0050 | < 0.0050 |

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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 18, 2000
Project: 11e. (2) Exceedance

Contact: Jeff Low
Date Received October 18, 2000

Lab Sample ID:
L43170-05A

Field Sample ID:
GW-57A

**DISSOLVED METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 11/1/00 | 7060A | 0.010 | **0.020** |
| Barium | mg/L | 10/31/00 | 6010B | 0.0040 | **0.021** |
| Silver | mg/L | 10/31/00 | 6010B | 0.0050 | < 0.0050 |

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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 19, 2000
Project: 11e. (2) Exceedance

Contact: Jeff Low
Date Received October 19, 2000

Lab Sample ID:
L43200-01A

Field Sample ID:
GW-27A

**TOTAL METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 11/1/00 | 7060A | 0.010 | **0.080** |
| Barium | mg/L | 10/31/00 | 6010B | 0.0040 | **0.023** |
| Silver | mg/L | 10/31/00 | 6010B | 0.0050 | < 0.0050 |

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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 19, 2000
Project: 11e. (2) Exceedance

Contact: Jeff Low
Date Received October 19, 2000

Lab Sample ID:
L43200-02A

Field Sample ID:
GW-25A

**TOTAL METALS**

| **Analytical Results** | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 11/1/00 | 7060A | 0.010 | **0.070** |
| Barium | mg/L | 10/31/00 | 6010B | 0.0040 | **0.018** |
| Silver | mg/L | 10/31/00 | 6010B | 0.0050 | < 0.0050 |

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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: October 19, 2000
Received: October 19, 2000
Analysis Requested: 8260B/5030A
Lab Sample ID: L43201-01A
Field Sample ID: **GW-36**
Site ID: LARW/11e. (2)

Contact: Jeff Low
Analyzed: October 28, 2000

**Analytical Results** — **Volatile Organic Compounds**

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Acetone | 20 | < 20 |
| 2-Butanone | 20 | < 20 |
| Carbondisulfide | 2.0 | < 2.0 |
| Chloroform | 2.0 | < 2.0 |
| 1,2-Dichloroethane | 2.0 | < 2.0 |
| Methylene chloride | 2.0 | < 2.0 |
| 1,1,2-Trichloroethane | 50 | < 50 |
| Vinyl chloride | 50 | < 50 |

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Report Date: December 2, 2000



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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: October 19, 2000
Received: October 19, 2000
Analysis Requested: 8270C
Lab Sample ID: L43201-01B
Field Sample ID: **GW-36**
Site ID: LARW/11e. (2)

Contact: Jeff Low
Analyzed: October 26, 2000
Extracted: October 24, 2000

**Analytical Results** — **Semi Volatile Organics by GC/MS**

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Benz(a)anthracene | 100 | < 100 |
| Benzo(a)pyrene | 100 | < 100 |
| Benzo(b)fluoranthene | 100 | < 100 |
| Benzo(k)fluoranthene | 100 | < 100 |
| Chrysene | 100 | < 100 |
| Dibenz(a,h)anthracene | 100 | < 100 |
| Diethyl phthalate | 4.0 | < 4.0 |
| 2-Methylnaphthalene | 4.0 | < 4.0 |
| Naphthalene | 4.0 | < 4.0 |

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Report Date: December 2, 2000



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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: October 19, 2000
Received: October 19, 2000
Analysis Requested: 8081/3510B
Lab Sample ID: L43201-01B
Field Sample ID: **GW-36**
Site ID: LARW/11e. (2)

Contact: Jeff Low
Analyzed: October 25, 2000
Extracted: October 23, 2000

**Analytical Results** — **PESTICIDES**

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Chlordane | 10 | < 10 |

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Report Date: December 2, 2000 Page 1 of 1

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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 19, 2000
Project: LARW/11e. (2)

Contact: Jeff Low
Date Received October 19, 2000

Lab Sample ID:
L43201-01C

Field Sample ID:
GW-36

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Bicarbonate (As CaCO3) | mg/L | 10/24/00 | 2320 B | 10 | **150** |
| Carbonate (As CaCO3) | mg/L | 10/24/00 | 2320 B | 10 | < 10 |
| Chloride | mg/L | 10/24/00 | 4500-CL B | 5.0 | **21,000** |
| Conductivity | µmhos/cm | 10/23/00 | 2510B | 10 | **68,000** |
| Cyanide | mg/L | 11/1/00 | 4500-CNE | 0.0050 | < 0.0050 |
| Fluoride | mg/L | 10/24/00 | 4500-FD | 0.50 | **2.6** |
| Ion Balance | | 11/22/00 | | 0 | **0.23** |
| Nitrate (as N) | mg/L | 10/20/00 | 4500-NO3F | 0.10 | **1.2** |
| Nitrate/Nitrite (as N) | mg/L | 10/20/00 | 4500-NO3F | 0.10 | **1.2** |
| pH | pH units | 10/19/00 | 4500/9040B | 0 | **7.40** |
| Sulfate | mg/L | 10/24/00 | 375.4 | 5.0 | **2,500** |
| TDS | mg/L | 10/20/00 | 2540C | 10 | **38,000** |
| Total Organic Carbon | mg/L | 10/27/00 | 5310C | 1.0 | < 1.0 |
| TOX | mg/L | 10/25/00 | 9020B | 0.050 | < 0.050 |

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Report Date: December 2, 2000



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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 19, 2000
Project: LARW/11e. (2)

Contact: Jeff Low
Date Received October 19, 2000

Lab Sample ID:
L43201-01D

Field Sample ID:
GW-36

**TOTAL METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Calcium | mg/L | 11/1/00 | 6010B | 0.10 | **460** |
| Iron | mg/L | 11/1/00 | 6010B | 0.10 | < 0.10 |
| Magnesium | mg/L | 11/1/00 | 6010B | 0.10 | **610** |
| Potassium | mg/L | 11/1/00 | 6010B | 0.10 | **440** |
| Sodium | mg/L | 11/1/00 | 6010B | 0.10 | **13,000** |

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Report Date: December 2, 2000 Page 1 of 1

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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 19, 2000
Project: LARW/11e. (2)

Contact: Jeff Low
Date Received October 19, 2000

Lab Sample ID:
L43201-01C

Field Sample ID:
GW-36

## DISSOLVED METALS

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 11/1/00 | 7060A | 0.010 | **0.030** |
| Barium | mg/L | 10/31/00 | 6010B | 0.0040 | **0.020** |
| Beryllium | mg/L | 10/31/00 | 6010B | 0.0020 | < 0.0020 |
| Cadmium | mg/L | 10/31/00 | 6010B | 0.0040 | < 0.0040 |
| Chromium | mg/L | 10/31/00 | 6010B | 0.0050 | < 0.0050 |
| Copper | mg/L | 10/31/00 | 6010B | 0.0080 | **0.0090** |
| Lead | mg/L | 11/1/00 | 7421 | 0.0050 | < 0.0050 |
| Mercury | mg/L | 10/30/00 | 7470A | 0.00020 | < 0.0002 |
| Molybdenum | mg/L | 10/31/00 | 6010B | 0.040 | **0.23** |
| Nickel | mg/L | 10/31/00 | 6010B | 0.010 | < 0.010 |
| Selenium | mg/L | 11/1/00 | 7740 | 0.0050 | < 0.0050 |
| Silver | mg/L | 10/31/00 | 6010B | 0.0050 | < 0.0050 |
| Zinc | mg/L | 10/31/00 | 6010B | 0.10 | < 0.10 |

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Laboratory Supervisor

Report Date: December 6, 2000



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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: October 19, 2000
Received: October 19, 2000
Analysis Requested: 8260B/5030A
Lab Sample ID: L43201-02A
Field Sample ID: **GW-27**
Site ID: LARW/11e. (2)

Contact: Jeff Low
Analyzed: October 28, 2000

**Analytical Results** — **Volatile Organic Compounds**

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Acetone | 20 | < 20 |
| 2-Butanone | 20 | < 20 |
| Carbondisulfide | 2.0 | < 2.0 |
| Chloroform | 2.0 | < 2.0 |
| 1,2-Dichloroethane | 2.0 | < 2.0 |
| Methylene chloride | 2.0 | < 2.0 |
| 1,1,2-Trichloroethane | 50 | < 50 |
| Vinyl chloride | 50 | < 50 |

Released by: _____
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Report Date: December 2, 2000 

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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: October 19, 2000
Received: October 19, 2000
Analysis Requested: 8270C
Lab Sample ID: L43201-02B
Field Sample ID: **GW-27**
Site ID: LARW/11e. (2)

Contact: Jeff Low
Analyzed: October 26, 2000
Extracted: October 24, 2000

**Analytical Results** — **Semi Volatile Organics by GC/MS**

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Benz(a)anthracene | 100 | < 100 |
| Benzo(a)pyrene | 100 | < 100 |
| Benzo(b)fluoranthene | 100 | < 100 |
| Benzo(k)fluoranthene | 100 | < 100 |
| Chrysene | 100 | < 100 |
| Dibenz(a,h)anthracene | 100 | < 100 |
| Diethyl phthalate | 4.0 | < 4.0 |
| 2-Methylnaphthalene | 4.0 | < 4.0 |
| Naphthalene | 4.0 | < 4.0 |

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Report Date: December 2, 2000



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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: October 19, 2000
Received: October 19, 2000
Analysis Requested: 8081/3510B
Lab Sample ID: L43201-02B
Field Sample ID: **GW-27**
Site ID: LARW/11e. (2)

Contact: Jeff Low
Analyzed: October 25, 2000
Extracted: October 23, 2000

**Analytical Results**

## PESTICIDES

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Chlordane | 10 | < 10 |

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Report Date: December 2, 2000



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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 19, 2000
Project: LARW/11e. (2)

Contact: Jeff Low
Date Received October 19, 2000

Lab Sample ID:
L43201-02C

Field Sample ID:
GW-27

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Bicarbonate (As CaCO3) | mg/L | 10/24/00 | 2320 B | 10 | **150** |
| Carbonate (As CaCO3) | mg/L | 10/24/00 | 2320 B | 10 | < 10 |
| Chloride | mg/L | 10/24/00 | 4500-CL B | 5.0 | **27,000** |
| Conductivity | µmhos/cm | 10/23/00 | 2510B | 10 | **73,000** |
| Cyanide | mg/L | 11/1/00 | 4500-CNE | 0.0050 | < 0.0050 |
| Fluoride | mg/L | 10/24/00 | 4500-FD | 0.50 | **3.6** |
| Ion Balance | | 11/22/00 | | 0 | -2.2 |
| Nitrate (as N) | mg/L | 10/20/00 | 4500-NO3F | 0.10 | **1.4** |
| Nitrate/Nitrite (as N) | mg/L | 10/20/00 | 4500-NO3F | 0.10 | **1.4** |
| pH | pH units | 10/19/00 | 4500/9040B | 0 | **7.20** |
| Sulfate | mg/L | 10/24/00 | 375.4 | 5.0 | **4,500** |
| TDS | mg/L | 10/20/00 | 2540C | 10 | **48,000** |
| Total Organic Carbon | mg/L | 10/27/00 | 5310C | 1.0 | < 1.0 |
| TOX | mg/L | 10/25/00 | 9020B | 0.050 | < 0.050 |

Released by: _____
Laboratory Supervisor

Report Date: December 2, 2000 Page 1 of 1

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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 19, 2000
Project: LARW/11e. (2)

Contact: Jeff Low
Date Received October 19, 2000

Lab Sample ID:
L43201-02D

Field Sample ID:
GW-27

**TOTAL METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Calcium | mg/L | 11/1/00 | 6010B | 0.10 | **650** |
| Iron | mg/L | 11/1/00 | 6010B | 0.10 | < 0.10 |
| Magnesium | mg/L | 11/1/00 | 6010B | 0.10 | **960** |
| Potassium | mg/L | 11/1/00 | 6010B | 0.10 | **540** |
| Sodium | mg/L | 11/1/00 | 6010B | 0.10 | **16,000** |

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Report Date: December 2, 2000



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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 19, 2000
Project: LARW/11e. (2)

Contact: Jeff Low
Date Received October 19, 2000

Lab Sample ID:
L43201-02C

Field Sample ID:
GW-27

**DISSOLVED METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 11/1/00 | 7060A | 0.010 | **0.070** |
| Barium | mg/L | 10/31/00 | 6010B | 0.0040 | **0.023** |
| Beryllium | mg/L | 10/31/00 | 6010B | 0.0020 | < 0.0020 |
| Cadmium | mg/L | 10/31/00 | 6010B | 0.0040 | < 0.0040 |
| Chromium | mg/L | 10/31/00 | 6010B | 0.0050 | < 0.0050 |
| Copper | mg/L | 10/31/00 | 6010B | 0.0080 | < 0.0080 |
| Lead | mg/L | 11/1/00 | 7421 | 0.0050 | < 0.0050 |
| Mercury | mg/L | 10/30/00 | 7470A | 0.00020 | < 0.0002 |
| Molybdenum | mg/L | 10/31/00 | 6010B | 0.040 | **0.57** |
| Nickel | mg/L | 10/31/00 | 6010B | 0.010 | < 0.010 |
| Selenium | mg/L | 11/1/00 | 7740 | 0.0050 | < 0.0050 |
| Silver | mg/L | 10/31/00 | 6010B | 0.0050 | < 0.0050 |
| Zinc | mg/L | 10/31/00 | 6010B | 0.10 | < 0.10 |

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Laboratory Supervisor

Report Date: December 6, 2000



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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: October 19, 2000
Received: October 19, 2000
Analysis Requested: 8260B/5030A
Lab Sample ID: L43201-03A
Field Sample ID: **GW-25**
Site ID: LARW/11e. (2)

Contact: Jeff Low
Analyzed: October 31, 2000

## Analytical Results — Volatile Organic Compounds

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Acetone | 20 | < 20 |
| 2-Butanone | 20 | < 20 |
| Carbondisulfide | 2.0 | < 2.0 |
| Chloroform | 2.0 | < 2.0 |
| 1,2-Dichloroethane | 2.0 | < 2.0 |
| Methylene chloride | 2.0 | < 2.0 |
| 1,1,2-Trichloroethane | 50 | < 50 |
| Vinyl chloride | 50 | < 50 |

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Report Date: December 2, 2000



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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: October 19, 2000
Received: October 19, 2000
Analysis Requested: 8270C
Lab Sample ID: L43201-03B
Field Sample ID: **GW-25**
Site ID: LARW/11e. (2)

Contact: Jeff Low
Analyzed: October 26, 2000
Extracted: October 24, 2000

**Analytical Results** — **Semi Volatile Organics by GC/MS**

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Benz(a)anthracene | 100 | < 100 |
| Benzo(a)pyrene | 100 | < 100 |
| Benzo(b)fluoranthene | 100 | < 100 |
| Benzo(k)fluoranthene | 100 | < 100 |
| Chrysene | 100 | < 100 |
| Dibenz(a,h)anthracene | 100 | < 100 |
| Diethyl phthalate | 4.0 | < 4.0 |
| 2-Methylnaphthalene | 4.0 | < 4.0 |
| Naphthalene | 4.0 | < 4.0 |

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Report Date: December 2, 2000 

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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: October 19, 2000
Received: October 19, 2000
Analysis Requested: 8081/3510B
Lab Sample ID: L43201-03B
Field Sample ID: **GW-25**
Site ID: LARW/11e. (2)

Contact: Jeff Low
Analyzed: October 25, 2000
Extracted: October 23, 2000

**Analytical Results**

## PESTICIDES

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Chlordane | 10 | < 10 |

The sample was received unpreserved.

Released by: _____
Laboratory Supervisor

Report Date: December 2, 2000



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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 19, 2000
Project: LARW/11e. (2)

Contact: Jeff Low
Date Received October 19, 2000

Lab Sample ID:
L43201-03C

Field Sample ID:
GW-25

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Bicarbonate (As CaCO3) | mg/L | 10/24/00 | 2320 B | 10 | **190** |
| Carbonate (As CaCO3) | mg/L | 10/24/00 | 2320 B | 10 | < 10 |
| Chloride | mg/L | 10/24/00 | 4500-CL B | 5.0 | **27,000** |
| Conductivity | µmhos/cm | 10/23/00 | 2510B | 10 | **70,000** |
| Cyanide | mg/L | 11/1/00 | 4500-CNE | 0.0050 | < 0.0050 |
| Fluoride | mg/L | 10/24/00 | 4500-FD | 0.50 | **3.4** |
| Ion Balance | | 11/22/00 | | 0 | -2.4 |
| Nitrate (as N) | mg/L | 10/20/00 | 4500-NO3F | 0.10 | **0.62** |
| Nitrate/Nitrite (as N) | mg/L | 10/20/00 | 4500-NO3F | 0.10 | **0.62** |
| pH | pH units | 10/19/00 | 4500/9040B | 0 | **7.20** |
| Sulfate | mg/L | 10/24/00 | 375.4 | 5.0 | **4,000** |
| TDS | mg/L | 10/20/00 | 2540C | 10 | **43,000** |
| Total Organic Carbon | mg/L | 10/27/00 | 5310C | 1.0 | < 1.0 |
| TOX | mg/L | 10/25/00 | 9020B | 0.050 | < 0.050 |

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Report Date: December 2, 2000



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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 19, 2000
Project: LARW/11e. (2)

Contact: Jeff Low
Date Received October 19, 2000

Lab Sample ID:
L43201-03D

Field Sample ID:
GW-25

**TOTAL METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Calcium | mg/L | 11/1/00 | 6010B | 0.10 | **560** |
| Iron | mg/L | 11/1/00 | 6010B | 0.10 | < 0.10 |
| Magnesium | mg/L | 11/1/00 | 6010B | 0.10 | **850** |
| Potassium | mg/L | 11/1/00 | 6010B | 0.10 | **570** |
| Sodium | mg/L | 11/1/00 | 6010B | 0.10 | **16,000** |

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Laboratory Supervisor

Report Date: December 2, 2000 Page 1 of 1

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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 19, 2000
Project: LARW/11e. (2)

Contact: Jeff Low
Date Received October 19, 2000

Lab Sample ID:
L43201-03C

Field Sample ID:
GW-25

**DISSOLVED METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 11/1/00 | 7060A | 0.010 | **0.060** |
| Barium | mg/L | 10/31/00 | 6010B | 0.0040 | **0.018** |
| Beryllium | mg/L | 10/31/00 | 6010B | 0.0020 | < 0.0020 |
| Cadmium | mg/L | 10/31/00 | 6010B | 0.0040 | < 0.0040 |
| Chromium | mg/L | 10/31/00 | 6010B | 0.0050 | < 0.0050 |
| Copper | mg/L | 10/31/00 | 6010B | 0.0080 | **0.0090** |
| Lead | mg/L | 11/1/00 | 7421 | 0.0050 | < 0.0050 |
| Mercury | mg/L | 10/30/00 | 7470A | 0.00020 | < 0.0002 |
| Molybdenum | mg/L | 10/31/00 | 6010B | 0.040 | **0.23** |
| Nickel | mg/L | 10/31/00 | 6010B | 0.010 | < 0.010 |
| Selenium | mg/L | 11/1/00 | 7740 | 0.0050 | < 0.0050 |
| Silver | mg/L | 10/31/00 | 6010B | 0.0050 | < 0.0050 |
| Zinc | mg/L | 10/31/00 | 6010B | 0.10 | < 0.10 |

Released by: Scott
Laboratory Supervisor

Report Date: December 6, 2000



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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Contact: Jeff Low
Date Sampled: October 23, 2000
Date Received October 24, 2000
Project: LARW/11e. (2) Exceedance

Lab Sample ID:
L43238-01A

Field Sample ID:
GW-26A

## DISSOLVED METALS

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 11/7/00 | 7060A | 0.010 | **0.28** |
| Barium | mg/L | 11/6/00 | 6010B | 0.0040 | **0.018** |
| Selenium | mg/L | 11/7/00 | 7740 | 0.0050 | **0.030** |
| Silver | mg/L | 11/6/00 | 6010B | 0.0050 | < 0.0050 |

Released by: _____
Laboratory Supervisor

Report Date: November 30, 2000 Page 1 of 1

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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 23, 2000
Project: LARW/11e. (2) Exceedance

Contact: Jeff Low
Date Received October 24, 2000

Lab Sample ID:
L43238-03A

Field Sample ID:
GW-20A

## DISSOLVED METALS

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 11/7/00 | 7060A | 0.010 | **0.030** |
| Barium | mg/L | 11/6/00 | 6010B | 0.0040 | **0.019** |
| Silver | mg/L | 11/6/00 | 6010B | 0.0050 | < 0.0050 |

Released by: Laboratory Supervisor

Report Date: November 30, 2000



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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 23, 2000
Project: LARW/11e. (2) Exceedance

Contact: Jeff Low
Date Received October 24, 2000

Lab Sample ID:
L43238-04A

Field Sample ID:
GW-24A

**DISSOLVED METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Barium | mg/L | 11/6/00 | 6010B | 0.0040 | **0.022** |

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Report Date: November 30, 2000



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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: October 23, 2000
Received: October 24, 2000
Analysis Requested: 8081/3510B
Lab Sample ID: L43238-01B
Field Sample ID: **GW-26**
Site ID: LARW/11e. (2) Exceedance

Contact: Jeff Low
Analyzed: October 31, 2000
Extracted: October 25, 2000

**Analytical Results** **PESTICIDES**

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Chlordane | 10 | < 10 |

Released by: _____
Laboratory Supervisor

Report Date: November 30, 2000 Page 1 of 1

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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: October 23, 2000
Received: October 24, 2000
Analysis Requested: 8081/3510B
Lab Sample ID: L43238-02B
Field Sample ID: **GW-401**
Site ID: LARW/11e. (2) Exceedance

Contact: Jeff Low
Analyzed: October 31, 2000
Extracted: October 25, 2000

**Analytical Results** — **PESTICIDES**

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Chlordane | 10 | < 10 |

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Report Date: November 30, 2000 Page 1 of 1

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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: October 23, 2000
Received: October 24, 2000
Analysis Requested: 8260B/5030A
Lab Sample ID: L43239-01A
Field Sample ID: **GW-26**
Site ID: LARW/11e. (2)

Contact: Jeff Low
Analyzed: October 31, 2000

**Analytical Results** — **Volatile Organic Compounds**

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Acetone | 20 | < 20 |
| 2-Butanone | 20 | < 20 |
| Carbondisulfide | 2.0 | < 2.0 |
| Chloroform | 2.0 | < 2.0 |
| 1,2-Dichloroethane | 2.0 | < 2.0 |
| Methylene chloride | 2.0 | < 2.0 |
| 1,1,2-Trichloroethane | 50 | < 50 |
| Vinyl chloride | 50 | < 50 |

Released by: _____
Laboratory Supervisor

Report Date: December 2, 2000



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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: October 23, 2000
Received: October 24, 2000
Analysis Requested: 8270C
Lab Sample ID: L43239-01B
Field Sample ID: **GW-26**
Site ID: LARW/11e. (2)

Contact: Jeff Low
Analyzed: October 31, 2000
Extracted: October 30, 2000

**Analytical Results** — **Semi Volatile Organics by GC/MS**

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Benz(a)anthracene | 100 | < 100 |
| Benzo(a)pyrene | 100 | < 100 |
| Benzo(b)fluoranthene | 100 | < 100 |
| Benzo(k)fluoranthene | 100 | < 100 |
| Chrysene | 100 | < 100 |
| Dibenz(a,h)anthracene | 100 | < 100 |
| Diethyl phthalate | 4.0 | < 4.0 |
| 2-Methylnaphthalene | 4.0 | < 4.0 |
| Naphthalene | 4.0 | < 4.0 |

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Report Date: December 2, 2000 

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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: October 23, 2000
Received: October 24, 2000
Analysis Requested: 8081/3510B
Lab Sample ID: L43239-01B
Field Sample ID: **GW-26**
Site ID: LARW/11e. (2)

Contact: Jeff Low
Analyzed: October 31, 2000
Extracted: October 25, 2000

**Analytical Results** — **PESTICIDES**

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Chlordane | 10 | < 10 |

Released by: _____
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Report Date: December 2, 2000 Page 1 of 1

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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 23, 2000
Project: LARW/11e. (2)

Contact: Jeff Low
Date Received October 24, 2000

Lab Sample ID:
L43239-01C

Field Sample ID:
GW-26

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Bicarbonate (As CaCO3) | mg/L | 10/30/00 | 2320 B | 10 | **100** |
| Carbonate (As CaCO3) | mg/L | 10/30/00 | 2320 B | 10 | < 10 |
| Chloride | mg/L | 10/30/00 | 4500-CL B | 5.0 | **29,000** |
| Conductivity | µmhos/cm | 10/30/00 | 2510B | 10 | **89,000** |
| Cyanide | mg/L | 11/7/00 | 4500-CNE | 0.0050 | < 0.0050 |
| Fluoride | mg/L | 11/6/00 | 4500-FD | 0.50 | **5.1** |
| Ion Balance | | 11/22/00 | | 0 | **1.5** |
| Nitrate (as N) | mg/L | 10/25/00 | 4500-NO3F | 0.10 | **2.4** |
| Nitrate/Nitrite (as N) | mg/L | 10/25/00 | 4500-NO3F | 0.10 | **2.4** |
| pH | pH units | 10/24/00 | 4500/9040B | 0 | **7.37** |
| Sulfate | mg/L | 10/30/00 | 375.4 | 5.0 | **4,000** |
| TDS | mg/L | 10/31/00 | 2540C | 10 | **54,000** |
| Total Organic Carbon | mg/L | 10/27/00 | 5310C | 1.0 | < 1.0 |
| TOX | mg/L | 10/25/00 | 9020B | 0.050 | < 0.050 |

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Report Date: December 2, 2000



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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 23, 2000
Project: LARW/11e. (2)

Contact: Jeff Low
Date Received October 24, 2000

Lab Sample ID:
L43239-01D

Field Sample ID:
GW-26

**TOTAL METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Calcium | mg/L | 11/1/00 | 6010B | 0.10 | **830** |
| Iron | mg/L | 11/1/00 | 6010B | 0.10 | < 0.10 |
| Magnesium | mg/L | 11/1/00 | 6010B | 0.10 | **1,100** |
| Potassium | mg/L | 11/1/00 | 6010B | 0.10 | **590** |
| Sodium | mg/L | 11/1/00 | 6010B | 0.10 | **18,000** |

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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 23, 2000
Project: LARW/11e. (2)

Contact: Jeff Low
Date Received October 24, 2000

Lab Sample ID:
L43239-01C

Field Sample ID:
GW-26

## DISSOLVED METALS

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 11/7/00 | 7060A | 0.010 | **0.29** |
| Barium | mg/L | 11/6/00 | 6010B | 0.0040 | **0.018** |
| Beryllium | mg/L | 11/6/00 | 6010B | 0.0020 | < 0.0020 |
| Cadmium | mg/L | 11/6/00 | 6010B | 0.0040 | < 0.0040 |
| Chromium | mg/L | 11/6/00 | 6010B | 0.0050 | < 0.0050 |
| Copper | mg/L | 11/6/00 | 6010B | 0.0080 | **0.013** |
| Lead | mg/L | 11/3/00 | 7421 | 0.0050 | < 0.0050 |
| Mercury | mg/L | 11/2/00 | 7470A | 0.00020 | < 0.0002 |
| Molybdenum | mg/L | 11/6/00 | 6010B | 0.040 | **0.58** |
| Nickel | mg/L | 11/6/00 | 6010B | 0.010 | < 0.010 |
| Selenium | mg/L | 11/7/00 | 7740 | 0.0050 | < 0.0050 |
| Silver | mg/L | 11/6/00 | 6010B | 0.0050 | < 0.0050 |
| Zinc | mg/L | 11/6/00 | 6010B | 0.10 | < 0.10 |

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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: October 23, 2000
Received: October 24, 2000
Analysis Requested: 8260B/5030A
Lab Sample ID: L43239-02A
Field Sample ID: **GW-20**
Site ID: LARW/11e. (2)

Contact: Jeff Low
Analyzed: October 31, 2000

**Analytical Results** — **Volatile Organic Compounds**

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Acetone | 20 | < 20 |
| 2-Butanone | 20 | < 20 |
| Carbondisulfide | 2.0 | < 2.0 |
| Chloroform | 2.0 | < 2.0 |
| 1,2-Dichloroethane | 2.0 | < 2.0 |
| Methylene chloride | 2.0 | < 2.0 |
| 1,1,2-Trichloroethane | 50 | < 50 |
| Vinyl chloride | 50 | < 50 |

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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: October 23, 2000
Received: October 24, 2000
Analysis Requested: 8270C
Lab Sample ID: L43239-02B
Field Sample ID: **GW-20**
Site ID: LARW/11e. (2)

Contact: Jeff Low
Analyzed: October 31, 2000
Extracted: October 30, 2000

**Analytical Results** — **Semi Volatile Organics by GC/MS**

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Benz(a)anthracene | 100 | < 100 |
| Benzo(a)pyrene | 100 | < 100 |
| Benzo(b)fluoranthene | 100 | < 100 |
| Benzo(k)fluoranthene | 100 | < 100 |
| Chrysene | 100 | < 100 |
| Dibenz(a,h)anthracene | 100 | < 100 |
| Diethyl phthalate | 4.0 | < 4.0 |
| 2-Methylnaphthalene | 4.0 | < 4.0 |
| Naphthalene | 4.0 | < 4.0 |

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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: October 23, 2000
Received: October 24, 2000
Analysis Requested: 8081/3510B
Lab Sample ID: L43239-02B
Field Sample ID: **GW-20**
Site ID: LARW/11e. (2)

Contact: Jeff Low
Analyzed: October 31, 2000
Extracted: October 25, 2000

**Analytical Results** — **PESTICIDES**

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Chlordane | 10 | < 10 |

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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 23, 2000
Project: LARW/11e. (2)

Contact: Jeff Low
Date Received October 24, 2000

Lab Sample ID:
L43239-02C

Field Sample ID:
GW-20

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Bicarbonate (As CaCO3) | mg/L | 10/30/00 | 2320 B | 10 | **180** |
| Carbonate (As CaCO3) | mg/L | 10/30/00 | 2320 B | 10 | < 10 |
| Chloride | mg/L | 10/30/00 | 4500-CL B | 5.0 | **28,000** |
| Conductivity | µmhos/cm | 10/30/00 | 2510B | 10 | **88,000** |
| Cyanide | mg/L | 11/7/00 | 4500-CNE | 0.0050 | < 0.0050 |
| Fluoride | mg/L | 11/6/00 | 4500-FD | 0.50 | **4.7** |
| Ion Balance | | 11/22/00 | | 0 | -2.0 |
| Nitrate (as N) | mg/L | 10/25/00 | 4500-NO3F | 0.10 | **1.9** |
| Nitrate/Nitrite (as N) | mg/L | 10/25/00 | 4500-NO3F | 0.10 | **1.9** |
| pH | pH units | 10/24/00 | 4500/9040B | 0 | **7.25** |
| Sulfate | mg/L | 10/30/00 | 375.4 | 5.0 | **4,300** |
| TDS | mg/L | 10/31/00 | 2540C | 10 | **45,000** |
| Total Organic Carbon | mg/L | 10/27/00 | 5310C | 1.0 | < 1.0 |
| TOX | mg/L | 10/25/00 | 9020B | 0.050 | < 0.050 |

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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 23, 2000
Project: LARW/11e. (2)

Contact: Jeff Low
Date Received October 24, 2000

Lab Sample ID:
L43239-02D

Field Sample ID:
GW-20

**TOTAL METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Calcium | mg/L | 11/1/00 | 6010B | 0.10 | **570** |
| Iron | mg/L | 11/1/00 | 6010B | 0.10 | < 0.10 |
| Magnesium | mg/L | 11/1/00 | 6010B | 0.10 | **800** |
| Potassium | mg/L | 11/1/00 | 6010B | 0.10 | **530** |
| Sodium | mg/L | 11/1/00 | 6010B | 0.10 | **17,000** |

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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 23, 2000
Project: LARW/11e. (2)

Contact: Jeff Low
Date Received October 24, 2000

Lab Sample ID:
L43239-02C

Field Sample ID:
GW-20

## DISSOLVED METALS

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 11/7/00 | 7060A | 0.010 | **0.030** |
| Barium | mg/L | 11/6/00 | 6010B | 0.0040 | **0.019** |
| Beryllium | mg/L | 11/6/00 | 6010B | 0.0020 | < 0.0020 |
| Cadmium | mg/L | 11/6/00 | 6010B | 0.0040 | < 0.0040 |
| Chromium | mg/L | 11/6/00 | 6010B | 0.0050 | < 0.0050 |
| Copper | mg/L | 11/6/00 | 6010B | 0.0080 | **0.017** |
| Lead | mg/L | 11/3/00 | 7421 | 0.0050 | < 0.0050 |
| Mercury | mg/L | 11/2/00 | 7470A | 0.00020 | < 0.0002 |
| Molybdenum | mg/L | 11/6/00 | 6010B | 0.040 | **0.19** |
| Nickel | mg/L | 11/6/00 | 6010B | 0.010 | < 0.010 |
| Selenium | mg/L | 11/7/00 | 7740 | 0.0050 | < 0.0050 |
| Silver | mg/L | 11/6/00 | 6010B | 0.0050 | < 0.0050 |
| Zinc | mg/L | 11/6/00 | 6010B | 0.10 | < 0.10 |

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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: October 23, 2000
Received: October 24, 2000
Analysis Requested: 8260B/5030A
Lab Sample ID: L43239-03A
Field Sample ID: **GW-24**
Site ID: LARW/11e. (2)

Contact: Jeff Low
Analyzed: October 31, 2000

**Analytical Results** — **Volatile Organic Compounds**

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Acetone | 20 | < 20 |
| 2-Butanone | 20 | < 20 |
| Carbondisulfide | 2.0 | < 2.0 |
| Chloroform | 2.0 | < 2.0 |
| 1,2-Dichloroethane | 2.0 | < 2.0 |
| Methylene chloride | 2.0 | < 2.0 |
| 1,1,2-Trichloroethane | 50 | < 50 |
| Vinyl chloride | 50 | < 50 |

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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: October 23, 2000
Received: October 24, 2000
Analysis Requested: 8270C
Lab Sample ID: L43239-03B
Field Sample ID: **GW-24**
Site ID: LARW/11e. (2)

Contact: Jeff Low
Analyzed: October 31, 2000
Extracted: October 30, 2000

**Analytical Results** — **Semi Volatile Organics by GC/MS**

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Benz(a)anthracene | 100 | < 100 |
| Benzo(a)pyrene | 100 | < 100 |
| Benzo(b)fluoranthene | 100 | < 100 |
| Benzo(k)fluoranthene | 100 | < 100 |
| Chrysene | 100 | < 100 |
| Dibenz(a,h)anthracene | 100 | < 100 |
| Diethyl phthalate | 4.0 | < 4.0 |
| 2-Methylnaphthalene | 4.0 | < 4.0 |
| Naphthalene | 4.0 | < 4.0 |

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Report Date: December 2, 2000 Page 1 of 1

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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: October 23, 2000
Received: October 24, 2000
Analysis Requested: 8081/3510B
Lab Sample ID: L43239-03B
Field Sample ID: **GW-24**
Site ID: LARW/11e. (2)

Contact: Jeff Low
Analyzed: October 31, 2000
Extracted: October 25, 2000

**Analytical Results** — **PESTICIDES**

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Chlordane | 10 | < 10 |

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Report Date: December 2, 2000 Page 1 of 1

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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 23, 2000
Project: LARW/11e. (2)

Contact: Jeff Low
Date Received October 24, 2000

Lab Sample ID:
L43239-03C

Field Sample ID:
GW-24

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Bicarbonate (As CaCO3) | mg/L | 10/30/00 | 2320 B | 10 | **230** |
| Carbonate (As CaCO3) | mg/L | 10/30/00 | 2320 B | 10 | < 10 |
| Chloride | mg/L | 10/30/00 | 4500-CL B | 5.0 | **22,000** |
| Conductivity | µmhos/cm | 10/30/00 | 2510B | 10 | **76,000** |
| Cyanide | mg/L | 11/7/00 | 4500-CNE | 0.0050 | < 0.0050 |
| Fluoride | mg/L | 11/6/00 | 4500-FD | 0.50 | **4.1** |
| Ion Balance | | 11/22/00 | | 0 | -0.73 |
| Nitrate (as N) | mg/L | 10/25/00 | 4500-NO3F | 0.10 | **1.1** |
| Nitrate/Nitrite (as N) | mg/L | 10/25/00 | 4500-NO3F | 0.10 | **1.1** |
| pH | pH units | 10/24/00 | 4500/9040B | 0 | **7.30** |
| Sulfate | mg/L | 10/30/00 | 375.4 | 5.0 | **3,600** |
| TDS | mg/L | 10/31/00 | 2540C | 10 | **40,000** |
| Total Organic Carbon | mg/L | 10/27/00 | 5310C | 1.0 | < 1.0 |
| TOX | mg/L | 10/25/00 | 9020B | 0.050 | < 0.050 |

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Client: Envirocare of Utah
Date Sampled: October 23, 2000
Project: LARW/11e. (2)

Contact: Jeff Low
Date Received October 24, 2000

Lab Sample ID:
L43239-03D

Field Sample ID:
GW-24

**TOTAL METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Calcium | mg/L | 11/1/00 | 6010B | 0.10 | **400** |
| Iron | mg/L | 11/1/00 | 6010B | 0.10 | < 0.10 |
| Magnesium | mg/L | 11/1/00 | 6010B | 0.10 | **590** |
| Potassium | mg/L | 11/1/00 | 6010B | 0.10 | **460** |
| Sodium | mg/L | 11/1/00 | 6010B | 0.10 | **14,000** |

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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 23, 2000
Project: LARW/11e. (2)

Contact: Jeff Low
Date Received October 24, 2000

Lab Sample ID:
L43239-03C

Field Sample ID:
GW-24

## DISSOLVED METALS

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 11/7/00 | 7060A | 0.010 | **0.030** |
| Barium | mg/L | 11/6/00 | 6010B | 0.0040 | **0.022** |
| Beryllium | mg/L | 11/6/00 | 6010B | 0.0020 | < 0.0020 |
| Cadmium | mg/L | 11/6/00 | 6010B | 0.0040 | < 0.0040 |
| Chromium | mg/L | 11/6/00 | 6010B | 0.0050 | < 0.0050 |
| Copper | mg/L | 11/6/00 | 6010B | 0.0080 | **0.017** |
| Lead | mg/L | 11/3/00 | 7421 | 0.0050 | < 0.0050 |
| Mercury | mg/L | 11/2/00 | 7470A | 0.00020 | < 0.0002 |
| Molybdenum | mg/L | 11/6/00 | 6010B | 0.040 | **0.22** |
| Nickel | mg/L | 11/6/00 | 6010B | 0.010 | < 0.010 |
| Selenium | mg/L | 11/7/00 | 7740 | 0.0050 | < 0.0050 |
| Silver | mg/L | 11/6/00 | 6010B | 0.0050 | < 0.0050 |
| Zinc | mg/L | 11/6/00 | 6010B | 0.10 | < 0.10 |

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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 23, 2000
Project: LARW/11e. (2)

Contact: Jeff Low
Date Received October 24, 2000

Lab Sample ID:
L43239-04A

Field Sample ID:
GW-23

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Bicarbonate (As CaCO3) | mg/L | 10/30/00 | 2320 B | 10 | **280** |
| Carbonate (As CaCO3) | mg/L | 10/30/00 | 2320 B | 10 | < 10 |
| Chloride | mg/L | 10/30/00 | 4500-CL B | 5.0 | **24,000** |
| Conductivity | µmhos/cm | 10/30/00 | 2510B | 10 | **82,000** |
| Cyanide | mg/L | 11/7/00 | 4500-CNE | 0.010 | < 0.010 |
| Fluoride | mg/L | 11/6/00 | 4500-FD | 1.0 | **4.4** |
| Ion Balance | | 11/22/00 | | 0 | -3.2 |
| Nitrate (as N) | mg/L | 10/25/00 | 4500-NO3F | 0.10 | **0.16** |
| Nitrate/Nitrite (as N) | mg/L | 10/25/00 | 4500-NO3F | 0.10 | **0.16** |
| pH | pH units | 10/24/00 | 4500/9040B | 0 | **7.14** |
| Sulfate | mg/L | 10/30/00 | 375.4 | 5.0 | **3,100** |
| TDS | mg/L | 10/31/00 | 2540C | 10 | **40,000** |
| Total Organic Carbon | mg/L | 10/27/00 | 5310C | 1.0 | < 1.0 |
| TOX | mg/L | 10/25/00 | 9020B | 0.050 | < 0.050 |

Released by: _____
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Report Date: December 2, 2000 Page 1 of 1

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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 23, 2000
Project: LARW/11e. (2)

Contact: Jeff Low
Date Received October 24, 2000

Lab Sample ID:
L43239-04B

Field Sample ID:
GW-23

**TOTAL METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Calcium | mg/L | 11/1/00 | 6010B | 0.050 | **490** |
| Iron | mg/L | 11/1/00 | 6010B | 0.010 | < 0.010 |
| Magnesium | mg/L | 11/1/00 | 6010B | 0.050 | **670** |
| Potassium | mg/L | 11/1/00 | 6010B | 0.10 | **470** |
| Sodium | mg/L | 11/1/00 | 6010B | 0.10 | **14,000** |

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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 23, 2000
Project: LARW/11e. (2)

Contact: Jeff Low
Date Received October 24, 2000

Lab Sample ID:
L43239-04A

Field Sample ID:
GW-23

## DISSOLVED METALS

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 11/7/00 | 7060A | 0.010 | **0.030** |
| Barium | mg/L | 11/6/00 | 6010B | 0.0040 | **0.022** |
| Beryllium | mg/L | 11/6/00 | 6010B | 0.0020 | < 0.0020 |
| Cadmium | mg/L | 11/6/00 | 6010B | 0.0040 | < 0.0040 |
| Chromium | mg/L | 11/6/00 | 6010B | 0.020 | < 0.020 |
| Copper | mg/L | 11/6/00 | 6010B | 0.0080 | **0.017** |
| Lead | mg/L | 11/3/00 | 7421 | 0.010 | < 0.010 |
| Mercury | mg/L | 11/2/00 | 7470A | 0.0010 | < 0.0010 |
| Molybdenum | mg/L | 11/6/00 | 6010B | 0.040 | **0.17** |
| Nickel | mg/L | 11/6/00 | 6010B | 0.010 | < 0.010 |
| Selenium | mg/L | 11/7/00 | 7740 | 0.010 | < 0.010 |
| Silver | mg/L | 11/6/00 | 6010B | 0.010 | < 0.010 |
| Zinc | mg/L | 11/6/00 | 6010B | 0.10 | < 0.10 |

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Report Date: December 2, 2000



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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Contact: Jeff Low
Date Sampled: October 24, 2000
Date Received October 25, 2000
Project: LARW

Lab Sample ID:
L43270-01B

Field Sample ID:
GW-22

## TOTAL METALS

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Calcium | mg/L | 11/14/00 | 6010B | 0.10 | **410** |
| Iron | mg/L | 11/14/00 | 6010B | 0.10 | < 0.10 |
| Magnesium | mg/L | 11/14/00 | 6010B | 0.10 | **580** |
| Potassium | mg/L | 11/14/00 | 6010B | 0.10 | **440** |
| Sodium | mg/L | 11/14/00 | 6010B | 0.10 | **14,000** |

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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 24, 2000
Project: LARW

Contact: Jeff Low
Date Received October 25, 2000

Lab Sample ID:
L43270-01A

Field Sample ID:
GW-22

**DISSOLVED METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 11/7/00 | 7060A | 0.010 | **0.020** |
| Barium | mg/L | 11/20/00 | 6010B | 0.0040 | **0.030** |
| Beryllium | mg/L | 11/20/00 | 6010B | 0.0020 | < 0.0020 |
| Cadmium | mg/L | 11/20/00 | 6010B | 0.0040 | < 0.0040 |
| Chromium | mg/L | 11/20/00 | 6010B | 0.020 | < 0.020 |
| Copper | mg/L | 11/20/00 | 6010B | 0.0080 | < 0.0080 |
| Lead | mg/L | 11/8/00 | 7421 | 0.010 | < 0.010 |
| Mercury | mg/L | 11/5/00 | 7470A | 0.0010 | < 0.0010 |
| Molybdenum | mg/L | 11/20/00 | 6010B | 0.040 | **0.050** |
| Nickel | mg/L | 11/20/00 | 6010B | 0.010 | < 0.010 |
| Selenium | mg/L | 11/7/00 | 7740 | 0.010 | < 0.010 |
| Silver | mg/L | 11/20/00 | 6010B | 0.010 | < 0.010 |
| Zinc | mg/L | 11/20/00 | 6010B | 0.10 | < 0.10 |

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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 24, 2000
Project: LARW

Contact: Jeff Low
Date Received October 25, 2000

Lab Sample ID:
L43270-01A

Field Sample ID:
GW-22

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Bicarbonate (As CaCO3) | mg/L | 10/30/00 | 2320 B | 10 | **350** |
| Carbonate (As CaCO3) | mg/L | 10/30/00 | 2320 B | 10 | < 10 |
| Chloride | mg/L | 10/30/00 | 4500-CL B | 5.0 | **22,000** |
| Conductivity | µmhos/cm | 10/30/00 | 2510B | 10 | **74,000** |
| Cyanide | mg/L | 11/8/00 | 4500-CNE | 0.010 | < 0.010 |
| Fluoride | mg/L | 11/6/00 | 4500-FD | 1.0 | **3.6** |
| Ion Balance | | 11/22/00 | | 0 | **1.5** |
| Nitrate (as N) | mg/L | 10/25/00 | 4500-NO3F | 0.10 | **0.39** |
| Nitrate/Nitrite (as N) | mg/L | 10/25/00 | 4500-NO3F | 0.10 | **0.39** |
| pH | pH units | 10/25/00 | 4500/9040B | 0 | **7.23** |
| Sulfate | mg/L | 10/30/00 | 375.4 | 5.0 | **2,000** |
| TDS | mg/L | 10/31/00 | 2540C | 10 | **38,000** |
| Total Organic Carbon | mg/L | 10/27/00 | 5310C | 1.0 | < 1.0 |
| TOX | mg/L | 11/1/00 | 9020B | 0.050 | < 0.050 |

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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 24, 2000
Project: LARW

Contact: Jeff Low
Date Received October 25, 2000

Lab Sample ID:
L43270-02B

Field Sample ID:
GW-81

**TOTAL METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Calcium | mg/L | 11/14/00 | 6010B | 0.10 | **430** |
| Iron | mg/L | 11/14/00 | 6010B | 0.10 | < 0.10 |
| Magnesium | mg/L | 11/14/00 | 6010B | 0.10 | **610** |
| Potassium | mg/L | 11/14/00 | 6010B | 0.10 | **470** |
| Sodium | mg/L | 11/14/00 | 6010B | 0.10 | **14,000** |

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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 24, 2000
Project: LARW

Contact: Jeff Low
Date Received October 25, 2000

Lab Sample ID:
L43270-02A

Field Sample ID:
GW-81

## DISSOLVED METALS

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 11/7/00 | 7060A | 0.010 | **0.040** |
| Barium | mg/L | 11/20/00 | 6010B | 0.0040 | **0.040** |
| Beryllium | mg/L | 11/20/00 | 6010B | 0.0020 | < 0.0020 |
| Cadmium | mg/L | 11/20/00 | 6010B | 0.0040 | < 0.0040 |
| Chromium | mg/L | 11/20/00 | 6010B | 0.020 | < 0.020 |
| Copper | mg/L | 11/20/00 | 6010B | 0.0080 | < 0.0080 |
| Lead | mg/L | 11/8/00 | 7421 | 0.010 | < 0.010 |
| Mercury | mg/L | 11/5/00 | 7470A | 0.0010 | < 0.0010 |
| Molybdenum | mg/L | 11/20/00 | 6010B | 0.040 | **0.080** |
| Nickel | mg/L | 11/20/00 | 6010B | 0.010 | < 0.010 |
| Selenium | mg/L | 11/7/00 | 7740 | 0.010 | < 0.010 |
| Silver | mg/L | 11/20/00 | 6010B | 0.010 | < 0.010 |
| Zinc | mg/L | 11/20/00 | 6010B | 0.10 | < 0.10 |

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Report Date: December 2, 2000



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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 24, 2000
Project: LARW

Contact: Jeff Low
Date Received October 25, 2000

Lab Sample ID:
L43270-02A

Field Sample ID:
GW-81

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Bicarbonate (As CaCO3) | mg/L | 10/30/00 | 2320 B | 10 | **150** |
| Carbonate (As CaCO3) | mg/L | 10/30/00 | 2320 B | 10 | < 10 |
| Chloride | mg/L | 10/30/00 | 4500-CL B | 5.0 | **19,000** |
| Conductivity | µmhos/cm | 10/30/00 | 2510B | 10 | **70,000** |
| Cyanide | mg/L | 11/8/00 | 4500-CNE | 0.010 | < 0.010 |
| Fluoride | mg/L | 11/6/00 | 4500-FD | 1.0 | **3.5** |
| Ion Balance | | 11/22/00 | | 0 | **7.9** |
| Nitrate (as N) | mg/L | 10/25/00 | 4500-NO3F | 0.10 | **0.22** |
| Nitrate/Nitrite (as N) | mg/L | 10/25/00 | 4500-NO3F | 0.10 | **0.22** |
| pH | pH units | 10/25/00 | 4500/9040B | 0 | **7.58** |
| Sulfate | mg/L | 10/30/00 | 375.4 | 5.0 | **2,500** |
| TDS | mg/L | 10/31/00 | 2540C | 10 | **35,000** |
| Total Organic Carbon | mg/L | 10/27/00 | 5310C | 1.0 | < 1.0 |
| TOX | mg/L | 11/1/00 | 9020B | 0.050 | < 0.050 |

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Report Date: December 2, 2000 Page 1 of 1

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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 24, 2000
Project: LARW

Contact: Jeff Low
Date Received October 25, 2000

Lab Sample ID:
L43270-04B

Field Sample ID:
GW-83

## TOTAL METALS

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Calcium | mg/L | 11/14/00 | 6010B | 0.10 | **470** |
| Iron | mg/L | 11/14/00 | 6010B | 0.10 | **0.11** |
| Magnesium | mg/L | 11/14/00 | 6010B | 0.10 | **670** |
| Potassium | mg/L | 11/14/00 | 6010B | 0.10 | **440** |
| Sodium | mg/L | 11/14/00 | 6010B | 0.10 | **13,000** |

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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 24, 2000
Project: LARW

Contact: Jeff Low
Date Received October 25, 2000

Lab Sample ID:
L43270-04A

Field Sample ID:
GW-83

## DISSOLVED METALS

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 11/7/00 | 7060A | 0.010 | **0.040** |
| Barium | mg/L | 11/20/00 | 6010B | 0.0040 | **0.030** |
| Beryllium | mg/L | 11/20/00 | 6010B | 0.0020 | < 0.0020 |
| Cadmium | mg/L | 11/20/00 | 6010B | 0.0040 | < 0.0040 |
| Chromium | mg/L | 11/20/00 | 6010B | 0.020 | < 0.020 |
| Copper | mg/L | 11/20/00 | 6010B | 0.0080 | < 0.0080 |
| Lead | mg/L | 11/8/00 | 7421 | 0.010 | < 0.010 |
| Mercury | mg/L | 11/5/00 | 7470A | 0.0010 | < 0.0010 |
| Molybdenum | mg/L | 11/20/00 | 6010B | 0.040 | **0.080** |
| Nickel | mg/L | 11/20/00 | 6010B | 0.010 | < 0.010 |
| Selenium | mg/L | 11/7/00 | 7740 | 0.010 | < 0.010 |
| Silver | mg/L | 11/20/00 | 6010B | 0.010 | < 0.010 |
| Zinc | mg/L | 11/20/00 | 6010B | 0.10 | < 0.10 |

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Report Date: December 2, 2000 Page 1 of 1

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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 24, 2000
Project: LARW

Contact: Jeff Low
Date Received October 25, 2000

Lab Sample ID:
L43270-04A

Field Sample ID:
GW-83

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Bicarbonate (As CaCO3) | mg/L | 10/30/00 | 2320 B | 10 | **160** |
| Carbonate (As CaCO3) | mg/L | 10/30/00 | 2320 B | 10 | < 10 |
| Chloride | mg/L | 10/30/00 | 4500-CL B | 5.0 | **18,000** |
| Conductivity | µmhos/cm | 10/30/00 | 2510B | 10 | **67,000** |
| Cyanide | mg/L | 11/8/00 | 4500-CNE | 0.010 | < 0.010 |
| Fluoride | mg/L | 11/6/00 | 4500-FD | 1.0 | **3.3** |
| Ion Balance | | 11/22/00 | | 0 | **8.0** |
| Nitrate (as N) | mg/L | 10/25/00 | 4500-NO3F | 0.10 | < 0.10 |
| Nitrate/Nitrite (as N) | mg/L | 10/25/00 | 4500-NO3F | 0.10 | < 0.10 |
| pH | pH units | 10/25/00 | 4500/9040B | 0 | **7.48** |
| Sulfate | mg/L | 10/30/00 | 375.4 | 5.0 | **2,300** |
| TDS | mg/L | 10/31/00 | 2540C | 10 | **29,000** |
| Total Organic Carbon | mg/L | 10/27/00 | 5310C | 1.0 | < 1.0 |
| TOX | mg/L | 11/1/00 | 9020B | 0.050 | < 0.050 |

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Report Date: December 2, 2000



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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 24, 2000
Project: LARW

Contact: Jeff Low
Date Received October 25, 2000

Lab Sample ID:
L43270-05A

Field Sample ID:
GW-405

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Bicarbonate (As CaCO3) | mg/L | 10/30/00 | 2320 B | 10 | **160** |
| Carbonate (As CaCO3) | mg/L | 10/30/00 | 2320 B | 10 | < 10 |
| Chloride | mg/L | 10/30/00 | 4500-CL B | 5.0 | **18,000** |
| Conductivity | µmhos/cm | 10/30/00 | 2510B | 10 | **67,000** |
| Cyanide | mg/L | 11/8/00 | 4500-CNE | 0.010 | < 0.010 |
| Fluoride | mg/L | 11/6/00 | 4500-FD | 1.0 | **3.3** |
| Ion Balance | | 11/22/00 | | 0 | **8.1** |
| Nitrate (as N) | mg/L | 10/25/00 | 4500-NO3F | 0.10 | < 0.10 |
| Nitrate/Nitrite (as N) | mg/L | 10/25/00 | 4500-NO3F | 0.10 | < 0.10 |
| pH | pH units | 10/25/00 | 4500/9040B | 0 | **7.48** |
| Sulfate | mg/L | 10/30/00 | 375.4 | 5.0 | **2,300** |
| TDS | mg/L | 10/31/00 | 2540C | 10 | **34,000** |
| Total Organic Carbon | mg/L | 10/27/00 | 5310C | 1.0 | < 1.0 |
| TOX | mg/L | 11/1/00 | 9020B | 0.050 | < 0.050 |

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Report Date: December 2, 2000 Page 1 of 1

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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 24, 2000
Project: LARW

Contact: Jeff Low
Date Received October 25, 2000

Lab Sample ID:
L43270-05A

Field Sample ID:
GW-405

## DISSOLVED METALS

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 11/7/00 | 7060A | 0.010 | **0.040** |
| Barium | mg/L | 11/20/00 | 6010B | 0.0040 | **0.030** |
| Beryllium | mg/L | 11/20/00 | 6010B | 0.0020 | < 0.0020 |
| Cadmium | mg/L | 11/20/00 | 6010B | 0.0040 | < 0.0040 |
| Chromium | mg/L | 11/20/00 | 6010B | 0.020 | < 0.020 |
| Copper | mg/L | 11/20/00 | 6010B | 0.0080 | < 0.0080 |
| Lead | mg/L | 11/8/00 | 7421 | 0.010 | < 0.010 |
| Mercury | mg/L | 11/5/00 | 7470A | 0.0010 | < 0.0010 |
| Molybdenum | mg/L | 11/20/00 | 6010B | 0.040 | **0.080** |
| Nickel | mg/L | 11/20/00 | 6010B | 0.010 | < 0.010 |
| Selenium | mg/L | 11/7/00 | 7740 | 0.010 | < 0.010 |
| Silver | mg/L | 11/20/00 | 6010B | 0.010 | < 0.010 |
| Zinc | mg/L | 11/20/00 | 6010B | 0.10 | < 0.10 |

Released by: _____
Laboratory Supervisor

Report Date: December 2, 2000



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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 24, 2000
Project: LARW

Contact: Jeff Low
Date Received October 25, 2000

Lab Sample ID:
L43270-05B

Field Sample ID:
GW-405

**TOTAL METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Calcium | mg/L | 11/14/00 | 6010B | 0.10 | **490** |
| Iron | mg/L | 11/14/00 | 6010B | 0.10 | **0.21** |
| Magnesium | mg/L | 11/14/00 | 6010B | 0.10 | **670** |
| Potassium | mg/L | 11/14/00 | 6010B | 0.10 | **450** |
| Sodium | mg/L | 11/14/00 | 6010B | 0.10 | **13,000** |

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Report Date: December 2, 2000



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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 24, 2000
Project: LARW

Contact: Jeff Low
Date Received October 25, 2000

Lab Sample ID:
L43270-03A

Field Sample ID:
GW-82

**DISSOLVED METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 11/7/00 | 7060A | 0.010 | **0.020** |
| Barium | mg/L | 11/20/00 | 6010B | 0.0040 | **0.030** |
| Beryllium | mg/L | 11/20/00 | 6010B | 0.0020 | < 0.0020 |
| Cadmium | mg/L | 11/20/00 | 6010B | 0.0040 | < 0.0040 |
| Chromium | mg/L | 11/20/00 | 6010B | 0.020 | < 0.020 |
| Copper | mg/L | 11/20/00 | 6010B | 0.0080 | < 0.0080 |
| Lead | mg/L | 11/8/00 | 7421 | 0.010 | < 0.010 |
| Mercury | mg/L | 11/5/00 | 7470A | 0.0010 | < 0.0010 |
| Molybdenum | mg/L | 11/20/00 | 6010B | 0.040 | **0.080** |
| Nickel | mg/L | 11/20/00 | 6010B | 0.010 | < 0.010 |
| Selenium | mg/L | 11/7/00 | 7740 | 0.010 | < 0.010 |
| Silver | mg/L | 11/20/00 | 6010B | 0.010 | < 0.010 |
| Zinc | mg/L | 11/20/00 | 6010B | 0.10 | < 0.10 |

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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 24, 2000
Project: LARW

Contact: Jeff Low
Date Received October 25, 2000

Lab Sample ID:
L43270-03B

Field Sample ID:
GW-82

**TOTAL METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Calcium | mg/L | 11/14/00 | 6010B | 0.10 | **440** |
| Iron | mg/L | 11/14/00 | 6010B | 0.10 | < 0.10 |
| Magnesium | mg/L | 11/14/00 | 6010B | 0.10 | **620** |
| Potassium | mg/L | 11/14/00 | 6010B | 0.10 | **450** |
| Sodium | mg/L | 11/14/00 | 6010B | 0.10 | **13,000** |

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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 24, 2000
Project: LARW

Contact: Jeff Low
Date Received October 25, 2000

Lab Sample ID:
L43270-03A

Field Sample ID:
GW-82

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Bicarbonate (As CaCO3) | mg/L | 10/30/00 | 2320 B | 10 | **160** |
| Carbonate (As CaCO3) | mg/L | 10/30/00 | 2320 B | 10 | < 10 |
| Chloride | mg/L | 10/30/00 | 4500-CL B | 5.0 | **19,000** |
| Conductivity | µmhos/cm | 10/30/00 | 2510B | 10 | **67,000** |
| Cyanide | mg/L | 11/8/00 | 4500-CNE | 0.010 | < 0.010 |
| Fluoride | mg/L | 11/6/00 | 4500-FD | 1.0 | **3.7** |
| Ion Balance | | 11/22/00 | | 0 | **4.8** |
| Nitrate (as N) | mg/L | 10/25/00 | 4500-NO3F | 0.10 | < 0.10 |
| Nitrate/Nitrite (as N) | mg/L | 10/25/00 | 4500-NO3F | 0.10 | < 0.10 |
| pH | pH units | 10/25/00 | 4500/9040B | 0 | **7.61** |
| Sulfate | mg/L | 10/30/00 | 375.4 | 5.0 | **2,500** |
| TDS | mg/L | 10/31/00 | 2540C | 10 | **32,000** |
| Total Organic Carbon | mg/L | 10/27/00 | 5310C | 1.0 | < 1.0 |
| TOX | mg/L | 11/1/00 | 9020B | 0.050 | < 0.050 |

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Report Date: December 2, 2000



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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 25, 2000
Project: LARW

Contact: Jeff Low
Date Received October 25, 2000

Lab Sample ID:
L43284-01A

Field Sample ID:
GW-84

**DISSOLVED METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 11/7/00 | 7060A | 0.010 | **0.050** |
| Barium | mg/L | 11/20/00 | 6010B | 0.0040 | **0.040** |
| Beryllium | mg/L | 11/20/00 | 6010B | 0.0020 | < 0.0020 |
| Cadmium | mg/L | 11/20/00 | 6010B | 0.0040 | < 0.0040 |
| Chromium | mg/L | 11/20/00 | 6010B | 0.020 | < 0.020 |
| Copper | mg/L | 11/20/00 | 6010B | 0.0080 | < 0.0080 |
| Lead | mg/L | 11/8/00 | 7421 | 0.010 | < 0.010 |
| Mercury | mg/L | 11/3/00 | 7470A | 0.0010 | < 0.0010 |
| Molybdenum | mg/L | 11/20/00 | 6010B | 0.040 | **0.20** |
| Nickel | mg/L | 11/20/00 | 6010B | 0.010 | < 0.010 |
| Selenium | mg/L | 11/7/00 | 7740 | 0.010 | < 0.010 |
| Silver | mg/L | 11/20/00 | 6010B | 0.010 | < 0.010 |
| Zinc | mg/L | 11/20/00 | 6010B | 0.10 | < 0.10 |

Released by: SDT
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Report Date: December 2, 2000



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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Contact: Jeff Low
Date Sampled: October 25, 2000
Date Received October 25, 2000
Project: LARW

Lab Sample ID:
L43284-01B

Field Sample ID:
GW-84

**TOTAL METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Calcium | mg/L | 11/14/00 | 6010B | 0.10 | **550** |
| Iron | mg/L | 11/14/00 | 6010B | 0.10 | < 0.10 |
| Magnesium | mg/L | 11/14/00 | 6010B | 0.10 | **790** |
| Potassium | mg/L | 11/14/00 | 6010B | 0.10 | **530** |
| Sodium | mg/L | 11/14/00 | 6010B | 0.10 | **15,000** |

Released by: _____
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Report Date: December 2, 2000



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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 25, 2000
Project: LARW

Contact: Jeff Low
Date Received October 25, 2000

Lab Sample ID:
L43284-01A

Field Sample ID:
GW-84

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Bicarbonate (As CaCO3) | mg/L | 10/30/00 | 2320 B | 10 | **180** |
| Carbonate (As CaCO3) | mg/L | 10/30/00 | 2320 B | 10 | < 10 |
| Chloride | mg/L | 10/30/00 | 4500-CL B | 5.0 | **23,000** |
| Conductivity | µmhos/cm | 10/30/00 | 2510B | 10 | **78,000** |
| Cyanide | mg/L | 11/8/00 | 4500-CNE | 0.010 | < 0.010 |
| Fluoride | mg/L | 11/6/00 | 4500-FD | 1.0 | **4.0** |
| Ion Balance | | 11/22/00 | | 0 | **3.0** |
| Nitrate (as N) | mg/L | 10/26/00 | 4500-NO3F | 0.10 | < 0.10 |
| Nitrate/Nitrite (as N) | mg/L | 10/26/00 | 4500-NO3F | 0.10 | < 0.10 |
| pH | pH units | 10/26/00 | 4500/9040B | 0 | **7.35** |
| Sulfate | mg/L | 10/31/00 | 375.4 | 5.0 | **3,000** |
| TDS | mg/L | 10/31/00 | 2540C | 10 | **43,000** |
| Total Organic Carbon | mg/L | 10/27/00 | 5310C | 1.0 | < 1.0 |
| TOX | mg/L | 11/6/00 | 9020B | 0.050 | < 0.050 |

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Report Date: December 2, 2000



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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 25, 2000
Project: LARW

Contact: Jeff Low
Date Received October 25, 2000

Lab Sample ID:
L43284-02B

Field Sample ID:
GW-85

## TOTAL METALS

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Calcium | mg/L | 11/14/00 | 6010B | 0.10 | **600** |
| Iron | mg/L | 11/14/00 | 6010B | 0.10 | < 0.10 |
| Magnesium | mg/L | 11/14/00 | 6010B | 0.10 | **890** |
| Potassium | mg/L | 11/14/00 | 6010B | 0.10 | **550** |
| Sodium | mg/L | 11/14/00 | 6010B | 0.10 | **16,000** |

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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 25, 2000
Project: LARW

Contact: Jeff Low
Date Received October 25, 2000

Lab Sample ID:
L43284-02A

Field Sample ID:
GW-85

**DISSOLVED METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 11/7/00 | 7060A | 0.010 | **0.030** |
| Barium | mg/L | 11/20/00 | 6010B | 0.0040 | **0.030** |
| Beryllium | mg/L | 11/20/00 | 6010B | 0.0020 | < 0.0020 |
| Cadmium | mg/L | 11/20/00 | 6010B | 0.0040 | < 0.0040 |
| Chromium | mg/L | 11/20/00 | 6010B | 0.020 | < 0.020 |
| Copper | mg/L | 11/20/00 | 6010B | 0.0080 | < 0.0080 |
| Lead | mg/L | 11/8/00 | 7421 | 0.010 | < 0.010 |
| Mercury | mg/L | 11/3/00 | 7470A | 0.0010 | < 0.0010 |
| Molybdenum | mg/L | 11/20/00 | 6010B | 0.040 | **0.070** |
| Nickel | mg/L | 11/20/00 | 6010B | 0.010 | < 0.010 |
| Selenium | mg/L | 11/7/00 | 7740 | 0.010 | < 0.010 |
| Silver | mg/L | 11/20/00 | 6010B | 0.010 | < 0.010 |
| Zinc | mg/L | 11/20/00 | 6010B | 0.10 | < 0.10 |

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Laboratory Supervisor

Report Date: December 6, 2000 Page 1 of 1

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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 25, 2000
Project: LARW

Contact: Jeff Low
Date Received October 25, 2000

Lab Sample ID:
L43284-02A

Field Sample ID:
GW-85

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Bicarbonate (As CaCO3) | mg/L | 10/30/00 | 2320 B | 10 | **200** |
| Carbonate (As CaCO3) | mg/L | 10/30/00 | 2320 B | 10 | < 10 |
| Chloride | mg/L | 10/30/00 | 4500-CL B | 5.0 | **22,000** |
| Conductivity | µmhos/cm | 10/30/00 | 2510B | 10 | **79,000** |
| Cyanide | mg/L | 11/8/00 | 4500-CNE | 0.010 | < 0.010 |
| Fluoride | mg/L | 11/6/00 | 4500-FD | 1.0 | **3.7** |
| Ion Balance | | 11/22/00 | | 0 | **8.6** |
| Nitrate (as N) | mg/L | 10/26/00 | 4500-NO3F | 0.10 | < 0.10 |
| Nitrate/Nitrite (as N) | mg/L | 10/26/00 | 4500-NO3F | 0.10 | < 0.10 |
| pH | pH units | 10/26/00 | 4500/9040B | 0 | **7.28** |
| Sulfate | mg/L | 10/31/00 | 375.4 | 5.0 | **2,900** |
| TDS | mg/L | 10/31/00 | 2540C | 10 | **41,000** |
| Total Organic Carbon | mg/L | 10/27/00 | 5310C | 1.0 | < 1.0 |
| TOX | mg/L | 11/6/00 | 9020B | 0.050 | < 0.050 |

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Laboratory Supervisor

Report Date: December 2, 2000



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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 25, 2000
Project: LARW

Contact: Jeff Low
Date Received October 25, 2000

Lab Sample ID:
L43284-03A

Field Sample ID:
GW-86

**DISSOLVED METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 11/7/00 | 7060A | 0.010 | **0.020** |
| Barium | mg/L | 11/20/00 | 6010B | 0.0040 | **0.040** |
| Beryllium | mg/L | 11/20/00 | 6010B | 0.0020 | < 0.0020 |
| Cadmium | mg/L | 11/20/00 | 6010B | 0.0040 | < 0.0040 |
| Chromium | mg/L | 11/20/00 | 6010B | 0.020 | < 0.020 |
| Copper | mg/L | 11/20/00 | 6010B | 0.0080 | < 0.0080 |
| Lead | mg/L | 11/8/00 | 7421 | 0.010 | < 0.010 |
| Mercury | mg/L | 11/3/00 | 7470A | 0.0010 | < 0.0010 |
| Molybdenum | mg/L | 11/20/00 | 6010B | 0.040 | **0.12** |
| Nickel | mg/L | 11/20/00 | 6010B | 0.010 | < 0.010 |
| Selenium | mg/L | 11/7/00 | 7740 | 0.010 | < 0.010 |
| Silver | mg/L | 11/20/00 | 6010B | 0.010 | < 0.010 |
| Zinc | mg/L | 11/20/00 | 6010B | 0.10 | < 0.10 |

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Report Date: December 2, 2000



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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 25, 2000
Project: LARW

Contact: Jeff Low
Date Received October 25, 2000

Lab Sample ID:
L43284-03B

Field Sample ID:
GW-86

**TOTAL METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Calcium | mg/L | 11/14/00 | 6010B | 0.10 | **560** |
| Iron | mg/L | 11/14/00 | 6010B | 0.10 | < 0.10 |
| Magnesium | mg/L | 11/14/00 | 6010B | 0.10 | **830** |
| Potassium | mg/L | 11/14/00 | 6010B | 0.10 | **580** |
| Sodium | mg/L | 11/14/00 | 6010B | 0.10 | **17,000** |

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Report Date: December 2, 2000



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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 25, 2000
Project: LARW

Contact: Jeff Low
Date Received October 25, 2000

Lab Sample ID:
L43284-03A

Field Sample ID:
GW-86

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Bicarbonate (As CaCO3) | mg/L | 10/30/00 | 2320 B | 10 | **170** |
| Carbonate (As CaCO3) | mg/L | 10/30/00 | 2320 B | 10 | < 10 |
| Chloride | mg/L | 10/30/00 | 4500-CL B | 5.0 | **24,000** |
| Conductivity | µmhos/cm | 10/30/00 | 2510B | 10 | **83,000** |
| Cyanide | mg/L | 11/8/00 | 4500-CNE | 0.010 | < 0.010 |
| Fluoride | mg/L | 11/6/00 | 4500-FD | 1.0 | **3.8** |
| Ion Balance | | 11/22/00 | | 0 | **6.7** |
| Nitrate (as N) | mg/L | 10/26/00 | 4500-NO3F | 0.10 | **0.29** |
| Nitrate/Nitrite (as N) | mg/L | 10/26/00 | 4500-NO3F | 0.10 | **0.29** |
| pH | pH units | 10/26/00 | 4500/9040B | 0 | **7.37** |
| Sulfate | mg/L | 10/31/00 | 375.4 | 5.0 | **3,100** |
| TDS | mg/L | 10/31/00 | 2540C | 10 | **42,000** |
| Total Organic Carbon | mg/L | 10/27/00 | 5310C | 1.0 | < 1.0 |
| TOX | mg/L | 11/6/00 | 9020B | 0.050 | < 0.050 |

Released by: _____
Laboratory Supervisor

Report Date: December 2, 2000



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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 25, 2000
Project: LARW

Contact: Jeff Low
Date Received October 25, 2000

Lab Sample ID:
L43284-04B

Field Sample ID:
GW-406

**TOTAL METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Calcium | mg/L | 11/14/00 | 6010B | 0.10 | **550** |
| Iron | mg/L | 11/14/00 | 6010B | 0.10 | < 0.10 |
| Magnesium | mg/L | 11/14/00 | 6010B | 0.10 | **820** |
| Potassium | mg/L | 11/14/00 | 6010B | 0.10 | **570** |
| Sodium | mg/L | 11/14/00 | 6010B | 0.10 | **17,000** |

Released by: _____
Laboratory Supervisor

Report Date: December 2, 2000 Page 1 of 1

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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 25, 2000
Project: LARW

Contact: Jeff Low
Date Received October 25, 2000

Lab Sample ID:
L43284-04A

Field Sample ID:
GW-406

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Bicarbonate (As CaCO3) | mg/L | 10/30/00 | 2320 B | 10 | **160** |
| Carbonate (As CaCO3) | mg/L | 10/30/00 | 2320 B | 10 | < 10 |
| Chloride | mg/L | 10/30/00 | 4500-CL B | 5.0 | **24,000** |
| Conductivity | µmhos/cm | 10/30/00 | 2510B | 10 | **83,000** |
| Cyanide | mg/L | 11/8/00 | 4500-CNE | 0.010 | < 0.010 |
| Fluoride | mg/L | 11/6/00 | 4500-FD | 1.0 | **3.9** |
| Ion Balance | | 11/22/00 | | 0 | **6.7** |
| Nitrate (as N) | mg/L | 10/26/00 | 4500-NO3F | 0.10 | **0.29** |
| Nitrate/Nitrite (as N) | mg/L | 10/26/00 | 4500-NO3F | 0.10 | **0.29** |
| pH | pH units | 10/26/00 | 4500/9040B | 0 | **7.39** |
| Sulfate | mg/L | 10/31/00 | 375.4 | 5.0 | **3,000** |
| TDS | mg/L | 10/31/00 | 2540C | 10 | **46,000** |
| Total Organic Carbon | mg/L | 10/27/00 | 5310C | 1.0 | < 1.0 |
| TOX | mg/L | 11/6/00 | 9020B | 0.050 | < 0.050 |

Released by: _____
Laboratory Supervisor

Report Date: December 2, 2000



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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 25, 2000
Project: LARW

Contact: Jeff Low
Date Received October 25, 2000

Lab Sample ID:
L43284-04A

Field Sample ID:
GW-406

**DISSOLVED METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 11/7/00 | 7060A | 0.010 | **0.020** |
| Barium | mg/L | 11/20/00 | 6010B | 0.0040 | **0.050** |
| Beryllium | mg/L | 11/20/00 | 6010B | 0.0020 | < 0.0020 |
| Cadmium | mg/L | 11/20/00 | 6010B | 0.0040 | < 0.0040 |
| Chromium | mg/L | 11/20/00 | 6010B | 0.020 | < 0.020 |
| Copper | mg/L | 11/20/00 | 6010B | 0.0080 | < 0.0080 |
| Lead | mg/L | 11/8/00 | 7421 | 0.010 | < 0.010 |
| Mercury | mg/L | 11/3/00 | 7470A | 0.0010 | < 0.0010 |
| Molybdenum | mg/L | 11/20/00 | 6010B | 0.040 | **0.11** |
| Nickel | mg/L | 11/20/00 | 6010B | 0.010 | < 0.010 |
| Selenium | mg/L | 11/7/00 | 7740 | 0.010 | < 0.010 |
| Silver | mg/L | 11/20/00 | 6010B | 0.010 | < 0.010 |
| Zinc | mg/L | 11/20/00 | 6010B | 0.10 | < 0.10 |

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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 26, 2000
Project: LARW

Contact: Jeff Low
Date Received October 26, 2000

Lab Sample ID:
L43300-01A

Field Sample ID:
GW-92

## DISSOLVED METALS

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 11/7/00 | 7060A | 0.010 | **0.030** |
| Barium | mg/L | 11/20/00 | 6010B | 0.0040 | **0.060** |
| Beryllium | mg/L | 11/20/00 | 6010B | 0.0020 | < 0.0020 |
| Cadmium | mg/L | 11/20/00 | 6010B | 0.0040 | < 0.0040 |
| Chromium | mg/L | 11/20/00 | 6010B | 0.020 | < 0.020 |
| Copper | mg/L | 11/20/00 | 6010B | 0.0080 | < 0.0080 |
| Lead | mg/L | 11/8/00 | 7421 | 0.010 | < 0.010 |
| Mercury | mg/L | 11/6/00 | 7470A | 0.0010 | < 0.0010 |
| Molybdenum | mg/L | 11/20/00 | 6010B | 0.040 | **0.080** |
| Nickel | mg/L | 11/20/00 | 6010B | 0.010 | < 0.010 |
| Selenium | mg/L | 11/7/00 | 7740 | 0.010 | < 0.010 |
| Silver | mg/L | 11/20/00 | 6010B | 0.010 | < 0.010 |
| Zinc | mg/L | 11/20/00 | 6010B | 0.10 | < 0.10 |

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Report Date: December 2, 2000 

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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 26, 2000
Project: LARW

Contact: Jeff Low
Date Received October 26, 2000

Lab Sample ID:
L43300-01B

Field Sample ID:
GW-92

**TOTAL METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Calcium | mg/L | 11/14/00 | 6010B | 0.10 | **80** |
| Iron | mg/L | 11/14/00 | 6010B | 0.10 | < 0.10 |
| Magnesium | mg/L | 11/14/00 | 6010B | 0.10 | **88** |
| Potassium | mg/L | 11/14/00 | 6010B | 0.10 | **140** |
| Sodium | mg/L | 11/14/00 | 6010B | 0.10 | **4,200** |

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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 26, 2000
Project: LARW

Contact: Jeff Low
Date Received October 26, 2000

Lab Sample ID:
L43300-01A

Field Sample ID:
GW-92

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Bicarbonate (As CaCO3) | mg/L | 10/30/00 | 2320 B | 10 | **330** |
| Carbonate (As CaCO3) | mg/L | 10/30/00 | 2320 B | 10 | < 10 |
| Chloride | mg/L | 10/30/00 | 4500-CL B | 5.0 | **5,000** |
| Conductivity | µmhos/cm | 10/30/00 | 2510B | 10 | **26,000** |
| Cyanide | mg/L | 11/9/00 | 4500-CNE | 0.010 | < 0.010 |
| Fluoride | mg/L | 11/13/00 | 4500-FD | 1.0 | **2.4** |
| Ion Balance | | 11/22/00 | | 0 | **7.7** |
| Nitrate (as N) | mg/L | 10/27/00 | 4500-NO3F | 0.10 | **2.0** |
| Nitrate/Nitrite (as N) | mg/L | 10/27/00 | 4500-NO3F | 0.10 | **2.0** |
| pH | pH units | 10/27/00 | 4500/9040B | 0 | **7.50** |
| Sulfate | mg/L | 10/31/00 | 375.4 | 5.0 | **1,100** |
| TDS | mg/L | 11/2/00 | 2540C | 10 | **11,000** |
| Total Organic Carbon | mg/L | 10/27/00 | 5310C | 1.0 | < 1.0 |
| TOX | mg/L | 11/6/00 | 9020B | 0.050 | < 0.050 |

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Laboratory Supervisor

Report Date: December 2, 2000



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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 26, 2000
Project: LARW

Contact: Jeff Low
Date Received October 26, 2000

Lab Sample ID:
L43300-02B

Field Sample ID:
GW-93

**TOTAL METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Calcium | mg/L | 11/14/00 | 6010B | 0.10 | **480** |
| Iron | mg/L | 11/14/00 | 6010B | 0.10 | < 0.10 |
| Magnesium | mg/L | 11/14/00 | 6010B | 0.10 | **810** |
| Potassium | mg/L | 11/14/00 | 6010B | 0.10 | **580** |
| Sodium | mg/L | 11/14/00 | 6010B | 0.10 | **18,000** |

Released by: _____
Laboratory Supervisor

Report Date: December 2, 2000



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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 26, 2000
Project: LARW

Contact: Jeff Low
Date Received October 26, 2000

Lab Sample ID:
L43300-02A

Field Sample ID:
GW-93

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Bicarbonate (As CaCO3) | mg/L | 10/30/00 | 2320 B | 10 | **210** |
| Carbonate (As CaCO3) | mg/L | 10/30/00 | 2320 B | 10 | < 10 |
| Chloride | mg/L | 10/30/00 | 4500-CL B | 5.0 | **26,000** |
| Conductivity | µmhos/cm | 10/30/00 | 2510B | 10 | **86,000** |
| Cyanide | mg/L | 11/9/00 | 4500-CNE | 0.010 | < 0.010 |
| Fluoride | mg/L | 11/13/00 | 4500-FD | 1.0 | **3.7** |
| Ion Balance | | 11/22/00 | | 0 | **4.6** |
| Nitrate (as N) | mg/L | 10/27/00 | 4500-NO3F | 0.10 | **0.22** |
| Nitrate/Nitrite (as N) | mg/L | 10/27/00 | 4500-NO3F | 0.10 | **0.22** |
| pH | pH units | 10/27/00 | 4500/9040B | 0 | **7.30** |
| Sulfate | mg/L | 10/31/00 | 375.4 | 5.0 | **3,500** |
| TDS | mg/L | 11/2/00 | 2540C | 10 | **42,000** |
| Total Organic Carbon | mg/L | 10/27/00 | 5310C | 1.0 | < 1.0 |
| TOX | mg/L | 11/6/00 | 9020B | 0.050 | < 0.050 |

Released by: _____
Laboratory Supervisor

Report Date: December 2, 2000



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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 26, 2000
Project: LARW

Contact: Jeff Low
Date Received October 26, 2000

Lab Sample ID:
L43300-02A

Field Sample ID:
GW-93

**DISSOLVED METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 11/7/00 | 7060A | 0.010 | **0.020** |
| Barium | mg/L | 11/20/00 | 6010B | 0.0040 | **0.080** |
| Beryllium | mg/L | 11/20/00 | 6010B | 0.0020 | < 0.0020 |
| Cadmium | mg/L | 11/20/00 | 6010B | 0.0040 | < 0.0040 |
| Chromium | mg/L | 11/20/00 | 6010B | 0.020 | < 0.020 |
| Copper | mg/L | 11/20/00 | 6010B | 0.0080 | < 0.0080 |
| Lead | mg/L | 11/8/00 | 7421 | 0.010 | < 0.010 |
| Mercury | mg/L | 11/6/00 | 7470A | 0.0010 | < 0.0010 |
| Molybdenum | mg/L | 11/20/00 | 6010B | 0.040 | **0.21** |
| Nickel | mg/L | 11/20/00 | 6010B | 0.010 | < 0.010 |
| Selenium | mg/L | 11/7/00 | 7740 | 0.010 | < 0.010 |
| Silver | mg/L | 11/20/00 | 6010B | 0.010 | < 0.010 |
| Zinc | mg/L | 11/20/00 | 6010B | 0.10 | < 0.10 |

Released by: SOM
Laboratory Supervisor

Report Date: December 2, 2000



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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 26, 2000
Project: LARW

Contact: Jeff Low
Date Received October 26, 2000

Lab Sample ID:
L43300-03B

Field Sample ID:
GW-407

**TOTAL METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Calcium | mg/L | 11/14/00 | 6010B | 0.10 | **480** |
| Iron | mg/L | 11/14/00 | 6010B | 0.10 | < 0.10 |
| Magnesium | mg/L | 11/14/00 | 6010B | 0.10 | **820** |
| Potassium | mg/L | 11/14/00 | 6010B | 0.10 | **580** |
| Sodium | mg/L | 11/14/00 | 6010B | 0.10 | **18,000** |

Released by: SDH
Laboratory Supervisor

Report Date: December 2, 2000



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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 26, 2000
Project: LARW

Contact: Jeff Low
Date Received October 26, 2000

Lab Sample ID:
L43300-03A

Field Sample ID:
GW-407

**DISSOLVED METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 11/7/00 | 7060A | 0.010 | **0.020** |
| Barium | mg/L | 11/20/00 | 6010B | 0.0040 | **0.070** |
| Beryllium | mg/L | 11/20/00 | 6010B | 0.0020 | < 0.0020 |
| Cadmium | mg/L | 11/20/00 | 6010B | 0.0040 | < 0.0040 |
| Chromium | mg/L | 11/20/00 | 6010B | 0.020 | < 0.020 |
| Copper | mg/L | 11/20/00 | 6010B | 0.0080 | < 0.0080 |
| Lead | mg/L | 11/8/00 | 7421 | 0.010 | < 0.010 |
| Mercury | mg/L | 11/6/00 | 7470A | 0.0010 | < 0.0010 |
| Molybdenum | mg/L | 11/20/00 | 6010B | 0.040 | **0.22** |
| Nickel | mg/L | 11/20/00 | 6010B | 0.010 | < 0.010 |
| Selenium | mg/L | 11/7/00 | 7740 | 0.010 | < 0.010 |
| Silver | mg/L | 11/20/00 | 6010B | 0.010 | < 0.010 |
| Zinc | mg/L | 11/20/00 | 6010B | 0.10 | < 0.10 |

Released by: _____
Laboratory Supervisor

Report Date: December 2, 2000



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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 26, 2000
Project: LARW

Contact: Jeff Low
Date Received October 26, 2000

Lab Sample ID:
L43300-03A

Field Sample ID:
GW-407

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Bicarbonate (As CaCO3) | mg/L | 10/30/00 | 2320 B | 10 | **210** |
| Carbonate (As CaCO3) | mg/L | 10/30/00 | 2320 B | 10 | < 10 |
| Chloride | mg/L | 10/30/00 | 4500-CL B | 5.0 | **22,000** |
| Conductivity | µmhos/cm | 10/30/00 | 2510B | 10 | **86,000** |
| Cyanide | mg/L | 11/9/00 | 4500-CNE | 0.010 | < 0.010 |
| Fluoride | mg/L | 11/13/00 | 4500-FD | 1.0 | **3.8** |
| Ion Balance | | 11/22/00 | | 0 | **12** |
| Nitrate (as N) | mg/L | 10/27/00 | 4500-NO3F | 0.10 | **0.22** |
| Nitrate/Nitrite (as N) | mg/L | 10/27/00 | 4500-NO3F | 0.10 | **0.22** |
| pH | pH units | 10/27/00 | 4500/9040B | 0 | **7.40** |
| Sulfate | mg/L | 10/31/00 | 375.4 | 5.0 | **3,400** |
| TDS | mg/L | 11/2/00 | 2540C | 10 | **45,000** |
| Total Organic Carbon | mg/L | 10/27/00 | 5310C | 1.0 | < 1.0 |
| TOX | mg/L | 11/6/00 | 9020B | 0.050 | < 0.050 |

Released by: _____
Laboratory Supervisor

Report Date: December 2, 2000



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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Contact: Jeff Low
Date Sampled: October 30, 2000
Date Received October 31, 2000
Project: LARW 2nd Semi Sampling

Lab Sample ID:
L43336-01A

Field Sample ID:
GW-103

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Bicarbonate (As CaCO3) | mg/L | 11/10/00 | 2320 B | 10 | **250** |
| Carbonate (As CaCO3) | mg/L | 11/10/00 | 2320 B | 10 | < 10 |
| Chloride | mg/L | 11/9/00 | 4500-CL B | 5.0 | **22,000** |
| Conductivity | µmhos/cm | 11/1/00 | 2510B | 10 | **80,000** |
| Fluoride | mg/L | 11/13/00 | 4500-FD | 1.0 | **3.8** |
| Ion Balance | | 11/22/00 | | 0 | **4.9** |
| Nitrate (as N) | mg/L | 11/1/00 | 4500-NO3F | 0.10 | < 0.10 |
| Nitrate/Nitrite (as N) | mg/L | 11/1/00 | 4500-NO3F | 0.10 | < 0.10 |
| pH | pH units | 10/31/00 | 4500/9040B | 0 | **7.20** |
| Sulfate | mg/L | 11/8/00 | 375.4 | 5.0 | **3,000** |
| TDS | mg/L | 11/6/00 | 2540C | 10 | **42,000** |
| Total Organic Carbon | mg/L | 11/7/00 | 5310C | 1.0 | < 1.0 |
| TOX | mg/L | 11/6/00 | 9020B | 0.050 | < 0.050 |

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Laboratory Supervisor

Report Date: December 6, 2000



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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 30, 2000
Project: LARW 2nd Semi Sampling

Contact: Jeff Low
Date Received October 31, 2000

Lab Sample ID:
L43336-01B

Field Sample ID:
GW-103

## TOTAL METALS

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Calcium | mg/L | 11/14/00 | 6010B | 0.10 | **540** |
| Iron | mg/L | 11/14/00 | 6010B | 0.10 | < 0.10 |
| Magnesium | mg/L | 11/14/00 | 6010B | 0.10 | **800** |
| Potassium | mg/L | 11/14/00 | 6010B | 0.10 | **510** |
| Sodium | mg/L | 11/14/00 | 6010B | 0.10 | **15,000** |

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Report Date: December 6, 2000 Page 1 of 1

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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 30, 2000
Project: LARW 2nd Semi Sampling

Contact: Jeff Low
Date Received October 31, 2000

Lab Sample ID:
L43336-01A

Field Sample ID:
GW-103

**DISSOLVED METALS**

| **Analytical Results** | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 11/14/00 | 7060A | 0.010 | **0.020** |
| Barium | mg/L | 11/17/00 | 6010B | 0.0040 | **0.0040** |
| Beryllium | mg/L | 11/17/00 | 6010B | 0.0020 | < 0.0020 |
| Cadmium | mg/L | 11/17/00 | 6010B | 0.0040 | < 0.0040 |
| Chromium | mg/L | 11/17/00 | 6010B | 0.020 | < 0.020 |
| Copper | mg/L | 11/17/00 | 6010B | 0.0080 | < 0.0080 |
| Lead | mg/L | 11/10/00 | 7421 | 0.010 | < 0.010 |
| Mercury | mg/L | 11/13/00 | 7470A | 0.0010 | < 0.0010 |
| Molybdenum | mg/L | 11/17/00 | 6010B | 0.040 | **0.17** |
| Nickel | mg/L | 11/17/00 | 6010B | 0.010 | < 0.010 |
| Selenium | mg/L | 11/14/00 | 7740 | 0.010 | < 0.010 |
| Silver | mg/L | 11/17/00 | 6010B | 0.010 | < 0.010 |
| Zinc | mg/L | 11/17/00 | 6010B | 0.10 | < 0.10 |

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Report Date: December 6, 2000



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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 30, 2000
Project: LARW 2nd Semi Sampling

Contact: Jeff Low
Date Received October 31, 2000

Lab Sample ID:
L43336-02A

Field Sample ID:
GW-104

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Bicarbonate (As CaCO3) | mg/L | 11/10/00 | 2320 B | 10 | **250** |
| Carbonate (As CaCO3) | mg/L | 11/10/00 | 2320 B | 10 | < 10 |
| Chloride | mg/L | 11/9/00 | 4500-CL B | 5.0 | **22,000** |
| Conductivity | µmhos/cm | 11/1/00 | 2510B | 10 | **76,000** |
| Fluoride | mg/L | 11/13/00 | 4500-FD | 1.0 | **3.1** |
| Ion Balance | | 11/22/00 | | 0 | **1.7** |
| Nitrate (as N) | mg/L | 11/1/00 | 4500-NO3F | 0.10 | < 0.10 |
| Nitrate/Nitrite (as N) | mg/L | 11/1/00 | 4500-NO3F | 0.10 | < 0.10 |
| pH | pH units | 10/31/00 | 4500/9040B | 0 | **7.50** |
| Sulfate | mg/L | 11/8/00 | 375.4 | 5.0 | **2,300** |
| TDS | mg/L | 11/6/00 | 2540C | 10 | **40,000** |
| Total Organic Carbon | mg/L | 11/7/00 | 5310C | 1.0 | < 1.0 |
| TOX | mg/L | 11/6/00 | 9020B | 0.050 | < 0.050 |

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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 30, 2000
Project: LARW 2nd Semi Sampling

Contact: Jeff Low
Date Received October 31, 2000

Lab Sample ID:
L43336-02B

Field Sample ID:
GW-104

## TOTAL METALS

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Calcium | mg/L | 11/14/00 | 6010B | 0.10 | **440** |
| Iron | mg/L | 11/14/00 | 6010B | 0.10 | < 0.10 |
| Magnesium | mg/L | 11/14/00 | 6010B | 0.10 | **640** |
| Potassium | mg/L | 11/14/00 | 6010B | 0.10 | **460** |
| Sodium | mg/L | 11/14/00 | 6010B | 0.10 | **14,000** |

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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 30, 2000
Project: LARW 2nd Semi Sampling

Contact: Jeff Low
Date Received October 31, 2000

Lab Sample ID:
L43336-02A

Field Sample ID:
GW-104

## DISSOLVED METALS

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 11/14/00 | 7060A | 0.010 | **0.020** |
| Barium | mg/L | 11/17/00 | 6010B | 0.0040 | **0.020** |
| Beryllium | mg/L | 11/17/00 | 6010B | 0.0020 | < 0.0020 |
| Cadmium | mg/L | 11/17/00 | 6010B | 0.0040 | < 0.0040 |
| Chromium | mg/L | 11/17/00 | 6010B | 0.020 | < 0.020 |
| Copper | mg/L | 11/17/00 | 6010B | 0.0080 | < 0.0080 |
| Lead | mg/L | 11/10/00 | 7421 | 0.010 | < 0.010 |
| Mercury | mg/L | 11/13/00 | 7470A | 0.0010 | < 0.0010 |
| Molybdenum | mg/L | 11/17/00 | 6010B | 0.040 | **0.13** |
| Nickel | mg/L | 11/17/00 | 6010B | 0.010 | < 0.010 |
| Selenium | mg/L | 11/14/00 | 7740 | 0.010 | < 0.010 |
| Silver | mg/L | 11/17/00 | 6010B | 0.010 | < 0.010 |
| Zinc | mg/L | 11/17/00 | 6010B | 0.10 | < 0.10 |

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Report Date: December 6, 2000



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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 31, 2000
Project: LARW 2nd Semi Sampling

Contact: Jeff Low
Date Received November 1, 2000

Lab Sample ID:
L43356-01B

Field Sample ID:
GW-105

**TOTAL METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Calcium | mg/L | 11/17/00 | 6010B | 0.10 | **360** |
| Iron | mg/L | 11/17/00 | 6010B | 0.10 | < 0.10 |
| Magnesium | mg/L | 11/17/00 | 6010B | 0.10 | **560** |
| Potassium | mg/L | 11/17/00 | 6010B | 0.10 | **460** |
| Sodium | mg/L | 11/17/00 | 6010B | 0.10 | **13,000** |

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Report Date: December 7, 2000



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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 31, 2000
Project: LARW 2nd Semi Sampling

Contact: Jeff Low
Date Received November 1, 2000

Lab Sample ID:
L43356-01A

Field Sample ID:
GW-105

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Bicarbonate (As CaCO3) | mg/L | 11/10/00 | 2320 B | 10 | **190** |
| Carbonate (As CaCO3) | mg/L | 11/10/00 | 2320 B | 10 | < 10 |
| Chloride | mg/L | 11/9/00 | 4500-CL B | 5.0 | **21,000** |
| Conductivity | µmhos/cm | 11/8/00 | 2510B | 10 | **83,000** |
| Fluoride | mg/L | 11/13/00 | 4500-FD | 1.0 | **3.2** |
| Ion Balance | | 11/22/00 | | 0 | -0.49 |
| Nitrate (as N) | mg/L | 11/2/00 | 4500-NO3F | 0.10 | **0.60** |
| Nitrate/Nitrite (as N) | mg/L | 11/2/00 | 4500-NO3F | 0.10 | **0.60** |
| pH | pH units | 11/2/00 | 4500/9040B | 0 | **7.70** |
| Sulfate | mg/L | 11/8/00 | 375.4 | 5.0 | **2,500** |
| TDS | mg/L | 11/6/00 | 2540C | 10 | **36,000** |
| Total Organic Carbon | mg/L | 11/7/00 | 5310C | 1.0 | < 1.0 |
| TOX | mg/L | 11/6/00 | 9020B | 0.050 | < 0.050 |

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Report Date: December 7, 2000 Page 1 of 1

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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 31, 2000
Project: LARW 2nd Semi Sampling

Contact: Jeff Low
Date Received November 1, 2000

Lab Sample ID:
L43356-01A

Field Sample ID:
GW-105

## DISSOLVED METALS

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 11/17/00 | 7060A | 0.010 | **0.023** |
| Barium | mg/L | 11/17/00 | 6010B | 0.0040 | **0.020** |
| Beryllium | mg/L | 11/17/00 | 6010B | 0.0020 | < 0.0020 |
| Cadmium | mg/L | 11/17/00 | 6010B | 0.0040 | < 0.0040 |
| Chromium | mg/L | 11/17/00 | 6010B | 0.020 | < 0.020 |
| Copper | mg/L | 11/17/00 | 6010B | 0.0080 | < 0.0080 |
| Lead | mg/L | 11/10/00 | 7421 | 0.010 | < 0.010 |
| Mercury | mg/L | 11/16/00 | 7470A | 0.0010 | < 0.0010 |
| Molybdenum | mg/L | 11/17/00 | 6010B | 0.040 | **0.11** |
| Nickel | mg/L | 11/17/00 | 6010B | 0.010 | < 0.010 |
| Selenium | mg/L | 11/17/00 | 7740 | 0.010 | < 0.010 |
| Silver | mg/L | 11/17/00 | 6010B | 0.010 | < 0.010 |
| Zinc | mg/L | 11/17/00 | 6010B | 0.10 | < 0.10 |

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Laboratory Supervisor

Report Date: December 7, 2000 Page 1

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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 31, 2000
Project: LARW 2nd Semi Sampling

Contact: Jeff Low
Date Received November 1, 2000

Lab Sample ID:
L43356-02B

Field Sample ID:
GW-102

**TOTAL METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Calcium | mg/L | 11/17/00 | 6010B | 0.10 | **550** |
| Iron | mg/L | 11/17/00 | 6010B | 0.10 | **0.10** |
| Magnesium | mg/L | 11/17/00 | 6010B | 0.10 | **710** |
| Potassium | mg/L | 11/17/00 | 6010B | 0.10 | **480** |
| Sodium | mg/L | 11/17/00 | 6010B | 0.10 | **14,000** |

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Laboratory Supervisor

Report Date: December 7, 2000



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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 31, 2000
Project: LARW 2nd Semi Sampling

Contact: Jeff Low
Date Received November 1, 2000

Lab Sample ID:
L43356-02A

Field Sample ID:
GW-102

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Bicarbonate (As CaCO3) | mg/L | 11/10/00 | 2320 B | 10 | **120** |
| Carbonate (As CaCO3) | mg/L | 11/10/00 | 2320 B | 10 | < 10 |
| Chloride | mg/L | 11/9/00 | 4500-CL B | 5.0 | **22,000** |
| Conductivity | µmhos/cm | 11/8/00 | 2510B | 10 | **82,000** |
| Fluoride | mg/L | 11/13/00 | 4500-FD | 1.0 | **3.5** |
| Ion Balance | | 11/22/00 | | 0 | **1.3** |
| Nitrate (as N) | mg/L | 11/2/00 | 4500-NO3F | 0.10 | **0.63** |
| Nitrate/Nitrite (as N) | mg/L | 11/2/00 | 4500-NO3F | 0.10 | **0.63** |
| pH | pH units | 11/2/00 | 4500/9040B | 0 | **7.60** |
| Sulfate | mg/L | 11/8/00 | 375.4 | 5.0 | **3,200** |
| TDS | mg/L | 11/6/00 | 2540C | 10 | **44,000** |
| Total Organic Carbon | mg/L | 11/7/00 | 5310C | 1.0 | < 1.0 |
| TOX | mg/L | 11/6/00 | 9020B | 0.050 | < 0.050 |

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Laboratory Supervisor

Report Date: December 7, 2000



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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 31, 2000
Project: LARW 2nd Semi Sampling

Contact: Jeff Low
Date Received November 1, 2000

Lab Sample ID:
L43356-02A

Field Sample ID:
GW-102

## DISSOLVED METALS

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 11/17/00 | 7060A | 0.010 | **0.045** |
| Barium | mg/L | 11/17/00 | 6010B | 0.0040 | **0.020** |
| Beryllium | mg/L | 11/17/00 | 6010B | 0.0020 | < 0.0020 |
| Cadmium | mg/L | 11/17/00 | 6010B | 0.0040 | < 0.0040 |
| Chromium | mg/L | 11/17/00 | 6010B | 0.020 | < 0.020 |
| Copper | mg/L | 11/17/00 | 6010B | 0.0080 | < 0.0080 |
| Lead | mg/L | 11/10/00 | 7421 | 0.010 | < 0.010 |
| Mercury | mg/L | 11/16/00 | 7470A | 0.0010 | < 0.0010 |
| Molybdenum | mg/L | 11/17/00 | 6010B | 0.040 | **0.090** |
| Nickel | mg/L | 11/17/00 | 6010B | 0.010 | < 0.010 |
| Selenium | mg/L | 11/17/00 | 7740 | 0.010 | < 0.010 |
| Silver | mg/L | 11/17/00 | 6010B | 0.010 | < 0.010 |
| Zinc | mg/L | 11/17/00 | 6010B | 0.10 | < 0.10 |

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Report Date: December 7, 2000



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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 31, 2000
Project: LARW 2nd Semi Sampling

Contact: Jeff Low
Date Received November 1, 2000

Lab Sample ID:
L43356-03B

Field Sample ID:
GW-101

**TOTAL METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Calcium | mg/L | 11/17/00 | 6010B | 0.10 | **440** |
| Iron | mg/L | 11/17/00 | 6010B | 0.10 | **0.30** |
| Magnesium | mg/L | 11/17/00 | 6010B | 0.10 | **590** |
| Potassium | mg/L | 11/17/00 | 6010B | 0.10 | **430** |
| Sodium | mg/L | 11/17/00 | 6010B | 0.10 | **13,000** |

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Report Date: December 7, 2000 Page 1 of 1

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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 31, 2000
Project: LARW 2nd Semi Sampling

Contact: Jeff Low
Date Received November 1, 2000

Lab Sample ID:
L43356-03A

Field Sample ID:
GW-101

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Bicarbonate (As CaCO3) | mg/L | 11/10/00 | 2320 B | 10 | **150** |
| Carbonate (As CaCO3) | mg/L | 11/10/00 | 2320 B | 10 | < 10 |
| Chloride | mg/L | 11/9/00 | 4500-CL B | 5.0 | **18,000** |
| Conductivity | µmhos/cm | 11/8/00 | 2510B | 10 | **70,000** |
| Fluoride | mg/L | 11/13/00 | 4500-FD | 1.0 | **3.4** |
| Ion Balance | | 11/22/00 | | 0 | **6.8** |
| Nitrate (as N) | mg/L | 11/2/00 | 4500-NO3F | 0.10 | < 0.10 |
| Nitrate/Nitrite (as N) | mg/L | 11/2/00 | 4500-NO3F | 0.10 | < 0.10 |
| pH | pH units | 11/2/00 | 4500/9040B | 0 | **7.60** |
| Sulfate | mg/L | 11/8/00 | 375.4 | 5.0 | **2,600** |
| TDS | mg/L | 11/6/00 | 2540C | 10 | **33,000** |
| Total Organic Carbon | mg/L | 11/7/00 | 5310C | 1.0 | < 1.0 |
| TOX | mg/L | 11/6/00 | 9020B | 0.050 | < 0.050 |

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Laboratory Supervisor

Report Date: December 7, 2000



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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 31, 2000
Project: LARW 2nd Semi Sampling

Contact: Jeff Low
Date Received November 1, 2000

Lab Sample ID:
L43356-03A

Field Sample ID:
GW-101

**DISSOLVED METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 11/17/00 | 7060A | 0.010 | **0.041** |
| Barium | mg/L | 11/17/00 | 6010B | 0.0040 | < 0.0040 |
| Beryllium | mg/L | 11/17/00 | 6010B | 0.0020 | < 0.0020 |
| Cadmium | mg/L | 11/17/00 | 6010B | 0.0040 | < 0.0040 |
| Chromium | mg/L | 11/17/00 | 6010B | 0.020 | < 0.020 |
| Copper | mg/L | 11/17/00 | 6010B | 0.0080 | < 0.0080 |
| Lead | mg/L | 11/10/00 | 7421 | 0.010 | < 0.010 |
| Mercury | mg/L | 11/16/00 | 7470A | 0.0010 | < 0.0010 |
| Molybdenum | mg/L | 11/17/00 | 6010B | 0.040 | **0.16** |
| Nickel | mg/L | 11/17/00 | 6010B | 0.010 | < 0.010 |
| Selenium | mg/L | 11/17/00 | 7740 | 0.010 | < 0.010 |
| Silver | mg/L | 11/17/00 | 6010B | 0.010 | < 0.010 |
| Zinc | mg/L | 11/17/00 | 6010B | 0.10 | < 0.10 |

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Report Date: December 7, 2000 Page 1 of 1

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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 31, 2000
Project: LARW 2nd Semi Sampling

Contact: Jeff Low
Date Received November 1, 2000

Lab Sample ID:
L43356-04B

Field Sample ID:
GW-100

**TOTAL METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Calcium | mg/L | 11/17/00 | 6010B | 0.10 | **570** |
| Iron | mg/L | 11/17/00 | 6010B | 0.10 | **0.40** |
| Magnesium | mg/L | 11/17/00 | 6010B | 0.10 | **720** |
| Potassium | mg/L | 11/17/00 | 6010B | 0.10 | **470** |
| Sodium | mg/L | 11/17/00 | 6010B | 0.10 | **14,000** |

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Report Date: December 7, 2000 Page 1 of 1

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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 31, 2000
Project: LARW 2nd Semi Sampling

Contact: Jeff Low
Date Received November 1, 2000

Lab Sample ID:
L43356-04A

Field Sample ID:
GW-100

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Bicarbonate (As CaCO3) | mg/L | 11/10/00 | 2320 B | 10 | **140** |
| Carbonate (As CaCO3) | mg/L | 11/10/00 | 2320 B | 10 | < 10 |
| Chloride | mg/L | 11/9/00 | 4500-CL B | 5.0 | **21,000** |
| Conductivity | µmhos/cm | 11/8/00 | 2510B | 10 | **74,000** |
| Fluoride | mg/L | 11/13/00 | 4500-FD | 1.0 | **3.9** |
| Ion Balance | | 11/22/00 | | 0 | **3.9** |
| Nitrate (as N) | mg/L | 11/2/00 | 4500-NO3F | 0.10 | **0.30** |
| Nitrate/Nitrite (as N) | mg/L | 11/2/00 | 4500-NO3F | 0.10 | **0.30** |
| pH | pH units | 11/2/00 | 4500/9040B | 0 | **7.50** |
| Sulfate | mg/L | 11/8/00 | 375.4 | 5.0 | **2,900** |
| TDS | mg/L | 11/6/00 | 2540C | 10 | **31,000** |
| Total Organic Carbon | mg/L | 11/7/00 | 5310C | 1.0 | < 1.0 |
| TOX | mg/L | 11/6/00 | 9020B | 0.050 | < 0.050 |

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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: October 31, 2000
Project: LARW 2nd Semi Sampling

Contact: Jeff Low
Date Received November 1, 2000

Lab Sample ID:
L43356-04A

Field Sample ID:
GW-100

## DISSOLVED METALS

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 11/17/00 | 7060A | 0.010 | **0.11** |
| Barium | mg/L | 11/17/00 | 6010B | 0.0040 | **0.040** |
| Beryllium | mg/L | 11/17/00 | 6010B | 0.0020 | < 0.0020 |
| Cadmium | mg/L | 11/17/00 | 6010B | 0.0040 | < 0.0040 |
| Chromium | mg/L | 11/17/00 | 6010B | 0.020 | < 0.020 |
| Copper | mg/L | 11/17/00 | 6010B | 0.0080 | < 0.0080 |
| Lead | mg/L | 11/10/00 | 7421 | 0.010 | < 0.010 |
| Mercury | mg/L | 11/16/00 | 7470A | 0.0010 | < 0.0010 |
| Molybdenum | mg/L | 11/17/00 | 6010B | 0.040 | **0.42** |
| Nickel | mg/L | 11/17/00 | 6010B | 0.010 | < 0.010 |
| Selenium | mg/L | 11/17/00 | 7740 | 0.010 | < 0.010 |
| Silver | mg/L | 11/17/00 | 6010B | 0.010 | < 0.010 |
| Zinc | mg/L | 11/17/00 | 6010B | 0.10 | < 0.10 |

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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Contact: Jeff Low
Date Sampled: November 2, 2000
Date Received November 2, 2000
Project: LARW 2nd Semi Sampling

Lab Sample ID:
L43395-01A

Field Sample ID:
GW-99

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Bicarbonate (As CaCO3) | mg/L | 11/10/00 | 2320 B | 10 | **160** |
| Carbonate (As CaCO3) | mg/L | 11/10/00 | 2320 B | 10 | < 10 |
| Chloride | mg/L | 11/9/00 | 4500-CL B | 5.0 | **19,000** |
| Conductivity | µmhos/cm | 11/8/00 | 2510B | 10 | **77,000** |
| Fluoride | mg/L | 11/13/00 | 4500-FD | 1.0 | **5.6** |
| Ion Balance | | 11/22/00 | | 0 | **9.0** |
| Nitrate (as N) | mg/L | 11/3/00 | 4500-NO3F | 0.10 | < 0.10 |
| Nitrate/Nitrite (as N) | mg/L | 11/3/00 | 4500-NO3F | 0.10 | < 0.10 |
| pH | pH units | 11/3/00 | 4500/9040B | 0 | **7.30** |
| Sulfate | mg/L | 11/8/00 | 375.4 | 5.0 | **3,100** |
| TDS | mg/L | 11/9/00 | 2540C | 10 | **36,000** |
| Total Organic Carbon | mg/L | 11/7/00 | 5310C | 1.0 | < 1.0 |
| TOX | mg/L | 11/6/00 | 9020B | 0.050 | < 0.050 |

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Report Date: December 7, 2000



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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: November 2, 2000
Project: LARW 2nd Semi Sampling

Contact: Jeff Low
Date Received November 2, 2000

Lab Sample ID:
L43395-01B

Field Sample ID:
GW-99

**TOTAL METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Calcium | mg/L | 11/17/00 | 6010B | 0.10 | **680** |
| Iron | mg/L | 11/17/00 | 6010B | 0.10 | **0.19** |
| Magnesium | mg/L | 11/17/00 | 6010B | 0.10 | **810** |
| Potassium | mg/L | 11/17/00 | 6010B | 0.10 | **480** |
| Sodium | mg/L | 11/17/00 | 6010B | 0.10 | **14,000** |

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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Contact: Jeff Low
Date Sampled: November 2, 2000
Date Received November 2, 2000
Project: LARW 2nd Semi Sampling

Lab Sample ID:
L43395-01A

Field Sample ID:
GW-99

## DISSOLVED METALS

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 11/17/00 | 7060A | 0.010 | **0.067** |
| Barium | mg/L | 11/17/00 | 6010B | 0.0040 | **0.020** |
| Beryllium | mg/L | 11/17/00 | 6010B | 0.0020 | < 0.0020 |
| Cadmium | mg/L | 11/17/00 | 6010B | 0.0040 | < 0.0040 |
| Chromium | mg/L | 11/17/00 | 6010B | 0.020 | < 0.020 |
| Copper | mg/L | 11/17/00 | 6010B | 0.0080 | < 0.0080 |
| Lead | mg/L | 11/10/00 | 7421 | 0.010 | < 0.010 |
| Mercury | mg/L | 11/18/00 | 7470A | 0.0010 | < 0.0010 |
| Molybdenum | mg/L | 11/17/00 | 6010B | 0.040 | **0.15** |
| Nickel | mg/L | 11/17/00 | 6010B | 0.010 | < 0.010 |
| Selenium | mg/L | 11/17/00 | 7740 | 0.010 | < 0.010 |
| Silver | mg/L | 11/17/00 | 6010B | 0.010 | < 0.010 |
| Zinc | mg/L | 11/17/00 | 6010B | 0.10 | < 0.10 |

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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Contact: Jeff Low
Date Sampled: November 2, 2000
Date Received November 2, 2000
Project: LARW 2nd Semi Sampling

Lab Sample ID:
L43395-02A

Field Sample ID:
GW-94

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Bicarbonate (As CaCO3) | mg/L | 11/10/00 | 2320 B | 10 | **140** |
| Carbonate (As CaCO3) | mg/L | 11/10/00 | 2320 B | 10 | < 10 |
| Chloride | mg/L | 11/9/00 | 4500-CL B | 5.0 | **23,000** |
| Conductivity | µmhos/cm | 11/8/00 | 2510B | 10 | **78,000** |
| Fluoride | mg/L | 11/13/00 | 4500-FD | 1.0 | **4.4** |
| Ion Balance | | 11/22/00 | | 0 | **5.6** |
| Nitrate (as N) | mg/L | 11/3/00 | 4500-NO3F | 0.10 | **0.48** |
| Nitrate/Nitrite (as N) | mg/L | 11/3/00 | 4500-NO3F | 0.10 | **0.48** |
| pH | pH units | 11/3/00 | 4500/9040B | 0 | **7.50** |
| Sulfate | mg/L | 11/8/00 | 375.4 | 5.0 | **3,800** |
| TDS | mg/L | 11/9/00 | 2540C | 10 | **34,000** |
| Total Organic Carbon | mg/L | 11/7/00 | 5310C | 1.0 | < 1.0 |
| TOX | mg/L | 11/6/00 | 9020B | 0.050 | < 0.050 |

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Report Date: December 7, 2000 Page 1 of 1

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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: November 2, 2000
Project: LARW 2nd Semi Sampling

Contact: Jeff Low
Date Received November 2, 2000

Lab Sample ID:
L43395-02B

Field Sample ID:
GW-94

**TOTAL METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Calcium | mg/L | 11/17/00 | 6010B | 0.10 | **640** |
| Iron | mg/L | 11/17/00 | 6010B | 0.10 | < 0.10 |
| Magnesium | mg/L | 11/17/00 | 6010B | 0.10 | **920** |
| Potassium | mg/L | 11/17/00 | 6010B | 0.10 | **520** |
| Sodium | mg/L | 11/17/00 | 6010B | 0.10 | **16,000** |

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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: November 2, 2000
Project: LARW 2nd Semi Sampling

Contact: Jeff Low
Date Received November 2, 2000

Lab Sample ID:
L43395-02A

Field Sample ID:
GW-94

## DISSOLVED METALS

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 11/17/00 | 7060A | 0.010 | **0.25** |
| Barium | mg/L | 11/17/00 | 6010B | 0.0040 | **0.010** |
| Beryllium | mg/L | 11/17/00 | 6010B | 0.0020 | < 0.0020 |
| Cadmium | mg/L | 11/17/00 | 6010B | 0.0040 | < 0.0040 |
| Chromium | mg/L | 11/17/00 | 6010B | 0.020 | < 0.020 |
| Copper | mg/L | 11/17/00 | 6010B | 0.0080 | < 0.0080 |
| Lead | mg/L | 11/10/00 | 7421 | 0.010 | < 0.010 |
| Mercury | mg/L | 11/18/00 | 7470A | 0.0010 | < 0.0010 |
| Molybdenum | mg/L | 11/17/00 | 6010B | 0.040 | **0.52** |
| Nickel | mg/L | 11/17/00 | 6010B | 0.010 | < 0.010 |
| Selenium | mg/L | 11/17/00 | 7740 | 0.010 | < 0.010 |
| Silver | mg/L | 11/17/00 | 6010B | 0.010 | < 0.010 |
| Zinc | mg/L | 11/17/00 | 6010B | 0.10 | < 0.10 |

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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Contact: Jeff Low
Date Sampled: November 2, 2000
Date Received November 2, 2000
Project: LARW 2nd Semi Sampling

Lab Sample ID:
L43395-03A

Field Sample ID:
GW-95

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Bicarbonate (As CaCO3) | mg/L | 11/10/00 | 2320 B | 10 | **130** |
| Carbonate (As CaCO3) | mg/L | 11/10/00 | 2320 B | 10 | < 10 |
| Chloride | mg/L | 11/9/00 | 4500-CL B | 5.0 | **24,000** |
| Conductivity | µmhos/cm | 11/8/00 | 2510B | 10 | **83,000** |
| Fluoride | mg/L | 11/13/00 | 4500-FD | 1.0 | **4.6** |
| Ion Balance | | 11/22/00 | | 0 | **3.7** |
| Nitrate (as N) | mg/L | 11/3/00 | 4500-NO3F | 0.10 | **0.17** |
| Nitrate/Nitrite (as N) | mg/L | 11/3/00 | 4500-NO3F | 0.10 | **0.17** |
| pH | pH units | 11/3/00 | 4500/9040B | 0 | **7.50** |
| Sulfate | mg/L | 11/8/00 | 375.4 | 5.0 | **4,600** |
| TDS | mg/L | 11/9/00 | 2540C | 10 | **39,000** |
| Total Organic Carbon | mg/L | 11/7/00 | 5310C | 1.0 | < 1.0 |
| TOX | mg/L | 11/6/00 | 9020B | 0.050 | < 0.050 |

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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: November 2, 2000
Project: LARW 2nd Semi Sampling

Contact: Jeff Low
Date Received November 2, 2000

Lab Sample ID:
L43395-03B

Field Sample ID:
GW-95

## TOTAL METALS

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Calcium | mg/L | 11/17/00 | 6010B | 0.10 | **860** |
| Iron | mg/L | 11/17/00 | 6010B | 0.10 | **1.4** |
| Magnesium | mg/L | 11/17/00 | 6010B | 0.10 | **1,000** |
| Potassium | mg/L | 11/17/00 | 6010B | 0.10 | **520** |
| Sodium | mg/L | 11/17/00 | 6010B | 0.10 | **16,000** |

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Report Date: December 7, 2000 Page 1 of 1

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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Contact: Jeff Low
Date Sampled: November 2, 2000
Date Received November 2, 2000
Project: LARW 2nd Semi Sampling

Lab Sample ID:
L43395-03A

Field Sample ID:
GW-95

**DISSOLVED METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 11/17/00 | 7060A | 0.010 | **0.34** |
| Barium | mg/L | 11/17/00 | 6010B | 0.0040 | **0.020** |
| Beryllium | mg/L | 11/17/00 | 6010B | 0.0020 | < 0.0020 |
| Cadmium | mg/L | 11/17/00 | 6010B | 0.0040 | < 0.0040 |
| Chromium | mg/L | 11/17/00 | 6010B | 0.020 | < 0.020 |
| Copper | mg/L | 11/17/00 | 6010B | 0.0080 | < 0.0080 |
| Lead | mg/L | 11/10/00 | 7421 | 0.010 | < 0.010 |
| Mercury | mg/L | 11/18/00 | 7470A | 0.0010 | < 0.0010 |
| Molybdenum | mg/L | 11/17/00 | 6010B | 0.040 | **0.78** |
| Nickel | mg/L | 11/17/00 | 6010B | 0.010 | < 0.010 |
| Selenium | mg/L | 11/17/00 | 7740 | 0.010 | < 0.010 |
| Silver | mg/L | 11/17/00 | 6010B | 0.010 | < 0.010 |
| Zinc | mg/L | 11/17/00 | 6010B | 0.10 | < 0.10 |

Released by: _____
Laboratory Supervisor

Report Date: December 7, 2000 Page 1 of 1

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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: November 13, 2000
Received: November 14, 2000
Analysis Requested: 8260B/5030A
Lab Sample ID: L43574-01A
Field Sample ID: **GW-38R**
Site ID: LARW/11e. (2)

Contact: Jeff Low
Analyzed: November 16, 2000

## Analytical Results — Volatile Organic Compounds

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Acetone | 20 | < 20 |
| 2-Butanone | 20 | < 20 |
| Carbondisulfide | 2.0 | < 2.0 |
| Chloroform | 2.0 | < 2.0 |
| 1,2-Dichloroethane | 2.0 | < 2.0 |
| Methylene chloride | 2.0 | < 2.0 |
| 1,1,2-Trichloroethane | 50 | < 50 |
| Vinyl chloride | 50 | < 50 |

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Laboratory Supervisor

Report Date: December 12, 2000



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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: November 13, 2000
Received: November 14, 2000
Analysis Requested: 8270C
Lab Sample ID: L43574-01B
Field Sample ID: **GW-38R**
Site ID: LARW/11e. (2)

Contact: Jeff Low
Analyzed: November 28, 2000
Extracted: November 16, 2000

**Analytical Results** — **Semi Volatile Organics by GC/MS**

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Benz(a)anthracene | 100 | < 100 |
| Benzo(a)pyrene | 100 | < 100 |
| Benzo(b)fluoranthene | 100 | < 100 |
| Benzo(k)fluoranthene | 100 | < 100 |
| Chrysene | 100 | < 100 |
| Dibenz(a,h)anthracene | 100 | < 100 |
| Diethyl phthalate | 4.0 | < 4.0 |
| 2-Methylnaphthalene | 4.0 | < 4.0 |
| Naphthalene | 4.0 | < 4.0 |

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Report Date: December 12, 2000



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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: November 13, 2000
Received: November 14, 2000
Analysis Requested: 8081/3510B
Lab Sample ID: L43574-01B
Field Sample ID: **GW-38R**
Site ID: LARW/11e. (2)

Contact: Jeff Low
Analyzed: November 15, 2000
Extracted: November 14, 2000

**Analytical Results** — **PESTICIDES**

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Chlordane | 10 | < 10 |

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Report Date: December 12, 2000 Page 1 of 1

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Client: Envirocare of Utah
Date Sampled: November 13, 2000
Project: LARW/11e. (2)

Contact: Jeff Low
Date Received November 14, 2000

Lab Sample ID:
L43574-01C

Field Sample ID:
GW-38R

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Bicarbonate (As CaCO3) | mg/L | 11/16/00 | 2320 B | 10 | **120** |
| Carbonate (As CaCO3) | mg/L | 11/16/00 | 2320 B | 10 | < 10 |
| Chloride | mg/L | 11/17/00 | 4500-CL B | 5.0 | **20,000** |
| Conductivity | µmhos/cm | 11/16/00 | 2510B | 10 | **74,000** |
| Cyanide | mg/L | 11/27/00 | 4500-CNE | 0.0050 | < 0.0050 |
| Fluoride | mg/L | 11/28/00 | 4500-FD | 0.50 | **4.0** |
| Ion Balance | | 12/11/00 | | 0 | **5.0** |
| Nitrate (as N) | mg/L | 11/15/00 | 4500-NO3F | 0.10 | **0.76** |
| Nitrate/Nitrite (as N) | mg/L | 11/15/00 | 4500-NO3F | 0.10 | **0.76** |
| pH | pH units | 11/15/00 | 4500/9040B | 0 | **7.40** |
| Sulfate | mg/L | 11/16/00 | 375.4 | 5.0 | **3,000** |
| TDS | mg/L | 11/16/00 | 2540C | 10 | **41,000** |
| Total Organic Carbon | mg/L | 11/20/00 | 5310C | 1.0 | < 1.0 |
| TOX | mg/L | 11/16/00 | 9020B | 0.050 | < 0.050 |

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Laboratory Supervisor

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Client: Envirocare of Utah
Date Sampled: November 13, 2000
Project: LARW/11e. (2)

Contact: Jeff Low
Date Received November 14, 2000

Lab Sample ID:
L43574-01E.

Field Sample ID:
GW-38R

**TOTAL METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Calcium | mg/L | 11/22/00 | 6010B | 0.10 | **420** |
| Iron | mg/L | 11/22/00 | 6010B | 0.10 | **0.35** |
| Magnesium | mg/L | 11/22/00 | 6010B | 0.10 | **670** |
| Potassium | mg/L | 11/22/00 | 6010B | 0.10 | **410** |
| Sodium | mg/L | 11/22/00 | 6010B | 0.10 | **14,000** |

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Client: Envirocare of Utah
Date Sampled: November 13, 2000
Project: LARW/11e. (2)

Contact: Jeff Low
Date Received November 14, 2000

Lab Sample ID:
L43574-01D

Field Sample ID:
GW-38R

**DISSOLVED METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 11/28/00 | 7060A | 0.010 | **0.11** |
| Barium | mg/L | 12/5/00 | 6010B | 0.0040 | **0.041** |
| Beryllium | mg/L | 12/5/00 | 6010B | 0.0020 | < 0.0020 |
| Cadmium | mg/L | 12/5/00 | 6010B | 0.0040 | < 0.0040 |
| Chromium | mg/L | 12/5/00 | 6010B | 0.0050 | **0.037** |
| Copper | mg/L | 12/5/00 | 6010B | 0.0080 | **0.022** |
| Lead | mg/L | 11/30/00 | 7421 | 0.0050 | < 0.0050 |
| Mercury | mg/L | 11/27/00 | 7470A | 0.00020 | < 0.0002 |
| Molybdenum | mg/L | 12/5/00 | 6010B | 0.040 | **0.33** |
| Nickel | mg/L | 12/5/00 | 6010B | 0.010 | < 0.010 |
| Selenium | mg/L | 11/28/00 | 7740 | 0.0050 | < 0.0050 |
| Silver | mg/L | 12/5/00 | 6010B | 0.0050 | < 0.0050 |
| Zinc | mg/L | 12/5/00 | 6010B | 0.10 | < 0.10 |

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Report Date: December 14, 2000



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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: November 13, 2000
Received: November 14, 2000
Analysis Requested: 8260B/5030A
Lab Sample ID: L43574-02A
Field Sample ID: **GW-37**
Site ID: LARW/11e. (2)

Contact: Jeff Low
Analyzed: November 16, 2000

**Analytical Results** — **Volatile Organic Compounds**

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Acetone | 20 | < 20 |
| 2-Butanone | 20 | < 20 |
| Carbondisulfide | 2.0 | < 2.0 |
| Chloroform | 2.0 | < 2.0 |
| 1,2-Dichloroethane | 2.0 | < 2.0 |
| Methylene chloride | 2.0 | < 2.0 |
| 1,1,2-Trichloroethane | 50 | < 50 |
| Vinyl chloride | 50 | < 50 |

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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: November 13, 2000
Received: November 14, 2000
Analysis Requested: 8270C
Lab Sample ID: L43574-02B
Field Sample ID: **GW-37**
Site ID: LARW/11e. (2)

Contact: Jeff Low
Analyzed: November 28, 2000
Extracted: November 16, 2000

**Analytical Results** — **Semi Volatile Organics by GC/MS**

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Benz(a)anthracene | 100 | < 100 |
| Benzo(a)pyrene | 100 | < 100 |
| Benzo(b)fluoranthene | 100 | < 100 |
| Benzo(k)fluoranthene | 100 | < 100 |
| Chrysene | 100 | < 100 |
| Dibenz(a,h)anthracene | 100 | < 100 |
| Diethyl phthalate | 4.0 | < 4.0 |
| 2-Methylnaphthalene | 4.0 | < 4.0 |
| Naphthalene | 4.0 | < 4.0 |

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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: November 13, 2000
Received: November 14, 2000
Analysis Requested: 8081/3510B
Lab Sample ID: L43574-02B
Field Sample ID: **GW-37**
Site ID: LARW/11e. (2)

Contact: Jeff Low
Analyzed: November 15, 2000
Extracted: November 14, 2000

**Analytical Results**

## PESTICIDES

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Chlordane | 10 | < 10 |

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Client: Envirocare of Utah
Date Sampled: November 13, 2000
Project: LARW/11e. (2)

Contact: Jeff Low
Date Received November 14, 2000

Lab Sample ID:
L43574-02C

Field Sample ID:
GW-37

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Bicarbonate (As CaCO3) | mg/L | 11/16/00 | 2320 B | 10 | **150** |
| Carbonate (As CaCO3) | mg/L | 11/16/00 | 2320 B | 10 | < 10 |
| Chloride | mg/L | 11/17/00 | 4500-CL B | 5.0 | **23,000** |
| Conductivity | µmhos/cm | 11/16/00 | 2510B | 10 | **83,000** |
| Cyanide | mg/L | 11/27/00 | 4500-CNE | 0.0050 | < 0.0050 |
| Fluoride | mg/L | 11/28/00 | 4500-FD | 0.50 | **4.0** |
| Ion Balance | | 12/11/00 | | 0 | **7.7** |
| Nitrate (as N) | mg/L | 11/15/00 | 4500-NO3F | 0.10 | **0.61** |
| Nitrate/Nitrite (as N) | mg/L | 11/15/00 | 4500-NO3F | 0.10 | **0.61** |
| pH | pH units | 11/15/00 | 4500/9040B | 0 | **7.40** |
| Sulfate | mg/L | 11/16/00 | 375.4 | 5.0 | **3,300** |
| TDS | mg/L | 11/16/00 | 2540C | 10 | **39,000** |
| Total Organic Carbon | mg/L | 11/20/00 | 5310C | 1.0 | < 1.0 |
| TOX | mg/L | 11/16/00 | 9020B | 0.050 | < 0.050 |

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Client: Envirocare of Utah
Date Sampled: November 13, 2000
Project: LARW/11e. (2)

Contact: Jeff Low
Date Received November 14, 2000

Lab Sample ID:
L43574-02E

Field Sample ID:
GW-37

**TOTAL METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Calcium | mg/L | 11/22/00 | 6010B | 0.10 | **450** |
| Iron | mg/L | 11/22/00 | 6010B | 0.10 | < 0.10 |
| Magnesium | mg/L | 11/22/00 | 6010B | 0.10 | **800** |
| Potassium | mg/L | 11/22/00 | 6010B | 0.10 | **510** |
| Sodium | mg/L | 11/22/00 | 6010B | 0.10 | **17,000** |

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Client: Envirocare of Utah
Date Sampled: November 13, 2000
Project: LARW/11e. (2)

Contact: Jeff Low
Date Received November 14, 2000

Lab Sample ID:
L43574-02D

Field Sample ID:
GW-37

**DISSOLVED METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 11/28/00 | 7060A | 0.010 | **0.040** |
| Barium | mg/L | 12/5/00 | 6010B | 0.0040 | **0.032** |
| Beryllium | mg/L | 12/5/00 | 6010B | 0.0020 | < 0.0020 |
| Cadmium | mg/L | 12/5/00 | 6010B | 0.0040 | < 0.0040 |
| Chromium | mg/L | 12/5/00 | 6010B | 0.0050 | **0.040** |
| Copper | mg/L | 12/5/00 | 6010B | 0.0080 | **0.015** |
| Lead | mg/L | 11/30/00 | 7421 | 0.0050 | < 0.0050 |
| Mercury | mg/L | 11/27/00 | 7470A | 0.00020 | < 0.0002 |
| Molybdenum | mg/L | 12/5/00 | 6010B | 0.040 | **0.29** |
| Nickel | mg/L | 12/5/00 | 6010B | 0.010 | < 0.010 |
| Selenium | mg/L | 11/28/00 | 7740 | 0.0050 | < 0.0050 |
| Silver | mg/L | 12/5/00 | 6010B | 0.0050 | < 0.0050 |
| Zinc | mg/L | 12/5/00 | 6010B | 0.10 | < 0.10 |

Released by: SOM
Laboratory Supervisor

Report Date: December 14, 2000



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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: November 13, 2000
Received: November 14, 2000
Analysis Requested: 8260B/5030A
Lab Sample ID: L43574-03A
Field Sample ID: **GW-29**
Site ID: LARW/11e. (2)

Contact: Jeff Low
Analyzed: November 16, 2000

**Analytical Results** — **Volatile Organic Compounds**

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Acetone | 20 | < 20 |
| 2-Butanone | 20 | < 20 |
| Carbondisulfide | 2.0 | < 2.0 |
| Chloroform | 2.0 | < 2.0 |
| 1,2-Dichloroethane | 2.0 | < 2.0 |
| Methylene chloride | 2.0 | < 2.0 |
| 1,1,2-Trichloroethane | 50 | < 50 |
| Vinyl chloride | 50 | < 50 |

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Report Date: December 12, 2000 Page 1 of 1

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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: November 13, 2000
Received: November 14, 2000
Analysis Requested: 8270C
Lab Sample ID: L43574-03B
Field Sample ID: **GW-29**
Site ID: LARW/11e. (2)

Contact: Jeff Low
Analyzed: November 28, 2000
Extracted: November 16, 2000

**Analytical Results** — **Semi Volatile Organics by GC/MS**

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Benz(a)anthracene | 100 | < 100 |
| Benzo(a)pyrene | 100 | < 100 |
| Benzo(b)fluoranthene | 100 | < 100 |
| Benzo(k)fluoranthene | 100 | < 100 |
| Chrysene | 100 | < 100 |
| Dibenz(a,h)anthracene | 100 | < 100 |
| Diethyl phthalate | 4.0 | < 4.0 |
| 2-Methylnaphthalene | 4.0 | < 4.0 |
| Naphthalene | 4.0 | < 4.0 |

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# ORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Collected: November 13, 2000
Received: November 14, 2000
Analysis Requested: 8081/3510B
Lab Sample ID: L43574-03B
Field Sample ID: **GW-29**
Site ID: LARW/11e. (2)

Contact: Jeff Low
Analyzed: November 15, 2000
Extracted: November 14, 2000

**Analytical Results** — **PESTICIDES**

Units = µg/L

| Compound | Reporting Limit | Amount Detected |
|---|---|---|
| Chlordane | 10 | < 10 |

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Report Date: December 12, 2000 Page 1 of 1

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Client: Envirocare of Utah
Date Sampled: November 13, 2000
Project: LARW/11e. (2)

Contact: Jeff Low
Date Received November 14, 2000

Lab Sample ID:
L43574-03C

Field Sample ID:
GW-29

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Bicarbonate (As CaCO3) | mg/L | 11/16/00 | 2320 B | 10 | **280** |
| Carbonate (As CaCO3) | mg/L | 11/16/00 | 2320 B | 10 | < 10 |
| Chloride | mg/L | 11/17/00 | 4500-CL B | 5.0 | **23,000** |
| Conductivity | µmhos/cm | 11/16/00 | 2510B | 10 | **84,000** |
| Cyanide | mg/L | 11/27/00 | 4500-CNE | 0.0050 | < 0.0050 |
| Fluoride | mg/L | 11/28/00 | 4500-FD | 0.50 | **4.7** |
| Ion Balance | | 12/11/00 | | 0 | **7.5** |
| Nitrate (as N) | mg/L | 11/15/00 | 4500-NO3F | 0.10 | < 0.10 |
| Nitrate/Nitrite (as N) | mg/L | 11/15/00 | 4500-NO3F | 0.10 | < 0.10 |
| pH | pH units | 11/15/00 | 4500/9040B | 0 | **7.10** |
| Sulfate | mg/L | 11/16/00 | 375.4 | 5.0 | **3,700** |
| TDS | mg/L | 11/16/00 | 2540C | 10 | **42,000** |
| Total Organic Carbon | mg/L | 11/20/00 | 5310C | 1.0 | < 1.0 |
| TOX | mg/L | 11/16/00 | 9020B | 0.050 | < 0.050 |

Released by: _____
Laboratory Supervisor

Report Date: December 12, 2000



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Fax (801) 263-8687

Client: Envirocare of Utah
Date Sampled: November 13, 2000
Project: LARW/11e. (2)

Contact: Jeff Low
Date Received November 14, 2000

Lab Sample ID:
L43574-03E

Field Sample ID:
GW-29

**TOTAL METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Calcium | mg/L | 11/22/00 | 6010B | 0.10 | **490** |
| Iron | mg/L | 11/22/00 | 6010B | 0.10 | < 0.10 |
| Magnesium | mg/L | 11/22/00 | 6010B | 0.10 | **860** |
| Potassium | mg/L | 11/22/00 | 6010B | 0.10 | **540** |
| Sodium | mg/L | 11/22/00 | 6010B | 0.10 | **17,000** |

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Report Date: December 12, 2000



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Client: Envirocare of Utah
Date Sampled: November 13, 2000
Project: LARW/11e. (2)

Contact: Jeff Low
Date Received November 14, 2000

Lab Sample ID:
L43574-03D

Field Sample ID:
GW-29

## DISSOLVED METALS

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 11/28/00 | 7060A | 0.010 | **0.020** |
| Barium | mg/L | 12/5/00 | 6010B | 0.0040 | **0.026** |
| Beryllium | mg/L | 12/5/00 | 6010B | 0.0020 | < 0.0020 |
| Cadmium | mg/L | 12/5/00 | 6010B | 0.0040 | < 0.0040 |
| Chromium | mg/L | 12/5/00 | 6010B | 0.0050 | **0.040** |
| Copper | mg/L | 12/5/00 | 6010B | 0.0080 | **0.017** |
| Lead | mg/L | 11/30/00 | 7421 | 0.0050 | < 0.0050 |
| Mercury | mg/L | 11/27/00 | 7470A | 0.00020 | < 0.0002 |
| Molybdenum | mg/L | 12/5/00 | 6010B | 0.040 | **0.22** |
| Nickel | mg/L | 12/5/00 | 6010B | 0.010 | < 0.010 |
| Selenium | mg/L | 11/28/00 | 7740 | 0.0050 | < 0.0050 |
| Silver | mg/L | 12/5/00 | 6010B | 0.0050 | < 0.0050 |
| Zinc | mg/L | 12/5/00 | 6010B | 0.10 | < 0.10 |

Released by: SCM
Laboratory Supervisor

Report Date: December 14, 2000



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Client: Envirocare of Utah
Date Sampled: November 13, 2000
Project: LARW/11e. (2)

Contact: Jeff Low
Date Received November 14, 2000

Lab Sample ID:
L43574-04A

Field Sample ID:
GW-77

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Bicarbonate (As CaCO3) | mg/L | 11/16/00 | 2320 B | 10 | **280** |
| Carbonate (As CaCO3) | mg/L | 11/16/00 | 2320 B | 10 | < 10 |
| Chloride | mg/L | 11/17/00 | 4500-CL B | 5.0 | **23,000** |
| Conductivity | µmhos/cm | 11/16/00 | 2510B | 10 | **78,000** |
| Cyanide | mg/L | 11/27/00 | 4500-CNE | 0.010 | < 0.010 |
| Fluoride | mg/L | 11/28/00 | 4500-FD | 1.0 | **3.6** |
| Ion Balance | | 12/11/00 | | 0 | **5.6** |
| Nitrate (as N) | mg/L | 11/15/00 | 4500-NO3F | 0.10 | **0.11** |
| Nitrate/Nitrite (as N) | mg/L | 11/15/00 | 4500-NO3F | 0.10 | **0.11** |
| pH | pH units | 11/15/00 | 4500/9040B | 0 | **7.30** |
| Sulfate | mg/L | 11/16/00 | 375.4 | 5.0 | **1,900** |
| TDS | mg/L | 11/16/00 | 2540C | 10 | **50,000** |
| Total Organic Carbon | mg/L | 11/20/00 | 5310C | 1.0 | < 1.0 |
| TOX | mg/L | 11/16/00 | 9020B | 0.050 | < 0.050 |

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Laboratory Supervisor

Report Date: December 12, 2000



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Client: Envirocare of Utah
Date Sampled: November 13, 2000
Project: LARW/11e. (2)

Contact: Jeff Low
Date Received November 14, 2000

Lab Sample ID:
L43574-04C

Field Sample ID:
GW-77

**TOTAL METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Calcium | mg/L | 11/22/00 | 6010B | 0.10 | **360** |
| Iron | mg/L | 11/22/00 | 6010B | 0.10 | < 0.10 |
| Magnesium | mg/L | 11/22/00 | 6010B | 0.10 | **600** |
| Potassium | mg/L | 11/22/00 | 6010B | 0.10 | **440** |
| Sodium | mg/L | 11/22/00 | 6010B | 0.10 | **16,000** |

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Client: Envirocare of Utah
Date Sampled: November 13, 2000
Project: LARW/11e. (2)

Contact: Jeff Low
Date Received November 14, 2000

Lab Sample ID:
L43574-04B

Field Sample ID:
GW-77

**DISSOLVED METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 11/28/00 | 7060A | 0.010 | **0.010** |
| Barium | mg/L | 12/5/00 | 6010B | 0.0040 | **0.047** |
| Beryllium | mg/L | 12/5/00 | 6010B | 0.0020 | < 0.0020 |
| Cadmium | mg/L | 12/5/00 | 6010B | 0.0040 | < 0.0040 |
| Chromium | mg/L | 12/5/00 | 6010B | 0.020 | **0.035** |
| Copper | mg/L | 12/5/00 | 6010B | 0.0080 | **0.015** |
| Lead | mg/L | 11/30/00 | 7421 | 0.010 | < 0.010 |
| Mercury | mg/L | 11/27/00 | 7470A | 0.0010 | < 0.0010 |
| Molybdenum | mg/L | 12/5/00 | 6010B | 0.040 | **0.065** |
| Nickel | mg/L | 12/5/00 | 6010B | 0.010 | < 0.010 |
| Selenium | mg/L | 11/28/00 | 7740 | 0.010 | < 0.010 |
| Silver | mg/L | 12/5/00 | 6010B | 0.010 | < 0.010 |
| Zinc | mg/L | 12/5/00 | 6010B | 0.10 | < 0.10 |

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Laboratory Supervisor

Report Date: December 14, 2000



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Client: Envirocare of Utah
Contact: Jeff Low
Date Sampled: November 13, 2000
Date Received: November 14, 2000
Project: 11e. (2) Exceedance

Lab Sample ID:
L43575-01A

Field Sample ID:
GW-29A

**DISSOLVED METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Barium | mg/L | 12/5/00 | 6010B | 0.0040 | **0.026** |

Released by: SOM
Laboratory Supervisor

Report Date: December 8, 2000 Page 1

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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: November 14, 2000
Project: LARW 2nd Semi

Contact: Jeff Low
Date Received November 15, 2000

Lab Sample ID:
L43606-01A

Field Sample ID:
GW-64

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Bicarbonate (As CaCO3) | mg/L | 11/16/00 | 2320 B | 10 | **230** |
| Carbonate (As CaCO3) | mg/L | 11/16/00 | 2320 B | 10 | < 10 |
| Chloride | mg/L | 11/17/00 | 4500-CL B | 5.0 | **22,000** |
| Conductivity | µmhos/cm | 11/16/00 | 2510B | 10 | **78,000** |
| Cyanide | mg/L | 11/27/00 | 4500-CNE | 0.010 | < 0.010 |
| Fluoride | mg/L | 11/28/00 | 4500-FD | 1.0 | **3.7** |
| Ion Balance | | 12/11/00 | | 0 | **6.9** |
| Nitrate (as N) | mg/L | 11/15/00 | 4500-NO3F | 0.10 | **0.12** |
| Nitrate/Nitrite (as N) | mg/L | 11/15/00 | 4500-NO3F | 0.10 | **0.12** |
| pH | pH units | 11/15/00 | 4500/9040B | 0 | **7.20** |
| Sulfate | mg/L | 11/16/00 | 375.4 | 5.0 | **2,500** |
| TDS | mg/L | 11/16/00 | 2540C | 10 | **38,000** |
| Total Organic Carbon | mg/L | 11/20/00 | 5310C | 1.0 | < 1.0 |
| TOX | mg/L | 11/17/00 | 9020B | 0.050 | < 0.050 |

Released by: _____
Laboratory Supervisor

Report Date: December 12, 2000 Page 1 of 1

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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Contact: Jeff Low
Date Sampled: November 14, 2000
Date Received November 15, 2000
Project: LARW 2nd Semi

Lab Sample ID:
L43606-01B

Field Sample ID:
GW-64

## TOTAL METALS

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Calcium | mg/L | 11/22/00 | 6010B | 0.10 | **380** |
| Iron | mg/L | 11/22/00 | 6010B | 0.10 | < 0.10 |
| Magnesium | mg/L | 11/22/00 | 6010B | 0.10 | **620** |
| Potassium | mg/L | 11/22/00 | 6010B | 0.10 | **440** |
| Sodium | mg/L | 11/22/00 | 6010B | 0.10 | **16,000** |

Released by: Scott
Laboratory Supervisor

Report Date: December 12, 2000



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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: November 14, 2000
Project: LARW 2nd Semi

Contact: Jeff Low
Date Received November 15, 2000

Lab Sample ID:
L43606-01C

Field Sample ID:
GW-64

## DISSOLVED METALS

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 11/28/00 | 7060A | 0.010 | < 0.010 |
| Barium | mg/L | 12/5/00 | 6010B | 0.0040 | **0.040** |
| Beryllium | mg/L | 12/5/00 | 6010B | 0.0020 | < 0.0020 |
| Cadmium | mg/L | 12/5/00 | 6010B | 0.0040 | < 0.0040 |
| Chromium | mg/L | 12/5/00 | 6010B | 0.020 | **0.035** |
| Copper | mg/L | 12/5/00 | 6010B | 0.0080 | **0.017** |
| Lead | mg/L | 11/30/00 | 7421 | 0.010 | < 0.010 |
| Mercury | mg/L | 11/28/00 | 7470A | 0.0010 | < 0.0010 |
| Molybdenum | mg/L | 12/5/00 | 6010B | 0.040 | **0.077** |
| Nickel | mg/L | 12/5/00 | 6010B | 0.010 | < 0.010 |
| Selenium | mg/L | 11/28/00 | 7740 | 0.010 | < 0.010 |
| Silver | mg/L | 12/5/00 | 6010B | 0.010 | < 0.010 |
| Zinc | mg/L | 12/5/00 | 6010B | 0.10 | < 0.10 |

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Laboratory Supervisor

Report Date: December 12, 2000 Page 1 of 1

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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: November 14, 2000
Project: LARW 2nd Semi

Contact: Jeff Low
Date Received November 15, 2000

Lab Sample ID:
L43606-02A

Field Sample ID:
I-2-30

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Bicarbonate (As CaCO3) | mg/L | 11/16/00 | 2320 B | 10 | **250** |
| Carbonate (As CaCO3) | mg/L | 11/16/00 | 2320 B | 10 | < 10 |
| Chloride | mg/L | 11/17/00 | 4500-CL B | 5.0 | **17,000** |
| Conductivity | µmhos/cm | 11/16/00 | 2510B | 10 | **64,000** |
| Cyanide | mg/L | 11/27/00 | 4500-CNE | 0.010 | < 0.010 |
| Fluoride | mg/L | 11/28/00 | 4500-FD | 1.0 | **2.9** |
| Ion Balance | | 12/11/00 | | 0 | **6.6** |
| Nitrate (as N) | mg/L | 11/15/00 | 4500-NO3F | 0.10 | < 0.10 |
| Nitrate/Nitrite (as N) | mg/L | 11/15/00 | 4500-NO3F | 0.10 | < 0.10 |
| pH | pH units | 11/15/00 | 4500/9040B | 0 | **7.30** |
| Sulfate | mg/L | 11/16/00 | 375.4 | 5.0 | **1,000** |
| TDS | mg/L | 11/16/00 | 2540C | 10 | **39,000** |
| Total Organic Carbon | mg/L | 11/20/00 | 5310C | 1.0 | < 1.0 |
| TOX | mg/L | 11/17/00 | 9020B | 0.050 | < 0.050 |

Released by: _____
Laboratory Supervisor

Report Date: December 12, 2000



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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: November 14, 2000
Project: LARW 2nd Semi

Contact: Jeff Low
Date Received November 15, 2000

Lab Sample ID:
L43606-02B

Field Sample ID:
I-2-30

**TOTAL METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Calcium | mg/L | 11/22/00 | 6010B | 0.10 | **300** |
| Iron | mg/L | 11/22/00 | 6010B | 0.10 | **0.16** |
| Magnesium | mg/L | 11/22/00 | 6010B | 0.10 | **360** |
| Potassium | mg/L | 11/22/00 | 6010B | 0.10 | **350** |
| Sodium | mg/L | 11/22/00 | 6010B | 0.10 | **12,000** |

Released by: _____
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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Contact: Jeff Low
Date Sampled: November 14, 2000
Date Received November 15, 2000
Project: LARW 2nd Semi

Lab Sample ID:
L43606-02C

Field Sample ID:
I-2-30

## DISSOLVED METALS

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 11/28/00 | 7060A | 0.010 | **0.030** |
| Barium | mg/L | 12/5/00 | 6010B | 0.0040 | **0.041** |
| Beryllium | mg/L | 12/5/00 | 6010B | 0.0020 | < 0.0020 |
| Cadmium | mg/L | 12/5/00 | 6010B | 0.0040 | < 0.0040 |
| Chromium | mg/L | 12/5/00 | 6010B | 0.020 | **0.027** |
| Copper | mg/L | 12/5/00 | 6010B | 0.0080 | **0.017** |
| Lead | mg/L | 11/30/00 | 7421 | 0.010 | < 0.010 |
| Mercury | mg/L | 11/28/00 | 7470A | 0.0010 | < 0.0010 |
| Molybdenum | mg/L | 12/5/00 | 6010B | 0.040 | < 0.040 |
| Nickel | mg/L | 12/5/00 | 6010B | 0.010 | < 0.010 |
| Selenium | mg/L | 11/28/00 | 7740 | 0.010 | < 0.010 |
| Silver | mg/L | 12/5/00 | 6010B | 0.010 | < 0.010 |
| Zinc | mg/L | 12/5/00 | 6010B | 0.10 | < 0.10 |

Released by: _____
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Report Date: December 12, 2000



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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: November 14, 2000
Project: LARW 2nd Semi

Contact: Jeff Low
Date Received November 15, 2000

Lab Sample ID:
L43606-03A

Field Sample ID:
GW-56R

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Bicarbonate (As CaCO3) | mg/L | 11/16/00 | 2320 B | 10 | **360** |
| Carbonate (As CaCO3) | mg/L | 11/16/00 | 2320 B | 10 | < 10 |
| Chloride | mg/L | 11/17/00 | 4500-CL B | 5.0 | **20,000** |
| Conductivity | µmhos/cm | 11/16/00 | 2510B | 10 | **76,000** |
| Cyanide | mg/L | 11/27/00 | 4500-CNE | 0.010 | < 0.010 |
| Fluoride | mg/L | 11/28/00 | 4500-FD | 1.0 | **3.1** |
| Ion Balance | | 12/11/00 | | 0 | **5.3** |
| Nitrate (as N) | mg/L | 11/15/00 | 4500-NO3F | 0.10 | < 0.10 |
| Nitrate/Nitrite (as N) | mg/L | 11/15/00 | 4500-NO3F | 0.10 | < 0.10 |
| pH | pH units | 11/15/00 | 4500/9040B | 0 | **7.20** |
| Sulfate | mg/L | 11/16/00 | 375.4 | 5.0 | **1,600** |
| TDS | mg/L | 11/16/00 | 2540C | 10 | **32,000** |
| Total Organic Carbon | mg/L | 11/20/00 | 5310C | 1.0 | < 1.0 |
| TOX | mg/L | 11/17/00 | 9020B | 0.050 | < 0.050 |

Released by: _____
Laboratory Supervisor

Report Date: December 12, 2000 

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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Contact: Jeff Low
Date Sampled: November 14, 2000
Date Received November 15, 2000
Project: LARW 2nd Semi

Lab Sample ID:
L43606-03B .

Field Sample ID:
GW-56R

## TOTAL METALS

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Calcium | mg/L | 11/22/00 | 6010B | 0.10 | **330** |
| Iron | mg/L | 11/22/00 | 6010B | 0.10 | < 0.10 |
| Magnesium | mg/L | 11/22/00 | 6010B | 0.10 | **420** |
| Potassium | mg/L | 11/22/00 | 6010B | 0.10 | **450** |
| Sodium | mg/L | 11/22/00 | 6010B | 0.10 | **14,000** |

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Laboratory Supervisor

Report Date: December 12, 2000



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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: November 14, 2000
Project: LARW 2nd Semi

Contact: Jeff Low
Date Received November 15, 2000

Lab Sample ID:
L43606-03C

Field Sample ID:
GW-56R

## DISSOLVED METALS

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 11/28/00 | 7060A | 0.010 | **0.010** |
| Barium | mg/L | 12/5/00 | 6010B | 0.0040 | **0.041** |
| Beryllium | mg/L | 12/5/00 | 6010B | 0.0020 | < 0.0020 |
| Cadmium | mg/L | 12/5/00 | 6010B | 0.0040 | < 0.0040 |
| Chromium | mg/L | 12/5/00 | 6010B | 0.020 | **0.031** |
| Copper | mg/L | 12/5/00 | 6010B | 0.0080 | **0.016** |
| Lead | mg/L | 11/30/00 | 7421 | 0.010 | < 0.010 |
| Mercury | mg/L | 11/28/00 | 7470A | 0.0010 | < 0.0010 |
| Molybdenum | mg/L | 12/5/00 | 6010B | 0.040 | **0.051** |
| Nickel | mg/L | 12/5/00 | 6010B | 0.010 | < 0.010 |
| Selenium | mg/L | 11/28/00 | 7740 | 0.010 | < 0.010 |
| Silver | mg/L | 12/5/00 | 6010B | 0.010 | < 0.010 |
| Zinc | mg/L | 12/5/00 | 6010B | 0.10 | < 0.10 |

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Laboratory Supervisor

Report Date: December 12, 2000 Page 1 of 1

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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Contact: Jeff Low
Date Sampled: November 14, 2000
Date Received November 15, 2000
Project: LARW 2nd Semi

Lab Sample ID:
L43606-04A

Field Sample ID:
GW-16R

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Bicarbonate (As CaCO3) | mg/L | 11/16/00 | 2320 B | 10 | **340** |
| Carbonate (As CaCO3) | mg/L | 11/16/00 | 2320 B | 10 | < 10 |
| Chloride | mg/L | 11/17/00 | 4500-CL B | 5.0 | **20,000** |
| Conductivity | µmhos/cm | 11/16/00 | 2510B | 10 | **77,000** |
| Cyanide | mg/L | 11/27/00 | 4500-CNE | 0.010 | < 0.010 |
| Fluoride | mg/L | 11/28/00 | 4500-FD | 1.0 | **3.0** |
| Ion Balance | | 12/11/00 | | 0 | **8.6** |
| Nitrate (as N) | mg/L | 11/15/00 | 4500-NO3F | 0.10 | < 0.10 |
| Nitrate/Nitrite (as N) | mg/L | 11/15/00 | 4500-NO3F | 0.10 | < 0.10 |
| pH | pH units | 11/15/00 | 4500/9040B | 0 | **7.20** |
| Sulfate | mg/L | 11/16/00 | 375.4 | 5.0 | **1,600** |
| TDS | mg/L | 11/16/00 | 2540C | 10 | **41,000** |
| Total Organic Carbon | mg/L | 11/20/00 | 5310C | 1.0 | < 1.0 |
| TOX | mg/L | 11/17/00 | 9020B | 0.050 | < 0.050 |

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Laboratory Supervisor

Report Date: December 12, 2000 Page 1 of 1

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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: November 14, 2000
Project: LARW 2nd Semi

Contact: Jeff Low
Date Received November 15, 2000

Lab Sample ID:
L43606-04B

Field Sample ID:
GW-16R

**TOTAL METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Calcium | mg/L | 11/22/00 | 6010B | 0.10 | **340** |
| Iron | mg/L | 11/22/00 | 6010B | 0.10 | < 0.10 |
| Magnesium | mg/L | 11/22/00 | 6010B | 0.10 | **430** |
| Potassium | mg/L | 11/22/00 | 6010B | 0.10 | **450** |
| Sodium | mg/L | 11/22/00 | 6010B | 0.10 | **15,000** |

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Laboratory Supervisor

Report Date: December 12, 2000 Page 1 of 1

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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: November 14, 2000
Project: LARW 2nd Semi

Contact: Jeff Low
Date Received November 15, 2000

Lab Sample ID:
L43606-04C

Field Sample ID:
GW-16R

## DISSOLVED METALS

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 11/28/00 | 7060A | 0.010 | < 0.010 |
| Barium | mg/L | 12/5/00 | 6010B | 0.0040 | **0.035** |
| Beryllium | mg/L | 12/5/00 | 6010B | 0.0020 | < 0.0020 |
| Cadmium | mg/L | 12/5/00 | 6010B | 0.0040 | < 0.0040 |
| Chromium | mg/L | 12/5/00 | 6010B | 0.020 | **0.032** |
| Copper | mg/L | 12/5/00 | 6010B | 0.0080 | **0.016** |
| Lead | mg/L | 11/30/00 | 7421 | 0.010 | < 0.010 |
| Mercury | mg/L | 11/28/00 | 7470A | 0.0010 | < 0.0010 |
| Molybdenum | mg/L | 12/5/00 | 6010B | 0.040 | **0.048** |
| Nickel | mg/L | 12/5/00 | 6010B | 0.010 | < 0.010 |
| Selenium | mg/L | 11/28/00 | 7740 | 0.010 | < 0.010 |
| Silver | mg/L | 12/5/00 | 6010B | 0.010 | < 0.010 |
| Zinc | mg/L | 12/5/00 | 6010B | 0.10 | < 0.10 |

Released by: S Dott
Laboratory Supervisor

Report Date: December 12, 2000



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Client: Envirocare of Utah
Date Sampled: November 15, 2000
Project: LARW

Contact: Jeff Low
Date Received November 16, 2000

Lab Sample ID:
L43629-01C

Field Sample ID:
P3-95 SWC

**TOTAL METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Calcium | mg/L | 11/22/00 | 6010B | 0.10 | **2,000** |
| Iron | mg/L | 11/22/00 | 6010B | 0.10 | < 0.10 |
| Magnesium | mg/L | 11/22/00 | 6010B | 0.10 | **2,200** |
| Potassium | mg/L | 11/22/00 | 6010B | 0.10 | **640** |
| Sodium | mg/L | 11/22/00 | 6010B | 0.10 | **41,000** |

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Report Date: December 14, 2000



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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: November 15, 2000
Project: LARW

Contact: Jeff Low
Date Received November 16, 2000

Lab Sample ID:
L43629-01B

Field Sample ID:
P3-95 SWC

## DISSOLVED METALS

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 11/28/00 | 7060A | 0.010 | < 0.010 |
| Barium | mg/L | 12/5/00 | 6010B | 0.0040 | **0.091** |
| Beryllium | mg/L | 12/5/00 | 6010B | 0.0020 | < 0.0020 |
| Cadmium | mg/L | 12/5/00 | 6010B | 0.0040 | < 0.0040 |
| Chromium | mg/L | 12/5/00 | 6010B | 0.020 | **0.037** |
| Copper | mg/L | 12/5/00 | 6010B | 0.0080 | **0.017** |
| Lead | mg/L | 11/30/00 | 7421 | 0.010 | < 0.010 |
| Mercury | mg/L | 11/29/00 | 7470A | 0.0010 | < 0.0010 |
| Molybdenum | mg/L | 12/5/00 | 6010B | 0.040 | **0.043** |
| Nickel | mg/L | 12/5/00 | 6010B | 0.010 | < 0.010 |
| Selenium | mg/L | 11/28/00 | 7740 | 0.010 | < 0.010 |
| Silver | mg/L | 12/5/00 | 6010B | 0.010 | < 0.010 |
| Zinc | mg/L | 12/5/00 | 6010B | 0.10 | < 0.10 |

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Laboratory Supervisor

Report Date: December 14, 2000



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Client: Envirocare of Utah
Date Sampled: November 15, 2000
Project: LARW

Contact: Jeff Low
Date Received November 16, 2000

Lab Sample ID:
L43629-01A

Field Sample ID:
P3-95 SWC

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Bicarbonate (As CaCO3) | mg/L | 11/21/00 | 2320 B | 10 | **84** |
| Carbonate (As CaCO3) | mg/L | 11/21/00 | 2320 B | 10 | < 10 |
| Chloride | mg/L | 11/17/00 | 4500-CL B | 5.0 | **67,000** |
| Conductivity | µmhos/cm | 11/21/00 | 2510B | 10 | **170,000** |
| Cyanide | mg/L | 11/28/00 | 4500-CNE | 0.010 | < 0.010 |
| Fluoride | mg/L | 11/28/00 | 4500-FD | 1.0 | **5.6** |
| Ion Balance | | 12/11/00 | | 0 | **2.7** |
| Nitrate (as N) | mg/L | 11/17/00 | 4500-NO3F | 0.10 | **17** |
| Nitrate/Nitrite (as N) | mg/L | 11/17/00 | 4500-NO3F | 0.10 | **17** |
| pH | pH units | 11/21/00 | 4500/9040B | 0 | **7.20** |
| Sulfate | mg/L | 11/20/00 | 375.4 | 5.0 | **3,800** |
| TDS | mg/L | 11/22/00 | 2540C | 10 | **110,000** |
| Total Organic Carbon | mg/L | 11/20/00 | 5310C | 1.0 | < 1.0 |
| TOX | mg/L | 11/17/00 | 9020B | 0.050 | < 0.050 |

Released by: _____
Laboratory Supervisor

Report Date: December 14, 2000



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Client: Envirocare of Utah
Date Sampled: November 15, 2000
Project: LARW

Contact: Jeff Low
Date Received November 16, 2000

Lab Sample ID:
L43629-02C

Field Sample ID:
P3-95 NEC

**TOTAL METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Calcium | mg/L | 11/22/00 | 6010B | 0.10 | **250** |
| Iron | mg/L | 11/22/00 | 6010B | 0.10 | < 0.10 |
| Magnesium | mg/L | 11/22/00 | 6010B | 0.10 | **270** |
| Potassium | mg/L | 11/22/00 | 6010B | 0.10 | **280** |
| Sodium | mg/L | 11/22/00 | 6010B | 0.10 | **9,300** |

Released by: Craig Thurston
Laboratory Supervisor

Report Date: December 14, 2000



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Client: Envirocare of Utah
Date Sampled: November 15, 2000
Project: LARW

Contact: Jeff Low
Date Received November 16, 2000

Lab Sample ID:
L43629-02B

Field Sample ID:
P3-95 NEC

**DISSOLVED METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 11/28/00 | 7060A | 0.010 | < 0.010 |
| Barium | mg/L | 12/5/00 | 6010B | 0.0040 | **0.042** |
| Beryllium | mg/L | 12/5/00 | 6010B | 0.0020 | < 0.0020 |
| Cadmium | mg/L | 12/5/00 | 6010B | 0.0040 | < 0.0040 |
| Chromium | mg/L | 12/5/00 | 6010B | 0.020 | **0.021** |
| Copper | mg/L | 12/5/00 | 6010B | 0.0080 | **0.014** |
| Lead | mg/L | 11/30/00 | 7421 | 0.010 | < 0.010 |
| Mercury | mg/L | 11/29/00 | 7470A | 0.0010 | < 0.0010 |
| Molybdenum | mg/L | 12/5/00 | 6010B | 0.040 | < 0.040 |
| Nickel | mg/L | 12/5/00 | 6010B | 0.010 | < 0.010 |
| Selenium | mg/L | 11/28/00 | 7740 | 0.010 | < 0.010 |
| Silver | mg/L | 12/5/00 | 6010B | 0.010 | < 0.010 |
| Zinc | mg/L | 12/5/00 | 6010B | 0.10 | < 0.10 |

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Laboratory Supervisor

Report Date: December 14, 2000



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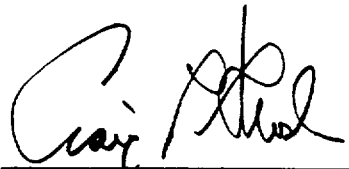
Client: Envirocare of Utah
Contact: Jeff Low
Date Sampled: November 15, 2000
Date Received November 16, 2000
Project: LARW

Lab Sample ID:
L43629-02A

Field Sample ID:
P3-95 NEC

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Bicarbonate (As CaCO3) | mg/L | 11/21/00 | 2320 B | 10 | **200** |
| Carbonate (As CaCO3) | mg/L | 11/21/00 | 2320 B | 10 | < 10 |
| Chloride | mg/L | 11/17/00 | 4500-CL B | 5.0 | **16,000** |
| Conductivity | µmhos/cm | 11/21/00 | 2510B | 10 | **54,000** |
| Cyanide | mg/L | 11/28/00 | 4500-CNE | 0.010 | < 0.010 |
| Fluoride | mg/L | 11/28/00 | 4500-FD | 1.0 | **1.9** |
| Ion Balance | | 12/11/00 | | 0 | -2.5 |
| Nitrate (as N) | mg/L | 11/17/00 | 4500-NO3F | 0.10 | < 0.10 |
| Nitrate/Nitrite (as N) | mg/L | 11/17/00 | 4500-NO3F | 0.10 | < 0.10 |
| pH | pH units | 11/21/00 | 4500/9040B | 0 | **7.40** |
| Sulfate | mg/L | 11/20/00 | 375.4 | 5.0 | **720** |
| TDS | mg/L | 11/22/00 | 2540C | 10 | **17,000** |
| Total Organic Carbon | mg/L | 11/20/00 | 5310C | 1.0 | < 1.0 |
| TOX | mg/L | 11/17/00 | 9020B | 0.050 | < 0.050 |

Released by: 

Laboratory Supervisor Report Date: December 14, 2000 

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Client: Envirocare of Utah
Date Sampled: November 15, 2000
Project: LARW

Contact: Jeff Low
Date Received November 16, 2000

Lab Sample ID:
L43629-03C

Field Sample ID:
P3-97 NEC

**TOTAL METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Calcium | mg/L | 11/22/00 | 6010B | 0.10 | **370** |
| Iron | mg/L | 11/22/00 | 6010B | 0.10 | < 0.10 |
| Magnesium | mg/L | 11/22/00 | 6010B | 0.10 | **460** |
| Potassium | mg/L | 11/22/00 | 6010B | 0.10 | **400** |
| Sodium | mg/L | 11/22/00 | 6010B | 0.10 | **14,000** |

Released by: _____
Laboratory Supervisor

Report Date: December 14, 2000



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Client: Envirocare of Utah
Date Sampled: November 15, 2000
Project: LARW

Contact: Jeff Low
Date Received November 16, 2000

Lab Sample ID:
L43629-03B

Field Sample ID:
P3-97 NEC

**DISSOLVED METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 11/28/00 | 7060A | 0.010 | < 0.010 |
| Barium | mg/L | 12/5/00 | 6010B | 0.0040 | **0.047** |
| Beryllium | mg/L | 12/5/00 | 6010B | 0.0020 | < 0.0020 |
| Cadmium | mg/L | 12/5/00 | 6010B | 0.0040 | < 0.0040 |
| Chromium | mg/L | 12/5/00 | 6010B | 0.020 | **0.032** |
| Copper | mg/L | 12/5/00 | 6010B | 0.0080 | **0.018** |
| Lead | mg/L | 11/30/00 | 7421 | 0.010 | < 0.010 |
| Mercury | mg/L | 11/29/00 | 7470A | 0.0010 | < 0.0010 |
| Molybdenum | mg/L | 12/5/00 | 6010B | 0.040 | **0.052** |
| Nickel | mg/L | 12/5/00 | 6010B | 0.010 | < 0.010 |
| Selenium | mg/L | 11/28/00 | 7740 | 0.010 | < 0.010 |
| Silver | mg/L | 12/5/00 | 6010B | 0.010 | < 0.010 |
| Zinc | mg/L | 12/5/00 | 6010B | 0.10 | < 0.10 |

Released by: Craig P. Thuss
Laboratory Supervisor

Report Date: December 14, 2000



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(801) 263-8686
Toll Free (888) 263-8686
Fax (801) 263-8687

Client: Envirocare of Utah
Date Sampled: November 15, 2000
Project: LARW

Contact: Jeff Low
Date Received November 16, 2000

Lab Sample ID:
L43629-03A

Field Sample ID:
P3-97 NEC

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Bicarbonate (As CaCO3) | mg/L | 11/21/00 | 2320 B | 10 | **290** |
| Carbonate (As CaCO3) | mg/L | 11/21/00 | 2320 B | 10 | < 10 |
| Chloride | mg/L | 11/17/00 | 4500-CL B | 5.0 | **18,000** |
| Conductivity | µmhos/cm | 11/21/00 | 2510B | 10 | **75,000** |
| Cyanide | mg/L | 11/28/00 | 4500-CNE | 0.010 | < 0.010 |
| Fluoride | mg/L | 11/28/00 | 4500-FD | 1.0 | **3.0** |
| Ion Balance | | 12/11/00 | | 0 | **10** |
| Nitrate (as N) | mg/L | 11/17/00 | 4500-NO3F | 0.10 | **0.41** |
| Nitrate/Nitrite (as N) | mg/L | 11/17/00 | 4500-NO3F | 0.10 | **0.41** |
| pH | pH units | 11/21/00 | 4500/9040B | 0 | **7.30** |
| Sulfate | mg/L | 11/20/00 | 375.4 | 5.0 | **1,900** |
| TDS | mg/L | 11/22/00 | 2540C | 10 | **29,000** |
| Total Organic Carbon | mg/L | 11/20/00 | 5310C | 1.0 | < 1.0 |
| TOX | mg/L | 11/17/00 | 9020B | 0.050 | < 0.050 |

Released by: _____
Laboratory Supervisor

Report Date: December 14, 2000 Page 1 of 1

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Client: Envirocare of Utah
Date Sampled: November 16, 2000
Project: LARW

Contact: Jeff Low
Date Received November 17, 2000

Lab Sample ID:
L43644-01B

Field Sample ID:
CL-4

## DISSOLVED METALS

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 11/28/00 | 7060A | 0.010 | < 0.010 |
| Barium | mg/L | 12/5/00 | 6010B | 0.0040 | **0.20** |
| Beryllium | mg/L | 12/5/00 | 6010B | 0.0020 | < 0.0020 |
| Cadmium | mg/L | 12/5/00 | 6010B | 0.0040 | < 0.0040 |
| Chromium | mg/L | 12/5/00 | 6010B | 0.020 | **0.041** |
| Copper | mg/L | 12/5/00 | 6010B | 0.0080 | **0.031** |
| Lead | mg/L | 11/30/00 | 7421 | 0.010 | < 0.010 |
| Mercury | mg/L | 12/1/00 | 7470A | 0.0010 | < 0.0010 |
| Molybdenum | mg/L | 12/5/00 | 6010B | 0.040 | < 0.040 |
| Nickel | mg/L | 12/5/00 | 6010B | 0.010 | < 0.010 |
| Selenium | mg/L | 11/28/00 | 7740 | 0.010 | < 0.010 |
| Silver | mg/L | 12/5/00 | 6010B | 0.010 | < 0.010 |
| Zinc | mg/L | 12/5/00 | 6010B | 0.10 | < 0.10 |

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Laboratory Supervisor

Report Date: December 18, 2000 Page 1 of 1

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Client: Envirocare of Utah
Date Sampled: November 16, 2000
Project: LARW

Contact: Jeff Low
Date Received November 17, 2000

Lab Sample ID:
L43644-01C

Field Sample ID:
CL-4

**TOTAL METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Calcium | mg/L | 11/22/00 | 6010B | 0.10 | **1,600** |
| Iron | mg/L | 11/22/00 | 6010B | 0.10 | **0.85** |
| Magnesium | mg/L | 11/22/00 | 6010B | 0.10 | **830** |
| Potassium | mg/L | 11/22/00 | 6010B | 0.10 | **160** |
| Sodium | mg/L | 11/22/00 | 6010B | 0.10 | **9,600** |

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Laboratory Supervisor

Report Date: December 18, 2000 Page 1 of 1

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Client: Envirocare of Utah
Date Sampled: November 16, 2000
Project: LARW

Contact: Jeff Low
Date Received November 17, 2000

Lab Sample ID:
L43644-01A

Field Sample ID:
CL-4

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Bicarbonate (As CaCO3) | mg/L | 11/21/00 | 2320 B | 10 | **120** |
| Carbonate (As CaCO3) | mg/L | 11/21/00 | 2320 B | 10 | < 10 |
| Chloride | mg/L | 11/21/00 | 4500-CL B | 5.0 | **17,000** |
| Conductivity | µmhos/cm | 11/21/00 | 2510B | 10 | **64,000** |
| Cyanide | mg/L | 11/30/00 | 4500-CNE | 0.010 | < 0.010 |
| Fluoride | mg/L | 11/28/00 | 4500-FD | 1.0 | **3.2** |
| Ion Balance | | 12/11/00 | | 0 | **4.1** |
| Nitrate (as N) | mg/L | 11/17/00 | 4500-NO3F | 0.10 | **2.4** |
| Nitrate/Nitrite (as N) | mg/L | 11/17/00 | 4500-NO3F | 0.10 | **2.4** |
| pH | pH units | 11/21/00 | 4500/9040B | 0 | **7.10** |
| Sulfate | mg/L | 11/20/00 | 375.4 | 5.0 | **2,100** |
| TDS | mg/L | 11/22/00 | 2540C | 10 | **24,000** |
| Total Organic Carbon | mg/L | 11/20/00 | 5310C | 1.0 | < 1.0 |
| TOX | mg/L | 11/17/00 | 9020B | 0.050 | < 0.050 |

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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: December 1, 2000
Project: LARW

Contact: Jeff Low
Date Received December 4, 2000

Lab Sample ID:
L43850-01A

Field Sample ID:
GW-94

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Cyanide | mg/L | 12/5/00 | 4500-CNE | 0.010 | < 0.010 |

Released by: SOM
Laboratory Supervisor

Report Date: December 6, 2000



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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Contact: Jeff Low
Date Sampled: December 1, 2000
Date Received December 4, 2000
Project: LARW

Lab Sample ID:
L43850-02A

Field Sample ID:
GW-95

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Cyanide | mg/L | 12/5/00 | 4500-CNE | 0.010 | < 0.010 |

Released by: SOL
Laboratory Supervisor

Report Date: December 6, 2000



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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: December 1, 2000
Project: LARW

Contact: Jeff Low
Date Received December 4, 2000

Lab Sample ID:
L43850-03A

Field Sample ID:
GW-99

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Cyanide | mg/L | 12/5/00 | 4500-CNE | 0.010 | < 0.010 |

Released by: _____
Laboratory Supervisor

Report Date: December 6, 2000



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Client: Envirocare of Utah
Date Sampled: December 1, 2000
Project: LARW

Contact: Jeff Low
Date Received December 4, 2000

Lab Sample ID:
L43850-04A

Field Sample ID:
GW-100

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Cyanide | mg/L | 12/5/00 | 4500-CNE | 0.010 | < 0.010 |

Released by: SDM
Laboratory Supervisor

Report Date: December 6, 2000



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Client: Envirocare of Utah
Contact: Jeff Low
Date Sampled: December 1, 2000
Date Received December 4, 2000
Project: LARW

Lab Sample ID:
L43850-05A

Field Sample ID:
GW-101

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Cyanide | mg/L | 12/5/00 | 4500-CNE | 0.010 | < 0.010 |

Released by: _____
Laboratory Supervisor

Report Date: December 6, 2000



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Client: Envirocare of Utah
Date Sampled: December 1, 2000
Project: LARW

Contact: Jeff Low
Date Received December 4, 2000

Lab Sample ID:
L43850-06A

Field Sample ID:
GW-102

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Cyanide | mg/L | 12/5/00 | 4500-CNE | 0.010 | < 0.010 |

Released by: _____
Laboratory Supervisor

Report Date: December 6, 2000

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Client: Envirocare of Utah
Date Sampled: December 1, 2000
Project: LARW

Contact: Jeff Low
Date Received December 4, 2000

Lab Sample ID:
L43850-07A

Field Sample ID:
GW-105

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Cyanide | mg/L | 12/5/00 | 4500-CNE | 0.010 | < 0.010 |

Released by: _____
Laboratory Supervisor

Report Date: December 6, 2000 Page 1 of 1

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Client: Envirocare of Utah
Contact: Jeff Low
Date Sampled: December 1, 2000
Date Received December 4, 2000
Project: LARW

Lab Sample ID:
L43850-08A

Field Sample ID:
GW-104

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Cyanide | mg/L | 12/5/00 | 4500-CNE | 0.010 | < 0.010 |

Released by: SDT
Laboratory Supervisor

Report Date: December 6, 2000



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# INORGANIC ANALYSIS REPORT

Client: Envirocare of Utah
Date Sampled: December 1, 2000
Project: LARW

Contact: Jeff Low
Date Received December 4, 2000

Lab Sample ID:
L43850-09A

Field Sample ID:
GW-401

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Cyanide | mg/L | 12/5/00 | 4500-CNE | 0.010 | < 0.010 |

Released by: _____
Laboratory Supervisor

Report Date: December 6, 2000



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Client: Envirocare of Utah
Contact: Jeff Low
Date Sampled: December 1, 2000
Date Received December 4, 2000
Project: LARW

Lab Sample ID:
L43850-10A

Field Sample ID:
GW-103

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Cyanide | mg/L | 12/5/00 | 4500-CNE | 0.010 | < 0.010 |

Released by: _____
Laboratory Supervisor

Report Date: December 6, 2000



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Client: Envirocare of Utah
Date Sampled: December 18, 2000
Project: LARW

Contact: Jeff Low
Date Received December 18, 2000

Lab Sample ID:
L44066-01C

Field Sample ID:
P3-95SWC

**TOTAL METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Calcium | mg/L | 12/28/00 | 6010B | 0.10 | **1,800** |
| Iron | mg/L | 12/28/00 | 6010B | 0.10 | < 0.10 |
| Magnesium | mg/L | 12/28/00 | 6010B | 0.10 | **2,000** |
| Potassium | mg/L | 12/28/00 | 6010B | 0.10 | **940** |
| Sodium | mg/L | 12/28/00 | 6010B | 0.10 | **41,000** |

Released by: _____
Laboratory Supervisor

Report Date: January 5, 2001



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Client: Envirocare of Utah
Date Sampled: December 18, 2000
Project: LARW

Contact: Jeff Low
Date Received December 18, 2000

Lab Sample ID:
L44066-01B

Field Sample ID:
P3-95SWC

## DISSOLVED METALS

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 12/26/00 | 7060A | 0.010 | < 0.010 |
| Barium | mg/L | 12/27/00 | 6010B | 0.0040 | **0.099** |
| Beryllium | mg/L | 12/27/00 | 6010B | 0.0020 | < 0.0020 |
| Cadmium | mg/L | 12/27/00 | 6010B | 0.0040 | **0.026** |
| Chromium | mg/L | 12/27/00 | 6010B | 0.020 | **0.067** |
| Copper | mg/L | 12/27/00 | 6010B | 0.0080 | **0.080** |
| Lead | mg/L | 12/29/00 | 7421 | 0.010 | < 0.010 |
| Mercury | mg/L | 12/28/00 | 7470A | 0.0010 | < 0.0010 |
| Molybdenum | mg/L | 12/27/00 | 6010B | 0.040 | **0.23** |
| Nickel | mg/L | 12/27/00 | 6010B | 0.010 | **0.019** |
| Selenium | mg/L | 12/26/00 | 7740 | 0.010 | < 0.010 |
| Silver | mg/L | 12/27/00 | 6010B | 0.010 | **0.047** |
| Zinc | mg/L | 12/27/00 | 6010B | 0.10 | < 0.10 |

Released by: SDH
Laboratory Supervisor

Report Date: January 5, 2001



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Client: Envirocare of Utah
Date Sampled: December 18, 2000
Project: LARW

Contact: Jeff Low
Date Received December 18, 2000

Lab Sample ID:
L44066-01A

Field Sample ID:
P3-95SWC

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Bicarbonate (As CaCO3) | mg/L | 12/19/00 | 2320 B | 10 | **120** |
| Carbonate (As CaCO3) | mg/L | 12/19/00 | 2320 B | 10 | < 10 |
| Chloride | mg/L | 12/20/00 | 4500-CL B | 5.0 | **65,000** |
| Conductivity | µmhos/cm | 12/20/00 | 2510B | 10 | **140,000** |
| Cyanide | mg/L | 12/20/00 | 4500-CNE | 0.010 | < 0.010 |
| Fluoride | mg/L | 12/20/00 | 4500-FD | 1.0 | **8.6** |
| Ion Balance | | 1/4/01 | | 0 | **3.9** |
| Nitrate (as N) | mg/L | 12/19/00 | 4500-NO3F | 0.10 | **12** |
| Nitrate/Nitrite (as N) | mg/L | 12/19/00 | 4500-NO3F | 0.10 | **12** |
| pH | pH units | 12/19/00 | 4500/9040B | 0 | **7.10** |
| Sulfate | mg/L | 12/20/00 | 375.4 | 5.0 | **3,500** |
| TDS | mg/L | 12/21/00 | 2540C | 10 | **98,000** |
| Total Organic Carbon | mg/L | 12/19/00 | 5310C | 1.0 | < 1.0 |
| TOX | mg/L | 12/21/00 | 9020B | 0.050 | < 0.050 |

Released by: _____
Laboratory Supervisor

Report Date: January 5, 2001



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Client: Envirocare of Utah
Date Sampled: December 18, 2000
Project: LARW

Contact: Jeff Low
Date Received December 18, 2000

Lab Sample ID:
L44066-02C

Field Sample ID:
GW-701

**TOTAL METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Calcium | mg/L | 12/28/00 | 6010B | 0.10 | **1,700** |
| Iron | mg/L | 12/28/00 | 6010B | 0.10 | < 0.10 |
| Magnesium | mg/L | 12/28/00 | 6010B | 0.10 | **1,900** |
| Potassium | mg/L | 12/28/00 | 6010B | 0.10 | **900** |
| Sodium | mg/L | 12/28/00 | 6010B | 0.10 | **40,000** |

Reviewed by: _____
Laboratory Supervisor

Report Date: January 5, 2001



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# INORGANIC ANALYSIS REPORT

AMERICAN
WEST
ANALYTICAL
LABORATORIES

463 West 3600 South
Salt Lake City, Utah
84115

(801) 263-8686
Toll Free (888) 263-8686
Fax (801) 263-8687

Client: Envirocare of Utah
Date Sampled: December 18, 2000
Project: LARW

Contact: Jeff Low
Date Received December 18, 2000

Lab Sample ID:
L44066-02B

Field Sample ID:
GW-701

**DISSOLVED METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Arsenic | mg/L | 12/26/00 | 7060A | 0.010 | < 0.010 |
| Barium | mg/L | 12/27/00 | 6010B | 0.0040 | **0.091** |
| Beryllium | mg/L | 12/27/00 | 6010B | 0.0020 | < 0.0020 |
| Cadmium | mg/L | 12/27/00 | 6010B | 0.0040 | **0.024** |
| Chromium | mg/L | 12/27/00 | 6010B | 0.020 | **0.067** |
| Copper | mg/L | 12/27/00 | 6010B | 0.0080 | **0.097** |
| Lead | mg/L | 12/29/00 | 7421 | 0.010 | < 0.010 |
| Mercury | mg/L | 12/28/00 | 7470A | 0.0010 | < 0.0010 |
| Molybdenum | mg/L | 12/27/00 | 6010B | 0.040 | **0.22** |
| Nickel | mg/L | 12/27/00 | 6010B | 0.010 | **0.018** |
| Selenium | mg/L | 12/26/00 | 7740 | 0.010 | < 0.010 |
| Silver | mg/L | 12/27/00 | 6010B | 0.010 | **0.043** |
| Zinc | mg/L | 12/27/00 | 6010B | 0.10 | < 0.10 |

Released by: SDM
Laboratory Supervisor

Report Date: January 5, 2001



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# INORGANIC ANALYSIS REPORT

AMERICAN
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463 West 3600 South
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84115

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Client: Envirocare of Utah
Date Sampled: December 18, 2000
Project: LARW

Contact: Jeff Low
Date Received December 18, 2000

Lab Sample ID:
L44066-02A

Field Sample ID:
GW-701

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Amount Detected |
|---|---|---|---|---|---|
| Bicarbonate (As CaCO3) | mg/L | 12/19/00 | 2320 B | 10 | **120** |
| Carbonate (As CaCO3) | mg/L | 12/19/00 | 2320 B | 10 | < 10 |
| Chloride | mg/L | 12/20/00 | 4500-CL B | 5.0 | **65,000** |
| Conductivity | µmhos/cm | 12/20/00 | 2510B | 10 | **150,000** |
| Cyanide | mg/L | 12/20/00 | 4500-CNE | 0.010 | < 0.010 |
| Fluoride | mg/L | 12/20/00 | 4500-FD | 1.0 | **8.6** |
| Ion Balance | | 1/4/01 | | 0 | **2.4** |
| Nitrate (as N) | mg/L | 12/19/00 | 4500-NO3F | 0.10 | **11** |
| Nitrate/Nitrite (as N) | mg/L | 12/19/00 | 4500-NO3F | 0.10 | **11** |
| pH | pH units | 12/19/00 | 4500/9040B | 0 | **7.00** |
| Sulfate | mg/L | 12/20/00 | 375.4 | 5.0 | **3,500** |
| TDS | mg/L | 12/21/00 | 2540C | 10 | **110,000** |
| Total Organic Carbon | mg/L | 12/19/00 | 5310C | 1.0 | < 1.0 |
| TOX | mg/L | 12/21/00 | 9020B | 0.050 | < 0.050 |

Released by: _____
Laboratory Supervisor

Report Date: January 5, 2001



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# ATTACHMENT D

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# ANALYTICAL REPORTS: RADIOLOGICAL CHEMISTRIES

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**Barringer Laboratories, Inc.**

*15000 W 6th Avenue Suite 300 Golden, Colorado 80401-5047 (800) 654-0506 (303) 277-1687 Fax (303) 277-1689*

**Date:** 21-Aug-00

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah**
Work Order: **0007138**
Project:

Client Sample ID: **GW-103A**
Tag Number:

Lab Sample ID: **0007138-01A**
Date Collected: **07/11/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 0.024 | 0.0009 | | mg/L | 1 | | 08/02/2000 | AGM | P6098 |
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 50 ± 23 | 40 | | pCi/L | 1 | | 07/26/2000 | FT | P5964 |
| Gross Alpha, dissolved | 12587-46-1 | EPA 00-02 | 58 ± 14 | 8 | | pCi/L | 1 | | 07/28/2000 | AEW | P5981 |
| Gross Beta, dissolved | 12587-47-2 | EPA 900.0 | 120 ± 490 | 800 | | pCi/L | 1 | | 07/27/2000 | AEW | P5914 |
| Potassium-40, dissolved | 13966-00-2 | EPA 901.1 | ND | 300 | | pCi/L | 1 | | 07/24/2000 | LLC | A8649A |
| Radium-226, dissolved | 13982-63-3 | EPA 903.0M/SM 705M | 0.86 ± 0.54 | 0.5 | | pCi/L | 1 | | 08/01/2000 | RKB | P5982 |
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 1.2 ± 0.40 | 0.6 | | pCi/L | 1 | | 07/31/2000 | CWP | P5811 |
| Strontium-89/90, dissolved | 11-10-9 | EPA 905.0/SM704 | -0.23 ± 0.71 | 1 | | pCi/L | 1 | | 08/04/2000 | MTC | P6087 |
| Neptunium-237, dissolved | 13994-20-2 | EPA 907.0M/520M | 0.46 ± 0.48 | 0.6 | | pCi/L | 1 | | 08/16/2000 | JCP | P6220 |
| Uranium-233/234, dissolved | 13966-29-5 | EPA 908.0M | 13 ± 1.5 | 1 | | pCi/L | 1 | | 07/20/2000 | KEB | P5792 |
| Uranium-235/236, dissolved | 15117-96-1 | EPA 908.0M | -0.13 ± 0.34 | 0.6 | | pCi/L | 1 | | 07/20/2000 | KEB | P5792 |
| Uranium-238, dissolved | 7440-61-1 | EPA 908.0M | 8.7 ± 1.2 | 0.7 | | pCi/L | 1 | | 07/20/2000 | KEB | P5792 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | -1.1 ± 1.3 | 2 | | pCi/L | 1 | | 08/07/2000 | KEB | P6072 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | 0.34 ± 0.63 | 0.9 | | pCi/L | 1 | | 08/07/2000 | KEB | P6072 |

Client: **Envirocare of Utah**
Work Order: **0007138**
Project:

Client Sample ID: **GW-103A**
Tag Number:

Lab Sample ID: **0007138-01B**
Date Collected: **07/11/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Carbon-14, dissolved | 14762-75-5 | EPA 520-C01M | -41 ± 40 | 70 | | pCi/L | 1 | | 08/09/2000 | FT | P6188 |
| Iodine-129, dissolved | 15046-84-1 | EPA 902.0 | -0.93 ± 0.73 | 1 | | pCi/L | 1 | | 07/26/2000 | CWP | P5808 |

**Qualifiers:** ND - Not detected at the reporting limit J - Analyte detected below reporting limit E - Value above quantitation range S - Spike outside accepted recovery limits
...alyte detected in method blank L - Contract/Client reporting limit exceeded ...utside accepted recovery limits Y - Unspiked sample > 4 times amount spiked
...ple > 10 times blank result M - Maximum contaminant level exceeded ...ate sample(s) < 5 times limit

*Barringer Laboratories, Inc.*

*15000 W 6th Avenue Suite 300 Golden, Colorado 80401-5047 (800) 654-0506 (303) 277-1687 Fax (303) 277-1689*

**Date:** 21-Aug-00

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah**
Work Order: **0007138**
Project:

Client Sample ID: **GW-103A**
Tag Number:

Lab Sample ID: **0007138-01C**
Date Collected: **07/11/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Tritium, dissolved | 10028-17-8 | EPA 906.0 | -180 ± 210 | 400 | | pCi/L | 1 | | 08/07/2000 | AWT | P6069 |

Client: **Envirocare of Utah**
Work Order: **0007138**
Project:

Client Sample ID: **GW-103B**
Tag Number:

Lab Sample ID: **0007138-02A**
Date Collected: **07/11/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 0.024 | 0.0009 | | mg/L | 1 | | 08/02/2000 | AGM | P6098 |
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 27 ± 21 | 30 | | pCi/L | 1 | | 07/26/2000 | FT | P5964 |
| Gross Alpha, dissolved | 12587-46-1 | EPA 00-02 | 59 ± 14 | 8 | | pCi/L | 1 | | 07/28/2000 | AEW | P5981 |
| Gross Beta, dissolved | 12587-47-2 | EPA 900.0 | 210 ± 490 | 800 | | pCi/L | 1 | | 07/27/2000 | AEW | P5914 |
| Potassium-40, dissolved | 13966-00-2 | EPA 901.1 | ND | 200 | | pCi/L | 1 | | 07/24/2000 | LLC | A8649A |
| Radium-226, dissolved | 13982-63-3 | EPA 903.0M/SM 705M | 0.33 ± 0.44 | 0.6 | | pCi/L | 1 | | 08/01/2000 | RKB | P5982 |
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 1.6 ± 0.42 | 0.6 | | pCi/L | 1 | | 08/01/2000 | CWP | P5812 |
| Strontium-89/90, dissolved | 11-10-9 | EPA 905.0/SM704 | -0.060 ± 0.76 | 1 | | pCi/L | 1 | | 08/04/2000 | MTC | P6087 |
| Neptunium-237, dissolved | 13994-20-2 | EPA 907.0M/520M | 0.27 ± 0.33 | 0.4 | | pCi/L | 1 | | 08/16/2000 | JCP | P6220 |
| Uranium-233/234, dissolved | 13966-29-5 | EPA 908.0M | 15 ± 1.8 | 1 | | pCi/L | 1 | | 07/20/2000 | KEB | P5792 |
| Uranium-235/236, dissolved | 15117-96-1 | EPA 908.0M | -0.42 ± 0.37 | 0.8 | | pCi/L | 1 | | 07/20/2000 | KEB | P5792 |
| Uranium-238, dissolved | 7440-61-1 | EPA 908.0M | 7.9 ± 1.3 | 0.9 | | pCi/L | 1 | | 07/20/2000 | KEB | P5792 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | -2.3 ± 1.4 | 3 | | pCi/L | 1 | | 08/07/2000 | KEB | P6072 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | 0.015 ± 0.61 | 1 | | pCi/L | 1 | | 08/07/2000 | KEB | P6072 |

Client: **Envirocare of Utah**
Work Order: **0007138**
Project:

Client Sample ID: **GW-103B**
Tag Number:

Lab Sample ID: **0007138-02B**
Date Collected: **07/11/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Carbon-14, dissolved | 14762-75-5 | EPA 520-C01M | -42 ± 41 | 70 | | pCi/L | 1 | | 08/09/2000 | FT | P6188 |

**Qualifiers:**
ND - Not detected at the reporting limit
B - Analyte detected in method blank
Z - Sample > 10 times blank result
J - Analyte detected below reporting limit
L - Contract/Client reporting limit exceeded
M - Maximum contaminant level exceeded
E - Value above quantitation range
R - RPD outside accepted recovery limits
X - Duplicate sample(s) < 5 times limit
S - Spike outside accepted recovery limits
Y - Unspiked sample > 4 times amount spiked

**Barringer Laboratories, Inc.**

15000 W 6th Avenue Suite 300 Golden, Colorado 80401-5047 (800) 654-0506 (303) 277-1687 Fax (303) 277-1689

**Date:** 21-Aug-00

# CLIENT SAMPLE REPORT

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Iodine-129, dissolved | 15046-84-1 | EPA 902.0 | -1.1 ± 0.77 | 1 | | pCi/L | 1 | | 08/08/2000 | CWP | P6022 |

Client: **Envirocare of Utah**
Work Order: **0007138**
Project:

Client Sample ID: **GW-103B**
Tag Number:

Lab Sample ID: **0007138-02C**
Date Collected: **07/11/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Tritium, dissolved | 10028-17-8 | EPA 906.0 | 17 ± 210 | 400 | | pCi/L | 1 | | 08/07/2000 | AWT | P6069 |

Client: **Envirocare of Utah**
Work Order: **0007138**
Project:

Client Sample ID: **GW-103C**
Tag Number:

Lab Sample ID: **0007138-03A**
Date Collected: **07/11/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 0.0024 | 0.0009 | | mg/L | 1 | | 08/02/2000 | AGM | P6098 |
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 39 ± 23 | 40 | | pCi/L | 1 | | 07/26/2000 | FT | P5964 |
| Gross Alpha, dissolved | 12587-46-1 | EPA 00-02 | 46 ± 12 | 7 | | pCi/L | 1 | | 07/28/2000 | AEW | P5981 |
| Gross Beta, dissolved | 12587-47-2 | EPA 900.0 | -77 ± 520 | 900 | | pCi/L | 1 | | 07/27/2000 | AEW | P5914 |
| Potassium-40, dissolved | 13966-00-2 | EPA 901.1 | 310 ± 160 | 300 | | pCi/L | 1 | | 07/24/2000 | LLC | A8649A |
| Radium-226, dissolved | 13982-63-3 | EPA 903.0M/SM 705M | 0.31 ± 0.45 | 0.6 | | pCi/L | 1 | | 08/01/2000 | RKB | P5982 |
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 1.7 ± 0.42 | 0.6 | | pCi/L | 1 | | 08/01/2000 | CWP | P5812 |
| Strontium-89/90, dissolved | 11-10-9 | EPA 905.0/SM704 | 0.29 ± 0.67 | 1 | | pCi/L | 1 | | 08/04/2000 | MTC | P6087 |
| Neptunium-237, dissolved | 13994-20-2 | EPA 907.0M/520M | 0.17 ± 0.33 | 0.4 | | pCi/L | 1 | | 08/16/2000 | JCP | P6220 |
| Uranium-233/234, dissolved | 13966-29-5 | EPA 908.0M | 16 ± 1.8 | 1 | | pCi/L | 1 | | 07/20/2000 | KEB | P5792 |
| Uranium-235/236, dissolved | 15117-96-1 | EPA 908.0M | -0.23 ± 0.39 | 0.7 | | pCi/L | 1 | | 07/20/2000 | KEB | P5792 |
| Uranium-238, dissolved | 7440-61-1 | EPA 908.0M | 8.5 ± 1.3 | 0.8 | | pCi/L | 1 | | 07/20/2000 | KEB | P5792 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | -0.35 ± 1.3 | 2 | | pCi/L | 1 | | 08/07/2000 | KEB | P6072 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | 0.12 ± 0.74 | 1 | | pCi/L | 1 | | 08/07/2000 | KEB | P6072 |

**Qualifiers:** ND - Not detected at the reporting limit; J - Analyte detected below reporting limit; E - Value above quantitation range; S - Spike outside accepted recovery limits; ...alyte detected in method blank; L - Contract/Client reporting limit exceeded; ...utside accepted recovery limits; Y - Unspiked sample > 4 times amount spiked; ...ple > 10 times blank result; M - Maximum contaminant level exceeded; ...ate sample(s) < 5 times limit

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**Date:** 21-Aug-00

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah**
Work Order: **0007138**
Project:

Client Sample ID: **GW-103C**
Tag Number:

Lab Sample ID: **0007138-03B**
Date Collected: **07/11/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Carbon-14, dissolved | 14762-75-5 | EPA 520-C01M | -65 ± 41 | 70 | | pCi/L | 1 | | 08/09/2000 | FT | P6188 |
| Iodine-129, dissolved | 15046-84-1 | EPA 902.0 | -0.91 ± 0.75 | 1 | | pCi/L | 1 | | 08/08/2000 | CWP | P6022 |

Client: **Envirocare of Utah**
Work Order: **0007138**
Project:

Client Sample ID: **GW-103C**
Tag Number:

Lab Sample ID: **0007138-03C**
Date Collected: **07/11/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Tritium, dissolved | 10028-17-8 | EPA 906.0 | -85 ± 200 | 300 | | pCi/L | 1 | | 08/07/2000 | AWT | P6069 |

Client: **Envirocare of Utah**
Work Order: **0007138**
Project:

Client Sample ID: **GW-103D**
Tag Number:

Lab Sample ID: **0007138-04A**
Date Collected: **07/11/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 0.024 | 0.0009 | | mg/L | 1 | | 08/02/2000 | AGM | P6098 |
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 45 ± 22 | 30 | | pCi/L | 1 | | 07/26/2000 | FT | P5964 |
| Gross Alpha, dissolved | 12587-46-1 | EPA 00-02 | 58 ± 14 | 7 | | pCi/L | 1 | | 07/28/2000 | AEW | P5981 |
| Gross Beta, dissolved | 12587-47-2 | EPA 900.0 | -80 ± 530 | 900 | | pCi/L | 1 | | 07/27/2000 | AEW | P5914 |
| Potassium-40, dissolved | 13966-00-2 | EPA 901.1 | 370 ± 170 | 200 | | pCi/L | 1 | | 07/24/2000 | LLC | A8649A |
| Radium-226, dissolved | 13982-63-3 | EPA 903.0M/SM 705M | 0.37 ± 0.52 | 0.7 | | pCi/L | 1 | | 08/01/2000 | RKB | P5982 |
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 1.8 ± 0.43 | 0.6 | | pCi/L | 1 | | 08/01/2000 | CWP | P5812 |
| Strontium-89/90, dissolved | 11-10-9 | EPA 905.0/SM704 | 0.94 ± 0.68 | 1 | | pCi/L | 1 | | 08/04/2000 | MTC | P6087 |
| Neptunium-237, dissolved | 13994-20-2 | EPA 907.0M/520M | 0.12 ± 0.29 | 0.4 | | pCi/L | 1 | | 08/16/2000 | JCP | P6220 |
| Uranium-233/234, dissolved | 13966-29-5 | EPA 908.0M | 14 ± 1.7 | 1 | | pCi/L | 1 | | 07/20/2000 | KEB | P5792 |
| Uranium-235/236, dissolved | 15117-96-1 | EPA 908.0M | -0.32 ± 0.40 | 0.8 | | pCi/L | 1 | | 07/20/2000 | KEB | P5792 |
| Uranium-238, dissolved | 7440-61-1 | EPA 908.0M | 6.6 ± 1.1 | 0.8 | | pCi/L | 1 | | 07/20/2000 | KEB | P5792 |

**Qualifiers:**
ND - Not detected at the reporting limit
B - Analyte detected in method blank
Z - Sample > 10 times blank result
J - Analyte detected below reporting limit
L - Contract/Client reporting limit exceeded
M - Maximum contaminant level exceeded
E - Value above quantitation range
R - RPD outside accepted recovery limits
X - Duplicate sample(s) < 5 times limit
S - Spike outside accepted recovery limits
Y - Unspiked sample > 4 times amount spiked

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Date: 21-Aug-00

# CLIENT SAMPLE REPORT

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | -3.6 ± 1.7 | 3 | pCi/L | 1 | 08/07/2000 | KEB | P6072 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | -0.26 ± 0.52 | 1 | pCi/L | 1 | 08/07/2000 | KEB | P6072 |

Client: **Envirocare of Utah**
Work Order: **0007138**
Project:

Client Sample ID: **GW-103D**
Tag Number:

Lab Sample ID: **0007138-04B**
Date Collected: **07/11/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Carbon-14, dissolved | 14762-75-5 | EPA 520-C01M | -62 ± 43 | 70 | | pCi/L | 1 | | 08/09/2000 | FT | P6188 |
| Iodine-129, dissolved | 15046-84-1 | EPA 902.0 | -1.6 ± 0.72 | 1 | | pCi/L | 1 | | 08/08/2000 | CWP | P6022 |

Client: **Envirocare of Utah**
Work Order: **0007138**
Project:

Client Sample ID: **GW-103D**
Tag Number:

Lab Sample ID: **0007138-04C**
Date Collected: **07/11/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Tritium, dissolved | 10028-17-8 | EPA 906.0 | -77 ± 210 | 400 | | pCi/L | 1 | | 08/07/2000 | AWT | P6069 |

Client: **Envirocare of Utah**
Work Order: **0007138**
Project:

Client Sample ID: **GW-104A**
Tag Number:

Lab Sample ID: **0007138-05A**
Date Collected: **07/12/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 0.019 | 0.0009 | | mg/L | 1 | | 08/02/2000 | AGM | P6098 |
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 35 ± 23 | 40 | | pCi/L | 1 | | 07/26/2000 | FT | P5964 |
| Gross Alpha, dissolved | 12587-46-1 | EPA 00-02 | 37 ± 12 | 10 | | pCi/L | 1 | | 07/28/2000 | AEW | P5981 |
| Gross Beta, dissolved | 12587-47-2 | EPA 900.0 | 270 ± 470 | 800 | | pCi/L | 1 | | 07/27/2000 | AEW | P5914 |
| Potassium-40, dissolved | 13966-00-2 | EPA 901.1 | ND | 300 | | pCi/L | 1 | | 07/24/2000 | LLC | A8649A |
| Radium-226, dissolved | 13982-63-3 | EPA 903.0M/SM 705M | 0.50 ± 0.53 | 0.7 | | pCi/L | 1 | | 08/01/2000 | RKB | P5982 |
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 1.5 ± 0.42 | 0.6 | | pCi/L | 1 | | 08/01/2000 | CWP | P5812 |
| Strontium-89/90, dissolved | 11-10-9 | EPA 905.0/SM704 | -0.39 ± 0.65 | 1 | | pCi/L | 1 | | 08/04/2000 | MTC | P6087 |
| Neptunium-237, dissolved | 13994-20-2 | EPA 907.0M/520M | 0.19 ± 0.43 | 0.6 | | pCi/L | 1 | | 08/16/2000 | JCP | P6220 |

**Qualifiers:** ND - Not detected at the reporting limit J - Analyte detected below reporting limit E - Value above quantitation range S - Spike outside accepted recovery limits
...lyte detected in method blank L - Contract/Client reporting limit exceeded ...utside accepted recovery limits Y - Unspiked sample > 4 times amount spiked
...ple > 10 times blank result M - Maximum contaminant level exceeded X - ...ate sample(s) < 5 times limit

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**Date:** 21-Aug-00

# CLIENT SAMPLE REPORT

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Uranium-233/234, dissolved | 13966-29-5 | EPA 908.0M | 12 ± 1.6 | 1 | pCi/L | 1 | 07/20/2000 | KEB | P5792 |
| Uranium-235/236, dissolved | 15117-96-1 | EPA 908.0M | -0.28 ± 0.42 | 0.8 | pCi/L | 1 | 07/20/2000 | KEB | P5792 |
| Uranium-238, dissolved | 7440-61-1 | EPA 908.0M | 6.2 ± 1.1 | 0.8 | pCi/L | 1 | 07/20/2000 | KEB | P5792 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | -2.4 ± 1.4 | 3 | pCi/L | 1 | 08/07/2000 | KEB | P6072 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | 0.053 ± 0.51 | 0.8 | pCi/L | 1 | 08/07/2000 | KEB | P6072 |

Client: **Envirocare of Utah**
Work Order: **0007138**
Project:

Client Sample ID: **GW-104A**
Tag Number:

Lab Sample ID: **0007138-05B**
Date Collected: **07/12/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Carbon-14, dissolved | 14762-75-5 | EPA 520-C01M | -42 ± 38 | 60 | | pCi/L | 1 | | 08/09/2000 | FT | P6188 |
| Iodine-129, dissolved | 15046-84-1 | EPA 902.0 | -1.7 ± 0.80 | 1 | | pCi/L | 1 | | 08/08/2000 | CWP | P6022 |

Client: **Envirocare of Utah**
Work Order: **0007138**
Project:

Client Sample ID: **GW-104A**
Tag Number:

Lab Sample ID: **0007138-05C**
Date Collected: **07/12/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Tritium, dissolved | 10028-17-8 | EPA 906.0 | -110 ± 210 | 400 | | pCi/L | 1 | | 08/07/2000 | AWT | P6069 |

Client: **Envirocare of Utah**
Work Order: **0007138**
Project:

Client Sample ID: **GW-104B**
Tag Number:

Lab Sample ID: **0007138-06A**
Date Collected: **07/12/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 0.017 | 0.0009 | | mg/L | 1 | | 08/02/2000 | AGM | P6098 |
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 48 ± 22 | 40 | | pCi/L | 1 | | 07/26/2000 | FT | P5964 |
| Gross Alpha, dissolved | 12587-46-1 | EPA 00-02 | 47 ± 13 | 9 | | pCi/L | 1 | | 07/28/2000 | AEW | P5981 |
| Gross Beta, dissolved | 12587-47-2 | EPA 900.0 | 640 ± 480 | 800 | | pCi/L | 1 | | 07/27/2000 | AEW | P5914 |
| Potassium-40, dissolved | 13966-00-2 | EPA 901.1 | ND | 300 | | pCi/L | 1 | | 07/24/2000 | LLC | A8649A |
| Radium-226, dissolved | 13982-63-3 | EPA 903.0M/SM 705M | 0.30 ± 0.45 | 0.6 | | pCi/L | 1 | | 08/01/2000 | RKB | P5982 |
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 1.6 ± 0.42 | 0.6 | | pCi/L | 1 | | 08/01/2000 | CWP | P5812 |

**Qualifiers:** ND - Not detected at the reporting limit; J - Analyte detected below reporting limit; E - Value above quantitation range; S - Spike outside accepted recovery limits; B - Analyte detected in method blank; L - Contract/Client reporting limit exceeded; R - RPD outside accepted recovery limits; Y - Unspiked sample > 4 times amount spiked; Z - Sample > 10 times blank result; M - Maximum contaminant level exceeded; X - Duplicate sample(s) < 5 times limit

**Barringer Laboratories, Inc.**

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**Date:** 21-Aug-00

# CLIENT SAMPLE REPORT

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Strontium-89/90, dissolved | 11-10-9 | EPA 905.0/SM704 | 0.15 ± 0.76 | 1 | pCi/L | 1 | 08/04/2000 | MTC | P6087 |
| Neptunium-237, dissolved | 13994-20-2 | EPA 907.0M/520M | 0.29 ± 0.43 | 0.6 | pCi/L | 1 | 08/16/2000 | JCP | P6220 |
| Uranium-233/234, dissolved | 13966-29-5 | EPA 908.0M | 12 ± 1.7 | 1 | pCi/L | 1 | 07/20/2000 | KEB | P5792 |
| Uranium-235/236, dissolved | 15117-96-1 | EPA 908.0M | -0.47 ± 0.46 | 0.9 | pCi/L | 1 | 07/20/2000 | KEB | P5792 |
| Uranium-238, dissolved | 7440-61-1 | EPA 908.0M | 5.8 ± 1.2 | 1 | pCi/L | 1 | 07/20/2000 | KEB | P5792 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | -1.0 ± 1.5 | 3 | pCi/L | 1 | 08/07/2000 | KEB | P6072 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | 0.86 ± 1.3 | 2 | pCi/L | 1 | 08/07/2000 | KEB | P6072 |

Client: **Envirocare of Utah**
Work Order: **0007138**
Project:

Client Sample ID: **GW-104B**
Tag Number:

Lab Sample ID: **0007138-06B**
Date Collected: **07/12/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Carbon-14, dissolved | 14762-75-5 | EPA 520-C01M | -52 ± 36 | 60 | | pCi/L | 1 | | 08/09/2000 | FT | P6188 |
| Iodine-129, dissolved | 15046-84-1 | EPA 902.0 | -0.93 ± 0.74 | 1 | | pCi/L | 1 | | 08/08/2000 | CWP | P6022 |

Client: **Envirocare of Utah**
Work Order: **0007138**
Project:

Client Sample ID: **GW-104B**
Tag Number:

Lab Sample ID: **0007138-06C**
Date Collected: **07/12/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Tritium, dissolved | 10028-17-8 | EPA 906.0 | -200 ± 190 | 300 | | pCi/L | 1 | | 08/07/2000 | AWT | P6069 |

Client: **Envirocare of Utah**
Work Order: **0007138**
Project:

Client Sample ID: **GW-104C**
Tag Number:

Lab Sample ID: **0007138-07A**
Date Collected: **07/12/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 0.018 | 0.0009 | | mg/L | 1 | | 08/02/2000 | AGM | P6098 |
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 36 ± 23 | 40 | | pCi/L | 1 | | 07/26/2000 | FT | P5964 |
| Gross Alpha, dissolved | 12587-46-1 | EPA 00-02 | 56 ± 9.9 | 7 | | pCi/L | 1 | | 07/28/2000 | AEW | P5981 |
| Gross Beta, dissolved | 12587-47-2 | EPA 900.0 | 530 ± 480 | 800 | | pCi/L | 1 | | 07/27/2000 | AEW | P5914 |
| Potassium-40, dissolved | 13966-00-2 | EPA 901.1 | ND | 300 | | pCi/L | 1 | | 07/25/2000 | LLC | A8649A |

**Qualifiers:** ND - Not detected at the reporting limit J - Analyte detected below reporting limit E - Value above quantitation range S - Spike outside accepted recovery limits
alyte detected in method blank L - Contract/Client reporting limit exceeded outside accepted recovery limits Y - Unspiked sample > 4 times amount spiked
iple > 10 times blank result M - Maximum contaminant level exceeded ate sample(s) < 5 times limit

**Barringer Laboratories, Inc.**

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**Date:** 21-Aug-00

# CLIENT SAMPLE REPORT

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Radium-226, dissolved | 13982-63-3 | EPA 903.0M/SM 705M | 0.18 ± 0.40 | 0.6 | pCi/L | 1 | 08/01/2000 | RKB | P5982 |
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 1.6 ± 0.42 | 0.6 | pCi/L | 1 | 08/01/2000 | CWP | P5812 |
| Strontium-89/90, dissolved | 11-10-9 | EPA 905.0/SM704 | 0.37 ± 0.67 | 1 | pCi/L | 1 | 08/04/2000 | MTC | P6087 |
| Neptunium-237, dissolved | 13994-20-2 | EPA 907.0M/520M | 0.74 ± 0.48 | 0.4 | pCi/L | 1 | 08/16/2000 | JCP | P6221 |
| Uranium-233/234, dissolved | 13966-29-5 | EPA 908.0M | 15 ± 1.7 | 1 | pCi/L | 1 | 07/21/2000 | KEB | P5792 |
| Uranium-235/236, dissolved | 15117-96-1 | EPA 908.0M | -0.13 ± 0.40 | 0.7 | pCi/L | 1 | 07/21/2000 | KEB | P5792 |
| Uranium-238, dissolved | 7440-61-1 | EPA 908.0M | 7.5 ± 1.2 | 0.8 | pCi/L | 1 | 07/21/2000 | KEB | P5792 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | -0.45 ± 1.0 | 2 | pCi/L | 1 | 08/07/2000 | KEB | P6072 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | 0.083 ± 0.48 | 0.8 | pCi/L | 1 | 08/07/2000 | KEB | P6072 |

Client: **Envirocare of Utah**
Work Order: **0007138**
Project:

Client Sample ID: **GW-104C**
Tag Number:

Lab Sample ID: **0007138-07B**
Date Collected: **07/12/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Carbon-14, dissolved | 14762-75-5 | EPA 520-C01M | -23 ± 31 | 50 | | pCi/L | 1 | | 08/10/2000 | FT | P6189 |
| Iodine-129, dissolved | 15046-84-1 | EPA 902.0 | -0.89 ± 0.76 | 1 | | pCi/L | 1 | | 08/08/2000 | CWP | P6022 |

Client: **Envirocare of Utah**
Work Order: **0007138**
Project:

Client Sample ID: **GW-104C**
Tag Number:

Lab Sample ID: **0007138-07C**
Date Collected: **07/12/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Tritium, dissolved | 10028-17-8 | EPA 906.0 | -21 ± 210 | 400 | | pCi/L | 1 | | 08/10/2000 | AWT | P6070 |

Client: **Envirocare of Utah**
Work Order: **0007138**
Project:

Client Sample ID: **GW-104D**
Tag Number:

Lab Sample ID: **0007138-08A**
Date Collected: **07/12/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 0.019 | 0.0009 | | mg/L | 1 | | 08/03/2000 | AGM | P6151 |
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 34 ± 25 | 40 | | pCi/L | 1 | | 07/29/2000 | FT | P5965 |
| Gross Alpha, dissolved | 12587-46-1 | EPA 00-02 | 40 ± 12 | 9 | | pCi/L | 1 | | 08/02/2000 | AEW | P5940 |

**Qualifiers:**
ND - Not detected at the reporting limit
B - Analyte detected in method blank
Z - Sample > 10 times blank result
J - Analyte detected below reporting limit
L - Contract/Client reporting limit exceeded
M - Maximum contaminant level exceeded
E - Value above quantitation range
R - RPD outside accepted recovery limits
X - Duplicate sample(s) < 5 times limit
S - Spike outside accepted recovery limits
Y - Unspiked sample > 4 times amount spiked

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15000 W 6th Avenue Suite 300 Golden, Colorado 80401-5047 (800) 654-0506 (303) 277-1687 Fax (303) 277-1689

**Date:** 21-Aug-00

# CLIENT SAMPLE REPORT

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Gross Beta, dissolved | 12587-47-2 | EPA 900.0 | 37 ± 460 | 800 | pCi/L | 1 | 07/27/2000 | AEW | P5914 |
| Potassium-40, dissolved | 13966-00-2 | EPA 901.1 | ND | 300 | pCi/L | 1 | 07/25/2000 | LLC | A8649A |
| Radium-226, dissolved | 13982-63-3 | EPA 903.0M/SM 705M | 0.79 ± 0.55 | 0.6 | pCi/L | 1 | 08/01/2000 | RKB | P5982 |
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 1.4 ± 0.41 | 0.6 | pCi/L | 1 | 08/01/2000 | CWP | P5812 |
| Strontium-89/90, dissolved | 11-10-9 | EPA 905.0/SM704 | -0.040 ± 0.63 | 1 | pCi/L | 1 | 08/04/2000 | MTC | P6087 |
| Neptunium-237, dissolved | 13994-20-2 | EPA 907.0M/520M | 1.6 ± 0.65 | 0.4 | pCi/L | 1 | 08/16/2000 | JCP | P6221 |
| Uranium-233/234, dissolved | 13966-29-5 | EPA 908.0M | 12 ± 1.8 | 2 | pCi/L | 1 | 07/21/2000 | KEB | P5792 |
| Uranium-235/236, dissolved | 15117-96-1 | EPA 908.0M | -0.071 ± 0.57 | 1 | pCi/L | 1 | 07/21/2000 | KEB | P5792 |
| Uranium-238, dissolved | 7440-61-1 | EPA 908.0M | 6.1 ± 1.3 | 1 | pCi/L | 1 | 07/21/2000 | KEB | P5792 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | -1.7 ± 1.6 | 3 | pCi/L | 1 | 08/07/2000 | KEB | P6072 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | -0.0046 ± 0.83 | 1 | pCi/L | 1 | 08/07/2000 | KEB | P6072 |

Client: **Envirocare of Utah**
Work Order: **0007138**
Project:

Client Sample ID: **GW-104D**
Tag Number:

Lab Sample ID: **0007138-08B**
Date Collected: **07/12/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Carbon-14, dissolved | 14762-75-5 | EPA 520-C01M | -2.5 ± 34 | 50 | | pCi/L | 1 | | 08/10/2000 | FT | P6189 |
| Iodine-129, dissolved | 15046-84-1 | EPA 902.0 | -1.7 ± 0.76 | 1 | | pCi/L | 1 | | 08/08/2000 | CWP | P6022 |

Client: **Envirocare of Utah**
Work Order: **0007138**
Project:

Client Sample ID: **GW-104D**
Tag Number:

Lab Sample ID: **0007138-08C**
Date Collected: **07/12/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Tritium, dissolved | 10028-17-8 | EPA 906.0 | -64 ± 210 | 400 | | pCi/L | 1 | | 08/10/2000 | AWT | P6070 |

Client: **Envirocare of Utah**
Work Order: **0007138**
Project:

Client Sample ID: **GW-105A**
Tag Number:

Lab Sample ID: **0007138-09A**
Date Collected: **07/12/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 0.014 | 0.0009 | | mg/L | 1 | | 08/03/2000 | AGM | P6151 |

**Qualifiers:** ND - Not detected at the reporting limit J - Analyte detected below reporting limit E - Value above quantitation range S - Spike outside accepted recovery limits
...lyte detected in method blank L - Contract/Client reporting limit exceeded ...utside accepted recovery limits Y - Unspiked sample > 4 times amount spiked
...ple > 10 times blank result M - Maximum contaminant level exceeded X - ...ate sample(s) < 5 times limit

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**Date:** 21-Aug-00

# CLIENT SAMPLE REPORT

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 8.7 ± 26 | 40 | pCi/L | 1 | 07/29/2000 | FT | P5965 |
| Gross Alpha, dissolved | 12587-46-1 | EPA 00-02 | 24 ± 8.7 | 8 | pCi/L | 1 | 08/02/2000 | AEW | P5940 |
| Gross Beta, dissolved | 12587-47-2 | EPA 900.0 | 410 ± 440 | 700 | pCi/L | 1 | 07/27/2000 | AEW | P5914 |
| Potassium-40, dissolved | 13966-00-2 | EPA 901.1 | ND | 300 | pCi/L | 1 | 07/25/2000 | LLC | A8649A |
| Radium-226, dissolved | 13982-63-3 | EPA 903.0M/SM 705M | 0.93 ± 0.63 | 0.7 | pCi/L | 1 | 08/01/2000 | RKB | P5982 |
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 1.2 ± 0.41 | 0.6 | pCi/L | 1 | 08/01/2000 | CWP | P5812 |
| Strontium-89/90, dissolved | 11-10-9 | EPA 905.0/SM704 | 0.090 ± 0.68 | 1 | pCi/L | 1 | 08/04/2000 | MTC | P6087 |
| Neptunium-237, dissolved | 13994-20-2 | EPA 907.0M/520M | 0.12 ± 0.38 | 0.6 | pCi/L | 1 | 08/16/2000 | JCP | P6221 |
| Uranium-233/234, dissolved | 13966-29-5 | EPA 908.0M | 11 ± 1.5 | 1 | pCi/L | 1 | 07/21/2000 | KEB | P5792 |
| Uranium-235/236, dissolved | 15117-96-1 | EPA 908.0M | -0.42 ± 0.38 | 0.8 | pCi/L | 1 | 07/21/2000 | KEB | P5792 |
| Uranium-238, dissolved | 7440-61-1 | EPA 908.0M | 4.9 ± 1.0 | 0.8 | pCi/L | 1 | 07/21/2000 | KEB | P5792 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | -1.5 ± 1.6 | 3 | pCi/L | 1 | 08/07/2000 | KEB | P6072 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | 0.42 ± 0.73 | 1 | pCi/L | 1 | 08/07/2000 | KEB | P6072 |

Client: **Envirocare of Utah**
Work Order: **0007138**
Project:

Client Sample ID: **GW-105A**
Tag Number:

Lab Sample ID: **0007138-09B**
Date Collected: **07/12/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Carbon-14, dissolved | 14762-75-5 | EPA 520-C01M | -48 ± 34 | 60 | | pCi/L | 1 | | 08/10/2000 | FT | P6189 |
| Iodine-129, dissolved | 15046-84-1 | EPA 902.0 | -1.6 ± 0.79 | 1 | | pCi/L | 1 | | 08/08/2000 | CWP | P6022 |

Client: **Envirocare of Utah**
Work Order: **0007138**
Project:

Client Sample ID: **GW-105A**
Tag Number:

Lab Sample ID: **0007138-09C**
Date Collected: **07/12/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Tritium, dissolved | 10028-17-8 | EPA 906.0 | 130 ± 220 | 400 | | pCi/L | 1 | | 08/10/2000 | AWT | P6070 |

**Qualifiers:**
ND - Not detected at the reporting limit
B - Analyte detected in method blank
Z - Sample > 10 times blank result
J - Analyte detected below reporting limit
L - Contract/Client reporting limit exceeded
M - Maximum contaminant level exceeded
E - Value above quantitation range
R - RPD outside accepted recovery limits
X - Duplicate sample(s) < 5 times limit
S - Spike outside accepted recovery limits
Y - Unspiked sample > 4 times amount spiked

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**Date:** 21-Aug-00

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah**
Work Order: **0007138**
Project:

## Client Sample ID: **GW-105B**
Tag Number:

Lab Sample ID: **0007138-10A**
Date Collected: **07/12/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 0.014 | 0.0009 | | mg/L | 1 | | 08/03/2000 | AGM | P6151 |
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 54 ± 25 | 40 | | pCi/L | 1 | | 07/29/2000 | FT | P5965 |
| Gross Alpha, dissolved | 12587-46-1 | EPA 00-02 | 32 ± 11 | 8 | | pCi/L | 1 | | 08/02/2000 | AEW | P5940 |
| Gross Beta, dissolved | 12587-47-2 | EPA 900.0 | 350 ± 460 | 800 | | pCi/L | 1 | | 07/28/2000 | AEW | P5915 |
| Potassium-40, dissolved | 13966-00-2 | EPA 901.1 | ND | 300 | | pCi/L | 1 | | 07/25/2000 | LLC | A8649A |
| Radium-226, dissolved | 13982-63-3 | EPA 903.0M/SM 705M | 1.6 ± 0.57 | 0.6 | | pCi/L | 1 | | 08/01/2000 | RKB | P5983 |
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 2.5 ± 0.45 | 0.6 | | pCi/L | 1 | | 08/07/2000 | CWP | P6023 |
| Strontium-89/90, dissolved | 11-10-9 | EPA 905.0/SM704 | 190 ± 3.0 | 1 | | pCi/L | 1 | | 08/09/2000 | MTC | P6157 |
| Neptunium-237, dissolved | 13994-20-2 | EPA 907.0M/520M | 0.054 ± 0.36 | 0.6 | | pCi/L | 1 | | 08/16/2000 | JCP | P6221 |
| Uranium-233/234, dissolved | 13966-29-5 | EPA 908.0M | 10 ± 1.6 | 1 | | pCi/L | 1 | | 07/21/2000 | KEB | P5792 |
| Uranium-235/236, dissolved | 15117-96-1 | EPA 908.0M | -0.44 ± 0.43 | 0.9 | | pCi/L | 1 | | 07/21/2000 | KEB | P5792 |
| Uranium-238, dissolved | 7440-61-1 | EPA 908.0M | 4.6 ± 1.1 | 0.9 | | pCi/L | 1 | | 07/21/2000 | KEB | P5792 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | -0.58 ± 1.2 | 2 | | pCi/L | 1 | | 08/03/2000 | KEB | P5977 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | 0.45 ± 0.79 | 1 | | pCi/L | 1 | | 08/03/2000 | KEB | P5977 |

Client: **Envirocare of Utah**
Work Order: **0007138**
Project:

## Client Sample ID: **GW-105B**
Tag Number:

Lab Sample ID: **0007138-10B**
Date Collected: **07/12/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Carbon-14, dissolved | 14762-75-5 | EPA 520-C01M | -30 ± 34 | 50 | | pCi/L | 1 | | 08/10/2000 | FT | P6189 |
| Iodine-129, dissolved | 15046-84-1 | EPA 902.0 | -0.80 ± 0.76 | 1 | | pCi/L | 1 | | 08/08/2000 | CWP | P6022 |

**Qualifiers:** ND - Not detected at the reporting limit; J - Analyte detected below reporting limit; E - Value above quantitation range; S - Spike outside accepted recovery limits; lyte detected in method blank; L - Contract/Client reporting limit exceeded; utside accepted recovery limits; Y - Unspiked sample > 4 times amount spiked; iple > 10 times blank result; M - Maximum contaminant level exceeded; ate sample(s) < 5 times limit

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**Date:** 21-Aug-00

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah**
Work Order: **0007138**
Project:

Client Sample ID: **GW-105B**
Tag Number:

Lab Sample ID: **0007138-10C**
Date Collected: **07/12/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Tritium, dissolved | 10028-17-8 | EPA 906.0 | 180 ± 210 | 300 | | pCi/L | 1 | | 08/10/2000 | AWT | P6070 |

Client: **Envirocare of Utah**
Work Order: **0007138**
Project:

Client Sample ID: **GW-105C**
Tag Number:

Lab Sample ID: **0007138-11A**
Date Collected: **07/12/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 0.014 | 0.0009 | | mg/L | 1 | | 08/03/2000 | AGM | P6151 |
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 41 ± 26 | 40 | | pCi/L | 1 | | 07/29/2000 | FT | P5965 |
| Gross Alpha, dissolved | 12587-46-1 | EPA 00-02 | 38 ± 12 | 9 | | pCi/L | 1 | | 08/02/2000 | AEW | P5940 |
| Gross Beta, dissolved | 12587-47-2 | EPA 900.0 | 150 ± 450 | 800 | | pCi/L | 1 | | 07/28/2000 | AEW | P5915 |
| Potassium-40, dissolved | 13966-00-2 | EPA 901.1 | ND | 200 | | pCi/L | 1 | | 07/25/2000 | LLC | A8649B |
| Radium-226, dissolved | 13982-63-3 | EPA 903.0M/SM 705M | 1.0 ± 0.54 | 0.7 | | pCi/L | 1 | | 07/26/2000 | RKB | P5905 |
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 1.9 ± 0.43 | 0.6 | | pCi/L | 1 | | 08/07/2000 | CWP | P6023 |
| Strontium-89/90, dissolved | 11-10-9 | EPA 905.0/SM704 | -0.010 ± 0.74 | 1 | | pCi/L | 1 | | 08/09/2000 | MTC | P6157 |
| Neptunium-237, dissolved | 13994-20-2 | EPA 907.0M/520M | 0.84 ± 0.57 | 0.6 | | pCi/L | 1 | | 08/16/2000 | JCP | P6221 |
| Uranium-233/234, dissolved | 13966-29-5 | EPA 908.0M | 13 ± 2.2 | 2 | | pCi/L | 1 | | 08/09/2000 | KEB | P5975 |
| Uranium-235/236, dissolved | 15117-96-1 | EPA 908.0M | -0.52 ± 0.61 | 1 | | pCi/L | 1 | | 08/09/2000 | KEB | P5975 |
| Uranium-238, dissolved | 7440-61-1 | EPA 908.0M | 5.2 ± 1.4 | 1 | | pCi/L | 1 | | 08/09/2000 | KEB | P5975 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | 7.3 ± 2.3 | 3 | | pCi/L | 1 | | 08/03/2000 | KEB | P5977 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | 0.21 ± 0.74 | 1 | | pCi/L | 1 | | 08/03/2000 | KEB | P5977 |

Client: **Envirocare of Utah**
Work Order: **0007138**
Project:

Client Sample ID: **GW-105C**
Tag Number:

Lab Sample ID: **0007138-11B**
Date Collected: **07/12/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Carbon-14, dissolved | 14762-75-5 | EPA 520-C01M | -74 ± 35 | 60 | | pCi/L | 1 | | 08/10/2000 | FT | P6189 |

**Qualifiers:** ND - Not detected at the reporting limit; J - Analyte detected below reporting limit; E - Value above quantitation range; S - Spike outside accepted recovery limits; B - Analyte detected in method blank; L - Contract/Client reporting limit exceeded; R - RPD outside accepted recovery limits; Y - Unspiked sample > 4 times amount spiked; Z - Sample > 10 times blank result; M - Maximum contaminant level exceeded; X - Duplicate sample(s) < 5 times limit

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**Date:** 21-Aug-00

# CLIENT SAMPLE REPORT

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Iodine-129, dissolved | 15046-84-1 | EPA 902.0 | -1.0 ± 0.74 | 1 | pCi/L | 1 | 08/09/2000 | CWP | P6193 |

Client: **Envirocare of Utah**
Work Order: **0007138**
Project:

Client Sample ID: **GW-105C**
Tag Number:

Lab Sample ID: **0007138-11C**
Date Collected: **07/12/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Tritium, dissolved | 10028-17-8 | EPA 906.0 | 110 ± 220 | 400 | | pCi/L | 1 | | 08/10/2000 | AWT | P6070 |

Client: **Envirocare of Utah**
Work Order: **0007138**
Project:

Client Sample ID: **GW-105D**
Tag Number:

Lab Sample ID: **0007138-12A**
Date Collected: **07/12/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 0.016 | 0.0009 | | mg/L | 1 | | 08/03/2000 | AGM | P6151 |
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 29 ± 23 | 40 | | pCi/L | 1 | | 07/29/2000 | FT | P5965 |
| Gross Alpha, dissolved | 12587-46-1 | EPA 00-02 | 36 ± 11 | 7 | | pCi/L | 1 | | 08/02/2000 | AEW | P5940 |
| Gross Beta, dissolved | 12587-47-2 | EPA 900.0 | 510 ± 470 | 800 | | pCi/L | 1 | | 07/28/2000 | AEW | P5915 |
| Potassium-40, dissolved | 13966-00-2 | EPA 901.1 | ND | 300 | | pCi/L | 1 | | 07/25/2000 | LLC | A8649B |
| Radium-226, dissolved | 13982-63-3 | EPA 903.0M/SM 705M | 1.6 ± 0.61 | 0.7 | | pCi/L | 1 | | 07/26/2000 | RKB | P5906 |
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 2.0 ± 0.43 | 0.6 | | pCi/L | 1 | | 08/07/2000 | CWP | P6023 |
| Strontium-89/90, dissolved | 11-10-9 | EPA 905.0/SM704 | 0.32 ± 0.74 | 1 | | pCi/L | 1 | | 08/09/2000 | MTC | P6157 |
| Neptunium-237, dissolved | 13994-20-2 | EPA 907.0M/520M | -0.063 ± 0.19 | 0.4 | | pCi/L | 1 | | 08/16/2000 | JCP | P6221 |
| Uranium-233/234, dissolved | 13966-29-5 | EPA 908.0M | 9.4 ± 1.6 | 1 | | pCi/L | 1 | | 08/09/2000 | KEB | P5975 |
| Uranium-235/236, dissolved | 15117-96-1 | EPA 908.0M | -0.38 ± 0.48 | 0.9 | | pCi/L | 1 | | 08/09/2000 | KEB | P5975 |
| Uranium-238, dissolved | 7440-61-1 | EPA 908.0M | 4.5 ± 1.1 | 1 | | pCi/L | 1 | | 08/09/2000 | KEB | P5975 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | 6.4 ± 2.7 | 4 | | pCi/L | 1 | | 08/03/2000 | KEB | P5977 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | 0.91 ± 1.0 | 1 | | pCi/L | 1 | | 08/03/2000 | KEB | P5977 |

Qualifiers: ND - Not detected at the reporting limit J - Analyte detected below reporting limit F Value above quantitation range S - Spike outside accepted recovery limits
[illegible]alyte detected in method blank L - Contract/Client reporting limit exceeded [illegible]utside accepted recovery limits Y - Unspiked sample > 4 times amount spiked
[illegible]ple > 10 times blank result M - Maximum contaminant level exceeded X - [illegible]ate sample(s) < 5 times limit

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**Date:** 21-Aug-00

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah**
Work Order: **0007138**
Project:

Client Sample ID: **GW-105D**
Tag Number:

Lab Sample ID: **0007138-12B**
Date Collected: **07/12/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Carbon-14, dissolved | 14762-75-5 | EPA 520-C01M | -48 ± 39 | 60 | | pCi/L | 1 | | 08/10/2000 | FT | P6180 |
| Iodine-129, dissolved | 15046-84-1 | EPA 902.0 | -0.62 ± 0.75 | 1 | | pCi/L | 1 | | 08/09/2000 | CWP | P6193 |

Client: **Envirocare of Utah**
Work Order: **0007138**
Project:

Client Sample ID: **GW-105D**
Tag Number:

Lab Sample ID: **0007138-12C**
Date Collected: **07/12/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Tritium, dissolved | 10028-17-8 | EPA 906.0 | 75 ± 210 | 400 | | pCi/L | 1 | | 08/10/2000 | AWT | P6070 |

**Qualifiers:**
ND - Not detected at the reporting limit
B - Analyte detected in method blank
Z - Sample > 10 times blank result
J - Analyte detected below reporting limit
L - Contract/Client reporting limit exceeded
M - Maximum contaminant level exceeded
E - Value above quantitation range
R - RPD outside accepted recovery limits
X - Duplicate sample(s) < 5 times limit
S - Spike outside accepted recovery limits
Y - Unspiked sample > 4 times amount spiked

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**Date:** 18-Sep-00

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah**
Work Order: **0007251**
Project: **LARW**

Client Sample ID: **MWPOND**
Tag Number:

Lab Sample ID: **0007251-01A**
Date Collected: **07/19/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 0.75 | 0.004 | | mg/L | 1 | | 08/11/2000 | AWT | P6276 |
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 67 ± 20 | 30 | | pCi/L | 1 | | 08/18/2000 | FT | P6441 |
| Gross Alpha, dissolved | 12587-46-1 | EPA 00-02 | 280 ± 20 | 6 | | pCi/L | 1 | | 08/22/2000 | AEW | P6425 |
| Gross Beta, dissolved | 12587-47-2 | EPA 900.0 | 600 ± 470 | 700 | L | pCi/L | 1 | | 08/16/2000 | AEW | P6270 |
| Potassium-40, dissolved | 13966-00-2 | EPA 901.1 | ND | 300 | | pCi/L | 1 | | 08/03/2000 | LLC | A8964 |
| Radium-226, dissolved | 13982-63-3 | EPA 903.0M/SM 705M | 4.2 ± 1.1 | 0.7 | | pCi/L | 1 | | 08/08/2000 | RKB | P6104 |
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 16 ± 0.96 | 0.9 | | pCi/L | 1 | | 08/16/2000 | CWP | P6197 |
| Strontium-89/90, dissolved | 11-10-9 | EPA 905.0/SM704 | 5.9 ± 1.1 | 2 | | pCi/L | 1 | | 08/16/2000 | MTC | P6308 |
| Neptunium-237, dissolved | 13994-20-2 | EPA 907.0M/520M | 0.20 ± 0.54 | 0.8 | | pCi/L | 1 | | 08/30/2000 | JCP | P6406 |
| Uranium-233/234, dissolved | 13966-29-5 | EPA 908.0M | 190 ± 7.2 | 2 | | pCi/L | 1 | | 08/30/2000 | KEB | P6539 |
| Uranium-235/236, dissolved | 15117-96-1 | EPA 908.0M | 7.5 ± 1.6 | 1 | | pCi/L | 1 | | 08/30/2000 | KEB | P6539 |
| Uranium-238, dissolved | 7440-61-1 | EPA 908.0M | 220 ± 7.7 | 1 | | pCi/L | 1 | | 08/30/2000 | KEB | P6539 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | -0.58 ± 1.2 | 2 | L | pCi/L | 1 | | 08/24/2000 | KEB | P6332 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | 0.089 ± 0.76 | 1 | | pCi/L | 1 | | 08/24/2000 | KEB | P6332 |

Client: **Envirocare of Utah**
Work Order: **0007251**
Project: **LARW**

Client Sample ID: **MWPOND**
Tag Number:

Lab Sample ID: **0007251-01B**
Date Collected: **07/19/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Carbon-14, dissolved | 14762-75-5 | EPA 520-C01M | -3.1 ± 39 | 60 | | pCi/L | 1 | | 08/17/2000 | FT | P6317 |
| Iodine-129, dissolved | 15046-84-1 | EPA 902.0 | -1.4 ± 0.75 | 1 | | pCi/L | 1 | | 08/09/2000 | CWP | P6193 |

**Qualifiers:** ND - Not detected at the reporting limit; J - Analyte detected below reporting limit; E - Value above quantitation range; S - Spike outside accepted recovery limits; [illegible]lyte detected in method blank; L - Contract/Client reporting limit exceeded; [illegible]utside accepted recovery limits; Y - Unspiked sample > 4 times amount spiked; [illegible]nple > 10 times blank result; M - Maximum contaminant level exceeded; X - [illegible]cate sample(s) < 5 times limit

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**Date:** 18-Sep-00

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah**
Work Order: **0007251**
Project: **LARW**

Client Sample ID: **MWPOND**
Tag Number:

Lab Sample ID: **0007251-01C**
Date Collected: **07/19/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Tritium, dissolved | 10028-17-8 | EPA 906.0 | 850 ± 240 | 400 | | pCi/L | 1 | | 08/11/2000 | AWT | P6241 |

Client: **Envirocare of Utah**
Work Order: **0007251**
Project: **LARW**

Client Sample ID: **P3-95**
Tag Number:

Lab Sample ID: **0007251-02A**
Date Collected: **07/19/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 1.4 | 0.004 | | mg/L | 1 | | 08/11/2000 | AWT | P6276 |
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 46 ± 18 | 30 | | pCi/L | 1 | | 08/18/2000 | FT | P6441 |
| Gross Alpha, dissolved | 12587-46-1 | EPA 00-02 | 390 ± 24 | 7 | | pCi/L | 1 | | 08/22/2000 | AEW | P6425 |
| Gross Beta, dissolved | 12587-47-2 | EPA 900.0 | 1100 ± 510 | 800 | L | pCi/L | 1 | | 08/16/2000 | AEW | P6270 |
| Potassium-40, dissolved | 13966-00-2 | EPA 901.1 | ND | 300 | | pCi/L | 1 | | 08/03/2000 | LLC | A8964 |
| Radium-226, dissolved | 13982-63-3 | EPA 903.0M/SM 705M | 1.9 ± 0.76 | 0.6 | | pCi/L | 1 | | 08/09/2000 | RKB | P6104 |
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 10 ± 0.64 | 0.6 | | pCi/L | 1 | | 08/28/2000 | CWP | P6459 |
| Strontium-89/90, dissolved | 11-10-9 | EPA 905.0/SM704 | 20 ± 1.5 | 2 | | pCi/L | 1 | | 08/16/2000 | MTC | P6308 |
| Neptunium-237, dissolved | 13994-20-2 | EPA 907.0M/520M | -0.014 ± 0.39 | 0.7 | | pCi/L | 1 | | 08/30/2000 | JCP | P6406 |
| Uranium-233/234, dissolved | 13966-29-5 | EPA 908.0M | 260 ± 11 | 2 | | pCi/L | 1 | | 08/30/2000 | KEB | P6539 |
| Uranium-235/236, dissolved | 15117-96-1 | EPA 908.0M | 16 ± 3.0 | 2 | | pCi/L | 1 | | 08/30/2000 | KEB | P6539 |
| Uranium-238, dissolved | 7440-61-1 | EPA 908.0M | 490 ± 15 | 2 | | pCi/L | 1 | | 08/30/2000 | KEB | P6539 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | 0.36 ± 1.2 | 2 | L | pCi/L | 1 | | 08/24/2000 | KEB | P6332 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | -0.39 ± 0.73 | 1 | | pCi/L | 1 | | 08/24/2000 | KEB | P6332 |

Client: **Envirocare of Utah**
Work Order: **0007251**
Project: **LARW**

Client Sample ID: **P3-95**
Tag Number:

Lab Sample ID: **0007251-02B**
Date Collected: **07/19/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Carbon-14, dissolved | 14762-75-5 | EPA 520-C01M | -53 ± 31 | 50 | | pCi/L | 1 | | 08/17/2000 | FT | P6317 |

**Qualifiers:**
ND - Not detected at the reporting limit
B - Analyte detected in method blank
Z - Sample > 10 times blank result
J - Analyte detected below reporting limit
L - Contract/Client reporting limit exceeded
M - Maximum contaminant level exceeded
E - Value above quantitation range
R - RPD outside accepted recovery limits
X - Duplicate sample(s) < 5 times limit
S - Spike outside accepted recovery limits
Y - Unspiked sample > 4 times amount spiked

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**Date:** 18-Sep-00

# CLIENT SAMPLE REPORT

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Iodine-129, dissolved | 15046-84-1 | EPA 902.0 | -2.2 ± 0.81 | 1 | | pCi/L | 1 | 08/09/2000 | CWP | P6193 |

Client: **Envirocare of Utah**
Work Order: **0007251**
Project: **LARW**

Client Sample ID: **P3-95**
Tag Number:

Lab Sample ID: **0007251-02C**
Date Collected: **07/19/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Tritium, dissolved | 10028-17-8 | EPA 906.0 | 760 ± 230 | 300 | | pCi/L | 1 | | 08/11/2000 | AWT | P6241 |

Client: **Envirocare of Utah**
Work Order: **0007251**
Project: **LARW**

Client Sample ID: **P3-97**
Tag Number:

Lab Sample ID: **0007251-03A**
Date Collected: **07/20/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 2.2 | 0.004 | | mg/L | 1 | | 08/11/2000 | AWT | P6276 |
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 53 ± 19 | 30 | | pCi/L | 1 | | 08/18/2000 | FT | P6441 |
| Gross Alpha, dissolved | 12587-46-1 | EPA 00-02 | 340 ± 50 | 30 | | pCi/L | 1 | | 08/22/2000 | AEW | P6425 |
| Gross Beta, dissolved | 12587-47-2 | EPA 900.0 | 13000 ± 10000 | 20000 | L | pCi/L | 1 | | 08/16/2000 | AEW | P6270 |
| Potassium-40, dissolved | 13966-00-2 | EPA 901.1 | 790 | 400 | | pCi/L | 1 | | 08/04/2000 | LLC | A8964 |
| Radium-226, dissolved | 13982-63-3 | EPA 903.0M/SM 705M | 1.6 ± 0.62 | 0.7 | | pCi/L | 1 | | 08/09/2000 | RKB | P6104 |
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 11 ± 0.65 | 0.6 | | pCi/L | 1 | | 08/28/2000 | CWP | P6459 |
| Strontium-89/90, dissolved | 11-10-9 | EPA 905.0/SM704 | 27 ± 1.7 | 2 | | pCi/L | 1 | | 08/16/2000 | MTC | P6308 |
| Neptunium-237, dissolved | 13994-20-2 | EPA 907.0M/520M | 0.15 ± 0.40 | 0.6 | | pCi/L | 1 | | 08/30/2000 | JCP | P6406 |
| Uranium-233/234, dissolved | 13966-29-5 | EPA 908.0M | 650 ± 24 | 5 | | pCi/L | 1 | | 08/31/2000 | KEB | P6539 |
| Uranium-235/236, dissolved | 15117-96-1 | EPA 908.0M | 41 ± 6.9 | 4 | | pCi/L | 1 | | 08/31/2000 | KEB | P6539 |
| Uranium-238, dissolved | 7440-61-1 | EPA 908.0M | 1200 ± 32 | 4 | | pCi/L | 1 | | 08/31/2000 | KEB | P6539 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | 0.55 ± 1.2 | 2 | L | pCi/L | 1 | | 08/24/2000 | KEB | P6332 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | -0.011 ± 0.68 | 1 | | pCi/L | 1 | | 08/24/2000 | KEB | P6332 |

**Qualifiers:** ND - Not detected at the reporting limit; J - Analyte detected below reporting limit; E - Value above quantitation range; S - Spike outside accepted recovery limits
'alyte detected in method blank; L - Contract/Client reporting limit exceeded; outside accepted recovery limits; Y - Unspiked sample > 4 times amount spiked
nple > 10 times blank result; M - Maximum contaminant level exceeded; X - cate sample(s) < 5 times limit

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**Date:** 18-Sep-00

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah**
Work Order: **0007251**
Project: **LARW**

Client Sample ID: **P3-97**
Tag Number:

Lab Sample ID: **0007251-03B**
Date Collected: **07/20/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Carbon-14, dissolved | 14762-75-5 | EPA 520-C01M | -79 ± 42 | 70 | | pCi/L | 1 | | 08/17/2000 | FT | P6317 |
| Iodine-129, dissolved | 15046-84-1 | EPA 902.0 | -0.79 ± 0.54 | 0.9 | | pCi/L | 1 | | 08/09/2000 | CWP | P6193 |

Client: **Envirocare of Utah**
Work Order: **0007251**
Project: **LARW**

Client Sample ID: **P3-97**
Tag Number:

Lab Sample ID: **0007251-03C**
Date Collected: **07/20/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Tritium, dissolved | 10028-17-8 | EPA 906.0 | 350 ± 210 | 300 | | pCi/L | 1 | | 08/11/2000 | AWT | P6241 |

Client: **Envirocare of Utah**
Work Order: **0007251**
Project: **LARW**

Client Sample ID: **GW-904**
Tag Number:

Lab Sample ID: **0007251-04A**
Date Collected: **07/20/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 2.7 | 0.01 | | mg/L | 1 | | 08/11/2000 | AWT | P6276 |
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 41 ± 21 | 30 | | pCi/L | 1 | | 08/18/2000 | FT | P6441 |
| Gross Alpha, dissolved | 12587-46-1 | EPA 00-02 | 400 ± 48 | 20 | | pCi/L | 1 | | 08/22/2000 | AEW | P6425 |
| Gross Beta, dissolved | 12587-47-2 | EPA 900.0 | 17000 ± 9700 | 20000 | L | pCi/L | 1 | | 08/16/2000 | AEW | P6270 |
| Potassium-40, dissolved | 13966-00-2 | EPA 901.1 | 870 | 300 | | pCi/L | 1 | | 08/04/2000 | LLC | A8964 |
| Radium-226, dissolved | 13982-63-3 | EPA 903.0M/SM 705M | 1.9 ± 0.77 | 0.6 | | pCi/L | 1 | | 08/09/2000 | RKB | P6104 |
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 9.9 ± 0.63 | 0.6 | | pCi/L | 1 | | 08/28/2000 | CWP | P6459 |
| Strontium-89/90, dissolved | 11-10-9 | EPA 905.0/SM704 | 32 ± 1.7 | 2 | | pCi/L | 1 | | 08/16/2000 | MTC | P6308 |
| Neptunium-237, dissolved | 13994-20-2 | EPA 907.0M/520M | 0.56 ± 0.52 | 0.5 | | pCi/L | 1 | | 08/30/2000 | JCP | P6406 |
| Uranium-233/234, dissolved | 13966-29-5 | EPA 908.0M | 510 ± 20 | 4 | | pCi/L | 1 | | 08/31/2000 | KEB | P6539 |
| Uranium-235/236, dissolved | 15117-96-1 | EPA 908.0M | 22 ± 4.7 | 3 | | pCi/L | 1 | | 08/31/2000 | KEB | P6539 |
| Uranium-238, dissolved | 7440-61-1 | EPA 908.0M | 970 ± 27 | 3 | | pCi/L | 1 | | 08/31/2000 | KEB | P6539 |

**Qualifiers:**
ND - Not detected at the reporting limit
B - Analyte detected in method blank
Z - Sample > 10 times blank result
J - Analyte detected below reporting limit
L - Contract/Client reporting limit exceeded
M - Maximum contaminant level exceeded
E - Value above quantitation range
R - RPD outside accepted recovery limits
X - Duplicate sample(s) < 5 times limit
S - Spike outside accepted recovery limits
Y - Unspiked sample > 4 times amount spiked

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Date: 18-Sep-00

# CLIENT SAMPLE REPORT

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | 0.33 ± 0.78 | 1 | pCi/L | 1 | 09/14/2000 | KEB | P6694 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | 0.50 ± 0.35 | 0.5 | pCi/L | 1 | 09/14/2000 | KEB | P6694 |

Client: **Envirocare of Utah**
Work Order: **0007251**
Project: **LARW**

Client Sample ID: **GW-904**
Tag Number:

Lab Sample ID: **0007251-04B**
Date Collected: **07/20/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Carbon-14, dissolved | 14762-75-5 | EPA 520-C01M | -45 ± 41 | 70 | | pCi/L | 1 | | 08/17/2000 | FT | P6317 |
| Iodine-129, dissolved | 15046-84-1 | EPA 902.0 | -1.2 ± 0.77 | 1 | | pCi/L | 1 | | 08/10/2000 | CWP | P6193 |

Client: **Envirocare of Utah**
Work Order: **0007251**
Project: **LARW**

Client Sample ID: **GW-904**
Tag Number:

Lab Sample ID: **0007251-04C**
Date Collected: **07/20/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Tritium, dissolved | 10028-17-8 | EPA 906.0 | 490 ± 230 | 400 | | pCi/L | 1 | | 08/11/2000 | AWT | P6241 |

**Qualifiers:** ND - Not detected at the reporting limit J - Analyte detected below reporting limit E - Value above quantitation range S - Spike outside accepted recovery limits
[illegible]lyte detected in method blank L - Contract/Client reporting limit exceeded [illegible]utside accepted recovery limits Y - Unspiked sample > 4 times amount spiked
[illegible]nple > 10 times blank result M - Maximum contaminant level exceeded X - [illegible]cate sample(s) < 5 times limit

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**Date:** 10-Oct-00

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah**
Work Order: **0008080**
Project: **11e.(2)**

Client Sample ID: **GW-19A**
Tag Number:

Lab Sample ID: **0008080-01A**
Date Collected: **08/01/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 0.0049 | 0.0009 | | mg/L | 1 | | 09/07/2000 | AWT | P6662 |
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 0.61 ± 0.49 | 0.8 | L | pCi/L | 1 | | 08/28/2000 | CWP | P6368 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | -0.38 ± 1.6 | 3 | L | pCi/L | 1 | | 08/30/2000 | KEB | P6507 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | 2.5 ± 1.3 | 1 | | pCi/L | 1 | | 08/30/2000 | KEB | P6507 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | -0.72 ± 0.60 | 0.6 | | pCi/L | 1 | | 10/07/2000 | KEB | P6995 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | -0.039 ± 0.37 | 0.6 | | pCi/L | 1 | | 10/07/2000 | KEB | P6995 |
| Radium-226, total | 13982-63-3 | EPA 903.0M/SM 705M | -0.017 ± 0.38 | 0.6 | | pCi/L | 1 | | 08/30/2000 | RKB | P6536 |

Client: **Envirocare of Utah**
Work Order: **0008080**
Project: **11e.(2)**

Client Sample ID: **GW-19A**
Tag Number:

Lab Sample ID: **0008080-01B**
Date Collected: **08/01/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Fluorine as Fluoride | 7782-41-4 | EPA 340.2M | 0.99 | 0.1 | | mg/L | 1 | | 08/15/2000 | PKL | A8914a |

Client: **Envirocare of Utah**
Work Order: **0008080**
Project: **11e.(2)**

Client Sample ID: **GW-63**
Tag Number:

Lab Sample ID: **0008080-02A**
Date Collected: **08/01/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 0.011 | 0.0009 | | mg/L | 1 | | 09/07/2000 | AWT | P6662 |
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 2.0 ± 0.53 | 0.8 | | pCi/L | 1 | | 08/28/2000 | CWP | P6368 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | -1.5 ± 1.6 | 3 | | pCi/L | 1 | | 08/30/2000 | KEB | P6507 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | 0.017 ± 0.72 | 1 | | pCi/L | 1 | | 08/30/2000 | KEB | P6507 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | 0.49 ± 1.4 | 1 | | pCi/L | 1 | | 10/02/2000 | KEB | P6995 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | 0.36 ± 0.87 | 1 | | pCi/L | 1 | | 10/02/2000 | KEB | P6995 |
| Radium-226, total | 13982-63-3 | EPA 903.0M/SM 705M | 0.70 ± 0.50 | 0.5 | | pCi/L | 1 | | 09/07/2000 | CWP | P6556 |

**Qualifiers:**
ND - Not detected at the reporting limit
B - Analyte detected in method blank
Z - Sample > 10 times blank result
J - Analyte detected below reporting limit
L - Contract/Client reporting limit exceeded
M - Maximum contaminant level exceeded
E - Value above quantitation range
R - RPD outside accepted recovery limits
X - Duplicate sample(s) < 5 times limit
S - Spike outside accepted recovery limits
Y - Unspiked sample > 4 times amount spiked

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**Date:** 10-Oct-00

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah**
Work Order: **0008080**
Project: **11e.(2)**

## Client Sample ID: GW-63

Tag Number:

Lab Sample ID: **0008080-02B**
Date Collected: **08/01/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Fluorine as Fluoride | 7782-41-4 | EPA 340.2M | 0.58 | 0.1 | | mg/L | 1 | | 08/15/2000 | PKL | A8914a |

Client: **Envirocare of Utah**
Work Order: **0008080**
Project: **11e.(2)**

## Client Sample ID: GW-776

Tag Number:

Lab Sample ID: **0008080-03A**
Date Collected: **08/01/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 0.011 | 0.0009 | | mg/L | 1 | | 09/07/2000 | AWT | P6662 |
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 1.8 ± 0.53 | 0.8 | | pCi/L | 1 | | 08/28/2000 | CWP | P6368 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | 0.048 ± 1.2 | 2 | | pCi/L | 1 | | 08/30/2000 | KEB | P6507 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | 0.093 ± 0.56 | 0.9 | | pCi/L | 1 | | 08/30/2000 | KEB | P6507 |
| Radium-226, total | 13982-63-3 | EPA 903.0M/SM 705M | 0.19 ± 0.41 | 0.6 | | pCi/L | 1 | | 09/07/2000 | CWP | P6556 |

Client: **Envirocare of Utah**
Work Order: **0008080**
Project: **11e.(2)**

## Client Sample ID: GW-776

Tag Number:

Lab Sample ID: **0008080-03B**
Date Collected: **08/01/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Fluorine as Fluoride | 7782-41-4 | EPA 340.2M | 0.75 | 0.1 | | mg/L | 1 | | 08/15/2000 | PKL | A8914a |

Client: **Envirocare of Utah**
Work Order: **0008080**
Project: **11e.(2)**

## Client Sample ID: GW-60

Tag Number:

Lab Sample ID: **0008080-04A**
Date Collected: **08/01/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 0.019 | 0.0009 | | mg/L | 1 | | 09/07/2000 | AWT | P6662 |
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 1.6 ± 0.52 | 0.8 | | pCi/L | 1 | | 08/28/2000 | CWP | P6368 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | -0.63 ± 1.5 | 3 | | pCi/L | 1 | | 08/30/2000 | KEB | P6507 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | 1.3 ± 0.91 | 1 | | pCi/L | 1 | | 08/30/2000 | KEB | P6507 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | 0.32 ± 1.4 | 1 | | pCi/L | 1 | | 10/02/2000 | KEB | P6995 |

**Qualifiers:** ND - Not detected at the reporting limit J - Analyte detected below reporting limit E - Value above quantitation range S - Spike outside accepted recovery limits
Analyte detected in method blank L - Contract/Client reporting limit exceeded RPD outside accepted recovery limits Y - Unspiked sample > 4 times amount spiked
Sample > 10 times blank result M - Maximum contaminant level exceeded plicate sample(s) < 5 times limit

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**Date:** 10-Oct-00

# CLIENT SAMPLE REPORT

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | -0.31 ± 0.64 | 1 | pCi/L | 1 | | 10/02/2000 | KEB | P6995 |
| Radium-226, total | 13982-63-3 | EPA 903.0M/SM 705M | 0.51 ± 0.52 | 0.7 | pCi/L | 1 | | 09/07/2000 | CWP | P6556 |

Client: **Envirocare of Utah**
Work Order: **0008080**
Project: **11e.(2)**

Client Sample ID: **GW-60**
Tag Number:

Lab Sample ID: **0008080-04B**
Date Collected: **08/01/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Fluorine as Fluoride | 7782-41-4 | EPA 340.2M | 0.67 | 0.1 | | mg/L | 1 | | 08/15/2000 | PKL | A8914a |

**Qualifiers:**
ND - Not detected at the reporting limit
B - Analyte detected in method blank
Z - Sample > 10 times blank result
J - Analyte detected below reporting limit
L - Contract/Client reporting limit exceeded
M - Maximum contaminant level exceeded
E - Value above quantitation range
R - RPD outside accepted recovery limits
X - Duplicate sample(s) < 5 times limit
S - Spike outside accepted recovery limits
Y - Unspiked sample > 4 times amount spiked

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**Date:** 27-Oct-00

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah**
Work Order: **0008081**
Project: **11e.(2)**

## Client Sample ID: **GW-58**
Tag Number:

Lab Sample ID: **0008081-01A**
Date Collected: **08/03/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 0.046 | 0.0009 | | mg/L | 1 | 08/31/2000 | 09/07/2000 | AWT | P6662 |
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 0.032 | 0.0009 | | mg/L | 1 | 10/06/2000 | 10/06/2000 | AWT | P7328 |
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 0.031 | 0.0009 | | mg/L | 1 | 10/06/2000 | 10/06/2000 | AWT | P7328 |
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 0.035 | 0.0009 | | mg/L | 1 | 10/23/2000 | 10/20/2000 | AWT | P7597 |
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 0.035 | 0.0009 | | mg/L | 1 | 10/23/2000 | 10/20/2000 | AWT | P7597 |
| Radium-226, dissolved | 13982-63-3 | EPA 903.0M/SM 705M | 0.46 ± 0.51 | 0.7 | | pCi/L | 1 | 09/06/2000 | 09/07/2000 | CWP | P6556 |
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 0.86 ± 0.50 | 0.8 | | pCi/L | 1 | 08/22/2000 | 08/28/2000 | CWP | P6368 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | 0.23 ± 0.56 | 0.4 | | pCi/L | 1 | 09/20/2000 | 10/07/2000 | KEB | P6995 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | 0.51 ± 0.33 | 0.5 | | pCi/L | 1 | 09/20/2000 | 10/07/2000 | KEB | P6995 |

Client: **Envirocare of Utah**
Work Order: **0008081**
Project: **11e.(2)**

## Client Sample ID: **GW-58**
Tag Number:

Lab Sample ID: **0008081-01B**
Date Collected: **08/03/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Fluorine as Fluoride | 7782-41-4 | EPA 340.2M | 0.90 | 0.1 | | mg/L | 1 | | 08/15/2000 | PKL | A8914a |

Client: **Envirocare of Utah**
Work Order: **0008081**
Project: **11e.(2)**

## Client Sample ID: **GW-57**
Tag Number:

Lab Sample ID: **0008081-02A**
Date Collected: **08/03/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 0.0070 | 0.0009 | | mg/L | 1 | 08/31/2000 | 09/07/2000 | AWT | P6662 |
| Radium-226, dissolved | 13982-63-3 | EPA 903.0M/SM 705M | 0.17 ± 0.42 | 0.6 | | pCi/L | 1 | 09/06/2000 | 09/07/2000 | CWP | P6556 |
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 0.26 ± 0.48 | 0.8 | | pCi/L | 1 | 08/22/2000 | 08/28/2000 | CWP | P6368 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | -1.3 ± 1.5 | 3 | L | pCi/L | 1 | 08/23/2000 | 08/30/2000 | KEB | P6509 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | -0.34 ± 0.58 | 1 | | pCi/L | 1 | 08/23/2000 | 08/30/2000 | KEB | P6509 |

**Qualifiers:** ND - Not detected at the reporting limit; J - Analyte detected below reporting limit; E - Value above quantitation range; S - Spike outside accepted recovery limits; [illegible]yte detected in method blank; L - Contract/Client reporting limit exceeded; [illegible]utside accepted recovery limits; Y - Unspiked sample > 4 times amount spiked; [illegible]ple > 10 times blank result; M - Maximum contaminant level exceeded; X - [illegible]ate sample(s) < 5 times limit

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**Date:** 27-Oct-00

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah**
Work Order: **0008081**
Project: **11e.(2)**

Client Sample ID: **GW-57**
Tag Number:

Lab Sample ID: **0008081-02B**
Date Collected: **08/03/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Fluorine as Fluoride | 7782-41-4 | EPA 340.2M | 0.78 | 0.1 | | mg/L | 1 | | 08/15/2000 | PKL | A8914a |

Client: **Envirocare of Utah**
Work Order: **0008081**
Project: **11e.(2)**

Client Sample ID: **GW-27**
Tag Number:

Lab Sample ID: **0008081-03A**
Date Collected: **08/03/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 0.037 | 0.0009 | | mg/L | 1 | 08/31/2000 | 09/07/2000 | AWT | P6662 |
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 0.021 | 0.0009 | | mg/L | 1 | 10/06/2000 | 10/06/2000 | AWT | P7328 |
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 0.021 | 0.0009 | | mg/L | 1 | 10/06/2000 | 10/06/2000 | AWT | P7328 |
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 0.028 | 0.0009 | | mg/L | 1 | 10/23/2000 | 10/20/2000 | AWT | P7597 |
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 0.028 | 0.0009 | | mg/L | 1 | 10/23/2000 | 10/20/2000 | AWT | P7597 |
| Radium-226, dissolved | 13982-63-3 | EPA 903.0M/SM 705M | 0.39 ± 0.48 | 0.6 | | pCi/L | 1 | 09/06/2000 | 09/07/2000 | CWP | P6556 |
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 0.46 ± 0.47 | 0.8 | | pCi/L | 1 | 08/30/2000 | 09/05/2000 | CWP | P6635 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | -3.7 ± 1.6 | 3 | L | pCi/L | 1 | 08/23/2000 | 08/30/2000 | KEB | P6509 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | 0.23 ± 0.69 | 1 | | pCi/L | 1 | 08/23/2000 | 08/30/2000 | KEB | P6509 |

Client: **Envirocare of Utah**
Work Order: **0008081**
Project: **11e.(2)**

Client Sample ID: **GW-27**
Tag Number:

Lab Sample ID: **0008081-03B**
Date Collected: **08/03/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Fluorine as Fluoride | 7782-41-4 | EPA 340.2M | 0.94 | 0.1 | | mg/L | 1 | | 08/15/2000 | PKL | A8914a |

Client: **Envirocare of Utah**
Work Order: **0008081**
Project: **11e.(2)**

Client Sample ID: **GW-28**
Tag Number:

Lab Sample ID: **0008081-04A**
Date Collected: **08/03/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 0.012 | 0.0009 | | mg/L | 1 | 08/31/2000 | 09/07/2000 | AWT | P6662 |
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 0.0082 | 0.0009 | | mg/L | 1 | 10/06/2000 | 10/06/2000 | AWT | P7328 |
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 0.0081 | 0.0009 | | mg/L | 1 | 10/06/2000 | 10/06/2000 | AWT | P7328 |

**Qualifiers:**
ND - Not detected at the reporting limit
B - Analyte detected in method blank
Z - Sample > 10 times blank result
J - Analyte detected below reporting limit
L - Contract/Client reporting limit exceeded
M - Maximum contaminant level exceeded
E - Value above quantitation range
R - RPD outside accepted recovery limits
X - Duplicate sample(s) < 5 times limit
S - Spike outside accepted recovery limits
Y - Unspiked sample > 4 times amount spiked

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**Date:** 27-Oct-00

# CLIENT SAMPLE REPORT

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226, dissolved | 13982-63-3 | EPA 903.0M/SM 705M | -0.028 ± 0.36 | 0.6 | pCi/L | 1 | 09/06/2000 | 09/07/2000 | CWP | P6556 |
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 0.88 ± 0.49 | 0.8 | pCi/L | 1 | 08/30/2000 | 09/05/2000 | CWP | P6635 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | -0.85 ± 1.1 | 2 | pCi/L | 1 | 08/23/2000 | 08/30/2000 | KEB | P6509 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | 0.41 ± 0.67 | 0.9 | pCi/L | 1 | 08/23/2000 | 08/30/2000 | KEB | P6509 |

Client: **Envirocare of Utah**
Work Order: **0008081**
Project: **11e.(2)**

Client Sample ID: **GW-28**
Tag Number:

Lab Sample ID: **0008081-04B**
Date Collected: **08/03/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Fluorine as Fluoride | 7782-41-4 | EPA 340.2M | 0.85 | 0.1 | | mg/L | 1 | | 08/15/2000 | PKL | A8914a |

**Qualifiers:** ND - Not detected at the reporting limit; J - Analyte detected below reporting limit; E - Value above quantitation range; S - Spike outside accepted recovery limits; B - Analyte detected in method blank; L - Contract/Client reporting limit exceeded; I - Outside accepted recovery limits; Y - Unspiked sample > 4 times amount spiked; Z - Sample > 10 times blank result; M - Maximum contaminant level exceeded; X - Duplicate sample(s) < 5 times limit

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**Date:** 11-Sep-00

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah** | Client Sample ID: **GW-58A** | Lab Sample ID: **0008082-01A**
Work Order: **0008082** | Tag Number: | Date Collected: **08/03/2000**
Project: **11e.(2)** | Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Thorium-232, total | 7440-29-1 | USAEC RMO 3008 | -0.045 ± 0.54 | 0.9 | | pCi/L | 1 | | 08/30/2000 | KEB | P6509 |

Client: **Envirocare of Utah** | Client Sample ID: **GW-58B** | Lab Sample ID: **0008082-02A**
Work Order: **0008082** | Tag Number: | Date Collected: **08/03/2000**
Project: **11e.(2)** | Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Thorium-232, total | 7440-29-1 | USAEC RMO 3008 | -0.31 ± 0.33 | 0.8 | | pCi/L | 1 | | 08/30/2000 | KEB | P6509 |

Client: **Envirocare of Utah** | Client Sample ID: **GW-58A** | Lab Sample ID: **0008082-03A**
Work Order: **0008082** | Tag Number: | Date Collected: **08/03/2000**
Project: **11e.(2)** | Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, total | 11-09-6 | ASTM D2907 | 0.042 | 0.0009 | | mg/L | 1 | | 09/11/2000 | AWT | P6663 |

Client: **Envirocare of Utah** | Client Sample ID: **GW-28A** | Lab Sample ID: **0008082-04A**
Work Order: **0008082** | Tag Number: | Date Collected: **08/03/2000**
Project: **11e.(2)** | Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Thorium-232, total | 7440-29-1 | USAEC RMO 3008 | 0.33 ± 0.58 | 0.8 | | pCi/L | 1 | | 08/30/2000 | KEB | P6509 |

Client: **Envirocare of Utah** | Client Sample ID: **GW-28A** | Lab Sample ID: **0008082-04B**
Work Order: **0008082** | Tag Number: | Date Collected: **08/03/2000**
Project: **11e.(2)** | Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, total | 11-09-6 | ASTM D2907 | 0.012 | 0.0009 | | mg/L | 1 | | 09/11/2000 | AWT | P6663 |

**Qualifiers:**
ND - Not detected at the reporting limit
B - Analyte detected in method blank
Z - Sample > 10 times blank result
J - Analyte detected below reporting limit
L - Contract/Client reporting limit exceeded
M - Maximum contaminant level exceeded
E - Value above quantitation range
R - RPD outside accepted recovery limits
X - Duplicate sample(s) < 5 times limit
S - Spike outside accepted recovery limits
Y - Unspiked sample > 4 times amount spiked

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**Date:** 11-Sep-00

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah**
Work Order: **0008082**
Project: **11e.(2)**

## Client Sample ID: GW-28B

Tag Number:

Lab Sample ID: **0008082-04C**
Date Collected: **08/03/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, total | 11-09-6 | ASTM D2907 | 0.012 | 0.0009 | | mg/L | 1 | | 09/11/2000 | AWT | P6663 |

Client: **Envirocare of Utah**
Work Order: **0008082**
Project: **11e.(2)**

## Client Sample ID: GW-57A

Tag Number:

Lab Sample ID: **0008082-05A**
Date Collected: **08/03/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Thorium-232, total | 7440-29-1 | USAEC RMO 3008 | -0.24 ± 0.43 | 0.9 | | pCi/L | 1 | | 08/30/2000 | KEB | P6509 |

Client: **Envirocare of Utah**
Work Order: **0008082**
Project: **11e.(2)**

## Client Sample ID: GW-57A

Tag Number:

Lab Sample ID: **0008082-06A**
Date Collected: **08/03/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, total | 11-09-6 | ASTM D2907 | 0.0072 | 0.0009 | | mg/L | 1 | | 09/11/2000 | AWT | P6663 |

Client: **Envirocare of Utah**
Work Order: **0008082**
Project: **11e.(2)**

## Client Sample ID: GW-27A

Tag Number:

Lab Sample ID: **0008082-07A**
Date Collected: **08/03/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Thorium-232, total | 7440-29-1 | USAEC RMO 3008 | 0.38 ± 0.70 | 1 | | pCi/L | 1 | | 08/30/2000 | KEB | P6509 |

Client: **Envirocare of Utah**
Work Order: **0008082**
Project: **11e.(2)**

## Client Sample ID: GW-27B

Tag Number:

Lab Sample ID: **0008082-08A**
Date Collected: **08/03/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Thorium-232, total | 7440-29-1 | USAEC RMO 3008 | -0.19 ± 0.55 | 1 | | pCi/L | 1 | | 08/30/2000 | KEB | P6541 |

**Qualifiers:** ND - Not detected at the reporting limit; J - Analyte detected below reporting limit; E - Value above quantitation range; S - Spike outside accepted recovery limits

B - Analyte detected in method blank; L - Contract/Client reporting limit exceeded; outside accepted recovery limits; Y - Unspiked sample > 4 times amount spiked

nple > 10 times blank result; M - Maximum contaminant level exceeded; ate sample(s) < 5 times limit

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**Date:** 11-Sep-00

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah**
Work Order: **0008082**
Project: **11e.(2)**

Client Sample ID: **GW-27A**
Tag Number:

Lab Sample ID: **0008082-09A**
Date Collected: **08/03/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, total | 11-09-6 | ASTM D2907 | 0.035 | 0.0009 | | mg/L | 1 | | 09/11/2000 | AWT | P6663 |

Qualifiers: ND - Not detected at the reporting limit; J - Analyte detected below reporting limit; E - Value above quantitation range; S - Spike outside accepted recovery limits
B - Analyte detected in method blank; L - Contract/Client reporting limit exceeded; R - RPD outside accepted recovery limits; Y - Unspiked sample > 4 times amount spiked
Z - Sample > 10 times blank result; M - Maximum contaminant level exceeded; X - Duplicate sample(s) < 5 times limit

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**Date:** 04-Oct-00

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah**
Work Order: **0008083**
Project:

## Client Sample ID: GW-19A-A

Tag Number:

Lab Sample ID: **0008083-01A**
Date Collected: **08/01/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Thorium-232, total | 7440-29-1 | USAEC RMO 3008 | -0.0015 ± 0.61 | 1 | | pCi/L | 1 | | 09/01/2000 | KEB | P6541 |

Client: **Envirocare of Utah**
Work Order: **0008083**
Project:

## Client Sample ID: GW-19A-B

Tag Number:

Lab Sample ID: **0008083-02A**
Date Collected: **08/01/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Thorium-232, total | 7440-29-1 | USAEC RMO 3008 | 0.42 ± 0.67 | 0.9 | | pCi/L | 1 | | 09/01/2000 | KEB | P6541 |

Client: **Envirocare of Utah**
Work Order: **0008083**
Project:

## Client Sample ID: GW-19A-A

Tag Number:

Lab Sample ID: **0008083-03A**
Date Collected: **08/01/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Fluorine as Fluoride | 7782-41-4 | EPA 340.2M | 1.1 | 0.1 | | mg/L | 1 | | 08/15/2000 | PKL | A8914a |

Client: **Envirocare of Utah**
Work Order: **0008083**
Project:

## Client Sample ID: GW-60

Tag Number:

Lab Sample ID: **0008083-04A**
Date Collected: **08/01/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Thorium-230, total | 14269-63-7 | USAEC RMO 3008 | 0.21 ± 1.9 | 3 | | pCi/L | 1 | | 09/01/2000 | KEB | P6541 |
| Thorium-232, total | 7440-29-1 | USAEC RMO 3008 | -0.053 ± 0.59 | 1 | | pCi/L | 1 | | 09/01/2000 | KEB | P6541 |

Client: **Envirocare of Utah**
Work Order: **0008083**
Project:

## Client Sample ID: GW-63

Tag Number:

Lab Sample ID: **0008083-05A**
Date Collected: **08/01/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Thorium-232, total | 7440-29-1 | USAEC RMO 3008 | -0.087 ± 0.58 | 1 | | pCi/L | 1 | | 09/11/2000 | KEB | P6541 |

**Qualifiers:** ND - Not detected at the reporting limit; J - Analyte detected below reporting limit; E - Value above quantitation range; S - Spike outside accepted recovery limits

`nalyte detected in method blank; L - Contract/Client reporting limit exceeded; ] outside accepted recovery limits; Y - Unspiked sample > 4 times amount spiked

ample > 10 times blank result; M - Maximum contaminant level exceeded; icate sample(s) < 5 times limit

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**Date:** 29-Sep-00

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah**
Work Order: **0008237**
Project: **11e.(2)**

Client Sample ID: **GW-26**
Tag Number:

Lab Sample ID: **0008237-01A**
Date Collected: **08/07/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 0.028 | 0.0009 | | mg/L | 1 | | 09/20/2000 | AGM | P6862 |
| Radium-226, dissolved | 13982-63-3 | EPA 903.0M/SM 705M | 0.58 ± 0.55 | 0.7 | | pCi/L | 1 | | 09/05/2000 | CEJ | P6637 |
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 1.6 ± 0.41 | 0.6 | | pCi/L | 1 | | 09/12/2000 | CWP | P6618 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | -0.018 ± 1.7 | 2 | | pCi/L | 1 | | 09/25/2000 | KEB | P6993 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | 0.23 ± 1.2 | 2 | | pCi/L | 1 | | 09/25/2000 | KEB | P6993 |

Client: **Envirocare of Utah**
Work Order: **0008237**
Project: **11e.(2)**

Client Sample ID: **GW-26**
Tag Number:

Lab Sample ID: **0008237-01B**
Date Collected: **08/07/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Fluorine as Fluoride | 7782-41-4 | EPA 340.2M | 0.66 | 0.1 | | mg/L | 1 | | 08/28/2000 | PKL | A9230a |

Client: **Envirocare of Utah**
Work Order: **0008237**
Project: **11e.(2)**

Client Sample ID: **GW-25**
Tag Number:

Lab Sample ID: **0008237-02A**
Date Collected: **08/07/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 0.091 | 0.0009 | | mg/L | 1 | | 09/20/2000 | AGM | P6862 |
| Radium-226, dissolved | 13982-63-3 | EPA 903.0M/SM 705M | 2.4 ± 0.86 | 0.6 | | pCi/L | 1 | | 09/05/2000 | CEJ | P6637 |
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 2.3 ± 0.43 | 0.6 | | pCi/L | 1 | | 09/12/2000 | CWP | P6618 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | 0.27 ± 1.2 | 0.8 | | pCi/L | 1 | | 09/25/2000 | KEB | P6993 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | 0.28 ± 0.63 | 0.9 | | pCi/L | 1 | | 09/25/2000 | KEB | P6993 |

Client: **Envirocare of Utah**
Work Order: **0008237**
Project: **11e.(2)**

Client Sample ID: **GW-25**
Tag Number:

Lab Sample ID: **0008237-02B**
Date Collected: **08/07/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Fluorine as Fluoride | 7782-41-4 | EPA 340.2M | 0.87 | 0.1 | | mg/L | 1 | | 08/28/2000 | PKL | A9230a |

**Qualifiers:**
ND - Not detected at the reporting limit
B - Analyte detected in method blank
Z - Sample > 10 times blank result
J - Analyte detected below reporting limit
L - Contract/Client reporting limit exceeded
M - Maximum contaminant level exceeded
E - Value above quantitation range
R - RPD outside accepted recovery limits
X - Duplicate sample(s) < 5 times limit
S - Spike outside accepted recovery limits
Y - Unspiked sample > 4 times amount spiked

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**Date:** 29-Sep-00

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah**
Work Order: **0008237**
Project: **11e.(2)**

Client Sample ID: **GW-20**
Tag Number:

Lab Sample ID: **0008237-03A**
Date Collected: **08/08/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 0.011 | 0.0009 | | mg/L | 1 | | 09/20/2000 | AGM | P6862 |
| Radium-226, dissolved | 13982-63-3 | EPA 903.0M/SM 705M | 1.5 ± 0.78 | 0.8 | | pCi/L | 1 | | 09/05/2000 | CEJ | P6637 |
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 1.6 ± 0.41 | 0.6 | | pCi/L | 1 | | 09/12/2000 | CWP | P6618 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | -1.6 ± 1.4 | 0.9 | | pCi/L | 1 | | 09/25/2000 | KEB | P6993 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | -0.099 ± 0.56 | 1 | | pCi/L | 1 | | 09/25/2000 | KEB | P6993 |

Client: **Envirocare of Utah**
Work Order: **0008237**
Project: **11e.(2)**

Client Sample ID: **GW-20**
Tag Number:

Lab Sample ID: **0008237-03B**
Date Collected: **08/08/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Fluorine as Fluoride | 7782-41-4 | EPA 340.2M | 0.65 | 0.1 | | mg/L | 1 | | 08/28/2000 | PKL | A9230a |

Client: **Envirocare of Utah**
Work Order: **0008237**
Project: **11e.(2)**

Client Sample ID: **GW-24**
Tag Number:

Lab Sample ID: **0008237-04A**
Date Collected: **08/08/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 0.016 | 0.0009 | | mg/L | 1 | | 09/20/2000 | AGM | P6862 |
| Radium-226, dissolved | 13982-63-3 | EPA 903.0M/SM 705M | 1.2 ± 0.73 | 0.8 | | pCi/L | 1 | | 09/05/2000 | CEJ | P6637 |
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 2.4 ± 0.43 | 0.6 | | pCi/L | 1 | | 09/12/2000 | CWP | P6618 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | -0.76 ± 2.4 | 2 | | pCi/L | 1 | | 09/27/2000 | KEB | P6993 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | 0.43 ± 1.2 | 2 | | pCi/L | 1 | | 09/27/2000 | KEB | P6993 |

Client: **Envirocare of Utah**
Work Order: **0008237**
Project: **11e.(2)**

Client Sample ID: **GW-24**
Tag Number:

Lab Sample ID: **0008237-04B**
Date Collected: **08/08/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|

**Qualifiers:** ND - Not detected at the reporting limit; J - Analyte detected below reporting limit; F - Value above quantitation range; S - Spike outside accepted recovery limits; Analyte detected in method blank; L - Contract/Client reporting limit exceeded; D outside accepted recovery limits; Y - Unspiked sample > 4 times amount spik; Sample > 10 times blank result; M - Maximum contaminant level exceeded; plicate sample(s) < 5 times limit

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**Date:** 29-Sep-00

# CLIENT SAMPLE REPORT

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Fluorine as Fluoride | 7782-41-4 | EPA 340.2M | 0.78 | 0.1 | | mg/L | 1 | | 08/28/2000 | PKL | A9230a |

Client: **Envirocare of Utah**
Work Order: **0008237**
Project: **11e.(2)**

Client Sample ID: **GW-29**
Tag Number:

Lab Sample ID: **0008237-05A**
Date Collected: **08/08/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 0.022 | 0.0009 | | mg/L | 1 | | 09/20/2000 | AGM | P6862 |
| Radium-226, dissolved | 13982-63-3 | EPA 903.0M/SM 705M | 1.1 ± 0.62 | 0.6 | | pCi/L | 1 | | 09/05/2000 | CEJ | P6637 |
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 2.5 ± 0.43 | 0.6 | | pCi/L | 1 | | 09/12/2000 | CWP | P6618 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | -2.5 ± 1.4 | 1 | | pCi/L | 1 | | 09/25/2000 | KEB | P6993 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | 0.095 ± 0.71 | 1 | | pCi/L | 1 | | 09/25/2000 | KEB | P6993 |

Client: **Envirocare of Utah**
Work Order: **0008237**
Project: **11e.(2)**

Client Sample ID: **GW-29**
Tag Number:

Lab Sample ID: **0008237-05B**
Date Collected: **08/08/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Fluorine as Fluoride | 7782-41-4 | EPA 340.2M | 0.86 | 0.1 | | mg/L | 1 | | 08/28/2000 | PKL | A9230a |

**Qualifiers:**
ND - Not detected at the reporting limit
B - Analyte detected in method blank
Z - Sample > 10 times blank result
J - Analyte detected below reporting limit
L - Contract/Client reporting limit exceeded
M - Maximum contaminant level exceeded
E - Value above quantitation range
R - RPD outside accepted recovery limits
X - Duplicate sample(s) < 5 times limit
S - Spike outside accepted recovery limits
Y - Unspiked sample > 4 times amount spiked

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**Date:** 29-Sep-00

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah**
Work Order: **0008237**
Project: **11e.(2)**

Client Sample ID: **GW-26**
Tag Number:

Lab Sample ID: **0008237-01A**
Date Collected: **08/07/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 0.028 | 0.0009 | | mg/L | 1 | | 09/20/2000 | AGM | P6862 |
| Radium-226, dissolved | 13982-63-3 | EPA 903.0M/SM 705M | 0.58 ± 0.55 | 0.7 | | pCi/L | 1 | | 09/05/2000 | CEJ | P6637 |
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 1.6 ± 0.41 | 0.6 | | pCi/L | 1 | | 09/12/2000 | CWP | P6618 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | -0.018 ± 1.7 | 2 | | pCi/L | 1 | | 09/25/2000 | KEB | P6993 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | 0.23 ± 1.2 | 2 | | pCi/L | 1 | | 09/25/2000 | KEB | P6993 |

Client: **Envirocare of Utah**
Work Order: **0008237**
Project: **11e.(2)**

Client Sample ID: **GW-26**
Tag Number:

Lab Sample ID: **0008237-01B**
Date Collected: **08/07/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Fluorine as Fluoride | 7782-41-4 | EPA 340.2M | 0.66 | 0.1 | | mg/L | 1 | | 08/28/2000 | PKL | A9230a |

Client: **Envirocare of Utah**
Work Order: **0008237**
Project: **11e.(2)**

Client Sample ID: **GW-25**
Tag Number:

Lab Sample ID: **0008237-02A**
Date Collected: **08/07/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 0.091 | 0.0009 | | mg/L | 1 | | 09/20/2000 | AGM | P6862 |
| Radium-226, dissolved | 13982-63-3 | EPA 903.0M/SM 705M | 2.4 ± 0.86 | 0.6 | | pCi/L | 1 | | 09/05/2000 | CEJ | P6637 |
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 2.3 ± 0.43 | 0.6 | | pCi/L | 1 | | 09/12/2000 | CWP | P6618 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | 0.27 ± 1.2 | 0.8 | | pCi/L | 1 | | 09/25/2000 | KEB | P6993 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | 0.28 ± 0.63 | 0.9 | | pCi/L | 1 | | 09/25/2000 | KEB | P6993 |

Client: **Envirocare of Utah**
Work Order: **0008237**
Project: **11e.(2)**

Client Sample ID: **GW-25**
Tag Number:

Lab Sample ID: **0008237-02B**
Date Collected: **08/07/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Fluorine as Fluoride | 7782-41-4 | EPA 340.2M | 0.87 | 0.1 | | mg/L | 1 | | 08/28/2000 | PKL | A9230a |

**Qualifiers:** ND - Not detected at the reporting limit J - Analyte detected below reporting limit E - Value above quantitation range S - Spike outside accepted recovery limits
P - Analyte detected in method blank L - Contract/Client reporting limit exceeded R - Outside accepted recovery limits Y - Unspiked sample > 4 times amount spike
B - Sample > 10 times blank result M - Maximum contaminant level exceeded Z - Duplicate sample(s) < 5 times limit

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**Date:** 29-Sep-00

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah**
Work Order: **0008237**
Project: **11e.(2)**

Client Sample ID: **GW-20**
Tag Number:

Lab Sample ID: **0008237-03A**
Date Collected: **08/08/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 0.011 | 0.0009 | | mg/L | 1 | | 09/20/2000 | AGM | P6862 |
| Radium-226, dissolved | 13982-63-3 | EPA 903.0M/SM 705M | 1.5 ± 0.78 | 0.8 | | pCi/L | 1 | | 09/05/2000 | CEJ | P6637 |
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 1.6 ± 0.41 | 0.6 | | pCi/L | 1 | | 09/12/2000 | CWP | P6618 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | -1.6 ± 1.4 | 0.9 | | pCi/L | 1 | | 09/25/2000 | KEB | P6993 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | -0.099 ± 0.56 | 1 | | pCi/L | 1 | | 09/25/2000 | KEB | P6993 |

Client: **Envirocare of Utah**
Work Order: **0008237**
Project: **11e.(2)**

Client Sample ID: **GW-20**
Tag Number:

Lab Sample ID: **0008237-03B**
Date Collected: **08/08/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Fluorine as Fluoride | 7782-41-4 | EPA 340.2M | 0.65 | 0.1 | | mg/L | 1 | | 08/28/2000 | PKL | A9230a |

Client: **Envirocare of Utah**
Work Order: **0008237**
Project: **11e.(2)**

Client Sample ID: **GW-24**
Tag Number:

Lab Sample ID: **0008237-04A**
Date Collected: **08/08/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 0.016 | 0.0009 | | mg/L | 1 | | 09/20/2000 | AGM | P6862 |
| Radium-226, dissolved | 13982-63-3 | EPA 903.0M/SM 705M | 1.2 ± 0.73 | 0.8 | | pCi/L | 1 | | 09/05/2000 | CEJ | P6637 |
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 2.4 ± 0.43 | 0.6 | | pCi/L | 1 | | 09/12/2000 | CWP | P6618 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | -0.76 ± 2.4 | 2 | | pCi/L | 1 | | 09/27/2000 | KEB | P6993 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | 0.43 ± 1.2 | 2 | | pCi/L | 1 | | 09/27/2000 | KEB | P6993 |

Client: **Envirocare of Utah**
Work Order: **0008237**
Project: **11e.(2)**

Client Sample ID: **GW-24**
Tag Number:

Lab Sample ID: **0008237-04B**
Date Collected: **08/08/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|

**Qualifiers:**
ND - Not detected at the reporting limit
B - Analyte detected in method blank
Z - Sample > 10 times blank result
J - Analyte detected below reporting limit
L - Contract/Client reporting limit exceeded
M - Maximum contaminant level exceeded
E - Value above quantitation range
R - RPD outside accepted recovery limits
X - Duplicate sample(s) < 5 times limit
S - Spike outside accepted recovery limits
Y - Unspiked sample > 4 times amount spiked

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**Date:** 29-Sep-00

# CLIENT SAMPLE REPORT

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Fluorine as Fluoride | 7782-41-4 | EPA 340.2M | 0.78 | 0.1 | | mg/L | 1 | | 08/28/2000 | PKL | A9230a |

Client: **Envirocare of Utah**
Work Order: **0008237**
Project: **11e.(2)**

Client Sample ID: **GW-29**
Tag Number:

Lab Sample ID: **0008237-05A**
Date Collected: **08/08/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 0.022 | 0.0009 | | mg/L | 1 | | 09/20/2000 | AGM | P6862 |
| Radium-226, dissolved | 13982-63-3 | EPA 903.0M/SM 705M | 1.1 ± 0.62 | 0.6 | | pCi/L | 1 | | 09/05/2000 | CEJ | P6637 |
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 2.5 ± 0.43 | 0.6 | | pCi/L | 1 | | 09/12/2000 | CWP | P6618 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | -2.5 ± 1.4 | 1 | | pCi/L | 1 | | 09/25/2000 | KEB | P6993 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | 0.095 ± 0.71 | 1 | | pCi/L | 1 | | 09/25/2000 | KEB | P6993 |

Client: **Envirocare of Utah**
Work Order: **0008237**
Project: **11e.(2)**

Client Sample ID: **GW-29**
Tag Number:

Lab Sample ID: **0008237-05B**
Date Collected: **08/08/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Fluorine as Fluoride | 7782-41-4 | EPA 340.2M | 0.86 | 0.1 | | mg/L | 1 | | 08/28/2000 | PKL | A9230a |

**Qualifiers:** ND - Not detected at the reporting limit; J - Analyte detected below reporting limit; [illegible] Value above quantitation range; S - Spike outside accepted recovery limits; [illegible]alyte detected in method blank; L - Contract/Client reporting limit exceeded; [illegible]outside accepted recovery limits; Y - Unspiked sample > 4 times amount spiked; [illegible]ample > 10 times blank result; M - Maximum contaminant level exceeded; X - [illegible]cate sample(s) < 5 times limit

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**Date:** 29-Sep-00

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah**
Work Order: **0008238**
Project: **11e.(2)**

Client Sample ID: **GW-26A**
Tag Number:

Lab Sample ID: **0008238-01A**
Date Collected: **08/07/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 0.031 | 0.0009 | | mg/L | 1 | | 09/15/2000 | AWT | P6840 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | 1.4 ± 2.3 | 2 | | pCi/L | 1 | | 09/27/2000 | KEB | P6993 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | -0.0033 ± 1.3 | 2 | | pCi/L | 1 | | 09/27/2000 | KEB | P6993 |

Client: **Envirocare of Utah**
Work Order: **0008238**
Project: **11e.(2)**

Client Sample ID: **GW-20A**
Tag Number:

Lab Sample ID: **0008238-02A**
Date Collected: **08/08/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | 0.18 ± 0.91 | 1 | | pCi/L | 1 | | 09/25/2000 | KEB | P6993 |

Client: **Envirocare of Utah**
Work Order: **0008238**
Project: **11e.(2)**

Client Sample ID: **GW-24A**
Tag Number:

Lab Sample ID: **0008238-03A**
Date Collected: **08/08/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | -0.89 ± 1.8 | 1 | | pCi/L | 1 | | 09/19/2000 | KEB | P6879 |

**Qualifiers:**
ND - Not detected at the reporting limit
B - Analyte detected in method blank
Z - Sample > 10 times blank result
J - Analyte detected below reporting limit
L - Contract/Client reporting limit exceeded
M - Maximum contaminant level exceeded
E - Value above quantitation range
R - RPD outside accepted recovery limits
X - Duplicate sample(s) < 5 times limit
S - Spike outside accepted recovery limits
Y - Unspiked sample > 4 times amount spiked

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Date: 31-Oct-00

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah**
Work Order: **0009136**
Project: **RCRA**

Client Sample ID: **1B**
Tag Number: **RCRA**

Lab Sample ID: **0009136-01A**
Date Collected: **09/13/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 0.17 | 0.0009 | | mg/L | 1 | 09/26/2000 | 09/29/2000 | AGM | P7122 |
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 34000 ± 63 | 4 | | pCi/L | 1 | 10/25/2000 | 10/26/2000 | CMA | P7651 |
| Gross Alpha, dissolved | 12587-46-1 | EPA 00-02 | 330 ± 37 | 10 | | pCi/L | 1 | 10/16/2000 | 10/17/2000 | AEW | P7441 |
| Gross Beta, dissolved | 12587-47-2 | EPA 900.0 | 21000 ± 1100 | 900 | | pCi/L | 1 | 10/10/2000 | 10/13/2000 | AEW | P7375 |
| Potassium-40, dissolved | 13966-00-2 | EPA 901.1 | ND | 400 | | pCi/L | 1 | | 09/19/2000 | LLC | A10329 |
| Radium-226, dissolved | 13982-63-3 | EPA 903.0M/SM 705M | 0.33 ± 0.44 | 0.6 | | pCi/L | 1 | 09/26/2000 | 09/29/2000 | CWP | P7129 |
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 1.7 ± 0.43 | 0.6 | | pCi/L | 1 | 09/27/2000 | 10/09/2000 | CWP | P7144 |
| Strontium-89/90, dissolved | 11-10-9 | EPA 905.0/SM704 | 3.1 ± 1.1 | 2 | | pCi/L | 1 | 09/25/2000 | 09/29/2000 | MTC | P7105 |
| Neptunium-237, dissolved | 13994-20-2 | EPA 907.0M/520M | 0.42 ± 0.36 | 0.4 | | pCi/L | 1 | 10/19/2000 | 10/30/2000 | JCP | P7567 |
| Uranium-233/234, dissolved | 13966-29-5 | EPA 908.0M | 240 ± 6.0 | 0.6 | | pCi/L | 1 | 10/17/2000 | 10/24/2000 | KEB | P7499 |
| Uranium-235/236, dissolved | 15117-96-1 | EPA 908.0M | 10 ± 1.4 | 0.6 | | pCi/L | 1 | 10/17/2000 | 10/24/2000 | KEB | P7499 |
| Uranium-238, dissolved | 7440-61-1 | EPA 908.0M | 65 ± 3.1 | 0.6 | | pCi/L | 1 | 10/17/2000 | 10/24/2000 | KEB | P7499 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | -1.1 ± 1.8 | 1 | | pCi/L | 1 | 10/16/2000 | 10/20/2000 | KEB | P7457 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | 0.14 ± 0.91 | 1 | | pCi/L | 1 | 10/16/2000 | 10/20/2000 | KEB | P7457 |

Client: **Envirocare of Utah**
Work Order: **0009136**
Project: **RCRA**

Client Sample ID: **1B**
Tag Number: **RCRA**

Lab Sample ID: **0009136-01B**
Date Collected: **09/13/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Carbon-14, dissolved | 14762-75-5 | EPA 520-C01M | -18 ± 51 | 80 | | pCi/L | 1 | 10/19/2000 | 10/23/2000 | JCP | P7562 |
| Iodine-129, dissolved | 15046-84-1 | EPA 902.0 | -0.18 ± 0.78 | 1 | | pCi/L | 1 | 10/02/2000 | 10/09/2000 | CWP | P7141 |

**Qualifiers:** ND - Not detected at the reporting limit; J - Analyte detected below reporting limit; E - Value above quantitation range; S - Spike outside accepted recovery limits; ...alyte detected in method blank; L - Contract/Client reporting limit exceeded; ...outside accepted recovery limits; Y - Unspiked sample > 4 times amount spiked; ...ple > 10 times blank result; M - Maximum contaminant level exceeded; X ... ...ate sample(s) < 5 times limit

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Date: 31-Oct-00

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah**
Work Order: **0009136**
Project: **RCRA**

Client Sample ID: **1B**
Tag Number: **RCRA**

Lab Sample ID: **0009136-01C**
Date Collected: **09/13/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result | ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tritium, dissolved | 10028-17-8 | EPA 906.0 | 230. | ± 450 | 700 | | pCi/L | 1 | 10/11/2000 | 10/16/2000 | ALZ | P7396 |

Client: **Envirocare of Utah**
Work Order: **0009136**
Project: **RCRA**

Client Sample ID: **2B**
Tag Number: **RCRA**

Lab Sample ID: **0009136-02A**
Date Collected: **09/13/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result | ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 0.19 | | 0.0009 | | mg/L | 1 | 09/26/2000 | 09/29/2000 | AGM | P7122 |
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 2600 | ± 17 | 4 | | pCi/L | 1 | 10/25/2000 | 10/26/2000 | CMA | P7651 |
| Gross Alpha, dissolved | 12587-46-1 | EPA 00-02 | 370 | ± 39 | 10 | | pCi/L | 1 | 10/16/2000 | 10/17/2000 | AEW | P7441 |
| Gross Beta, dissolved | 12587-47-2 | EPA 900.0 | 2400 | ± 610 | 900 | L | pCi/L | 1 | 10/10/2000 | 10/13/2000 | AEW | P7375 |
| Potassium-40, dissolved | 13966-00-2 | EPA 901.1 | ND | | 400 | | pCi/L | 1 | | 09/19/2000 | LLC | A10329 |
| Radium-226, dissolved | 13982-63-3 | EPA 903.0M/SM 705M | 0.014 | ± 0.39 | 0.6 | | pCi/L | 1 | 09/26/2000 | 09/29/2000 | CWP | P7129 |
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 1.8 | ± 0.43 | 0.6 | | pCi/L | 1 | 09/27/2000 | 10/09/2000 | CWP | P7144 |
| Strontium-89/90, dissolved | 11-10-9 | EPA 905.0/SM704 | 2.1 | ± 0.99 | 2 | | pCi/L | 1 | 09/25/2000 | 09/29/2000 | MTC | P7105 |
| Neptunium-237, dissolved | 13994-20-2 | EPA 907.0M/520M | 0.48 | ± 0.40 | 0.4 | | pCi/L | 1 | 10/19/2000 | 10/30/2000 | JCP | P7567 |
| Uranium-233/234, dissolved | 13966-29-5 | EPA 908.0M | 120 | ± 4.3 | 0.6 | | pCi/L | 1 | 10/17/2000 | 10/24/2000 | KEB | P7499 |
| Uranium-235/236, dissolved | 15117-96-1 | EPA 908.0M | 5.5 | ± 1.1 | 0.7 | | pCi/L | 1 | 10/17/2000 | 10/24/2000 | KEB | P7499 |
| Uranium-238, dissolved | 7440-61-1 | EPA 908.0M | 67 | ± 3.2 | 0.6 | | pCi/L | 1 | 10/17/2000 | 10/24/2000 | KEB | P7499 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | -4.6 | ± 1.7 | 0.9 | | pCi/L | 1 | 10/16/2000 | 10/20/2000 | KEB | P7457 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | 0.32 | ± 0.69 | 1 | | pCi/L | 1 | 10/16/2000 | 10/20/2000 | KEB | P7457 |

Client: **Envirocare of Utah**
Work Order: **0009136**
Project: **RCRA**

Client Sample ID: **2B**
Tag Number: **RCRA**

Lab Sample ID: **0009136-02B**
Date Collected: **09/13/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result | ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Carbon-14, dissolved | 14762-75-5 | EPA 520-C01M | -270 | ± 140 | 200 | | pCi/L | 1 | 10/19/2000 | 10/23/2000 | JCP | P7562 |

**Qualifiers:**
ND - Not detected at the reporting limit
B - Analyte detected in method blank
Z - Sample > 10 times blank result
J - Analyte detected below reporting limit
L - Contract/Client reporting limit exceeded
M - Maximum contaminant level exceeded
E - Value above quantitation range
R - RPD outside accepted recovery limits
X - Duplicate sample(s) < 5 times limit
S - Spike outside accepted recovery limits
Y - Unspiked sample > 4 times amount spiked

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Date: 31-Oct-00

# CLIENT SAMPLE REPORT

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Iodine-129, dissolved | 15046-84-1 | EPA 902.0 | -0.61 ± 0.75 | 1 | | pCi/L | 1 | 10/02/2000 | 10/09/2000 | CWP | P7141 |

Client: **Envirocare of Utah**
Work Order: **0009136**
Project: **RCRA**

Client Sample ID: **2B**
Tag Number: **RCRA**

Lab Sample ID: **0009136-02C**
Date Collected: **09/13/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Tritium, dissolved | 10028-17-8 | EPA 906.0 | 180 ± 440 | 700 | | pCi/L | 1 | 10/11/2000 | 10/16/2000 | ALZ | P7396 |

Client: **Envirocare of Utah**
Work Order: **0009136**
Project: **RCRA**

Client Sample ID: **3B**
Tag Number: **RCRA**

Lab Sample ID: **0009136-03A**
Date Collected: **09/13/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 0.019 | 0.0009 | | mg/L | 1 | 09/26/2000 | 09/29/2000 | AGM | P7122 |
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 1700 ± 14 | 4 | | pCi/L | 1 | 10/25/2000 | 10/26/2000 | CMA | P7651 |
| Gross Alpha, dissolved | 12587-46-1 | EPA 00-02 | 55 ± 18 | 20 | | pCi/L | 1 | 10/16/2000 | 10/17/2000 | AEW | P7441 |
| Gross Beta, dissolved | 12587-47-2 | EPA 900.0 | 1400 ± 530 | 800 | L | pCi/L | 1 | 10/10/2000 | 10/13/2000 | AEW | P7375 |
| Potassium-40, dissolved | 13966-00-2 | EPA 901.1 | 440 ± 180 | 300 | | pCi/L | 1 | | 09/19/2000 | LLC | A10329 |
| Radium-226, dissolved | 13982-63-3 | EPA 903.0M/SM 705M | 0.41 ± 0.52 | 0.7 | | pCi/L | 1 | 09/26/2000 | 09/29/2000 | CWP | P7129 |
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 1.8 ± 0.43 | 0.6 | | pCi/L | 1 | 09/27/2000 | 10/09/2000 | CWP | P7144 |
| Strontium-89/90, dissolved | 11-10-9 | EPA 905.0/SM704 | 0.020 ± 0.93 | 2 | | pCi/L | 1 | 09/25/2000 | 09/29/2000 | MTC | P7105 |
| Neptunium-237, dissolved | 13994-20-2 | EPA 907.0M/520M | 0.63 ± 0.42 | 0.4 | | pCi/L | 1 | 10/19/2000 | 10/30/2000 | JCP | P7567 |
| Uranium-233/234, dissolved | 13966-29-5 | EPA 908.0M | 10 ± 1.3 | 0.5 | | pCi/L | 1 | 10/17/2000 | 10/25/2000 | KEB | P7499 |
| Uranium-235/236, dissolved | 15117-96-1 | EPA 908.0M | -0.094 ± 0.34 | 0.6 | | pCi/L | 1 | 10/17/2000 | 10/25/2000 | KEB | P7499 |
| Uranium-238, dissolved | 7440-61-1 | EPA 908.0M | 6.2 ± 0.99 | 0.5 | | pCi/L | 1 | 10/17/2000 | 10/25/2000 | KEB | P7499 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | -1.4 ± 1.2 | 1 | | pCi/L | 1 | 10/16/2000 | 10/20/2000 | KEB | P7457 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | 0.17 ± 0.85 | 1 | | pCi/L | 1 | 10/16/2000 | 10/20/2000 | KEB | P7457 |

**Qualifiers:** ND - Not detected at the reporting limit; J - Analyte detected below reporting limit; F - Value above quantitation range; S - Spike outside accepted recovery limits; B - Analyte detected in method blank; L - Contract/Client reporting limit exceeded; H - Outside accepted recovery limits; Y - Unspiked sample > 4 times amount spiked; Z - Sample > 10 times blank result; M - Maximum contaminant level exceeded; X - Duplicate sample(s) < 5 times limit

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Date: 31-Oct-00

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah**
Work Order: **0009136**
Project: **RCRA**

Client Sample ID: **3B**
Tag Number: **RCRA**

Lab Sample ID: **0009136-03B**
Date Collected: **09/13/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Carbon-14, dissolved | 14762-75-5 | EPA 520-C01M | -36 ± 21 | 40 | | pCi/L | 1 | 10/19/2000 | 10/23/2000 | JCP | P7562 |
| Iodine-129, dissolved | 15046-84-1 | EPA 902.0 | -0.26 ± 0.77 | 1 | | pCi/L | 1 | 10/02/2000 | 10/09/2000 | CWP | P7141 |

Client: **Envirocare of Utah**
Work Order: **0009136**
Project: **RCRA**

Client Sample ID: **3B**
Tag Number: **RCRA**

Lab Sample ID: **0009136-03C**
Date Collected: **09/13/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Tritium, dissolved | 10028-17-8 | EPA 906.0 | -15 ± 440 | 700 | | pCi/L | 1 | 10/11/2000 | 10/16/2000 | ALZ | P7396 |

Client: **Envirocare of Utah**
Work Order: **0009136**
Project: **RCRA**

Client Sample ID: **4B**
Tag Number: **RCRA**

Lab Sample ID: **0009136-04A**
Date Collected: **09/13/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 0.076 | 0.0009 | | mg/L | 1 | 09/26/2000 | 09/29/2000 | AGM | P7122 |
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 840 ± 10 | 4 | | pCi/L | 1 | 10/25/2000 | 10/26/2000 | CMA | P7651 |
| Gross Alpha, dissolved | 12587-46-1 | EPA 00-02 | 53 ± 16 | 10 | | pCi/L | 1 | 10/16/2000 | 10/17/2000 | AEW | P7441 |
| Gross Beta, dissolved | 12587-47-2 | EPA 900.0 | 1100 ± 550 | 900 | L | pCi/L | 1 | 10/10/2000 | 10/13/2000 | AEW | P7375 |
| Potassium-40, dissolved | 13966-00-2 | EPA 901.1 | ND | 300 | | pCi/L | 1 | | 09/19/2000 | LLC | A10329 |
| Radium-226, dissolved | 13982-63-3 | EPA 903.0M/SM 705M | -0.064 ± 0.40 | 0.7 | | pCi/L | 1 | 09/26/2000 | 09/29/2000 | CWP | P7129 |
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 1.4 ± 0.41 | 0.6 | | pCi/L | 1 | 09/27/2000 | 10/09/2000 | CWP | P7144 |
| Strontium-89/90, dissolved | 11-10-9 | EPA 905.0/SM704 | 6.6 ± 1.2 | 2 | | pCi/L | 1 | 09/25/2000 | 09/29/2000 | MTC | P7105 |
| Neptunium-237, dissolved | 13994-20-2 | EPA 907.0M/520M | 0.88 ± 0.50 | 0.4 | | pCi/L | 1 | 10/19/2000 | 10/30/2000 | JCP | P7567 |
| Uranium-233/234, dissolved | 13966-29-5 | EPA 908.0M | 27 ± 2.1 | 0.6 | | pCi/L | 1 | 10/17/2000 | 10/25/2000 | KEB | P7499 |
| Uranium-235/236, dissolved | 15117-96-1 | EPA 908.0M | -0.11 ± 0.39 | 0.7 | | pCi/L | 1 | 10/17/2000 | 10/25/2000 | KEB | P7499 |
| Uranium-238, dissolved | 7440-61-1 | EPA 908.0M | 27 ± 2.1 | 0.6 | | pCi/L | 1 | 10/17/2000 | 10/25/2000 | KEB | P7499 |

**Qualifiers:**
ND - Not detected at the reporting limit
B - Analyte detected in method blank
Z - Sample > 10 times blank result
J - Analyte detected below reporting limit
L - Contract/Client reporting limit exceeded
M - Maximum contaminant level exceeded
E - Value above quantitation range
R - RPD outside accepted recovery limits
X - Duplicate sample(s) < 5 times limit
S - Spike outside accepted recovery limits
Y - Unspiked sample > 4 times amount spiked

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Date: 31-Oct-00

# CLIENT SAMPLE REPORT

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | 0.83 ± 1.7 | 1 | | pCi/L | 1 | 10/16/2000 | 10/20/2000 | KEB | P7457 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | -0.13 ± 0.89 | 2 | | pCi/L | 1 | 10/16/2000 | 10/20/2000 | KEB | P7457 |

Client: **Envirocare of Utah**
Work Order: **0009136**
Project: **RCRA**
Client Sample ID: **4B**
Tag Number: **RCRA**
Lab Sample ID: **0009136-04B**
Date Collected: **09/13/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Carbon-14, dissolved | 14762-75-5 | EPA 520-C01M | -12 ± 33 | 50 | | pCi/L | 1 | 10/19/2000 | 10/23/2000 | JCP | P7562 |
| Iodine-129, dissolved | 15046-84-1 | EPA 902.0 | 0.050 ± 0.76 | 1 | | pCi/L | 1 | 10/02/2000 | 10/10/2000 | CWP | P7141 |

Client: **Envirocare of Utah**
Work Order: **0009136**
Project: **RCRA**
Client Sample ID: **4B**
Tag Number: **RCRA**
Lab Sample ID: **0009136-04C**
Date Collected: **09/13/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Tritium, dissolved | 10028-17-8 | EPA 906.0 | -51 ± 440 | 700 | | pCi/L | 1 | 10/11/2000 | 10/16/2000 | ALZ | P7396 |

Client: **Envirocare of Utah**
Work Order: **0009136**
Project: **RCRA**
Client Sample ID: **1A**
Tag Number: **RCRA**
Lab Sample ID: **0009136-05A**
Date Collected: **09/12/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Barium, dissolved | 7440-39-3 | EPA 200.7 | 17000 | 2 | M | mg/L | 100 | | 10/10/2000 | JWH | A10303a |
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 0.0071 | 0.0009 | | mg/L | 1 | 09/26/2000 | 09/29/2000 | AGM | P7122 |
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 97 ± 4.2 | 4 | | pCi/L | 1 | 10/25/2000 | 10/26/2000 | CMA | P7651 |
| Gross Alpha, dissolved | 12587-46-1 | EPA 00-02 | 3500 ± 1300 | 1000 | | pCi/L | 1 | 10/16/2000 | 10/17/2000 | AEW | P7441 |
| Gross Beta, dissolved | 12587-47-2 | EPA 900.0 | 5600 ± 690 | 800 | | pCi/L | 1 | 10/10/2000 | 10/13/2000 | AEW | P7375 |
| Potassium-40, dissolved | 13966-00-2 | EPA 901.1 | 13000 ± 1200 | 600 | | pCi/L | 1 | | 09/19/2000 | LLC | A10329 |
| Alpha Radium, dissolved | | EPA 903.0 | -69 ± 120 | 200 | | pCi/L | 1 | 10/10/2000 | 10/13/2000 | JCP | P7427 |
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 51 ± 7.2 | 9 | | pCi/L | 1 | 09/27/2000 | 10/09/2000 | CWP | P7144 |
| Strontium-89/90, dissolved | 11-10-9 | EPA 905.0/SM704 | 1.3 ± 1.7 | 2 | | pCi/L | 1 | 09/25/2000 | 10/04/2000 | MTC | P7105 |

**Qualifiers:** ND - Not detected at the reporting limit J - Analyte detected below reporting limit F - Value above quantitation range S - Spike outside accepted recovery limits
B - Analyte detected in method blank L - Contract/Client reporting limit exceeded Q outside accepted recovery limits Y - Unspiked sample > 4 times amount spike
E - Sample > 10 times blank result M - Maximum contaminant level exceeded ..icate sample(s) < 5 times limit

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Date: 31-Oct-00

# CLIENT SAMPLE REPORT

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Neptunium-237, dissolved | 13994-20-2 | EPA 907.0M/520M | 0.055 ± 0.27 | 0.4 | | pCi/L | 1 | 10/19/2000 | 10/30/2000 | JCP | P7567 |
| Uranium-233/234, dissolved | 13966-29-5 | EPA 908.0M | 0.12 ± 1.4 | 1 | | pCi/L | 1 | 10/17/2000 | 10/25/2000 | KEB | P7499 |
| Uranium-235/236, dissolved | 15117-96-1 | EPA 908.0M | -1.2 ± 0.71 | 2 | | pCi/L | 1 | 10/17/2000 | 10/25/2000 | KEB | P7499 |
| Uranium-238, dissolved | 7440-61-1 | EPA 908.0M | 1.6 ± 1.3 | 1 | | pCi/L | 1 | 10/17/2000 | 10/25/2000 | KEB | P7499 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | 0.80 ± 1.4 | 1 | | pCi/L | 1 | 10/16/2000 | 10/27/2000 | KEB | P7459 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | 0.15 ± 0.73 | 1 | | pCi/L | 1 | 10/16/2000 | 10/27/2000 | KEB | P7459 |

Client: **Envirocare of Utah**
Work Order: **0009136**
Project: **RCRA**

Client Sample ID: **1A**
Tag Number: **RCRA**

Lab Sample ID: **0009136-05B**
Date Collected: **09/12/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Carbon-14, dissolved | 14762-75-5 | EPA 520-C01M | -73 ± 42 | 70 | | pCi/L | 1 | 10/19/2000 | 10/23/2000 | JCP | P7562 |
| Iodine-129, dissolved | 15046-84-1 | EPA 902.0 | -0.96 ± 0.67 | 1 | | pCi/L | 1 | 10/02/2000 | 10/10/2000 | CWP | P7141 |

Client: **Envirocare of Utah**
Work Order: **0009136**
Project: **RCRA**

Client Sample ID: **1A**
Tag Number: **RCRA**

Lab Sample ID: **0009136-05C**
Date Collected: **09/12/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Tritium, dissolved | 10028-17-8 | EPA 906.0 | 410 ± 450 | 700 | | pCi/L | 1 | 10/11/2000 | 10/16/2000 | ALZ | P7396 |

Client: **Envirocare of Utah**
Work Order: **0009136**
Project: **RCRA**

Client Sample ID: **2A**
Tag Number: **RCRA**

Lab Sample ID: **0009136-06A**
Date Collected: **09/12/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 0.072 | 0.0009 | | mg/L | 1 | 09/26/2000 | 09/29/2000 | AGM | P7122 |
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 350 ± 6.8 | 4 | | pCi/L | 1 | 10/25/2000 | 10/26/2000 | CMA | P7651 |
| Gross Alpha, dissolved | 12587-46-1 | EPA 00-02 | 230 ± 81 | 70 | | pCi/L | 1 | 10/16/2000 | 10/18/2000 | AEW | P7441 |
| Gross Beta, dissolved | 12587-47-2 | EPA 900.0 | 3300 ± 660 | 900 | | pCi/L | 1 | 10/10/2000 | 10/13/2000 | AEW | P7375 |
| Potassium-40, dissolved | 13966-00-2 | EPA 901.1 | 2000 ± 380 | 300 | | pCi/L | 1 | | 09/19/2000 | LLC | A10329 |
| Radium-226, dissolved | 13982-63-3 | EPA 903.0M/SM 705M | 0.22 ± 0.43 | 0.6 | | pCi/L | 1 | 09/26/2000 | 09/29/2000 | CWP | P7129 |

**Qualifiers:** ND - Not detected at the reporting limit; J - Analyte detected below reporting limit; E - Value above quantitation range; S - Spike outside accepted recovery limits; B - Analyte detected in method blank; L - Contract/Client reporting limit exceeded; R - RPD outside accepted recovery limits; Y - Unspiked sample > 4 times amount spiked; Z - Sample > 10 times blank result; M - Maximum contaminant level exceeded; X - Duplicate sample(s) < 5 times limit

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Date: 31-Oct-00

# CLIENT SAMPLE REPORT

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 2.9 ± 1.2 | 2 | L | pCi/L | 1 | 09/27/2000 | 10/09/2000 | CWP | P7144 |
| Strontium-89/90, dissolved | 11-10-9 | EPA 905.0/SM704 | 3.6 ± 1.3 | 2 | | pCi/L | 1 | 09/25/2000 | 09/29/2000 | MTC | P7105 |
| Neptunium-237, dissolved | 13994-20-2 | EPA 907.0M/520M | 0.17 ± 0.30 | 0.4 | | pCi/L | 1 | 10/19/2000 | 10/30/2000 | JCP | P7567 |
| Uranium-233/234, dissolved | 13966-29-5 | EPA 908.0M | 22 ± 1.9 | 0.5 | | pCi/L | 1 | 10/17/2000 | 10/25/2000 | KEB | P7499 |
| Uranium-235/236, dissolved | 15117-96-1 | EPA 908.0M | 0.94 ± 0.53 | 0.6 | | pCi/L | 1 | 10/17/2000 | 10/25/2000 | KEB | P7499 |
| Uranium-238, dissolved | 7440-61-1 | EPA 908.0M | 25 ± 1.9 | 0.5 | | pCi/L | 1 | 10/17/2000 | 10/25/2000 | KEB | P7499 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | 1.5 ± 1.7 | 1 | | pCi/L | 1 | 10/16/2000 | 10/23/2000 | KEB | P7459 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | 0.16 ± 0.99 | 2 | | pCi/L | 1 | 10/16/2000 | 10/23/2000 | KEB | P7459 |

Client: **Envirocare of Utah**
Work Order: **0009136**
Project: **RCRA**

Client Sample ID: **2A**
Tag Number: **RCRA**

Lab Sample ID: **0009136-06B**
Date Collected: **09/12/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Carbon-14, dissolved | 14762-75-5 | EPA 520-C01M | -85 ± 68 | 100 | | pCi/L | 1 | 10/19/2000 | 10/23/2000 | JCP | P7562 |
| Iodine-129, dissolved | 15046-84-1 | EPA 902.0 | -1.3 ± 0.74 | 1 | | pCi/L | 1 | 10/02/2000 | 10/09/2000 | CWP | P7141 |

Client: **Envirocare of Utah**
Work Order: **0009136**
Project: **RCRA**

Client Sample ID: **2A**
Tag Number: **RCRA**

Lab Sample ID: **0009136-06C**
Date Collected: **09/12/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Tritium, dissolved | 10028-17-8 | EPA 906.0 | 60 ± 420 | 700 | | pCi/L | 1 | 10/11/2000 | 10/16/2000 | ALZ | P7396 |

**Qualifiers:** ND - Not detected at the reporting limit; J - Analyte detected below reporting limit; [illegible] Value above quantitation range; S - Spike outside accepted recovery limits; [illegible]nalyte detected in method blank; L - Contract/Client reporting limit exceeded; [illegible] outside accepted recovery limits; Y - Unspiked sample > 4 times amount spike; [illegible]mple > 10 times blank result; M - Maximum contaminant level exceeded; X - [illegible]cate sample(s) < 5 times limit

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**Date:** 31-Oct 00

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah**
Work Order: **0009216**
Project: **11e.(2)**

Client Sample ID: **GW-63**
Tag Number: **11e.(2)**

Lab Sample ID: **0009216-01A**
Date Collected: **09/19/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Gross Alpha, dissolved | 12587-46-1 | EPA 00-02 | 30 ± 13 | 10 | | pCi/L | 1 | 10/17/2000 | 10/19/2000 | AEW | P7483 |

Client: **Envirocare of Utah**
Work Order: **0009216**
Project: **11e.(2)**

Client Sample ID: **GW-704**
Tag Number: **11e.(2)**

Lab Sample ID: **0009216-02A**
Date Collected: **09/19/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Gross Alpha, dissolved | 12587-46-1 | EPA 00-02 | 60 ± 18 | 10 | | pCi/L | 1 | 10/17/2000 | 10/19/2000 | AEW | P7483 |

Client: **Envirocare of Utah**
Work Order: **0009216**
Project: **11e.(2)**

Client Sample ID: **GW-58**
Tag Number: **11e.(2)**

Lab Sample ID: **0009216-03A**
Date Collected: **09/19/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 0.034 | 0.0009 | | mg/L | 1 | 09/26/2000 | 09/26/2000 | AWT | P7125 |

Client: **Envirocare of Utah**
Work Order: **0009216**
Project: **11e.(2)**

Client Sample ID: **GW-705**
Tag Number: **11e.(2)**

Lab Sample ID: **0009216-04A**
Date Collected: **09/19/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 0.038 | 0.0009 | | mg/L | 1 | 09/26/2000 | 09/26/2000 | AWT | P7125 |

Client: **Envirocare of Utah**
Work Order: **0009216**
Project: **11e.(2)**

Client Sample ID: **GW-27**
Tag Number: **11e.(2)**

Lab Sample ID: **0009216-05A**
Date Collected: **09/19/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 0.033 | 0.0009 | | mg/L | 1 | 09/26/2000 | 09/26/2000 | AWT | P7125 |

**Qualifiers:**
ND - Not detected at the reporting limit
B - Analyte detected in method blank
Z - Sample > 10 times blank result
J - Analyte detected below reporting limit
L - Contract/Client reporting limit exceeded
M - Maximum contaminant level exceeded
E - Value above quantitation range
R - RPD outside accepted recovery limits
X - Duplicate sample(s) < 5 times limit
S - Spike outside accepted recovery limits
Y - Unspiked sample > 4 times amount spiked

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**Date:** 31-Oct-00

# CLIENT SAMPLE REPORT

**Client:** Envirocare of Utah
**Work Order:** 0009216
**Project:** 11e.(2)

Client Sample ID: **GW-25**
Tag Number: **11e.(2)**

Lab Sample ID: **0009216-06A**
Date Collected: **09/19/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium-233/234, dissolved | 13966-29-5 | EPA 908.0M | 83 ± 3.1 | 0.6 | | pCi/L | 1 | 10/20/2000 | 10/31/2000 | KEB | P7580 |
| Uranium-238, dissolved | 7440-61-1 | EPA 908.0M | 43 ± 2.2 | 0.6 | | pCi/L | 1 | 10/20/2000 | 10/31/2000 | KEB | P7580 |

**Client:** Envirocare of Utah
**Work Order:** 0009216
**Project:** 11e.(2)

Client Sample ID: **GW-706**
Tag Number: **11e.(2)**

Lab Sample ID: **0009216-07A**
Date Collected: **09/19/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium-233/234, dissolved | 13966-29-5 | EPA 908.0M | 86 ± 3.3 | 0.6 | | pCi/L | 1 | 10/20/2000 | 10/31/2000 | KEB | P7580 |
| Uranium-238, dissolved | 7440-61-1 | EPA 908.0M | 46 ± 2.4 | 0.6 | | pCi/L | 1 | 10/20/2000 | 10/31/2000 | KEB | P7580 |

Qualifiers: ND - Not detected at the reporting limit; J - Analyte detected below reporting limit; E - Value above quantitation range; S - Spike outside accepted recovery limits; Analyte detected in method blank; L - Contract/Client reporting limit exceeded; RPD outside accepted recovery limits; Y - Unspiked sample > 4 times amount spiked; Sample > 10 times blank result; M - Maximum contaminant level exceeded; Duplicate sample(s) < 5 times limit

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**Date:** 31-Oct-00

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah** | Client Sample ID: **GW-63** | Lab Sample ID: **0009216-01A**
Work Order: **0009216** | Tag Number: **11e.(2)** | Date Collected: **09/19/2000**
Project: **11e.(2)** | Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Gross Alpha, dissolved | 12587-46-1 | EPA 00-02 | 30 ± 13 | 10 | | pCi/L | 1 | 10/17/2000 | 10/19/2000 | AEW | P7483 |

Client: **Envirocare of Utah** | Client Sample ID: **GW-704** | Lab Sample ID: **0009216-02A**
Work Order: **0009216** | Tag Number: **11e.(2)** | Date Collected: **09/19/2000**
Project: **11e.(2)** | Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Gross Alpha, dissolved | 12587-46-1 | EPA 00-02 | 60 ± 18 | 10 | | pCi/L | 1 | 10/17/2000 | 10/19/2000 | AEW | P7483 |

Client: **Envirocare of Utah** | Client Sample ID: **GW-58** | Lab Sample ID: **0009216-03A**
Work Order: **0009216** | Tag Number: **11e.(2)** | Date Collected: **09/19/2000**
Project: **11e.(2)** | Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 0.034 | 0.0009 | | mg/L | 1 | 09/26/2000 | 09/26/2000 | AWT | P7125 |

Client: **Envirocare of Utah** | Client Sample ID: **GW-705** | Lab Sample ID: **0009216-04A**
Work Order: **0009216** | Tag Number: **11e.(2)** | Date Collected: **09/19/2000**
Project: **11e.(2)** | Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 0.038 | 0.0009 | | mg/L | 1 | 09/26/2000 | 09/26/2000 | AWT | P7125 |

Client: **Envirocare of Utah** | Client Sample ID: **GW-27** | Lab Sample ID: **0009216-05A**
Work Order: **0009216** | Tag Number: **11e.(2)** | Date Collected: **09/19/2000**
Project: **11e.(2)** | Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 0.033 | 0.0009 | | mg/L | 1 | 09/26/2000 | 09/26/2000 | AWT | P7125 |

**Qualifiers:**
ND - Not detected at the reporting limit
B - Analyte detected in method blank
Z - Sample > 10 times blank result
J - Analyte detected below reporting limit
L - Contract/Client reporting limit exceeded
M - Maximum contaminant level exceeded
E - Value above quantitation range
R - RPD outside accepted recovery limits
X - Duplicate sample(s) < 5 times limit
S - Spike outside accepted recovery limits
Y - Unspiked sample > 4 times amount spiked

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Date: 31-Oct-00

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah**
Work Order: **0009216**
Project: **11e.(2)**

Client Sample ID: **GW-25**
Tag Number: **11e.(2)**

Lab Sample ID: **0009216-06A**
Date Collected: **09/19/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium-233/234, dissolved | 13966-29-5 | EPA 908.0M | 83 ± 3.1 | 0.6 | | pCi/L | 1 | 10/20/2000 | 10/31/2000 | KEB | P7580 |
| Uranium-238, dissolved | 7440-61-1 | EPA 908.0M | 43 ± 2.2 | 0.6 | | pCi/L | 1 | 10/20/2000 | 10/31/2000 | KEB | P7580 |

Client: **Envirocare of Utah**
Work Order: **0009216**
Project: **11e.(2)**

Client Sample ID: **GW-706**
Tag Number: **11e.(2)**

Lab Sample ID: **0009216-07A**
Date Collected: **09/19/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium-233/234, dissolved | 13966-29-5 | EPA 908.0M | 86 ± 3.3 | 0.6 | | pCi/L | 1 | 10/20/2000 | 10/31/2000 | KEB | P7580 |
| Uranium-238, dissolved | 7440-61-1 | EPA 908.0M | 46 ± 2.4 | 0.6 | | pCi/L | 1 | 10/20/2000 | 10/31/2000 | KEB | P7580 |

**Qualifiers:** ND - Not detected at the reporting limit; J - Analyte detected below reporting limit; E - Value above quantitation range; S - Spike outside accepted recovery limits; alyte detected in method blank; L - Contract/Client reporting limit exceeded; utside accepted recovery limits; Y - Unspiked sample > 4 times amount spiked; nple > 10 times blank result; M - Maximum contaminant level exceeded; X - ate sample(s) < 5 times limit

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**Date:** 30-Nov-00

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah**
Work Order: **0010029**
Project: **LARW**

Client Sample ID: **GW-88**
Tag Number:

Lab Sample ID: **0010029-01A**
Date Collected: **10/03/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result | ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 0.011 | | 0.0009 | | mg/L | 1 | 10/31/2000 | 11/02/2000 | AGM | P7775 |
| Gross Alpha, dissolved | 12587-46-1 | EPA 00-02 | 43 | ± 16 | 10 | L | pCi/L | 1 | 10/31/2000 | 11/01/2000 | AEW | P7758 |
| Gross Beta, dissolved | 12587-47-2 | EPA 900.0 | 220 | ± 560 | 900 | L | pCi/L | 1 | 10/20/2000 | 10/23/2000 | AEW | P7571 |
| Potassium-40, dissolved | 13966-00-2 | EPA 901.1 | 510 | ± 130 | 200 | | pCi/L | 1 | | 11/17/2000 | LLC | A10507 |
| Radium-226, dissolved | 13982-63-3 | EPA 903.0M/SM 705M | 5.8 | ± 0.91 | 0.5 | | pCi/L | 1 | 10/24/2000 | 10/30/2000 | CEJ | P7637 |
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 1.7 | ± 0.42 | 0.6 | | pCi/L | 1 | 10/23/2000 | 10/31/2000 | CWP | P7590 |
| Strontium-89/90, dissolved | 11-10-9 | EPA 905.0/SM704 | -0.030 | ± 1.0 | 2 | | pCi/L | 1 | 10/20/2000 | 10/25/2000 | MTC | P7583 |
| Neptunium-237, dissolved | 13994-20-2 | EPA 907.0M/520M | -0.056 | ± 0.25 | 0.5 | | pCi/L | 1 | 11/08/2000 | 11/21/2000 | JCP | P7926 |
| Uranium-233/234, dissolved | 13966-29-5 | EPA 908.0M | 20 | ± 1.5 | 0.4 | | pCi/L | 1 | 11/02/2000 | 11/09/2000 | KEB | P7821 |
| Uranium-235/236, dissolved | 15117-96-1 | EPA 908.0M | 0.48 | ± 0.36 | 0.4 | | pCi/L | 1 | 11/02/2000 | 11/09/2000 | KEB | P7821 |
| Uranium-238, dissolved | 7440-61-1 | EPA 908.0M | 20 | ± 1.5 | 0.4 | | pCi/L | 1 | 11/02/2000 | 11/09/2000 | KEB | P7821 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | 0.066 | ± 0.50 | 0.4 | | pCi/L | 1 | 11/02/2000 | 11/15/2000 | KEB | P7820 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | -0.10 | ± 0.21 | 0.4 | | pCi/L | 1 | 11/02/2000 | 11/15/2000 | KEB | P7820 |

Client: **Envirocare of Utah**
Work Order: **0010029**
Project: **LARW**

Client Sample ID: **GW-88**
Tag Number:

Lab Sample ID: **0010029-01B**
Date Collected: **10/03/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result | ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Carbon-14, dissolved | 14762-75-5 | EPA 520-C01M | -33 | ± 18 | 30 | | pCi/L | 1 | 11/10/2000 | 11/15/2000 | JAW | P7984 |
| Iodine-129, dissolved | 15046-84-1 | EPA 902.0 | -0.21 | ± 0.75 | 1 | | pCi/L | 1 | 10/27/2000 | 11/06/2000 | CWP | P7584 |

Client: **Envirocare of Utah**
Work Order: **0010029**
Project: **LARW**

Client Sample ID: **GW-88**
Tag Number:

Lab Sample ID: **0010029-01C**
Date Collected: **10/03/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result | ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tritium, dissolved | 10028-17-8 | EPA 906.0 | 29 | ± 240 | 400 | | pCi/L | 1 | 10/18/2000 | 10/30/2000 | ALZ | P7511 |

**Qualifiers:**
ND - Not detected at the reporting limit
B - Analyte detected in method blank
Z - Sample > 10 times blank result
J - Analyte detected below reporting limit
L - Contract/Client reporting limit exceeded
M - Maximum contaminant level exceeded
E - Value above quantitation range
R - RPD outside accepted recovery limits
X - Duplicate sample(s) < 5 times limit
S - Spike outside accepted recovery limits
Y - Unspiked sample > 4 times amount spiked

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**Date:** 30-Nov-00

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah**
Work Order: **0010029**
Project: **LARW**

Client Sample ID: **GW-88**
Tag Number:

Lab Sample ID: **0010029-01D**
Date Collected: **10/03/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Bromide | 24959-67-9 | SW846 9056 | 45 | 10 | | mg/L | 20 | | 10/18/2000 | PKL | A10479a |

Client: **Envirocare of Utah**
Work Order: **0010029**
Project: **LARW**

Client Sample ID: **GW-89**
Tag Number:

Lab Sample ID: **0010029-02A**
Date Collected: **10/03/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 0.0088 | 0.0009 | | mg/L | 1 | 10/31/2000 | 11/02/2000 | AGM | P7775 |
| Gross Alpha, dissolved | 12587-46-1 | EPA 00-02 | 51 ± 19 | 20 | L | pCi/L | 1 | 10/31/2000 | 11/01/2000 | AEW | P7758 |
| Gross Beta, dissolved | 12587-47-2 | EPA 900.0 | 160 ± 500 | 800 | L | pCi/L | 1 | 10/20/2000 | 10/23/2000 | AEW | P7571 |
| Potassium-40, dissolved | 13966-00-2 | EPA 901.1 | 460 ± 120 | 200 | | pCi/L | 1 | | 11/17/2000 | LLC | A10507 |
| Radium-226, dissolved | 13982-63-3 | EPA 903.0M/SM 705M | 1.4 ± 0.47 | 0.4 | | pCi/L | 1 | 10/24/2000 | 10/30/2000 | CEJ | P7637 |
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 2.1 ± 0.43 | 0.6 | | pCi/L | 1 | 10/23/2000 | 10/31/2000 | CWP | P7590 |
| Strontium-89/90, dissolved | 11-10-9 | EPA 905.0/SM704 | 0.80 ± 0.91 | 2 | | pCi/L | 1 | 10/20/2000 | 10/25/2000 | MTC | P7583 |
| Neptunium-237, dissolved | 13994-20-2 | EPA 907.0M/520M | 0.20 ± 0.44 | 0.6 | | pCi/L | 1 | 11/08/2000 | 11/21/2000 | JCP | P7926 |
| Uranium-233/234, dissolved | 13966-29-5 | EPA 908.0M | 19 ± 1.5 | 0.4 | | pCi/L | 1 | 11/02/2000 | 11/09/2000 | KEB | P7821 |
| Uranium-235/236, dissolved | 15117-96-1 | EPA 908.0M | 0.55 ± 0.36 | 0.4 | | pCi/L | 1 | 11/02/2000 | 11/09/2000 | KEB | P7821 |
| Uranium-238, dissolved | 7440-61-1 | EPA 908.0M | 21 ± 1.5 | 0.4 | | pCi/L | 1 | 11/02/2000 | 11/09/2000 | KEB | P7821 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | -0.12 ± 0.62 | 0.5 | | pCi/L | 1 | 11/02/2000 | 11/09/2000 | KEB | P7820 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | 0.21 ± 0.43 | 0.6 | | pCi/L | 1 | 11/02/2000 | 11/09/2000 | KEB | P7820 |

Client: **Envirocare of Utah**
Work Order: **0010029**
Project: **LARW**

Client Sample ID: **GW-89**
Tag Number:

Lab Sample ID: **0010029-02B**
Date Collected: **10/03/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Carbon-14, dissolved | 14762-75-5 | EPA 520-C01M | -66 ± 48 | 30 | | pCi/L | 1 | 11/10/2000 | 11/15/2000 | JAW | P7984 |

**Qualifiers:** ND - Not detected at the reporting limit J - Analyte detected below reporting limit E - Value above quantitation range S - Spike outside accepted recovery limits
- Analyte detected in method blank L - Contract/Client reporting limit exceeded - outside accepted recovery limits Y - Unspiked sample > 4 times amount spiked
- ple > 10 times blank result M Maximum contaminant level exceeded X - ate sample(s) < 5 times limit

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# CLIENT SAMPLE REPORT

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Iodine-129, dissolved | 15046-84-1 | EPA 902.0 | -0.36 ± 0.78 | 1 | | pCi/L | 1 | 10/27/2000 | 11/06/2000 | CWP | P7584 |

Client: **Envirocare of Utah** | Client Sample ID: **GW-89** | Lab Sample ID: **0010029-02C**
Work Order: **0010029** | Tag Number: | Date Collected: **10/03/2000**
Project: **LARW** | Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Tritium, dissolved | 10028-17-8 | EPA 906.0 | -10 ± 230 | 400 | | pCi/L | 1 | 10/18/2000 | 10/30/2000 | ALZ | P7511 |

Client: **Envirocare of Utah** | Client Sample ID: **GW-89** | Lab Sample ID: **0010029-02D**
Work Order: **0010029** | Tag Number: | Date Collected: **10/03/2000**
Project: **LARW** | Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Bromide | 24959-67-9 | SW846 9056 | 54 | 10 | | mg/L | 20 | | 10/18/2000 | PKL | A10479a |

Client: **Envirocare of Utah** | Client Sample ID: **GW-90** | Lab Sample ID: **0010029-03A**
Work Order: **0010029** | Tag Number: | Date Collected: **10/03/2000**
Project: **LARW** | Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 0.013 | 0.0009 | | mg/L | 1 | 10/31/2000 | 11/02/2000 | AGM | P7775 |
| Gross Alpha, dissolved | 12587-46-1 | EPA 00-02 | 42 ± 15 | 10 | L | pCi/L | 1 | 10/31/2000 | 11/01/2000 | AEW | P7758 |
| Gross Beta, dissolved | 12587-47-2 | EPA 900.0 | 280 ± 500 | 800 | L | pCi/L | 1 | 10/20/2000 | 10/23/2000 | AEW | P7571 |
| Potassium-40, dissolved | 13966-00-2 | EPA 901.1 | 350 ± 110 | 100 | | pCi/L | 1 | | 11/17/2000 | LLC | A10507 |
| Radium-226, dissolved | 13982-63-3 | EPA 903.0M/SM 705M | 2.3 ± 0.57 | 0.4 | | pCi/L | 1 | 10/24/2000 | 10/30/2000 | CEJ | P7637 |
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 3.0 ± 0.46 | 0.6 | | pCi/L | 1 | 10/23/2000 | 10/31/2000 | CWP | P7590 |
| Strontium-89/90, dissolved | 11-10-9 | EPA 905.0/SM704 | -0.16 ± 0.81 | 2 | | pCi/L | 1 | 10/20/2000 | 10/25/2000 | MTC | P7583 |
| Neptunium-237, dissolved | 13994-20-2 | EPA 907.0M/520M | 0.41 ± 0.48 | 0.6 | | pCi/L | 1 | 11/08/2000 | 11/21/2000 | JCP | P7926 |
| Uranium-233/234, dissolved | 13966-29-5 | EPA 908.0M | 0.55 ± 0.52 | 0.4 | | pCi/L | 1 | 11/02/2000 | 11/09/2000 | KEB | P7821 |
| Uranium-235/236, dissolved | 15117-96-1 | EPA 908.0M | -0.26 ± 0.22 | 0.4 | | pCi/L | 1 | 11/02/2000 | 11/09/2000 | KEB | P7821 |
| Uranium-238, dissolved | 7440-61-1 | EPA 908.0M | 2.1 ± 0.55 | 0.4 | | pCi/L | 1 | 11/02/2000 | 11/09/2000 | KEB | P7821 |

Qualifiers: ND - Not detected at the reporting limit; J - Analyte detected below reporting limit; E - Value above quantitation range; S - Spike outside accepted recovery limits
B - Analyte detected in method blank; L - Contract/Client reporting limit exceeded; R - RPD outside accepted recovery limits; Y - Unspiked sample > 4 times amount spiked
Z - Sample > 10 times blank result; M - Maximum contaminant level exceeded; X - Duplicate sample(s) < 5 times limit

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# CLIENT SAMPLE REPORT

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | 1.1 ± 0.73 | 0.5 | pCi/L | 1 | 11/02/2000 | 11/13/2000 | KEB | P7820 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | 0.17 ± 0.40 | 0.6 | pCi/L | 1 | 11/02/2000 | 11/13/2000 | KEB | P7820 |

Client: **Envirocare of Utah**
Work Order: **0010029**
Project: **LARW**

Client Sample ID: **GW-90**
Tag Number:

Lab Sample ID: **0010029-03B**
Date Collected: **10/03/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Carbon-14, dissolved | 14762-75-5 | EPA 520-C01M | -29 ± 21 | 20 | | pCi/L | 1 | 11/10/2000 | 11/15/2000 | JAW | P7984 |
| Iodine-129, dissolved | 15046-84-1 | EPA 902.0 | -0.89 ± 0.72 | 1 | | pCi/L | 1 | 10/27/2000 | 11/06/2000 | CWP | P7584 |

Client: **Envirocare of Utah**
Work Order: **0010029**
Project: **LARW**

Client Sample ID: **GW-90**
Tag Number:

Lab Sample ID: **0010029-03C**
Date Collected: **10/03/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Tritium, dissolved | 10028-17-8 | EPA 906.0 | -12 ± 240 | 400 | | pCi/L | 1 | 10/18/2000 | 10/30/2000 | ALZ | P7511 |

Client: **Envirocare of Utah**
Work Order: **0010029**
Project: **LARW**

Client Sample ID: **GW-90**
Tag Number:

Lab Sample ID: **0010029-03D**
Date Collected: **10/03/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Bromide | 24959-67-9 | SW846 9056 | 44 | 10 | | mg/L | 20 | | 10/18/2000 | PKL | A10479a |

Client: **Envirocare of Utah**
Work Order: **0010029**
Project: **LARW**

Client Sample ID: **GW-91**
Tag Number:

Lab Sample ID: **0010029-04A**
Date Collected: **10/03/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 0.0096 | 0.0009 | | mg/L | 1 | 10/31/2000 | 11/02/2000 | AGM | P7775 |
| Gross Alpha, dissolved | 12587-46-1 | EPA 00-02 | 38 ± 14 | 10 | L | pCi/L | 1 | 10/31/2000 | 11/01/2000 | AEW | P7758 |
| Gross Beta, dissolved | 12587-47-2 | EPA 900.0 | 600 ± 500 | 800 | L | pCi/L | 1 | 10/20/2000 | 10/23/2000 | AEW | P7571 |
| Potassium-40, dissolved | 13966-00-2 | EPA 901.1 | ND | 200 | | pCi/L | 1 | | 10/12/2000 | LLC | A10507 |
| Radium-226, dissolved | 13982-63-3 | EPA 903.0M/SM 705M | 1.8 ± 0.53 | 0.4 | | pCi/L | 1 | 10/24/2000 | 10/30/2000 | CEJ | P7637 |

**Qualifiers:** ND - Not detected at the reporting limit J - Analyte detected below reporting limit E - Value above quantitation range S - Spike outside accepted recovery limits
- alyte detected in method blank L - Contract/Client reporting limit exceeded outside accepted recovery limits Y - Unspiked sample > 4 times amount spiked
- mple > 10 times blank result M - Maximum contaminant level exceeded cate sample(s) < 5 times limit

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**Date:** 30-Nov-00

# CLIENT SAMPLE REPORT

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 2.6 ± 0.45 | 0.6 | | pCi/L | 1 | 10/23/2000 | 10/31/2000 | CWP | P7590 |
| Strontium-89/90, dissolved | 11-10-9 | EPA 905.0/SM704 | -0.53 ± 0.82 | 2 | | pCi/L | 1 | 10/20/2000 | 10/25/2000 | MTC | P7583 |
| Neptunium-237, dissolved | 13994-20-2 | EPA 907.0M/520M | 0.19 ± 0.24 | 0.3 | | pCi/L | 1 | 11/08/2000 | 11/21/2000 | JCP | P7926 |
| Uranium-233/234, dissolved | 13966-29-5 | EPA 908.0M | 0.59 ± 0.40 | 0.3 | | pCi/L | 1 | 11/02/2000 | 11/09/2000 | KEB | P7821 |
| Uranium-235/236, dissolved | 15117-96-1 | EPA 908.0M | -0.18 ± 0.18 | 0.3 | | pCi/L | 1 | 11/02/2000 | 11/09/2000 | KEB | P7821 |
| Uranium-238, dissolved | 7440-61-1 | EPA 908.0M | 1.4 ± 0.42 | 0.3 | | pCi/L | 1 | 11/02/2000 | 11/09/2000 | KEB | P7821 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | -0.049 ± 0.62 | 0.4 | | pCi/L | 1 | 11/02/2000 | 11/13/2000 | KEB | P7820 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | -0.083 ± 0.25 | 0.4 | | pCi/L | 1 | 11/02/2000 | 11/13/2000 | KEB | P7820 |

Client: **Envirocare of Utah** — Client Sample ID: **GW-91** — Lab Sample ID: **0010029-04B**
Work Order: **0010029** — Tag Number: — Date Collected: **10/03/2000**
Project: **LARW** — Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Carbon-14, dissolved | 14762-75-5 | EPA 520-C01M | -21 ± 17 | 20 | | pCi/L | 1 | 11/10/2000 | 11/15/2000 | JAW | P7984 |
| Iodine-129, dissolved | 15046-84-1 | EPA 902.0 | -1.1 ± 0.81 | 1 | | pCi/L | 1 | 10/27/2000 | 11/06/2000 | CWP | P7584 |

Client: **Envirocare of Utah** — Client Sample ID: **GW-91** — Lab Sample ID: **0010029-04C**
Work Order: **0010029** — Tag Number: — Date Collected: **10/03/2000**
Project: **LARW** — Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Tritium, dissolved | 10028-17-8 | EPA 906.0 | -150 ± 220 | 400 | | pCi/L | 1 | 10/18/2000 | 10/30/2000 | ALZ | P7511 |

Client: **Envirocare of Utah** — Client Sample ID: **GW-91** — Lab Sample ID: **0010029-04D**
Work Order: **0010029** — Tag Number: — Date Collected: **10/03/2000**
Project: **LARW** — Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Bromide | 24959-67-9 | SW846 9056 | 55 | 10 | | mg/L | 20 | | 10/18/2000 | PKL | A10479a |

**Qualifiers:**
ND - Not detected at the reporting limit
B - Analyte detected in method blank
Z - Sample > 10 times blank result
J - Analyte detected below reporting limit
L - Contract/Client reporting limit exceeded
M - Maximum contaminant level exceeded
E - Value above quantitation range
R - RPD outside accepted recovery limits
X - Duplicate sample(s) < 5 times limit
S - Spike outside accepted recovery limits
Y - Unspiked sample > 4 times amount spiked

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**Date:** 18-Oct-00

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah**
Work Order: **0010085**
Project: **11e(2)**

Client Sample ID: **GW-19A-A**
Tag Number:

Lab Sample ID: **0010085-01A**
Date Collected: **10/04/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Fluorine as Fluoride | 7782-41-4 | EPA 340.2M | 1.2 | 0.1 | M | mg/L | 1 | | 10/17/2000 | SLA | A10487a |

Client: **Envirocare of Utah**
Work Order: **0010085**
Project: **11e(2)**

Client Sample ID: **GW-601**
Tag Number:

Lab Sample ID: **0010085-02A**
Date Collected: **10/04/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Fluorine as Fluoride | 7782-41-4 | EPA 340.2M | 1.2 | 0.1 | | mg/L | 1 | | 10/17/2000 | SLA | A10487a |

**Qualifiers:** ND - Not detected at the reporting limit; J - Analyte detected below reporting limit; E - Value above quantitation range; S - Spike outside accepted recovery limits
'alyte detected in method blank; L - Contract/Client reporting limit exceeded; outside accepted recovery limits; Y - Unspiked sample > 4 times amount spiked
nple > 10 times blank result; M - Maximum contaminant level exceeded; X ate sample(s) < 5 times limit

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**Date:** 07-Dec-00

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah**
Work Order: **0010086**
Project: **LARW,11e(2)**

Client Sample ID: **GW-63**
Tag Number:

Lab Sample ID: **0010086-02A**
Date Collected: **10/05/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 0.0094 | 0.0009 | | mg/L | 1 | 10/31/2000 | 11/02/2000 | AGM | P7776 |
| Gross Alpha, dissolved | 12587-46-1 | EPA 00-02 | 29 ± 5.4 | 5 | | pCi/L | 1 | 11/29/2000 | 12/05/2000 | AEW | P8215 |
| Gross Beta, dissolved | 12587-47-2 | EPA 900.0 | -40 ± 550 | 900 | L | pCi/L | 1 | 11/29/2000 | 12/04/2000 | AEW | P8214 |
| Potassium-40, dissolved | 13966-00-2 | EPA 901.1 | 360 ± 130 | 200 | | pCi/L | 1 | | 11/20/2000 | LLC | A11029 |
| Radium-226, dissolved | 13982-63-3 | EPA 903.0M/SM 705M | 0.12 ± 0.30 | 0.5 | | pCi/L | 1 | 10/26/2000 | 10/30/2000 | CEJ | P7694 |
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 1.1 ± 0.38 | 0.6 | | pCi/L | 1 | 10/24/2000 | 11/01/2000 | CWP | P7591 |
| Strontium-89/90, dissolved | 11-10-9 | EPA 905.0/SM704 | -0.53 ± 0.77 | 2 | | pCi/L | 1 | 10/20/2000 | 10/25/2000 | MTC | P7583 |
| Neptunium-237, dissolved | 13994-20-2 | EPA 907.0M/520M | 0.30 ± 0.37 | 0.4 | | pCi/L | 1 | 11/08/2000 | 11/13/2000 | JCP | P7905 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | -1.1 ± 0.65 | 0.6 | | pCi/L | 1 | 11/02/2000 | 11/13/2000 | KEB | P7820 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | -0.57 ± 0.32 | 0.7 | | pCi/L | 1 | 11/02/2000 | 11/13/2000 | KEB | P7820 |

Client: **Envirocare of Utah**
Work Order: **0010086**
Project: **LARW,11e(2)**

Client Sample ID: **GW-63**
Tag Number:

Lab Sample ID: **0010086-02B**
Date Collected: **10/05/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Carbon-14, dissolved | 14762-75-5 | EPA 520-C01M | -23 ± 17 | 20 | | pCi/L | 1 | 11/28/2000 | 11/28/2000 | JCP | P8199 |
| Iodine-129, dissolved | 15046-84-1 | EPA 902.0 | -0.69 ± 0.59 | 1 | | pCi/L | 1 | 10/27/2000 | 11/03/2000 | CWP | P7586 |

Client: **Envirocare of Utah**
Work Order: **0010086**
Project: **LARW,11e(2)**

Client Sample ID: **GW-63**
Tag Number:

Lab Sample ID: **0010086-02C**
Date Collected: **10/05/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Tritium, dissolved | 10028-17-8 | EPA 906.0 | 29 ± 230 | 400 | | pCi/L | 1 | 10/23/2000 | 11/03/2000 | ALZ | P7606 |

**Qualifiers:**
ND - Not detected at the reporting limit
B - Analyte detected in method blank
Z - Sample > 10 times blank result
J - Analyte detected below reporting limit
L - Contract/Client reporting limit exceeded
M - Maximum contaminant level exceeded
E - Value above quantitation range
R - RPD outside accepted recovery limits
X - Duplicate sample(s) < 5 times limit
S - Spike outside accepted recovery limits
Y - Unspiked sample > 4 times amount spiked

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**Date:** 07-Dec-00

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah**
Work Order: **0010086**
Project: **LARW,11e(2)**

Client Sample ID: **GW-63**
Tag Number:

Lab Sample ID: **0010086-02D**
Date Collected: **10/05/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Fluorine as Fluoride | 7782-41-4 | EPA 340.2M | 0.78 | 0.1 | | mg/L | 1 | | 10/17/2000 | SLA | A10487a |
| Bromide | 24959-67-9 | SW846 9056 | 64 | 10 | | mg/L | 20 | | 10/18/2000 | PKL | A10479a |

Client: **Envirocare of Utah**
Work Order: **0010086**
Project: **LARW,11e(2)**

Client Sample ID: **GW-707**
Tag Number:

Lab Sample ID: **0010086-03A**
Date Collected: **10/05/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 0.011 | 0.0009 | | mg/L | 1 | 10/31/2000 | 11/02/2000 | AGM | P7776 |
| Gross Alpha, dissolved | 12587-46-1 | EPA 00-02 | 65 ± 20 | 20 | L | pCi/L | 1 | 10/31/2000 | 11/01/2000 | AEW | P7758 |
| Gross Beta, dissolved | 12587-47-2 | EPA 900.0 | 710 ± 490 | 800 | L | pCi/L | 1 | 10/27/2000 | 10/30/2000 | AEW | P7704 |
| Potassium-40, dissolved | 13966-00-2 | EPA 901.1 | 400 ± 120 | 200 | | pCi/L | 1 | | 11/20/2000 | LLC | A11029 |
| Radium-226, dissolved | 13982-63-3 | EPA 903.0M/SM 705M | 0.20 ± 0.34 | 0.5 | | pCi/L | 1 | 10/26/2000 | 10/30/2000 | CEJ | P7694 |
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 1.5 ± 0.40 | 0.6 | | pCi/L | 1 | 10/24/2000 | 11/01/2000 | CWP | P7591 |
| Strontium-89/90, dissolved | 11-10-9 | EPA 905.0/SM704 | 2.5 ± 0.94 | 2 | | pCi/L | 1 | 10/20/2000 | 10/25/2000 | MTC | P7583 |
| Neptunium-237, dissolved | 13994-20-2 | EPA 907.0M/520M | 0.17 ± 0.35 | 0.5 | | pCi/L | 1 | 11/08/2000 | 11/13/2000 | JCP | P7905 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | -1.2 ± 0.75 | 0.6 | | pCi/L | 1 | 11/02/2000 | 11/13/2000 | KEB | P7820 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | -0.25 ± 0.33 | 0.6 | | pCi/L | 1 | 11/02/2000 | 11/13/2000 | KEB | P7820 |

Client: **Envirocare of Utah**
Work Order: **0010086**
Project: **LARW,11e(2)**

Client Sample ID: **GW-707**
Tag Number:

Lab Sample ID: **0010086-03B**
Date Collected: **10/05/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Carbon-14, dissolved | 14762-75-5 | EPA 520-C01M | -24 ± 14 | 10 | | pCi/L | 1 | 11/28/2000 | 11/28/2000 | JCP | P8199 |
| Iodine 129 dissolved | 15046-84-1 | EPA 902.0 | -1.4 ± 0.73 | 1 | | pCi/L | 1 | 10/27/2000 | 11/03/2000 | CWP | P7586 |

**Qualifiers:** ND - Not detected at the reporting limit; J - Analyte detected below reporting limit; E - Value above quantitation range; S - Spike outside accepted recovery limits
; nalyte detected in method blank; L - Contract/Client reporting limit exceeded; ; outside accepted recovery limits; Y - Unspiked sample > 4 times amount spiked
; mple > 10 times blank result; M - Maximum contaminant level exceeded; X - icate sample(s) < 5 times limit

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**Date:** 07-Dec-00

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah** Client Sample ID: **GW-707** Lab Sample ID: **0010086-03C**
Work Order: **0010086** Tag Number: Date Collected: **10/05/2000**
Project: **LARW,11e(2)** Matrix: **Aqueous**

| Analyte | CAS# | Method | Result | ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tritium, dissolved | 10028-17-8 | EPA 906.0 | -87 | ± 220 | 400 | | pCi/L | 1 | 10/23/2000 | 11/03/2000 | ALZ | P7606 |

Client: **Envirocare of Utah** Client Sample ID: **GW-707** Lab Sample ID: **0010086-03D**
Work Order: **0010086** Tag Number: Date Collected: **10/05/2000**
Project: **LARW,11e(2)** Matrix: **Aqueous**

| Analyte | CAS# | Method | Result | ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Fluorine as Fluoride | 7782-41-4 | EPA 340.2M | 0.78 | | 0.1 | | mg/L | 1 | | 10/17/2000 | SLA | A10487a |
| Bromide | 24959-67-9 | SW846 9056 | 49 | | 10 | | mg/L | 20 | | 10/18/2000 | PKL | A10479a |

**Qualifiers:**
ND - Not detected at the reporting limit
B - Analyte detected in method blank
Z - Sample > 10 times blank result
J - Analyte detected below reporting limit
L - Contract/Client reporting limit exceeded
M - Maximum contaminant level exceeded
E - Value above quantitation range
R - RPD outside accepted recovery limits
X - Duplicate sample(s) < 5 times limit
S - Spike outside accepted recovery limits
Y - Unspiked sample > 4 times amount spiked

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**Date:** 04-Dec-00

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah**
Work Order: **0010087**
Project: **RCRA**

Client Sample ID: **I-1-30**
Tag Number:

Lab Sample ID: **0010087-01A**
Date Collected: **10/09/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 0.014 | 0.0009 | | mg/L | 1 | 10/31/2000 | 11/02/2000 | AGM | P7776 |
| Gross Alpha, dissolved | 12587-46-1 | EPA 00-02 | 45 ± 16 | 10 | L | pCi/L | 1 | 11/01/2000 | 11/02/2000 | AEW | P7796 |
| Gross Beta, dissolved | 12587-47-2 | EPA 900.0 | 11 ± 220 | 400 | L | pCi/L | 1 | 10/31/2000 | 12/01/2000 | AEW | P7756 |
| Potassium-40, dissolved | 13966-00-2 | EPA 901.1 | ND | 200 | | pCi/L | 1 | | 10/16/2000 | LLC | A10509 |
| Radium-226, dissolved | 13982-63-3 | EPA 903.0M/SM 705M | 0.27 ± 0.35 | 0.5 | | pCi/L | 1 | 10/26/2000 | 10/30/2000 | CEJ | P7694 |
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 2.4 ± 0.43 | 0.6 | | pCi/L | 1 | 10/24/2000 | 11/01/2000 | CWP | P7591 |
| Strontium-89/90, dissolved | 11-10-9 | EPA 905.0/SM704 | -0.41 ± 1.1 | 2 | | pCi/L | 1 | 10/27/2000 | 11/03/2000 | MTC | P7726 |
| Neptunium-237, dissolved | 13994-20-2 | EPA 907.0M/520M | -0.14 ± 0.29 | 0.6 | | pCi/L | 1 | 11/08/2000 | 11/15/2000 | BPM | P7906 |
| Uranium-233/234, dissolved | 13966-29-5 | EPA 908.0M | 9.4 ± 1.0 | 0.4 | | pCi/L | 1 | 11/10/2000 | 11/16/2000 | KEB | P7973 |
| Uranium-235/236, dissolved | 15117-96-1 | EPA 908.0M | -0.34 ± 0.22 | 0.4 | | pCi/L | 1 | 11/10/2000 | 11/16/2000 | KEB | P7973 |
| Uranium-238, dissolved | 7440-61-1 | EPA 908.0M | 4.5 ± 0.68 | 0.4 | | pCi/L | 1 | 11/10/2000 | 11/16/2000 | KEB | P7973 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | 0.42 ± 0.55 | 0.5 | | pCi/L | 1 | 11/09/2000 | 11/17/2000 | KEB | P7949 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | -0.51 ± 0.26 | 0.6 | | pCi/L | 1 | 11/09/2000 | 11/17/2000 | KEB | P7949 |

Client: **Envirocare of Utah**
Work Order: **0010087**
Project: **RCRA**

Client Sample ID: **I-1-30**
Tag Number:

Lab Sample ID: **0010087-01B**
Date Collected: **10/09/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Carbon-14, dissolved | 14762-75-5 | EPA 520-C01M | -27 ± 22 | 20 | | pCi/L | 1 | 11/22/2000 | 11/28/2000 | JCP | P8169 |
| Iodine-129, dissolved | 15046-84-1 | EPA 902.0 | -0.57 ± 0.74 | 1 | | pCi/L | 1 | 10/27/2000 | 11/03/2000 | CWP | P7586 |

Client: **Envirocare of Utah**
Work Order: **0010087**
Project: **RCRA**

Client Sample ID: **I-1-30**
Tag Number:

Lab Sample ID: **0010087-01C**
Date Collected: **10/09/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Tritium, dissolved | 10028-17-8 | EPA 906.0 | -29 ± 220 | 400 | | pCi/L | 1 | 10/23/2000 | 11/03/2000 | ALZ | P7606 |

**Qualifier:** ND - Not detected at the reporting limit; J - Analyte detected below reporting limit; Value above quantitation range; S - Spike outside accepted recovery limits
Analyte detected in method blank; L - Contract/Client reporting limit exceeded; outside accepted recovery limits; Y - Unspiked sample > 4 times amount spiked
Sample > 10 times blank result; M - Maximum contaminant level exceeded; X - plicate sample(s) < 5 times limit

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**Date:** 04-Dec-00

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah**
Work Order: **0010087**
Project: **RCRA**

Client Sample ID: **GW-71**
Tag Number:

Lab Sample ID: **0010087-02A**
Date Collected: **10/09/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 0.011 | 0.0009 | | mg/L | 1 | 10/31/2000 | 11/02/2000 | AGM | P7776 |
| Gross Alpha, dissolved | 12587-46-1 | EPA 00-02 | 46 ± 16 | 10 | L | pCi/L | 1 | 11/01/2000 | 11/02/2000 | AEW | P7736 |
| Gross Beta, dissolved | 12587-47-2 | EPA 900.0 | 550 ± 510 | 800 | L | pCi/L | 1 | 10/31/2000 | 11/06/2000 | AEW | P7756 |
| Potassium-40, dissolved | 13966-00-2 | EPA 901.1 | ND | 200 | | pCi/L | 1 | | 10/16/2000 | LLC | A10509 |
| Radium-226, dissolved | 13982-63-3 | EPA 903.0M/SM 705M | 0.44 ± 0.34 | 0.4 | | pCi/L | 1 | 10/26/2000 | 10/31/2000 | CEJ | P7694 |
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 0.86 ± 0.37 | 0.6 | | pCi/L | 1 | 10/24/2000 | 11/01/2000 | CWP | P7591 |
| Strontium-89/90, dissolved | 11-10-9 | EPA 905.0/SM704 | 0.89 ± 1.0 | 2 | | pCi/L | 1 | 10/27/2000 | 11/03/2000 | MTC | P7726 |
| Neptunium-237, dissolved | 13994-20-2 | EPA 907.0M/520M | 0.13 ± 0.39 | 0.6 | | pCi/L | 1 | 11/08/2000 | 11/15/2000 | BPM | P7906 |
| Uranium-233/234, dissolved | 13966-29-5 | EPA 908.0M | 6.7 ± 0.83 | 0.3 | | pCi/L | 1 | 11/10/2000 | 11/16/2000 | KEB | P7973 |
| Uranium-235/236, dissolved | 15117-96-1 | EPA 908.0M | -0.24 ± 0.21 | 0.4 | | pCi/L | 1 | 11/10/2000 | 11/16/2000 | KEB | P7973 |
| Uranium-238, dissolved | 7440-61-1 | EPA 908.0M | 3.0 ± 0.56 | 0.3 | | pCi/L | 1 | 11/10/2000 | 11/16/2000 | KEB | P7973 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | 0.73 ± 0.48 | 0.4 | | pCi/L | 1 | 11/09/2000 | 11/17/2000 | KEB | P7949 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | -0.32 ± 0.25 | 0.5 | | pCi/L | 1 | 11/09/2000 | 11/17/2000 | KEB | P7949 |

Client: **Envirocare of Utah**
Work Order: **0010087**
Project: **RCRA**

Client Sample ID: **GW-71**
Tag Number:

Lab Sample ID: **0010087-02B**
Date Collected: **10/09/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Carbon-14, dissolved | 14762-75-5 | EPA 520-C01M | -27 ± 21 | 20 | | pCi/L | 1 | 11/22/2000 | 11/28/2000 | JCP | P8169 |
| Iodine-129, dissolved | 15046-84-1 | EPA 902.0 | -0.21 ± 0.72 | 1 | | pCi/L | 1 | 10/27/2000 | 11/03/2000 | CWP | P7586 |

**Qualifiers:**
ND - Not detected at the reporting limit
B - Analyte detected in method blank
Z - Sample > 10 times blank result
J - Analyte detected below reporting limit
L - Contract/Client reporting limit exceeded
M - Maximum contaminant level exceeded
E - Value above quantitation range
R - RPD outside accepted recovery limits
X - Duplicate sample(s) < 5 times limit
S - Spike outside accepted recovery limits
Y - Unspiked sample > 4 times amount spiked

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Date: 04-Dec 00

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah**
Work Order: **0010087**
Project: **RCRA**

Client Sample ID: **GW-71**
Tag Number:

Lab Sample ID: **0010087-02C**
Date Collected: **10/09/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Tritium, dissolved | 10028-17-8 | EPA 906.0 | 77 ± 230 | 400 | | pCi/L | 1 | 10/23/2000 | 11/03/2000 | ALZ | P7606 |

Client: **Envirocare of Utah**
Work Order: **0010087**
Project: **RCRA**

Client Sample ID: **GW-659**
Tag Number:

Lab Sample ID: **0010087-03A**
Date Collected: **10/09/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 0.011 | 0.0009 | | mg/L | 1 | 10/31/2000 | 11/02/2000 | AGM | P7776 |
| Gross Alpha, dissolved | 12587-46-1 | EPA 00-02 | 31 ± 13 | 10 | L | pCi/L | 1 | 11/01/2000 | 11/02/2000 | AEW | P7796 |
| Gross Beta, dissolved | 12587-47-2 | EPA 900.0 | 530 ± 490 | 800 | L | pCi/L | 1 | 10/31/2000 | 11/06/2000 | AEW | P7756 |
| Potassium-40, dissolved | 13966-00-2 | EPA 901.1 | 280 ± 110 | 200 | | pCi/L | 1 | | 11/20/2000 | LLC | A10509 |
| Radium-226, dissolved | 13982-63-3 | EPA 903.0M/SM 705M | 0.27 ± 0.32 | 0.4 | | pCi/L | 1 | 10/26/2000 | 10/31/2000 | CEJ | P7694 |
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 1.3 ± 0.39 | 0.6 | | pCi/L | 1 | 10/24/2000 | 11/01/2000 | CWP | P7591 |
| Strontium-89/90, dissolved | 11-10-9 | EPA 905.0/SM704 | -0.52 ± 0.92 | 2 | | pCi/L | 1 | 10/27/2000 | 11/03/2000 | MTC | P7726 |
| Neptunium-237, dissolved | 13994-20-2 | EPA 907.0M/520M | 0.44 ± 0.50 | 0.6 | | pCi/L | 1 | 11/08/2000 | 11/15/2000 | BPM | P7906 |
| Uranium-233/234, dissolved | 13966-29-5 | EPA 908.0M | 7.4 ± 0.95 | 0.4 | | pCi/L | 1 | 11/10/2000 | 11/17/2000 | KEB | P7973 |
| Uranium-235/236, dissolved | 15117-96-1 | EPA 908.0M | -0.25 ± 0.23 | 0.4 | | pCi/L | 1 | 11/10/2000 | 11/17/2000 | KEB | P7973 |
| Uranium-238, dissolved | 7440-61-1 | EPA 908.0M | 2.8 ± 0.60 | 0.4 | | pCi/L | 1 | 11/10/2000 | 11/17/2000 | KEB | P7973 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | -0.59 ± 0.51 | 0.5 | | pCi/L | 1 | 11/09/2000 | 11/17/2000 | KEB | P7949 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | -0.48 ± 0.25 | 0.6 | | pCi/L | 1 | 11/09/2000 | 11/17/2000 | KEB | P7949 |

Client: **Envirocare of Utah**
Work Order: **0010087**
Project: **RCRA**

Client Sample ID: **GW-659**
Tag Number:

Lab Sample ID: **0010087-03B**
Date Collected: **10/09/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Carbon-14, dissolved | 14762-75-5 | EPA 520-C01M | -57 ± 49 | 30 | | pCi/L | 1 | 11/22/2000 | 11/29/2000 | JCP | P8169 |
| Iodine-129, dissolved | 15046-84-1 | EPA 902.0 | -1.2 ± 0.78 | 1 | | pCi/L | 1 | 10/27/2000 | 11/03/2000 | CWP | P7586 |

**Qualifiers:** ND - Not detected at the reporting limit; J - Analyte detected below reporting limit; F - Value above quantitation range; S - Spike outside accepted recovery limits; Analyte detected in method blank; L - Contract/Client reporting limit exceeded; D outside accepted recovery limits; Y - Unspiked sample > 4 times amount spiked; ample > 10 times blank result; M - Maximum contaminant level exceeded; licate sample(s) < 5 times limit

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**Date:** 04-Dec-00

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah**
Work Order: **0010087**
Project: **RCRA**

Client Sample ID: **GW-659**
Tag Number:

Lab Sample ID: **0010087-03C**
Date Collected: **10/09/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Tritium, dissolved | 10028-17-8 | EPA 906.0 | 190 ± 230 | 400 | | pCi/L | 1 | 10/23/2000 | 11/03/2000 | ALZ | P7606 |

Client: **Envirocare of Utah**
Work Order: **0010087**
Project: **RCRA**

Client Sample ID: **GW-79**
Tag Number:

Lab Sample ID: **0010087-04A**
Date Collected: **10/09/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 0.012 | 0.0009 | | mg/L | 1 | 10/31/2000 | 11/02/2000 | AGM | P7776 |
| Gross Alpha, dissolved | 12587-46-1 | EPA 00-02 | 48 ± 15 | 10 | L | pCi/L | 1 | 11/01/2000 | 11/02/2000 | AEW | P7796 |
| Gross Beta, dissolved | 12587-47-2 | EPA 900.0 | 440 ± 510 | 800 | L | pCi/L | 1 | 10/31/2000 | 11/06/2000 | AEW | P7756 |
| Potassium-40, dissolved | 13966-00-2 | EPA 901.1 | ND | 200 | | pCi/L | 1 | | 10/16/2000 | LLC | A10509 |
| Radium-226, dissolved | 13982-63-3 | EPA 903.0M/SM 705M | 0.90 ± 0.43 | 0.5 | | pCi/L | 1 | 10/26/2000 | 10/31/2000 | CEJ | P7694 |
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 1.2 ± 0.39 | 0.6 | | pCi/L | 1 | 10/24/2000 | 11/01/2000 | CWP | P7591 |
| Strontium-89/90, dissolved | 11-10-9 | EPA 905.0/SM704 | 0.24 ± 0.90 | 2 | | pCi/L | 1 | 10/27/2000 | 11/03/2000 | MTC | P7726 |
| Neptunium-237, dissolved | 13994-20-2 | EPA 907.0M/520M | 0.32 ± 0.44 | 0.5 | | pCi/L | 1 | 11/08/2000 | 11/15/2000 | BPM | P7906 |
| Uranium-233/234, dissolved | 13966-29-5 | EPA 908.0M | 7.8 ± 0.95 | 0.4 | | pCi/L | 1 | 11/10/2000 | 11/17/2000 | KEB | P7973 |
| Uranium-235/236, dissolved | 15117-96-1 | EPA 908.0M | -0.14 ± 0.23 | 0.4 | | pCi/L | 1 | 11/10/2000 | 11/17/2000 | KEB | P7973 |
| Uranium-238, dissolved | 7440-61-1 | EPA 908.0M | 4.1 ± 0.65 | 0.4 | | pCi/L | 1 | 11/10/2000 | 11/17/2000 | KEB | P7973 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | -0.32 ± 0.59 | 0.5 | | pCi/L | 1 | 11/09/2000 | 11/17/2000 | KEB | P7949 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | -0.50 ± 0.30 | 0.7 | | pCi/L | 1 | 11/09/2000 | 11/17/2000 | KEB | P7949 |

Client: **Envirocare of Utah**
Work Order: **0010087**
Project: **RCRA**

Client Sample ID: **GW-79**
Tag Number:

Lab Sample ID: **0010087-04B**
Date Collected: **10/09/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Carbon-14, dissolved | 14762-75-5 | EPA 520/SM | 50 ± 38 | 30 | | pCi/L | 1 | 11/22/2000 | 11/28/2000 | JCP | P8169 |

Qualifiers: ND - Not detected at the reporting limit; J - Analyte detected below reporting limit; E - Value above quantitation range; S - Spike outside accepted recovery limits; B - Analyte detected in method blank; L - Contract/Client reporting limit exceeded; R - RPD outside accepted recovery limits; Y - Unspiked sample > 4 times amount spiked; Z - Sample > 10 times blank result; M - Maximum contaminant level exceeded; X - Duplicate sample(s) < 5 times limit

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Date. 04-Dec-00

# CLIENT SAMPLE REPORT

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Iodine-129, dissolved | 15046-84-1 | EPA 902.0 | -0.90 ± 0.75 | 1 | | pCi/L | 1 | 10/27/2000 | 11/03/2000 | CWP | P7586 |

Client: **Envirocare of Utah**
Work Order: **0010087**
Project: **RCRA**

Client Sample ID: **GW-79**
Tag Number:

Lab Sample ID: **0010087-04C**
Date Collected: **10/09/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Tritium, dissolved | 10028-17-8 | EPA 906.0 | -46 ± 220 | 400 | | pCi/L | 1 | 10/23/2000 | 11/03/2000 | ALZ | P7606 |

Client: **Envirocare of Utah**
Work Order: **0010087**
Project: **RCRA**

Client Sample ID: **GW-666**
Tag Number:

Lab Sample ID: **0010087-05A**
Date Collected: **10/09/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 0.013 | 0.0009 | | mg/L | 1 | 10/31/2000 | 11/02/2000 | AGM | P7776 |
| Gross Alpha, dissolved | 12587-46-1 | EPA 00-02 | 44 ± 14 | 10 | L | pCi/L | 1 | 11/01/2000 | 11/02/2000 | AEW | P7796 |
| Gross Beta, dissolved | 12587-47-2 | EPA 900.0 | 160 ± 500 | 800 | L | pCi/L | 1 | 10/31/2000 | 11/06/2000 | AEW | P7756 |
| Potassium-40, dissolved | 13966-00-2 | EPA 901.1 | ND | 200 | | pCi/L | 1 | | 10/16/2000 | LLC | A10509 |
| Radium-226, dissolved | 13982-63-3 | EPA 903.0M/SM 705M | 2.0 ± 0.58 | 0.5 | | pCi/L | 1 | 10/30/2000 | 11/01/2000 | CEJ | P7748 |
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 1.5 ± 0.40 | 0.6 | | pCi/L | 1 | 10/26/2000 | 11/06/2000 | CWP | P7696 |
| Strontium-89/90, dissolved | 11-10-9 | EPA 905.0/SM704 | 0.010 ± 0.93 | 2 | | pCi/L | 1 | 10/27/2000 | 11/03/2000 | MTC | P7726 |
| Neptunium-237, dissolved | 13994-20-2 | EPA 907.0M/520M | 0.36 ± 0.44 | 0.5 | | pCi/L | 1 | 11/08/2000 | 11/15/2000 | BPM | P7906 |
| Uranium-233/234, dissolved | 13966-29-5 | EPA 908.0M | 8.7 ± 1.0 | 0.4 | | pCi/L | 1 | 11/10/2000 | 11/21/2000 | KEB | P7973 |
| Uranium-235/236, dissolved | 15117-96-1 | EPA 908.0M | -0.24 ± 0.25 | 0.5 | | pCi/L | 1 | 11/10/2000 | 11/21/2000 | KEB | P7973 |
| Uranium-238, dissolved | 7440-61-1 | EPA 908.0M | 3.9 ± 0.66 | 0.4 | | pCi/L | 1 | 11/10/2000 | 11/21/2000 | KEB | P7973 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | -0.52 ± 0.63 | 0.4 | | pCi/L | 1 | 11/09/2000 | 11/17/2000 | KEB | P7949 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | -0.31 ± 0.27 | 0.6 | | pCi/L | 1 | 11/09/2000 | 11/17/2000 | KEB | P7949 |

**Qualifiers:** ND - Not detected at the reporting limit J - Analyte detected below reporting limit E - Value above quantitation range S - Spike outside accepted recovery limits
B - Analyte detected in method blank L - Contract/Client reporting limit exceeded Q - outside accepted recovery limits Y - Unspiked sample > 4 times amount spiked
H - Sample > 10 times blank result M - Maximum contaminant level exceeded X - Duplicate sample(s) < 5 times limit

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**Date:** 04-Dec-00

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah**
Work Order: **0010087**
Project: **RCRA**

Client Sample ID: **GW-666**
Tag Number:

Lab Sample ID: **0010087-05B**
Date Collected: **10/09/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Carbon-14, dissolved | 14762-75-5 | EPA 520-C01M | -44 ± 24 | 20 | | pCi/L | 1 | 11/22/2000 | 11/28/2000 | JCP | P8169 |
| Iodine-129, dissolved | 15046-84-1 | EPA 902.0 | -0.52 ± 0.71 | 1 | | pCi/L | 1 | 10/27/2000 | 11/03/2000 | CWP | P7586 |

Client: **Envirocare of Utah**
Work Order: **0010087**
Project: **RCRA**

Client Sample ID: **GW-666**
Tag Number:

Lab Sample ID: **0010087-05C**
Date Collected: **10/09/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Tritium, dissolved | 10028-17-8 | EPA 906.0 | 110 ± 220 | 400 | | pCi/L | 1 | 10/23/2000 | 11/03/2000 | ALZ | P7606 |

Client: **Envirocare of Utah**
Work Order: **0010087**
Project: **RCRA**

Client Sample ID: **GW-80**
Tag Number:

Lab Sample ID: **0010087-06A**
Date Collected: **10/09/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 0.012 | 0.0009 | | mg/L | 1 | 10/31/2000 | 11/02/2000 | AGM | P7776 |
| Gross Alpha, dissolved | 12587-46-1 | EPA 00-02 | 34 ± 13 | 10 | L | pCi/L | 1 | 11/01/2000 | 11/02/2000 | AEW | P7796 |
| Gross Beta, dissolved | 12587-47-2 | EPA 900.0 | 280 ± 490 | 800 | L | pCi/L | 1 | 10/31/2000 | 11/06/2000 | AEW | P7756 |
| Potassium-40, dissolved | 13966-00-2 | EPA 901.1 | 330 ± 120 | 200 | | pCi/L | 1 | | 11/20/2000 | LLC | A10509 |
| Radium-226, dissolved | 13982-63-3 | EPA 903.0M/SM 705M | 0.80 ± 0.44 | 0.5 | | pCi/L | 1 | 10/30/2000 | 11/01/2000 | CEJ | P7748 |
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 2.0 ± 0.42 | 0.6 | | pCi/L | 1 | 10/26/2000 | 11/06/2000 | CWP | P7696 |
| Strontium-89/90, dissolved | 11-10-9 | EPA 905.0/SM704 | 0.24 ± 0.99 | 2 | | pCi/L | 1 | 10/27/2000 | 11/03/2000 | MTC | P7706 |
| Neptunium-237, dissolved | 13994-20-2 | EPA 907.0M/520M | -0.11 ± 0.28 | 0.6 | | pCi/L | 1 | 11/08/2000 | 11/15/2000 | BPM | P7906 |
| Uranium-233/234, dissolved | 13966-29-5 | EPA 908.0M | 7.4 ± 1.0 | 0.5 | | pCi/L | 1 | 11/10/2000 | 11/17/2000 | KEB | P7973 |
| Uranium-235/236, dissolved | 15117-96-1 | EPA 908.0M | -0.075 ± 0.31 | 0.5 | | pCi/L | 1 | 11/10/2000 | 11/17/2000 | KEB | P7973 |
| Uranium-238, dissolved | 7440-61-1 | EPA 908.0M | 4.1 ± 0.71 | 0.5 | | pCi/L | 1 | 11/10/2000 | 11/17/2000 | KEB | P7973 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | -0.69 ± 0.70 | 0.5 | | pCi/L | 1 | 11/09/2000 | 11/17/2000 | KEB | P7949 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | -0.28 ± 0.33 | 0.6 | | pCi/L | 1 | 11/09/2000 | 11/17/2000 | KEB | P7949 |

**Qualifiers:**
ND - Not detected at the reporting limit
B - Analyte detected in method blank
Z - Sample > 10 times blank result
J - Analyte detected below reporting limit
L - Contract/Client reporting limit exceeded
M - Maximum contaminant level exceeded
E - Value above quantitation range
R - RPD outside accepted recovery limits
X - Duplicate sample(s) < 5 times limit
S - Spike outside accepted recovery limits
Y - Unspiked sample > 4 times amount spiked

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Date: 04-Dec-00

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah**
Work Order: **0010087**
Project: **RCRA**

Client Sample ID: **GW-80**
Tag Number:

Lab Sample ID: **0010087-06B**
Date Collected: **10/09/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Carbon-14, dissolved | 14762-75-5 | EPA 520-C01M | -33 ± 23 | 20 | | pCi/L | 1 | 11/22/2000 | 11/28/2000 | JCP | P8169 |
| Iodine-129, dissolved | 15046-84-1 | EPA 902.0 | -1.0 ± 0.77 | 1 | | pCi/L | 1 | 11/02/2000 | 11/20/2000 | CWP | P7826 |

Client: **Envirocare of Utah**
Work Order: **0010087**
Project: **RCRA**

Client Sample ID: **GW-80**
Tag Number:

Lab Sample ID: **0010087-06C**
Date Collected: **10/09/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Tritium, dissolved | 10028-17-8 | EPA 906.0 | -17 ± 220 | 400 | | pCi/L | 1 | 10/23/2000 | 11/03/2000 | ALZ | P7606 |

**Qualifiers:** ND - Not detected at the reporting limit; J - Analyte detected below reporting limit; Analyte detected in method blank; L - Contract/Client reporting limit exceeded; Sample > 10 times blank result; M - Maximum contaminant level exceeded; Value above quantitation range; D outside accepted recovery limits; plicate sample(s) < 5 times limit; S - Spike outside accepted recovery limits; Y - Unspiked sample > 4 times amount spike

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**Date:** 22-Nov-00

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah** | Client Sample ID: **GW-19A** | Lab Sample ID: **0010166-01A**
Work Order: **0010166** | Tag Number: | Date Collected: **10/04/2000**
Project: **11e.(2)** | Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 0.0029 | 0.0009 | | mg/L | 1 | 11/07/2000 | 11/10/2000 | AWT | P7900 |
| Radium-226, dissolved | 13982-63-3 | EPA 903.0M/SM 705M | -0.061 ± 0.27 | 0.5 | | pCi/L | 1 | 10/30/2000 | 11/01/2000 | CEJ | P7749 |
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 0.96 ± 0.56 | 0.9 | L | pCi/L | 1 | 10/26/2000 | 11/06/2000 | CWP | P7696 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | -2.1 ± 0.76 | 0.4 | | pCi/L | 1 | 11/09/2000 | 11/17/2000 | KEB | P7950 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | 0.067 ± 0.28 | 0.4 | | pCi/L | 1 | 11/09/2000 | 11/17/2000 | KEB | P7950 |

Client: **Envirocare of Utah** | Client Sample ID: **GW-19A** | Lab Sample ID: **0010166-01B**
Work Order: **0010166** | Tag Number: | Date Collected: **10/04/2000**
Project: **11e.(2)** | Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Fluorine as Fluoride | 7782-41-4 | EPA 340.2M | 1.1 | 0.1 | | mg/L | 1 | | 10/24/2000 | PKL | A10615 |
| Bromide | 24959-67-9 | SW846 9056 | 20 | 10 | | mg/L | 20 | | 11/02/2000 | PKL | A10895 |

**Qualifiers:**
ND - Not detected at the reporting limit
B - Analyte detected in method blank
Z - Sample > 10 times blank result
J - Analyte detected below reporting limit
L - Contract/Client reporting limit exceeded
M - Maximum contaminant level exceeded
E - Value above quantitation range
R - RPD outside accepted recovery limits
X - Duplicate sample(s) < 5 times limit
S - Spike outside accepted recovery limits
Y - Unspiked sample > 4 times amount spiked

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**Date:** 22-Dec-00

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah**
Work Order: **0010185**
Project: **11e.(2)**

Client Sample ID: **GW-60**
Tag Number:

Lab Sample ID: **0010185-01A**
Date Collected: **10/18/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 0.016 | 0.0009 | | mg/L | 1 | 11/08/2000 | 11/27/2000 | AWT | P7920 |
| Radium-226, dissolved | 13982-63-3 | EPA 903.0M/SM 705M | 1.2 ± 0.47 | 0.4 | | pCi/L | 1 | 10/31/2000 | 11/03/2000 | CEJ | P7770 |
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 2.3 ± 0.61 | 0.9 | L | pCi/L | 1 | 11/06/2000 | 11/13/2000 | CWP | P7872 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | -0.70 ± 0.87 | 0.5 | | pCi/L | 1 | 11/15/2000 | 11/21/2000 | AEW | P8038 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | 0.096 ± 0.40 | 0.6 | | pCi/L | 1 | 11/15/2000 | 11/21/2000 | AEW | P8038 |

Client: **Envirocare of Utah**
Work Order: **0010185**
Project: **11e.(2)**

Client Sample ID: **GW-60**
Tag Number:

Lab Sample ID: **0010185-01C**
Date Collected: **10/18/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Fluorine as Fluoride | 7782-41-4 | EPA 340.2M | 0.66 | 0.1 | | mg/L | 1 | | 10/24/2000 | PKL | A10615 |
| Bromide | 24959-67-9 | SW846 9056 | ND | 10 | | mg/L | 20 | | 11/14/2000 | PKL | A11117 |

Client: **Envirocare of Utah**
Work Order: **0010185**
Project: **11e.(2)**

Client Sample ID: **GW-58**
Tag Number:

Lab Sample ID: **0010185-02A**
Date Collected: **10/18/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 0.038 | 0.0009 | | mg/L | 1 | 11/08/2000 | 11/27/2000 | AWT | P7920 |
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 0.033 | 0.0009 | | mg/L | 1 | 12/20/2000 | 12/20/2000 | AWT | P8542 |
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 0.033 | 0.0009 | | mg/L | 1 | 12/20/2000 | 12/20/2000 | AWT | P8542 |
| Radium-226, dissolved | 13982-63-3 | EPA 903.0M/SM 705M | 0.98 ± 0.40 | 0.4 | | pCi/L | 1 | 10/31/2000 | 11/03/2000 | CEJ | P7770 |
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 1.8 ± 0.60 | 0.9 | L | pCi/L | 1 | 11/06/2000 | 11/13/2000 | CWP | P7872 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | 0.010 ± 0.73 | 0.6 | | pCi/L | 1 | 11/15/2000 | 11/27/2000 | AEW | P8038 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | 0.33 ± 0.46 | 0.7 | | pCi/L | 1 | 11/15/2000 | 11/27/2000 | AEW | P8038 |

**Qualifiers:** ND - Not detected at the reporting limit; J - Analyte detected below reporting limit; E - Value above quantitation range; S - Spike outside accepted recovery limits; ...alyte detected in method blank; L - Contract/Client reporting limit exceeded; ... outside accepted recovery limits; Y - Unspiked sample > 4 times amount spiked; ...ample > 10 times blank result; M - Maximum contaminant level exceeded; X - ...icate sample(s) < 5 times limit

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**Date:** 22-Dec-00

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah**
Work Order: **0010185**
Project: **11e.(2)**

Client Sample ID: **GW-58**
Tag Number:

Lab Sample ID: **0010185-02C**
Date Collected: **10/18/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Fluorine as Fluoride | 7782-41-4 | EPA 340.2M | 0.93 | 0.1 | | mg/L | 1 | | 10/24/2000 | PKL | A10615 |
| Bromide | 24959-67-9 | SW846 9056 | ND | 10 | | mg/L | 20 | | 11/14/2000 | PKL | A11117 |

Client: **Envirocare of Utah**
Work Order: **0010185**
Project: **11e.(2)**

Client Sample ID: **GW-302**
Tag Number:

Lab Sample ID: **0010185-03A**
Date Collected: **10/18/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 0.035 | 0.0009 | | mg/L | 1 | 11/08/2000 | 11/27/2000 | AWT | P7920 |
| Radium-226, dissolved | 13982-63-3 | EPA 903.0M/SM 705M | 0.67 ± 0.46 | 0.6 | | pCi/L | 1 | 10/31/2000 | 11/03/2000 | CEJ | P7770 |
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 1.7 ± 0.59 | 0.9 | L | pCi/L | 1 | 11/06/2000 | 11/13/2000 | CWP | P7872 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | 0.31 ± 0.80 | 0.5 | | pCi/L | 1 | 11/20/2000 | 11/28/2000 | KEB | P8100 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | -0.17 ± 0.28 | 0.5 | | pCi/L | 1 | 11/20/2000 | 11/28/2000 | KEB | P8100 |

Client: **Envirocare of Utah**
Work Order: **0010185**
Project: **11e.(2)**

Client Sample ID: **GW-302**
Tag Number:

Lab Sample ID: **0010185-03C**
Date Collected: **10/18/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Fluorine as Fluoride | 7782-41-4 | EPA 340.2M | 0.93 | 0.1 | | mg/L | 1 | | 10/24/2000 | PKL | A10615 |
| Bromide | 24959-67-9 | SW846 9056 | ND | 10 | | mg/L | 20 | | 11/14/2000 | PKL | A11117 |

Client: **Envirocare of Utah**
Work Order: **0010185**
Project: **11e.(2)**

Client Sample ID: **GW-28**
Tag Number:

Lab Sample ID: **0010185-04A**
Date Collected: **10/18/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 0.0092 | 0.0009 | | mg/L | 1 | 11/08/2000 | 11/27/2000 | AWT | P7920 |
| Radium-226, dissolved | 13982-63-3 | EPA 903.0M/SM 705M | 0.25 ± 0.38 | 0.6 | | pCi/L | 1 | 10/31/2000 | 11/03/2000 | CEJ | P7770 |
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 1.4 ± 0.58 | 0.9 | L | pCi/L | 1 | 11/06/2000 | 11/13/2000 | CWP | P7872 |

**Qualifiers:**
ND - Not detected at the reporting limit
B - Analyte detected in method blank
Z - Sample > 10 times blank result
J - Analyte detected below reporting limit
L - Contract/Client reporting limit exceeded
M - Maximum contaminant level exceeded
E - Value above quantitation range
R - RPD outside accepted recovery limits
X - Duplicate sample(s) < 5 times limit
S - Spike outside accepted recovery limits
Y - Unspiked sample > 4 times amount spiked

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**Date:** 22-Dec-00

# CLIENT SAMPLE REPORT

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | -2.4 ± 1.0 | 0.6 | pCi/L | 1 | 11/20/2000 | 11/28/2000 | KEB | P8100 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | 0.45 ± 0.46 | 0.6 | pCi/L | 1 | 11/20/2000 | 11/28/2000 | KEB | P8100 |

Client: **Envirocare of Utah**
Work Order: **0010185**
Project: **11e.(2)**

Client Sample ID: **GW-28**
Tag Number:

Lab Sample ID: **0010185-04C**
Date Collected: **10/18/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Fluorine as Fluoride | 7782-41-4 | EPA 340.2M | 0.89 | 0.1 | | mg/L | 1 | | 10/24/2000 | PKL | A10615 |
| Bromide | 24959-67-9 | SW846 9056 | ND | 10 | | mg/L | 20 | | 11/14/2000 | PKL | A11117 |

Client: **Envirocare of Utah**
Work Order: **0010185**
Project: **11e.(2)**

Client Sample ID: **GW-57**
Tag Number:

Lab Sample ID: **0010185-05A**
Date Collected: **10/18/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 0.0032 | 0.0009 | | mg/L | 1 | 11/08/2000 | 11/27/2000 | AWT | P7920 |
| Radium-226, dissolved | 13982-63-3 | EPA 903.0M/SM 705M | 0.13 ± 0.34 | 0.5 | | pCi/L | 1 | 10/31/2000 | 11/08/2000 | CEJ | P7770 |
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 1.4 ± 1.1 | 2 | L | pCi/L | 1 | 11/06/2000 | 11/13/2000 | CWP | P7872 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | -0.52 ± 0.56 | 0.4 | | pCi/L | 1 | 11/21/2000 | 11/29/2000 | KEB | P8134 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | -0.26 ± 0.29 | 0.6 | | pCi/L | 1 | 11/21/2000 | 11/29/2000 | KEB | P8134 |

Client: **Envirocare of Utah**
Work Order: **0010185**
Project: **11e.(2)**

Client Sample ID: **GW-57**
Tag Number:

Lab Sample ID: **0010185-05C**
Date Collected: **10/18/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Fluorine as Fluoride | 7782-41-4 | EPA 340.2M | 0.81 | 0.1 | | mg/L | 1 | | 10/24/2000 | PKL | A10615 |
| Bromide | 24959-67-9 | SW846 9056 | ND | 10 | | mg/L | 20 | | 11/14/2000 | PKL | A11117 |

**Qualifiers:** ND - Not detected at the reporting limit; J - Analyte detected below reporting limit; E - Value above quantitation range; S - Spike outside accepted recovery limits; ...nalyte detected in method blank; L - Contract/Client reporting limit exceeded; ...outside accepted recovery limits; Y - Unspiked sample > 4 times amount spiked; ...mple > 10 times blank result; M - Maximum contaminant level exceeded; X - ...cate sample(s) < 5 times limit

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**Date:** 26-Dec-00

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah**
Work Order: **0010186**
Project: **11e.(2)**

Client Sample ID: **GW-58A**
Tag Number:

Lab Sample ID: **0010186-01A**
Date Collected: **10/18/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 0.026 | 0.0009 | | mg/L | 1 | 12/20/2000 | 12/20/2000 | AWT | P8542 |

Client: **Envirocare of Utah**
Work Order: **0010186**
Project: **11e.(2)**

Client Sample ID: **GW-301**
Tag Number:

Lab Sample ID: **0010186-02A**
Date Collected: **10/18/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 0.035 | 0.0009 | | mg/L | 1 | 11/08/2000 | 11/27/2000 | AWT | P7921 |

Client: **Envirocare of Utah**
Work Order: **0010186**
Project: **11e.(2)**

Client Sample ID: **GW-28A**
Tag Number:

Lab Sample ID: **0010186-03A**
Date Collected: **10/18/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 0.0070 | 0.0009 | | mg/L | 1 | 11/08/2000 | 11/27/2000 | AWT | P7921 |

Client: **Envirocare of Utah**
Work Order: **0010186**
Project: **11e.(2)**

Client Sample ID: **GW-28B**
Tag Number:

Lab Sample ID: **0010186-04A**
Date Collected: **10/18/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 0.0071 | 0.0009 | | mg/L | 1 | 11/08/2000 | 11/27/2000 | AWT | P7921 |

Client: **Envirocare of Utah**
Work Order: **0010186**
Project: **11e.(2)**

Client Sample ID: **GW-57A**
Tag Number:

Lab Sample ID: **0010186-05A**
Date Collected: **10/18/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 0.0037 | 0.0009 | | mg/L | 1 | 11/08/2000 | 11/27/2000 | AWT | P7921 |

**Qualifiers:**
ND - Not detected at the reporting limit
B - Analyte detected in method blank
Z - Sample > 10 times blank result
J - Analyte detected below reporting limit
L - Contract/Client reporting limit exceeded
M - Maximum contaminant level exceeded
E - Value above quantitation range
R - RPD outside accepted recovery limits
X - Duplicate sample(s) < 5 times limit
S - Spike outside accepted recovery limits
Y - Unspiked sample > 4 times amount spiked

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**Date:** 26-Dec-00

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah**
Work Order: **0010204**
Project: **11e.(2)**

Client Sample ID: **GW-27A**
Tag Number:

Lab Sample ID: **0010204-01A**
Date Collected: **10/19/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 0.030 | 0.0009 | | mg/L | 1 | 11/08/2000 | 11/27/2000 | AWT | P7921 |
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 0.035 | 0.0009 | | mg/L | 1 | 12/20/2000 | 12/20/2000 | AWT | P8542 |
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 0.035 | 0.0009 | | mg/L | 1 | 12/20/2000 | 12/20/2000 | AWT | P8542 |

**Qualifiers:** ND - Not detected at the reporting limit; J - Analyte detected below reporting limit; E - Value above quantitation range; S - Spike outside accepted recovery limits

- Analyte detected in method blank; L - Contract/Client reporting limit exceeded; D outside accepted recovery limits; Y - Unspiked sample > 4 times amount spiked
- ample > 10 times blank result; M - Maximum contaminant level exceeded; licate sample(s) < 5 times limit

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**Date:** 04-Dec-00

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah** | Client Sample ID: **GW-25** | Lab Sample ID: **0010202-01A**
Work Order: **0010202** | Tag Number: | Date Collected: **10/19/2000**
Project: **LARW, 11e.(2)** | Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 0.10 | 0.0009 | | mg/L | 1 | 11/08/2000 | 11/27/2000 | AWT | P7921 |
| Gross Alpha, dissolved | 12587-46-1 | EPA 00-02 | 140 ± 26 | 10 | | pCi/L | 1 | 11/06/2000 | 11/10/2000 | AEW | P7862 |
| Gross Beta, dissolved | 12587-47-2 | EPA 900.0 | 500 ± 290 | 500 | L | pCi/L | 1 | 11/02/2000 | 11/29/2000 | AEW | P7815 |
| Potassium-40, dissolved | 13966-00-2 | EPA 901.1 | 380 ± 120 | 200 | | pCi/L | 1 | | 11/16/2000 | LLC | A11400 |
| Radium-226, dissolved | 13982-63-3 | EPA 903.0M/SM 705M | 1.9 ± 0.64 | 0.6 | | pCi/L | 1 | 11/01/2000 | 11/07/2000 | CEJ | P7800 |
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 1.9 ± 0.42 | 0.6 | | pCi/L | 1 | 11/06/2000 | 11/13/2000 | CWP | P7872 |
| Strontium-89/90, dissolved | 11-10-9 | EPA 905.0/SM704 | -0.13 ± 0.63 | 2 | | pCi/L | 1 | 11/02/2000 | 11/09/2000 | MTC | P7834 |
| Neptunium-237, dissolved | 13994-20-2 | EPA 907.0M/520M | 0.12 ± 0.28 | 0.4 | | pCi/L | 1 | 11/09/2000 | 11/27/2000 | JCP | P7948 |
| Uranium-233/234, dissolved | 13966-29-5 | EPA 908.0M | 82 ± 2.8 | 0.4 | | pCi/L | 1 | 11/10/2000 | 11/20/2000 | KEB | P7975 |
| Uranium-235/236, dissolved | 15117-96-1 | EPA 908.0M | 1.3 ± 0.46 | 0.5 | | pCi/L | 1 | 11/10/2000 | 11/20/2000 | KEB | P7975 |
| Uranium-238, dissolved | 7440-61-1 | EPA 908.0M | 46 ± 2.1 | 0.4 | | pCi/L | 1 | 11/10/2000 | 11/20/2000 | KEB | P7975 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | -4.0 ± 1.2 | 0.6 | | pCi/L | 1 | 11/20/2000 | 11/28/2000 | KEB | P8100 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | 0.29 ± 0.49 | 0.7 | | pCi/L | 1 | 11/20/2000 | 11/28/2000 | KEB | P8100 |

Client: **Envirocare of Utah** | Client Sample ID: **GW-25** | Lab Sample ID: **0010202-01B**
Work Order: **0010202** | Tag Number: | Date Collected: **10/19/2000**
Project: **LARW, 11e.(2)** | Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Carbon-14, dissolved | 14762-75-5 | EPA 520-C01M | -46 ± 27 | 20 | | pCi/L | 1 | 11/22/2000 | 11/28/2000 | JCP | P8169 |
| Iodine-129, dissolved | 15046-84-1 | EPA 902.0 | -0.57 ± 1.6 | 3 | L | pCi/L | 1 | 11/02/2000 | 11/21/2000 | CWP | P7827 |

Client: **Envirocare of Utah** | Client Sample ID: **GW-25** | Lab Sample ID: **0010202-01C**
Work Order: **0010202** | Tag Number: | Date Collected: **10/19/2000**
Project: **LARW, 11e.(2)** | Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Fluoride as Fluoride | 7782-41-4 | EPA 340.2M | ND | 0.1 | | mg/L | 1 | | 11/07/2000 | SLA | A11023 |

**Qualifiers:**
ND - Not detected at the reporting limit
B - Analyte detected in method blank
Z - Sample > 10 times blank result
J - Analyte detected below reporting limit
L - Contract/Client reporting limit exceeded
M - Maximum contaminant level exceeded
E - Value above quantitation range
R - RPD outside accepted recovery limits
X - Duplicate sample(s) < 5 times limit
S - Spike outside accepted recovery limits
Y - Unspiked sample > 4 times amount spiked

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Date: 04-Dec-00

# CLIENT SAMPLE REPORT

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Bromide | 24959-67-9 | SW846 9056 | ND | 10 | mg/L | 20 | 11/15/2000 | | PKL | A11229 |
| Tritium, dissolved | 10028-17-8 | EPA 906.0 | -130 ± 220 | 400 | pCi/L | 1 | 11/10/2000 | 11/29/2000 | ALZ | P7980 |

**Qualifiers:** ND - Not detected at the reporting limit; J - Analyte detected below reporting limit; F - Value above quantitation range; S - Spike outside accepted recovery limits

nalyte detected in method blank; L - Contract/Client reporting limit exceeded; ) outside accepted recovery limits; Y - Unspiked sample > 4 times amount spiked

ample > 10 times blank result; M - Maximum contaminant level exceeded; X - icate sample(s) < 5 times limit

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**Date:** 26-Dec-00

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah**
Work Order: **0010203**
Project: **11e.(2)**

Client Sample ID: **GW-27**
Tag Number:

Lab Sample ID: **0010203-01A**
Date Collected: **10/19/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 0.028 | 0.0009 | | mg/L | 1 | 12/20/2000 | 12/20/2000 | AWT | P8542 |
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 0.027 | 0.0009 | | mg/L | 1 | 12/20/2000 | 12/20/2000 | AWT | P8542 |
| Radium-226, dissolved | 13982-63-3 | EPA 903.0M/SM 705M | 0.28 ± 0.36 | 0.5 | | pCi/L | 1 | 11/01/2000 | 11/07/2000 | CEJ | P7800 |
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 1.0 ± 0.57 | 0.9 | L | pCi/L | 1 | 11/06/2000 | 11/13/2000 | CWP | P7872 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | 0.43 ± 0.40 | 0.5 | | pCi/L | 1 | 11/20/2000 | 11/28/2000 | KEB | P8100 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | -0.81 ± 0.28 | 0.6 | | pCi/L | 1 | 11/20/2000 | 11/28/2000 | KEB | P8100 |

Client: **Envirocare of Utah**
Work Order: **0010203**
Project: **11e.(2)**

Client Sample ID: **GW-27**
Tag Number:

Lab Sample ID: **0010203-01B**
Date Collected: **10/19/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Fluorine as Fluoride | 7782-41-4 | EPA 340.2M | ND | 0.1 | | mg/L | 1 | | 11/07/2000 | SLA | A11021 |
| Bromide | 24959-67-9 | SW846 9056 | ND | 10 | | mg/L | 20 | | 11/15/2000 | PKL | A11229 |

Client: **Envirocare of Utah**
Work Order: **0010203**
Project: **11e.(2)**

Client Sample ID: **GW-36**
Tag Number:

Lab Sample ID: **0010203-02A**
Date Collected: **10/19/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Bromide | 24959-67-9 | SW846 9056 | ND | 10 | | mg/L | 20 | | 11/15/2000 | PKL | A11229 |

**Qualifiers:**
ND - Not detected at the reporting limit
B - Analyte detected in method blank
Z - Sample > 10 times blank result
J - Analyte detected below reporting limit
L - Contract/Client reporting limit exceeded
M - Maximum contaminant level exceeded
E - Value above quantitation range
R - RPD outside accepted recovery limits
X - Duplicate sample(s) < 5 times limit
S - Spike outside accepted recovery limits
Y - Unspiked sample > 4 times amount spiked

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**Date:** 16-Jan-01

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah**
Work Order: **0010250**
Project: **LARW**

Client Sample ID: **GW-84**
Tag Number:

Lab Sample ID: **0010250-01A**
Date Collected: **10/25/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 7440-61-1 | ASTM D2907 | 0.013 | 0.0009 | | mg/L | 1 | 11/20/2000 | 11/30/2000 | AWT | P8109 |
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 5.9 ± 3.0 | 5 | | pCi/L | 1 | 01/11/2001 | 01/12/2000 | CMA | P8828 |
| Gross Alpha, dissolved | 12587-46-1 | EPA 00-02 | 51 ± 16 | 10 | L | pCi/L | 1 | 11/08/2000 | 11/13/2000 | AEW | P7912 |
| Gross Beta, dissolved | 12587-47-2 | EPA 900.0 | 540 ± 500 | 800 | L | pCi/L | 1 | 11/08/2000 | 11/14/2000 | AEW | P7911 |
| Potassium-40, dissolved | 13966-00-2 | EPA 901.1 | 450 ± 130 | 200 | | pCi/L | 1 | | 11/22/2000 | LLC | A11568 |
| Radium-226, dissolved | 13982-63-3 | EPA 903.0M/SM 705M | 2.0 ± 0.58 | 0.4 | | pCi/L | 1 | 11/06/2000 | 11/09/2000 | CEJ | P7866 |
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 2.2 ± 0.43 | 0.6 | | pCi/L | 1 | 11/14/2000 | 11/28/2000 | CWP | P8011 |
| Strontium-89/90, dissolved | 11-10-9 | EPA 905.0/SM704 | -0.030 ± 0.60 | 2 | | pCi/L | 1 | 11/02/2000 | 11/13/2000 | MTC | P7835 |
| Neptunium-237, dissolved | 13994-20-2 | EPA 907.0M/520M | 0.31 ± 0.47 | 0.6 | | pCi/L | 1 | 11/17/2000 | 12/07/2000 | BPM | P8075 |
| Uranium-233/234, dissolved | 13966-29-5 | EPA 908.0M | 7.8 ± 1.0 | 0.4 | | pCi/L | 1 | 11/28/2000 | 12/01/2000 | LLC | P8203 |
| Uranium-235/236, dissolved | 15117-96-1 | EPA 908.0M | -0.075 ± 0.26 | 0.4 | | pCi/L | 1 | 11/28/2000 | 12/01/2000 | LLC | P8203 |
| Uranium-238, dissolved | 7440-61-1 | EPA 908.0M | 4.5 ± 0.77 | 0.4 | | pCi/L | 1 | 11/28/2000 | 12/01/2000 | LLC | P8203 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | -2.1 ± 0.68 | 0.4 | | pCi/L | 1 | 12/05/2000 | 12/12/2000 | KEB | P8321 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | -0.19 ± 0.25 | 0.5 | | pCi/L | 1 | 12/05/2000 | 12/12/2000 | KEB | P8321 |

Client: **Envirocare of Utah**
Work Order: **0010250**
Project: **LARW**

Client Sample ID: **GW-84**
Tag Number:

Lab Sample ID: **0010250-01B**
Date Collected: **10/25/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Carbon-14, dissolved | 14762-75-5 | EPA 520-C01M | -14 ± 24 | 30 | | pCi/L | 1 | 11/22/2000 | 12/15/2000 | JCP | P8171 |
| Iodine-129, dissolved | 15046-84-1 | EPA 902.0 | -0.51 ± 0.72 | 1 | | pCi/L | 1 | 11/29/2000 | 12/07/2000 | CWP | P8195 |

**Qualifiers:** ND - Not detected at the reporting limit; J - Analyte detected below reporting limit; E - Value above quantitation range; S - Spike outside accepted recovery limits
Analyte detected in method blank; L - Contract/Client reporting limit exceeded; D outside accepted recovery limits; Y - Unspiked sample > 4 times amount spiked
ample > 10 times blank result; M - Maximum contaminant level exceeded; icate sample(s) < 5 times limit

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**Date:** 16-Jan-01

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah**
Work Order: **0010250**
Project: **LARW**

Client Sample ID: **GW-84**
Tag Number:

Lab Sample ID: **0010250-01C**
Date Collected: **10/25/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Bromide | 24959-67-9 | SW846 9056 | ND | 10 | | mg/L | 20 | | 11/16/2000 | PKL | A11229 |
| Tritium, dissolved | 10028-17-8 | EPA 906.0 | 3.9 ± 230 | 400 | | pCi/L | 1 | 11/16/2000 | 12/01/2000 | ALZ | P8054 |

Client: **Envirocare of Utah**
Work Order: **0010250**
Project: **LARW**

Client Sample ID: **GW-85**
Tag Number:

Lab Sample ID: **0010250-02A**
Date Collected: **10/25/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 7440-61-1 | ASTM D2907 | 0.013 | 0.0009 | | mg/L | 1 | 11/20/2000 | 11/30/2000 | AWT | P8109 |
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 5.4 ± 3.0 | 5 | | pCi/L | 1 | 01/11/2001 | 01/12/2000 | CMA | P8828 |
| Gross Alpha, dissolved | 12587-46-1 | EPA 00-02 | 45 ± 15 | 10 | L | pCi/L | 1 | 11/08/2000 | 11/13/2000 | AEW | P7912 |
| Gross Beta, dissolved | 12587-47-2 | EPA 900.0 | 430 ± 500 | 800 | L | pCi/L | 1 | 11/08/2000 | 11/14/2000 | AEW | P7911 |
| Potassium-40, dissolved | 13966-00-2 | EPA 901.1 | 360 ± 130 | 200 | | pCi/L | 1 | | 11/22/2000 | LLC | A11568 |
| Radium-226, dissolved | 13982-63-3 | EPA 903.0M/SM 705M | 2.3 ± 0.59 | 0.4 | | pCi/L | 1 | 11/06/2000 | 11/09/2000 | CEJ | P7866 |
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 2.9 ± 0.45 | 0.6 | | pCi/L | 1 | 11/14/2000 | 11/28/2000 | CWP | P8011 |
| Strontium-89/90, dissolved | 11-10-9 | EPA 905.0/SM704 | 0.48 ± 1.0 | 2 | | pCi/L | 1 | 11/13/2000 | 11/17/2000 | MTC | P7999 |
| Neptunium-237, dissolved | 13994-20-2 | EPA 907.0M/520M | 0.28 ± 0.22 | 0.3 | | pCi/L | 1 | 11/17/2000 | 12/08/2000 | BPM | P8075 |
| Uranium-233/234, dissolved | 13966-29-5 | EPA 908.0M | 6.2 ± 1.3 | 0.5 | | pCi/L | 1 | 11/28/2000 | 11/30/2000 | LLC | P8203 |
| Uranium-235/236, dissolved | 15117-96-1 | EPA 908.0M | -0.034 ± 0.36 | 0.6 | | pCi/L | 1 | 11/28/2000 | 11/30/2000 | LLC | P8203 |
| Uranium-238, dissolved | 7440-61-1 | EPA 908.0M | 3.4 ± 0.91 | 0.5 | | pCi/L | 1 | 11/28/2000 | 11/30/2000 | LLC | P8203 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | -1.5 ± 0.70 | 0.5 | | pCi/L | 1 | 12/05/2000 | 12/12/2000 | KEB | P8321 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | -0.095 ± 0.28 | 0.5 | | pCi/L | 1 | 12/05/2000 | 12/12/2000 | KEB | P8321 |

**Qualifiers:**
ND - Not detected at the reporting limit
B - Analyte detected in method blank
Z - Sample > 10 times blank result
J - Analyte detected below reporting limit
L - Contract/Client reporting limit exceeded
M - Maximum contaminant level exceeded
E - Value above quantitation range
R - RPD outside accepted recovery limits
X - Duplicate sample(s) < 5 times limit
S - Spike outside accepted recovery limits
Y - Unspiked sample > 4 times amount spiked

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Date: 16-Jan-01

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah**
Work Order: **0010250**
Project: **LARW**

## Client Sample ID: **GW-85**
Tag Number:

Lab Sample ID: **0010250-02B**
Date Collected: **10/25/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Carbon-14, dissolved | 14762-75-5 | EPA 520-C01M | -20 ± 20 | 30 | | pCi/L | 1 | 11/22/2000 | 12/15/2000 | JCP | P8171 |
| Iodine-129, dissolved | 15046-84-1 | EPA 902.0 | -0.60 ± 0.74 | 1 | | pCi/L | 1 | 11/29/2000 | 12/07/2000 | CWP | P8195 |

Client: **Envirocare of Utah**
Work Order: **0010250**
Project: **LARW**

## Client Sample ID: **GW-85**
Tag Number:

Lab Sample ID: **0010250-02C**
Date Collected: **10/25/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Bromide | 24959-67-9 | SW846 9056 | 11 | 10 | | mg/L | 20 | | 11/16/2000 | PKL | A11229 |
| Tritium, dissolved | 10028-17-8 | EPA 906.0 | 19 ± 230 | 400 | | pCi/L | 1 | 11/16/2000 | 12/01/2000 | ALZ | P8054 |

Client: **Envirocare of Utah**
Work Order: **0010250**
Project: **LARW**

## Client Sample ID: **GW-86**
Tag Number:

Lab Sample ID: **0010250-03A**
Date Collected: **10/25/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 7440-61-1 | ASTM D2907 | 0.0084 | 0.0009 | | mg/L | 1 | 11/20/2000 | 11/30/2000 | AWT | P8109 |
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 5.9 ± 3.0 | 5 | | pCi/L | 1 | 01/11/2001 | 01/12/2000 | CMA | P8828 |
| Gross Alpha, dissolved | 12587-46-1 | EPA 00-02 | 46 ± 16 | 10 | L | pCi/L | 1 | 11/08/2000 | 11/13/2000 | AEW | P7912 |
| Gross Beta, dissolved | 12587-47-2 | EPA 900.0 | 250 ± 470 | 800 | L | pCi/L | 1 | 11/08/2000 | 11/14/2000 | AEW | P7911 |
| Potassium-40, dissolved | 13966-00-2 | EPA 901.1 | 420 ± 140 | 200 | | pCi/L | 1 | | 11/22/2000 | LLC | A11568 |
| Radium-226, dissolved | 13982-63-3 | EPA 903.0M/SM 705M | 2.2 ± 0.69 | 0.6 | | pCi/L | 1 | 11/07/2000 | 11/14/2000 | CEJ | P7885 |
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 1.8 ± 0.41 | 0.6 | | pCi/L | 1 | 11/14/2000 | 11/28/2000 | CWP | P8012 |
| Strontium-89/90, dissolved | 11-10-9 | EPA 905.0/SM704 | 1.4 ± 0.96 | 2 | | pCi/L | 1 | 11/13/2000 | 11/17/2000 | MTC | P7999 |
| Neptunium-237, dissolved | 13994-20-2 | EPA 907.0M/520M | 0.86 ± 0.59 | 0.6 | | pCi/L | 1 | 11/17/2000 | 12/07/2000 | BPM | P8075 |
| Uranium-233/234, dissolved | 13966-29-5 | EPA 908.0M | 3.7 ± 1.0 | 0.5 | | pCi/L | 1 | 11/28/2000 | 11/30/2000 | LLC | P8203 |

Qualifiers: ND - Not detected at the reporting limit; J - Analyte detected below reporting limit; E - Value above quantitation range; S - Spike outside accepted recovery limits
Analyte detected in method blank; L - Contract/Client reporting limit exceeded; D - outside accepted recovery limits; Y - Unspiked sample > 4 times amount spiked
ample > 10 times blank result; M - Maximum contaminant level exceeded; X - icate sample(s) < 5 times limit

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# CLIENT SAMPLE REPORT

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Uranium-235/236, dissolved | 15117-96-1 | EPA 908.0M | -0.19 ± 0.28 | 0.5 | pCi/L | 1 | 11/28/2000 | 11/30/2000 | LLC | P8203 |
| Uranium-238, dissolved | 7440-61-1 | EPA 908.0M | 1.9 ± 0.71 | 0.5 | pCi/L | 1 | 11/28/2000 | 11/30/2000 | LLC | P8203 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | -0.41 ± 0.31 | 0.4 | pCi/L | 1 | 12/05/2000 | 12/12/2000 | KEB | P8321 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | -0.37 ± 0.26 | 0.6 | pCi/L | 1 | 12/05/2000 | 12/12/2000 | KEB | P8321 |

Client: **Envirocare of Utah**
Work Order: **0010250**
Project: **LARW**

Client Sample ID: **GW-86**
Tag Number:

Lab Sample ID: **0010250-03B**
Date Collected: **10/25/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Carbon-14, dissolved | 14762-75-5 | EPA 520-C01M | -12 ± 17 | 20 | | pCi/L | 1 | 11/22/2000 | 12/15/2000 | JCP | P8171 |
| Iodine-129, dissolved | 15046-84-1 | EPA 902.0 | 0.66 ± 0.81 | 1 | | pCi/L | 1 | 11/29/2000 | 12/07/2000 | CWP | P8195 |

Client: **Envirocare of Utah**
Work Order: **0010250**
Project: **LARW**

Client Sample ID: **GW-86**
Tag Number:

Lab Sample ID: **0010250-03C**
Date Collected: **10/25/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Bromide | 24959-67-9 | SW846 9056 | 11 | 10 | | mg/L | 20 | | 11/16/2000 | PKL | A11229 |
| Tritium, dissolved | 10028-17-8 | EPA 906.0 | 110 ± 240 | 400 | | pCi/L | 1 | 11/16/2000 | 12/01/2000 | ALZ | P8054 |

Client: **Envirocare of Utah**
Work Order: **0010250**
Project: **LARW**

Client Sample ID: **GW-406**
Tag Number:

Lab Sample ID: **0010250-04A**
Date Collected: **10/25/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 7440-61-1 | ASTM D2907 | 0.0085 | 0.0009 | | mg/L | 1 | 11/20/2000 | 11/30/2000 | AWT | P8109 |
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 7.7 ± 3.0 | 5 | | pCi/L | 1 | 01/11/2001 | 01/12/2000 | CMA | P8828 |
| Gross Alpha, dissolved | 12587-46-1 | EPA 00-02 | 63 ± 22 | 20 | L | pCi/L | 1 | 11/08/2000 | 11/13/2000 | AEW | P7912 |
| Gross Beta, dissolved | 12587-47-2 | EPA 900.0 | 660 ± 520 | 800 | L | pCi/L | 1 | 11/08/2000 | 11/14/2000 | AEW | P7911 |
| Potassium-40, dissolved | 13966-00-2 | EPA 901.1 | 410 ± 130 | 200 | | pCi/L | 1 | | 11/27/2000 | LLC | A11568 |
| Radium-226, dissolved | 13982-63-3 | EPA 903.0M/SM 705M | 1.8 ± 0.54 | 0.5 | | pCi/L | 1 | 11/07/2000 | 11/13/2000 | CEJ | P7885 |

**Qualifiers:**
ND - Not detected at the reporting limit
B - Analyte detected in method blank
Z - Sample > 10 times blank result
J - Analyte detected below reporting limit
L - Contract/Client reporting limit exceeded
M - Maximum contaminant level exceeded
E - Value above quantitation range
R - RPD outside accepted recovery limits
X - Duplicate sample(s) < 5 times limit
S - Spike outside accepted recovery limits
Y - Unspiked sample > 4 times amount spiked

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**Date:** 16-Jan-01

# CLIENT SAMPLE REPORT

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 2.6 ± 0.44 | 0.6 | pCi/L | 1 | 11/14/2000 | 11/28/2000 | CWP | P8012 |
| Strontium-89/90, dissolved | 11-10-9 | EPA 905.0/SM704 | 1.0 ± 0.91 | 2 | pCi/L | 1 | 11/13/2000 | 11/17/2000 | MTC | P7999 |
| Neptunium-237, dissolved | 13994-20-2 | EPA 907.0M/520M | 0.36 ± 0.24 | 0.3 | pCi/L | 1 | 11/17/2000 | 12/08/2000 | BPM | P8075 |
| Uranium-233/234, dissolved | 13966-29-5 | EPA 908.0M | 4.4 ± 0.96 | 0.5 | pCi/L | 1 | 11/21/2000 | 11/30/2000 | KEB | P8136 |
| Uranium-235/236, dissolved | 15117-96-1 | EPA 908.0M | -0.40 ± 0.25 | 0.5 | pCi/L | 1 | 11/21/2000 | 11/30/2000 | KEB | P8136 |
| Uranium-238, dissolved | 7440-61-1 | EPA 908.0M | 2.9 ± 0.70 | 0.5 | pCi/L | 1 | 11/21/2000 | 11/30/2000 | KEB | P8136 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | 1.4 ± 0.12 | 0.5 | pCi/L | 1 | 12/05/2000 | 12/12/2000 | KEB | P8321 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | -0.50 ± 0.28 | 0.6 | pCi/L | 1 | 12/05/2000 | 12/12/2000 | KEB | P8321 |

Client: **Envirocare of Utah**
Work Order: **0010250**
Project: **LARW**

Client Sample ID: **GW-406**
Tag Number:

Lab Sample ID: **0010250-04B**
Date Collected: **10/25/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Carbon-14, dissolved | 14762-75-5 | EPA 520-C01M | -13 ± 17 | 20 | | pCi/L | 1 | 11/22/2000 | 12/15/2000 | JCP | P8171 |
| Iodine-129, dissolved | 15046-84-1 | EPA 902.0 | -0.90 ± 0.77 | 1 | | pCi/L | 1 | 11/29/2000 | 12/07/2000 | CWP | P8195 |

Client: **Envirocare of Utah**
Work Order: **0010250**
Project: **LARW**

Client Sample ID: **GW-406**
Tag Number:

Lab Sample ID: **0010250-04C**
Date Collected: **10/25/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Bromide | 24959-67-9 | SW846 9056 | 12 | 10 | | mg/L | 20 | | 11/16/2000 | PKL | A11229 |
| Tritium, dissolved | 10028-17-8 | EPA 906.0 | -130 ± 230 | 400 | | pCi/L | 1 | 11/16/2000 | 12/01/2000 | ALZ | P8054 |

**Qualifiers:** ND - Not detected at the reporting limit J - Analyte detected below reporting limit E - Value above quantitation range S - Spike outside accepted recovery limits
Analyte detected in method blank L - Contract/Client reporting limit exceeded D outside accepted recovery limits Y - Unspiked sample > 4 times amount spiked
ample > 10 times blank result M - Maximum contaminant level exceeded licate sample(s) < 5 times limit

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**Date:** 02-Jan-01

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah**
Work Order: **0011021**
Project: **LARW**

Client Sample ID: **GW-103**
Tag Number:

Lab Sample ID: **0011021-01A**
Date Collected: **10/30/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result | ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 0.030 | | 0.0009 | | mg/L | 1 | 11/20/2000 | 11/30/2000 | AWT | P8111 |
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 33 | ± 5.6 | 9 | | pCi/L | 1 | 12/14/2000 | 12/28/2000 | JCP | P8463 |
| Gross Alpha, dissolved | 12587-46-1 | EPA 00-02 | 63 | ± 17 | 10 | L | pCi/L | 1 | 11/15/2000 | 11/20/2000 | AEW | P8023 |
| Gross Beta, dissolved | 12587-47-2 | EPA 900.0 | 340 | ± 500 | 800 | L | pCi/L | 1 | 11/16/2000 | 11/22/2000 | AEW | P8045 |
| Potassium-40, dissolved | 13966-00-2 | EPA 901.1 | 410 | ± 120 | 200 | | pCi/L | 1 | | 11/27/2000 | LLC | A11571 |
| Radium-226, dissolved | 13982-63-3 | EPA 903.0M/SM 705M | 0.97 | ± 0.44 | 0.5 | | pCi/L | 1 | 11/13/2000 | 11/17/2000 | CEJ | P7988 |
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 2.2 | ± 0.44 | 0.6 | | pCi/L | 1 | 11/15/2000 | 11/30/2000 | CWP | P8035 |
| Strontium-89/90, dissolved | 11-10-9 | EPA 905.0/SM704 | 0.93 | ± 0.94 | 2 | | pCi/L | 1 | 11/13/2000 | 11/17/2000 | MTC | P7999 |
| Neptunium-237, dissolved | 13994-20-2 | EPA 907.0M/520M | 0.23 | ± 0.36 | 0.5 | | pCi/L | 1 | 11/17/2000 | 12/07/2000 | EDS | P8074 |
| Uranium-233/234, dissolved | 13966-29-5 | EPA 908.0M | 16 | ± 1.3 | 0.4 | | pCi/L | 1 | 12/20/2000 | 12/26/2000 | LLC | P8535 |
| Uranium-235/236, dissolved | 15117-96-1 | EPA 908.0M | 0.26 | ± 0.30 | 0.4 | | pCi/L | 1 | 12/20/2000 | 12/26/2000 | LLC | P8535 |
| Uranium-238, dissolved | 7440-61-1 | EPA 908.0M | 7.4 | ± 0.88 | 0.4 | | pCi/L | 1 | 12/20/2000 | 12/26/2000 | LLC | P8535 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | -2.0 | ± 0.78 | 0.5 | | pCi/L | 1 | 12/05/2000 | 12/12/2000 | LLC | P8322 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | -0.16 | ± 0.31 | 0.6 | | pCi/L | 1 | 12/05/2000 | 12/12/2000 | LLC | P8322 |

Client: **Envirocare of Utah**
Work Order: **0011021**
Project: **LARW**

Client Sample ID: **GW-103**
Tag Number:

Lab Sample ID: **0011021-01B**
Date Collected: **10/30/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result | ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Carbon-14, dissolved | 14762-75-5 | EPA 520-C01M | -30 | ± 26 | 30 | | pCi/L | 1 | 11/22/2000 | 12/15/2000 | JCP | P8171 |
| Iodine-129, dissolved | 15046-84-1 | EPA 902.0 | -0.57 | ± 0.78 | 1 | | pCi/L | 1 | 12/06/2000 | 12/15/2000 | CWP | P8197 |

Qualifiers:
ND - Not detected at the reporting limit
B - Analyte detected in method blank
Z - Sample > 10 times blank result
J - Analyte detected below reporting limit
L - Contract/Client reporting limit exceeded
M - Maximum contaminant level exceeded
E - Value above quantitation range
R - RPD outside accepted recovery limits
X - Duplicate sample(s) < 5 times limit
S - Spike outside accepted recovery limits
Y - Unspiked sample > 4 times amount spiked

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**Date:** 02-Jan-01

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah**
Work Order: **0011021**
Project: **LARW**

## Client Sample ID: GW-103

Tag Number:

Lab Sample ID: **0011021-01C**
Date Collected: **10/30/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Bromide | 24959-67-9 | SW846 9056 | 12 | 10 | | mg/L | 20 | | 11/16/2000 | PKL | A11229 |
| Tritium, dissolved | 10028-17-8 | EPA 906.0 | -210 ± 230 | 400 | | pCi/L | 1 | 11/16/2000 | 12/01/2000 | ALZ | P8054 |

Client: **Envirocare of Utah**
Work Order: **0011021**
Project: **LARW**

## Client Sample ID: GW-104

Tag Number:

Lab Sample ID: **0011021-02A**
Date Collected: **10/30/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 0.021 | 0.0009 | | mg/L | 1 | 11/20/2000 | 11/30/2000 | AWT | P8111 |
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 27 ± 5.5 | 9 | L | pCi/L | 1 | 12/14/2000 | 12/28/2000 | JCP | P8463 |
| Gross Alpha, dissolved | 12587-46-1 | EPA 00-02 | 43 ± 18 | 10 | L | pCi/L | 1 | 11/15/2000 | 11/20/2000 | AEW | P8023 |
| Gross Beta, dissolved | 12587-47-2 | EPA 900.0 | 370 ± 510 | 800 | L | pCi/L | 1 | 11/16/2000 | 11/22/2000 | AEW | P8045 |
| Potassium-40, dissolved | 13966-00-2 | EPA 901.1 | 250 ± 100 | 100 | | pCi/L | 1 | | 11/27/2000 | LLC | A11571 |
| Radium-226, dissolved | 13982-63-3 | EPA 903.0M/SM 705M | 1.1 ± 0.45 | 0.5 | | pCi/L | 1 | 11/13/2000 | 11/17/2000 | CEJ | P7988 |
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 1.8 ± 0.43 | 0.6 | | pCi/L | 1 | 11/15/2000 | 11/30/2000 | CWP | P8035 |
| Strontium-89/90, dissolved | 11-10-9 | EPA 905.0/SM704 | 0.83 ± 0.89 | 2 | | pCi/L | 1 | 11/13/2000 | 11/17/2000 | MTC | P7999 |
| Neptunium-237, dissolved | 13994-20-2 | EPA 907.0M/520M | 0.66 ± 0.49 | 0.5 | | pCi/L | 1 | 11/17/2000 | 12/07/2000 | EDS | P8074 |
| Uranium-233/234, dissolved | 13966-29-5 | EPA 908.0M | 12 ± 1.1 | 0.3 | | pCi/L | 1 | 12/20/2000 | 12/26/2000 | LLC | P8535 |
| Uranium-235/236, dissolved | 15117-96-1 | EPA 908.0M | 0.27 ± 0.29 | 0.4 | | pCi/L | 1 | 12/20/2000 | 12/26/2000 | LLC | P8535 |
| Uranium-238, dissolved | 7440-61-1 | EPA 908.0M | 6.1 ± 0.79 | 0.3 | | pCi/L | 1 | 12/20/2000 | 12/26/2000 | LLC | P8535 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | -1.8 ± 0.77 | 0.5 | | pCi/L | 1 | 12/05/2000 | 12/12/2000 | LLC | P8322 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | 0.011 ± 0.32 | 0.5 | | pCi/L | 1 | 12/05/2000 | 12/12/2000 | LLC | P8322 |

**Qualifiers:** ND - Not detected at the reporting limit; J - Analyte detected below reporting limit; E - Value above quantitation range; S - Spike outside accepted recovery limits; B - Analyte detected in method blank; L - Contract/Client reporting limit exceeded; Q - outside accepted recovery limits; Y - Unspiked sample > 4 times amount spiked; H - Sample > 10 times blank result; M - Maximum contaminant level exceeded; X - ate sample(s) < 5 times limit

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**Date:** 02-Jan-01

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah**
Work Order: **0011021**
Project: **LARW**

Client Sample ID: **GW-104**
Tag Number:

Lab Sample ID: **0011021-02B**
Date Collected: **10/30/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result | ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Carbon-14, dissolved | 14762-75-5 | EPA 520-C01M | 37 | ± 20 | 30 | | pCi/L | 1 | 11/22/2000 | 12/15/2000 | JCP | P8171 |
| Iodine-129, dissolved | 15046-84-1 | EPA 902.0 | -0.47 | ± 0.76 | 1 | | pCi/L | 1 | 12/06/2000 | 12/15/2000 | CWP | P8197 |

Client: **Envirocare of Utah**
Work Order: **0011021**
Project: **LARW**

Client Sample ID: **GW-104**
Tag Number:

Lab Sample ID: **0011021-02C**
Date Collected: **10/30/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result | ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bromide | 24959-67-9 | SW846 9056 | ND | | 10 | | mg/L | 20 | | 11/16/2000 | PKL | A11229 |
| Tritium, dissolved | 10028-17-8 | EPA 906.0 | -91 | ± 230 | 400 | | pCi/L | 1 | 11/16/2000 | 12/01/2000 | ALZ | P8054 |

**Qualifiers:**
ND - Not detected at the reporting limit
B - Analyte detected in method blank
Z - Sample > 10 times blank result
J - Analyte detected below reporting limit
L - Contract/Client reporting limit exceeded
M - Maximum contaminant level exceeded
E - Value above quantitation range
R - RPD outside accepted recovery limits
X - Duplicate sample(s) < 5 times limit
S - Spike outside accepted recovery limits
Y - Unspiked sample > 4 times amount spiked

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**Date:** 18-Jan-01

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah**
Work Order: **0011084**
Project: **LARW**

## Client Sample ID: **GW-99**
Tag Number:

Lab Sample ID: **0011084-01A**
Date Collected: **11/02/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 7440-61-1 | ASTM D2907 | 0.0013 | 0.0009 | | mg/L | 1 | 11/21/2000 | 12/06/2000 | AWT | P8145 |
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 5.1 ± 2.8 | 5 | | pCi/L | 1 | 01/13/2001 | 01/14/2001 | CMA | P8837 |
| Gross Alpha, dissolved | 12587-46-1 | EPA 00-02 | 28 ± 14 | 10 | L | pCi/L | 1 | 11/16/2000 | 11/29/2000 | AEW | P8046 |
| Gross Beta, dissolved | 12587-47-2 | EPA 900.0 | 730 ± 510 | 800 | L | pCi/L | 1 | 11/17/2000 | 11/20/2000 | AEW | P8073 |
| Potassium-40, dissolved | 13966-00-2 | EPA 901.1 | 290 ± 100 | 100 | | pCi/L | 1 | | 11/27/2000 | LLC | A11626 |
| Radium-226, dissolved | 13982-63-3 | EPA 903.0M/SM 705M | 0.072 ± 0.30 | 0.5 | | pCi/L | 1 | 11/21/2000 | 11/22/2000 | CEJ | P8061 |
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 1.6 ± 0.43 | 0.6 | | pCi/L | 1 | 11/27/2000 | 12/05/2000 | CWP | P8193 |
| Strontium-89/90, dissolved | 11-10-9 | EPA 905.0/SM704 | 0.24 ± 0.91 | 2 | | pCi/L | 1 | 11/13/2000 | 11/17/2000 | MTC | P8000 |
| Neptunium-237, dissolved | 13994-20-2 | EPA 907.0M/520M | 0.61 ± 0.33 | 0.3 | | pCi/L | 1 | 11/27/2000 | 12/13/2000 | JCP | P8183 |
| Uranium-233/234, dissolved | 13966-29-5 | EPA 908.0M | 2.2 ± 0.69 | 0.4 | | pCi/L | 1 | 12/20/2000 | 12/26/2000 | LLC | P8535 |
| Uranium-235/236, dissolved | 15117-96-1 | EPA 908.0M | -0.23 ± 0.26 | 0.5 | | pCi/L | 1 | 12/20/2000 | 12/26/2000 | LLC | P8535 |
| Uranium-238, dissolved | 7440-61-1 | EPA 908.0M | 1.6 ± 0.57 | 0.4 | | pCi/L | 1 | 12/20/2000 | 12/26/2000 | LLC | P8535 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | -0.55 ± 0.67 | 0.5 | | pCi/L | 1 | 12/11/2000 | 12/13/2000 | LLC | P8401 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | -0.20 ± 0.32 | 0.6 | | pCi/L | 1 | 12/11/2000 | 12/13/2000 | LLC | P8401 |

Client: **Envirocare of Utah**
Work Order: **0011084**
Project: **LARW**

## Client Sample ID: **GW-99**
Tag Number:

Lab Sample ID: **0011084-01B**
Date Collected: **11/02/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Carbon-14, dissolved | 14762-75-5 | EPA 520-C01M | -5.2 ± 18 | 30 | | pCi/L | 1 | 11/22/2000 | 12/13/2000 | JCP | P8172 |
| Iodine-129, dissolved | 15046-84-1 | EPA 902.0 | -0.44 ± 0.80 | 1 | | pCi/L | 1 | 12/06/2000 | 12/15/2000 | CWP | P8197 |

Qualifiers: ND - Not detected at the reporting limit; J - Analyte detected below reporting limit; E - Value above quantitation range; S - Spike outside accepted recovery limits; Analyte detected in method blank; L - Contract/Client reporting limit exceeded; RD outside accepted recovery limits; Y - Unspiked sample > 4 times amount spi; Sample > 10 times blank result; M - Maximum contaminant level exceeded; plicate sample(s) < 5 times limit

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**Date:** 18-Jan-01

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah**
Work Order: **0011084**
Project: **LARW**

Client Sample ID: **GW-99**
Tag Number:

Lab Sample ID: **0011084-01C**
Date Collected: **11/02/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Bromide | 24959-67-9 | SW846 9056 | 24 | 10 | | mg/L | 20 | | 12/04/2000 | PKL | A11575 |
| Tritium, dissolved | 10028-17-8 | EPA 906.0 | -47 ± 210 | 400 | | pCi/L | 1 | 12/11/2000 | 12/16/2000 | ALZ | P8409 |

Client: **Envirocare of Utah**
Work Order: **0011084**
Project: **LARW**

Client Sample ID: **GW-94**
Tag Number:

Lab Sample ID: **0011084-02A**
Date Collected: **11/02/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 7440-61-1 | ASTM D2907 | 0.033 | 0.0009 | | mg/L | 1 | 11/21/2000 | 12/06/2000 | AWT | P8145 |
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 5.6 ± 2.8 | 5 | | pCi/L | 1 | 01/13/2001 | 01/14/2001 | CMA | P8837 |
| Gross Alpha, dissolved | 12587-46-1 | EPA 00-02 | 69 ± 27 | 20 | L | pCi/L | 1 | 11/16/2000 | 11/29/2000 | AEW | P8046 |
| Gross Beta, dissolved | 12587-47-2 | EPA 900.0 | 1000 ± 520 | 800 | L | pCi/L | 1 | 11/17/2000 | 11/20/2000 | AEW | P8073 |
| Potassium-40, dissolved | 13966-00-2 | EPA 901.1 | 350 ± 100 | 100 | | pCi/L | 1 | | 11/27/2000 | LLC | A11626 |
| Radium-226, dissolved | 13982-63-3 | EPA 903.0M/SM 705M | 0.79 ± 0.40 | 0.5 | | pCi/L | 1 | 11/21/2000 | 11/27/2000 | CEJ | P8061 |
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 1.6 ± 0.43 | 0.6 | | pCi/L | 1 | 11/27/2000 | 12/05/2000 | CWP | P8193 |
| Strontium-89/90, dissolved | 11-10-9 | EPA 905.0/SM704 | -0.030 ± 0.87 | 2 | | pCi/L | 1 | 11/13/2000 | 11/17/2000 | MTC | P8000 |
| Neptunium-237, dissolved | 13994-20-2 | EPA 907.0M/520M | 0.067 ± 0.39 | 0.6 | | pCi/L | 1 | 11/27/2000 | 12/13/2000 | JCP | P8183 |
| Uranium-233/234, dissolved | 13966-29-5 | EPA 908.0M | 18 ± 1.4 | 0.4 | | pCi/L | 1 | 12/15/2000 | 12/21/2000 | LLC | P8487 |
| Uranium-235/236, dissolved | 15117-96-1 | EPA 908.0M | 0.15 ± 0.28 | 0.4 | | pCi/L | 1 | 12/15/2000 | 12/21/2000 | LLC | P8487 |
| Uranium-238, dissolved | 7440-61-1 | EPA 908.0M | 9.5 ± 0.98 | 0.4 | | pCi/L | 1 | 12/15/2000 | 12/21/2000 | LLC | P8487 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | -2.6 ± 0.84 | 0.6 | | pCi/L | 1 | 12/11/2000 | 12/13/2000 | LLC | P8401 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | 0.041 ± 0.40 | 0.7 | | pCi/L | 1 | 12/11/2000 | 12/13/2000 | LLC | P8401 |

**Qualifiers:**
ND - Not detected at the reporting limit
B - Analyte detected in method blank
Z - Sample > 10 times blank result
J - Analyte detected below reporting limit
L - Contract/Client reporting limit exceeded
M - Maximum contaminant level exceeded
E - Value above quantitation range
R - RPD outside accepted recovery limits
X - Duplicate sample(s) < 5 times limit
S - Spike outside accepted recovery limits
Y - Unspiked sample > 4 times amount spiked

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**Date:** 18-Jan-01

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah**
Work Order: **0011084**
Project: **LARW**

## Client Sample ID: **GW-94**
Tag Number:

Lab Sample ID: **0011084-02B**
Date Collected: **11/02/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Carbon-14, dissolved | 14762-75-5 | EPA 520-C01M | -5.3 ± 15 | 20 | | pCi/L | 1 | 11/22/2000 | 12/13/2000 | JCP | P8172 |
| Iodine-129, dissolved | 15046-84-1 | EPA 902.0 | -0.43 ± 0.80 | 1 | | pCi/L | 1 | 12/06/2000 | 12/15/2000 | CWP | P8197 |

Client: **Envirocare of Utah**
Work Order: **0011084**
Project: **LARW**

## Client Sample ID: **GW-94**
Tag Number:

Lab Sample ID: **0011084-02C**
Date Collected: **11/02/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Bromide | 24959-67-9 | SW846 9056 | ND | 10 | | mg/L | 20 | | 12/04/2000 | PKL | A11575 |
| Tritium, dissolved | 10028-17-8 | EPA 906.0 | 39 ± 210 | 400 | | pCi/L | 1 | 12/11/2000 | 12/16/2000 | ALZ | P8409 |

Client: **Envirocare of Utah**
Work Order: **0011084**
Project: **LARW**

## Client Sample ID: **GW-95**
Tag Number:

Lab Sample ID: **0011084-03A**
Date Collected: **11/02/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 7440-61-1 | ASTM D2907 | 0.027 | 0.0009 | | mg/L | 1 | 11/21/2000 | 12/06/2000 | AWT | P8145 |
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 4.4 ± 2.8 | 5 | | pCi/L | 1 | 01/13/2001 | 01/15/2001 | CMA | P8837 |
| Gross Alpha, dissolved | 12587-46-1 | EPA 00-02 | 49 ± 15 | 10 | L | pCi/L | 1 | 11/16/2000 | 11/29/2000 | AEW | P8046 |
| Gross Beta, dissolved | 12587-47-2 | EPA 900.0 | 670 ± 520 | 800 | L | pCi/L | 1 | 11/17/2000 | 11/20/2000 | AEW | P8073 |
| Potassium-40, dissolved | 13966-00-2 | EPA 901.1 | 310 ± 100 | 100 | | pCi/L | 1 | | 11/27/2000 | LLC | A11626 |
| Radium-226, dissolved | 13982-63-3 | EPA 903.0M/SM 705M | 0.13 ± 0.37 | 0.6 | | pCi/L | 1 | 11/21/2000 | 11/22/2000 | CEJ | P8061 |
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 1.4 ± 0.42 | 0.6 | | pCi/L | 1 | 11/27/2000 | 12/05/2000 | CWP | P8193 |
| Strontium-89/90, dissolved | 11-10-9 | EPA 905.0/SM704 | -0.13 ± 0.85 | 2 | | pCi/L | 1 | 11/13/2000 | 11/17/2000 | MTC | P8000 |
| Neptunium-237, dissolved | 13994-20-2 | EPA 907.0M/520M | 0.30 ± 0.46 | 0.6 | | pCi/L | 1 | 11/27/2000 | 12/13/2000 | JCP | P8183 |
| Uranium-233/234, dissolved | 13966-29-5 | EPA 908.0M | 18 ± 1.5 | 0.4 | | pCi/L | 1 | 12/15/2000 | 12/21/2000 | LLC | P8487 |

Qualif[illegible] ND - Not detected at the reporting limit J - Analyte detected below reporting limit [illegible] - Value above quantitation range S - Spike outside accepted recovery limits
[illegible] Analyte detected in method blank L - Contract/Client reporting limit exceeded [illegible]D outside accepted recovery limits Y - Unspiked sample > 4 times amount spik[illegible]
[illegible]ample > 10 times blank result M - Maximum contaminant level exceeded X [illegible]plicate sample(s) < 5 times limit

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**Date:** 18-Jan-01

# CLIENT SAMPLE REPORT

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Uranium-235/236, dissolved | 15117-96-1 | EPA 908.0M | -0.047 ± 0.28 | 0.5 | pCi/L | 1 | 12/15/2000 | 12/21/2000 | LLC | P8487 |
| Uranium-238, dissolved | 7440-61-1 | EPA 908.0M | 9.5 ± 1.1 | 0.4 | pCi/L | 1 | 12/15/2000 | 12/21/2000 | LLC | P8487 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | -2.3 ± 0.78 | 0.6 | pCi/L | 1 | 12/11/2000 | 12/13/2000 | LLC | P8401 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | -0.13 ± 0.36 | 0.7 | pCi/L | 1 | 12/11/2000 | 12/13/2000 | LLC | P8401 |

Client: **Envirocare of Utah** — Client Sample ID: **GW-95** — Lab Sample ID: **0011084-03B**
Work Order: **0011084** — Tag Number: — Date Collected: **11/02/2000**
Project: **LARW** — Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Carbon-14, dissolved | 14762-75-5 | EPA 520-C01M | -8.8 ± 15 | 20 | | pCi/L | 1 | 11/22/2000 | 12/13/2000 | JCP | P8172 |
| Iodine-129, dissolved | 15046-84-1 | EPA 902.0 | 0.16 ± 0.70 | 1 | | pCi/L | 1 | 12/06/2000 | 12/15/2000 | CWP | P8197 |

Client: **Envirocare of Utah** — Client Sample ID: **GW-95** — Lab Sample ID: **0011084-03C**
Work Order: **0011084** — Tag Number: — Date Collected: **11/02/2000**
Project: **LARW** — Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Bromide | 24959-67-9 | SW846 9056 | ND | 10 | | mg/L | 20 | | 12/05/2000 | PKL | A11575 |
| Tritium, dissolved | 10028-17-8 | EPA 906.0 | 70 ± 220 | 400 | | pCi/L | 1 | 12/11/2000 | 12/16/2000 | ALZ | P8409 |

Qualifiers: ND - Not detected at the reporting limit; J - Analyte detected below reporting limit; E - Value above quantitation range; S - Spike outside accepted recovery limits
B - Analyte detected in method blank; L - Contract/Client reporting limit exceeded; R - RPD outside accepted recovery limits; Y - Unspiked sample > 4 times amount spiked
Z - Sample > 10 times blank result; M - Maximum contaminant level exceeded; X - Duplicate sample(s) < 5 times limit

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Date: 30-Nov-00

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah**
Work Order: **0010218**
Project: **11e.(2)**

Client Sample ID: **GW-24A**
Tag Number:

Lab Sample ID: **0010218-01A**
Date Collected: **10/23/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | -0.17 ± 0.86 | 0.6 | | pCi/L | 1 | 11/20/2000 | 11/28/2000 | KEB | P8100 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | -0.11 ± 0.38 | 0.7 | | pCi/L | 1 | 11/20/2000 | 11/28/2000 | KEB | P8100 |

Client: **Envirocare of Utah**
Work Order: **0010218**
Project: **11e.(2)**

Client Sample ID: **GW-402**
Tag Number:

Lab Sample ID: **0010218-02A**
Date Collected: **10/23/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | -1.0 ± 1.1 | 0.6 | | pCi/L | 1 | 11/20/2000 | 11/28/2000 | KEB | P8100 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | 0.089 ± 0.38 | 0.6 | | pCi/L | 1 | 11/20/2000 | 11/28/2000 | KEB | P8100 |

Qualifiers: ND - Not detected at the reporting limit J - Analyte detected below reporting limit E - Value above quantitation range S - Spike outside accepted recovery limits
P - Analyte detected in method blank L - Contract/Client reporting limit exceeded [illegible] outside accepted recovery limits Y - Unspiked sample > 4 times amount spike
[illegible]mple > 10 times blank result M - Maximum contaminant level exceeded [illegible]cate sample(s) < 5 times limit

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**Date:** 30-Nov-00

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah**
Work Order: **0010219**
Project: **11e.(2)**

Client Sample ID: **GW-26**
Tag Number:

Lab Sample ID: **0010219-01A**
Date Collected: **10/23/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 0.030 | 0.0009 | | mg/L | 1 | 11/08/2000 | 11/27/2000 | AWT | P7921 |
| Radium-226, dissolved | 13982-63-3 | EPA 903.0M/SM 705M | 0.67 ± 0.46 | 0.6 | | pCi/L | 1 | 11/01/2000 | 11/07/2000 | CEJ | P7800 |
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 1.9 ± 0.59 | 0.9 | L | pCi/L | 1 | 11/06/2000 | 11/15/2000 | CWP | P7873 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | -2.6 ± 0.99 | 0.6 | | pCi/L | 1 | 11/20/2000 | 11/28/2000 | KEB | P8100 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | 0.11 ± 0.40 | 0.6 | | pCi/L | 1 | 11/20/2000 | 11/28/2000 | KEB | P8100 |

Client: **Envirocare of Utah**
Work Order: **0010219**
Project: **11e.(2)**

Client Sample ID: **GW-26**
Tag Number:

Lab Sample ID: **0010219-01B**
Date Collected: **10/23/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Fluorine as Fluoride | 7782-41-4 | EPA 340.2M | ND | 0.1 | | mg/L | 1 | | 11/07/2000 | SLA | A11023 |
| Bromide | 24959-67-9 | SW846 9056 | ND | 10 | | mg/L | 20 | | 11/15/2000 | PKL | A11229 |

Qualifiers:
ND - Not detected at the reporting limit
B - Analyte detected in method blank
Z - Sample > 10 times blank result
J - Analyte detected below reporting limit
L - Contract/Client reporting limit exceeded
M - Maximum contaminant level exceeded
E - Value above quantitation range
R - RPD outside accepted recovery limits
X - Duplicate sample(s) < 5 times limit
S - Spike outside accepted recovery limits
Y - Unspiked sample > 4 times amount spiked

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**Date:** 09-Jan-0

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah**
Work Order: **0010220**
Project: **LARW 11e.(2)**

Client Sample ID: **GW-20**
Tag Number:

Lab Sample ID: **0010220-01A**
Date Collected: **10/23/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 7440-61-1 | ASTM D2907 | 0.0091 | 0.0009 | | mg/L | 1 | 11/08/2000 | 11/27/2000 | AWT | P7921 |
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 14 ± 3.5 | 6 | L | pCi/L | 1 | 12/15/2000 | 01/03/2001 | MDR | P8484 |
| Gross Alpha, dissolved | 12587-46-1 | EPA 00-02 | 45 ± 15 | 10 | L | pCi/L | 1 | 11/06/2000 | 11/10/2000 | AEW | P7862 |
| Gross Beta, dissolved | 12587-47-2 | EPA 900.0 | 340 ± 530 | 800 | L | pCi/L | 1 | 11/06/2000 | 11/09/2000 | AEW | P7860 |
| Potassium-40, dissolved | 13966-00-2 | EPA 901.1 | 410 ± 130 | 200 | | pCi/L | 1 | | 11/16/2000 | LLC | A11401 |
| Radium-226, dissolved | 13982-63-3 | EPA 903.0M/SM 705M | 1.6 ± 0.57 | 0.6 | | pCi/L | 1 | 11/01/2000 | 11/07/2000 | CEJ | P7800 |
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 1.5 ± 0.40 | 0.6 | | pCi/L | 1 | 11/06/2000 | 11/15/2000 | CWP | P7873 |
| Strontium-89/90, dissolved | 11-10-9 | EPA 905.0/SM704 | 0.090 ± 0.84 | 2 | | pCi/L | 1 | 11/02/2000 | 11/10/2000 | MTC | P7835 |
| Neptunium-237, dissolved | 13994-20-2 | EPA 907.0M/520M | 0.13 ± 0.31 | 0.4 | | pCi/L | 1 | 11/17/2000 | 12/07/2000 | EDS | P8074 |
| Uranium-233/234, dissolved | 13966-29-5 | EPA 908.0M | 5.9 ± 0.98 | 0.5 | | pCi/L | 1 | 11/10/2000 | 11/20/2000 | KEB | P7975 |
| Uranium-235/236, dissolved | 15117-96-1 | EPA 908.0M | -0.11 ± 0.31 | 0.5 | | pCi/L | 1 | 11/10/2000 | 11/20/2000 | KEB | P7975 |
| Uranium-238, dissolved | 7440-61-1 | EPA 908.0M | 2.9 ± 0.66 | 0.5 | | pCi/L | 1 | 11/10/2000 | 11/20/2000 | KEB | P7975 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | 0.16 ± 0.74 | 0.6 | | pCi/L | 1 | 11/20/2000 | 11/28/2000 | KEB | P8100 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | 0.30 ± 0.42 | 0.6 | | pCi/L | 1 | 11/20/2000 | 11/28/2000 | KEB | P8100 |

Client: **Envirocare of Utah**
Work Order: **0010220**
Project: **LARW 11e.(2)**

Client Sample ID: **GW-20**
Tag Number:

Lab Sample ID: **0010220-01B**
Date Collected: **10/23/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Fluorine as Fluoride | 7782-41-4 | EPA 340.2M | ND | 0.1 | | mg/L | 1 | | 11/07/2000 | SLA | A11023 |
| Bromide | 24959-67-9 | SW846 9056 | 10 | 10 | | mg/L | 20 | | 11/15/2000 | PKL | A11229 |
| Tritium, dissolved | 10028-17-8 | EPA 906.0 | -44 ± 220 | 400 | | pCi/L | 1 | 11/10/2000 | 11/29/2000 | ALZ | P7980 |

**Qualifiers:** ND - Not detected at the reporting limit; J - Analyte detected below reporting limit; E - Value above quantitation range; S - Spike outside accepted recovery limits; ...lyte detected in method blank; L - Contract/Client reporting limit exceeded; ...utside accepted recovery limits; Y - Unspiked sample > 4 times amount spiked; ...ple > 10 times blank result; M - Maximum contaminant level exceeded; X - L...te sample(s) < 5 times limit

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**Date:** 09-Jan-01

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah**
Work Order: **0010220**
Project: **LARW 11e.(2)**

Client Sample ID: **GW-20**
Tag Number:

Lab Sample ID: **0010220-01C**
Date Collected: **10/23/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result | ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Carbon-14, dissolved | 14762-75-5 | EPA 520-C01M | -17 | ± 18 | 30 | | pCi/L | 1 | 11/22/2000 | 12/06/2000 | JCP | P8170 |
| Iodine-129, dissolved | 15046-84-1 | EPA 902.0 | -0.84 | ± 0.79 | 1 | | pCi/L | 1 | 11/02/2000 | 11/21/2000 | CWP | P7827 |

Client: **Envirocare of Utah**
Work Order: **0010220**
Project: **LARW 11e.(2)**

Client Sample ID: **GW-24**
Tag Number:

Lab Sample ID: **0010220-02A**
Date Collected: **10/23/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result | ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 7440-61-1 | ASTM D2907 | 0.018 | | 0.0009 | | mg/L | 1 | 11/08/2000 | 11/21/2000 | AWT | P7922 |
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 12 | ± 3.4 | 6 | L | pCi/L | 1 | 12/15/2000 | 01/03/2001 | MDR | P8484 |
| Gross Alpha, dissolved | 12587-46-1 | EPA 00-02 | 48 | ± 15 | 10 | L | pCi/L | 1 | 11/06/2000 | 11/10/2000 | AEW | P7862 |
| Gross Beta, dissolved | 12587-47-2 | EPA 900.0 | -23 | ± 490 | 800 | L | pCi/L | 1 | 11/06/2000 | 11/09/2000 | AEW | P7860 |
| Potassium-40, dissolved | 13966-00-2 | EPA 901.1 | 350 | ± 110 | 100 | | pCi/L | 1 | | 11/16/2000 | LLC | A11401 |
| Radium-226, dissolved | 13982-63-3 | EPA 903.0M/SM 705M | 0.84 | ± 0.45 | 0.5 | | pCi/L | 1 | 11/01/2000 | 11/07/2000 | CEJ | P7800 |
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 1.7 | ± 0.40 | 0.6 | | pCi/L | 1 | 11/06/2000 | 11/15/2000 | CWP | P7873 |
| Strontium-89/90, dissolved | 11-10-9 | EPA 905.0/SM704 | -0.27 | ± 0.60 | 2 | | pCi/L | 1 | 11/02/2000 | 11/13/2000 | MTC | P7835 |
| Neptunium-237, dissolved | 13994-20-2 | EPA 907.0M/520M | 0.11 | ± 0.32 | 0.5 | | pCi/L | 1 | 11/17/2000 | 12/07/2000 | EDS | P8074 |
| Uranium-233/234, dissolved | 13966-29-5 | EPA 908.0M | 11 | ± 1.1 | 0.5 | | pCi/L | 1 | 11/10/2000 | 11/20/2000 | KEB | P7975 |
| Uranium-235/236, dissolved | 15117-96-1 | EPA 908.0M | -0.063 | ± 0.30 | 0.5 | | pCi/L | 1 | 11/10/2000 | 11/20/2000 | KEB | P7975 |
| Uranium-238, dissolved | 7440-61-1 | EPA 908.0M | 6.3 | ± 0.85 | 0.5 | | pCi/L | 1 | 11/10/2000 | 11/20/2000 | KEB | P7975 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | -0.13 | ± 0.28 | 0.3 | | pCi/L | 1 | 11/20/2000 | 11/27/2000 | KEB | P8114 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | -0.35 | ± 0.18 | 0.4 | | pCi/L | 1 | 11/20/2000 | 11/27/2000 | KEB | P8114 |

**Qualifiers:**
ND - Not detected at the reporting limit
B - Analyte detected in method blank
Z - Sample > 10 times blank result
J - Analyte detected below reporting limit
L - Contract/Client reporting limit exceeded
M - Maximum contaminant level exceeded
E - Value above quantitation range
R - RPD outside accepted recovery limits
X - Duplicate sample(s) < 5 times limit
S - Spike outside accepted recovery limits
Y - Unspiked sample > 4 times amount spiked

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**Date:** 09-Jan-01

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah**
Work Order: **0010220**
Project: **LARW 11e.(2)**

Client Sample ID: **GW-24**
Tag Number:

Lab Sample ID: **0010220-02B**
Date Collected: **10/23/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Fluorine as Fluoride | 7782-41-4 | EPA 340.2M | ND | 0.1 | | mg/L | 1 | | 11/07/2000 | SLA | A11023 |
| Bromide | 24959-67-9 | SW846 9056 | ND | 10 | | mg/L | 20 | | 11/15/2000 | PKL | A11229 |
| Tritium, dissolved | 10028-17-8 | EPA 906.0 | -74 ± 220 | 400 | | pCi/L | 1 | 11/10/2000 | 11/29/2000 | ALZ | P7980 |

Client: **Envirocare of Utah**
Work Order: **0010220**
Project: **LARW 11e.(2)**

Client Sample ID: **GW-24**
Tag Number:

Lab Sample ID: **0010220-02C**
Date Collected: **10/23/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Carbon-14, dissolved | 14762-75-5 | EPA 520-C01M | -35 ± 21 | 30 | | pCi/L | 1 | 11/22/2000 | 12/05/2000 | JCP | P8170 |
| Iodine-129, dissolved | 15046-84-1 | EPA 902.0 | -1.1 ± 0.77 | 1 | | pCi/L | 1 | 11/02/2000 | 11/21/2000 | CWP | P7827 |

Client: **Envirocare of Utah**
Work Order: **0010220**
Project: **LARW 11e.(2)**

Client Sample ID: **GW-23**
Tag Number:

Lab Sample ID: **0010220-03A**
Date Collected: **10/23/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 7440-61-1 | ASTM D2907 | 0.021 | 0.0009 | | mg/L | 1 | 11/08/2000 | 11/21/2000 | AWT | P7922 |
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 12 ± 3.4 | 6 | L | pCi/L | 1 | 12/15/2000 | 01/03/2001 | MDR | P8484 |
| Gross Alpha, dissolved | 12587-46-1 | EPA 00-02 | 37 ± 13 | 10 | L | pCi/L | 1 | 11/06/2000 | 11/10/2000 | AEW | P7862 |
| Gross Beta, dissolved | 12587-47-2 | EPA 900.0 | 190 ± 290 | 500 | L | pCi/L | 1 | 11/06/2000 | 11/29/2000 | AEW | P7860 |
| Potassium-40, dissolved | 13966-00-2 | EPA 901.1 | 510 ± 140 | 200 | | pCi/L | 1 | | 11/16/2000 | LLC | A11401 |
| Radium-226, dissolved | 13982-63-3 | EPA 903.0M/SM 705M | 0.55 ± 0.43 | 0.6 | | pCi/L | 1 | 11/01/2000 | 11/07/2000 | CEJ | P7800 |
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 1.5 ± 0.40 | 0.6 | | pCi/L | 1 | 11/06/2000 | 11/15/2000 | CWP | P7873 |
| Strontium-89/90, dissolved | 11-10-9 | EPA 905.0/SM704 | -0.25 ± 0.62 | 2 | | pCi/L | 1 | 11/02/2000 | 11/13/2000 | MTC | P7835 |
| Neptunium-237, dissolved | 13994-20-2 | EPA 907.0M/520M | 0.33 ± 0.39 | 0.4 | | pCi/L | 1 | 11/17/2000 | 12/07/2000 | EDS | P8074 |

**Qualifiers:** ND - Not detected at the reporting limit; J - Analyte detected below reporting limit; E - Value above quantitation range; S - Spike outside accepted recovery limits; B - Analyte detected in method blank; L - Contract/Client reporting limit exceeded; N - Outside accepted recovery limits; Y - Unspiked sample > 4 times amount spiked; Z - Sample > 10 times blank result; M - Maximum contaminant level exceeded; X - Late sample(s) < 5 times limit

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**Date:** 09-Jan-01

# CLIENT SAMPLE REPORT

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Uranium-233/234, dissolved | 13966-29-5 | EPA 908.0M | 14 ± 1.2 | 0.3 | pCi/L | 1 | 11/28/2000 | 12/01/2000 | LLC | P8203 |
| Uranium-235/236, dissolved | 15117-96-1 | EPA 908.0M | 0.19 ± 0.28 | 0.4 | pCi/L | 1 | 11/28/2000 | 12/01/2000 | LLC | P8203 |
| Uranium-238, dissolved | 7440-61-1 | EPA 908.0M | 6.9 ± 0.83 | 0.3 | pCi/L | 1 | 11/28/2000 | 12/01/2000 | LLC | P8203 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | -1.5 ± 0.31 | 0.3 | pCi/L | 1 | 11/20/2000 | 11/27/2000 | KEB | P8114 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | -0.43 ± 0.15 | 0.3 | pCi/L | 1 | 11/20/2000 | 11/27/2000 | KEB | P8114 |

Client: **Envirocare of Utah** — Client Sample ID: **GW-23** — Lab Sample ID: **0010220-03B**
Work Order: **0010220** — Tag Number: — Date Collected: **10/23/2000**
Project: **LARW 11e.(2)** — Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Bromide | 24959-67-9 | SW846 9056 | 15 | 10 | | mg/L | 20 | | 11/15/2000 | PKL | A11229 |
| Tritium, dissolved | 10028-17-8 | EPA 906.0 | 13 ± 220 | 400 | | pCi/L | 1 | 11/10/2000 | 11/29/2000 | ALZ | P7980 |

Client: **Envirocare of Utah** — Client Sample ID: **GW-23** — Lab Sample ID: **0010220-03C**
Work Order: **0010220** — Tag Number: — Date Collected: **10/23/2000**
Project: **LARW 11e.(2)** — Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Carbon-14, dissolved | 14762-75-5 | EPA 520-C01M | -66 ± 33 | 30 | | pCi/L | 1 | 11/22/2000 | 12/06/2000 | JCP | P8170 |
| Iodine-129, dissolved | 15046-84-1 | EPA 902.0 | -0.36 ± 0.79 | 1 | | pCi/L | 1 | 11/02/2000 | 11/21/2000 | CWP | P7827 |

**Qualifiers:**
ND - Not detected at the reporting limit
B - Analyte detected in method blank
Z - Sample > 10 times blank result
J - Analyte detected below reporting limit
L - Contract/Client reporting limit exceeded
M - Maximum contaminant level exceeded
E - Value above quantitation range
R - RPD outside accepted recovery limits
X - Duplicate sample(s) < 5 times limit
S - Spike outside accepted recovery limits
Y - Unspiked sample > 4 times amount spiked

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**Date:** 16-Jan-01

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah**
Work Order: **0010243**
Project: **LARW**

Client Sample ID: **GW-22**
Tag Number:

Lab Sample ID: **0010243-01A**
Date Collected: **10/24/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 7440-61-1 | ASTM D2907 | 0.017 | 0.0009 | | mg/L | 1 | 11/08/2000 | 11/21/2000 | AWT | P7922 |
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 9.2 ± 4.4 | 7 | L | pCi/L | 1 | 12/12/2000 | 12/21/2000 | MDR | P8423 |
| Gross Alpha, dissolved | 12587-46-1 | EPA 00-02 | 56 ± 17 | 10 | L | pCi/L | 1 | 11/08/2000 | 11/13/2000 | AEW | P7912 |
| Gross Beta, dissolved | 12587-47-2 | EPA 900.0 | 280 ± 560 | 900 | L | pCi/L | 1 | 11/08/2000 | 11/14/2000 | AEW | P7911 |
| Potassium-40, dissolved | 13966-00-2 | EPA 901.1 | 330 ± 130 | 200 | | pCi/L | 1 | | 11/17/2000 | LLC | A11567 |
| Radium-226, dissolved | 13982-63-3 | EPA 903.0M/SM 705M | 0.73 ± 0.43 | 0.5 | | pCi/L | 1 | 11/06/2000 | 11/09/2000 | CEJ | P7866 |
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 2.0 ± 0.43 | 0.6 | | pCi/L | 1 | 11/10/2000 | 11/17/2000 | CWP | P7966 |
| Strontium-89/90, dissolved | 11-10-9 | EPA 905.0/SM704 | 0.20 ± 0.67 | 2 | | pCi/L | 1 | 11/02/2000 | 11/13/2000 | MTC | P7835 |
| Neptunium-237, dissolved | 13994-20-2 | EPA 907.0M/520M | 0.17 ± 0.32 | 0.4 | | pCi/L | 1 | 11/17/2000 | 12/07/2000 | EDS | P8074 |
| Uranium-233/234, dissolved | 13966-29-5 | EPA 908.0M | 13 ± 1.6 | 0.5 | | pCi/L | 1 | 11/28/2000 | 11/30/2000 | LLC | P8203 |
| Uranium-235/236, dissolved | 15117-96-1 | EPA 908.0M | 0.060 ± 0.35 | 0.5 | | pCi/L | 1 | 11/28/2000 | 11/30/2000 | LLC | P8203 |
| Uranium-238, dissolved | 7440-61-1 | EPA 908.0M | 5.0 ± 1.0 | 0.5 | | pCi/L | 1 | 11/28/2000 | 11/30/2000 | LLC | P8203 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | 0.97 ± 0.13 | 0.2 | | pCi/L | 1 | 11/20/2000 | 11/28/2000 | KEB | P8116 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | -0.16 ± 0.15 | 0.3 | | pCi/L | 1 | 11/20/2000 | 11/28/2000 | KEB | P8116 |

Client: **Envirocare of Utah**
Work Order: **0010243**
Project: **LARW**

Client Sample ID: **GW-22**
Tag Number:

Lab Sample ID: **0010243-01B**
Date Collected: **10/24/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Carbon-14, dissolved | 14762-75-5 | EPA 520-C01M | -18 ± 20 | 30 | | pCi/L | 1 | 11/22/2000 | 12/05/2000 | JCP | P8170 |
| Iodine-129, dissolved | 15046-84-1 | EPA 902.0 | -0.68 ± 0.78 | 1 | | pCi/L | 1 | 11/02/2000 | 11/21/2000 | CWP | P7827 |

**Qualifiers:** ND - Not detected at the reporting limit; J - Analyte detected below reporting limit; E - Value above quantitation range; S - Spike outside accepted recovery limits; B - Analyte detected in method blank; L - Contract/Client reporting limit exceeded; RPD outside accepted recovery limits; Y - Unspiked sample > 4 times amount spike; ample > 10 times blank result; M - Maximum contaminant level exceeded; licate sample(s) < 5 times limit

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**Date:** 16-Jan-01

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah** Client Sample ID: **GW-22** Lab Sample ID: **0010243-01C**
Work Order: **0010243** Tag Number: Date Collected: **10/24/2000**
Project: **LARW** Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Bromide | 24959-67-9 | SW846 9056 | 13 | 10 | | mg/L | 20 | | 11/15/2000 | PKL | A11229 |
| Tritium, dissolved | 10028-17-8 | EPA 906.0 | 80 ± 230 | 400 | | pCi/L | 1 | 11/10/2000 | 11/29/2000 | ALZ | P7980 |

Client: **Envirocare of Utah** Client Sample ID: **GW-81** Lab Sample ID: **0010243-02A**
Work Order: **0010243** Tag Number: Date Collected: **10/24/2000**
Project: **LARW** Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 7440-61-1 | ASTM D2907 | 0.0026 | 0.0009 | | mg/L | 1 | 11/08/2000 | 11/21/2000 | AWT | P7922 |
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 11 ± 4.7 | 8 | L | pCi/L | 1 | 12/12/2000 | 12/21/2000 | MDR | P8423 |
| Gross Alpha, dissolved | 12587-46-1 | EPA 00-02 | 43 ± 15 | 10 | L | pCi/L | 1 | 11/08/2000 | 11/13/2000 | AEW | P7912 |
| Gross Beta, dissolved | 12587-47-2 | EPA 900.0 | 240 ± 560 | 900 | L | pCi/L | 1 | 11/08/2000 | 11/14/2000 | AEW | P7911 |
| Potassium-40, dissolved | 13966-00-2 | EPA 901.1 | 380 ± 110 | 100 | | pCi/L | 1 | | 11/17/2000 | LLC | A11567 |
| Radium-226, dissolved | 13982-63-3 | EPA 903.0M/SM 705M | 0.57 ± 0.36 | 0.4 | | pCi/L | 1 | 11/06/2000 | 11/09/2000 | CEJ | P7866 |
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 0.56 ± 0.38 | 0.6 | | pCi/L | 1 | 11/10/2000 | 11/17/2000 | CWP | P7966 |
| Strontium-89/90, dissolved | 11-10-9 | EPA 905.0/SM704 | 0.71 ± 0.66 | 2 | | pCi/L | 1 | 11/02/2000 | 11/13/2000 | MTC | P7835 |
| Neptunium-237, dissolved | 13994-20-2 | EPA 907.0M/520M | 0.75 ± 0.51 | 0.5 | | pCi/L | 1 | 11/17/2000 | 12/07/2000 | EDS | P8074 |
| Uranium-233/234, dissolved | 13966-29-5 | EPA 908.0M | 1.5 ± 0.82 | 0.6 | | pCi/L | 1 | 11/28/2000 | 11/30/2000 | LLC | P8203 |
| Uranium-235/236, dissolved | 15117-96-1 | EPA 908.0M | -0.10 ± 0.35 | 0.6 | | pCi/L | 1 | 11/28/2000 | 11/30/2000 | LLC | P8203 |
| Uranium-238, dissolved | 7440-61-1 | EPA 908.0M | 1.5 ± 0.70 | 0.6 | | pCi/L | 1 | 11/28/2000 | 11/30/2000 | LLC | P8203 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | -0.78 ± 0.52 | 0.4 | | pCi/L | 1 | 12/05/2000 | 12/12/2000 | KEB | P8321 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | 0.096 ± 0.25 | 0.4 | | pCi/L | 1 | 12/05/2000 | 12/12/2000 | KEB | P8321 |

**Qualifiers:**
ND - Not detected at the reporting limit
B - Analyte detected in method blank
Z - Sample > 10 times blank result
J - Analyte detected below reporting limit
L - Contract/Client reporting limit exceeded
M - Maximum contaminant level exceeded
E - Value above quantitation range
R - RPD outside accepted recovery limits
X - Duplicate sample(s) < 5 times limit
S - Spike outside accepted recovery limits
Y - Unspiked sample > 4 times amount spiked

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**Date:** 16-Jan-01

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah**
Work Order: **0010243**
Project: **LARW**

Client Sample ID: **GW-81**
Tag Number:

Lab Sample ID: **0010243-02B**
Date Collected: **10/24/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Carbon-14, dissolved | 14762-75-5 | EPA 520-C01M | -34 ± 20 | 20 | | pCi/L | 1 | 11/22/2000 | 12/06/2000 | JCP | P8170 |
| Iodine-129, dissolved | 15046-84-1 | EPA 902.0 | -1.5 ± 0.78 | 1 | | pCi/L | 1 | 11/02/2000 | 11/21/2000 | CWP | P7827 |

Client: **Envirocare of Utah**
Work Order: **0010243**
Project: **LARW**

Client Sample ID: **GW-81**
Tag Number:

Lab Sample ID: **0010243-02C**
Date Collected: **10/24/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Bromide | 24959-67-9 | SW846 9056 | ND | 10 | | mg/L | 20 | | 11/15/2000 | PKL | A11229 |
| Tritium, dissolved | 10028-17-8 | EPA 906.0 | -140 ± 220 | 400 | | pCi/L | 1 | 11/10/2000 | 11/29/2000 | ALZ | P7980 |

Client: **Envirocare of Utah**
Work Order: **0010243**
Project: **LARW**

Client Sample ID: **GW-82**
Tag Number:

Lab Sample ID: **0010243-03A**
Date Collected: **10/24/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 7440-61-1 | ASTM D2907 | 0.0029 | 0.0009 | | mg/L | 1 | 11/08/2000 | 11/21/2000 | AWT | P7922 |
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 4.0 ± 4.3 | 7 | L | pCi/L | 1 | 12/12/2000 | 12/21/2000 | MDR | P8423 |
| Gross Alpha, dissolved | 12587-46-1 | EPA 00-02 | 16 ± 11 | 10 | L | pCi/L | 1 | 11/08/2000 | 11/13/2000 | AEW | P7912 |
| Gross Beta, dissolved | 12587-47-2 | EPA 900.0 | 370 ± 490 | 800 | L | pCi/L | 1 | 11/08/2000 | 11/14/2000 | AEW | P7911 |
| Potassium-40, dissolved | 13966-00-2 | EPA 901.1 | 290 ± 100 | 100 | | pCi/L | 1 | | 11/17/2000 | LLC | A11567 |
| Radium-226, dissolved | 13982-63-3 | EPA 903.0M/SM 705M | 0.36 ± 0.41 | 0.6 | | pCi/L | 1 | 11/06/2000 | 11/09/2000 | CEJ | P7866 |
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 0.79 ± 0.38 | 0.6 | | pCi/L | 1 | 11/10/2000 | 11/17/2000 | CWP | P7966 |
| Strontium-89/90, dissolved | 11-10-9 | EPA 905.0/SM704 | 0.16 ± 0.60 | 2 | | pCi/L | 1 | 11/02/2000 | 11/13/2000 | MTC | P7835 |
| Neptunium-237, dissolved | 13994-20-2 | EPA 907.0M/520M | 0.42 ± 0.42 | 0.5 | | pCi/L | 1 | 11/17/2000 | 12/07/2000 | EDS | P8074 |
| Uranium-233/234, dissolved | 13966-29-5 | EPA 908.0M | 1.3 ± 0.91 | 0.5 | | pCi/L | 1 | 11/28/2000 | 11/30/2000 | LLC | P8203 |

**Qualifiers:** ND - Not detected at the reporting limit J - Analyte detected below reporting limit E - Value above quantitation range S - Spike outside accepted recovery limits
B Analyte detected in method blank L - Contract/Client reporting limit exceeded R RPD outside accepted recovery limits Y - Unspiked sample > 4 times amount spik
ample > 10 times blank result M - Maximum contaminant level exceeded licate sample(s) < 5 times limit

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# CLIENT SAMPLE REPORT

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Uranium-235/236, dissolved | 15117-96-1 | EPA 908.0M | -0.092 ± 0.35 | 0.6 | pCi/L | 1 | 11/28/2000 | 11/30/2000 | LLC | P8203 |
| Uranium-238, dissolved | 7440-61-1 | EPA 908.0M | 1.2 ± 0.65 | 0.5 | pCi/L | 1 | 11/28/2000 | 11/30/2000 | LLC | P8203 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | 3.6 ± 0.30 | 0.3 | pCi/L | 1 | 12/05/2000 | 12/12/2000 | KEB | P8321 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | -0.035 ± 0.23 | 0.4 | pCi/L | 1 | 12/05/2000 | 12/12/2000 | KEB | P8321 |

Client: **Envirocare of Utah** — Client Sample ID: **GW-82** — Lab Sample ID: **0010243-03B**
Work Order: **0010243** — Tag Number: — Date Collected: **10/24/2000**
Project: **LARW** — Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Carbon-14, dissolved | 14762-75-5 | EPA 520-C01M | -6.8 ± 21 | 30 | | pCi/L | 1 | 11/22/2000 | 12/05/2000 | JCP | P8170 |
| Iodine-129, dissolved | 15046-84-1 | EPA 902.0 | -0.91 ± 0.76 | 1 | | pCi/L | 1 | 11/02/2000 | 11/21/2000 | CWP | P7827 |

Client: **Envirocare of Utah** — Client Sample ID: **GW-82** — Lab Sample ID: **0010243-03C**
Work Order: **0010243** — Tag Number: — Date Collected: **10/24/2000**
Project: **LARW** — Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Bromide | 24959-67-9 | SW846 9056 | ND | 10 | | mg/L | 20 | | 11/15/2000 | PKL | A11229 |
| Tritium, dissolved | 10028-17-8 | EPA 906.0 | 78 ± 230 | 400 | | pCi/L | 1 | 11/10/2000 | 11/29/2000 | ALZ | P7980 |

Client: **Envirocare of Utah** — Client Sample ID: **GW-83** — Lab Sample ID: **0010243-04A**
Work Order: **0010243** — Tag Number: — Date Collected: **10/24/2000**
Project: **LARW** — Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 7440-61-1 | ASTM D2907 | 0.0040 | 0.0009 | | mg/L | 1 | 11/08/2000 | 11/21/2000 | AWT | P7922 |
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 6.0 ± 4.5 | 7 | L | pCi/L | 1 | 12/12/2000 | 12/21/2000 | MDR | P8423 |
| Gross Alpha, dissolved | 12587-46-1 | EPA 00-02 | 34 ± 14 | 10 | L | pCi/L | 1 | 11/08/2000 | 11/13/2000 | AEW | P7912 |
| Gross Beta, dissolved | 12587-47-2 | EPA 900.0 | 800 ± 500 | 800 | L | pCi/L | 1 | 11/08/2000 | 11/14/2000 | AEW | P7911 |
| Potassium-40, dissolved | 13966-00-2 | EPA 901.1 | 330 ± 130 | 200 | | pCi/L | 1 | | 11/17/2000 | LLC | A11567 |
| Radium-226, dissolved | 13982-63-3 | EPA 903.0M/SM 705M | 0.73 ± 0.48 | 0.6 | | pCi/L | 1 | 11/06/2000 | 11/09/2000 | CEJ | P7866 |

**Qualifiers:** ND - Not detected at the reporting limit; J - Analyte detected below reporting limit; E - Value above quantitation range; S - Spike outside accepted recovery limits; B - Analyte detected in method blank; L - Contract/Client reporting limit exceeded; R - RPD outside accepted recovery limits; Y - Unspiked sample > 4 times amount spiked; Z - Sample > 10 times blank result; M - Maximum contaminant level exceeded; X - Duplicate sample(s) < 5 times limit

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**Date:** 16-Jan-01

# CLIENT SAMPLE REPORT

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 0.83 ± 0.38 | 0.6 | pCi/L | 1 | 11/14/2000 | 11/28/2000 | CWP | P8011 |
| Strontium-89/90, dissolved | 11-10-9 | EPA 905.0/SM704 | 0 ± 0.57 | 2 | pCi/L | 1 | 11/02/2000 | 11/13/2000 | MTC | P7835 |
| Neptunium-237, dissolved | 13994-20-2 | EPA 907.0M/520M | 0.53 ± 0.45 | 0.4 | pCi/L | 1 | 11/17/2000 | 12/07/2000 | EDS | P8074 |
| Uranium-233/234, dissolved | 13966-29-5 | EPA 908.0M | 2.9 ± 0.88 | 0.5 | pCi/L | 1 | 11/28/2000 | 12/01/2000 | LLC | P8203 |
| Uranium-235/236, dissolved | 15117-96-1 | EPA 908.0M | -0.37 ± 0.25 | 0.5 | pCi/L | 1 | 11/28/2000 | 12/01/2000 | LLC | P8203 |
| Uranium-238, dissolved | 7440-61-1 | EPA 908.0M | 1.5 ± 0.58 | 0.5 | pCi/L | 1 | 11/28/2000 | 12/01/2000 | LLC | P8203 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | -0.94 ± 0.48 | 0.5 | pCi/L | 1 | 12/05/2000 | 12/12/2000 | KEB | P8321 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | -0.30 ± 0.27 | 0.6 | pCi/L | 1 | 12/05/2000 | 12/12/2000 | KEB | P8321 |

Client: **Envirocare of Utah**
Work Order: **0010243**
Project: **LARW**

Client Sample ID: **GW-83**
Tag Number:

Lab Sample ID: **0010243-04B**
Date Collected: **10/24/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Carbon-14, dissolved | 14762-75-5 | EPA 520-C01M | -30 ± 19 | 10 | | pCi/L | 1 | 11/22/2000 | 12/06/2000 | JCP | P8170 |
| Iodine-129, dissolved | 15046-84-1 | EPA 902.0 | -0.38 ± 0.77 | 1 | | pCi/L | 1 | 11/29/2000 | 12/07/2000 | CWP | P8195 |

Client: **Envirocare of Utah**
Work Order: **0010243**
Project: **LARW**

Client Sample ID: **GW-83**
Tag Number:

Lab Sample ID: **0010243-04C**
Date Collected: **10/24/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Bromide | 24959-67-9 | SW846 9056 | ND | 10 | | mg/L | 20 | | 11/15/2000 | PKL | A11229 |
| Tritium, dissolved | 10028-17-8 | EPA 906.0 | -140 ± 220 | 400 | | pCi/L | 1 | 11/10/2000 | 11/29/2000 | ALZ | P7980 |

Client: **Envirocare of Utah**
Work Order: **0010243**
Project: **LARW**

Client Sample ID: **GW-405**
Tag Number:

Lab Sample ID: **0010243-05A**
Date Collected: **10/24/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 7440-61-1 | ASTM D2907 | 0.0039 | 0.0009 | | mg/L | 1 | 11/08/2000 | 11/21/2000 | AWT | P7922 |
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 6.4 ± 3.0 | 5 | | pCi/L | 1 | 01/11/2001 | 01/12/2000 | CMA | P8826 |

**Qualifiers:** ND - Not detected at the reporting limit J - Analyte detected below reporting limit E - Value above quantitation range S - Spike outside accepted recovery limits
B - Analyte detected in method blank L - Contract/Client reporting limit exceeded RPD outside accepted recovery limits Y - Unspiked sample > 4 times amount spike
mple > 10 times blank result M - Maximum contaminant level exceeded cate sample(s) < 5 times limit

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**Date:** 16-Jan-01

# CLIENT SAMPLE REPORT

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Gross Alpha, dissolved | 12587-46-1 | EPA 00-02 | 32 ± 14 | 10 | L | pCi/L | 1 | 11/08/2000 | 11/13/2000 | AEW | P7912 |
| Gross Beta, dissolved | 12587-47-2 | EPA 900.0 | 320 ± 490 | 800 | L | pCi/L | 1 | 11/08/2000 | 11/14/2000 | AEW | P7911 |
| Potassium-40, dissolved | 13966-00-2 | EPA 901.1 | 320 ± 110 | 100 | | pCi/L | 1 | | 11/20/2000 | LLC | A11567 |
| Radium-226, dissolved | 13982-63-3 | EPA 903.0M/SM 705M | 0.78 ± 0.44 | 0.5 | | pCi/L | 1 | 11/06/2000 | 11/09/2000 | CEJ | P7866 |
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 0.91 ± 0.38 | 0.6 | | pCi/L | 1 | 11/14/2000 | 11/28/2000 | CWP | P8011 |
| Strontium-89/90, dissolved | 11-10-9 | EPA 905.0/SM704 | -0.40 ± 0.56 | 2 | | pCi/L | 1 | 11/02/2000 | 11/13/2000 | MTC | P7835 |
| Neptunium-237, dissolved | 13994-20-2 | EPA 907.0M/520M | 0.17 ± 0.32 | 0.4 | | pCi/L | 1 | 11/17/2000 | 12/07/2000 | EDS | P8074 |
| Uranium-233/234, dissolved | 13966-29-5 | EPA 908.0M | 3.5 ± 0.78 | 0.4 | | pCi/L | 1 | 11/28/2000 | 12/01/2000 | LLC | P8203 |
| Uranium-235/236, dissolved | 15117-96-1 | EPA 908.0M | -0.17 ± 0.26 | 0.5 | | pCi/L | 1 | 11/28/2000 | 12/01/2000 | LLC | P8203 |
| Uranium-238, dissolved | 7440-61-1 | EPA 908.0M | 2.2 ± 0.60 | 0.4 | | pCi/L | 1 | 11/28/2000 | 12/01/2000 | LLC | P8203 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | -1.1 ± 0.67 | 0.4 | | pCi/L | 1 | 12/05/2000 | 12/12/2000 | KEB | P8321 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | -0.16 ± 0.26 | 0.5 | | pCi/L | 1 | 12/05/2000 | 12/12/2000 | KEB | P8321 |

Client: **Envirocare of Utah**
Work Order: **0010243**
Project: **LARW**

Client Sample ID: **GW-405**
Tag Number:

Lab Sample ID: **0010243-05B**
Date Collected: **10/24/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Carbon-14, dissolved | 14762-75-5 | EPA 520-C01M | -33 ± 22 | 30 | | pCi/L | 1 | 11/22/2000 | 12/05/2000 | JCP | P8170 |
| Iodine-129, dissolved | 15046-84-1 | EPA 902.0 | -1.3 ± 0.79 | 1 | | pCi/L | 1 | 11/29/2000 | 12/07/2000 | CWP | P8195 |

Client: **Envirocare of Utah**
Work Order: **0010243**
Project: **LARW**

Client Sample ID: **GW-405**
Tag Number:

Lab Sample ID: **0010243-05C**
Date Collected: **10/24/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Bromide | 24959-67-9 | SW846 9056 | ND | 10 | | mg/L | 20 | | 11/15/2000 | PKL | A11229 |
| Tritium, dissolved | 10028-17-8 | EPA 906.0 | -200 ± 220 | 400 | | pCi/L | 1 | 11/10/2000 | 11/29/2000 | ALZ | P7980 |

**Qualifiers:**
ND - Not detected at the reporting limit
B - Analyte detected in method blank
Z - Sample > 10 times blank result
J - Analyte detected below reporting limit
L - Contract/Client reporting limit exceeded
M - Maximum contaminant level exceeded
E - Value above quantitation range
R - RPD outside accepted recovery limits
X - Duplicate sample(s) < 5 times limit
S - Spike outside accepted recovery limits
Y - Unspiked sample > 4 times amount spiked

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**Date:** 29-Jan-01

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah**
Work Order: **0011002**
Project: **LARW**

## Client Sample ID: **GW-92**
Tag Number:

Lab Sample ID: **0011002-01A**
Date Collected: **10/26/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 7440-61-1 | ASTM D2907 | 0.012 | 0.0009 | | mg/L | 1 | 11/20/2000 | 11/30/2000 | AWT | P8109 |
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 3.6 ± 3.0 | 5 | | pCi/L | 1 | 01/11/2001 | 01/12/2000 | CMA | P8828 |
| Gross Alpha, dissolved | 12587-46-1 | EPA 00-02 | 49 ± 16 | 10 | L | pCi/L | 1 | 11/15/2000 | 11/20/2000 | AEW | P8023 |
| Gross Beta, dissolved | 12587-47-2 | EPA 900.0 | 58 ± 190 | 300 | L | pCi/L | 1 | 11/16/2000 | 11/22/2000 | AEW | P8045 |
| Potassium-40, dissolved | 13966-00-2 | EPA 901.1 | ND | 200 | | pCi/L | 1 | | 11/22/2000 | LLC | A11569 |
| Radium-226, dissolved | 13982-63-3 | EPA 903.0M/SM 705M | 0.57 ± 0.39 | 0.5 | | pCi/L | 1 | 11/07/2000 | 11/13/2000 | CEJ | P7885 |
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 0.80 ± 0.38 | 0.6 | | pCi/L | 1 | 11/14/2000 | 11/28/2000 | CWP | P8012 |
| Strontium-89/90, dissolved | 11-10-9 | EPA 905.0/SM704 | 1.4 ± 1.1 | 2 | | pCi/L | 1 | 11/13/2000 | 11/17/2000 | MTC | P7999 |
| Neptunium-237, dissolved | 13994-20-2 | EPA 907.0M/520M | 0.49 ± 0.44 | 0.5 | | pCi/L | 1 | 11/17/2000 | 12/07/2000 | BPM | P8075 |
| Uranium-233/234, dissolved | 13966-29-5 | EPA 908.0M | 5.7 ± 0.85 | 0.3 | | pCi/L | 1 | 12/20/2000 | 12/26/2000 | LLC | P8535 |
| Uranium-235/236, dissolved | 15117-96-1 | EPA 908.0M | -0.072 ± 0.21 | 0.4 | | pCi/L | 1 | 12/20/2000 | 12/26/2000 | LLC | P8535 |
| Uranium-238, dissolved | 7440-61-1 | EPA 908.0M | 3.6 ± 0.62 | 0.3 | | pCi/L | 1 | 12/20/2000 | 12/26/2000 | LLC | P8535 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | 3.2 ± 0.90 | 0.4 | | pCi/L | 1 | 12/05/2000 | 12/12/2000 | LLC | P8322 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | 0.15 ± 0.31 | 0.5 | | pCi/L | 1 | 12/05/2000 | 12/12/2000 | LLC | P8322 |

Client: **Envirocare of Utah**
Work Order: **0011002**
Project: **LARW**

## Client Sample ID: **GW-92**
Tag Number:

Lab Sample ID: **0011002-01B**
Date Collected: **10/26/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Carbon-14, dissolved | 14762-75-5 | EPA 520-C01M | -21 ± 24 | 30 | | pCi/L | 1 | 11/22/2000 | 12/15/2000 | JCP | P8171 |
| Iodine-129, dissolved | 15046-84-1 | EPA 902.0 | -0.62 ± 0.74 | 1 | | pCi/L | 1 | 11/29/2000 | 12/07/2000 | CWP | P8195 |

**Qualifiers:** ND - Not detected at the reporting limit; J - Analyte detected below reporting limit; E - Value above quantitation range; S - Spike outside accepted recovery limits; B - Analyte detected in method blank; L - Contract/Client reporting limit exceeded; RPD outside accepted recovery limits; Y - Unspiked sample > 4 times amount spike; ample > 10 times blank result; M - Maximum contaminant level exceeded; licate sample(s) < 5 times limit

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**Date:** 29-Jan-01

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah**
Work Order: **0011002**
Project: **LARW**

Client Sample ID: **GW-92**
Tag Number:

Lab Sample ID: **0011002-01C**
Date Collected: **10/26/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Bromide | 24959-67-9 | SW846 9056 | ND | 10 | | mg/L | 20 | | 11/16/2000 | PKL | A11229 |
| Tritium, dissolved | 10028-17-8 | EPA 906.0 | 82 ± 240 | 400 | | pCi/L | 1 | 11/16/2000 | 12/01/2000 | ALZ | P8054 |

Client: **Envirocare of Utah**
Work Order: **0011002**
Project: **LARW**

Client Sample ID: **GW-93**
Tag Number:

Lab Sample ID: **0011002-02A**
Date Collected: **10/26/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 7440-61-1 | ASTM D2907 | 0.023 | 0.0009 | | mg/L | 1 | 11/20/2000 | 11/30/2000 | AWT | P8109 |
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 6.4 ± 3.1 | 5 | | pCi/L | 1 | 01/11/2001 | 01/12/2000 | CMA | P8828 |
| Gross Alpha, dissolved | 12587-46-1 | EPA 00-02 | 37 ± 15 | 10 | L | pCi/L | 1 | 11/15/2000 | 11/20/2000 | AEW | P8023 |
| Gross Beta, dissolved | 12587-47-2 | EPA 900.0 | 540 ± 110 | 200 | L | pCi/L | 1 | 01/02/2001 | 01/09/2001 | CWP | P8692 |
| Potassium-40, dissolved | 13966-00-2 | EPA 901.1 | 450 ± 120 | 200 | | pCi/L | 1 | | 11/27/2000 | LLC | A11569 |
| Radium-226, dissolved | 13982-63-3 | EPA 903.0M/SM 705M | 1.5 ± 0.51 | 0.4 | | pCi/L | 1 | 11/07/2000 | 11/13/2000 | CEJ | P7885 |
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 2.3 ± 0.44 | 0.6 | | pCi/L | 1 | 11/15/2000 | 11/30/2000 | CWP | P8035 |
| Strontium-89/90, dissolved | 11-10-9 | EPA 905.0/SM704 | 1.1 ± 0.92 | 2 | | pCi/L | 1 | 11/13/2000 | 11/17/2000 | MTC | P7999 |
| Neptunium-237, dissolved | 13994-20-2 | EPA 907.0M/520M | 0.18 ± 0.35 | 0.5 | | pCi/L | 1 | 11/17/2000 | 12/07/2000 | BPM | P8075 |
| Uranium-233/234, dissolved | 13966-29-5 | EPA 908.0M | 13 ± 1.2 | 0.3 | | pCi/L | 1 | 12/20/2000 | 12/26/2000 | LLC | P8535 |
| Uranium-235/236, dissolved | 15117-96-1 | EPA 908.0M | 0.13 ± 0.28 | 0.4 | | pCi/L | 1 | 12/20/2000 | 12/26/2000 | LLC | P8535 |
| Uranium-238, dissolved | 7440-61-1 | EPA 908.0M | 6.3 ± 0.80 | 0.3 | | pCi/L | 1 | 12/20/2000 | 12/26/2000 | LLC | P8535 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | 0.36 ± 0.44 | 0.4 | | pCi/L | 1 | 12/05/2000 | 12/12/2000 | LLC | P8322 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | -0.24 ± 0.25 | 0.5 | | pCi/L | 1 | 12/05/2000 | 12/12/2000 | LLC | P8322 |

**Qualifiers:**
ND - Not detected at the reporting limit
B - Analyte detected in method blank
Z - Sample > 10 times blank result
J - Analyte detected below reporting limit
L - Contract/Client reporting limit exceeded
M - Maximum contaminant level exceeded
E - Value above quantitation range
R - RPD outside accepted recovery limits
X - Duplicate sample(s) < 5 times limit
S - Spike outside accepted recovery limits
Y - Unspiked sample > 4 times amount spiked

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**Date:** 29-Jan-01

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah**
Work Order: **0011002**
Project: **LARW**

Client Sample ID: **GW-93**
Tag Number:

Lab Sample ID: **0011002-02B**
Date Collected: **10/26/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Carbon-14, dissolved | 14762-75-5 | EPA 520-C01M | -15 ± 14 | 20 | | pCi/L | 1 | 01/16/2001 | 01/17/2001 | JCP | P8845 |
| Iodine-129, dissolved | 15046-84-1 | EPA 902.0 | -1.3 ± 0.79 | 1 | | pCi/L | 1 | 11/29/2000 | 12/07/2000 | CWP | P8195 |

Client: **Envirocare of Utah**
Work Order: **0011002**
Project: **LARW**

Client Sample ID: **GW-93**
Tag Number:

Lab Sample ID: **0011002-02C**
Date Collected: **10/26/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Bromide | 24959-67-9 | SW846 9056 | ND | 10 | | mg/L | 20 | | 11/16/2000 | PKL | A11229 |
| Tritium, dissolved | 10028-17-8 | EPA 906.0 | -170 ± 230 | 400 | | pCi/L | 1 | 11/16/2000 | 12/01/2000 | ALZ | P8054 |

Client: **Envirocare of Utah**
Work Order: **0011002**
Project: **LARW**

Client Sample ID: **GW-407**
Tag Number:

Lab Sample ID: **0011002-03A**
Date Collected: **10/26/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 7440-61-1 | ASTM D2907 | 0.024 | 0.0009 | | mg/L | 1 | 11/20/2000 | 11/30/2000 | AWT | P8109 |
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 8.2 ± 5.4 | 9 | L | pCi/L | 1 | 12/14/2000 | 12/28/2000 | JCP | P8463 |
| Gross Alpha, dissolved | 12587-46-1 | EPA 00-02 | 56 ± 16 | 10 | L | pCi/L | 1 | 11/15/2000 | 11/20/2000 | AEW | P8023 |
| Gross Beta, dissolved | 12587-47-2 | EPA 900.0 | 850 ± 540 | 800 | L | pCi/L | 1 | 11/16/2000 | 11/22/2000 | AEW | P8045 |
| Potassium-40, dissolved | 13966-00-2 | EPA 901.1 | 410 ± 120 | 200 | | pCi/L | 1 | | 11/27/2000 | LLC | A11569 |
| Radium-226, dissolved | 13982-63-3 | EPA 903.0M/SM 705M | 1.6 ± 0.50 | 0.4 | | pCi/L | 1 | 11/13/2000 | 11/17/2000 | CEJ | P7988 |
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 2.7 ± 0.45 | 0.6 | | pCi/L | 1 | 11/15/2000 | 11/30/2000 | CWP | P8035 |
| Strontium-89/90, dissolved | 11-10-9 | EPA 905.0/SM704 | 0.99 ± 0.93 | 2 | | pCi/L | 1 | 11/13/2000 | 11/17/2000 | MTC | P7999 |
| Neptunium-237, dissolved | 13994-20-2 | EPA 907.0M/520M | 0.26 ± 0.36 | 0.4 | | pCi/L | 1 | 11/17/2000 | 12/07/2000 | BPM | P8075 |
| Uranium-233/234 dissolved | 13966-29-5 | EPA 908.0M | 13 ± 1.1 | 0.3 | | pCi/L | 1 | 12/20/2000 | 12/26/2000 | LLC | P8535 |

**Qualifiers:** ND - Not detected at the reporting limit; J - Analyte detected below reporting limit; E - Value above quantitation range; S - Spike outside accepted recovery limits; B - Analyte detected in method blank; L - Contract/Client reporting limit exceeded; RPD outside accepted recovery limits; Y - Unspiked sample > 4 times amount spiked; mple > 10 times blank result; M - Maximum contaminant level exceeded; cate sample(s) < 5 times limit

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**Date:** 29-Jan-01

# CLIENT SAMPLE REPORT

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Uranium-235/236, dissolved | 15117-96-1 | EPA 908.0M | 0.18 ± 0.25 | 0.3 | pCi/L | 1 | 12/20/2000 | 12/26/2000 | LLC | P8535 |
| Uranium-238, dissolved | 7440-61-1 | EPA 908.0M | 6.1 ± 0.74 | 0.3 | pCi/L | 1 | 12/20/2000 | 12/26/2000 | LLC | P8535 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | -0.23 ± 0.20 | 0.5 | pCi/L | 1 | 12/05/2000 | 12/13/2000 | LLC | P8322 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | -1.0 ± 0.30 | 0.6 | pCi/L | 1 | 12/05/2000 | 12/13/2000 | LLC | P8322 |

Client: **Envirocare of Utah**
Work Order: **0011002**
Project: **LARW**

Client Sample ID: **GW-407**
Tag Number:

Lab Sample ID: **0011002-03B**
Date Collected: **10/26/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Carbon-14, dissolved | 14762-75-5 | EPA 520-C01M | -18 ± 19 | 30 | | pCi/L | 1 | 11/22/2000 | 12/15/2000 | JCP | P8171 |
| Iodine-129, dissolved | 15046-84-1 | EPA 902.0 | -0.54 ± 0.79 | 1 | | pCi/L | 1 | 11/29/2000 | 12/07/2000 | CWP | P8195 |

Client: **Envirocare of Utah**
Work Order: **0011002**
Project: **LARW**

Client Sample ID: **GW-407**
Tag Number:

Lab Sample ID: **0011002-03C**
Date Collected: **10/26/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Bromide | 24959-67-9 | SW846 9056 | 14 | 10 | | mg/L | 20 | | 11/16/2000 | PKL | A11229 |
| Tritium, dissolved | 10028-17-8 | EPA 906.0 | -170 ± 230 | 400 | | pCi/L | 1 | 11/16/2000 | 12/01/2000 | ALZ | P8054 |

**Qualifiers:**
ND - Not detected at the reporting limit
B - Analyte detected in method blank
Z - Sample > 10 times blank result
J - Analyte detected below reporting limit
L - Contract/Client reporting limit exceeded
M - Maximum contaminant level exceeded
E - Value above quantitation range
R - RPD outside accepted recovery limits
X - Duplicate sample(s) < 5 times limit
S - Spike outside accepted recovery limits
Y - Unspiked sample > 4 times amount spiked

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**Date:** 02-Jan-01

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah**
Work Order: **0011030**
Project: **LARW**

## Client Sample ID: **GW-105**
Tag Number:

Lab Sample ID: **0011030-01A**
Date Collected: **10/31/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 0.022 | 0.0009 | | mg/L | 1 | 11/20/2000 | 11/30/2000 | AWT | P8111 |
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 32 ± 5.5 | 9 | | pCi/L | 1 | 12/14/2000 | 12/28/2000 | JCP | P846J |
| Gross Alpha, dissolved | 12587-46-1 | EPA 00-02 | 58 ± 17 | 10 | L | pCi/L | 1 | 11/16/2000 | 11/28/2000 | AEW | P8046 |
| Gross Beta, dissolved | 12587-47-2 | EPA 900.0 | 220 ± 500 | 800 | L | pCi/L | 1 | 11/16/2000 | 11/22/2000 | AEW | P8045 |
| Potassium-40, dissolved | 13966-00-2 | EPA 901.1 | 400 ± 130 | 200 | | pCi/L | 1 | | 11/27/2000 | LLC | A11573 |
| Radium-226, dissolved | 13982-63-3 | EPA 903.0M/SM 705M | 1.5 ± 0.52 | 0.5 | | pCi/L | 1 | 11/13/2000 | 11/17/2000 | CEJ | P7988 |
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 2.0 ± 0.43 | 0.6 | | pCi/L | 1 | 11/15/2000 | 11/30/2000 | CWP | P8035 |
| Strontium-89/90, dissolved | 11-10-9 | EPA 905.0/SM704 | 0.79 ± 0.92 | 2 | | pCi/L | 1 | 11/13/2000 | 11/17/2000 | MTC | P7999 |
| Neptunium-237, dissolved | 13994-20-2 | EPA 907.0M/520M | 0.058 ± 0.39 | 0.6 | | pCi/L | 1 | 11/27/2000 | 12/13/2000 | JCP | P8183 |
| Uranium-233/234, dissolved | 13966-29-5 | EPA 908.0M | 12 ± 1.2 | 0.4 | | pCi/L | 1 | 12/20/2000 | 12/26/2000 | LLC | P8535 |
| Uranium-235/236, dissolved | 15117-96-1 | EPA 908.0M | 0.10 ± 0.29 | 0.5 | | pCi/L | 1 | 12/20/2000 | 12/26/2000 | LLC | P8535 |
| Uranium-238, dissolved | 7440-61-1 | EPA 908.0M | 5.2 ± 0.79 | 0.4 | | pCi/L | 1 | 12/20/2000 | 12/26/2000 | LLC | P8535 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | -0.36 ± 0.56 | 0.5 | | pCi/L | 1 | 12/05/2000 | 12/12/2000 | LLC | P8322 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | -0.19 ± 0.28 | 0.5 | | pCi/L | 1 | 12/05/2000 | 12/12/2000 | LLC | P8322 |

Client: **Envirocare of Utah**
Work Order: **0011030**
Project: **LARW**

## Client Sample ID: **GW-105**
Tag Number:

Lab Sample ID: **0011030-01B**
Date Collected: **10/31/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Carbon-14, dissolved | 14762-75-5 | EPA 520-C01M | -17 ± 17 | 20 | | pCi/L | 1 | 11/22/2000 | 12/14/2000 | JCP | P8172 |
| Iodine-129, dissolved | 15046-84-1 | EPA 902.0 | -0.26 ± 0.76 | 1 | | pCi/L | 1 | 12/06/2000 | 12/15/2000 | CWP | P8197 |

**Qualifiers:** ND - Not detected at the reporting limit; J - Analyte detected below reporting limit; E - Value above quantitation range; S - Spike outside accepted recovery limits; ? Analyte detected in method blank; L - Contract/Client reporting limit exceeded; ? outside accepted recovery limits; Y - Unspiked sample > 4 times amount spiked; mple > 10 times blank result; M - Maximum contaminant level exceeded; cate sample(s) < 5 times limit

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**Date:** 02-Jan-01

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah**
Work Order: **0011030**
Project: **LARW**

Client Sample ID: **GW-105**
Tag Number:

Lab Sample ID: **0011030-01C**
Date Collected: **10/31/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Bromide | 24959-67-9 | SW846 9056 | ND | 10 | | mg/L | 20 | | 11/16/2000 | PKL | A11229 |
| Tritium, dissolved | 10028-17-8 | EPA 906.0 | 69 ± 210 | 300 | | pCi/L | 1 | 11/21/2000 | 12/01/2000 | ALZ | P8149 |

Client: **Envirocare of Utah**
Work Order: **0011030**
Project: **LARW**

Client Sample ID: **GW-102**
Tag Number:

Lab Sample ID: **0011030-02A**
Date Collected: **10/31/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 0.0046 | 0.0009 | | mg/L | 1 | 11/20/2000 | 11/30/2000 | AWT | P8111 |
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 34 ± 5.5 | 9 | | pCi/L | 1 | 12/14/2000 | 12/28/2000 | JCP | P8463 |
| Gross Alpha, dissolved | 12587-46-1 | EPA 00-02 | 74 ± 19 | 10 | L | pCi/L | 1 | 11/16/2000 | 11/29/2000 | AEW | P8046 |
| Gross Beta, dissolved | 12587-47-2 | EPA 900.0 | 300 ± 520 | 800 | L | pCi/L | 1 | 11/16/2000 | 11/22/2000 | AEW | P8045 |
| Potassium-40, dissolved | 13966-00-2 | EPA 901.1 | 400 ± 140 | 200 | | pCi/L | 1 | | 11/28/2000 | LLC | A11573 |
| Radium-226, dissolved | 13982-63-3 | EPA 903.0M/SM 705M | 0.95 ± 0.52 | 0.6 | | pCi/L | 1 | 11/13/2000 | 11/17/2000 | CEJ | P7988 |
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 1.7 ± 0.42 | 0.6 | | pCi/L | 1 | 11/15/2000 | 11/30/2000 | CWP | P8035 |
| Strontium-89/90, dissolved | 11-10-9 | EPA 905.0/SM704 | 0.89 ± 0.90 | 2 | | pCi/L | 1 | 11/13/2000 | 11/17/2000 | MTC | P8000 |
| Neptunium-237, dissolved | 13994-20-2 | EPA 907.0M/520M | 0.70 ± 0.47 | 0.4 | | pCi/L | 1 | 11/27/2000 | 12/13/2000 | JCP | P8183 |
| Uranium-233/234, dissolved | 13966-29-5 | EPA 908.0M | 1.8 ± 0.61 | 0.4 | | pCi/L | 1 | 12/20/2000 | 12/26/2000 | LLC | P8535 |
| Uranium-235/236, dissolved | 15117-96-1 | EPA 908.0M | -0.23 ± 0.21 | 0.4 | | pCi/L | 1 | 12/20/2000 | 12/26/2000 | LLC | P8535 |
| Uranium-238, dissolved | 7440-61-1 | EPA 908.0M | 1.1 ± 0.45 | 0.4 | | pCi/L | 1 | 12/20/2000 | 12/26/2000 | LLC | P8535 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | -1.3 ± 0.67 | 0.5 | | pCi/L | 1 | 12/05/2000 | 12/12/2000 | LLC | P8322 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | -0.14 ± 0.28 | 0.5 | | pCi/L | 1 | 12/05/2000 | 12/12/2000 | LLC | P8322 |

**Qualifiers:**
ND - Not detected at the reporting limit
B - Analyte detected in method blank
Z - Sample > 10 times blank result
J - Analyte detected below reporting limit
L - Contract/Client reporting limit exceeded
M - Maximum contaminant level exceeded
E - Value above quantitation range
R - RPD outside accepted recovery limits
X - Duplicate sample(s) < 5 times limit
S - Spike outside accepted recovery limits
Y - Unspiked sample > 4 times amount spiked

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**Date:** 02-Jan-01

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah**
Work Order: **0011030**
Project: **LARW**

Client Sample ID: **GW-102**
Tag Number:

Lab Sample ID: **0011030-02B**
Date Collected: **10/31/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Carbon-14, dissolved | 14762-75-5 | EPA 520-C01M | -7.8 ± 15 | 20 | | pCi/L | 1 | 11/22/2000 | 12/13/2000 | JCP | P8172 |
| Iodine-129, dissolved | 15046-84-1 | EPA 902.0 | -0.51 ± 0.83 | 1 | | pCi/L | 1 | 12/06/2000 | 12/15/2000 | CWP | P8197 |

Client: **Envirocare of Utah**
Work Order: **0011030**
Project: **LARW**

Client Sample ID: **GW-102**
Tag Number:

Lab Sample ID: **0011030-02C**
Date Collected: **10/31/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Bromide | 24959-67-9 | SW846 9056 | ND | 10 | | mg/L | 20 | | 11/16/2000 | PKL | A11229 |
| Tritium, dissolved | 10028-17-8 | EPA 906.0 | 8.0 ± 210 | 300 | | pCi/L | 1 | 11/21/2000 | 12/01/2000 | ALZ | P8149 |

Client: **Envirocare of Utah**
Work Order: **0011030**
Project: **LARW**

Client Sample ID: **GW-101**
Tag Number:

Lab Sample ID: **0011030-03A**
Date Collected: **10/31/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 0.0027 | 0.0009 | | mg/L | 1 | 11/20/2000 | 11/30/2000 | AWT | P8111 |
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 34 ± 5.6 | 9 | | pCi/L | 1 | 12/14/2000 | 12/28/2000 | JCP | P8463 |
| Gross Alpha, dissolved | 12587-46-1 | EPA 00-02 | 30 ± 14 | 10 | L | pCi/L | 1 | 11/16/2000 | 11/29/2000 | AEW | P8046 |
| Gross Beta, dissolved | 12587-47-2 | EPA 900.0 | 150 ± 490 | 800 | L | pCi/L | 1 | 11/16/2000 | 11/22/2000 | AEW | P8045 |
| Potassium-40, dissolved | 13966-00-2 | EPA 901.1 | 340 ± 120 | 200 | | pCi/L | 1 | | 11/28/2000 | LLC | A11573 |
| Radium-226, dissolved | 13982-63-3 | EPA 903.0M/SM 705M | 0.061 ± 0.29 | 0.5 | | pCi/L | 1 | 11/13/2000 | 11/17/2000 | CEJ | P7988 |
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 1.2 ± 0.40 | 0.6 | | pCi/L | 1 | 11/15/2000 | 11/30/2000 | CWP | P8035 |
| Strontium-89/90, dissolved | 11-10-9 | EPA 905.0/SM704 | 0.58 ± 0.86 | 2 | | pCi/L | 1 | 11/13/2000 | 11/17/2000 | MTC | P8000 |
| Neptunium-237, dissolved | 13994-20-2 | EPA 907.0M/520M | 0.47 ± 0.43 | 0.5 | | pCi/L | 1 | 11/27/2000 | 12/13/2000 | JCP | P8183 |
| Uranium-233/234, dissolved | 13966-29-5 | EPA 908.0M | 0.41 ± 0.49 | 0.3 | | pCi/L | 1 | 12/20/2000 | 12/26/2000 | LLC | P8535 |

**Qualifiers:** ND - Not detected at the reporting limit J - Analyte detected below reporting limit F - Value above quantitation range S - Spike outside accepted recovery limits
B - Analyte detected in method blank L - Contract/Client reporting limit exceeded H - outside accepted recovery limits Y - Unspiked sample > 4 times amount spiked
E - Sample > 10 times blank result M - Maximum contaminant level exceeded X - Duplicate sample(s) < 5 times limit

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# CLIENT SAMPLE REPORT

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium-235/236, dissolved | 15117-96-1 | EPA 908.0M | -0.19 ± 0.20 | 0.4 | | pCi/L | 1 | 12/20/2000 | 12/26/2000 | LLC | P8535 |
| Uranium-238, dissolved | 7440-61-1 | EPA 908.0M | 0.52 ± 0.34 | 0.3 | | pCi/L | 1 | 12/20/2000 | 12/26/2000 | LLC | P8535 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | 0.97 ± 0.69 | 0.5 | | pCi/L | 1 | 12/05/2000 | 12/12/2000 | LLC | P8322 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | -0.19 ± 0.28 | 0.5 | | pCi/L | 1 | 12/05/2000 | 12/12/2000 | LLC | P8322 |

Client: **Envirocare of Utah**
Work Order: **0011030**
Project: **LARW**

Client Sample ID: **GW-101**
Tag Number:

Lab Sample ID: **0011030-03B**
Date Collected: **10/31/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Carbon-14, dissolved | 14762-75-5 | EPA 520-C01M | -14 ± 15 | 30 | | pCi/L | 1 | 11/22/2000 | 12/13/2000 | JCP | P8172 |
| Iodine-129, dissolved | 15046-84-1 | EPA 902.0 | 0.16 ± 0.82 | 1 | | pCi/L | 1 | 12/06/2000 | 12/15/2000 | CWP | P8197 |

Client: **Envirocare of Utah**
Work Order: **0011030**
Project: **LARW**

Client Sample ID: **GW-101**
Tag Number:

Lab Sample ID: **0011030-03C**
Date Collected: **10/31/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Bromide | 24959-67-9 | SW846 9056 | ND | 10 | | mg/L | 20 | | 11/16/2000 | PKL | A11229 |
| Tritium, dissolved | 10028-17-8 | EPA 906.0 | -28 ± 210 | 300 | | pCi/L | 1 | 11/21/2000 | 12/01/2000 | ALZ | P8149 |

Client: **Envirocare of Utah**
Work Order: **0011030**
Project: **LARW**

Client Sample ID: **GW-100**
Tag Number:

Lab Sample ID: **0011030-04A**
Date Collected: **10/31/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 0.11 | 0.0009 | | mg/L | 1 | 11/20/2000 | 11/30/2000 | AWT | P8111 |
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 38 ± 5.5 | 9 | | pCi/L | 1 | 12/14/2000 | 12/28/2000 | JCP | P8463 |
| Gross Alpha, dissolved | 12587-46-1 | EPA 00-02 | 39 ± 15 | 10 | L | pCi/L | 1 | 11/16/2000 | 11/29/2000 | AEW | P8046 |
| Gross Beta, dissolved | 12587-47-2 | EPA 900.0 | 460 ± 490 | 800 | L | pCi/L | 1 | 11/16/2000 | 11/22/2000 | AEW | P8045 |
| Potassium-40 dissolved | 13966-00-2 | EPA 901 1 | 250 ± 110 | 200 | | pCi/L | 1 | | 11/28/2000 | LLC | A11573 |
| Radium-226 dissolved | 13982-63-3 | EPA 903 0M/SM 705M | 0 40 ± 0 40 | 0.5 | | pCi/L | 1 | 11/13/2000 | 11/17/2000 | CEJ | P7988 |

Qualifiers:
ND - Not detected at the reporting limit
B - Analyte detected in method blank
Z - Sample > 10 times blank result
J - Analyte detected below reporting limit
L - Contract/Client reporting limit exceeded
M - Maximum contaminant level exceeded
E - Value above quantitation range
R - RPD outside accepted recovery limits
X - Duplicate sample(s) < 5 times limit
S - Spike outside accepted recovery limits
Y - Unspiked sample > 4 times amount spiked

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**Date:** 02-Jan-01

# CLIENT SAMPLE REPORT

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 0.50 ± 0.38 | 0.6 | pCi/L | 1 | 11/15/2000 | 11/30/2000 | CWP | P8035 |
| Strontium-89/90, dissolved | 11-10-9 | EPA 905.0/SM704 | 1.1 ± 0.88 | 2 | pCi/L | 1 | 11/13/2000 | 11/17/2000 | MTC | P8000 |
| Neptunium-237, dissolved | 13994-20-2 | EPA 907.0M/520M | 0.19 ± 0.33 | 0.4 | pCi/L | 1 | 11/27/2000 | 12/13/2000 | JCP | P8183 |
| Uranium-233/234, dissolved | 13966-29-5 | EPA 908.0M | 77 ± 3.0 | 0.4 | pCi/L | 1 | 12/20/2000 | 12/26/2000 | LLC | P8535 |
| Uranium-235/236, dissolved | 15117-96-1 | EPA 908.0M | 2.3 ± 0.62 | 0.5 | pCi/L | 1 | 12/20/2000 | 12/26/2000 | LLC | P8535 |
| Uranium-238, dissolved | 7440-61-1 | EPA 908.0M | 42 ± 2.2 | 0.4 | pCi/L | 1 | 12/20/2000 | 12/26/2000 | LLC | P8535 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | 0.27 ± 0.44 | 0.5 | pCi/L | 1 | 12/05/2000 | 12/14/2000 | KEB | P8323 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | -0.41 ± 0.26 | 0.5 | pCi/L | 1 | 12/05/2000 | 12/14/2000 | KEB | P8323 |

Client: **Envirocare of Utah**
Work Order: **0011030**
Project: **LARW**

Client Sample ID: **GW-100**
Tag Number:

Lab Sample ID: **0011030-04B**
Date Collected: **10/31/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Carbon-14, dissolved | 14762-75-5 | EPA 520-C01M | -16 ± 15 | 20 | | pCi/L | 1 | 11/22/2000 | 12/13/2000 | JCP | P8172 |
| Iodine-129, dissolved | 15046-84-1 | EPA 902.0 | 0.38 ± 0.79 | 1 | | pCi/L | 1 | 12/06/2000 | 12/15/2000 | CWP | P8197 |

Client: **Envirocare of Utah**
Work Order: **0011030**
Project: **LARW**

Client Sample ID: **GW-100**
Tag Number:

Lab Sample ID: **0011030-04C**
Date Collected: **10/31/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Bromide | 24959-67-9 | SW846 9056 | ND | 10 | | mg/L | 20 | | 11/16/2000 | PKL | A11229 |
| Tritium, dissolved | 10028-17-8 | EPA 906.0 | -17 ± 210 | 400 | | pCi/L | 1 | 11/21/2000 | 12/01/2000 | ALZ | P8149 |

**Qualifiers:** ND - Not detected at the reporting limit; J - Analyte detected below reporting limit; F - Value above quantitation range; S - Spike outside accepted recovery limits; P - Analyte detected in method blank; L - Contract/Client reporting limit exceeded; outside accepted recovery limits; Y - Unspiked sample > 4 times amount spike; mple > 10 times blank result; M - Maximum contaminant level exceeded; cate sample(s) < 5 times limit

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**Date:** 02-Jan-01

# BATCH QC SUMMARY REPORT

Client: **Envirocare of Utah** Batch ID: **A11229** Sample ID: **0010202-01CDUP** Method: **SW846 9056** Prepped:
Work Order: **0011030** Seq No: **223361** Unit: **mg/L** Analyzed: **11/15/00**
Project: **LARW** **Sample Duplicate** Run ID: **IC1_001115A** Matrix: **Aqueous** Analyst: **PKL**

| Analyte | Result ± 2 sigma | Limit | SpikeVal | SpikeRefVal | %REC | LowLimit | HighLimit | DupRefVal | ± 2 sigma | RPD/RER | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bromide | 11 | 10 | | | | | | ND | | 200 | 20 | X |

Client: **Envirocare of Utah** Batch ID: **A11229** Sample ID: **0011021-02CDUP** Method: **SW846 9056** Prepped:
Work Order: **0011030** Seq No: **223393** Unit: **mg/L** Analyzed: **11/16/00**
Project: **LARW** **Sample Duplicate** Run ID: **IC1_001115A** Matrix: **Aqueous** Analyst: **PKL**

| Analyte | Result ± 2 sigma | Limit | SpikeVal | SpikeRefVal | %REC | LowLimit | HighLimit | DupRefVal | ± 2 sigma | RPD/RER | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bromide | 11 | 10 | | | | | | ND | | 200 | 20 | X |

Client: **Envirocare of Utah** Batch ID: **A11229** Sample ID: **LCS** Method: **SW846 9056** Prepped:
Work Order: **0011030** Seq No: **223398** Unit: **mg/L** Analyzed:
Project: **LARW** **Laboratory Control Spike** Run ID: **IC1_001115A** Matrix: **Aqueous** Analyst: **PKL**

| Analyte | Result ± 2 sigma | Limit | SpikeVal | SpikeRefVal | %REC | LowLimit | HighLimit | DupRefVal | ± 2 sigma | RPD/RER | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bromide | 10 | 0.5 | 10 | | 104 | 90 | 110 | | | | | |

Client: **Envirocare of Utah** Batch ID: **A11229** Sample ID: **MBLK** Method: **SW846 9056** Prepped:
Work Order: **0011030** Seq No: **223397** Unit: **mg/L** Analyzed:
Project: **LARW** **Method Blank** Run ID: **IC1_001115A** Matrix: **Aqueous** Analyst: **PKL**

| Analyte | Result ± 2 sigma | Limit | SpikeVal | SpikeRefVal | %REC | LowLimit | HighLimit | DupRefVal | ± 2 sigma | RPD/RER | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bromide | ND | 0.5 | | | | | | | | | | |

Client: **Envirocare of Utah** Batch ID: **A11229** Sample ID: **0010202-01CMS** Method: **SW846 9056** Prepped:
Work Order: **0011030** Seq No: **223362** Unit: **mg/L** Analyzed: **11/15/00**
Project: **LARW** **Matrix Spike** Run ID: **IC1_001115A** Matrix: **Aqueous** Analyst: **PKL**

| Analyte | Result ± 2 sigma | Limit | SpikeVal | SpikeRefVal | %REC | LowLimit | HighLimit | DupRefVal | ± 2 sigma | RPD/RER | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bromide | 220 | 10 | 200 | 0 | 108 | 75 | 125 | | | | | |

Client: **Envirocare of Utah** Batch ID: **A11229** Sample ID: **0011021-02CMS** Method: **SW846 9056** Prepped:
Work Order: **0011030** Seq No: **223394** Unit: **mg/L** Analyzed: **11/16/00**
Project: **LARW** **Matrix Spike** Run ID: **IC1_001115A** Matrix: **Aqueous** Analyst: **PKL**

| Analyte | Result ± 2 sigma | Limit | SpikeVal | SpikeRefVal | %REC | LowLimit | HighLimit | DupRefVal | ± 2 sigma | RPD/RER | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bromide | 220 | 10 | 200 | 0 | 108 | 75 | 125 | | | | | |

**Qualifiers:**

ND - Not detected at the reporting limit
J - Analyte detected below quantitation limit
E - Value above quantitation range
R - RPD outside accepted recovery limits
X - Duplicate sample(s) < 5 times limit
S - Spike recovery outside accepted recovery limits
Y - Unspiked sample > 4 times amount spiked
B - Analyte detected in the associated method blank
Z - Sample > 10 times blank result

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Date: 31-Jan-01

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah**
Work Order: **0011142**
Project: **LARW 11e.(2)**

## Client Sample ID: GW-29

Tag Number:

Lab Sample ID: **0011142-01A**
Date Collected: **11/13/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 7440-61-1 | ASTM D2907 | 0.022 | 0.0009 | | mg/L | 1 | 11/21/2000 | 12/06/2000 | AWT | P8145 |
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 6.2 ± 2.8 | 5 | | pCi/L | 1 | 01/13/2001 | 01/15/2001 | CMA | P8837 |
| Gross Alpha, dissolved | 12587-46-1 | EPA 00-02 | 48 ± 11 | 8 | L | pCi/L | 1 | 12/06/2000 | 12/12/2000 | AEW | P8335 |
| Gross Beta, dissolved | 12587-47-2 | EPA 900.0 | 220 ± 580 | 1000 | L | pCi/L | 1 | 11/29/2000 | 12/04/2000 | AEW | P8214 |
| Potassium-40, dissolved | 13966-00-2 | EPA 901.1 | 430 ± 140 | 200 | | pCi/L | 1 | | 11/30/2000 | LLC | A11650 |
| Radium-226, dissolved | 13982-63-3 | EPA 903.0M/SM 705M | 1.3 ± 0.49 | 0.5 | | pCi/L | 1 | 11/21/2000 | 11/22/2000 | CEJ | P8088 |
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 2.6 ± 0.46 | 0.6 | | pCi/L | 1 | 11/27/2000 | 12/11/2000 | CWP | P8194 |
| Strontium-89/90, dissolved | 11-10-9 | EPA 905.0/SM704 | 1.0 ± 1.0 | 2 | | pCi/L | 1 | 11/17/2000 | 11/28/2000 | MTC | P8090 |
| Neptunium-237, dissolved | 13994-20-2 | EPA 907.0M/520M | 0.68 ± 0.52 | 0.6 | | pCi/L | 1 | 12/01/2000 | 12/11/2000 | JCP | P8274 |
| Uranium-233/234, dissolved | 13966-29-5 | EPA 908.0M | 15 ± 1.3 | 0.3 | | pCi/L | 1 | 12/15/2000 | 12/21/2000 | LLC | P8487 |
| Uranium-235/236, dissolved | 15117-96-1 | EPA 908.0M | -0.043 ± 0.24 | 0.4 | | pCi/L | 1 | 12/15/2000 | 12/21/2000 | LLC | P8487 |
| Uranium-238, dissolved | 7440-61-1 | EPA 908.0M | 7.8 ± 0.93 | 0.3 | | pCi/L | 1 | 12/15/2000 | 12/21/2000 | LLC | P8487 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | -0.60 ± 0.27 | 0.5 | | pCi/L | 1 | 12/26/2000 | 01/04/2001 | LLC | P8603 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | -0.62 ± 0.27 | 0.6 | | pCi/L | 1 | 12/26/2000 | 01/04/2001 | LLC | P8603 |

Client: **Envirocare of Utah**
Work Order: **0011142**
Project: **LARW 11e.(2)**

## Client Sample ID: GW-29

Tag Number:

Lab Sample ID: **0011142-01B**
Date Collected: **11/13/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Carbon-14, dissolved | 14762-75-5 | EPA 520-C01M | -26 ± 29 | 30 | | pCi/L | 1 | 11/22/2000 | 12/13/2000 | JCP | P8172 |
| Iodine-129, dissolved | 15046-84-1 | EPA 902.0 | 0.13 ± 0.82 | 1 | | pCi/L | 1 | 12/14/2000 | 12/20/2000 | CWP | P8413 |

Qualifiers: ND - Not detected at the reporting limit; J - Analyte detected below reporting limit; E - Value above quantitation range; S - Spike outside accepted recovery limits; B - Analyte detected in method blank; L - Contract/Client reporting limit exceeded; [illegible] outside accepted recovery limits; Y - Unspiked sample > 4 times amount spiked; [illegible]ole > 10 times blank result; M - Maximum contaminant level exceeded; [illegible]le sample(s) < 5 times limit

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**Date:** 31-Jan-01

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah**
Work Order: **0011142**
Project: **LARW 11e.(2)**

## Client Sample ID: **GW-29**
Tag Number:

Lab Sample ID: **0011142-01C**
Date Collected: **11/13/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Bromide | 24959-67-9 | SW846 9056 | ND | 10 | | mg/L | 20 | | 12/08/2000 | PKL | A11637 |
| Tritium, dissolved | 10028-17-8 | EPA 906.0 | -39 ± 250 | 400 | | pCi/L | 1 | 12/13/2000 | 12/19/2000 | ALZ | P8444 |

Client: **Envirocare of Utah**
Work Order: **0011142**
Project: **LARW 11e.(2)**

## Client Sample ID: **GW-77**
Tag Number:

Lab Sample ID: **0011142-02A**
Date Collected: **11/13/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 7440-61-1 | ASTM D2907 | 0.018 | 0.0009 | | mg/L | 1 | 11/21/2000 | 12/06/2000 | AWT | P8145 |
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 4.6 ± 2.7 | 4 | | pCi/L | 1 | 01/13/2001 | 01/15/2001 | CMA | P8837 |
| Gross Alpha, dissolved | 12587-46-1 | EPA 00-02 | 53 ± 12 | 9 | L | pCi/L | 1 | 12/06/2000 | 12/12/2000 | AEW | P8335 |
| Gross Beta, dissolved | 12587-47-2 | EPA 900.0 | -53 ± 490 | 800 | L | pCi/L | 1 | 11/29/2000 | 12/04/2000 | AEW | P8214 |
| Potassium-40, dissolved | 13966-00-2 | EPA 901.1 | 420 ± 140 | 200 | | pCi/L | 1 | | 11/30/2000 | LLC | A11650 |
| Radium-226, dissolved | 13982-63-3 | EPA 903.0M/SM 705M | 1.5 ± 0.52 | 0.5 | | pCi/L | 1 | 11/21/2000 | 11/22/2000 | CEJ | P8088 |
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 2.8 ± 0.46 | 0.6 | | pCi/L | 1 | 11/27/2000 | 12/11/2000 | CWP | P8194 |
| Strontium-89/90, dissolved | 11-10-9 | EPA 905.0/SM704 | 2.3 ± 0.98 | 2 | | pCi/L | 1 | 11/17/2000 | 11/28/2000 | MTC | P8090 |
| Neptunium-237, dissolved | 13994-20-2 | EPA 907.0M/520M | 0.16 ± 0.29 | 0.4 | | pCi/L | 1 | 12/01/2000 | 12/11/2000 | JCP | P8274 |
| Uranium-233/234, dissolved | 13966-29-5 | EPA 908.0M | 12 ± 1.1 | 0.3 | | pCi/L | 1 | 12/15/2000 | 12/21/2000 | LLC | P8487 |
| Uranium-235/236, dissolved | 15117-96-1 | EPA 908.0M | 0.18 ± 0.25 | 0.3 | | pCi/L | 1 | 12/15/2000 | 12/21/2000 | LLC | P8487 |
| Uranium-238, dissolved | 7440-61-1 | EPA 908.0M | 5.6 ± 0.73 | 0.3 | | pCi/L | 1 | 12/15/2000 | 12/21/2000 | LLC | P8487 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | -1.0 ± 0.48 | 0.3 | | pCi/L | 1 | 12/15/2000 | 12/29/2000 | LLC | P8485 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | 0.098 ± 0.24 | 0.4 | | pCi/L | 1 | 12/15/2000 | 12/29/2000 | LLC | P8485 |

**Qualifiers:**
ND - Not detected at the reporting limit
B - Analyte detected in method blank
Z - Sample > 10 times blank result
J - Analyte detected below reporting limit
L - Contract/Client reporting limit exceeded
M - Maximum contaminant level exceeded
E - Value above quantitation range
R - RPD outside accepted recovery limits
X - Duplicate sample(s) < 5 times limit
S - Spike outside accepted recovery limits
Y - Unspiked sample > 4 times amount spiked

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Date: 31-Jan-01

# CLIENT SAMPLE REPORT

Client: Envirocare of Utah
Work Order: 0011142
Project: LARW 11e.(2)

## Client Sample ID: GW-77

Tag Number:

Lab Sample ID: 0011142-02B
Date Collected: 11/13/2000
Matrix: Aqueous

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Carbon-14, dissolved | 14762-75-5 | EPA 520-C01M | -6.4 ± 22 | 30 | | pCi/L | 1 | 11/22/2000 | 12/14/2000 | JCP | P8172 |
| Iodine-129, dissolved | 15046-84-1 | EPA 902.0 | -0.49 ± 0.78 | 1 | | pCi/L | 1 | 12/14/2000 | 12/20/2000 | CWP | P8413 |

Client: Envirocare of Utah
Work Order: 0011142
Project: LARW 11e.(2)

## Client Sample ID: GW-77

Tag Number:

Lab Sample ID: 0011142-02C
Date Collected: 11/13/2000
Matrix: Aqueous

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Bromide | 24959-67-9 | SW846 9056 | 17 | 10 | | mg/L | 20 | | 12/08/2000 | PKL | A11637 |
| Tritium, dissolved | 10028-17-8 | EPA 906.0 | -230 ± 240 | 400 | | pCi/L | 1 | 12/13/2000 | 12/19/2000 | ALZ | P8444 |

Client: Envirocare of Utah
Work Order: 0011142
Project: LARW 11e.(2)

## Client Sample ID: GW-64

Tag Number:

Lab Sample ID: 0011142-03A
Date Collected: 11/14/2000
Matrix: Aqueous

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 7440-61-1 | ASTM D2907 | 0.012 | 0.0009 | | mg/L | 1 | 11/21/2000 | 12/06/2000 | AWT | P8145 |
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 5.0 ± 2.8 | 5 | | pCi/L | 1 | 01/13/2001 | 01/15/2001 | CMA | P8837 |
| Gross Alpha, dissolved | 12587-46-1 | EPA 00-02 | 41 ± 10 | 7 | L | pCi/L | 1 | 12/06/2000 | 12/12/2000 | AEW | P8335 |
| Gross Beta, dissolved | 12587-47-2 | EPA 900.0 | 250 ± 490 | 800 | L | pCi/L | 1 | 11/29/2000 | 12/04/2000 | AEW | P8214 |
| Potassium-40, dissolved | 13966-00-2 | EPA 901.1 | 460 ± 140 | 200 | | pCi/L | 1 | | 11/30/2000 | LLC | A11650 |
| Radium-226, dissolved | 13982-63-3 | EPA 903.0M/SM 705M | 2.0 ± 0.57 | 0.5 | | pCi/L | 1 | 11/21/2000 | 11/22/2000 | CEJ | P8088 |
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 2.4 ± 0.45 | 0.6 | | pCi/L | 1 | 11/27/2000 | 12/11/2000 | CWP | P8194 |
| Strontium-89/90, dissolved | 11-10-9 | EPA 905.0/SM704 | 0.51 ± 0.88 | 2 | | pCi/L | 1 | 11/17/2000 | 11/28/2000 | MTC | P8090 |
| Neptunium-237, dissolved | 13994-20-2 | EPA 907.0M/520M | 0.17 ± 0.32 | 0.4 | | pCi/L | 1 | 12/01/2000 | 12/11/2000 | JCP | P8274 |
| Uranium-233/234 dissolved | 13966-29-5 | EPA 908.0M | 11 ± 1.1 | 0.3 | | pCi/L | 1 | 12/15/2000 | 12/21/2000 | LLC | P8487 |

Qualifiers: ND - Not detected at the reporting limit J - Analyte detected below reporting limit E - Value above quantitation range S - Spike outside accepted recovery limits
P - Analyte detected in method blank L - Contract/Client reporting limit exceeded R - RPD outside accepted recovery limits Y - Unspiked sample > 4 times amount spiked
mple > 10 times blank result M - Maximum contaminant level exceeded cate sample(s) < 5 times limit

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**Date:** 31-Jan-01

# CLIENT SAMPLE REPORT

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium-235/236, dissolved | 15117-96-1 | EPA 908.0M | -0.11 ± 0.23 | 0.4 | | pCi/L | 1 | 12/15/2000 | 12/21/2000 | LLC | P8487 |
| Uranium-238, dissolved | 7440-61-1 | EPA 908.0M | 5.1 ± 0.73 | 0.3 | | pCi/L | 1 | 12/15/2000 | 12/21/2000 | LLC | P8487 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | -0.27 ± 0.50 | 0.4 | | pCi/L | 1 | 12/15/2000 | 12/26/2000 | LLC | P8485 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | -0.052 ± 0.26 | 0.5 | | pCi/L | 1 | 12/15/2000 | 12/26/2000 | LLC | P8485 |

Client: **Envirocare of Utah**
Work Order: **0011142**
Project: **LARW 11e.(2)**

Client Sample ID: **GW-64**
Tag Number:

Lab Sample ID: **0011142-03B**
Date Collected: **11/14/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Carbon-14, dissolved | 14762-75-5 | EPA 520-C01M | -5.6 ± 16 | 20 | | pCi/L | 1 | 11/22/2000 | 12/12/2000 | JCP | P8173 |
| Iodine-129, dissolved | 15046-84-1 | EPA 902.0 | -0.54 ± 0.79 | 1 | | pCi/L | 1 | 12/14/2000 | 12/20/2000 | CWP | P8413 |

Client: **Envirocare of Utah**
Work Order: **0011142**
Project: **LARW 11e.(2)**

Client Sample ID: **GW-64**
Tag Number:

Lab Sample ID: **0011142-03C**
Date Collected: **11/14/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Bromide | 24959-67-9 | SW846 9056 | ND | 10 | | mg/L | 20 | | 12/08/2000 | PKL | A11637 |
| Tritium, dissolved | 10028-17-8 | EPA 906.0 | -190 ± 240 | 400 | | pCi/L | 1 | 12/13/2000 | 12/19/2000 | ALZ | P8444 |

Client: **Envirocare of Utah**
Work Order: **0011142**
Project: **LARW 11e.(2)**

Client Sample ID: **I-2-30**
Tag Number:

Lab Sample ID: **0011142-04A**
Date Collected: **11/14/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 7440-61-1 | ASTM D2907 | 0.0080 | 0.0009 | | mg/L | 1 | 11/21/2000 | 12/07/2000 | AWT | P8144 |
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 0.83 ± 2.6 | 4 | | pCi/L | 1 | 01/13/2001 | 01/15/2001 | CMA | P8837 |
| Gross Alpha, dissolved | 12587-46-1 | EPA 00-02 | 28 ± 8.6 | 7 | L | pCi/L | 1 | 12/06/2000 | 12/12/2000 | AEW | P8335 |
| Gross Beta, dissolved | 12587-47-2 | EPA 900.0 | 460 ± 500 | 800 | L | pCi/L | 1 | 11/29/2000 | 12/04/2000 | AEW | P8214 |
| Gross Beta, dissolved | 12587-47-2 | EPA 900.0 | 340 ± 140 | 200 | L | pCi/L | 1 | 01/19/2001 | 01/24/2001 | AEW | P8922 |
| Potassium-40, dissolved | 13966-00-2 | EPA 901.1 | 390 ± 130 | 200 | | pCi/L | 1 | | 11/30/2000 | LLC | A11650 |

**Qualifiers:**
ND - Not detected at the reporting limit
B - Analyte detected in method blank
Z - Sample > 10 times blank result
J - Analyte detected below reporting limit
L - Contract/Client reporting limit exceeded
M - Maximum contaminant level exceeded
E - Value above quantitation range
R - RPD outside accepted recovery limits
X - Duplicate sample(s) < 5 times limit
S - Spike outside accepted recovery limits
Y - Unspiked sample > 4 times amount spiked

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Date: 31-Jan-01

# CLIENT SAMPLE REPORT

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226, dissolved | 13982-63-3 | EPA 903.0M/SM 705M | 0.37 ± 0.30 | 0.4 | pCi/L | 1 | 12/05/2000 | 12/14/2000 | CWP | P8310 |
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 1.4 ± 0.42 | 0.6 | pCi/L | 1 | 11/27/2000 | 12/11/2000 | CWP | P8194 |
| Strontium-89/90, dissolved | 11-10-9 | EPA 905.0/SM704 | -0.62 ± 0.94 | 2 | pCi/L | 1 | 11/17/2000 | 11/28/2000 | MTC | P8090 |
| Neptunium-237, dissolved | 13994-20-2 | EPA 907.0M/520M | 0.66 ± 0.46 | 0.4 | pCi/L | 1 | 12/01/2000 | 12/11/2000 | JCP | P8274 |
| Uranium-233/234, dissolved | 13966-29-5 | EPA 908.0M | 8.3 ± 0.95 | 0.3 | pCi/L | 1 | 12/15/2000 | 12/21/2000 | LLC | P8487 |
| Uranium-235/236, dissolved | 15117-96-1 | EPA 908.0M | -0.10 ± 0.21 | 0.3 | pCi/L | 1 | 12/15/2000 | 12/21/2000 | LLC | P8487 |
| Uranium-238, dissolved | 7440-61-1 | EPA 908.0M | 4.1 ± 0.67 | 0.3 | pCi/L | 1 | 12/15/2000 | 12/21/2000 | LLC | P8487 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | -0.52 ± 0.66 | 0.4 | pCi/L | 1 | 12/15/2000 | 12/26/2000 | LLC | P8485 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | 0.16 ± 0.29 | 0.4 | pCi/L | 1 | 12/15/2000 | 12/26/2000 | LLC | P8485 |

Client: **Envirocare of Utah**
Work Order: **0011142**
Project: **LARW 11e.(2)**

## Client Sample ID: I-2-30
Tag Number:

Lab Sample ID: **0011142-04B**
Date Collected: **11/14/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Carbon-14, dissolved | 14762-75-5 | EPA 520-C01M | -27 ± 28 | 30 | | pCi/L | 1 | 11/22/2000 | 12/12/2000 | JCP | P8173 |
| Iodine-129, dissolved | 15046-84-1 | EPA 902.0 | -0.090 ± 0.73 | 1 | | pCi/L | 1 | 12/14/2000 | 12/20/2000 | CWP | P8413 |

Client: **Envirocare of Utah**
Work Order: **0011142**
Project: **LARW 11e.(2)**

## Client Sample ID: I-2-30
Tag Number:

Lab Sample ID: **0011142-04C**
Date Collected: **11/14/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Bromide | 24959-67-9 | SW846 9056 | ND | 10 | | mg/L | 20 | | 12/08/2000 | PKL | A11637 |
| Tritium, dissolved | 10028-17-8 | EPA 906.0 | -240 ± 240 | 400 | | pCi/L | 1 | 12/13/2000 | 12/19/2000 | ALZ | P8444 |

Client: **Envirocare of Utah**
Work Order: **0011142**
Project: **LARW 11e.(2)**

## Client Sample ID: GW-56R
Tag Number:

Lab Sample ID: **0011142-05A**
Date Collected: **11/14/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 7440-61-1 | ASTM D2907 | 0.012 | 0.0009 | | mg/L | 1 | 11/21/2000 | 12/07/2000 | AWT | P8144 |

Qualifiers: ND - Not detected at the reporting limit; J - Analyte detected below reporting limit; E - Value above quantitation range; S - Spike outside accepted recovery limits
P - Analyte detected in method blank; L - Contract/Client reporting limit exceeded; RPD outside accepted recovery limits; Y - Unspiked sample > 4 times amount spik
ample > 10 times blank result; M - Maximum contaminant level exceeded; licate sample(s) < 5 times limit

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Date: 31-Jan-01

# CLIENT SAMPLE REPORT

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 13 ± 3.5 | 6 | L | pCi/L | 1 | 12/15/2000 | 01/03/2001 | MDR | P8484 |
| Gross Alpha, dissolved | 12587-46-1 | EPA 00-02 | 39 ± 11 | 10 | L | pCi/L | 1 | 12/06/2000 | 12/12/2000 | AEW | P8335 |
| Gross Beta, dissolved | 12587-47-2 | EPA 900.0 | 140 ± 480 | 800 | L | pCi/L | 1 | 11/29/2000 | 12/04/2000 | AEW | P8214 |
| Potassium-40, dissolved | 13966-00-2 | EPA 901.1 | 320 ± 120 | 200 | | pCi/L | 1 | | 11/30/2000 | LLC | A11650 |
| Radium-226, dissolved | 13982-63-3 | EPA 903.0M/SM 705M | 0.99 ± 0.42 | 0.4 | | pCi/L | 1 | 12/05/2000 | 12/14/2000 | CWP | P8310 |
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 1.9 ± 0.44 | 0.6 | | pCi/L | 1 | 11/27/2000 | 12/11/2000 | CWP | P8194 |
| Strontium-89/90, dissolved | 11-10-9 | EPA 905.0/SM704 | -0.26 ± 1.0 | 2 | | pCi/L | 1 | 11/17/2000 | 11/28/2000 | MTC | P8090 |
| Neptunium-237, dissolved | 13994-20-2 | EPA 907.0M/520M | 0.19 ± 0.42 | 0.6 | | pCi/L | 1 | 12/01/2000 | 12/11/2000 | JCP | P8274 |
| Uranium-233/234, dissolved | 13966-29-5 | EPA 908.0M | 9.5 ± 0.86 | 0.3 | | pCi/L | 1 | 01/01/2001 | 01/08/2001 | LLC | P8672 |
| Uranium-235/236, dissolved | 15117-96-1 | EPA 908.0M | 0.17 ± 0.23 | 0.3 | | pCi/L | 1 | 01/01/2001 | 01/08/2001 | LLC | P8672 |
| Uranium-238, dissolved | 7440-61-1 | EPA 908.0M | 5.4 ± 0.62 | 0.3 | | pCi/L | 1 | 01/01/2001 | 01/08/2001 | LLC | P8672 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | -0.72 ± 0.47 | 0.5 | | pCi/L | 1 | 12/15/2000 | 12/26/2000 | LLC | P8485 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | -0.33 ± 0.30 | 0.6 | | pCi/L | 1 | 12/15/2000 | 12/26/2000 | LLC | P8485 |

Client: **Envirocare of Utah**
Work Order: **0011142**
Project: **LARW 11e.(2)**

Client Sample ID: **GW-56R**
Tag Number:

Lab Sample ID: **0011142-05B**
Date Collected: **11/14/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Carbon-14, dissolved | 14762-75-5 | EPA 520-C01M | -13 ± 27 | 30 | | pCi/L | 1 | 11/22/2000 | 12/12/2000 | JCP | P8173 |
| Iodine-129, dissolved | 15046-84-1 | EPA 902.0 | -0.93 ± 0.76 | 1 | | pCi/L | 1 | 12/14/2000 | 12/20/2000 | CWP | P8413 |

Client: **Envirocare of Utah**
Work Order: **0011142**
Project: **LARW 11e.(2)**

Client Sample ID: **GW-56R**
Tag Number:

Lab Sample ID: **0011142-05C**
Date Collected: **11/14/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Bromide | 24959-67-9 | SW846 9056 | ND | 10 | | mg/L | 20 | | 12/08/2000 | PKL | A11637 |
| Tritium, dissolved | 10028-17-8 | EPA 906.0 | 9.7 ± 240 | 400 | | pCi/L | 1 | 12/13/2000 | 12/19/2000 | ALZ | P8444 |

**Qualifiers:**
ND - Not detected at the reporting limit
B - Analyte detected in method blank
Z - Sample > 10 times blank result
J - Analyte detected below reporting limit
L - Contract/Client reporting limit exceeded
M - Maximum contaminant level exceeded
E - Value above quantitation range
R - RPD outside accepted recovery limits
X - Duplicate sample(s) < 5 times limit
S - Spike outside accepted recovery limits
Y - Unspiked sample > 4 times amount spiked

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Date: 31-Jan-01

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah**
Work Order: **0011142**
Project: **LARW 11e.(2)**

## Client Sample ID: GW-16R

Tag Number:

Lab Sample ID: **0011142-06A**
Date Collected: **11/14/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 7440-61-1 | ASTM D2907 | 0.012 | 0.0009 | | mg/L | 1 | 11/21/2000 | 12/07/2000 | AWT | P8144 |
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 12 ± 3.4 | 6 | L | pCi/L | 1 | 12/15/2000 | 01/03/2001 | MDR | P8484 |
| Gross Alpha, dissolved | 12587-46-1 | EPA 00-02 | 31 ± 9.6 | 9 | L | pCi/L | 1 | 12/06/2000 | 12/12/2000 | AEW | P8335 |
| Gross Beta, dissolved | 12587-47-2 | EPA 900.0 | 460 ± 500 | 800 | L | pCi/L | 1 | 11/29/2000 | 12/04/2000 | AEW | P8214 |
| Potassium-40, dissolved | 13966-00-2 | EPA 901.1 | 360 ± 110 | 100 | | pCi/L | 1 | | 12/01/2000 | LLC | A11650 |
| Radium-226, dissolved | 13982-63-3 | EPA 903.0M/SM 705M | 0.28 ± 0.30 | 0.4 | | pCi/L | 1 | 12/05/2000 | 12/14/2000 | CWP | P8310 |
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 1.4 ± 0.42 | 0.6 | | pCi/L | 1 | 11/27/2000 | 12/11/2000 | CWP | P8194 |
| Strontium-89/90, dissolved | 11-10-9 | EPA 905.0/SM704 | 1.1 ± 0.91 | 2 | | pCi/L | 1 | 11/17/2000 | 11/28/2000 | MTC | P8090 |
| Neptunium-237, dissolved | 13994-20-2 | EPA 907.0M/520M | 0.063 ± 0.36 | 0.6 | | pCi/L | 1 | 12/01/2000 | 12/11/2000 | JCP | P8274 |
| Uranium-233/234, dissolved | 13966-29-5 | EPA 908.0M | 13 ± 0.98 | 0.3 | | pCi/L | 1 | 01/01/2001 | 01/08/2001 | LLC | P8672 |
| Uranium-235/236, dissolved | 15117-96-1 | EPA 908.0M | 0.33 ± 0.27 | 0.4 | | pCi/L | 1 | 01/01/2001 | 01/08/2001 | LLC | P8672 |
| Uranium-238, dissolved | 7440-61-1 | EPA 908.0M | 5.7 ± 0.67 | 0.3 | | pCi/L | 1 | 01/01/2001 | 01/08/2001 | LLC | P8672 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | 0.52 ± 0.89 | 0.6 | | pCi/L | 1 | 12/15/2000 | 12/26/2000 | LLC | P8485 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | -0.0091 ± 0.38 | 0.7 | | pCi/L | 1 | 12/15/2000 | 12/26/2000 | LLC | P8485 |

Client: **Envirocare of Utah**
Work Order: **0011142**
Project: **LARW 11e.(2)**

## Client Sample ID: GW-16R

Tag Number:

Lab Sample ID: **0011142-06B**
Date Collected: **11/14/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Carbon-14, dissolved | 14762-75-5 | EPA 520-C01M | -9.8 ± 15 | 30 | | pCi/L | 1 | 11/22/2000 | 12/12/2000 | JCP | P8173 |
| Iodine-129, dissolved | 15046-84-1 | EPA 902.0 | -1.4 ± 0.76 | 1 | | pCi/L | 1 | 12/14/2000 | 12/20/2000 | CWP | P8413 |

**Qualifiers:** ND - Not detected at the reporting limit; J - Analyte detected below reporting limit; F - Value above quantitation range; S - Spike outside accepted recovery limits; B - Analyte detected in method blank; L - Contract/Client reporting limit exceeded; D - RPD outside accepted recovery limits; Y - Unspiked sample > 4 times amount spike; E - Sample > 10 times blank result; M - Maximum contaminant level exceeded; * - Duplicate sample(s) < 5 times limit

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**Date:** 31-Jan-01

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah**
Work Order: **0011142**
Project: **LARW 11e.(2)**

Client Sample ID: **GW-16R**
Tag Number:

Lab Sample ID: **0011142-06C**
Date Collected: **11/14/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result | ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bromide | 24959-67-9 | SW846 9056 | 11 | | 10 | | mg/L | 20 | | 12/08/2000 | PKL | A11637 |
| Tritium, dissolved | 10028-17-8 | EPA 906.0 | -15 | ± 240 | 400 | | pCi/L | 1 | 12/13/2000 | 12/19/2000 | ALZ | P8444 |

Qualifiers:
ND - Not detected at the reporting limit
B - Analyte detected in method blank
Z - Sample > 10 times blank result
J - Analyte detected below reporting limit
L - Contract/Client reporting limit exceeded
M - Maximum contaminant level exceeded
E - Value above quantitation range
R - RPD outside accepted recovery limits
X - Duplicate sample(s) < 5 times limit
S - Spike outside accepted recovery limits
Y - Unspiked sample > 4 times amount spiked

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**Date:** 13-Dec-00

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah**
Work Order: **0011143**
Project: **11e.(2)**

Client Sample ID: **GW-38R**
Tag Number:

Lab Sample ID: **0011143-01A**
Date Collected: **11/13/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 0.0023 | 0.0009 | | mg/L | 1 | 11/21/2000 | 12/07/2000 | AWT | P8144 |
| Potassium-40, dissolved | 13966-00-2 | EPA 901.1 | 390 ± 120 | 200 | | pCi/L | 1 | | 11/30/2000 | LLC | A11651 |

Client: **Envirocare of Utah**
Work Order: **0011143**
Project: **11e.(2)**

Client Sample ID: **GW-38R**
Tag Number:

Lab Sample ID: **0011143-01B**
Date Collected: **11/13/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Bromide | 24959-67-9 | SW846 9056 | ND | 10 | | mg/L | 20 | | 12/08/2000 | PKL | A11637 |

Client: **Envirocare of Utah**
Work Order: **0011143**
Project: **11e.(2)**

Client Sample ID: **GW-37**
Tag Number:

Lab Sample ID: **0011143-02A**
Date Collected: **11/13/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 11-09-6 | ASTM D2907 | 0.011 | 0.0009 | | mg/L | 1 | 11/21/2000 | 12/07/2000 | AWT | P8144 |
| Potassium-40, dissolved | 13966-00-2 | EPA 901.1 | 290 ± 98 | 200 | | pCi/L | 1 | | 12/01/2000 | LLC | A11651 |

Client: **Envirocare of Utah**
Work Order: **0011143**
Project: **11e.(2)**

Client Sample ID: **GW-37**
Tag Number:

Lab Sample ID: **0011143-02B**
Date Collected: **11/13/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Bromide | 24959-67-9 | SW846 9056 | 16 | 10 | | mg/L | 20 | | 12/08/2000 | PKL | A11637 |

**Qualifiers:** ND - Not detected at the reporting limit; J - Analyte detected below reporting limit; E - Value above quantitation range; S - Spike outside accepted recovery limits; - Analyte detected in method blank; L - Contract/Client reporting limit exceeded; outside accepted recovery limits; Y - Unspiked sample > 4 times amount spiked; ple > 10 times blank result; M - Maximum contaminant level exceeded; ate sample(s) < 5 times limit

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**Date:** 11-Jan-01

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah**
Work Order: **0012009**
Project:

Client Sample ID: **GW-119**
Tag Number: **RELOG 0009258-01A**

Lab Sample ID: **0012009-01A**
Date Collected: **09/26/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 28 ± 4.3 | 7 | | pCi/L | 1 | 12/28/2000 | 01/08/2001 | MDR | P8642 |

Client: **Envirocare of Utah**
Work Order: **0012009**
Project:

Client Sample ID: **GW-120**
Tag Number: **RELOG 0009258-02A**

Lab Sample ID: **0012009-02A**
Date Collected: **09/26/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 26 ± 4.3 | 7 | | pCi/L | 1 | 12/28/2000 | 01/08/2001 | MDR | P8642 |

Client: **Envirocare of Utah**
Work Order: **0012009**
Project:

Client Sample ID: **GW-121**
Tag Number: **RELOG 0009258-03A**

Lab Sample ID: **0012009-03A**
Date Collected: **09/26/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 27 ± 4.3 | 7 | | pCi/L | 1 | 12/28/2000 | 01/08/2001 | MDR | P8642 |

Client: **Envirocare of Utah**
Work Order: **0012009**
Project:

Client Sample ID: **GW-122**
Tag Number: **RELOG 0009258-04A**

Lab Sample ID: **0012009-04A**
Date Collected: **09/26/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 23 ± 3.7 | 6 | | pCi/L | 1 | 12/12/2000 | 12/27/2000 | JCP | P8422 |

Client: **Envirocare of Utah**
Work Order: **0012009**
Project:

Client Sample ID: **GW-108**
Tag Number: **RELOG 0010007-01A**

Lab Sample ID: **0012009-05A**
Date Collected: **09/27/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 10 ± 3.6 | 6 | L | pCi/L | 1 | 12/12/2000 | 12/27/2000 | JCP | P8422 |

**Qualifiers:**
ND - Not detected at the reporting limit
B - Analyte detected in method blank
Z - Sample > 10 times blank result
J - Analyte detected below reporting limit
L - Contract/Client reporting limit exceeded
M - Maximum contaminant level exceeded
E - Value above quantitation range
R - RPD outside accepted recovery limits
X - Duplicate sample(s) < 5 times limit
S - Spike outside accepted recovery limits
Y - Unspiked sample > 4 times amount spiked

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Date: 11-Jan-01

# CLIENT SAMPLE REPORT

Client: Envirocare of Utah
Work Order: 0012009
Project:

Client Sample ID: GW-109
Tag Number: RELOG 0010007-02A

Lab Sample ID: 0012009-06A
Date Collected: 09/27/2000
Matrix: Aqueous

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 11 ± 3.7 | 6 | L | pCi/L | 1 | 12/12/2000 | 12/27/2000 | JCP | P8422 |

Client: Envirocare of Utah
Work Order: 0012009
Project:

Client Sample ID: GW-110
Tag Number: RELOG 0010007-03A

Lab Sample ID: 0012009-07A
Date Collected: 09/27/2000
Matrix: Aqueous

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 4.9 ± 3.7 | 6 | L | pCi/L | 1 | 12/12/2000 | 12/27/2000 | JCP | P8422 |

Client: Envirocare of Utah
Work Order: 0012009
Project:

Client Sample ID: GW-111
Tag Number: RELOG 0010032-01A

Lab Sample ID: 0012009-08A
Date Collected: 09/28/2000
Matrix: Aqueous

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 13 ± 3.8 | 6 | L | pCi/L | 1 | 12/12/2000 | 12/27/2000 | JCP | P8422 |

Client: Envirocare of Utah
Work Order: 0012009
Project:

Client Sample ID: GW-112
Tag Number: RELOG 0010032-02A

Lab Sample ID: 0012009-09A
Date Collected: 09/28/2000
Matrix: Aqueous

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 11 ± 4.0 | 7 | L | pCi/L | 1 | 12/12/2000 | 12/27/2000 | JCP | P8422 |

Client: Envirocare of Utah
Work Order: 0012009
Project:

Client Sample ID: GW-113
Tag Number: RELOG 0010032-03A

Lab Sample ID: 0012009-10A
Date Collected: 09/28/2000
Matrix: Aqueous

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 6.2 ± 3.6 | 6 | L | pCi/L | 1 | 12/12/2000 | 12/27/2000 | JCP | P8422 |

Qualifiers: ND - Not detected at the reporting limit J - Analyte detected below reporting limit E - Value above quantitation range S - Spike outside accepted recovery limits
B - Analyte detected in method blank L - Contract/Client reporting limit exceeded Q - Outside accepted recovery limits Y - Unspiked sample > 4 times amount spiked
H - Sample > 10 times blank result M - Maximum contaminant level exceeded X - Duplicate sample(s) < 5 times limit

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**Date:** 11-Jan-01

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah**
Work Order: **0012009**
Project:

Client Sample ID: **GW-114**
Tag Number: **RELOG 0010032-04A**

Lab Sample ID: **0012009-11A**
Date Collected: **09/28/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result | ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 15 | ± 5.2 | 8 | L | pCi/L | 1 | 12/12/2000 | 12/21/2000 | MDR | P8423 |

Client: **Envirocare of Utah**
Work Order: **0012009**
Project:

Client Sample ID: **GW-115**
Tag Number: **RELOG 0010032-05A**

Lab Sample ID: **0012009-12A**
Date Collected: **09/28/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result | ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 7.4 | ± 4.6 | 8 | L | pCi/L | 1 | 12/12/2000 | 12/21/2000 | MDR | P8423 |

**Qualifiers:**
ND - Not detected at the reporting limit
B - Analyte detected in method blank
Z - Sample > 10 times blank result
J - Analyte detected below reporting limit
L - Contract/Client reporting limit exceeded
M - Maximum contaminant level exceeded
E - Value above quantitation range
R - RPD outside accepted recovery limits
X - Duplicate sample(s) < 5 times limit
S - Spike outside accepted recovery limits
Y - Unspiked sample > 4 times amount spiked

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**Date:** 22-Jan-01

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah**
Work Order: **0011158**
Project: **LARW**

## Client Sample ID: P3-95SWC

Tag Number:

Lab Sample ID: **0011158-01A**
Date Collected: **11/15/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 7440-61-1 | ASTM D2907 | 0.47 | 0.0009 | | mg/L | 1 | 11/30/2000 | 12/07/2000 | AWT | P8248 |
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 120 ± 4.4 | 6 | | pCi/L | 1 | 12/15/2000 | 01/03/2001 | MDR | P8484 |
| Gross Alpha, dissolved | 12587-46-1 | EPA 00-02 | 280 ± 36 | 10 | | pCi/L | 1 | 11/29/2000 | 11/30/2000 | AEW | P8215 |
| Gross Beta, dissolved | 12587-47-2 | EPA 900.0 | 180 ± 940 | 2000 | L | pCi/L | 1 | 11/29/2000 | 12/04/2000 | AEW | P8214 |
| Potassium-40, dissolved | 13966-00-2 | EPA 901.1 | 830 ± 160 | 200 | | pCi/L | 1 | | 11/28/2000 | LLC | A11652 |
| Radium-226, dissolved | 13982-63-3 | EPA 903.0M/SM 705M | 0.46 ± 0.33 | 0.4 | | pCi/L | 1 | 12/05/2000 | 12/14/2000 | CWP | P8310 |
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 3.1 ± 0.48 | 0.6 | | pCi/L | 1 | 12/19/2000 | 12/26/2000 | CWP | P8250 |
| Strontium-89/90, dissolved | 11-10-9 | EPA 905.0/SM704 | 12 ± 1.2 | 2 | | pCi/L | 1 | 11/28/2000 | 12/01/2000 | MTC | P8211 |
| Neptunium-237, dissolved | 13994-20-2 | EPA 907.0M/520M | 0.24 ± 0.26 | 0.3 | | pCi/L | 1 | 11/27/2000 | 12/13/2000 | JCP | P8183 |
| Uranium-233/234, dissolved | 13966-29-5 | EPA 908.0M | 74 ± 6.0 | 1 | | pCi/L | 1 | 12/26/2000 | 01/02/2001 | LLC | P8620 |
| Uranium-235/236, dissolved | 15117-96-1 | EPA 908.0M | 2.9 ± 1.5 | 1 | L | pCi/L | 1 | 12/26/2000 | 01/02/2001 | LLC | P8620 |
| Uranium-238, dissolved | 7440-61-1 | EPA 908.0M | 220 ± 10 | 1 | | pCi/L | 1 | 12/26/2000 | 01/02/2001 | LLC | P8620 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | -0.20 ± 0.21 | 0.3 | | pCi/L | 1 | 12/26/2000 | 12/29/2000 | LLC | P8603 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | -0.085 ± 0.22 | 0.4 | | pCi/L | 1 | 12/26/2000 | 12/29/2000 | LLC | P8603 |

Client: **Envirocare of Utah**
Work Order: **0011158**
Project: **LARW**

## Client Sample ID: P3-95SWC

Tag Number:

Lab Sample ID: **0011158-01B**
Date Collected: **11/15/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Carbon-14, dissolved | 14762-75-5 | EPA 520-C01M | -19 ± 15 | 20 | | pCi/L | 1 | 11/22/2000 | 12/12/2000 | JCP | P8173 |
| Iodine-129, dissolved | 15046-84-1 | EPA 902.0 | -0.61 ± 0.75 | 1 | | pCi/L | 1 | 12/14/2000 | 12/20/2000 | CWP | P8413 |

Qualifiers: ND - Not detected at the reporting limit J - Analyte detected below reporting limit ...alue above quantitation range S - Spike outside accepted recovery limits
...alyte detected in method blank L - Contract/Client reporting limit exceeded ...utside accepted recovery limits Y - Unspiked sample > 4 times amount spiked
...mple > 10 times blank result M - Maximum contaminant level exceeded X - L ...ate sample(s) < 5 times limit

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**Date:** 22-Jan-01

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah**
Work Order: **0011158**
Project: **LARW**

Client Sample ID: **P3-95SWC**
Tag Number:

Lab Sample ID: **0011158-01C**
Date Collected: **11/15/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Bromide | 24959-67-9 | SW846 9056 | ND | 10 | | mg/L | 20 | | 12/05/2000 | PKL | A11575 |
| Tritium, dissolved | 10028-17-8 | EPA 906.0 | -9.7 ± 240 | 400 | | pCi/L | 1 | 12/13/2000 | 12/19/2000 | ALZ | P8444 |

Client: **Envirocare of Utah**
Work Order: **0011158**
Project: **LARW**

Client Sample ID: **P3-95NEC**
Tag Number:

Lab Sample ID: **0011158-02A**
Date Collected: **11/15/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 7440-61-1 | ASTM D2907 | 0.0067 | 0.0009 | | mg/L | 1 | 11/30/2000 | 12/07/2000 | AWT | P8248 |
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 8.0 ± 3.4 | 6 | L | pCi/L | 1 | 12/15/2000 | 01/03/2001 | MDR | P8484 |
| Gross Alpha, dissolved | 12587-46-1 | EPA 00-02 | 39 ± 14 | 10 | L | pCi/L | 1 | 11/29/2000 | 11/30/2000 | AEW | P8215 |
| Gross Beta, dissolved | 12587-47-2 | EPA 900.0 | 200 ± 460 | 800 | L | pCi/L | 1 | 11/29/2000 | 12/04/2000 | AEW | P8214 |
| Potassium-40, dissolved | 13966-00-2 | EPA 901.1 | 300 ± 110 | 200 | | pCi/L | 1 | | 11/28/2000 | LLC | A11652 |
| Radium-226, dissolved | 13982-63-3 | EPA 903.0M/SM 705M | 0.30 ± 0.30 | 0.4 | | pCi/L | 1 | 12/05/2000 | 12/14/2000 | CWP | P8310 |
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 0.67 ± 0.40 | 0.6 | | pCi/L | 1 | 12/19/2000 | 12/26/2000 | CWP | P8250 |
| Strontium-89/90, dissolved | 11-10-9 | EPA 905.0/SM704 | -0.060 ± 0.91 | 2 | | pCi/L | 1 | 11/20/2000 | 11/28/2000 | MTC | P8119 |
| Neptunium-237, dissolved | 13994-20-2 | EPA 907.0M/520M | 0.35 ± 0.37 | 0.4 | | pCi/L | 1 | 11/27/2000 | 12/13/2000 | JCP | P8183 |
| Uranium-233/234, dissolved | 13966-29-5 | EPA 908.0M | 4.4 ± 1.1 | 0.5 | | pCi/L | 1 | 12/26/2000 | 01/02/2001 | LLC | P8620 |
| Uranium-235/236, dissolved | 15117-96-1 | EPA 908.0M | -0.20 ± 0.30 | 0.6 | | pCi/L | 1 | 12/26/2000 | 01/02/2001 | LLC | P8620 |
| Uranium-238, dissolved | 7440-61-1 | EPA 908.0M | 2.2 ± 0.77 | 0.5 | | pCi/L | 1 | 12/26/2000 | 01/02/2001 | LLC | P8620 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | 0.77 ± 0.48 | 0.6 | | pCi/L | 1 | 12/26/2000 | 01/03/2001 | LLC | P8621 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | -0.73 ± 0.31 | 0.7 | | pCi/L | 1 | 12/26/2000 | 01/03/2001 | LLC | P8621 |

**Qualifiers:**
ND - Not detected at the reporting limit
B - Analyte detected in method blank
Z - Sample > 10 times blank result
J - Analyte detected below reporting limit
L - Contract/Client reporting limit exceeded
M - Maximum contaminant level exceeded
E - Value above quantitation range
R - RPD outside accepted recovery limits
X - Duplicate sample(s) < 5 times limit
S - Spike outside accepted recovery limits
Y - Unspiked sample > 4 times amount spiked

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**Date:** 22-Jan-01

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah**
Work Order: **0011158**
Project: **LARW**

Client Sample ID: **P3-95NEC**
Tag Number:

Lab Sample ID: **0011158-02B**
Date Collected: **11/15/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Carbon-14, dissolved | 14762-75-5 | EPA 520-C01M | -5.7 ± 16 | 30 | | pCi/L | 1 | 11/22/2000 | 12/12/2000 | JCP | P8173 |
| Iodine-129, dissolved | 15046-84-1 | EPA 902.0 | -0.18 ± 0.76 | 1 | | pCi/L | 1 | 12/14/2000 | 12/20/2000 | CWP | P8413 |

Client: **Envirocare of Utah**
Work Order: **0011158**
Project: **LARW**

Client Sample ID: **P3-95NEC**
Tag Number:

Lab Sample ID: **0011158-02C**
Date Collected: **11/15/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Bromide | 24959-67-9 | SW846 9056 | ND | 10 | | mg/L | 20 | | 12/05/2000 | PKL | A11575 |
| Tritium, dissolved | 10028-17-8 | EPA 906.0 | -130 ± 240 | 400 | | pCi/L | 1 | 12/13/2000 | 12/19/2000 | ALZ | P8444 |

Client: **Envirocare of Utah**
Work Order: **0011158**
Project: **LARW**

Client Sample ID: **P3-97NEC**
Tag Number:

Lab Sample ID: **0011158-03A**
Date Collected: **11/15/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 7440-61-1 | ASTM D2907 | 0.013 | 0.0009 | | mg/L | 1 | 11/30/2000 | 12/07/2000 | AWT | P8248 |
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 19 ± 3.5 | 6 | | pCi/L | 1 | 01/02/2001 | 01/18/2001 | MDR | P8675 |
| Gross Alpha, dissolved | 12587-46-1 | EPA 00-02 | 43 ± 14 | 10 | L | pCi/L | 1 | 11/29/2000 | 11/30/2000 | AEW | P8215 |
| Gross Beta, dissolved | 12587-47-2 | EPA 900.0 | -310 ± 480 | 800 | L | pCi/L | 1 | 11/29/2000 | 12/04/2000 | AEW | P8214 |
| Potassium-40, dissolved | 13966-00-2 | EPA 901.1 | 290 ± 97 | 100 | | pCi/L | 1 | | 11/28/2000 | LLC | A11652 |
| Radium-226, dissolved | 13982-63-3 | EPA 903.0M/SM 705M | 0.44 ± 0.35 | 0.4 | | pCi/L | 1 | 12/05/2000 | 12/14/2000 | CWP | P8310 |
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 1.5 ± 0.42 | 0.6 | | pCi/L | 1 | 12/19/2000 | 12/26/2000 | CWP | P8250 |
| Strontium-89/90, dissolved | 11-10-9 | EPA 905.0/SM704 | -0.72 ± 0.84 | 2 | | pCi/L | 1 | 11/20/2000 | 11/28/2000 | MTC | P8119 |
| Neptunium-237, dissolved | 13994-20-2 | EPA 907.0M/520M | 6.1 ± 1.2 | 0.5 | | pCi/L | 1 | 11/27/2000 | 12/13/2000 | JCP | P8183 |
| Uranium-233/234, dissolved | 13966-29-5 | EPA 908.0M | 12 ± 1.9 | 0.6 | | pCi/L | 1 | 12/26/2000 | 01/02/2001 | LLC | P8620 |

Qualifiers: ND - Not detected at the reporting limit; J - Analyte detected below reporting limit; F - Value above quantitation range; S - Spike outside accepted recovery limits
B - Analyte detected in method blank; L - Contract/Client reporting limit exceeded; O - Outside accepted recovery limits; Y - Unspiked sample > 4 times amount spiked
Z - Sample > 10 times blank result; M - Maximum contaminant level exceeded; X - Surrogate sample(s) < 5 times limit

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**Date:** 22-Jan-01

# CLIENT SAMPLE REPORT

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium-235/236, dissolved | 15117-96-1 | EPA 908.0M | 0.31 ± 0.55 | 0.7 | L | pCi/L | 1 | 12/26/2000 | 01/02/2001 | LLC | P8620 |
| Uranium-238, dissolved | 7440-61-1 | EPA 908.0M | 5.6 ± 1.3 | 0.6 | | pCi/L | 1 | 12/26/2000 | 01/02/2001 | LLC | P8620 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | -0.42 ± 0.45 | 0.5 | | pCi/L | 1 | 12/26/2000 | 01/03/2001 | LLC | P8621 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | -0.56 ± 0.29 | 0.6 | | pCi/L | 1 | 12/26/2000 | 01/03/2001 | LLC | P8621 |

Client: **Envirocare of Utah**
Work Order: **0011158**
Project: **LARW**

Client Sample ID: **P3-97NEC**
Tag Number:

Lab Sample ID: **0011158-03B**
Date Collected: **11/15/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Carbon-14, dissolved | 14762-75-5 | EPA 520-C01M | -26 ± 25 | 30 | | pCi/L | 1 | 11/22/2000 | 12/12/2000 | JCP | P8173 |
| Iodine-129, dissolved | 15046-84-1 | EPA 902.0 | -0.75 ± 0.78 | 1 | | pCi/L | 1 | 12/14/2000 | 12/20/2000 | CWP | P8413 |

Client: **Envirocare of Utah**
Work Order: **0011158**
Project: **LARW**

Client Sample ID: **P3-97NEC**
Tag Number:

Lab Sample ID: **0011158-03C**
Date Collected: **11/15/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Bromide | 24959-67-9 | SW846 9056 | 19 | 10 | | mg/L | 20 | | 12/05/2000 | PKL | A11575 |
| Tritium, dissolved | 10028-17-8 | EPA 906.0 | -290 ± 230 | 400 | | pCi/L | 1 | 12/13/2000 | 12/19/2000 | ALZ | P8444 |

**Qualifiers:**
ND - Not detected at the reporting limit
B - Analyte detected in method blank
Z - Sample > 10 times blank result
J - Analyte detected below reporting limit
L - Contract/Client reporting limit exceeded
M - Maximum contaminant level exceeded
E - Value above quantitation range
R - RPD outside accepted recovery limits
X - Duplicate sample(s) < 5 times limit
S - Spike outside accepted recovery limits
Y - Unspiked sample > 4 times amount spiked

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**Date:** 22-Jan-01

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah**
Work Order: **0011180**
Project: **LARW**

## Client Sample ID: **P3-97A**

Tag Number:

Lab Sample ID: **0011180-01A**
Date Collected: **11/15/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Gross Alpha, dissolved | 12587-46-1 | EPA 00-02 | 1000 ± 63 | 20 | | pCi/L | 1 | 12/26/2000 | 12/27/2000 | AEW | P8606 |
| Gross Beta, dissolved | 12587-47-2 | EPA 900.0 | 1900 ± 1000 | 2000 | L | pCi/L | 1 | 12/05/2000 | 12/08/2000 | AEW | P8311 |

Client: **Envirocare of Utah**
Work Order: **0011180**
Project: **LARW**

## Client Sample ID: **CL-4**

Tag Number:

Lab Sample ID: **0011180-02A**
Date Collected: **11/16/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 7440-61-1 | ASTM D2907 | 0.92 | 0.0009 | | mg/L | 1 | 11/30/2000 | 12/07/2000 | AWT | P8248 |
| Gross Alpha, dissolved | 12587-46-1 | EPA 00-02 | 450 ± 43 | 20 | | pCi/L | 1 | 12/26/2000 | 12/27/2000 | AEW | P8606 |
| Gross Beta, dissolved | 12587-47-2 | EPA 900.0 | 340 ± 470 | 700 | L | pCi/L | 1 | 12/05/2000 | 12/08/2000 | AEW | P8311 |
| Potassium-40, dissolved | 13966-00-2 | EPA 901.1 | ND | 200 | | pCi/L | 1 | | 12/01/2000 | LLC | A12158 |
| Radium-226, dissolved | 13982-63-3 | EPA 903.0M/SM 705M | 0.10 ± 0.33 | 0.5 | | pCi/L | 1 | 12/05/2000 | 12/14/2000 | CWP | P8310 |
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 0.69 ± 0.40 | 0.6 | | pCi/L | 1 | 12/19/2000 | 12/26/2000 | CWP | P8250 |
| Strontium-89/90, dissolved | 11-10-9 | EPA 905.0/SM704 | 1.6 ± 1.0 | 2 | | pCi/L | 1 | 11/28/2000 | 12/01/2000 | MTC | P8211 |
| Neptunium-237, dissolved | 13994-20-2 | EPA 907.0M/520M | 0.22 ± 0.42 | 0.6 | | pCi/L | 1 | 12/01/2000 | 12/11/2000 | JCP | P8274 |

Client: **Envirocare of Utah**
Work Order: **0011180**
Project: **LARW**

## Client Sample ID: **CL-4**

Tag Number:

Lab Sample ID: **0011180-02B**
Date Collected: **11/16/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Carbon-14, dissolved | 14762-75-5 | EPA 520-C01M | -15 ± 27 | 30 | | pCi/L | 1 | 12/08/2000 | 12/22/2000 | JCP | P8391 |
| Iodine-129, dissolved | 15046-84-1 | EPA 902.0 | -0.86 ± 0.76 | 1 | | pCi/L | 1 | 12/14/2000 | 12/20/2000 | CWP | P8414 |

**Qualifiers:** ND - Not detected at the reporting limit; J - Analyte detected below reporting limit; F - Value above quantitation range; S - Spike outside accepted recovery limits; B - Analyte detected in method blank; L - Contract/Client reporting limit exceeded; Q - outside accepted recovery limits; Y - Unspiked sample > 4 times amount spiked; H - Sample > 10 times blank result; M - Maximum contaminant level exceeded; R - Duplicate sample(s) < 5 times limit

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**Date:** 22-Jan-01

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah** | Client Sample ID: **CL-4** | Lab Sample ID: **0011180-02C**
Work Order: **0011180** | Tag Number: | Date Collected: **11/16/2000**
Project: **LARW** | Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Bromide | 24959-67-9 | SW846 9056 | ND | 10 | | mg/L | 20 | | 12/05/2000 | PKL | A11575 |
| Tritium, dissolved | 10028-17-8 | EPA 906.0 | -85 ± 240 | 400 | | pCi/L | 1 | 12/13/2000 | 12/19/2000 | ALZ | P8444 |

Client: **Envirocare of Utah** | Client Sample ID: **CL-4** | Lab Sample ID: **0011180-02D**
Work Order: **0011180** | Tag Number: | Date Collected: **12/14/2000**
Project: **LARW** | Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 49 ± 3.8 | 6 | | pCi/L | 1 | 01/02/2001 | 01/18/2001 | MDR | P8675 |
| Uranium-233/234, dissolved | 13966-29-5 | EPA 908.0M | 84 ± 5.3 | 1 | | pCi/L | 1 | 01/11/2001 | 01/17/2001 | LLC | P8800 |
| Uranium-235/236, dissolved | 15117-96-1 | EPA 908.0M | 7.7 ± 1.9 | 2 | L | pCi/L | 1 | 01/11/2001 | 01/17/2001 | LLC | P8800 |
| Uranium-238, dissolved | 7440-61-1 | EPA 908.0M | 430 ± 12 | 1 | | pCi/L | 1 | 01/11/2001 | 01/17/2001 | LLC | P8800 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | 0.015 ± 0.58 | 0.4 | | pCi/L | 1 | 01/01/2001 | 01/08/2001 | LLC | P8670 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | -0.058 ± 0.28 | 0.5 | | pCi/L | 1 | 01/01/2001 | 01/08/2001 | LLC | P8670 |

**Qualifiers:**
ND - Not detected at the reporting limit
J - Analyte detected below reporting limit
E - Value above quantitation range
S - Spike outside accepted recovery limits
B - Analyte detected in method blank
L - Contract/Client reporting limit exceeded
R - RPD outside accepted recovery limits
Y - Unspiked sample > 4 times amount spiked
Z - Sample > 10 times blank result
M - Maximum contaminant level exceeded
X - Duplicate sample(s) < 5 times limit

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Date: 11-Jan-01

# CLIENT SAMPLE REPORT

Client: Envirocare of Utah
Work Order: 0012009
Project:

Client Sample ID: GW-119
Tag Number: RELOG 0009258-01A

Lab Sample ID: 0012009-01A
Date Collected: 09/26/2000
Matrix: Aqueous

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 28 ± 4.3 | 7 | | pCi/L | 1 | 12/28/2000 | 01/08/2001 | MDR | P8642 |

Client: Envirocare of Utah
Work Order: 0012009
Project:

Client Sample ID: GW-120
Tag Number: RELOG 0009258-02A

Lab Sample ID: 0012009-02A
Date Collected: 09/26/2000
Matrix: Aqueous

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 26 ± 4.3 | 7 | | pCi/L | 1 | 12/28/2000 | 01/08/2001 | MDR | P8642 |

Client: Envirocare of Utah
Work Order: 0012009
Project:

Client Sample ID: GW-121
Tag Number: RELOG 0009258-03A

Lab Sample ID: 0012009-03A
Date Collected: 09/26/2000
Matrix: Aqueous

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 27 ± 4.3 | 7 | | pCi/L | 1 | 12/28/2000 | 01/08/2001 | MDR | P8642 |

Client: Envirocare of Utah
Work Order: 0012009
Project:

Client Sample ID: GW-122
Tag Number: RELOG 0009258-04A

Lab Sample ID: 0012009-04A
Date Collected: 09/26/2000
Matrix: Aqueous

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 23 ± 3.7 | 6 | | pCi/L | 1 | 12/12/2000 | 12/27/2000 | JCP | P8422 |

Client: Envirocare of Utah
Work Order: 0012009
Project:

Client Sample ID: GW-108
Tag Number: RELOG 0010007-01A

Lab Sample ID: 0012009-05A
Date Collected: 09/27/2000
Matrix: Aqueous

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 10 ± 3.6 | 6 | L | pCi/L | 1 | 12/12/2000 | 12/27/2000 | JCP | P8422 |

Qualifiers: ND - Not detected at the reporting limit J - Analyte detected below reporting limit E - Value above quantitation range S - Spike outside accepted recovery limits
B Analyte detected in method blank L - Contract/Client reporting limit exceeded RPD outside accepted recovery limits Y - Unspiked sample > 4 times amount spike
ample > 10 times blank result M - Maximum contaminant level exceeded icate sample(s) < 5 times limit

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**Date:** 11-Jan-01

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah**
Work Order: **0012009**
Project:

Client Sample ID: **GW-109**
Tag Number: **RELOG 0010007-02A**

Lab Sample ID: **0012009-06A**
Date Collected: **09/27/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 11 ± 3.7 | 6 | L | pCi/L | 1 | 12/12/2000 | 12/27/2000 | JCP | P8422 |

Client: **Envirocare of Utah**
Work Order: **0012009**
Project:

Client Sample ID: **GW-110**
Tag Number: **RELOG 0010007-03A**

Lab Sample ID: **0012009-07A**
Date Collected: **09/27/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 4.9 ± 3.7 | 6 | L | pCi/L | 1 | 12/12/2000 | 12/27/2000 | JCP | P8422 |

Client: **Envirocare of Utah**
Work Order: **0012009**
Project:

Client Sample ID: **GW-111**
Tag Number: **RELOG 0010032-01A**

Lab Sample ID: **0012009-08A**
Date Collected: **09/28/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 13 ± 3.8 | 6 | L | pCi/L | 1 | 12/12/2000 | 12/27/2000 | JCP | P8422 |

Client: **Envirocare of Utah**
Work Order: **0012009**
Project:

Client Sample ID: **GW-112**
Tag Number: **RELOG 0010032-02A**

Lab Sample ID: **0012009-09A**
Date Collected: **09/28/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 11 ± 4.0 | 7 | L | pCi/L | 1 | 12/12/2000 | 12/27/2000 | JCP | P8422 |

Client: **Envirocare of Utah**
Work Order: **0012009**
Project:

Client Sample ID: **GW-113**
Tag Number: **RELOG 0010032-03A**

Lab Sample ID: **0012009-10A**
Date Collected: **09/28/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 6.2 ± 3.6 | 6 | L | pCi/L | 1 | 12/12/2000 | 12/27/2000 | JCP | P8422 |

**Qualifiers:**
ND - Not detected at the reporting limit
B - Analyte detected in method blank
Z - Sample > 10 times blank result
J - Analyte detected below reporting limit
L - Contract/Client reporting limit exceeded
M - Maximum contaminant level exceeded
E - Value above quantitation range
R - RPD outside accepted recovery limits
X - Duplicate sample(s) < 5 times limit
S - Spike outside accepted recovery limits
Y - Unspiked sample > 4 times amount spiked

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Date: 11-Jan-01

# CLIENT SAMPLE REPORT

Client: Envirocare of Utah
Work Order: 0012009
Project:

Client Sample ID: GW-114
Tag Number: RELOG 0010032-04A

Lab Sample ID: 0012009-11A
Date Collected: 09/28/2000
Matrix: Aqueous

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 15 ± 5.2 | 8 | L | pCi/L | 1 | 12/12/2000 | 12/21/2000 | MDR | P8423 |

Client: Envirocare of Utah
Work Order: 0012009
Project:

Client Sample ID: GW-115
Tag Number: RELOG 0010032-05A

Lab Sample ID: 0012009-12A
Date Collected: 09/28/2000
Matrix: Aqueous

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 7.4 ± 4.6 | 8 | L | pCi/L | 1 | 12/12/2000 | 12/21/2000 | MDR | P8423 |

Qualifiers: ND - Not detected at the reporting limit; J - Analyte detected below reporting limit; F - Value above quantitation range; S - Spike outside accepted recovery limits
Analyte detected in method blank; L - Contract/Client reporting limit exceeded; D outside accepted recovery limits; Y - Unspiked sample > 4 times amount spike
ample > 10 times blank result; M - Maximum contaminant level exceeded; licate sample(s) < 5 times limit

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**Date:** 19-Dec-00

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah**
Work Order: **0012013**
Project:

Client Sample ID: **GW-63**
Tag Number: **RELOG 0010086-02A**

Lab Sample ID: **0012013-01A**
Date Collected: **10/05/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 18 ± 3.8 | 6 | L | pCi/L | 1 | 12/05/2000 | 12/12/2000 | MDR | P8302 |

Client: **Envirocare of Utah**
Work Order: **0012013**
Project:

Client Sample ID: **GW-707**
Tag Number: **RELOG 0010086-03A**

Lab Sample ID: **0012013-02A**
Date Collected: **10/15/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 15 ± 4.0 | 6 | L | pCi/L | 1 | 12/05/2000 | 12/08/2000 | CMA | P8303 |

Client: **Envirocare of Utah**
Work Order: **0012013**
Project:

Client Sample ID: **I-1-30**
Tag Number: **RELOG 0010087-01A**

Lab Sample ID: **0012013-03A**
Date Collected: **10/09/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 16 ± 4.0 | 6 | L | pCi/L | 1 | 12/05/2000 | 12/08/2000 | CMA | P8303 |

Client: **Envirocare of Utah**
Work Order: **0012013**
Project:

Client Sample ID: **GW-71**
Tag Number: **RELOG 0010087-02A**

Lab Sample ID: **0012013-04A**
Date Collected: **10/09/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 14 ± 4.0 | 6 | L | pCi/L | 1 | 12/05/2000 | 12/08/2000 | CMA | P8303 |

Client: **Envirocare of Utah**
Work Order: **0012013**
Project:

Client Sample ID: **GW-659**
Tag Number: **RELOG 0010087-03A**

Lab Sample ID: **0012013-05A**
Date Collected: **10/09/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 15 ± 4.0 | 6 | L | pCi/L | 1 | 12/05/2000 | 12/08/2000 | CMA | P8303 |

**Qualifiers:**
ND - Not detected at the reporting limit
B - Analyte detected in method blank
Z - Sample > 10 times blank result
J - Analyte detected below reporting limit
L - Contract/Client reporting limit exceeded
M - Maximum contaminant level exceeded
E - Value above quantitation range
R - RPD outside accepted recovery limits
X - Duplicate sample(s) < 5 times limit
S - Spike outside accepted recovery limits
Y - Unspiked sample > 4 times amount spiked

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**Date:** 19-Dec-00

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah**
Work Order: **0012013**
Project:

Client Sample ID: **GW-79**
Tag Number: **RELOG 0010087-04A**

Lab Sample ID: **0012013-06A**
Date Collected: **10/09/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 0.26 ± 3.9 | 7 | L | pCi/L | 1 | 12/05/2000 | 12/08/2000 | CMA | P8303 |

Client: **Envirocare of Utah**
Work Order: **0012013**
Project:

Client Sample ID: **GW-666**
Tag Number: **RELOG 0010087-05A**

Lab Sample ID: **0012013-07A**
Date Collected: **10/09/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 9.0 ± 3.9 | 6 | L | pCi/L | 1 | 12/05/2000 | 12/08/2000 | CMA | P8303 |

Client: **Envirocare of Utah**
Work Order: **0012013**
Project:

Client Sample ID: **GW-80**
Tag Number: **RELOG 0010087-06A**

Lab Sample ID: **0012013-08A**
Date Collected: **10/09/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 19 ± 4.0 | 6 | L | pCi/L | 1 | 12/05/2000 | 12/08/2000 | CMA | P8303 |

Client: **Envirocare of Utah**
Work Order: **0012013**
Project:

Client Sample ID: **GW-88**
Tag Number: **RELOG 0010029-01A**

Lab Sample ID: **0012013-09A**
Date Collected: **10/03/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 19 ± 3.9 | 6 | L | pCi/L | 1 | 12/05/2000 | 12/12/2000 | MDR | P8302 |

Client: **Envirocare of Utah**
Work Order: **0012013**
Project:

Client Sample ID: **GW-89**
Tag Number: **RELOG 0010029-02A**

Lab Sample ID: **0012013-10A**
Date Collected: **10/03/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 26 ± 3.9 | 6 | | pCi/L | 1 | 12/05/2000 | 12/12/2000 | MDR | P8302 |

**Qualifiers:** ND - Not detected at the reporting limit; J - Analyte detected below reporting limit; E - Value above quantitation range; S - Spike outside accepted recovery limits; Analyte detected in method blank; L - Contract/Client reporting limit exceeded; outside accepted recovery limits; Y - Unspiked sample > 4 times amount spiked; mple > 10 times blank result; M - Maximum contaminant level exceeded; icate sample(s) < 5 times limit

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**Date:** 19-Dec-00

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah**
Work Order: **0012013**
Project:

Client Sample ID: **GW-90**
Tag Number: **RELOG 0010029-03A**

Lab Sample ID: **0012013-11A**
Date Collected: **10/03/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 21 ± 3.9 | 6 | | pCi/L | 1 | 12/05/2000 | 12/12/2000 | MDR | P8302 |

Client: **Envirocare of Utah**
Work Order: **0012013**
Project:

Client Sample ID: **GW-91**
Tag Number: **RELOG 0010029-04A**

Lab Sample ID: **0012013-12A**
Date Collected: **10/03/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 17 ± 3.9 | 6 | L | pCi/L | 1 | 12/05/2000 | 12/12/2000 | MDR | P8302 |

Client: **Envirocare of Utah**
Work Order: **0012013**
Project:

Client Sample ID: **GW-116**
Tag Number: **RELOG 0010030-01A**

Lab Sample ID: **0012013-13A**
Date Collected: **10/02/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 11 ± 3.8 | 6 | L | pCi/L | 1 | 12/05/2000 | 12/12/2000 | MDR | P8302 |

Client: **Envirocare of Utah**
Work Order: **0012013**
Project:

Client Sample ID: **GW-117**
Tag Number: **RELOG 0010030-02A**

Lab Sample ID: **0012013-14A**
Date Collected: **10/02/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 14 ± 3.8 | 6 | L | pCi/L | 1 | 12/05/2000 | 12/12/2000 | MDR | P8302 |

**Qualifiers:**
ND - Not detected at the reporting limit
B - Analyte detected in method blank
Z - Sample > 10 times blank result
J - Analyte detected below reporting limit
L - Contract/Client reporting limit exceeded
M - Maximum contaminant level exceeded
E - Value above quantitation range
R - RPD outside accepted recovery limits
X - Duplicate sample(s) < 5 times limit
S - Spike outside accepted recovery limits
Y - Unspiked sample > 4 times amount spiked

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**Date:** 19-Dec-00

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah**
Work Order: **0012013**
Project:

Client Sample ID: **GW-63**
Tag Number: **RELOG 0010086-02A**

Lab Sample ID: **0012013-01A**
Date Collected: **10/05/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 18 ± 3.8 | 6 | L | pCi/L | 1 | 12/05/2000 | 12/12/2000 | MDR | P8302 |

Client: **Envirocare of Utah**
Work Order: **0012013**
Project:

Client Sample ID: **GW-707**
Tag Number: **RELOG 0010086-03A**

Lab Sample ID: **0012013-02A**
Date Collected: **10/15/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 15 ± 4.0 | 6 | L | pCi/L | 1 | 12/05/2000 | 12/08/2000 | CMA | P8303 |

Client: **Envirocare of Utah**
Work Order: **0012013**
Project:

Client Sample ID: **I-1-30**
Tag Number: **RELOG 0010087-01A**

Lab Sample ID: **0012013-03A**
Date Collected: **10/09/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 16 ± 4.0 | 6 | L | pCi/L | 1 | 12/05/2000 | 12/08/2000 | CMA | P8303 |

Client: **Envirocare of Utah**
Work Order: **0012013**
Project:

Client Sample ID: **GW-71**
Tag Number: **RELOG 0010087-02A**

Lab Sample ID: **0012013-04A**
Date Collected: **10/09/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 14 ± 4.0 | 6 | L | pCi/L | 1 | 12/05/2000 | 12/08/2000 | CMA | P8303 |

Client: **Envirocare of Utah**
Work Order: **0012013**
Project:

Client Sample ID: **GW-659**
Tag Number: **RELOG 0010087-03A**

Lab Sample ID: **0012013-05A**
Date Collected: **10/09/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 15 ± 4.0 | 6 | L | pCi/L | 1 | 12/05/2000 | 12/08/2000 | CMA | P8303 |

**Qualifiers:** ND - Not detected at the reporting limit; J - Analyte detected below reporting limit; E - Value above quantitation range; S - Spike outside accepted recovery limits; B - Analyte detected in method blank; L - Contract/Client reporting limit exceeded; R - Outside accepted recovery limits; Y - Unspiked sample > 4 times amount spiked; Z - Sample > 10 times blank result; M - Maximum contaminant level exceeded; X - Late sample(s) < 5 times limit

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**Date:** 19-Dec-00

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah**
Work Order: **0012013**
Project:

Client Sample ID: **GW-79**
Tag Number: **RELOG 0010087-04A**

Lab Sample ID: **0012013-06A**
Date Collected: **10/09/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 0.26 ± 3.9 | 7 | L | pCi/L | 1 | 12/05/2000 | 12/08/2000 | CMA | P8303 |

Client: **Envirocare of Utah**
Work Order: **0012013**
Project:

Client Sample ID: **GW-666**
Tag Number: **RELOG 0010087-05A**

Lab Sample ID: **0012013-07A**
Date Collected: **10/09/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 9.0 ± 3.9 | 6 | L | pCi/L | 1 | 12/05/2000 | 12/08/2000 | CMA | P8303 |

Client: **Envirocare of Utah**
Work Order: **0012013**
Project:

Client Sample ID: **GW-80**
Tag Number: **RELOG 0010087-06A**

Lab Sample ID: **0012013-08A**
Date Collected: **10/09/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 19 ± 4.0 | 6 | L | pCi/L | 1 | 12/05/2000 | 12/08/2000 | CMA | P8303 |

Client: **Envirocare of Utah**
Work Order: **0012013**
Project:

Client Sample ID: **GW-88**
Tag Number: **RELOG 0010029-01A**

Lab Sample ID: **0012013-09A**
Date Collected: **10/03/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 19 ± 3.9 | 6 | L | pCi/L | 1 | 12/05/2000 | 12/12/2000 | MDR | P8302 |

Client: **Envirocare of Utah**
Work Order: **0012013**
Project:

Client Sample ID: **GW-89**
Tag Number: **RELOG 0010029-02A**

Lab Sample ID: **0012013-10A**
Date Collected: **10/03/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 26 ± 3.9 | 6 | | pCi/L | 1 | 12/05/2000 | 12/12/2000 | MDR | P8302 |

**Qualifiers:**
ND - Not detected at the reporting limit
B - Analyte detected in method blank
Z - Sample > 10 times blank result
J - Analyte detected below reporting limit
L - Contract/Client reporting limit exceeded
M - Maximum contaminant level exceeded
E - Value above quantitation range
R - RPD outside accepted recovery limits
X - Duplicate sample(s) < 5 times limit
S - Spike outside accepted recovery limits
Y - Unspiked sample > 4 times amount spiked

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Date: 19-Dec-00

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah**
Work Order: **0012013**
Project:

Client Sample ID: **GW-90**
Tag Number: **RELOG 0010029-03A**

Lab Sample ID: **0012013-11A**
Date Collected: **10/03/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 21 ± 3.9 | 6 | | pCi/L | 1 | 12/05/2000 | 12/12/2000 | MDR | P8302 |

Client: **Envirocare of Utah**
Work Order: **0012013**
Project:

Client Sample ID: **GW-91**
Tag Number: **RELOG 0010029-04A**

Lab Sample ID: **0012013-12A**
Date Collected: **10/03/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 17 ± 3.9 | 6 | L | pCi/L | 1 | 12/05/2000 | 12/12/2000 | MDR | P8302 |

Client: **Envirocare of Utah**
Work Order: **0012013**
Project:

Client Sample ID: **GW-116**
Tag Number: **RELOG 0010030-01A**

Lab Sample ID: **0012013-13A**
Date Collected: **10/02/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 11 ± 3.8 | 6 | L | pCi/L | 1 | 12/05/2000 | 12/12/2000 | MDR | P8302 |

Client: **Envirocare of Utah**
Work Order: **0012013**
Project:

Client Sample ID: **GW-117**
Tag Number: **RELOG 0010030-02A**

Lab Sample ID: **0012013-14A**
Date Collected: **10/02/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 14 ± 3.8 | 6 | L | pCi/L | 1 | 12/05/2000 | 12/12/2000 | MDR | P8302 |

**Qualifiers:** ND - Not detected at the reporting limit; J - Analyte detected below reporting limit; E - Value above quantitation range; S - Spike outside accepted recovery limits; ...nalyte detected in method blank; L - Contract/Client reporting limit exceeded; ...outside accepted recovery limits; Y - Unspiked sample > 4 times amount spiked; ...nple > 10 times blank result; M - Maximum contaminant level exceeded; X - ...ate sample(s) < 5 times limit

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**Date:** 11-Jan-01

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah** Client Sample ID: **GW-66** Lab Sample ID: **0012014-01A**
Work Order: **0012014** Tag Number: **RELOG 0010134-01A** Date Collected: **10/11/2000**
Project: Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 13 ± 3.2 | 5 | | pCi/L | 1 | 12/05/2000 | 12/13/2000 | MDR | P8304 |

Client: **Envirocare of Utah** Client Sample ID: **GW-41** Lab Sample ID: **0012014-02A**
Work Order: **0012014** Tag Number: **RELOG 0010134-02A** Date Collected: **10/11/2000**
Project: Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 15 ± 3.3 | 5 | | pCi/L | 1 | 12/05/2000 | 12/13/2000 | MDR | P8304 |

Client: **Envirocare of Utah** Client Sample ID: **GW-42** Lab Sample ID: **0012014-03A**
Work Order: **0012014** Tag Number: **RELOG 0010147-01A** Date Collected: **10/10/2000**
Project: Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 12 ± 3.2 | 5 | | pCi/L | 1 | 12/05/2000 | 12/13/2000 | MDR | P8304 |

Client: **Envirocare of Utah** Client Sample ID: **GW-67** Lab Sample ID: **0012014-04A**
Work Order: **0012014** Tag Number: **RELOG 0010147-02A** Date Collected: **10/12/2000**
Project: Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 17 ± 3.3 | 5 | | pCi/L | 1 | 12/05/2000 | 12/13/2000 | MDR | P8304 |

Client: **Envirocare of Utah** Client Sample ID: **GW-67R** Lab Sample ID: **0012014-05A**
Work Order: **0012014** Tag Number: **RELOG 0010147-03A** Date Collected: **10/12/2000**
Project: Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 14 ± 3.3 | 5 | | pCi/L | 1 | 12/05/2000 | 12/13/2000 | MDR | P8304 |

**Qualifiers:**
ND - Not detected at the reporting limit
B - Analyte detected in method blank
Z - Sample > 10 times blank result
J - Analyte detected below reporting limit
L - Contract/Client reporting limit exceeded
M - Maximum contaminant level exceeded
E - Value above quantitation range
R - RPD outside accepted recovery limits
X - Duplicate sample(s) < 5 times limit
S - Spike outside accepted recovery limits
Y - Unspiked sample > 4 times amount spiked

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Date: 11-Jan-01

# CLIENT SAMPLE REPORT

Client: Envirocare of Utah
Work Order: 0012014
Project:

Client Sample ID: GW-68
Tag Number: RELOG 0010168-01A

Lab Sample ID: 0012014-06A
Date Collected: 10/16/2000
Matrix: Aqueous

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 12 ± 3.2 | 5 | | pCi/L | 1 | 12/05/2000 | 12/13/2000 | MDR | P8304 |

Client: Envirocare of Utah
Work Order: 0012014
Project:

Client Sample ID: GW-68R
Tag Number: RELOG 0010168-02A

Lab Sample ID: 0012014-07A
Date Collected: 10/16/2000
Matrix: Aqueous

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 11 ± 3.2 | 5 | | pCi/L | 1 | 12/05/2000 | 12/13/2000 | MDR | P8304 |

Client: Envirocare of Utah
Work Order: 0012014
Project:

Client Sample ID: GW-69
Tag Number: RELOG 0010168-03A

Lab Sample ID: 0012014-08A
Date Collected: 10/16/2000
Matrix: Aqueous

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 15 ± 4.2 | 7 | L | pCi/L | 1 | 12/21/2000 | 01/05/2001 | MDR | P8564 |

Client: Envirocare of Utah
Work Order: 0012014
Project:

Client Sample ID: GW-69R
Tag Number: RELOG 0010168-04A

Lab Sample ID: 0012014-09A
Date Collected: 10/16/2000
Matrix: Aqueous

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 17 ± 4.2 | 7 | L | pCi/L | 1 | 12/21/2000 | 01/05/2001 | MDR | P8564 |

Client: Envirocare of Utah
Work Order: 0012014
Project:

Client Sample ID: GW-70
Tag Number: RELOG 0010168-05A

Lab Sample ID: 0012014-10A
Date Collected: 10/16/2000
Matrix: Aqueous

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 12 ± 4.1 | 7 | L | pCi/L | 1 | 12/21/2000 | 01/05/2001 | MDR | P8564 |

Qualifiers: ND - Not detected at the reporting limit J - Analyte detected below reporting limit E - Value above quantitation range S - Spike outside accepted recovery limits
- nalyte detected in method blank L - Contract/Client reporting limit exceeded - outside accepted recovery limits Y - Unspiked sample > 4 times amount spiked
mple > 10 times blank result M - Maximum contaminant level exceeded X - cate sample(s) < 5 times limit

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**Date:** 11-Jan-01

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah**
Work Order: **0012014**
Project:

Client Sample ID: **GW-25**
Tag Number: **RELOG 0010202-01A**

Lab Sample ID: **0012014-11A**
Date Collected: **10/19/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result | ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 14 | ± 4.2 | 7 | L | pCi/L | 1 | 12/21/2000 | 01/05/2001 | MDR | P8564 |

**Qualifiers:**
ND - Not detected at the reporting limit
B - Analyte detected in method blank
Z - Sample > 10 times blank result
J - Analyte detected below reporting limit
L - Contract/Client reporting limit exceeded
M - Maximum contaminant level exceeded
E - Value above quantitation range
R - RPD outside accepted recovery limits
X - Duplicate sample(s) < 5 times limit
S - Spike outside accepted recovery limits
Y - Unspiked sample > 4 times amount spiked

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**Date:** 18-Dec-00

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah**
Work Order: **0012023**
Project:

Client Sample ID: **GW-26**
Tag Number: **RELOG 0008237-01A**

Lab Sample ID: **0012023-01A**
Date Collected: **08/07/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | -0.033 ± 0.31 | 0.4 | | pCi/L | 1 | 12/05/2000 | 12/12/2000 | KEB | P8323 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | -0.16 ± 0.25 | 0.5 | | pCi/L | 1 | 12/05/2000 | 12/12/2000 | KEB | P8323 |

Client: **Envirocare of Utah**
Work Order: **0012023**
Project:

Client Sample ID: **GW-25**
Tag Number: **RELOG 0008237-02A**

Lab Sample ID: **0012023-02A**
Date Collected: **08/07/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | 0.012 ± 0.41 | 0.5 | | pCi/L | 1 | 12/05/2000 | 12/12/2000 | KEB | P8323 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | 0.13 ± 0.30 | 0.5 | | pCi/L | 1 | 12/05/2000 | 12/12/2000 | KEB | P8323 |

Client: **Envirocare of Utah**
Work Order: **0012023**
Project:

Client Sample ID: **GW-20**
Tag Number: **RELOG 0008237-03A**

Lab Sample ID: **0012023-03A**
Date Collected: **08/08/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | -0.26 ± 0.29 | 0.3 | | pCi/L | 1 | 12/05/2000 | 12/12/2000 | KEB | P8323 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | 0.0063 ± 0.21 | 0.3 | | pCi/L | 1 | 12/05/2000 | 12/12/2000 | KEB | P8323 |

Client: **Envirocare of Utah**
Work Order: **0012023**
Project:

Client Sample ID: **GW-24**
Tag Number: **RELOG 0008237-04A**

Lab Sample ID: **0012023-04A**
Date Collected: **08/08/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | -0.39 ± 0.31 | 0.5 | | pCi/L | 1 | 12/05/2000 | 12/12/2000 | KEB | P8323 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | -0.48 ± 0.30 | 0.6 | | pCi/L | 1 | 12/05/2000 | 12/12/2000 | KEB | P8323 |

Client: **Envirocare of Utah**
Work Order: **0012023**
Project:

Client Sample ID: **GW-29**
Tag Number: **RELOG 0008237-05A**

Lab Sample ID: **0012023-05A**
Date Collected: **08/08/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | -0.24 ± 0.28 | 0.4 | | pCi/L | 1 | 12/05/2000 | 12/12/2000 | KEB | P8323 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | 0.20 ± 0.30 | 0.5 | | pCi/L | 1 | 12/05/2000 | 12/12/2000 | KEB | P8323 |

**Qualifiers:** ND - Not detected at the reporting limit J - Analyte detected below reporting limit F - Value above quantitation range S - Spike outside accepted recovery limits
...nalyte detected in method blank L - Contract/Client reporting limit exceeded ...outside accepted recovery limits Y - Unspiked sample > 4 times amount spiked
...mple > 10 times blank result M - Maximum contaminant level exceeded X - ...cate sample(s) < 5 times limit

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**Date:** 18-Dec-00

# CLIENT SAMPLE REPORT

**Qualifiers:**

ND - Not detected at the reporting limit
B - Analyte detected in method blank
Z - Sample > 10 times blank result
J - Analyte detected below reporting limit
L - Contract/Client reporting limit exceeded
M - Maximum contaminant level exceeded
E - Value above quantitation range
R - RPD outside accepted recovery limits
X - Duplicate sample(s) < 5 times limit
S - Spike outside accepted recovery limits
Y - Unspiked sample > 4 times amount spiked

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**Date:** 09-Feb-01

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah**
Work Order: **0012158**
Project: **LARW**

Client Sample ID: **P3-95SWC**
Tag Number:

Lab Sample ID: **0012158-01A**
Date Collected: **12/18/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 7440-61-1 | ASTM D2907 | 0.47 | 0.0009 | | mg/L | 1 | 12/21/2000 | 12/29/2000 | AWT | P8576 |
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 89 ± 3.2 | 4 | | pCi/L | 1 | 01/16/2001 | 01/23/2001 | MDR | P8847 |
| Gross Alpha, dissolved | 12587-46-1 | EPA 00-02 | 200 ± 17 | 8 | | pCi/L | 1 | 01/16/2001 | 01/18/2001 | AEW | P8841 |
| Gross Beta, dissolved | 12587-47-2 | EPA 900.0 | 1200 ± 240 | 400 | | pCi/L | 1 | 01/02/2001 | 01/09/2001 | CWP | P8692 |
| Potassium-40, dissolved | 13966-00-2 | EPA 901.1 | 620 ± 160 | 200 | | pCi/L | 1 | | 01/19/2001 | LLC | A12467 |
| Radium-226, dissolved | 13982-63-3 | EPA 903.0M/SM 705M | 0.42 ± 0.26 | 0.3 | | pCi/L | 1 | 01/15/2001 | 01/19/2001 | CWP | P8824 |
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 4.7 ± 0.97 | 1 | | pCi/L | 1 | 01/18/2001 | 01/24/2001 | CWP | P8791 |
| Strontium-89/90, dissolved | 11-10-9 | EPA 905.0/SM704 | 13 ± 1.3 | 2 | | pCi/L | 1 | 01/08/2001 | 01/12/2001 | MTC | P8752 |
| Neptunium-237, dissolved | 13994-20-2 | EPA 907.0M/520M | -0.068 ± 0.20 | 0.4 | | pCi/L | 1 | 12/29/2000 | 01/10/2001 | EDS | P8666 |
| Uranium-233/234, dissolved | 13966-29-5 | EPA 908.0M | 72 ± 2.1 | 0.4 | | pCi/L | 1 | 01/24/2001 | 01/26/2001 | CEJ | P8963 |
| Uranium-235/236, dissolved | 15117-96-1 | EPA 908.0M | 4.4 ± 0.61 | 0.5 | | pCi/L | 1 | 01/24/2001 | 01/26/2001 | CEJ | P8963 |
| Uranium-238, dissolved | 7440-61-1 | EPA 908.0M | 190 ± 3.4 | 0.4 | | pCi/L | 1 | 01/24/2001 | 01/26/2001 | CEJ | P8963 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | -0.17 ± 0.22 | 0.3 | | pCi/L | 1 | 01/31/2001 | 02/07/2001 | CEJ | P9058 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | -0.091 ± 0.20 | 0.4 | | pCi/L | 1 | 01/31/2001 | 02/07/2001 | CEJ | P9058 |

Client: **Envirocare of Utah**
Work Order: **0012158**
Project: **LARW**

Client Sample ID: **P3-95SWC**
Tag Number:

Lab Sample ID: **0012158-01B**
Date Collected: **12/18/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Carbon-14, dissolved | 14762-75-5 | EPA 520-C01M | -20 ± 14 | 10 | | pCi/L | 1 | 12/28/2000 | 01/05/2001 | CWP | P8646 |
| Iodine-129, dissolved | 15046-84-1 | EPA 902.0 | -0.47 ± 0.76 | 1 | | pCi/L | 1 | 01/29/2001 | 01/31/2001 | CWP | P8930 |

Qualifiers: ND - Not detected at the reporting limit; J - Analyte detected below reporting limit; E - Value above quantitation range; S - Spike outside accepted recovery limits; alyte detected in method blank; L - Contract/Client reporting limit exceeded; outside accepted recovery limits; Y - Unspiked sample > 4 times amount spiked; mple > 10 times blank result; M - Maximum contaminant level exceeded; cate sample(s) < 5 times limit

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**Date:** 09-Feb-01

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah**
Work Order: **0012158**
Project: **LARW**

## Client Sample ID: **P3-95SWC**

Tag Number:

Lab Sample ID: **0012158-01C**
Date Collected: **12/18/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Bromide | 24959-67-9 | SW846 9056 | 36 | 10 | | mg/L | 20 | | 01/02/2001 | PKL | A12063 |
| Tritium, dissolved | 10028-17-8 | EPA 906.0 | 0 ± 240 | 400 | | pCi/L | 1 | 12/26/2000 | 12/30/2000 | AWT | P8614 |

Client: **Envirocare of Utah**
Work Order: **0012158**
Project: **LARW**

## Client Sample ID: **GW-701**

Tag Number:

Lab Sample ID: **0012158-02A**
Date Collected: **12/18/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Uranium, dissolved | 7440-61-1 | ASTM D2907 | 0.50 | 0.0009 | | mg/L | 1 | 12/21/2000 | 12/29/2000 | AWT | P8576 |
| Technetium-99, dissolved | 14133-76-7 | BLI RC-Tc99 | 94 ± 3.3 | 4 | | pCi/L | 1 | 01/16/2001 | 01/23/2001 | MDR | P8847 |
| Gross Alpha, dissolved | 12587-46-1 | EPA 00-02 | 180 ± 17 | 9 | | pCi/L | 1 | 01/16/2001 | 01/18/2001 | AEW | P8841 |
| Gross Beta, dissolved | 12587-47-2 | EPA 900.0 | 880 ± 190 | 300 | L | pCi/L | 1 | 01/02/2001 | 01/10/2001 | CWP | P8692 |
| Potassium-40, dissolved | 13966-00-2 | EPA 901.1 | 670 ± 150 | 200 | | pCi/L | 1 | | 01/23/2001 | LLC | A12467 |
| Radium-226, dissolved | 13982-63-3 | EPA 903.0M/SM 705M | 0.24 ± 0.25 | 0.3 | | pCi/L | 1 | 01/15/2001 | 01/19/2001 | CWP | P8824 |
| Radium-228, dissolved | 15262-20-1 | EPA 904.0M | 4.0 ± 0.99 | 1 | | pCi/L | 1 | 01/10/2001 | 01/18/2001 | CWP | P8793 |
| Strontium-89/90, dissolved | 11-10-9 | EPA 905.0/SM704 | 12 ± 1.3 | 2 | | pCi/L | 1 | 01/08/2001 | 01/12/2001 | MTC | P8752 |
| Neptunium-237, dissolved | 13994-20-2 | EPA 907.0M/520M | 0.10 ± 0.31 | 0.4 | | pCi/L | 1 | 12/29/2000 | 01/10/2001 | EDS | P8666 |
| Uranium-233/234, dissolved | 13966-29-5 | EPA 908.0M | 78 ± 2.2 | 0.5 | | pCi/L | 1 | 01/24/2001 | 01/26/2001 | CEJ | P8963 |
| Uranium-235/236, dissolved | 15117-96-1 | EPA 908.0M | 5.7 ± 0.70 | 0.5 | | pCi/L | 1 | 01/24/2001 | 01/26/2001 | CEJ | P8963 |
| Uranium-238, dissolved | 7440-61-1 | EPA 908.0M | 210 ± 3.6 | 0.5 | | pCi/L | 1 | 01/24/2001 | 01/26/2001 | CEJ | P8963 |
| Thorium-230, dissolved | 14269-63-7 | USAEC RMO 3008 | -0.56 ± 0.16 | 0.2 | | pCi/L | 1 | 01/19/2001 | 01/26/2001 | CEJ | P8915 |
| Thorium-232, dissolved | 7440-29-1 | USAEC RMO 3008 | -0.26 ± 0.15 | 0.3 | | pCi/L | 1 | 01/19/2001 | 01/26/2001 | CEJ | P8915 |

**Qualifiers:**
ND - Not detected at the reporting limit
B - Analyte detected in method blank
Z - Sample > 10 times blank result
J - Analyte detected below reporting limit
L - Contract/Client reporting limit exceeded
M - Maximum contaminant level exceeded
E - Value above quantitation range
R - RPD outside accepted recovery limits
X - Duplicate sample(s) < 5 times limit
S - Spike outside accepted recovery limits
Y - Unspiked sample > 4 times amount spiked

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**Date:** 09-Feb-01

# CLIENT SAMPLE REPORT

Client: **Envirocare of Utah**
Work Order: **0012158**
Project: **LARW**

Client Sample ID: **GW-701**
Tag Number:

Lab Sample ID: **0012158-02B**
Date Collected: **12/18/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Carbon-14, dissolved | 14762-75-5 | EPA 520-C01M | -13 ± 29 | 30 | | pCi/L | 1 | 12/28/2000 | 01/09/2001 | CWP | P8646 |
| Iodine-129, dissolved | 15046-84-1 | EPA 902.0 | -1.2 ± 0.76 | 1 | | pCi/L | 1 | 01/29/2001 | 01/31/2001 | CWP | P8930 |

Client: **Envirocare of Utah**
Work Order: **0012158**
Project: **LARW**

Client Sample ID: **GW-701**
Tag Number:

Lab Sample ID: **0012158-02C**
Date Collected: **12/18/2000**
Matrix: **Aqueous**

| Analyte | CAS# | Method | Result ± 2 sigma | Limit | Qual | Unit | DF | Prepped | Analyzed | Analyst | Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Bromide | 24959-67-9 | SW846 9056 | 33 | 10 | | mg/L | 20 | | 01/02/2001 | PKL | A12063 |
| Tritium, dissolved | 10028-17-8 | EPA 906.0 | 66 ± 230 | 400 | | pCi/L | 1 | 12/26/2000 | 12/30/2000 | AWT | P8614 |

Qualifiers: U - Not detected at the reporting limit; J - Analyte detected below reporting limit; E - Value above quantitation range; S - Spike outside accepted recovery limits
B - Analyte detected in method blank; L - Contract/Client reporting limit exceeded; I - Outside accepted recovery limits; Y - Unspiked sample > 4 times amount spiked
Z - Sample > 10 times blank result; M - Maximum contaminant level exceeded; X - Duplicate sample(s) < 5 times limit

# ATTACHMENT E

# DATA VALIDATION

## FIGURE B.12-2
## INORGANIC ANALYSIS DATA VALIDATION WORKSHEET

**Analytical Method/Analytes:** Various **Sample Collection Date(s):** 7/19/00

**Laboratory:** MSAI **MW Job Number:** _____

**Batch Identification:** 0007219 **Matrix:** Waters

**QC Identification[a]:** _____ **Page:** 1 of 2

**Validation Complete:** _____ 9/20/00

(Date/Signature)

| Sample No. | Sample ID | Lab. ID | Hits (Y/N) | Quals. | Comments |
|---|---|---|---|---|---|
| 1 | MW Pond | 0007219-1 | N | J | TOC had matrix interferences. |
| 2 | P3-95 Pond | 0007219-2 | N | J | TOC had matrix interferences. |
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# DATA VALIDATION WORKSHEET

**Analytical Method:** Various Methods **Identification[a]:** 0007219

**Laboratory:** MSAI **Batch Identification:** _____

| Validation Criteria | Sample Number | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| Hardcopy vs. Chain-of-Custody | A | A | | | | | | | | | | | | | | | |
| Holding Time | AL | AL | | | | | | | | | | | | | | | |
| Analyte List | A | A | | | | | | | | | | | | | | | |
| Reporting Limits | A | A | | | | | | | | | | | | | | | |
| Initial Calibration (all methods) | AL | AL | | | | | | | | | | | | | | | |
| Initial Check Blank (ICP & AA methods) | AL | AL | | | | | | | | | | | | | | | |
| Continuing Calibration (ICP & AA methods) | AL | AL | | | | | | | | | | | | | | | |
| Injection Time(s) (all methods) | N | N | | | | | | | | | | | | | | | |
| Interference Check Standard (ICP Method) | AL | AL | | | | | | | | | | | | | | | |
| Method Blank (all methods) | AL | AL | | | | | | | | | | | | | | | |
| Laboratory Control Sample (all methods) | AL | AL | | | | | | | | | | | | | | | |
| Laboratory Control Sample Duplicate (lab specific) | NA | NA | | | | | | | | | | | | | | | |
| Matrix Spike/Matrix Spike Duplicate | 1 | 1 | | | | | | | | | | | | | | | |
| Matrix Duplicate (Lab Specific) | NA | NA | | | | | | | | | | | | | | | |
| Field Duplicate/Replicate | NA | NA | | | | | | | | | | | | | | | |
| Equipment Rinsate Blanks | NA | NA | | | | | | | | | | | | | | | |
| Electronic Deliverable vs. Hardcopy | NA | NA | | | | | | | | | | | | | | | |
| Electronic Deliverable vs. Chain of Custody | NA | NA | | | | | | | | | | | | | | | |

(a) List QC batch identification if different than Batch ID
A indicates validation criteria were met
A/L indicates validation criteria were met based upon Laboratory's QC Summary Form
X indicates validation criteria were not met
N indicates data review were not a project specific requirement
N/A indicates criteria are not applicable for the specified analytical method
N/R indicates data not available for review

**NOTES:** 1. TOC had matrix interferences.

**FIGURE B.12-2**
**INORGANIC ANALYSIS DATA VALIDATION WORKSHEET**

**Analytical Method/Analytes:** Various **Sample Collection Date(s):** 7/19/00

**Laboratory:** MSAI **MW Job Number:** _____

**Batch Identification:** 0007235 **Matrix:** Waters

**QC Identification[a]:** _____ **Page:** 1 of 2

**Validation Complete:** _____ 9/26/00
(Date/Signature)

| Sample No. | Sample ID | Lab. ID | Hits (Y/N) | Quals. | Comments |
|---|---|---|---|---|---|
| 1 | P3-97,MS, MSD | 0007235-1 | N | J | TOC, Hg had matrix interferences. |
| 2 | GW-904 | 0007235-2 | N | J | TOC, Hg had matrix interferences. |
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# DATA VALIDATION WORKSHEET

**Analytical Method:** Various Methods **Identification[a]:** 0007235

**Laboratory:** MSAI **Batch Identification:** _____

| Validation Criteria | Sample Number | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| Hardcopy vs. Chain-of-Custody | A | A | | | | | | | | | | | | | | | |
| Holding Time | AL | AL | | | | | | | | | | | | | | | |
| Analyte List | A | A | | | | | | | | | | | | | | | |
| Reporting Limits | A | A | | | | | | | | | | | | | | | |
| Initial Calibration (all methods) | AL | AL | | | | | | | | | | | | | | | |
| Initial Check Blank (ICP & AA methods) | AL | AL | | | | | | | | | | | | | | | |
| Continuing Calibration (ICP & AA methods) | AL | AL | | | | | | | | | | | | | | | |
| Injection Time(s) (all methods) | N | N | | | | | | | | | | | | | | | |
| Interference Check Standard (ICP Method) | AL | AL | | | | | | | | | | | | | | | |
| Method Blank (all methods) | AL | AL | | | | | | | | | | | | | | | |
| Laboratory Control Sample (all methods) | AL | AL | | | | | | | | | | | | | | | |
| Laboratory Control Sample Duplicate (lab specific) | NA | NA | | | | | | | | | | | | | | | |
| Matrix Spike/Matrix Spike Duplicate | 1 | 1 | | | | | | | | | | | | | | | |
| Matrix Duplicate (Lab Specific) | NA | NA | | | | | | | | | | | | | | | |
| Field Duplicate/Replicate | NA | NA | | | | | | | | | | | | | | | |
| Equipment Rinsate Blanks | NA | NA | | | | | | | | | | | | | | | |
| Electronic Deliverable vs. Hardcopy | NA | NA | | | | | | | | | | | | | | | |
| Electronic Deliverable vs. Chain of Custody | NA | NA | | | | | | | | | | | | | | | |

(a) List QC batch identification if different than Batch ID
A indicates validation criteria were met
A/L indicates validation criteria were met based upon Laboratory's QC Summary Form
X indicates validation criteria were not met
N indicates data review were not a project specific requirement
N/A indicates criteria are not applicable for the specified analytical method
N/R indicates data not available for review

**NOTES:** 1. TOC, Hg had matrix interferences.

**FIGURE B.12-2**
**INORGANIC ANALYSIS DATA VALIDATION WORKSHEET**

**Analytical Method/Analytes:** Various **Sample Collection Date(s):** 8/1/2000

**Laboratory:** AWAL **MW Job Number:** _____

**Batch Identification:** L42179 **Matrix:** Waters

**QC Identification[a]:** _____ **Page:** 1 of 2

**Validation Complete:** _____ 9/28/00
(Date/Signature)

| Sample No. | Sample ID | Lab. ID | Hits (Y/N) | Quals. | Comments |
|---|---|---|---|---|---|
| 1 | GW-19A | L42179-1A,B | N | J | Pb, Se, Cu had matrix interferences. |
| 2 | GW-63 | L42179-2A,B | N | J | Pb, Se, Cu had matrix interferences. |
| 3 | GW-776 | L42179-3A,B | N | J | Pb, Se, Cu had matrix interferences. |
| 4 | GW-60 | L42179-4A,B | N | J | Pb, Se, Cu had matrix interferences. |
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# DATA VALIDATION WORKSHEET

**Analytical Method:** Various Methods **Identification[a]:** L42179

**Laboratory:** AWAL **Batch Identification:** _____

| Validation Criteria | Sample Number | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| Hardcopy vs. Chain-of-Custody | A | A | A | A | | | | | | | | | | | | | |
| Holding Time | AL | AL | AL | AL | | | | | | | | | | | | | |
| Analyte List | A | A | A | A | | | | | | | | | | | | | |
| Reporting Limits | A | A | A | A | | | | | | | | | | | | | |
| Initial Calibration (all methods) | AL | AL | AL | AL | | | | | | | | | | | | | |
| Initial Check Blank (ICP & AA methods) | AL | AL | AL | AL | | | | | | | | | | | | | |
| Continuing Calibration (ICP & AA methods) | AL | AL | AL | AL | | | | | | | | | | | | | |
| Injection Time(s) (all methods) | N | N | N | N | | | | | | | | | | | | | |
| Interference Check Standard (ICP Method) | AL | AL | AL | AL | | | | | | | | | | | | | |
| Method Blank (all methods) | AL | AL | AL | AL | | | | | | | | | | | | | |
| Laboratory Control Sample (all methods) | AL | AL | AL | AL | | | | | | | | | | | | | |
| Laboratory Control Sample Duplicate (lab specific) | NA | NA | NA | NA | | | | | | | | | | | | | |
| Matrix Spike/Matrix Spike Duplicate | 1 | 1 | 1 | 1 | | | | | | | | | | | | | |
| Matrix Duplicate (Lab Specific) | NA | NA | NA | NA | | | | | | | | | | | | | |
| Field Duplicate/Replicate | NA | NA | NA | NA | | | | | | | | | | | | | |
| Equipment Rinsate Blanks | NA | NA | NA | NA | | | | | | | | | | | | | |
| Electronic Deliverable vs. Hardcopy | NA | NA | NA | NA | | | | | | | | | | | | | |
| Electronic Deliverable vs. Chain of Custody | NA | NA | NA | NA | | | | | | | | | | | | | |

(a) List QC batch identification if different than Batch ID
A indicates validation criteria were met
A/L indicates validation criteria were met based upon Laboratory's QC Summary Form
X indicates validation criteria were not met
N indicates data review were not a project specific requirement
N/A indicates criteria are not applicable for the specified analytical method
N/R indicates data not available for review

**NOTES:** 1. Pb, Se, Cu had matrix interferences.

## FIGURE B.12-1
## ORGANIC ANALYSIS DATA VALIDATION WORKSHEET

**Analytical Method/Analytes:** Various **Sample Collection Date( s):** 8/1/00

**Laboratory** AWAL **MW Job Number:** _____

**Batch Identification:** L42179 **Matrix:** Water

**QC Identification[a]:** _____ **Page:** 1 of 2

**Validation Complete:** _____ 9/28/00

(Date/Signature)

| Sample No. | Sample ID | Lab. ID | Hits (Y/N) | Quals. | Comments |
|---|---|---|---|---|---|
| 1 | GW-19A | L42179-1A,B | N | J | S-Voa analysis had matrix interference. |
| 2 | GW-63 | L42179-2A,B | N | J | S-Voa analysis had matrix interference. |
| 3 | GW-776 | L42179-3A,B | N | J | S-Voa analysis had matrix interference. |
| 4 | GW-60 | L42179-4A,B | N | J | S-Voa analysis had matrix interference. |
| 5 | Trip Blank | L42179-5A | | | |
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# DATA VALIDATION WORKSHEET

**Analytical Method:** Various **QC Identification[a]:** _____

**Laboratory:** AWAL **Batch Identification:** L42179

| Validation Criteria | Sample Number | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| Hardcopy vs. Chain-of-Custody | A | A | A | A | A | | | | | | | | | |
| Holding Time | AL | AL | AL | AL | AL | | | | | | | | | |
| Analyte List | A | A | A | A | A | | | | | | | | | |
| Reporting Limits | A | A | A | A | A | | | | | | | | | |
| Tuning Standard (GC/MS) | AL | AL | AL | AL | AL | | | | | | | | | |
| Initial Calibration (all methods) | AL | AL | AL | AL | AL | | | | | | | | | |
| Continuing Calibration (all methods) | AL | AL | AL | AL | AL | | | | | | | | | |
| Injection Time(s) (all methods) | AL | AL | AL | AL | AL | | | | | | | | | |
| Internal Standard EICP Area (GC/MS methods) | NA | NA | NA | NA | NA | | | | | | | | | |
| Internal Standard Retention Time Window (GC/MS methods) | NA | NA | NA | NA | NA | | | | | | | | | |
| Retention Time Windows (GC methods) | NA | NA | NA | NA | NA | | | | | | | | | |
| Method Blank (all methods) | AL | AL | AL | AL | AL | | | | | | | | | |
| Surrogate Spike Recovery (organic methods) | AL | AL | AL | AL | AL | | | | | | | | | |
| Laboratory Control Sample (all methods) | AL | AL | AL | AL | AL | | | | | | | | | |
| Laboratory Control Sample Duplicate (lab specific) | N | N | N | N | N | | | | | | | | | |
| Matrix Spike/Matrix Spike Duplicate (all organic methods) | 1 | 1 | 1 | 1 | AL | | | | | | | | | |
| Trip Blanks | A | A | A | A | A | | | | | | | | | |
| Field Duplicate/Replicate | NA | NA | NA | NA | NA | | | | | | | | | |
| Equipment Rinsate Blanks | N | N | N | N | N | | | | | | | | | |
| Electronic Deliverable vs. Hardcopy | NA | NA | NA | NA | NA | | | | | | | | | |
| Electronic Deliverable vs. Chain of Custody | A | A | A | A | A | | | | | | | | | |

(a) List QC batch identification if different than Batch ID
A indicates validation criteria were met
A/L indicates validation criteria met based upon Laboratory's QC Summary Form
X indicates validation criteria were not met
N indicates data review were not a project specific requirement
N/A indicates criteria are not applicable for the specified analytical method
N/R indicates data not available for review

NOTES: 1. S-Voa analysis had matrix interference.

## FIGURE B.12-2
## INORGANIC ANALYSIS DATA VALIDATION WORKSHEET

**Analytical Method/Analytes:** Various **Sample Collection Date(s):** 8/7/2000

**Laboratory:** AWAL **MW Job Number:** _____

**Batch Identification:** L42190 **Matrix:** Waters

**QC Identification[a]:** _____ **Page:** 1 of 2

**Validation Complete:** _____ 9/27/00
(Date/Signature)

| Sample No. | Sample ID | Lab. ID | Hits (Y/N) | Quals. | Comments |
|---|---|---|---|---|---|
| 1 | GW-58 | L42190-1 C,D | N | J | Pb, Se, Cu had matrix interferences. |
| 2 | GW-28 | L42190-2 C,D | N | J | Pb, Se, Cu had matrix interferences. |
| 3 | GW-57 | L42190-3 C,D | N | J | Pb, Se, Cu had matrix interferences. |
| 4 | GW-27 | L42190-4 C,D | N | J | Pb, Se, Cu had matrix interferences. |
| 5 | GW-58A | L42190-5 A | N | J | Pb, Se, Cu had matrix interferences. |
| 6 | GW-28A | L42190-6 A | N | J | Pb, Se, Cu had matrix interferences. |
| 7 | GW-57A | L42190-7 A | N | J | Pb, Se, Cu had matrix interferences. |
| 8 | GW-27A | L42190-8 A | N | J | Pb, Se, Cu had matrix interferences. |
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# DATA VALIDATION WORKSHEET

**Analytical Method:** Various Methods **Identification[a]:** L42190

**Laboratory:** AWAL **Batch Identification:** _____

| Validation Criteria | Sample Number | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| Hardcopy vs. Chain-of-Custody | A | A | A | A | A | A | A | A | | | | | | | | | |
| Holding Time | AL | AL | AL | AL | AL | AL | AL | AL | | | | | | | | | |
| Analyte List | A | A | A | A | A | A | A | A | | | | | | | | | |
| Reporting Limits | A | A | A | A | A | A | A | A | | | | | | | | | |
| Initial Calibration (all methods) | AL | AL | AL | AL | AL | AL | AL | AL | | | | | | | | | |
| Initial Check Blank (ICP & AA methods) | AL | AL | AL | AL | AL | AL | AL | AL | | | | | | | | | |
| Continuing Calibration (ICP & AA methods) | AL | AL | AL | AL | AL | AL | AL | AL | | | | | | | | | |
| Injection Time(s) (all methods) | N | N | N | N | N | N | N | N | | | | | | | | | |
| Interference Check Standard (ICP Method) | AL | AL | AL | AL | AL | AL | AL | AL | | | | | | | | | |
| Method Blank (all methods) | AL | AL | AL | AL | AL | AL | AL | AL | | | | | | | | | |
| Laboratory Control Sample (all methods) | AL | AL | AL | AL | AL | AL | AL | AL | | | | | | | | | |
| Laboratory Control Sample Duplicate (lab specific) | NA | NA | NA | NA | NA | NA | NA | NA | | | | | | | | | |
| Matrix Spike/Matrix Spike Duplicate | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | |
| Matrix Duplicate (Lab Specific) | NA | NA | NA | NA | NA | NA | NA | NA | | | | | | | | | |
| Field Duplicate/Replicate | NA | NA | NA | NA | NA | NA | NA | NA | | | | | | | | | |
| Equipment Rinsate Blanks | NA | NA | NA | NA | NA | NA | NA | NA | | | | | | | | | |
| Electronic Deliverable vs. Hardcopy | NA | NA | NA | NA | NA | NA | NA | NA | | | | | | | | | |
| Electronic Deliverable vs. Chain of Custody | NA | NA | NA | NA | NA | NA | NA | NA | | | | | | | | | |

(a) List QC batch identification if different than Batch ID
A indicates validation criteria were met
A/L indicates validation criteria were met based upon Laboratory's QC Summary Form
X indicates validation criteria were not met
N indicates data review were not a project specific requirement
N/A indicates criteria are not applicable for the specified analytical method
N/R indicates data not available for review

**NOTES:** 1. Pb, Se, Cu had matrix interferences.

**FIGURE B.12-1**
**ORGANIC ANALYSIS DATA VALIDATION WORKSHEET**

**Analytical Method/Analytes:** Various **Sample Collection Date( s):** 8/700

**Laboratory** AWAL **MW Job Number:** _____

**Batch Identification:** L42190 **Matrix:** Water

**QC Identification[a]:** _____ **Page:** 1 of 2

**Validation Complete:** _____ 9/27/07

(Date/Signature)

| Sample No. | Sample ID | Lab. ID | Hits (Y/N) | Quals. | Comments |
|---|---|---|---|---|---|
| 1 | GW-58 | L42190-1A,B | N | J | S-Voa analysis had matrix interference. |
| 2 | GW-28 | L42190-2A,B | N | J | S-Voa analysis had matrix interference. |
| 3 | GW-57 | L42190-3A,B | N | J | S-Voa analysis had matrix interference. |
| 4 | GW-27 | L42190-4A,B | N | J | S-Voa analysis had matrix interference. |
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# DATA VALIDATION WORKSHEET

**Analytical Method:** Various **QC Identification[a]:** _____

**Laboratory:** AWAL **Batch Identification:** L42190

| Validation Criteria | Sample Number | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| Hardcopy vs. Chain-of-Custody | A | A | A | A | | | | | | | | | | |
| Holding Time | AL | AL | AL | AL | | | | | | | | | | |
| Analyte List | A | A | A | A | | | | | | | | | | |
| Reporting Limits | A | A | A | A | | | | | | | | | | |
| Tuning Standard (GC/MS) | AL | AL | AL | AL | | | | | | | | | | |
| Initial Calibration (all methods) | AL | AL | AL | AL | | | | | | | | | | |
| Continuing Calibration (all methods) | AL | AL | AL | AL | | | | | | | | | | |
| Injection Time(s) (all methods) | AL | AL | AL | AL | | | | | | | | | | |
| Internal Standard EICP Area (GC/MS methods) | NA | NA | NA | NA | | | | | | | | | | |
| Internal Standard Retention Time Window (GC/MS methods) | NA | NA | NA | NA | | | | | | | | | | |
| Retention Time Windows (GC methods) | NA | NA | NA | NA | | | | | | | | | | |
| Method Blank (all methods) | AL | AL | AL | AL | | | | | | | | | | |
| Surrogate Spike Recovery (organic methods) | AL | AL | AL | AL | | | | | | | | | | |
| Laboratory Control Sample (all methods) | AL | AL | AL | AL | | | | | | | | | | |
| Laboratory Control Sample Duplicate (lab specific) | N | N | N | N | | | | | | | | | | |
| Matrix Spike/Matrix Spike Duplicate (all organic methods) | 1 | 1 | 1 | 1 | | | | | | | | | | |
| Trip Blanks | A | A | A | A | | | | | | | | | | |
| Field Duplicate/Replicate | NA | NA | NA | NA | | | | | | | | | | |
| Equipment Rinsate Blanks | N | N | N | N | | | | | | | | | | |
| Electronic Deliverable vs. Hardcopy | NA | NA | NA | NA | | | | | | | | | | |
| Electronic Deliverable vs. Chain of Custody | A | A | A | A | | | | | | | | | | |

(a) List QC batch identification if different than Batch ID
A indicates validation criteria were met
A/L indicates validation criteria met based upon Laboratory's QC Summary Form
X indicates validation criteria were not met
N indicates data review were not a project specific requirement
N/A indicates criteria are not applicable for the specified analytical method
N/R indicates data not available for review

NOTES: 1. S-Voa analysis had matrix interference.

## FIGURE B.12-2
## INORGANIC ANALYSIS DATA VALIDATION WORKSHEET

**Analytical Method/Analytes:** Various **Sample Collection Date(s):** 8/7/00

**Laboratory:** AWAL **MW Job Number:** _____

**Batch Identification:** L42221 **Matrix:** Waters

**QC Identification[a]:** _____ **Page:** 1 of 2

**Validation Complete:** _____ 9/26/02

(Date/Signature)

| Sample No. | Sample ID | Lab. ID | Hits (Y/N) | Quals. | Comments |
|---|---|---|---|---|---|
| 1 | GW-25A | L42221-1A | N | J | As, Pb, Se had matrix interferences. |
| 2 | GW-26A | L42221-2A | N | J | As, Pb, Se had matrix interferences. |
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# DATA VALIDATION WORKSHEET

**Analytical Method:** Various Methods **Identification[a]:** L42221

**Laboratory:** AWAL **Batch Identification:** _____

| Validation Criteria | Sample Number | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| Hardcopy vs. Chain-of-Custody | A | A | | | | | | | | | | | | | | | |
| Holding Time | AL | AL | | | | | | | | | | | | | | | |
| Analyte List | A | A | | | | | | | | | | | | | | | |
| Reporting Limits | A | A | | | | | | | | | | | | | | | |
| Initial Calibration (all methods) | AL | AL | | | | | | | | | | | | | | | |
| Initial Check Blank (ICP & AA methods) | AL | AL | | | | | | | | | | | | | | | |
| Continuing Calibration (ICP & AA methods) | AL | AL | | | | | | | | | | | | | | | |
| Injection Time(s) (all methods) | N | N | | | | | | | | | | | | | | | |
| Interference Check Standard (ICP Method) | AL | AL | | | | | | | | | | | | | | | |
| Method Blank (all methods) | AL | AL | | | | | | | | | | | | | | | |
| Laboratory Control Sample (all methods) | AL | AL | | | | | | | | | | | | | | | |
| Laboratory Control Sample Duplicate (lab specific) | NA | NA | | | | | | | | | | | | | | | |
| Matrix Spike/Matrix Spike Duplicate | 1 | 1 | | | | | | | | | | | | | | | |
| Matrix Duplicate (Lab Specific) | NA | NA | | | | | | | | | | | | | | | |
| Field Duplicate/Replicate | NA | NA | | | | | | | | | | | | | | | |
| Equipment Rinsate Blanks | NA | NA | | | | | | | | | | | | | | | |
| Electronic Deliverable vs. Hardcopy | NA | NA | | | | | | | | | | | | | | | |
| Electronic Deliverable vs. Chain of Custody | NA | NA | | | | | | | | | | | | | | | |

(a) List QC batch identification if different than Batch ID
A indicates validation criteria were met
A/L indicates validation criteria were met based upon Laboratory's QC Summary Form
X indicates validation criteria were not met
N indicates data review were not a project specific requirement
N/A indicates criteria are not applicable for the specified analytical method
N/R indicates data not available for review

**NOTES:** 1. As, Pb, Se had matrix interferences.

**FIGURE B.12-2**
**INORGANIC ANALYSIS DATA VALIDATION WORKSHEET**

**Analytical Method/Analytes:** Various **Sample Collection Date(s):** 8/7/00

**Laboratory:** AWAL **MW Job Number:** _____

**Batch Identification:** L42222 **Matrix:** Waters

**QC Identification[a]:** _____ **Page:** 1 of 2

**Validation Complete:** _____ 10/4/00
(Date/Signature)

| Sample No. | Sample ID | Lab. ID | Hits (Y/N) | Quals. | Comments |
|---|---|---|---|---|---|
| 1 | GW-26 | L42222-1C,D | N | J | Pb, Se, Hg, had matrix interferences. |
| 2 | GW-25 | L42222-2C,D | N | J | Pb, Se, Hg, had matrix interferences. |
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# DATA VALIDATION WORKSHEET

**Analytical Method:** Various Methods **Identification[a]:** L42222

**Laboratory:** AWAL **Batch Identification:** _____

| Validation Criteria | Sample Number | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| Hardcopy vs. Chain-of-Custody | A | A | | | | | | | | | | | | | | | |
| Holding Time | AL | AL | | | | | | | | | | | | | | | |
| Analyte List | A | A | | | | | | | | | | | | | | | |
| Reporting Limits | A | A | | | | | | | | | | | | | | | |
| Initial Calibration (all methods) | AL | AL | | | | | | | | | | | | | | | |
| Initial Check Blank (ICP & AA methods) | AL | AL | | | | | | | | | | | | | | | |
| Continuing Calibration (ICP & AA methods) | AL | AL | | | | | | | | | | | | | | | |
| Injection Time(s) (all methods) | N | N | | | | | | | | | | | | | | | |
| Interference Check Standard (ICP Method) | AL | AL | | | | | | | | | | | | | | | |
| Method Blank (all methods) | AL | AL | | | | | | | | | | | | | | | |
| Laboratory Control Sample (all methods) | AL | AL | | | | | | | | | | | | | | | |
| Laboratory Control Sample Duplicate (lab specific) | NA | NA | | | | | | | | | | | | | | | |
| Matrix Spike/Matrix Spike Duplicate | 1 | 1 | | | | | | | | | | | | | | | |
| Matrix Duplicate (Lab Specific) | NA | NA | | | | | | | | | | | | | | | |
| Field Duplicate/Replicate | NA | NA | | | | | | | | | | | | | | | |
| Equipment Rinsate Blanks | NA | NA | | | | | | | | | | | | | | | |
| Electronic Deliverable vs. Hardcopy | NA | NA | | | | | | | | | | | | | | | |
| Electronic Deliverable vs. Chain of Custody | NA | NA | | | | | | | | | | | | | | | |

(a) List QC batch identification if different than Batch ID
A indicates validation criteria were met
A/L indicates validation criteria were met based upon Laboratory's QC Summary Form
X indicates validation criteria were not met
N indicates data review were not a project specific requirement
N/A indicates criteria are not applicable for the specified analytical method
N/R indicates data not available for review

**NOTES:** 1. Pb, Se, Hg, had matrix interferences.

## FIGURE B.12-1
## ORGANIC ANALYSIS DATA VALIDATION WORKSHEET

**Analytical Method/Analytes:** Various **Sample Collection Date( s):** 8/7/00

**Laboratory** AWAL **MW Job Number:** _____

**Batch Identification:** L42222 **Matrix:** Water

**QC Identification[a]:** _____ **Page:** 1 of 2

**Validation Complete:** _____ 10/4/00

(Date/Signature)

| Sample No. | Sample ID | Lab. ID | Hits (Y/N) | Quals. | Comments |
|---|---|---|---|---|---|
| 1 | GW-26 | L42222-01A,B | N | J | 1,4-Dichlorobenzene, 2-Chlorophenol, Pyrene had matrix interferences. Low recovery, Pest surrogates. |
| 2 | GW-25 | L42222-02A,B | N | J | 1,4-Dichlorobenzene, 2-Chlorophenol, Pyrene had matrix interferences. Low recovery, Pest surrogates. |
| 3 | Trip Blank | L42222-03A | N | NA | None |
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# DATA VALIDATION WORKSHEET

**Analytical Method:** Various **QC Identification[a]:** _____

**Laboratory:** AWAL **Batch Identification:** L42222

| Validation Criteria | Sample Number | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| Hardcopy vs. Chain-of-Custody | A | A | A | | | | | | | | | | | |
| Holding Time | AL | AL | AL | | | | | | | | | | | |
| Analyte List | A | A | A | | | | | | | | | | | |
| Reporting Limits | A | A | A | | | | | | | | | | | |
| Tuning Standard (GC/MS) | AL | AL | AL | | | | | | | | | | | |
| Initial Calibration (all methods) | AL | AL | AL | | | | | | | | | | | |
| Continuing Calibration (all methods) | AL | AL | AL | | | | | | | | | | | |
| Injection Time(s) (all methods) | AL | AL | AL | | | | | | | | | | | |
| Internal Standard EICP Area (GC/MS methods) | NA | NA | NA | | | | | | | | | | | |
| Internal Standard Retention Time Window (GC/MS methods) | NA | NA | NA | | | | | | | | | | | |
| Retention Time Windows (GC methods) | NA | NA | NA | | | | | | | | | | | |
| Method Blank (all methods) | AL | AL | AL | | | | | | | | | | | |
| Surrogate Spike Recovery (organic methods) | 1 | AL | AL | | | | | | | | | | | |
| Laboratory Control Sample (all methods) | AL | AL | AL | | | | | | | | | | | |
| Laboratory Control Sample Duplicate (lab specific) | N | N | N | | | | | | | | | | | |
| Matrix Spike/Matrix Spike Duplicate (all organic methods) | 2 | 2 | AL | | | | | | | | | | | |
| Trip Blanks | A | A | A | | | | | | | | | | | |
| Field Duplicate/Replicate | NA | NA | NA | | | | | | | | | | | |
| Equipment Rinsate Blanks | N | N | N | | | | | | | | | | | |
| Electronic Deliverable vs. Hardcopy | NA | NA | NA | | | | | | | | | | | |
| Electronic Deliverable vs. Chain of Custody | A | A | A | | | | | | | | | | | |

(a) List QC batch identification if different than Batch ID
A indicates validation criteria were met
A/L indicates validation criteria met based upon Laboratory's QC Summary Form
X indicates validation criteria were not met
N indicates data review were not a project specific requirement
N/A indicates criteria are not applicable for the specified analytical method
N/R indicates data not available for review

NOTES: 1. Low recovery, Pest surrogates. 2. 1,4-Dichlorobenzene, 2-Chlorophenbol, Pyrene had matrix interferences.

## FIGURE B.12-2
## INORGANIC ANALYSIS DATA VALIDATION WORKSHEET

**Analytical Method/Analytes:** Various **Sample Collection Date(s):** 8/8/00

**Laboratory:** AWAL **MW Job Number:** _____

**Batch Identification:** L42241 **Matrix:** Waters

**QC Identification[a]:** _____ **Page:** 1 of 2

**Validation Complete:** _____ 9/28/00
(Date/Signature)

| Sample No. | Sample ID | Lab. ID | Hits (Y/N) | Quals. | Comments |
|---|---|---|---|---|---|
| 1 | GW-20 | L42241-1A | N | J | Pb, Se, Hg had matrix interferences. |
| 2 | GW-24 | L42241-2A | N | J | Pb, Se, Hg had matrix interferences. |
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# DATA VALIDATION WORKSHEET

**Analytical Method:** Various Methods **Identification[a]:** L42241

**Laboratory:** AWAL **Batch Identification:** _____

| Validation Criteria | Sample Number | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| Hardcopy vs. Chain-of-Custody | A | A | | | | | | | | | | | | | | | |
| Holding Time | AL | AL | | | | | | | | | | | | | | | |
| Analyte List | A | A | | | | | | | | | | | | | | | |
| Reporting Limits | A | A | | | | | | | | | | | | | | | |
| Initial Calibration (all methods) | AL | AL | | | | | | | | | | | | | | | |
| Initial Check Blank (ICP & AA methods) | AL | AL | | | | | | | | | | | | | | | |
| Continuing Calibration (ICP & AA methods) | AL | AL | | | | | | | | | | | | | | | |
| Injection Time(s) (all methods) | N | N | | | | | | | | | | | | | | | |
| Interference Check Standard (ICP Method) | AL | AL | | | | | | | | | | | | | | | |
| Method Blank (all methods) | AL | AL | | | | | | | | | | | | | | | |
| Laboratory Control Sample (all methods) | AL | AL | | | | | | | | | | | | | | | |
| Laboratory Control Sample Duplicate (lab specific) | NA | NA | | | | | | | | | | | | | | | |
| Matrix Spike/Matrix Spike Duplicate | 1 | 1 | | | | | | | | | | | | | | | |
| Matrix Duplicate (Lab Specific) | NA | NA | | | | | | | | | | | | | | | |
| Field Duplicate/Replicate | NA | NA | | | | | | | | | | | | | | | |
| Equipment Rinsate Blanks | NA | NA | | | | | | | | | | | | | | | |
| Electronic Deliverable vs. Hardcopy | NA | NA | | | | | | | | | | | | | | | |
| Electronic Deliverable vs. Chain of Custody | NA | NA | | | | | | | | | | | | | | | |

(a) List QC batch identification if different than Batch ID
A indicates validation criteria were met
A/L indicates validation criteria were met based upon Laboratory's QC Summary Form
X indicates validation criteria were not met
N indicates data review were not a project specific requirement
N/A indicates criteria are not applicable for the specified analytical method
N/R indicates data not available for review

**NOTES:** 1. Pb, Se, Hg had matrix interferences.

FIGURE B.12-2
INORGANIC ANALYSIS DATA VALIDATION WORKSHEET

Analytical Method/Analytes: Various Sample Collection Date(s): 8/8/00

Laboratory: AWAL MW Job Number: _____

Batch Identification: L42242 Matrix: Waters

QC Identification[a]: _____ Page: 1 of 2

Validation Complete: _____ 9/28/00
(Date/Signature)

| Sample No. | Sample ID | Lab. ID | Hits (Y/N) | Quals. | Comments |
|---|---|---|---|---|---|
| 1 | GW-20 | L42242-1C,D | N | J | Pb, Se, Hg had matrix interferences. |
| 2 | GW-24 | L42242-2C,D | N | J | Pb, Se, Hg had matrix interferences. |
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# DATA VALIDATION WORKSHEET

**Analytical Method:** Various Methods **Identification[a]:** L42242

**Laboratory:** AWAL **Batch Identification:** _____

| Validation Criteria | Sample Number | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| Hardcopy vs. Chain-of-Custody | A | A | A | A | | | | | | | | | | | | | |
| Holding Time | AL | AL | AL | AL | | | | | | | | | | | | | |
| Analyte List | A | A | A | A | | | | | | | | | | | | | |
| Reporting Limits | A | A | A | A | | | | | | | | | | | | | |
| Initial Calibration (all methods) | AL | AL | AL | AL | | | | | | | | | | | | | |
| Initial Check Blank (ICP & AA methods) | AL | AL | AL | AL | | | | | | | | | | | | | |
| Continuing Calibration (ICP & AA methods) | AL | AL | AL | AL | | | | | | | | | | | | | |
| Injection Time(s) (all methods) | N | N | N | N | | | | | | | | | | | | | |
| Interference Check Standard (ICP Method) | AL | AL | AL | AL | | | | | | | | | | | | | |
| Method Blank (all methods) | AL | AL | AL | AL | | | | | | | | | | | | | |
| Laboratory Control Sample (all methods) | AL | AL | AL | AL | | | | | | | | | | | | | |
| Laboratory Control Sample Duplicate (lab specific) | NA | NA | NA | NA | | | | | | | | | | | | | |
| Matrix Spike/Matrix Spike Duplicate | 1 | 1 | 1 | 1 | | | | | | | | | | | | | |
| Matrix Duplicate (Lab Specific) | NA | NA | NA | NA | | | | | | | | | | | | | |
| Field Duplicate/Replicate | NA | NA | NA | NA | | | | | | | | | | | | | |
| Equipment Rinsate Blanks | NA | NA | NA | NA | | | | | | | | | | | | | |
| Electronic Deliverable vs. Hardcopy | NA | NA | NA | NA | | | | | | | | | | | | | |
| Electronic Deliverable vs. Chain of Custody | NA | NA | NA | NA | | | | | | | | | | | | | |

(a) List QC batch identification if different than Batch ID
A indicates validation criteria were met
A/L indicates validation criteria were met based upon Laboratory's QC Summary Form
X indicates validation criteria were not met
N indicates data review were not a project specific requirement
N/A indicates criteria are not applicable for the specified analytical method
N/R indicates data not available for review

**NOTES:** 1. Pb, Se, Hg had matrix interferences.

## FIGURE B.12-1
## ORGANIC ANALYSIS DATA VALIDATION WORKSHEET

**Analytical Method/Analytes:** Various **Sample Collection Date( s):** 8/8/00

**Laboratory** AWAL **MW Job Number:** _____

**Batch Identification:** L42242 **Matrix:** Water

**QC Identification[a]:** _____ **Page:** 1 of 2

**Validation Complete:** _____ 9/29/00

(Date/Signature)

| Sample No. | Sample ID | Lab. ID | Hits (Y/N) | Quals. | Comments |
|---|---|---|---|---|---|
| 1 | GW-20 | L42242-1A,B | N | J | 1,4-Dichlorobenzene, 2-Chlorophenol, and Pyrene had matrix interference. |
| 2 | GW-24 | L42242-2A,B | N | J | 1,4-Dichlorobenzene, 2-Chlorophenol, and Pyrene had matrix interference. |
| 3 | Trip Blank | L42242-3A | N | NA | None |
| 4 | | | | | |
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# DATA VALIDATION WORKSHEET

**Analytical Method:** Various **QC Identification[a]:** _____

**Laboratory:** AWAL **Batch Identification:** L42242

| Validation Criteria | Sample Number | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| Hardcopy vs. Chain-of-Custody | A | A | A | | | | | | | | | | | |
| Holding Time | AL | AL | AL | | | | | | | | | | | |
| Analyte List | A | A | A | | | | | | | | | | | |
| Reporting Limits | A | A | A | | | | | | | | | | | |
| Tuning Standard (GC/MS) | AL | AL | AL | | | | | | | | | | | |
| Initial Calibration (all methods) | AL | AL | AL | | | | | | | | | | | |
| Continuing Calibration (all methods) | AL | AL | AL | | | | | | | | | | | |
| Injection Time(s) (all methods) | AL | AL | AL | | | | | | | | | | | |
| Internal Standard EICP Area (GC/MS methods) | NA | NA | NA | | | | | | | | | | | |
| Internal Standard Retention Time Window (GC/MS methods) | NA | NA | NA | | | | | | | | | | | |
| Retention Time Windows (GC methods) | NA | NA | NA | | | | | | | | | | | |
| Method Blank (all methods) | AL | AL | AL | | | | | | | | | | | |
| Surrogate Spike Recovery (organic methods) | AL | AL | AL | | | | | | | | | | | |
| Laboratory Control Sample (all methods) | AL | AL | AL | | | | | | | | | | | |
| Laboratory Control Sample Duplicate (lab specific) | N | N | N | | | | | | | | | | | |
| Matrix Spike/Matrix Spike Duplicate (all organic methods) | 1 | 1 | AL | | | | | | | | | | | |
| Trip Blanks | A | A | A | | | | | | | | | | | |
| Field Duplicate/Replicate | NA | NA | NA | | | | | | | | | | | |
| Equipment Rinsate Blanks | N | N | N | | | | | | | | | | | |
| Electronic Deliverable vs. Hardcopy | NA | NA | NA | | | | | | | | | | | |
| Electronic Deliverable vs. Chain of Custody | A | A | A | | | | | | | | | | | |

(a) List QC batch identification if different than Batch ID
A indicates validation criteria were met
A/L indicates validation criteria met based upon Laboratory's QC Summary Form
X indicates validation criteria were not met
N indicates data review were not a project specific requirement
N/A indicates criteria are not applicable for the specified analytical method
N/R indicates data not available for review

NOTES: 1. 1,4-Dichlorobenzene, 2-Chlorophenol, and Pyrene had matrix interference.

**FIGURE B.12-1**
**ORGANIC ANALYSIS DATA VALIDATION WORKSHEET**

**Analytical Method/Analytes:** Various **Sample Collection Date( s):** 8/10/00

**Laboratory** AWAL **MW Job Number:** _____

**Batch Identification:** L42270 **Matrix:** Water

**QC Identification[a]:** _____ **Page:** 1 of 2

**Validation Complete:** _____ 9/20/00

(Date/Signature)

| Sample No. | Sample ID | Lab. ID | Hits (Y/N) | Quals. | Comments |
|---|---|---|---|---|---|
| 1 | GW-29 | L42270-01C,D | N | J | 1,4-Dichlorobenzene, 2-Chlorophenbol, Pyrene had matrix interferences. |
| 2 | Trip Blank | L42270-01A | N | NA | None |
| 3 | | | | | |
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# DATA VALIDATION WORKSHEET

**Analytical Method:** Various **QC Identification[(a)]:** _____

**Laboratory:** AWAL **Batch Identification:** L42270

| Validation Criteria | Sample Number | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| Hardcopy vs. Chain-of-Custody | A | A | | | | | | | | | | | | |
| Holding Time | AL | AL | | | | | | | | | | | | |
| Analyte List | A | A | | | | | | | | | | | | |
| Reporting Limits | A | A | | | | | | | | | | | | |
| Tuning Standard (GC/MS) | AL | AL | | | | | | | | | | | | |
| Initial Calibration (all methods) | AL | AL | | | | | | | | | | | | |
| Continuing Calibration (all methods) | AL | AL | | | | | | | | | | | | |
| Injection Time(s) (all methods) | AL | AL | | | | | | | | | | | | |
| Internal Standard EICP Area (GC/MS methods) | NA | NA | | | | | | | | | | | | |
| Internal Standard Retention Time Window (GC/MS methods) | NA | NA | | | | | | | | | | | | |
| Retention Time Windows (GC methods) | NA | NA | | | | | | | | | | | | |
| Method Blank (all methods) | AL | AL | | | | | | | | | | | | |
| Surrogate Spike Recovery (organic methods) | AL | AL | | | | | | | | | | | | |
| Laboratory Control Sample (all methods) | AL | AL | | | | | | | | | | | | |
| Laboratory Control Sample Duplicate (lab specific) | N | N | | | | | | | | | | | | |
| Matrix Spike/Matrix Spike Duplicate (all organic methods) | 1 | AL | | | | | | | | | | | | |
| Trip Blanks | A | A | | | | | | | | | | | | |
| Field Duplicate/Replicate | NA | NA | | | | | | | | | | | | |
| Equipment Rinsate Blanks | N | N | | | | | | | | | | | | |
| Electronic Deliverable vs. Hardcopy | NA | NA | | | | | | | | | | | | |
| Electronic Deliverable vs. Chain of Custody | A | A | | | | | | | | | | | | |

(a) List QC batch identification if different than Batch ID
A indicates validation criteria were met
A/L indicates validation criteria met based upon Laboratory's QC Summary Form
X indicates validation criteria were not met
N indicates data review were not a project specific requirement
N/A indicates criteria are not applicable for the specified analytical method
N/R indicates data not available for review

NOTES: 1. 1,4-Dichlorobenzene, 2-Chlorophenbol, Pyrene had matrix interferences.

FIGURE B.12-2
INORGANIC ANALYSIS DATA VALIDATION WORKSHEET

Analytical Method/Analytes: Various Sample Collection Date(s): 8/10/2000

Laboratory: AWAL MW Job Number: _____

Batch Identification: L42270 Matrix: Waters

QC Identification[a]: _____ Page: 1 of 2

Validation Complete: Jeff Kuhn 9/26/02
(Date/Signature)

| Sample No. | Sample ID | Lab. ID | Hits (Y/N) | Quals. | Comments |
|---|---|---|---|---|---|
| 1 | GW-29 | L42270-1A,B,C | N | J | Pb, Se, Hg, had matrix interferences. |
| 2 | | | | | |
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# DATA VALIDATION WORKSHEET

**Analytical Method:** Various Methods **Identification[a]:** L42270

**Laboratory:** AWAL **Batch Identification:** _____

| Validation Criteria | Sample Number | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| Hardcopy vs. Chain-of-Custody | A | | | | | | | | | | | | | | | | |
| Holding Time | AL | | | | | | | | | | | | | | | | |
| Analyte List | A | | | | | | | | | | | | | | | | |
| Reporting Limits | A | | | | | | | | | | | | | | | | |
| Initial Calibration (all methods) | AL | | | | | | | | | | | | | | | | |
| Initial Check Blank (ICP & AA methods) | AL | | | | | | | | | | | | | | | | |
| Continuing Calibration (ICP & AA methods) | AL | | | | | | | | | | | | | | | | |
| Injection Time(s) (all methods) | N | | | | | | | | | | | | | | | | |
| Interference Check Standard (ICP Method) | AL | | | | | | | | | | | | | | | | |
| Method Blank (all methods) | AL | | | | | | | | | | | | | | | | |
| Laboratory Control Sample (all methods) | AL | | | | | | | | | | | | | | | | |
| Laboratory Control Sample Duplicate (lab specific) | NA | | | | | | | | | | | | | | | | |
| Matrix Spike/Matrix Spike Duplicate | 1 | | | | | | | | | | | | | | | | |
| Matrix Duplicate (Lab Specific) | NA | | | | | | | | | | | | | | | | |
| Field Duplicate/Replicate | NA | | | | | | | | | | | | | | | | |
| Equipment Rinsate Blanks | NA | | | | | | | | | | | | | | | | |
| Electronic Deliverable vs. Hardcopy | NA | | | | | | | | | | | | | | | | |
| Electronic Deliverable vs. Chain of Custody | NA | | | | | | | | | | | | | | | | |

(a) List QC batch identification if different than Batch ID
A indicates validation criteria were met
A/L indicates validation criteria were met based upon Laboratory's QC Summary Form
X indicates validation criteria were not met
N indicates data review were not a project specific requirement
N/A indicates criteria are not applicable for the specified analytical method
N/R indicates data not available for review

**NOTES:** 1. Pb, Se, Hg, had matrix interferences.

**FIGURE B.12-2**
**INORGANIC ANALYSIS DATA VALIDATION WORKSHEET**

**Analytical Method/Analytes:** Various **Sample Collection Date(s):** 8/10/00

**Laboratory:** AWAL **MW Job Number:** _____

**Batch Identification:** L42271 **Matrix:** Waters

**QC Identification[a]:** _____ **Page:** 1 of 2

**Validation Complete:** Jeff B. for 9/21/00
(Date/Signature)

| Sample No. | Sample ID | Lab. ID | Hits (Y/N) | Quals. | Comments |
|---|---|---|---|---|---|
| 1 | GW-29 | L42271-1A | N | J | Pb, Se, Hg had matrix interferences. |
| 2 | | | | | |
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# DATA VALIDATION WORKSHEET

**Analytical Method:** Various Methods **Identification[a]:** L42271

**Laboratory:** AWAL **Batch Identification:** _____

| Validation Criteria | Sample Number | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| Hardcopy vs. Chain-of-Custody | A | | | | | | | | | | | | | | | | |
| Holding Time | AL | | | | | | | | | | | | | | | | |
| Analyte List | A | | | | | | | | | | | | | | | | |
| Reporting Limits | A | | | | | | | | | | | | | | | | |
| Initial Calibration (all methods) | AL | | | | | | | | | | | | | | | | |
| Initial Check Blank (ICP & AA methods) | AL | | | | | | | | | | | | | | | | |
| Continuing Calibration (ICP & AA methods) | AL | | | | | | | | | | | | | | | | |
| Injection Time(s) (all methods) | N | | | | | | | | | | | | | | | | |
| Interference Check Standard (ICP Method) | AL | | | | | | | | | | | | | | | | |
| Method Blank (all methods) | AL | | | | | | | | | | | | | | | | |
| Laboratory Control Sample (all methods) | AL | | | | | | | | | | | | | | | | |
| Laboratory Control Sample Duplicate (lab specific) | NA | | | | | | | | | | | | | | | | |
| Matrix Spike/Matrix Spike Duplicate | 1 | | | | | | | | | | | | | | | | |
| Matrix Duplicate (Lab Specific) | NA | | | | | | | | | | | | | | | | |
| Field Duplicate/Replicate | NA | | | | | | | | | | | | | | | | |
| Equipment Rinsate Blanks | NA | | | | | | | | | | | | | | | | |
| Electronic Deliverable vs. Hardcopy | NA | | | | | | | | | | | | | | | | |
| Electronic Deliverable vs. Chain of Custody | NA | | | | | | | | | | | | | | | | |

(a) List QC batch identification if different than Batch ID
A indicates validation criteria were met
A/L indicates validation criteria were met based upon Laboratory's QC Summary Form
X indicates validation criteria were not met
N indicates data review were not a project specific requirement
N/A indicates criteria are not applicable for the specified analytical method
N/R indicates data not available for review

**NOTES:** 1. Pb, Se, Hg had matrix interferences.

## FIGURE B.12-2
## INORGANIC ANALYSIS DATA VALIDATION WORKSHEET

**Analytical Method/Analytes:** Various **Sample Collection Date(s):** 10/3/00

**Laboratory:** AWAL **MW Job Number:** _____

**Batch Identification:** L42939 **Matrix:** Waters

**QC Identification[a]:** _____ **Page:** 1 of 2

**Validation Complete:** _____ 2/2/01

(Date/Signature)

| Sample No. | Sample ID | Lab. ID | Hits (Y/N) | Quals. | Comments |
|---|---|---|---|---|---|
| 1 | GW-88 | L42939-1 | N | J | Pb, Hg had matrix interferences. |
| 2 | GW-89 | L42939-2 | N | J | Pb, Hg had matrix interferences. |
| 3 | GW-90 | L42939-3 | N | J | Pb, Hg had matrix interferences. |
| 4 | GW-91 | L42939-4 | N | J | Pb, Hg had matrix interferences. |
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# DATA VALIDATION WORKSHEET

**Analytical Method:** Various Methods **Identification[a]:** L42939

**Laboratory:** AWAL **Batch Identification:** _____

| Validation Criteria | Sample Number | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| Hardcopy vs. Chain-of-Custody | A | A | A | A | | | | | | | | | | | | | |
| Holding Time | AL | AL | AL | AL | | | | | | | | | | | | | |
| Analyte List | A | A | A | A | | | | | | | | | | | | | |
| Reporting Limits | A | A | A | A | | | | | | | | | | | | | |
| Initial Calibration (all methods) | AL | AL | AL | AL | | | | | | | | | | | | | |
| Initial Check Blank (ICP & AA methods) | AL | AL | AL | AL | | | | | | | | | | | | | |
| Continuing Calibration (ICP & AA methods) | AL | AL | AL | AL | | | | | | | | | | | | | |
| Injection Time(s) (all methods) | N | N | N | N | | | | | | | | | | | | | |
| Interference Check Standard (ICP Method) | AL | AL | AL | AL | | | | | | | | | | | | | |
| Method Blank (all methods) | AL | AL | AL | AL | | | | | | | | | | | | | |
| Laboratory Control Sample (all methods) | AL | AL | AL | AL | | | | | | | | | | | | | |
| Laboratory Control Sample Duplicate (lab specific) | NA | NA | NA | NA | | | | | | | | | | | | | |
| Matrix Spike/Matrix Spike Duplicate | 1 | 1 | 1 | 1 | | | | | | | | | | | | | |
| Matrix Duplicate (Lab Specific) | NA | NA | NA | NA | | | | | | | | | | | | | |
| Field Duplicate/Replicate | NA | NA | NA | NA | | | | | | | | | | | | | |
| Equipment Rinsate Blanks | NA | NA | NA | NA | | | | | | | | | | | | | |
| Electronic Deliverable vs. Hardcopy | NA | NA | NA | NA | | | | | | | | | | | | | |
| Electronic Deliverable vs. Chain of Custody | NA | NA | NA | NA | | | | | | | | | | | | | |

(a) List QC batch identification if different than Batch ID
A indicates validation criteria were met
A/L indicates validation criteria were met based upon Laboratory's QC Summary Form
X indicates validation criteria were not met
N indicates data review were not a project specific requirement
N/A indicates criteria are not applicable for the specified analytical method
N/R indicates data not available for review

**NOTES:** 1. Pb, Hg had matrix interferences.

## FIGURE B.12-2
## INORGANIC ANALYSIS DATA VALIDATION WORKSHEET

**Analytical Method/Analytes:** Various **Sample Collection Date(s):** 10/4/00

**Laboratory:** AWAL **MW Job Number:** _____

**Batch Identification:** L42961 **Matrix:** Waters

**QC Identification[a]:** _____ **Page:** 1 of 2

**Validation Complete:** _____ 12/8/00
(Date/Signature)

| Sample No. | Sample ID | Lab. ID | Hits (Y/N) | Quals. | Comments |
|---|---|---|---|---|---|
| 1 | GW-19A | L42961-1 C,D | N | J | Pb, Hg had matrix interferences. |
| 2 | | | | | |
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# DATA VALIDATION WORKSHEET

**Analytical Method:** Various Methods **Identification[a]:** L42961

**Laboratory:** AWAL **Batch Identification:** _____

| Validation Criteria | Sample Number | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| Hardcopy vs. Chain-of-Custody | A | | | | | | | | | | | | | | | | |
| Holding Time | AL | | | | | | | | | | | | | | | | |
| Analyte List | A | | | | | | | | | | | | | | | | |
| Reporting Limits | A | | | | | | | | | | | | | | | | |
| Initial Calibration (all methods) | AL | | | | | | | | | | | | | | | | |
| Initial Check Blank (ICP & AA methods) | AL | | | | | | | | | | | | | | | | |
| Continuing Calibration (ICP & AA methods) | AL | | | | | | | | | | | | | | | | |
| Injection Time(s) (all methods) | N | | | | | | | | | | | | | | | | |
| Interference Check Standard (ICP Method) | AL | | | | | | | | | | | | | | | | |
| Method Blank (all methods) | AL | | | | | | | | | | | | | | | | |
| Laboratory Control Sample (all methods) | AL | | | | | | | | | | | | | | | | |
| Laboratory Control Sample Duplicate (lab specific) | NA | | | | | | | | | | | | | | | | |
| Matrix Spike/Matrix Spike Duplicate | 1 | | | | | | | | | | | | | | | | |
| Matrix Duplicate (Lab Specific) | NA | | | | | | | | | | | | | | | | |
| Field Duplicate/Replicate | NA | | | | | | | | | | | | | | | | |
| Equipment Rinsate Blanks | NA | | | | | | | | | | | | | | | | |
| Electronic Deliverable vs. Hardcopy | NA | | | | | | | | | | | | | | | | |
| Electronic Deliverable vs. Chain of Custody | NA | | | | | | | | | | | | | | | | |

(a) List QC batch identification if different than Batch ID
A indicates validation criteria were met
A/L indicates validation criteria were met based upon Laboratory's QC Summary Form
X indicates validation criteria were not met
N indicates data review were not a project specific requirement
N/A indicates criteria are not applicable for the specified analytical method
N/R indicates data not available for review

**NOTES:** 1. Pb, Hg had matrix interferences.

**FIGURE B.12-1**
**ORGANIC ANALYSIS DATA VALIDATION WORKSHEET**

**Analytical Method/Analytes:** Various **Sample Collection Date( s):** 10/4/00

**Laboratory** AWAL **MW Job Number:** NA

**Batch Identification:** L42961 **Matrix:** Water

**QC Identification[a]:** _____ **Page:** 1 of 2

**Validation Complete:** _____ 12/8/00

(Date/Signature)

| Sample No. | Sample ID | Lab. ID | Hits (Y/N) | Quals. | Comments |
|---|---|---|---|---|---|
| 1 | GW-19A | L42961-1A,B | N | J | none |
| 2 | | | | | |
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# DATA VALIDATION WORKSHEET

**Analytical Method:** Various **QC Identification[a]:** _____

**Laboratory:** AWAL **Batch Identification:** L42961

| Validation Criteria | Sample Number | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| Hardcopy vs. Chain-of-Custody | A | | | | | | | | | | | | | |
| Holding Time | AL | | | | | | | | | | | | | |
| Analyte List | A | | | | | | | | | | | | | |
| Reporting Limits | A | | | | | | | | | | | | | |
| Tuning Standard (GC/MS) | AL | | | | | | | | | | | | | |
| Initial Calibration (all methods) | AL | | | | | | | | | | | | | |
| Continuing Calibration (all methods) | AL | | | | | | | | | | | | | |
| Injection Time(s) (all methods) | AL | | | | | | | | | | | | | |
| Internal Standard EICP Area (GC/MS methods) | NA | | | | | | | | | | | | | |
| Internal Standard Retention Time Window (GC/MS methods) | NA | | | | | | | | | | | | | |
| Retention Time Windows (GC methods) | NA | | | | | | | | | | | | | |
| Method Blank (all methods) | AL | | | | | | | | | | | | | |
| Surrogate Spike Recovery (organic methods) | AL | | | | | | | | | | | | | |
| Laboratory Control Sample (all methods) | AL | | | | | | | | | | | | | |
| Laboratory Control Sample Duplicate (lab specific) | N | | | | | | | | | | | | | |
| Matrix Spike/Matrix Spike Duplicate (all organic methods) | A | | | | | | | | | | | | | |
| Trip Blanks | A | | | | | | | | | | | | | |
| Field Duplicate/Replicate | NA | | | | | | | | | | | | | |
| Equipment Rinsate Blanks | N | | | | | | | | | | | | | |
| Electronic Deliverable vs. Hardcopy | NA | | | | | | | | | | | | | |
| Electronic Deliverable vs. Chain of Custody | A | | | | | | | | | | | | | |

(a) List QC batch identification if different than Batch ID
A indicates validation criteria were met
A/L indicates validation criteria met based upon Laboratory's QC Summary Form
X indicates validation criteria were not met
N indicates data review were not a project specific requirement
N/A indicates criteria are not applicable for the specified analytical method
N/R indicates data not available for review

NOTES: None

## FIGURE B.12-2
## INORGANIC ANALYSIS DATA VALIDATION WORKSHEET

**Analytical Method/Analytes:** Various **Sample Collection Date(s):** 10/5/00

**Laboratory:** AWAL **MW Job Number:** _____

**Batch Identification:** L42982 **Matrix:** Waters

**QC Identification[a]:** _____ **Page:** 1 of 2

**Validation Complete:** _____ 2/1/01

(Date/Signature)

| Sample No. | Sample ID | Lab. ID | Hits (Y/N) | Quals. | Comments |
|---|---|---|---|---|---|
| 1 | GW-63 | L42982-1 C,D | N | J | Pb, Hg had matrix interferences. |
| 2 | GW-707 | L42982-2 C,D | N | J | Pb, Hg had matrix interferences. |
| 3 | | | | | |
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# DATA VALIDATION WORKSHEET

**Analytical Method:** Various Methods **Identification[a]:** L42982

**Laboratory:** AWAL **Batch Identification:** _____

| Validation Criteria | Sample Number | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| Hardcopy vs. Chain-of-Custody | A | A | | | | | | | | | | | | | | | |
| Holding Time | AL | AL | | | | | | | | | | | | | | | |
| Analyte List | A | A | | | | | | | | | | | | | | | |
| Reporting Limits | A | A | | | | | | | | | | | | | | | |
| Initial Calibration (all methods) | AL | AL | | | | | | | | | | | | | | | |
| Initial Check Blank (ICP & AA methods) | AL | AL | | | | | | | | | | | | | | | |
| Continuing Calibration (ICP & AA methods) | AL | AL | | | | | | | | | | | | | | | |
| Injection Time(s) (all methods) | N | N | | | | | | | | | | | | | | | |
| Interference Check Standard (ICP Method) | AL | AL | | | | | | | | | | | | | | | |
| Method Blank (all methods) | AL | AL | | | | | | | | | | | | | | | |
| Laboratory Control Sample (all methods) | AL | AL | | | | | | | | | | | | | | | |
| Laboratory Control Sample Duplicate (lab specific) | NA | NA | | | | | | | | | | | | | | | |
| Matrix Spike/Matrix Spike Duplicate | 1 | 1 | | | | | | | | | | | | | | | |
| Matrix Duplicate (Lab Specific) | NA | NA | | | | | | | | | | | | | | | |
| Field Duplicate/Replicate | NA | NA | | | | | | | | | | | | | | | |
| Equipment Rinsate Blanks | NA | NA | | | | | | | | | | | | | | | |
| Electronic Deliverable vs. Hardcopy | NA | NA | | | | | | | | | | | | | | | |
| Electronic Deliverable vs. Chain of Custody | NA | NA | | | | | | | | | | | | | | | |

(a) List QC batch identification if different than Batch ID
A indicates validation criteria were met
A/L indicates validation criteria were met based upon Laboratory's QC Summary Form
X indicates validation criteria were not met
N indicates data review were not a project specific requirement
N/A indicates criteria are not applicable for the specified analytical method
N/R indicates data not available for review

**NOTES:** 1. Pb, Hg had matrix interferences.

# FIGURE B.12-1
## ORGANIC ANALYSIS DATA VALIDATION WORKSHEET

Analytical Method/Analytes: Various Sample Collection Date( s): 10/5/00

Laboratory AWAL MW Job Number: NA

Batch Identification: L42982 Matrix: Water

QC Identification[a]: Page: 1 of 2

Validation Complete: 1/22/01

(Date/Signature)

| Sample No. | Sample ID | Lab. ID | Hits (Y/N) | Quals. | Comments |
|---|---|---|---|---|---|
| 1 | GW-63 | L42982-1A,B | N | NA | Matrix interference for SVOCs |
| 2 | GW-707 | L42982-2A,B | N | NA | Matrix interference for SVOCs |
| 3 | | | | | |
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# DATA VALIDATION WORKSHEET

**Analytical Method:** Various **QC Identification[a]:** _____

**Laboratory:** AWAL **Batch Identification:** L42982

| Validation Criteria | Sample Number | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| Hardcopy vs. Chain-of-Custody | A | A | | | | | | | | | | | | |
| Holding Time | AL | AL | | | | | | | | | | | | |
| Analyte List | A | A | | | | | | | | | | | | |
| Reporting Limits | A | A | | | | | | | | | | | | |
| Tuning Standard (GC/MS) | AL | AL | | | | | | | | | | | | |
| Initial Calibration (all methods) | AL | AL | | | | | | | | | | | | |
| Continuing Calibration (all methods) | AL | AL | | | | | | | | | | | | |
| Injection Time(s) (all methods) | AL | AL | | | | | | | | | | | | |
| Internal Standard EICP Area (GC/MS methods) | NA | NA | | | | | | | | | | | | |
| Internal Standard Retention Time Window (GC/MS methods) | NA | NA | | | | | | | | | | | | |
| Retention Time Windows (GC methods) | NA | NA | | | | | | | | | | | | |
| Method Blank (all methods) | AL | AL | | | | | | | | | | | | |
| Surrogate Spike Recovery (organic methods) | AL | AL | | | | | | | | | | | | |
| Laboratory Control Sample (all methods) | AL | AL | | | | | | | | | | | | |
| Laboratory Control Sample Duplicate (lab specific) | N | N | | | | | | | | | | | | |
| Matrix Spike/Matrix Spike Duplicate (all organic methods) | I | I | | | | | | | | | | | | |
| Trip Blanks | A | A | | | | | | | | | | | | |
| Field Duplicate/Replicate | NA | NA | | | | | | | | | | | | |
| Equipment Rinsate Blanks | N | N | | | | | | | | | | | | |
| Electronic Deliverable vs. Hardcopy | NA | NA | | | | | | | | | | | | |
| Electronic Deliverable vs. Chain of Custody | A | A | | | | | | | | | | | | |

(a) List QC batch identification if different than Batch ID
A indicates validation criteria were met
A/L indicates validation criteria met based upon Laboratory's QC Summary Form.
X indicates validation criteria were not met
N indicates data review were not a project specific requirement
N/A indicates criteria are not applicable for the specified analytical method
N/R indicates data not available for review

NOTES: 1. Matrix interference for SVOCs.

# FIGURE B.12-1
## ORGANIC ANALYSIS DATA VALIDATION WORKSHEET

**Analytical Method/Analytes:** Various **Sample Collection Date( s):** 10/18/00

**Laboratory** AWAL **MW Job Number:** NA

**Batch Identification:** L43169 **Matrix:** Water

**QC Identification[a]:** _____ **Page:** 1 of 2

**Validation Complete:** _____ 1/8/01

(Date/Signature)

| Sample No. | Sample ID | Lab. ID | Hits (Y/N) | Quals. | Comments |
|---|---|---|---|---|---|
| 1 | GW-60 | L43169-1A,B | N | J | Matrix interference for SVOCs |
| 2 | GW-58 | L43169-2A,B | N | J | Matrix interference for SVOCs |
| 3 | GW-302 | L43169-2A,B | N | J | Matrix interference for SVOCs |
| 4 | GW-28 | L43169-2A,B | N | J | Matrix interference for SVOCs |
| 5 | GW-57 | L43169-2A,B | N | J | Matrix interference for SVOCs |
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# DATA VALIDATION WORKSHEET

**Analytical Method:** Various **QC Identification[a]:** _____

**Laboratory:** AWAL **Batch Identification:** L43169

| Validation Criteria | Sample Number | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| Hardcopy vs. Chain-of-Custody | A | A | A | A | A | | | | | | | | | |
| Holding Time | AL | AL | AL | AL | AL | | | | | | | | | |
| Analyte List | A | A | A | A | A | | | | | | | | | |
| Reporting Limits | A | A | A | A | A | | | | | | | | | |
| Tuning Standard (GC/MS) | AL | AL | AL | AL | AL | | | | | | | | | |
| Initial Calibration (all methods) | AL | AL | AL | AL | AL | | | | | | | | | |
| Continuing Calibration (all methods) | AL | AL | AL | AL | AL | | | | | | | | | |
| Injection Time(s) (all methods) | AL | AL | AL | AL | AL | | | | | | | | | |
| Internal Standard EICP Area (GC/MS methods) | NA | NA | NA | NA | NA | | | | | | | | | |
| Internal Standard Retention Time Window (GC/MS methods) | NA | NA | NA | NA | NA | | | | | | | | | |
| Retention Time Windows (GC methods) | NA | NA | NA | NA | NA | | | | | | | | | |
| Method Blank (all methods) | AL | AL | AL | AL | AL | | | | | | | | | |
| Surrogate Spike Recovery (organic methods) | AL | AL | AL | AL | AL | | | | | | | | | |
| Laboratory Control Sample (all methods) | AL | AL | AL | AL | AL | | | | | | | | | |
| Laboratory Control Sample Duplicate (lab specific) | N | N | N | N | N | | | | | | | | | |
| Matrix Spike/Matrix Spike Duplicate (all organic methods) | 1 | 1 | 1 | 1 | 1 | | | | | | | | | |
| Trip Blanks | A | A | A | A | A | | | | | | | | | |
| Field Duplicate/Replicate | NA | NA | NA | NA | NA | | | | | | | | | |
| Equipment Rinsate Blanks | N | N | N | N | N | | | | | | | | | |
| Electronic Deliverable vs. Hardcopy | NA | NA | NA | NA | NA | | | | | | | | | |
| Electronic Deliverable vs. Chain of Custody | A | A | A | A | A | | | | | | | | | |

(a) List QC batch identification if different than Batch ID
A indicates validation criteria were met
A/L indicates validation criteria met based upon Laboratory's QC Summary Form
X indicates validation criteria were not met
N indicates data review were not a project specific requirement
N/A indicates criteria are not applicable for the specified analytical method
N/R indicates data not available for review

NOTES: 1. Matrix interference for SVOCs.

# FIGURE B.12-2
# INORGANIC ANALYSIS DATA VALIDATION WORKSHEET

**Analytical Method/Analytes:** Various **Sample Collection Date(s):** 10/18/00

**Laboratory:** AWAL **MW Job Number:** _____

**Batch Identification:** L43169 **Matrix:** Waters

**QC Identification[a]:** _____ **Page:** 1 of 2

**Validation Complete:** _____ 1/8/01
(Date/Signature)

| Sample No. | Sample ID | Lab. ID | Hits (Y/N) | Quals. | Comments |
|---|---|---|---|---|---|
| 1 | GW-60 | L43169-1 C,D | N | J | As, Se, Hg had matrix interferences. |
| 2 | GW-58 | L43169-2 C,D | N | J | As, Se, Hg had matrix interferences. |
| 3 | GW-302 | L43169-3 C,D | N | J | As, Se, Hg had matrix interferences. |
| 4 | GW-28 | L43169-4 C,D | N | J | As, Se, Hg had matrix interferences. |
| 5 | GW-57 | L43169-5 C,D | N | J | As, Se, Hg had matrix interferences. |
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# DATA VALIDATION WORKSHEET

**Analytical Method:** Various Methods **Identification[a]:** L43169

**Laboratory:** AWAL **Batch Identification:** _____

| Validation Criteria | Sample Number | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| Hardcopy vs. Chain-of-Custody | A | A | A | A | A | | | | | | | | | | | | |
| Holding Time | AL | AL | AL | AL | AL | | | | | | | | | | | | |
| Analyte List | A | A | A | A | A | | | | | | | | | | | | |
| Reporting Limits | A | A | A | A | A | | | | | | | | | | | | |
| Initial Calibration (all methods) | AL | AL | AL | AL | AL | | | | | | | | | | | | |
| Initial Check Blank (ICP & AA methods) | AL | AL | AL | AL | AL | | | | | | | | | | | | |
| Continuing Calibration (ICP & AA methods) | AL | AL | AL | AL | AL | | | | | | | | | | | | |
| Injection Time(s) (all methods) | N | N | N | N | N | | | | | | | | | | | | |
| Interference Check Standard (ICP Method) | AL | AL | AL | AL | AL | | | | | | | | | | | | |
| Method Blank (all methods) | AL | AL | AL | AL | AL | | | | | | | | | | | | |
| Laboratory Control Sample (all methods) | AL | AL | AL | AL | AL | | | | | | | | | | | | |
| Laboratory Control Sample Duplicate (lab specific) | NA | NA | NA | NA | NA | | | | | | | | | | | | |
| Matrix Spike/Matrix Spike Duplicate | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | | |
| Matrix Duplicate (Lab Specific) | NA | NA | NA | NA | NA | | | | | | | | | | | | |
| Field Duplicate/Replicate | NA | NA | NA | NA | NA | | | | | | | | | | | | |
| Equipment Rinsate Blanks | NA | NA | NA | NA | NA | | | | | | | | | | | | |
| Electronic Deliverable vs. Hardcopy | NA | NA | NA | NA | NA | | | | | | | | | | | | |
| Electronic Deliverable vs. Chain of Custody | NA | NA | NA | NA | NA | | | | | | | | | | | | |

(a) List QC batch identification if different than Batch ID
A indicates validation criteria were met
A/L indicates validation criteria were met based upon Laboratory's QC Summary Form
X indicates validation criteria were not met
N indicates data review were not a project specific requirement
N/A indicates criteria are not applicable for the specified analytical method
N/R indicates data not available for review

**NOTES:** 1. As, Se, Hg had matrix interferences.

## FIGURE B.12-2
## INORGANIC ANALYSIS DATA VALIDATION WORKSHEET

**Analytical Method/Analytes:** Various **Sample Collection Date(s):** 10/19/00

**Laboratory:** AWAL **MW Job Number:** _____

**Batch Identification:** L43201 **Matrix:** Waters

**QC Identification[a]:** _____ **Page:** 1 of 2

**Validation Complete:** _____ 1/8/01

(Date/Signature)

| Sample No. | Sample ID | Lab. ID | Hits (Y/N) | Quals. | Comments |
|---|---|---|---|---|---|
| 1 | GW-36 | L43201-1 C,D | N | J | As, Se, Hg, F had matrix interferences. |
| 2 | GW-27 | L43201-2 C,D | N | J | As, Se, Hg, F had matrix interferences. |
| 3 | GW-25 | L43201-3 C,D | N | J | As, Se, Hg, F had matrix interferences. |
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# DATA VALIDATION WORKSHEET

**Analytical Method:** Various Methods **Identification[a]:** L43201

**Laboratory:** AWAL **Batch Identification:** _____

| Validation Criteria | Sample Number | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| Hardcopy vs. Chain-of-Custody | A | A | A | | | | | | | | | | | | | | |
| Holding Time | AL | AL | AL | | | | | | | | | | | | | | |
| Analyte List | A | A | A | | | | | | | | | | | | | | |
| Reporting Limits | A | A | A | | | | | | | | | | | | | | |
| Initial Calibration (all methods) | AL | AL | AL | | | | | | | | | | | | | | |
| Initial Check Blank (ICP & AA methods) | AL | AL | AL | | | | | | | | | | | | | | |
| Continuing Calibration (ICP & AA methods) | AL | AL | AL | | | | | | | | | | | | | | |
| Injection Time(s) (all methods) | N | N | N | | | | | | | | | | | | | | |
| Interference Check Standard (ICP Method) | AL | AL | AL | | | | | | | | | | | | | | |
| Method Blank (all methods) | AL | AL | AL | | | | | | | | | | | | | | |
| Laboratory Control Sample (all methods) | AL | AL | AL | | | | | | | | | | | | | | |
| Laboratory Control Sample Duplicate (lab specific) | NA | NA | NA | | | | | | | | | | | | | | |
| Matrix Spike/Matrix Spike Duplicate | 1 | 1 | 1 | | | | | | | | | | | | | | |
| Matrix Duplicate (Lab Specific) | NA | NA | NA | | | | | | | | | | | | | | |
| Field Duplicate/Replicate | NA | NA | NA | | | | | | | | | | | | | | |
| Equipment Rinsate Blanks | NA | NA | NA | | | | | | | | | | | | | | |
| Electronic Deliverable vs. Hardcopy | NA | NA | NA | | | | | | | | | | | | | | |
| Electronic Deliverable vs. Chain of Custody | NA | NA | NA | | | | | | | | | | | | | | |

(a) List QC batch identification if different than Batch ID
A indicates validation criteria were met
A/L indicates validation criteria were met based upon Laboratory's QC Summary Form
X indicates validation criteria were not met
N indicates data review were not a project specific requirement
N/A indicates criteria are not applicable for the specified analytical method
N/R indicates data not available for review

**NOTES:** 1. As, Se, Hg, F had matrix interferences.

## FIGURE B.12-1
## ORGANIC ANALYSIS DATA VALIDATION WORKSHEET

**Analytical Method/Analytes:** Various **Sample Collection Date( s):** 10/19/00

**Laboratory** AWAL **MW Job Number:** NA

**Batch Identification:** L43201 **Matrix:** Water

**QC Identification[a]:** _____ **Page:** 1 of 2

**Validation Complete:** _____ 1/8/01

(Date/Signature)

| Sample No. | Sample ID | Lab. ID | Hits (Y/N) | Quals. | Comments |
|---|---|---|---|---|---|
| 1 | GW-36 | L43201-1A,B | N | J | Matrix interference for SVOCs |
| 2 | GW-27 | L43201-2A,B | N | J | Matrix interference for SVOCs |
| 3 | GW-25 | L43201-2A,B | N | J | Matrix interference for SVOCs |
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# DATA VALIDATION WORKSHEET

**Analytical Method:** Various **QC Identification[a]:** _____

**Laboratory:** AWAL **Batch Identification:** L43201

| Validation Criteria | Sample Number | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| Hardcopy vs. Chain-of-Custody | A | A | A | | | | | | | | | | | |
| Holding Time | AL | AL | AL | | | | | | | | | | | |
| Analyte List | A | A | A | | | | | | | | | | | |
| Reporting Limits | A | A | A | | | | | | | | | | | |
| Tuning Standard (GC/MS) | AL | AL | AL | | | | | | | | | | | |
| Initial Calibration (all methods) | AL | AL | AL | | | | | | | | | | | |
| Continuing Calibration (all methods) | AL | AL | AL | | | | | | | | | | | |
| Injection Time(s) (all methods) | AL | AL | AL | | | | | | | | | | | |
| Internal Standard EICP Area (GC/MS methods) | NA | NA | NA | | | | | | | | | | | |
| Internal Standard Retention Time Window (GC/MS methods) | NA | NA | NA | | | | | | | | | | | |
| Retention Time Windows (GC methods) | NA | NA | NA | | | | | | | | | | | |
| Method Blank (all methods) | AL | AL | AL | | | | | | | | | | | |
| Surrogate Spike Recovery (organic methods) | AL | AL | AL | | | | | | | | | | | |
| Laboratory Control Sample (all methods) | AL | AL | AL | | | | | | | | | | | |
| Laboratory Control Sample Duplicate (lab specific) | N | N | N | | | | | | | | | | | |
| Matrix Spike/Matrix Spike Duplicate (all organic methods) | 1 | 1 | 1 | | | | | | | | | | | |
| Trip Blanks | A | A | A | | | | | | | | | | | |
| Field Duplicate/Replicate | NA | NA | NA | | | | | | | | | | | |
| Equipment Rinsate Blanks | N | N | N | | | | | | | | | | | |
| Electronic Deliverable vs. Hardcopy | NA | NA | NA | | | | | | | | | | | |
| Electronic Deliverable vs. Chain of Custody | A | A | A | | | | | | | | | | | |

(a) List QC batch identification if different than Batch ID
A indicates validation criteria were met
A/L indicates validation criteria met based upon Laboratory's QC Summary Form
X indicates validation criteria were not met
N indicates data review were not a project specific requirement
N/A indicates criteria are not applicable for the specified analytical method
N/R indicates data not available for review

NOTES: 1. Matrix interference for SVOCs.

## FIGURE B.12-1
## ORGANIC ANALYSIS DATA VALIDATION WORKSHEET

**Analytical Method/Analytes:** Various **Sample Collection Date( s):** 10/23/00

**Laboratory** AWAL **MW Job Number:** NA

**Batch Identification:** L43239 **Matrix:** Water

**QC Identification[a]:** _____ **Page:** 1 of 2

**Validation Complete:** _____ 1/6/00

(Date/Signature)

| Sample No. | Sample ID | Lab. ID | Hits (Y/N) | Quals. | Comments |
|---|---|---|---|---|---|
| 1 | GW-26 | L43239-1A,B | N | NA | None |
| 2 | GW-20 | L43239-2A,B | N | NA | None |
| 3 | GW-24 | L43239-2A,B | N | NA | None |
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# DATA VALIDATION WORKSHEET

**Analytical Method:** Various **QC Identification[a]:** _____

**Laboratory:** AWAL **Batch Identification:** L43239

| Validation Criteria | Sample Number | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| Hardcopy vs. Chain-of-Custody | A | A | A | | | | | | | | | | | |
| Holding Time | AL | AL | AL | | | | | | | | | | | |
| Analyte List | A | A | A | | | | | | | | | | | |
| Reporting Limits | A | A | A | | | | | | | | | | | |
| Tuning Standard (GC/MS) | AL | AL | AL | | | | | | | | | | | |
| Initial Calibration (all methods) | AL | AL | AL | | | | | | | | | | | |
| Continuing Calibration (all methods) | AL | AL | AL | | | | | | | | | | | |
| Injection Time(s) (all methods) | AL | AL | AL | | | | | | | | | | | |
| Internal Standard EICP Area (GC/MS methods) | NA | NA | NA | | | | | | | | | | | |
| Internal Standard Retention Time Window (GC/MS methods) | NA | NA | NA | | | | | | | | | | | |
| Retention Time Windows (GC methods) | NA | NA | NA | | | | | | | | | | | |
| Method Blank (all methods) | AL | AL | AL | | | | | | | | | | | |
| Surrogate Spike Recovery (organic methods) | AL | AL | AL | | | | | | | | | | | |
| Laboratory Control Sample (all methods) | AL | AL | AL | | | | | | | | | | | |
| Laboratory Control Sample Duplicate (lab specific) | N | N | N | | | | | | | | | | | |
| Matrix Spike/Matrix Spike Duplicate (all organic methods) | AL | AL | AL | | | | | | | | | | | |
| Trip Blanks | A | A | A | | | | | | | | | | | |
| Field Duplicate/Replicate | NA | NA | NA | | | | | | | | | | | |
| Equipment Rinsate Blanks | N | N | N | | | | | | | | | | | |
| Electronic Deliverable vs. Hardcopy | NA | NA | NA | | | | | | | | | | | |
| Electronic Deliverable vs. Chain of Custody | A | A | A | | | | | | | | | | | |

(a) List QC batch identification if different than Batch ID
A indicates validation criteria were met
A/L indicates validation criteria met based upon Laboratory's QC Summary Form
X indicates validation criteria were not met
N indicates data review were not a project specific requirement
N/A indicates criteria are not applicable for the specified analytical method
N/R indicates data not available for review

NOTES: None

## FIGURE B.12-2
## INORGANIC ANALYSIS DATA VALIDATION WORKSHEET

**Analytical Method/Analytes:** Various **Sample Collection Date(s):** 10/23/00

**Laboratory:** AWAL **MW Job Number:** _____

**Batch Identification:** L43239 **Matrix:** Waters

**QC Identification[a]:** _____ **Page:** 1 of 2

**Validation Complete:** _____ 1/9/01

(Date/Signature)

| Sample No. | Sample ID | Lab. ID | Hits (Y/N) | Quals. | Comments |
|---|---|---|---|---|---|
| 1 | GW-26 | L43239-1 C,D | N | J | As, Pb, Se, Hg, had matrix interferences. |
| 2 | GW-20 | L43239-2 C,D | N | J | As, Pb, Se, Hg, had matrix interferences. |
| 3 | GW-24 | L43239-3 C,D | N | J | As, Pb, Se, Hg, had matrix interferences. |
| 4 | GW-23 | L43239-4 C,D | N | J | As, Pb, Se, Hg, had matrix interferences. |
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# DATA VALIDATION WORKSHEET

**Analytical Method:** Various Methods **Identification[a]:** L43239

**Laboratory:** AWAL **Batch Identification:** _____

| Validation Criteria | Sample Number | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| Hardcopy vs. Chain-of-Custody | A | A | A | A | | | | | | | | | | | | | |
| Holding Time | AL | AL | AL | AL | | | | | | | | | | | | | |
| Analyte List | A | A | A | A | | | | | | | | | | | | | |
| Reporting Limits | A | A | A | A | | | | | | | | | | | | | |
| Initial Calibration (all methods) | AL | AL | AL | AL | | | | | | | | | | | | | |
| Initial Check Blank (ICP & AA methods) | AL | AL | AL | AL | | | | | | | | | | | | | |
| Continuing Calibration (ICP & AA methods) | AL | AL | AL | AL | | | | | | | | | | | | | |
| Injection Time(s) (all methods) | N | N | N | N | | | | | | | | | | | | | |
| Interference Check Standard (ICP Method) | AL | AL | AL | AL | | | | | | | | | | | | | |
| Method Blank (all methods) | AL | AL | AL | AL | | | | | | | | | | | | | |
| Laboratory Control Sample (all methods) | AL | AL | AL | AL | | | | | | | | | | | | | |
| Laboratory Control Sample Duplicate (lab specific) | NA | NA | NA | NA | | | | | | | | | | | | | |
| Matrix Spike/Matrix Spike Duplicate | 1 | 1 | 1 | 1 | | | | | | | | | | | | | |
| Matrix Duplicate (Lab Specific) | NA | NA | NA | NA | | | | | | | | | | | | | |
| Field Duplicate/Replicate | NA | NA | NA | NA | | | | | | | | | | | | | |
| Equipment Rinsate Blanks | NA | NA | NA | NA | | | | | | | | | | | | | |
| Electronic Deliverable vs. Hardcopy | NA | NA | NA | NA | | | | | | | | | | | | | |
| Electronic Deliverable vs. Chain of Custody | NA | NA | NA | NA | | | | | | | | | | | | | |

(a) List QC batch identification if different than Batch ID
A indicates validation criteria were met
A/L indicates validation criteria were met based upon Laboratory's QC Summary Form
X indicates validation criteria were not met
N indicates data review were not a project specific requirement
N/A indicates criteria are not applicable for the specified analytical method
N/R indicates data not available for review

**NOTES:** 1. As, Pb, Se, Hg, had matrix interferences.

## FIGURE B.12-2
## INORGANIC ANALYSIS DATA VALIDATION WORKSHEET

**Analytical Method/Analytes:** Various **Sample Collection Date(s):** 10/24/00

**Laboratory:** AWAL **MW Job Number:** _____

**Batch Identification:** L43270 **Matrix:** Waters

**QC Identification[a]:** _____ **Page:** 1 of 2

**Validation Complete:** _____ 2/2/01
(Date/Signature)

| Sample No. | Sample ID | Lab. ID | Hits (Y/N) | Quals. | Comments |
|---|---|---|---|---|---|
| 1 | GW-22 | L43270-1 | N | J | As, Pb, Se had matrix interferences. |
| 2 | GW-81 | L43270-2 | N | J | As, Pb, Se had matrix interferences. |
| 3 | GW-82 | L43270-3 | N | J | As, Pb, Se had matrix interferences. |
| 4 | GW-83 | L43270-4 | N | J | As, Pb, Se had matrix interferences. |
| 5 | GW-405 | L43270-5 | N | J | As, Pb, Se had matrix interferences. |
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# DATA VALIDATION WORKSHEET

**Analytical Method:** Various Methods **Identification[a]:** L43270

**Laboratory:** AWAL **Batch Identification:** _____

| Validation Criteria | Sample Number | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| Hardcopy vs. Chain-of-Custody | A | A | A | A | A | | | | | | | | | | | | |
| Holding Time | AL | AL | AL | AL | AL | | | | | | | | | | | | |
| Analyte List | A | A | A | A | A | | | | | | | | | | | | |
| Reporting Limits | A | A | A | A | A | | | | | | | | | | | | |
| Initial Calibration (all methods) | AL | AL | AL | AL | AL | | | | | | | | | | | | |
| Initial Check Blank (ICP & AA methods) | AL | AL | AL | AL | AL | | | | | | | | | | | | |
| Continuing Calibration (ICP & AA methods) | AL | AL | AL | AL | AL | | | | | | | | | | | | |
| Injection Time(s) (all methods) | N | N | N | N | N | | | | | | | | | | | | |
| Interference Check Standard (ICP Method) | AL | AL | AL | AL | AL | | | | | | | | | | | | |
| Method Blank (all methods) | AL | AL | AL | AL | AL | | | | | | | | | | | | |
| Laboratory Control Sample (all methods) | AL | AL | AL | AL | AL | | | | | | | | | | | | |
| Laboratory Control Sample Duplicate (lab specific) | NA | NA | NA | NA | NA | | | | | | | | | | | | |
| Matrix Spike/Matrix Spike Duplicate | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | | |
| Matrix Duplicate (Lab Specific) | NA | NA | NA | NA | NA | | | | | | | | | | | | |
| Field Duplicate/Replicate | NA | NA | NA | NA | NA | | | | | | | | | | | | |
| Equipment Rinsate Blanks | NA | NA | NA | NA | NA | | | | | | | | | | | | |
| Electronic Deliverable vs. Hardcopy | NA | NA | NA | NA | NA | | | | | | | | | | | | |
| Electronic Deliverable vs. Chain of Custody | NA | NA | NA | NA | NA | | | | | | | | | | | | |

(a) List QC batch identification if different than Batch ID
A indicates validation criteria were met
A/L indicates validation criteria were met based upon Laboratory's QC Summary Form
X indicates validation criteria were not met
N indicates data review were not a project specific requirement
N/A indicates criteria are not applicable for the specified analytical method
N/R indicates data not available for review

**NOTES:** 1. As, Pb, Se had matrix interferences.

## FIGURE B.12-2
## INORGANIC ANALYSIS DATA VALIDATION WORKSHEET

**Analytical Method/Analytes:** Various **Sample Collection Date(s):** 10/25/00

**Laboratory:** AWAL **MW Job Number:** _____

**Batch Identification:** L43284 **Matrix:** Waters

**QC Identification[a]:** _____ **Page:** 1 of 2

**Validation Complete:** _____ 2/2/01

(Date/Signature)

| Sample No. | Sample ID | Lab. ID | Hits (Y/N) | Quals. | Comments |
|---|---|---|---|---|---|
| 1 | GW-84 | L43284-1 | N | J | As, Pb, Se, Hg had matrix interferences. |
| 2 | GW-85 | L43284-2 | N | J | As, Pb, Se, Hg had matrix interferences. |
| 3 | GW-86 | L43284-3 | N | J | As, Pb, Se, Hg had matrix interferences. |
| 4 | GW-406 | L43284-4 | N | J | As, Pb, Se, Hg had matrix interferences. |
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# DATA VALIDATION WORKSHEET

**Analytical Method:** Various Methods **Identification[a]:** L43284

**Laboratory:** AWAL **Batch Identification:** _____

| Validation Criteria | Sample Number | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| Hardcopy vs. Chain-of-Custody | A | A | A | A | | | | | | | | | | | | | |
| Holding Time | AL | AL | AL | AL | | | | | | | | | | | | | |
| Analyte List | A | A | A | A | | | | | | | | | | | | | |
| Reporting Limits | A | A | A | A | | | | | | | | | | | | | |
| Initial Calibration (all methods) | AL | AL | AL | AL | | | | | | | | | | | | | |
| Initial Check Blank (ICP & AA methods) | AL | AL | AL | AL | | | | | | | | | | | | | |
| Continuing Calibration (ICP & AA methods) | AL | AL | AL | AL | | | | | | | | | | | | | |
| Injection Time(s) (all methods) | N | N | N | N | | | | | | | | | | | | | |
| Interference Check Standard (ICP Method) | AL | AL | AL | AL | | | | | | | | | | | | | |
| Method Blank (all methods) | AL | AL | AL | AL | | | | | | | | | | | | | |
| Laboratory Control Sample (all methods) | AL | AL | AL | AL | | | | | | | | | | | | | |
| Laboratory Control Sample Duplicate (lab specific) | NA | NA | NA | NA | | | | | | | | | | | | | |
| Matrix Spike/Matrix Spike Duplicate | 1 | 1 | 1 | 1 | | | | | | | | | | | | | |
| Matrix Duplicate (Lab Specific) | NA | NA | NA | NA | | | | | | | | | | | | | |
| Field Duplicate/Replicate | NA | NA | NA | NA | | | | | | | | | | | | | |
| Equipment Rinsate Blanks | NA | NA | NA | NA | | | | | | | | | | | | | |
| Electronic Deliverable vs. Hardcopy | NA | NA | NA | NA | | | | | | | | | | | | | |
| Electronic Deliverable vs. Chain of Custody | NA | NA | NA | NA | | | | | | | | | | | | | |

(a) List QC batch identification if different than Batch ID
A indicates validation criteria were met
A/L indicates validation criteria were met based upon Laboratory's QC Summary Form
X indicates validation criteria were not met
N indicates data review were not a project specific requirement
N/A indicates criteria are not applicable for the specified analytical method
N/R indicates data not available for review

**NOTES:** 1. As, Pb, Se, Hg had matrix interferences.

**FIGURE B.12-2**
**INORGANIC ANALYSIS DATA VALIDATION WORKSHEET**

**Analytical Method/Analytes:** Various **Sample Collection Date(s):** 10/26/00

**Laboratory:** AWAL **MW Job Number:** _____

**Batch Identification:** L43300 **Matrix:** Waters

**QC Identification[a]:** _____ **Page:** 1 of 2

**Validation Complete:** _____ 2/2/01
(Date/Signature)

| Sample No. | Sample ID | Lab. ID | Hits (Y/N) | Quals. | Comments |
|---|---|---|---|---|---|
| 1 | GW-92 | L43300-1 | N | J | As, Pb, Se, F had matrix interferences. |
| 2 | GW-93 | L43300-2 | N | J | As, Pb, Se, F had matrix interferences. |
| 3 | GW-406 | L43300-3 | N | J | As, Pb, Se, F had matrix interferences. |
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# DATA VALIDATION WORKSHEET

**Analytical Method:** Various Methods **Identification[(a)]:** L43300

**Laboratory:** AWAL **Batch Identification:** _____

| Validation Criteria | Sample Number | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| Hardcopy vs. Chain-of-Custody | A | A | A | | | | | | | | | | | | | | |
| Holding Time | AL | AL | AL | | | | | | | | | | | | | | |
| Analyte List | A | A | A | | | | | | | | | | | | | | |
| Reporting Limits | A | A | A | | | | | | | | | | | | | | |
| Initial Calibration (all methods) | AL | AL | AL | | | | | | | | | | | | | | |
| Initial Check Blank (ICP & AA methods) | AL | AL | AL | | | | | | | | | | | | | | |
| Continuing Calibration (ICP & AA methods) | AL | AL | AL | | | | | | | | | | | | | | |
| Injection Time(s) (all methods) | N | N | N | | | | | | | | | | | | | | |
| Interference Check Standard (ICP Method) | AL | AL | AL | | | | | | | | | | | | | | |
| Method Blank (all methods) | AL | AL | AL | | | | | | | | | | | | | | |
| Laboratory Control Sample (all methods) | AL | AL | AL | | | | | | | | | | | | | | |
| Laboratory Control Sample Duplicate (lab specific) | NA | NA | NA | | | | | | | | | | | | | | |
| Matrix Spike/Matrix Spike Duplicate | 1 | 1 | 1 | | | | | | | | | | | | | | |
| Matrix Duplicate (Lab Specific) | NA | NA | NA | | | | | | | | | | | | | | |
| Field Duplicate/Replicate | NA | NA | NA | | | | | | | | | | | | | | |
| Equipment Rinsate Blanks | NA | NA | NA | | | | | | | | | | | | | | |
| Electronic Deliverable vs. Hardcopy | NA | NA | NA | | | | | | | | | | | | | | |
| Electronic Deliverable vs. Chain of Custody | NA | NA | NA | | | | | | | | | | | | | | |

(a) List QC batch identification if different than Batch ID
A indicates validation criteria were met
A/L indicates validation criteria were met based upon Laboratory's QC Summary Form
X indicates validation criteria were not met
N indicates data review were not a project specific requirement
N/A indicates criteria are not applicable for the specified analytical method
N/R indicates data not available for review

**NOTES:** 1. As, Pb, Se, F had matrix interferences.

## FIGURE B.12-2
## INORGANIC ANALYSIS DATA VALIDATION WORKSHEET

**Analytical Method/Analytes:** Various **Sample Collection Date(s):** 10/30/00

**Laboratory:** AWAL **MW Job Number:** _____

**Batch Identification:** L43336 **Matrix:** Waters

**QC Identification[a]:** _____ **Page:** 1 of 2

**Validation Complete:** _____ 1/9/01
(Date/Signature)

| Sample No. | Sample ID | Lab. ID | Hits (Y/N) | Quals. | Comments |
|---|---|---|---|---|---|
| 1 | GW-103 | L43336-1 A,B | N | J | Pb, F had matrix interferences. |
| 2 | GW-104 | L43336-2 A,B | N | J | Pb, F had matrix interferences. |
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# DATA VALIDATION WORKSHEET

**Analytical Method:** Various Methods **Identification[a]:** L43336

**Laboratory:** AWAL **Batch Identification:** _____

| Validation Criteria | Sample Number | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| Hardcopy vs. Chain-of-Custody | A | A | | | | | | | | | | | | | | | |
| Holding Time | AL | AL | | | | | | | | | | | | | | | |
| Analyte List | A | A | | | | | | | | | | | | | | | |
| Reporting Limits | A | A | | | | | | | | | | | | | | | |
| Initial Calibration (all methods) | AL | AL | | | | | | | | | | | | | | | |
| Initial Check Blank (ICP & AA methods) | AL | AL | | | | | | | | | | | | | | | |
| Continuing Calibration (ICP & AA methods) | AL | AL | | | | | | | | | | | | | | | |
| Injection Time(s) (all methods) | N | N | | | | | | | | | | | | | | | |
| Interference Check Standard (ICP Method) | AL | AL | | | | | | | | | | | | | | | |
| Method Blank (all methods) | AL | AL | | | | | | | | | | | | | | | |
| Laboratory Control Sample (all methods) | AL | AL | | | | | | | | | | | | | | | |
| Laboratory Control Sample Duplicate (lab specific) | NA | NA | | | | | | | | | | | | | | | |
| Matrix Spike/Matrix Spike Duplicate | 1 | 1 | | | | | | | | | | | | | | | |
| Matrix Duplicate (Lab Specific) | NA | NA | | | | | | | | | | | | | | | |
| Field Duplicate/Replicate | NA | NA | | | | | | | | | | | | | | | |
| Equipment Rinsate Blanks | NA | NA | | | | | | | | | | | | | | | |
| Electronic Deliverable vs. Hardcopy | NA | NA | | | | | | | | | | | | | | | |
| Electronic Deliverable vs. Chain of Custody | NA | NA | | | | | | | | | | | | | | | |

(a) List QC batch identification if different than Batch ID
A indicates validation criteria were met
A/L indicates validation criteria were met based upon Laboratory's QC Summary Form
X indicates validation criteria were not met
N indicates data review were not a project specific requirement
N/A indicates criteria are not applicable for the specified analytical method
N/R indicates data not available for review

**NOTES:** 1. Pb, F had matrix interferences.

## FIGURE B.12-2
## INORGANIC ANALYSIS DATA VALIDATION WORKSHEET

**Analytical Method/Analytes:** Various **Sample Collection Date(s):** 10/31/00

**Laboratory:** AWAL **MW Job Number:** _____

**Batch Identification:** L43356 **Matrix:** Waters

**QC Identification[a]:** _____ **Page:** 1 of 2

**Validation Complete:** _____ 1/10/01

(Date/Signature)

| Sample No. | Sample ID | Lab. ID | Hits (Y/N) | Quals. | Comments |
|---|---|---|---|---|---|
| 1 | GW-105 | L43356-1 A,B | N | J | Pb, Hg, F had matrix interferences. |
| 2 | GW-102 | L43356-2 A,B | N | J | Pb, Hg, F had matrix interferences. |
| 3 | GW-101 | L43356-3 A,B | N | J | Pb, Hg, F had matrix interferences. |
| 4 | GW-100 | L43356-4 A,B | N | J | Pb, Hg, F had matrix interferences. |
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# DATA VALIDATION WORKSHEET

**Analytical Method:** Various Methods **Identification[a]:** L43356

**Laboratory:** AWAL **Batch Identification:** _____

| Validation Criteria | Sample Number | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| Hardcopy vs. Chain-of-Custody | A | A | A | A | | | | | | | | | | | | | |
| Holding Time | AL | AL | AL | AL | | | | | | | | | | | | | |
| Analyte List | A | A | A | A | | | | | | | | | | | | | |
| Reporting Limits | A | A | A | A | | | | | | | | | | | | | |
| Initial Calibration (all methods) | AL | AL | AL | AL | | | | | | | | | | | | | |
| Initial Check Blank (ICP & AA methods) | AL | AL | AL | AL | | | | | | | | | | | | | |
| Continuing Calibration (ICP & AA methods) | AL | AL | AL | AL | | | | | | | | | | | | | |
| Injection Time(s) (all methods) | N | N | N | N | | | | | | | | | | | | | |
| Interference Check Standard (ICP Method) | AL | AL | AL | AL | | | | | | | | | | | | | |
| Method Blank (all methods) | AL | AL | AL | AL | | | | | | | | | | | | | |
| Laboratory Control Sample (all methods) | AL | AL | AL | AL | | | | | | | | | | | | | |
| Laboratory Control Sample Duplicate (lab specific) | NA | NA | NA | NA | | | | | | | | | | | | | |
| Matrix Spike/Matrix Spike Duplicate | 1 | 1 | 1 | 1 | | | | | | | | | | | | | |
| Matrix Duplicate (Lab Specific) | NA | NA | NA | NA | | | | | | | | | | | | | |
| Field Duplicate/Replicate | NA | NA | NA | NA | | | | | | | | | | | | | |
| Equipment Rinsate Blanks | NA | NA | NA | NA | | | | | | | | | | | | | |
| Electronic Deliverable vs. Hardcopy | NA | NA | NA | NA | | | | | | | | | | | | | |
| Electronic Deliverable vs. Chain of Custody | NA | NA | NA | NA | | | | | | | | | | | | | |

(a) List QC batch identification if different than Batch ID
A indicates validation criteria were met
A/L indicates validation criteria were met based upon Laboratory's QC Summary Form
X indicates validation criteria were not met
N indicates data review were not a project specific requirement
N/A indicates criteria are not applicable for the specified analytical method
N/R indicates data not available for review

**NOTES:** 1. Pb, Hg, F had matrix interferences.

## FIGURE B.12-2
## INORGANIC ANALYSIS DATA VALIDATION WORKSHEET

**Analytical Method/Analytes:** Various **Sample Collection Date(s):** 11/2/00

**Laboratory:** AWAL **MW Job Number:** _____

**Batch Identification:** L43395 **Matrix:** Waters

**QC Identification[a]:** _____ **Page:** 1 of 2

**Validation Complete:** _____ 1/16/01
(Date/Signature)

| Sample No. | Sample ID | Lab. ID | Hits (Y/N) | Quals. | Comments |
|---|---|---|---|---|---|
| 1 | GW-99 | L43395-1 A,B | N | J | Pb, Hg, F had matrix interferences. |
| 2 | GW-94 | L43395-2 A,B | N | J | Pb, Hg, F had matrix interferences. |
| 3 | GW-95 | L43395-3 A,B | N | J | Pb, Hg, F had matrix interferences. |
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# DATA VALIDATION WORKSHEET

**Analytical Method:** Various Methods **Identification[a]:** L43395

**Laboratory:** AWAL **Batch Identification:** _____

| Validation Criteria | Sample Number | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| Hardcopy vs. Chain-of-Custody | A | A | A | | | | | | | | | | | | | | |
| Holding Time | AL | AL | AL | | | | | | | | | | | | | | |
| Analyte List | A | A | A | | | | | | | | | | | | | | |
| Reporting Limits | A | A | A | | | | | | | | | | | | | | |
| Initial Calibration (all methods) | AL | AL | AL | | | | | | | | | | | | | | |
| Initial Check Blank (ICP & AA methods) | AL | AL | AL | | | | | | | | | | | | | | |
| Continuing Calibration (ICP & AA methods) | AL | AL | AL | | | | | | | | | | | | | | |
| Injection Time(s) (all methods) | N | N | N | | | | | | | | | | | | | | |
| Interference Check Standard (ICP Method) | AL | AL | AL | | | | | | | | | | | | | | |
| Method Blank (all methods) | AL | AL | AL | | | | | | | | | | | | | | |
| Laboratory Control Sample (all methods) | AL | AL | AL | | | | | | | | | | | | | | |
| Laboratory Control Sample Duplicate (lab specific) | NA | NA | NA | | | | | | | | | | | | | | |
| Matrix Spike/Matrix Spike Duplicate | 1 | 1 | 1 | | | | | | | | | | | | | | |
| Matrix Duplicate (Lab Specific) | NA | NA | NA | | | | | | | | | | | | | | |
| Field Duplicate/Replicate | NA | NA | NA | | | | | | | | | | | | | | |
| Equipment Rinsate Blanks | NA | NA | NA | | | | | | | | | | | | | | |
| Electronic Deliverable vs. Hardcopy | NA | NA | NA | | | | | | | | | | | | | | |
| Electronic Deliverable vs. Chain of Custody | NA | NA | NA | | | | | | | | | | | | | | |

(a) List QC batch identification if different than Batch ID
A indicates validation criteria were met
A/L indicates validation criteria were met based upon Laboratory's QC Summary Form
X indicates validation criteria were not met
N indicates data review were not a project specific requirement
N/A indicates criteria are not applicable for the specified analytical method
N/R indicates data not available for review

**NOTES:** 1. Pb, Hg, F had matrix interferences.

**FIGURE B.12-2**
**INORGANIC ANALYSIS DATA VALIDATION WORKSHEET**

**Analytical Method/Analytes:** Various **Sample Collection Date(s):** 11/13/00

**Laboratory:** AWAL **MW Job Number:** _____

**Batch Identification:** L43574 **Matrix:** Waters

**QC Identification[a]:** _____ **Page:** 1 of 2

**Validation Complete:** _____
(Date/Signature)

| Sample No. | Sample ID | Lab. ID | Hits (Y/N) | Quals. | Comments |
|---|---|---|---|---|---|
| 1 | GW-38R | L43574-1 C,D | N | J | As, Pb, Hg, Se, F had matrix interferences. |
| 2 | GW-37 | L43574-2 C,D | N | J | As, Pb, Hg, Se, F had matrix interferences. |
| 3 | GW-29 | L43574-3 C,D | N | J | As, Pb, Hg, Se, F had matrix interferences. |
| 4 | GW-77 | L43574-4 A,B | N | J | As, Pb, Hg, Se, F had matrix interferences. |
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# DATA VALIDATION WORKSHEET

**Analytical Method:** Various Methods **Identification[a]:** L43574

**Laboratory:** AWAL **Batch Identification:** _____

| Validation Criteria | Sample Number | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| Hardcopy vs. Chain-of-Custody | A | A | A | A | | | | | | | | | | | | | |
| Holding Time | AL | AL | AL | AL | | | | | | | | | | | | | |
| Analyte List | A | A | A | A | | | | | | | | | | | | | |
| Reporting Limits | A | A | A | A | | | | | | | | | | | | | |
| Initial Calibration (all methods) | AL | AL | AL | AL | | | | | | | | | | | | | |
| Initial Check Blank (ICP & AA methods) | AL | AL | AL | AL | | | | | | | | | | | | | |
| Continuing Calibration (ICP & AA methods) | AL | AL | AL | AL | | | | | | | | | | | | | |
| Injection Time(s) (all methods) | N | N | N | N | | | | | | | | | | | | | |
| Interference Check Standard (ICP Method) | AL | AL | AL | AL | | | | | | | | | | | | | |
| Method Blank (all methods) | AL | AL | AL | AL | | | | | | | | | | | | | |
| Laboratory Control Sample (all methods) | AL | AL | AL | AL | | | | | | | | | | | | | |
| Laboratory Control Sample Duplicate (lab specific) | NA | NA | NA | NA | | | | | | | | | | | | | |
| Matrix Spike/Matrix Spike Duplicate | 1 | 1 | 1 | 1 | | | | | | | | | | | | | |
| Matrix Duplicate (Lab Specific) | NA | NA | NA | NA | | | | | | | | | | | | | |
| Field Duplicate/Replicate | NA | NA | NA | NA | | | | | | | | | | | | | |
| Equipment Rinsate Blanks | NA | NA | NA | NA | | | | | | | | | | | | | |
| Electronic Deliverable vs. Hardcopy | NA | NA | NA | NA | | | | | | | | | | | | | |
| Electronic Deliverable vs. Chain of Custody | NA | NA | NA | NA | | | | | | | | | | | | | |

(a) List QC batch identification if different than Batch ID
A indicates validation criteria were met
A/L indicates validation criteria were met based upon Laboratory's QC Summary Form
X indicates validation criteria were not met
N indicates data review were not a project specific requirement
N/A indicates criteria are not applicable for the specified analytical method
N/R indicates data not available for review

**NOTES:** 1. As, Pb, Hg, Se, F had matrix interferences.

**FIGURE B.12-1**
**ORGANIC ANALYSIS DATA VALIDATION WORKSHEET**

**Analytical Method/Analytes:** Various **Sample Collection Date( s):** 11/13/00

**Laboratory** AWAL **MW Job Number:** NA

**Batch Identification:** L43574 **Matrix:** Water

**QC Identification[a]:** _____ **Page:** 1 of 2

**Validation Complete:** _____ 1/10/01

(Date/Signature)

| Sample No. | Sample ID | Lab. ID | Hits (Y/N) | Quals. | Comments |
|---|---|---|---|---|---|
| 1 | GW-38R | L43574-1A,B | N | J | Matrix interference for SVOCs |
| 2 | GW-37 | L43574-2A,B | N | J | Matrix interference for SVOCs |
| 3 | GW-29 | L43574-2A,B | N | J | Matrix interference for SVOCs |
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# DATA VALIDATION WORKSHEET

**Analytical Method:** Various **QC Identification[a]:** _____

**Laboratory:** AWAL **Batch Identification:** L43574

| Validation Criteria | Sample Number | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| Hardcopy vs. Chain-of-Custody | A | A | A | | | | | | | | | | | |
| Holding Time | AL | AL | AL | | | | | | | | | | | |
| Analyte List | A | A | A | | | | | | | | | | | |
| Reporting Limits | A | A | A | | | | | | | | | | | |
| Tuning Standard (GC/MS) | AL | AL | AL | | | | | | | | | | | |
| Initial Calibration (all methods) | AL | AL | AL | | | | | | | | | | | |
| Continuing Calibration (all methods) | AL | AL | AL | | | | | | | | | | | |
| Injection Time(s) (all methods) | AL | AL | AL | | | | | | | | | | | |
| Internal Standard EICP Area (GC/MS methods) | NA | NA | NA | | | | | | | | | | | |
| Internal Standard Retention Time Window (GC/MS methods) | NA | NA | NA | | | | | | | | | | | |
| Retention Time Windows (GC methods) | NA | NA | NA | | | | | | | | | | | |
| Method Blank (all methods) | AL | AL | AL | | | | | | | | | | | |
| Surrogate Spike Recovery (organic methods) | AL | AL | AL | | | | | | | | | | | |
| Laboratory Control Sample (all methods) | AL | AL | AL | | | | | | | | | | | |
| Laboratory Control Sample Duplicate (lab specific) | N | N | N | | | | | | | | | | | |
| Matrix Spike/Matrix Spike Duplicate (all organic methods) | 1 | 1 | 1 | | | | | | | | | | | |
| Trip Blanks | A | A | A | | | | | | | | | | | |
| Field Duplicate/Replicate | NA | NA | NA | | | | | | | | | | | |
| Equipment Rinsate Blanks | N | N | N | | | | | | | | | | | |
| Electronic Deliverable vs. Hardcopy | NA | NA | NA | | | | | | | | | | | |
| Electronic Deliverable vs. Chain of Custody | A | A | A | | | | | | | | | | | |

(a) List QC batch identification if different than Batch ID
A indicates validation criteria were met
A/L indicates validation criteria met based upon Laboratory's QC Summary Form
X indicates validation criteria were not met
N indicates data review were not a project specific requirement
N/A indicates criteria are not applicable for the specified analytical method
N/R indicates data not available for review

NOTES: 1. Matrix interference for SVOCs.

## FIGURE B.12-2
## INORGANIC ANALYSIS DATA VALIDATION WORKSHEET

**Analytical Method/Analytes:** Various **Sample Collection Date(s):** 11/14/00

**Laboratory:** AWAL **MW Job Number:** _____

**Batch Identification:** L43606 **Matrix:** Waters

**QC Identification[a]:** _____ **Page:** 1 of 2

**Validation Complete:** _____ 1/10/01

(Date/Signature)

| Sample No. | Sample ID | Lab. ID | Hits (Y/N) | Quals. | Comments |
|---|---|---|---|---|---|
| 1 | GW-64 | L43606-1 A,B | N | J | As, Pb, Hg, Se, F had matrix interferences. |
| 2 | I-2-30 | L43606-2 A,B | N | J | As, Pb, Hg, Se, F had matrix interferences. |
| 3 | GW-56R | L43606-3 A,B | N | J | As, Pb, Hg, Se, F had matrix interferences. |
| 4 | GW-16R | L43606-4 A,B | N | J | As, Pb, Hg, Se, F had matrix interferences. |
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# DATA VALIDATION WORKSHEET

**Analytical Method:** Various Methods **Identification[a]:** L43606

**Laboratory:** AWAL **Batch Identification:** _____

| Validation Criteria | Sample Number | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| Hardcopy vs. Chain-of-Custody | A | A | A | A | | | | | | | | | | | | | |
| Holding Time | AL | AL | AL | AL | | | | | | | | | | | | | |
| Analyte List | A | A | A | A | | | | | | | | | | | | | |
| Reporting Limits | A | A | A | A | | | | | | | | | | | | | |
| Initial Calibration (all methods) | AL | AL | AL | AL | | | | | | | | | | | | | |
| Initial Check Blank (ICP & AA methods) | AL | AL | AL | AL | | | | | | | | | | | | | |
| Continuing Calibration (ICP & AA methods) | AL | AL | AL | AL | | | | | | | | | | | | | |
| Injection Time(s) (all methods) | N | N | N | N | | | | | | | | | | | | | |
| Interference Check Standard (ICP Method) | AL | AL | AL | AL | | | | | | | | | | | | | |
| Method Blank (all methods) | AL | AL | AL | AL | | | | | | | | | | | | | |
| Laboratory Control Sample (all methods) | AL | AL | AL | AL | | | | | | | | | | | | | |
| Laboratory Control Sample Duplicate (lab specific) | NA | NA | NA | NA | | | | | | | | | | | | | |
| Matrix Spike/Matrix Spike Duplicate | 1 | 1 | 1 | 1 | | | | | | | | | | | | | |
| Matrix Duplicate (Lab Specific) | NA | NA | NA | NA | | | | | | | | | | | | | |
| Field Duplicate/Replicate | NA | NA | NA | NA | | | | | | | | | | | | | |
| Equipment Rinsate Blanks | NA | NA | NA | NA | | | | | | | | | | | | | |
| Electronic Deliverable vs. Hardcopy | NA | NA | NA | NA | | | | | | | | | | | | | |
| Electronic Deliverable vs. Chain of Custody | NA | NA | NA | NA | | | | | | | | | | | | | |

(a) List QC batch identification if different than Batch ID
A indicates validation criteria were met
A/L indicates validation criteria were met based upon Laboratory's QC Summary Form
X indicates validation criteria were not met
N indicates data review were not a project specific requirement
N/A indicates criteria are not applicable for the specified analytical method
N/R indicates data not available for review

**NOTES:** 1. As, Pb, Hg, Se, F had matrix interferences.

## FIGURE B.12-2
## INORGANIC ANALYSIS DATA VALIDATION WORKSHEET

**Analytical Method/Analytes:** Various **Sample Collection Date(s):** 11/15/00

**Laboratory:** AWAL **MW Job Number:** _____

**Batch Identification:** L43629 **Matrix:** Waters

**QC Identification[a]:** _____ **Page:** 1 of 2

**Validation Complete:** _____ 1/22/01
(Date/Signature)

| Sample No. | Sample ID | Lab. ID | Hits (Y/N) | Quals. | Comments |
|---|---|---|---|---|---|
| 1 | P3-95 SWC | L43629-1A,B,C | N | J | F, As, Pb, Se, Hg had matrix interferences. |
| 2 | P3-95 NEC | L43629-2A,B,C | N | J | F, As, Pb, Se, Hg had matrix interferences. |
| 3 | P3-97 NEC | L43629-3A,B,C | N | J | F, As, Pb, Se, Hg had matrix interferences. |
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# DATA VALIDATION WORKSHEET

**Analytical Method:** Various Methods **Identification[a]:** L43629

**Laboratory:** AWAL **Batch Identification:** _____

| Validation Criteria | Sample Number | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| Hardcopy vs. Chain-of-Custody | A | A | A | | | | | | | | | | | | | | |
| Holding Time | AL | AL | AL | | | | | | | | | | | | | | |
| Analyte List | A | A | A | | | | | | | | | | | | | | |
| Reporting Limits | A | A | A | | | | | | | | | | | | | | |
| Initial Calibration (all methods) | AL | AL | AL | | | | | | | | | | | | | | |
| Initial Check Blank (ICP & AA methods) | AL | AL | AL | | | | | | | | | | | | | | |
| Continuing Calibration (ICP & AA methods) | AL | AL | AL | | | | | | | | | | | | | | |
| Injection Time(s) (all methods) | N | N | N | | | | | | | | | | | | | | |
| Interference Check Standard (ICP Method) | AL | AL | AL | | | | | | | | | | | | | | |
| Method Blank (all methods) | AL | AL | AL | | | | | | | | | | | | | | |
| Laboratory Control Sample (all methods) | AL | AL | AL | | | | | | | | | | | | | | |
| Laboratory Control Sample Duplicate (lab specific) | NA | NA | NA | | | | | | | | | | | | | | |
| Matrix Spike/Matrix Spike Duplicate | 1 | 1 | 1 | | | | | | | | | | | | | | |
| Matrix Duplicate (Lab Specific) | NA | NA | NA | | | | | | | | | | | | | | |
| Field Duplicate/Replicate | NA | NA | NA | | | | | | | | | | | | | | |
| Equipment Rinsate Blanks | NA | NA | NA | | | | | | | | | | | | | | |
| Electronic Deliverable vs. Hardcopy | NA | NA | NA | | | | | | | | | | | | | | |
| Electronic Deliverable vs. Chain of Custody | NA | NA | NA | | | | | | | | | | | | | | |

(a) List QC batch identification if different than Batch ID
A indicates validation criteria were met
A/L indicates validation criteria were met based upon Laboratory's QC Summary Form
X indicates validation criteria were not met
N indicates data review were not a project specific requirement
N/A indicates criteria are not applicable for the specified analytical method
N/R indicates data not available for review

**NOTES:** 1. F, As, Pb, Se, Hg had matrix interferences.

## FIGURE B.12-2
## INORGANIC ANALYSIS DATA VALIDATION WORKSHEET

**Analytical Method/Analytes:** Various **Sample Collection Date(s):** 11/16/00

**Laboratory:** AWAL **MW Job Number:** _____

**Batch Identification:** L43644 **Matrix:** Waters

**QC Identification[a]:** _____ **Page:** 1 of 2

**Validation Complete:** _____ 1/22/01
(Date/Signature)

| Sample No. | Sample ID | Lab. ID | Hits (Y/N) | Quals. | Comments |
|---|---|---|---|---|---|
| 1 | CL-4 | L43644-1A,B,C | N | J | F, As, Pb, Se, Hg had matrix interferences. |
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# DATA VALIDATION WORKSHEET

**Analytical Method:** Various Methods **Identification[a]:** L43644

**Laboratory:** AWAL **Batch Identification:** _____

| Validation Criteria | Sample Number | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| Hardcopy vs. Chain-of-Custody | A | A | A | | | | | | | | | | | | | | |
| Holding Time | AL | AL | AL | | | | | | | | | | | | | | |
| Analyte List | A | A | A | | | | | | | | | | | | | | |
| Reporting Limits | A | A | A | | | | | | | | | | | | | | |
| Initial Calibration (all methods) | AL | AL | AL | | | | | | | | | | | | | | |
| Initial Check Blank (ICP & AA methods) | AL | AL | AL | | | | | | | | | | | | | | |
| Continuing Calibration (ICP & AA methods) | AL | AL | AL | | | | | | | | | | | | | | |
| Injection Time(s) (all methods) | N | N | N | | | | | | | | | | | | | | |
| Interference Check Standard (ICP Method) | AL | AL | AL | | | | | | | | | | | | | | |
| Method Blank (all methods) | AL | AL | AL | | | | | | | | | | | | | | |
| Laboratory Control Sample (all methods) | AL | AL | AL | | | | | | | | | | | | | | |
| Laboratory Control Sample Duplicate (lab specific) | NA | NA | NA | | | | | | | | | | | | | | |
| Matrix Spike/Matrix Spike Duplicate | I | I | I | | | | | | | | | | | | | | |
| Matrix Duplicate (Lab Specific) | NA | NA | NA | | | | | | | | | | | | | | |
| Field Duplicate/Replicate | NA | NA | NA | | | | | | | | | | | | | | |
| Equipment Rinsate Blanks | NA | NA | NA | | | | | | | | | | | | | | |
| Electronic Deliverable vs. Hardcopy | NA | NA | NA | | | | | | | | | | | | | | |
| Electronic Deliverable vs. Chain of Custody | NA | NA | NA | | | | | | | | | | | | | | |

(a) List QC batch identification if different than Batch ID
A indicates validation criteria were met
A/L indicates validation criteria were met based upon Laboratory's QC Summary Form
X indicates validation criteria were not met
N indicates data review were not a project specific requirement
N/A indicates criteria are not applicable for the specified analytical method
N/R indicates data not available for review

**NOTES:** 1. F, As, Pb, Se, Hg had matrix interferences.

## FIGURE B.12-2
## INORGANIC ANALYSIS DATA VALIDATION WORKSHEET

**Analytical Method/Analytes:** Various **Sample Collection Date(s):** 12/18/00

**Laboratory:** AWAL **MW Job Number:** _____

**Batch Identification:** L44066 **Matrix:** Waters

**QC Identification[a]:** _____ **Page:** 1 of 2

**Validation Complete:** _____ 2/15/01
(Date/Signature)

| Sample No. | Sample ID | Lab. ID | Hits (Y/N) | Quals. | Comments |
|---|---|---|---|---|---|
| 1 | P3-95SWC | L44066-1 A,B | N | J | F, nitrate, As, Pb, Se, Hg, Ag, Na, Mg, Ca had matrix interferences. |
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# DATA VALIDATION WORKSHEET

**Analytical Method:** Various Methods **Identification[a]:** L44066

**Laboratory:** AWAL **Batch Identification:** _____

| Validation Criteria | Sample Number | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| Hardcopy vs. Chain-of-Custody | A | | | | | | | | | | | | | | | | |
| Holding Time | AL | | | | | | | | | | | | | | | | |
| Analyte List | A | | | | | | | | | | | | | | | | |
| Reporting Limits | A | | | | | | | | | | | | | | | | |
| Initial Calibration (all methods) | AL | | | | | | | | | | | | | | | | |
| Initial Check Blank (ICP & AA methods) | AL | | | | | | | | | | | | | | | | |
| Continuing Calibration (ICP & AA methods) | AL | | | | | | | | | | | | | | | | |
| Injection Time(s) (all methods) | N | | | | | | | | | | | | | | | | |
| Interference Check Standard (ICP Method) | AL | | | | | | | | | | | | | | | | |
| Method Blank (all methods) | AL | | | | | | | | | | | | | | | | |
| Laboratory Control Sample (all methods) | AL | | | | | | | | | | | | | | | | |
| Laboratory Control Sample Duplicate (lab specific) | NA | | | | | | | | | | | | | | | | |
| Matrix Spike/Matrix Spike Duplicate | 1 | | | | | | | | | | | | | | | | |
| Matrix Duplicate (Lab Specific) | NA | | | | | | | | | | | | | | | | |
| Field Duplicate/Replicate | NA | | | | | | | | | | | | | | | | |
| Equipment Rinsate Blanks | NA | | | | | | | | | | | | | | | | |
| Electronic Deliverable vs. Hardcopy | NA | | | | | | | | | | | | | | | | |
| Electronic Deliverable vs. Chain of Custody | NA | | | | | | | | | | | | | | | | |

(a) List QC batch identification if different than Batch ID
A indicates validation criteria were met
A/L indicates validation criteria were met based upon Laboratory's QC Summary Form
X indicates validation criteria were not met
N indicates data review were not a project specific requirement
N/A indicates criteria are not applicable for the specified analytical method
N/R indicates data not available for review

**NOTES:** 1. F, nitrate, As, Pb, Se, Hg, Ag, Na, Mg, Ca had matrix interferences.

## FIGURE B.12-2
## INORGANIC ANALYSIS DATA VALIDATION WORKSHEET

**Analytical Method/Analytes:** Various Radiochemical **Sample Collection Date:** 7/11/00

**Laboratory:** Barringer **Job Number:** 7138

**Batch Identification:** various **Matrix:** Waters

**QC Identification[a]:** _____ **Page:** 1 of 2

**Validation Complete:** _____ 9/18/00
(Date/Signature)

| Sample No. | Sample ID | Lab. ID | Hits (Y/N) | Quals. | Comments |
|---|---|---|---|---|---|
| 1 | GW-103A | 7138-01A,B,C | N | NA | None |
| 2 | GW-103B | 7138-02A,B,C | N | NA | None |
| 3 | GW-103C | 7138-03A,B,C | N | NA | None |
| 4 | GW-103D | 7138-04A,B,C | N | NA | None |
| 5 | GW-104A | 7138-05A,B,C | N | NA | None |
| 6 | GW-104B | 7138-06A,B,C | N | NA | None |
| 7 | GW-104C | 7138-07A,B,C | N | NA | None |
| 8 | GW-104D | 7138-08A,B,C | N | NA | None |
| 9 | GW-105A | 7138-09A,B,C | N | NA | None |
| 10 | GW-104B | 7138-10A,B,C | N | NA | None |
| 11 | GW-105C | 7138-11A,B,C | N | NA | None |
| 12 | GW-105D | 7138-12A,B,C | N | NA | None |
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# DATA VALIDATION WORKSHEET

**Analytical Method:** Various **QC Identification[a]:** various

**Laboratory:** Barringer **Work Order:** 7138

| Validation Criteria | Sample Number | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| Hardcopy vs. Chain-of-Custody | A | A | A | A | A | A | A | A | A | A | A | A | | | | | |
| Holding Time | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | | | |
| Analyte List | A | A | A | A | A | A | A | A | A | A | A | A | | | | | |
| Reporting Limits | A | A | A | A | A | A | A | A | A | A | A | A | | | | | |
| Initial Calibration (all methods) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | | | |
| Initial Check Blank (ICP & AA methods) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | | | |
| Continuing Calibration (ICP & AA methods) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | | | |
| Injection Time(s) (all methods) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | | | |
| Interference Check Standard (ICP Method | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | | | |
| Method Blank (all methods) | AL | AL | AL | AL | AL | AL | AL | AL | AL | AL | AL | AL | | | | | |
| Laboratory Control Sample (all methods) | AL | AL | AL | AL | AL | AL | AL | AL | AL | AL | AL | AL | | | | | |
| Laboratory Control Sample Duplicate (lab specific) | AL | AL | AL | AL | AL | AL | AL | AL | AL | AL | AL | AL | | | | | |
| Matrix Spike/Matrix Spike Duplicate | AL | AL | AL | AL | AL | AL | AL | AL | AL | AL | AL | AL | | | | | |
| Matrix Duplicate (Lab Specific) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | | | |
| Field Duplicate/Replicate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | | | |
| Equipment Rinsate Blanks | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | | | |
| Electronic Deliverable vs. Hardcopy | A | A | A | A | A | A | A | A | A | A | A | A | | | | | |
| Electronic Deliverable vs. Chain of Custody | A | A | A | A | A | A | A | A | A | A | A | A | | | | | |

(a) List QC batch identification if different than Batch ID
A indicates validation criteria were met
A/L indicates validation criteria were met based upon Laboratory's QC Summary Form
X indicates validation criteria were not met
N indicates data review were not a project specific requirement
N/A indicates criteria are not applicable for the specified analytical method
N/R indicates data not available for review

NOTES: none

**FIGURE B.12-2**
**INORGANIC ANALYSIS DATA VALIDATION WORKSHEET**

**Analytical Method/Analytes:** Various Radiochemical **Sample Collection Date:** 7/19/00

**Laboratory:** Barringer **Job Number:** 7251

**Batch Identification:** various **Matrix:** Waters

**QC Identification[a]:** _____ **Page:** 1 of 2

**Validation Complete:** Jeff B. for 9/29/00
(Date/Signature)

| Sample No. | Sample ID | Lab. ID | Hits (Y/N) | Quals. | Comments |
|---|---|---|---|---|---|
| 1 | MW Pond | 7251-01A,B,C | N | NA | None |
| 2 | P3-95 Pond | 7251-02A,B,C | N | NA | None |
| 3 | P3-97 Pond | 7251-03A,B,C | N | NA | None |
| 4 | GW-904 | 7251-04A,B,C | N | NA | None |
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# DATA VALIDATION WORKSHEET

**Analytical Method:** Various **QC Identification[a]:** various

**Laboratory:** Barringer **Work Order:** 7251

| Validation Criteria | Sample Number | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| Hardcopy vs. Chain-of-Custody | A | A | A | A | | | | | | | | | | | | | |
| Holding Time | NA | NA | NA | NA | | | | | | | | | | | | | |
| Analyte List | A | A | A | A | | | | | | | | | | | | | |
| Reporting Limits | A | A | A | A | | | | | | | | | | | | | |
| Initial Calibration (all methods) | NA | NA | NA | NA | | | | | | | | | | | | | |
| Initial Check Blank (ICP & AA methods) | NA | NA | NA | NA | | | | | | | | | | | | | |
| Continuing Calibration (ICP & AA methods) | NA | NA | NA | NA | | | | | | | | | | | | | |
| Injection Time(s) (all methods) | NA | NA | NA | NA | | | | | | | | | | | | | |
| Interference Check Standard (ICP Method | NA | NA | NA | NA | | | | | | | | | | | | | |
| Method Blank (all methods) | AL | AL | AL | AL | | | | | | | | | | | | | |
| Laboratory Control Sample (all methods) | AL | AL | AL | AL | | | | | | | | | | | | | |
| Laboratory Control Sample Duplicate (lab specific) | AL | AL | AL | AL | | | | | | | | | | | | | |
| Matrix Spike/Matrix Spike Duplicate | AL | AL | AL | AL | | | | | | | | | | | | | |
| Matrix Duplicate (Lab Specific) | NA | NA | NA | NA | | | | | | | | | | | | | |
| Field Duplicate/Replicate | NA | NA | NA | NA | | | | | | | | | | | | | |
| Equipment Rinsate Blanks | NA | NA | NA | NA | | | | | | | | | | | | | |
| Electronic Deliverable vs. Hardcopy | A | A | A | A | | | | | | | | | | | | | |
| Electronic Deliverable vs. Chain of Custody | A | A | A | A | | | | | | | | | | | | | |

(a) List QC batch identification if different than Batch ID
A indicates validation criteria were met
A/L indicates validation criteria were met based upon Laboratory's QC Summary Form
X indicates validation criteria were not met
N indicates data review were not a project specific requirement
N/A indicates criteria are not applicable for the specified analytical method
N/R indicates data not available for review

NOTES: none

FIGURE B.12-2
INORGANIC ANALYSIS DATA VALIDATION WORKSHEET

Analytical Method/Analytes: Various Radiochemical Sample Collection Date: 8/1/00

Laboratory: Barringer Job Number: 0008080

Batch Identification: various Matrix: Waters

QC Identification[a]: _____ Page: 1 of 2

Validation Complete: _____ 11/27/00
(Date/Signature)

| Sample No. | Sample ID | Lab. ID | Hits (Y/N) | Quals. | Comments |
|---|---|---|---|---|---|
| 1 | GW-19A | 0008080-01A,B | N | NA | None |
| 2 | GW-63 | 0008080-02A,B | N | NA | Iso-Th reporting limits not met |
| 3 | GW-776 | 0008080-03A,B | N | NA | Iso-Th reporting limits not met |
| 4 | GW-60 | 0008080-04A,B | N | NA | Iso-Th reporting limits not met |
| 5 | | | | | |
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# DATA VALIDATION WORKSHEET

**Analytical Method:** Various **QC Identification[a]:** various

**Laboratory:** Barringer **Work Order:** 0008080

| Validation Criteria | Sample Number | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| Hardcopy vs. Chain-of-Custody | A | A | A | A | | | | | | | | | | | | | |
| Holding Time | NA | NA | NA | NA | | | | | | | | | | | | | |
| Analyte List | A | A | A | A | | | | | | | | | | | | | |
| Reporting Limits | A | 1 | 1 | 1 | | | | | | | | | | | | | |
| Initial Calibration (all methods) | NA | NA | NA | NA | | | | | | | | | | | | | |
| Initial Check Blank (ICP & AA methods) | NA | NA | NA | NA | | | | | | | | | | | | | |
| Continuing Calibration (ICP & AA methods) | NA | NA | NA | NA | | | | | | | | | | | | | |
| Injection Time(s) (all methods) | NA | NA | NA | NA | | | | | | | | | | | | | |
| Interference Check Standard (ICP Method | NA | NA | NA | NA | | | | | | | | | | | | | |
| Method Blank (all methods) | AL | AL | AL | AL | | | | | | | | | | | | | |
| Laboratory Control Sample (all methods) | AL | AL | AL | AL | | | | | | | | | | | | | |
| Laboratory Control Sample Duplicate (lab specific) | AL | AL | AL | AL | | | | | | | | | | | | | |
| Matrix Spike/Matrix Spike Duplicate | AL | AL | AL | AL | | | | | | | | | | | | | |
| Matrix Duplicate (Lab Specific) | NA | NA | NA | NA | | | | | | | | | | | | | |
| Field Duplicate/Replicate | NA | NA | NA | NA | | | | | | | | | | | | | |
| Equipment Rinsate Blanks | NA | NA | NA | NA | | | | | | | | | | | | | |
| Electronic Deliverable vs. Hardcopy | A | A | A | A | | | | | | | | | | | | | |
| Electronic Deliverable vs. Chain of Custody | A | A | A | A | | | | | | | | | | | | | |

(a) List QC batch identification if different than Batch ID
A indicates validation criteria were met
A/L indicates validation criteria were met based upon Laboratory's QC Summary Form
X indicates validation criteria were not met
N indicates data review were not a project specific requirement
N/A indicates criteria are not applicable for the specified analytical method
N/R indicates data not available for review

NOTES: 1. Iso-Th reporting limits not met.

## FIGURE B.12-2
## INORGANIC ANALYSIS DATA VALIDATION WORKSHEET

**Analytical Method/Analytes:** Various Radiochemical **Sample Collection Date:** 8/3/00

**Laboratory:** Barringer **Job Number:** 0008081

**Batch Identification:** various **Matrix:** Waters

**QC Identification[a]:** _____ **Page:** 1 of 2

**Validation Complete:** _____ 11/24/00
(Date/Signature)

| Sample No. | Sample ID | Lab. ID | Hits (Y/N) | Quals. | Comments |
|---|---|---|---|---|---|
| 1 | GW-58 | 0008081-01A,B,C | N | NA | None |
| 2 | GW-57 | 0008081-02A,B,C | N | NA | Reporting limits for Iso-Th exceeded. |
| 3 | GW-27 | 0008081-03A,B,C | N | NA | Reporting limits for Iso-Th exceeded. |
| 4 | GW-28 | 0008081-04A,B,C | N | NA | Reporting limits for Iso-Th exceeded. |
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# DATA VALIDATION WORKSHEET

**Analytical Method:** Various **QC Identification[a]:** various

**Laboratory:** Barringer **Work Order:** 0008081

| Validation Criteria | Sample Number | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | | | | | | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| Hardcopy vs. Chain-of-Custody | A | A | A | A | | | | | | | | | | | | | |
| Holding Time | NA | NA | NA | NA | | | | | | | | | | | | | |
| Analyte List | A | A | A | A | | | | | | | | | | | | | |
| Reporting Limits | A | 1 | 1 | 1 | | | | | | | | | | | | | |
| Initial Calibration (all methods) | NA | NA | NA | NA | | | | | | | | | | | | | |
| Initial Check Blank (ICP & AA methods) | NA | NA | NA | NA | | | | | | | | | | | | | |
| Continuing Calibration (ICP & AA methods) | NA | NA | NA | NA | | | | | | | | | | | | | |
| Injection Time(s) (all methods) | NA | NA | NA | NA | | | | | | | | | | | | | |
| Interference Check Standard (ICP Method | NA | NA | NA | NA | | | | | | | | | | | | | |
| Method Blank (all methods) | AL | AL | AL | AL | | | | | | | | | | | | | |
| Laboratory Control Sample (all methods) | AL | AL | AL | AL | | | | | | | | | | | | | |
| Laboratory Control Sample Duplicate (lab specific) | AL | AL | AL | AL | | | | | | | | | | | | | |
| Matrix Spike/Matrix Spike Duplicate | AL | AL | AL | AL | | | | | | | | | | | | | |
| Matrix Duplicate (Lab Specific) | NA | NA | NA | NA | | | | | | | | | | | | | |
| Field Duplicate/Replicate | NA | NA | NA | NA | | | | | | | | | | | | | |
| Equipment Rinsate Blanks | NA | NA | NA | NA | | | | | | | | | | | | | |
| Electronic Deliverable vs. Hardcopy | A | A | A | A | | | | | | | | | | | | | |
| Electronic Deliverable vs. Chain of Custody | A | A | A | A | | | | | | | | | | | | | |

(a) List QC batch identification if different than Batch ID
A indicates validation criteria were met
A/L indicates validation criteria were met based upon Laboratory's QC Summary Form
X indicates validation criteria were not met
N indicates data review were not a project specific requirement
N/A indicates criteria are not applicable for the specified analytical method
N/R indicates data not available for review

NOTES: 1. Reporting limits for Iso-Th exceeded.

## FIGURE B.12-2
## INORGANIC ANALYSIS DATA VALIDATION WORKSHEET

**Analytical Method/Analytes:** Various Radiochemical **Sample Collection Date:** 8/3/00

**Laboratory:** Barringer **Job Number:** 8082

**Batch Identification:** various **Matrix:** Waters

**QC Identification[a]:** _____ **Page:** 1 of 2

**Validation Complete:** _____

(Date/Signature)

| Sample No. | Sample ID | Lab. ID | Hits (Y/N) | Quals. | Comments |
|---|---|---|---|---|---|
| 1 | GW-58A | 8082-01A | N | NA | None |
| 2 | GW-58B | 8082-02A | N | NA | None |
| 3 | GW-58A | 8082-03A | N | NA | None |
| 4 | GW-28A | 8082-04A,B,C | N | NA | None |
| 5 | GW-57A | 8082-05A | N | NA | None |
| 6 | GW-57A | 8082-06A | N | NA | None |
| 7 | GW-27A | 8082-07A | N | NA | None |
| 8 | GW-27B | 8082-08A | N | NA | None |
| 9 | GW-27A | 8082-09A | N | NA | None |
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# DATA VALIDATION WORKSHEET

**Analytical Method:** Various **QC Identification[a]:** various

**Laboratory:** Barringer **Work Order:** 8082

| Validation Criteria | Sample Number | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| Hardcopy vs. Chain-of-Custody | A | A | A | A | A | A | A | A | A | | | | | | | | |
| Holding Time | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | | | | | | |
| Analyte List | A | A | A | A | A | A | A | A | A | | | | | | | | |
| Reporting Limits | A | A | A | A | A | A | A | A | A | | | | | | | | |
| Initial Calibration (all methods) | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | | | | | | |
| Initial Check Blank (ICP & AA methods) | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | | | | | | |
| Continuing Calibration (ICP & AA methods) | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | | | | | | |
| Injection Time(s) (all methods) | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | | | | | | |
| Interference Check Standard (ICP Method | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | | | | | | |
| Method Blank (all methods) | AL | AL | AL | AL | AL | AL | AL | AL | AL | | | | | | | | |
| Laboratory Control Sample (all methods) | AL | AL | AL | AL | AL | AL | AL | AL | AL | | | | | | | | |
| Laboratory Control Sample Duplicate (lab specific) | AL | AL | AL | AL | AL | AL | AL | AL | AL | | | | | | | | |
| Matrix Spike/Matrix Spike Duplicate | AL | AL | AL | AL | AL | AL | AL | AL | AL | | | | | | | | |
| Matrix Duplicate (Lab Specific) | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | | | | | | |
| Field Duplicate/Replicate | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | | | | | | |
| Equipment Rinsate Blanks | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | | | | | | |
| Electronic Deliverable vs. Hardcopy | A | A | A | A | A | A | A | A | A | | | | | | | | |
| Electronic Deliverable vs. Chain of Custody | A | A | A | A | A | A | A | A | A | | | | | | | | |

(a) List QC batch identification if different than Batch ID
A indicates validation criteria were met
A/L indicates validation criteria were met based upon Laboratory's QC Summary Form
X indicates validation criteria were not met
N indicates data review were not a project specific requirement
N/A indicates criteria are not applicable for the specified analytical method
N/R indicates data not available for review

NOTES: none

## FIGURE B.12-2
## INORGANIC ANALYSIS DATA VALIDATION WORKSHEET

**Analytical Method/Analytes:** Various Radiochemical **Sample Collection Date:** various

**Laboratory:** Barringer **Job Number:** 0008237

**Batch Identification:** various **Matrix:** Waters

**QC Identification[a]:** _____ **Page:** 1 of 2

**Validation Complete:** _____ 2/6/01
(Date/Signature)

| Sample No. | Sample ID | Lab. ID | Hits (Y/N) | Quals. | Comments |
|---|---|---|---|---|---|
| 1 | GW-26 | 0008237-01A | N | NA | Reporting limits for Iso-Thorium was exceeded. |
| 2 | GW-25 | 0008237-02A | N | NA | None |
| 3 | GW-20 | 0008237-03A | N | NA | Reporting limits for Iso-Thorium was exceeded. |
| 4 | GW-24 | 0008237-04A | N | NA | Reporting limits for Iso-Thorium was exceeded. |
| 5 | GW-29 | 0008237-05A | N | NA | Reporting limits for Iso-Thorium was exceeded. |
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# DATA VALIDATION WORKSHEET

**Analytical Method:** Various **QC Identification[a]:** various

**Laboratory:** Barringer **Work Order:** 0008237

| Validation Criteria | Sample Number | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| Hardcopy vs. Chain-of-Custody | A | A | A | A | A | | | | | | | | | | | | |
| Holding Time | NA | NA | NA | NA | NA | | | | | | | | | | | | |
| Analyte List | A | A | A | A | A | | | | | | | | | | | | |
| Reporting Limits | 1 | A | 1 | 1 | 1 | | | | | | | | | | | | |
| Initial Calibration (all methods) | NA | NA | NA | NA | NA | | | | | | | | | | | | |
| Initial Check Blank (ICP & AA methods) | NA | NA | NA | NA | NA | | | | | | | | | | | | |
| Continuing Calibration (ICP & AA methods) | NA | NA | NA | NA | NA | | | | | | | | | | | | |
| Injection Time(s) (all methods) | NA | NA | NA | NA | NA | | | | | | | | | | | | |
| Interference Check Standard (ICP Method | NA | NA | NA | NA | NA | | | | | | | | | | | | |
| Method Blank (all methods) | AL | AL | AL | AL | AL | | | | | | | | | | | | |
| Laboratory Control Sample (all methods) | AL | AL | AL | AL | AL | | | | | | | | | | | | |
| Laboratory Control Sample Duplicate (lab specific) | AL | AL | AL | AL | AL | | | | | | | | | | | | |
| Matrix Spike/Matrix Spike Duplicate | AL | AL | AL | AL | AL | | | | | | | | | | | | |
| Matrix Duplicate (Lab Specific) | NA | NA | NA | NA | NA | | | | | | | | | | | | |
| Field Duplicate/Replicate | NA | NA | NA | NA | NA | | | | | | | | | | | | |
| Equipment Rinsate Blanks | NA | NA | NA | NA | NA | | | | | | | | | | | | |
| Electronic Deliverable vs. Hardcopy | A | A | A | A | A | | | | | | | | | | | | |
| Electronic Deliverable vs. Chain of Custody | A | A | A | A | A | | | | | | | | | | | | |

(a) List QC batch identification if different than Batch ID
A indicates validation criteria were met
A/L indicates validation criteria were met based upon Laboratory's QC Summary Form
X indicates validation criteria were not met
N indicates data review were not a project specific requirement
N/A indicates criteria are not applicable for the specified analytical method
N/R indicates data not available for review

NOTES: 1. Reporting limits for Iso-Thorium was exceeded.

## FIGURE B.12-2
## INORGANIC ANALYSIS DATA VALIDATION WORKSHEET

**Analytical Method/Analytes:** Various Radiochemical **Sample Collection Date:** various

**Laboratory:** Barringer **Job Number:** 0008237

**Batch Identification:** various **Matrix:** Waters

**QC Identification[a]:** _____ **Page:** 1 of 2

**Validation Complete:** _____ 2/6/01
(Date/Signature)

| Sample No. | Sample ID | Lab. ID | Hits (Y/N) | Quals. | Comments |
|---|---|---|---|---|---|
| 1 | GW-26 | 0008237-01A | N | NA | Reporting limits for Iso-Thorium was exceeded. |
| 2 | GW-25 | 0008237-02A | N | NA | None |
| 3 | GW-20 | 0008237-03A | N | NA | Reporting limits for Iso-Thorium was exceeded. |
| 4 | GW-24 | 0008237-04A | N | NA | Reporting limits for Iso-Thorium was exceeded. |
| 5 | GW-29 | 0008237-05A | N | NA | Reporting limits for Iso-Thorium was exceeded. |
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# DATA VALIDATION WORKSHEET

**Analytical Method:** Various **QC Identification[(a)]:** various

**Laboratory:** Barringer **Work Order:** 0008237

| Validation Criteria | Sample Number | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| Hardcopy vs. Chain-of-Custody | A | A | A | A | A | | | | | | | | | | | | |
| Holding Time | NA | NA | NA | NA | NA | | | | | | | | | | | | |
| Analyte List | A | A | A | A | A | | | | | | | | | | | | |
| Reporting Limits | 1 | A | 1 | 1 | 1 | | | | | | | | | | | | |
| Initial Calibration (all methods) | NA | NA | NA | NA | NA | | | | | | | | | | | | |
| Initial Check Blank (ICP & AA methods) | NA | NA | NA | NA | NA | | | | | | | | | | | | |
| Continuing Calibration (ICP & AA methods) | NA | NA | NA | NA | NA | | | | | | | | | | | | |
| Injection Time(s) (all methods) | NA | NA | NA | NA | NA | | | | | | | | | | | | |
| Interference Check Standard (ICP Method | NA | NA | NA | NA | NA | | | | | | | | | | | | |
| Method Blank (all methods) | AL | AL | AL | AL | AL | | | | | | | | | | | | |
| Laboratory Control Sample (all methods) | AL | AL | AL | AL | AL | | | | | | | | | | | | |
| Laboratory Control Sample Duplicate (lab specific) | AL | AL | AL | AL | AL | | | | | | | | | | | | |
| Matrix Spike/Matrix Spike Duplicate | AL | AL | AL | AL | AL | | | | | | | | | | | | |
| Matrix Duplicate (Lab Specific) | NA | NA | NA | NA | NA | | | | | | | | | | | | |
| Field Duplicate/Replicate | NA | NA | NA | NA | NA | | | | | | | | | | | | |
| Equipment Rinsate Blanks | NA | NA | NA | NA | NA | | | | | | | | | | | | |
| Electronic Deliverable vs. Hardcopy | A | A | A | A | A | | | | | | | | | | | | |
| Electronic Deliverable vs. Chain of Custody | A | A | A | A | A | | | | | | | | | | | | |

(a) List QC batch identification if different than Batch ID
A indicates validation criteria were met
A/L indicates validation criteria were met based upon Laboratory's QC Summary Form
X indicates validation criteria were not met
N indicates data review were not a project specific requirement
N/A indicates criteria are not applicable for the specified analytical method
N/R indicates data not available for review

NOTES: 1. Reporting limits for Iso-Thorium was exceeded.

FIGURE B.12-2
INORGANIC ANALYSIS DATA VALIDATION WORKSHEET

**Analytical Method/Analytes:** Various Radiochemical **Sample Collection Date:** various

**Laboratory:** Barringer **Job Number:** 0008238

**Batch Identification:** various **Matrix:** Waters

**QC Identification[a]:** _____ **Page:** 1 of 2

**Validation Complete:** _____ 11/22/05
(Date/Signature)

| Sample No. | Sample ID | Lab. ID | Hits (Y/N) | Quals. | Comments |
|---|---|---|---|---|---|
| 1 | GW-26A | 0008238-01A | N | NA | Reporting limits for Iso-Thorium was exceeded. |
| 2 | GW-20A | 0008238-02A | N | NA | Reporting limits for Th-232 were exceeded. |
| 3 | GW-24A | 0008238-03A | N | NA | Reporting limits for Th-230 were exceeded. |
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# DATA VALIDATION WORKSHEET

**Analytical Method:** Various **QC Identification[a]:** various

**Laboratory:** Barringer **Work Order:** 0008238

| Validation Criteria | Sample Number | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| Hardcopy vs. Chain-of-Custody | A | A | A | | | | | | | | | | | | | | |
| Holding Time | NA | NA | NA | | | | | | | | | | | | | | |
| Analyte List | A | A | A | | | | | | | | | | | | | | |
| Reporting Limits | 1 | 1 | 1 | | | | | | | | | | | | | | |
| Initial Calibration (all methods) | NA | NA | NA | | | | | | | | | | | | | | |
| Initial Check Blank (ICP & AA methods) | NA | NA | NA | | | | | | | | | | | | | | |
| Continuing Calibration (ICP & AA methods) | NA | NA | NA | | | | | | | | | | | | | | |
| Injection Time(s) (all methods) | NA | NA | NA | | | | | | | | | | | | | | |
| Interference Check Standard (ICP Method | NA | NA | NA | | | | | | | | | | | | | | |
| Method Blank (all methods) | AL | AL | AL | | | | | | | | | | | | | | |
| Laboratory Control Sample (all methods) | AL | AL | AL | | | | | | | | | | | | | | |
| Laboratory Control Sample Duplicate (lab specific) | AL | AL | AL | | | | | | | | | | | | | | |
| Matrix Spike/Matrix Spike Duplicate | AL | AL | AL | | | | | | | | | | | | | | |
| Matrix Duplicate (Lab Specific) | NA | NA | NA | | | | | | | | | | | | | | |
| Field Duplicate/Replicate | NA | NA | NA | | | | | | | | | | | | | | |
| Equipment Rinsate Blanks | NA | NA | NA | | | | | | | | | | | | | | |
| Electronic Deliverable vs. Hardcopy | A | A | A | | | | | | | | | | | | | | |
| Electronic Deliverable vs. Chain of Custody | A | A | A | | | | | | | | | | | | | | |

(a) List QC batch identification if different than Batch ID
A indicates validation criteria were met
A/L indicates validation criteria were met based upon Laboratory's QC Summary Form
X indicates validation criteria were not met
N indicates data review were not a project specific requirement
N/A indicates criteria are not applicable for the specified analytical method
N/R indicates data not available for review

NOTES: 1. Reporting limits were exceeded.

## FIGURE B.12-2
## INORGANIC ANALYSIS DATA VALIDATION WORKSHEET

Analytical Method/Analytes: Various Radiochemical Sample Collection Date: 9/13/00

Laboratory: Barringer Job Number: 0009136

Batch Identification: various Matrix: Waters

QC Identification[a]: _____ Page: 1 of 2

Validation Complete: _____ 1/22/01

(Date/Signature)

| Sample No. | Sample ID | Lab. ID | Hits (Y/N) | Quals. | Comments |
|---|---|---|---|---|---|
| 1 | 1B | 0009136-01A,B,C | N | NA | Alpha, Beta, K-40, Iso-Th, C-14, Tritium Reporting Limits Exceeded Project Requirements. |
| 2 | 2B | 0009136-02A,B,C | N | NA | Alpha, Beta, K-40, Iso-Th, C-14, Tritium Reporting Limits Exceeded Project Requirements. |
| 3 | 3B | 0009136-03A,B,C | N | NA | Alpha, Beta, K-40, Iso-Th, C-14, Tritium Reporting Limits Exceeded Project Requirements. |
| 4 | 4B | 0009136-04A,B,C | N | NA | Alpha, Beta, K-40, Iso-Th, C-14, Tritium Reporting Limits Exceeded Project Requirements. |
| 5 | 1A | 0009136-05A,B,C | N | NA | Alpha, Beta, K-40, Iso-Th, C-14, Tritium Reporting Limits Exceeded Project Requirements. High Barium concentration necessitated the use of 903.0 for Ra-226 analysis. |
| 6 | 2A | 0009136-06A,B,C | N | NA | Alpha, Beta, K-40, Iso-Th, C-14, Tritium, Ra-228 Reporting Limits Exceeded Project Requirements. |
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# DATA VALIDATION WORKSHEET

**Analytical Method:** Various **QC Identification[a]:** various

**Laboratory:** Barringer **Work Order:** 0009136

| Validation Criteria | Sample Number | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| Hardcopy vs. Chain-of-Custody | A | A | A | A | A | A | | | | | | | | | | | |
| Holding Time | NA | NA | NA | NA | NA | NA | | | | | | | | | | | |
| Analyte List | A | A | A | A | A | A | | | | | | | | | | | |
| Reporting Limits | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | |
| Initial Calibration (all methods) | NA | NA | NA | NA | NA | NA | | | | | | | | | | | |
| Initial Check Blank (ICP & AA methods) | NA | NA | NA | NA | NA | NA | | | | | | | | | | | |
| Continuing Calibration (ICP & AA methods) | NA | NA | NA | NA | NA | NA | | | | | | | | | | | |
| Injection Time(s) (all methods) | NA | NA | NA | NA | NA | NA | | | | | | | | | | | |
| Interference Check Standard (ICP Method | NA | NA | NA | NA | NA | NA | | | | | | | | | | | |
| Method Blank (all methods) | AL | AL | AL | AL | AL | AL | | | | | | | | | | | |
| Laboratory Control Sample (all methods) | AL | AL | AL | AL | AL | AL | | | | | | | | | | | |
| Laboratory Control Sample Duplicate (lab specific) | AL | AL | AL | AL | AL | AL | | | | | | | | | | | |
| Matrix Spike/Matrix Spike Duplicate | AL | AL | AL | AL | AL | AL | | | | | | | | | | | |
| Matrix Duplicate (Lab Specific) | NA | NA | NA | NA | NA | NA | | | | | | | | | | | |
| Field Duplicate/Replicate | NA | NA | NA | NA | NA | NA | | | | | | | | | | | |
| Equipment Rinsate Blanks | NA | NA | NA | NA | NA | NA | | | | | | | | | | | |
| Electronic Deliverable vs. Hardcopy | A | A | A | A | A | A | | | | | | | | | | | |
| Electronic Deliverable vs. Chain of Custody | A | A | A | A | A | A | | | | | | | | | | | |

(a) List QC batch identification if different than Batch ID
A indicates validation criteria were met
A/L indicates validation criteria were met based upon Laboratory's QC Summary Form
X indicates validation criteria were not met
N indicates data review were not a project specific requirement
N/A indicates criteria are not applicable for the specified analytical method
N/R indicates data not available for review

NOTES: 1. Reporting limits exceeded project requirements.

## FIGURE B.12-2
## INORGANIC ANALYSIS DATA VALIDATION WORKSHEET

**Analytical Method/Analytes:** Various Radiochemical **Sample Collection Date:** 10/3/00

**Laboratory:** Barringer **Job Number:** 0010029

**Batch Identification:** various **Matrix:** Waters

**QC Identification[a]:** _____ **Page:** 1 of 2

**Validation Complete:** _____ 2/2/01
(Date/Signature)

| Sample No. | Sample ID | Lab. ID | Hits (Y/N) | Quals. | Comments |
|---|---|---|---|---|---|
| 1 | GW-88 | 0010029-01A | N | NA | Alpha, Beta RLs exceeded |
| 2 | GW-89 | 0010029-02A | N | NA | Alpha, Beta RLs exceeded |
| 3 | GW-90 | 0010029-03A | N | NA | Alpha, Beta RLs exceeded |
| 4 | GW-91 | 0010029-04A | N | NA | Alpha, Beta RLs exceeded |
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# DATA VALIDATION WORKSHEET

**Analytical Method:** Various **QC Identification[a]:** various

**Laboratory:** Barringer **Work Order:** 0010029

| Validation Criteria | Sample Number | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| Hardcopy vs. Chain-of-Custody | A | A | A | A | | | | | | | | | | | | | |
| Holding Time | NA | NA | NA | NA | | | | | | | | | | | | | |
| Analyte List | A | A | A | A | | | | | | | | | | | | | |
| Reporting Limits | 1 | 1 | 1 | 1 | | | | | | | | | | | | | |
| Initial Calibration (all methods) | NA | NA | NA | NA | | | | | | | | | | | | | |
| Initial Check Blank (ICP & AA methods) | NA | NA | NA | NA | | | | | | | | | | | | | |
| Continuing Calibration (ICP & AA methods) | NA | NA | NA | NA | | | | | | | | | | | | | |
| Injection Time(s) (all methods) | NA | NA | NA | NA | | | | | | | | | | | | | |
| Interference Check Standard (ICP Method | NA | NA | NA | NA | | | | | | | | | | | | | |
| Method Blank (all methods) | AL | AL | AL | AL | | | | | | | | | | | | | |
| Laboratory Control Sample (all methods) | AL | AL | AL | AL | | | | | | | | | | | | | |
| Laboratory Control Sample Duplicate (lab specific) | AL | AL | AL | AL | | | | | | | | | | | | | |
| Matrix Spike/Matrix Spike Duplicate | AL | AL | AL | AL | | | | | | | | | | | | | |
| Matrix Duplicate (Lab Specific) | NA | NA | NA | NA | | | | | | | | | | | | | |
| Field Duplicate/Replicate | NA | NA | NA | NA | | | | | | | | | | | | | |
| Equipment Rinsate Blanks | NA | NA | NA | NA | | | | | | | | | | | | | |
| Electronic Deliverable vs. Hardcopy | A | A | A | A | | | | | | | | | | | | | |
| Electronic Deliverable vs. Chain of Custody | A | A | A | A | | | | | | | | | | | | | |

(a) List QC batch identification if different than Batch ID
A indicates validation criteria were met
A/L indicates validation criteria were met based upon Laboratory's QC Summary Form
X indicates validation criteria were not met
N indicates data review were not a project specific requirement
N/A indicates criteria are not applicable for the specified analytical method
N/R indicates data not available for review

NOTES: 1. Alpha, Beta RLs exceeded.

FIGURE B.12-2
INORGANIC ANALYSIS DATA VALIDATION WORKSHEET

**Analytical Method/Analytes:** Various Radiochemical **Sample Collection Date:** 10/5/00

**Laboratory:** Barringer **Job Number:** 0010086

**Batch Identification:** various **Matrix:** Waters

**QC Identification[a]:** _____ **Page:** 1 of 2

**Validation Complete:** _____ 2/27/01
(Date/Signature)

| Sample No. | Sample ID | Lab. ID | Hits (Y/N) | Quals. | Comments |
|---|---|---|---|---|---|
| 1 | GW-63 | 0010086-01A | N | NA | Alpha, Beta reporting limits were exceeded. |
| 2 | GW-707 | 0010086-02A | N | NA | Alpha, Beta reporting limits were exceeded. |
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# DATA VALIDATION WORKSHEET

**Analytical Method:** Various **QC Identification[a]:** various

**Laboratory:** Barringer **Work Order:** 0010086

| Validation Criteria | Sample Number | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| Hardcopy vs. Chain-of-Custody | A | A | | | | | | | | | | | | | | | |
| Holding Time | NA | NA | | | | | | | | | | | | | | | |
| Analyte List | A | A | | | | | | | | | | | | | | | |
| Reporting Limits | 1 | 1 | | | | | | | | | | | | | | | |
| Initial Calibration (all methods) | NA | NA | | | | | | | | | | | | | | | |
| Initial Check Blank (ICP & AA methods) | NA | NA | | | | | | | | | | | | | | | |
| Continuing Calibration (ICP & AA methods) | NA | NA | | | | | | | | | | | | | | | |
| Injection Time(s) (all methods) | NA | NA | | | | | | | | | | | | | | | |
| Interference Check Standard (ICP Method | NA | NA | | | | | | | | | | | | | | | |
| Method Blank (all methods) | AL | AL | | | | | | | | | | | | | | | |
| Laboratory Control Sample (all methods) | AL | AL | | | | | | | | | | | | | | | |
| Laboratory Control Sample Duplicate (lab specific) | AL | AL | | | | | | | | | | | | | | | |
| Matrix Spike/Matrix Spike Duplicate | AL | AL | | | | | | | | | | | | | | | |
| Matrix Duplicate (Lab Specific) | NA | NA | | | | | | | | | | | | | | | |
| Field Duplicate/Replicate | NA | NA | | | | | | | | | | | | | | | |
| Equipment Rinsate Blanks | NA | NA | | | | | | | | | | | | | | | |
| Electronic Deliverable vs. Hardcopy | A | A | | | | | | | | | | | | | | | |
| Electronic Deliverable vs. Chain of Custody | A | A | | | | | | | | | | | | | | | |

(a) List QC batch identification if different than Batch ID
A indicates validation criteria were met
A/L indicates validation criteria were met based upon Laboratory's QC Summary Form
X indicates validation criteria were not met
N indicates data review were not a project specific requirement
N/A indicates criteria are not applicable for the specified analytical method
N/R indicates data not available for review

NOTES: 1. Alpha, Beta reporting limits were exceeded.

## FIGURE B.12-2
## INORGANIC ANALYSIS DATA VALIDATION WORKSHEET

**Analytical Method/Analytes:** Various Radiochemical **Sample Collection Date:** 10/9/00

**Laboratory:** Barringer **Job Number:** 0010087

**Batch Identification:** various **Matrix:** Waters

**QC Identification[a]:** _____ **Page:** 1 of 2

**Validation Complete:** _____ 1/22/01
(Date/Signature)

| Sample No. | Sample ID | Lab. ID | Hits (Y/N) | Quals. | Comments |
|---|---|---|---|---|---|
| 1 | I-1-30 | 0010087-01A | N | NA | Reporting limits for Gross Alpha and Beta were exceeded. |
| 2 | GW-71 | 0010087-02A | N | NA | Reporting limits for Gross Alpha and Beta were exceeded. |
| 3 | GW-659 | 0010087-03A | N | NA | Reporting limits for Gross Alpha and Beta were exceeded. |
| 4 | GW-79 | 0010087-03A | N | NA | Reporting limits for Gross Alpha and Beta were exceeded. |
| 5 | GW-666 | 0010087-03A | N | NA | Reporting limits for Gross Alpha and Beta were exceeded. |
| 6 | GW-80 | 0010087-03A | N | NA | Reporting limits for Gross Alpha and Beta were exceeded. |
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# DATA VALIDATION WORKSHEET

**Analytical Method:** Various **QC Identification[a]:** various

**Laboratory:** Barringer **Work Order:** 0012158

| Validation Criteria | Sample Number | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| Hardcopy vs. Chain-of-Custody | A | A | | | | | | | | | | | | | | | |
| Holding Time | NA | NA | | | | | | | | | | | | | | | |
| Analyte List | A | A | | | | | | | | | | | | | | | |
| Reporting Limits | 1 | 1 | | | | | | | | | | | | | | | |
| Initial Calibration (all methods) | NA | NA | | | | | | | | | | | | | | | |
| Initial Check Blank (ICP & AA methods) | NA | NA | | | | | | | | | | | | | | | |
| Continuing Calibration (ICP & AA methods) | NA | NA | | | | | | | | | | | | | | | |
| Injection Time(s) (all methods) | NA | NA | | | | | | | | | | | | | | | |
| Interference Check Standard (ICP Method | NA | NA | | | | | | | | | | | | | | | |
| Method Blank (all methods) | AL | AL | | | | | | | | | | | | | | | |
| Laboratory Control Sample (all methods) | AL | AL | | | | | | | | | | | | | | | |
| Laboratory Control Sample Duplicate (lab specific) | AL | AL | | | | | | | | | | | | | | | |
| Matrix Spike/Matrix Spike Duplicate | AL | AL | | | | | | | | | | | | | | | |
| Matrix Duplicate (Lab Specific) | NA | NA | | | | | | | | | | | | | | | |
| Field Duplicate/Replicate | NA | NA | | | | | | | | | | | | | | | |
| Equipment Rinsate Blanks | NA | NA | | | | | | | | | | | | | | | |
| Electronic Deliverable vs. Hardcopy | A | A | | | | | | | | | | | | | | | |
| Electronic Deliverable vs. Chain of Custody | A | A | | | | | | | | | | | | | | | |

(a) List QC batch identification if different than Batch ID
A indicates validation criteria were met
A/L indicates validation criteria were met based upon Laboratory's QC Summary Form
X indicates validation criteria were not met
N indicates data review were not a project specific requirement
N/A indicates criteria are not applicable for the specified analytical method
N/R indicates data not available for review

NOTES: 1. Reporting limits were exceeded for indicated parameters.

# DATA VALIDATION WORKSHEET

**Analytical Method:** Various **QC Identification[a]:** various

**Laboratory:** Barringer **Work Order:** 0010087

| Validation Criteria | Sample Number | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| Hardcopy vs. Chain-of-Custody | A | A | A | A | A | A | | | | | | | | | | | |
| Holding Time | NA | NA | NA | NA | NA | NA | | | | | | | | | | | |
| Analyte List | A | A | A | A | A | A | | | | | | | | | | | |
| Reporting Limits | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | |
| Initial Calibration (all methods) | NA | NA | NA | NA | NA | NA | | | | | | | | | | | |
| Initial Check Blank (ICP & AA methods) | NA | NA | NA | NA | NA | NA | | | | | | | | | | | |
| Continuing Calibration (ICP & AA methods) | NA | NA | NA | NA | NA | NA | | | | | | | | | | | |
| Injection Time(s) (all methods) | NA | NA | NA | NA | NA | NA | | | | | | | | | | | |
| Interference Check Standard (ICP Method | NA | NA | NA | NA | NA | NA | | | | | | | | | | | |
| Method Blank (all methods) | AL | AL | AL | AL | AL | AL | | | | | | | | | | | |
| Laboratory Control Sample (all methods) | AL | AL | AL | AL | AL | AL | | | | | | | | | | | |
| Laboratory Control Sample Duplicate (lab specific) | AL | AL | AL | AL | AL | AL | | | | | | | | | | | |
| Matrix Spike/Matrix Spike Duplicate | AL | AL | AL | AL | AL | AL | | | | | | | | | | | |
| Matrix Duplicate (Lab Specific) | NA | NA | NA | NA | NA | NA | | | | | | | | | | | |
| Field Duplicate/Replicate | NA | NA | NA | NA | NA | NA | | | | | | | | | | | |
| Equipment Rinsate Blanks | NA | NA | NA | NA | NA | NA | | | | | | | | | | | |
| Electronic Deliverable vs. Hardcopy | A | A | A | A | A | A | | | | | | | | | | | |
| Electronic Deliverable vs. Chain of Custody | A | A | A | A | A | A | | | | | | | | | | | |

(a) List QC batch identification if different than Batch ID
A indicates validation criteria were met
A/L indicates validation criteria were met based upon Laboratory's QC Summary Form
X indicates validation criteria were not met
N indicates data review were not a project specific requirement
N/A indicates criteria are not applicable for the specified analytical method
N/R indicates data not available for review

NOTES: 1. Reporting limits for Gross Alpha and Beta were exceeded.

## FIGURE B.12-2
## INORGANIC ANALYSIS DATA VALIDATION WORKSHEET

**Analytical Method/Analytes:** Various Radiochemical **Sample Collection Date:** 10/4/00

**Laboratory:** Barringer **Job Number:** 0010166

**Batch Identification:** various **Matrix:** Waters

**QC Identification[a]:** _____ **Page:** 1 of 2

**Validation Complete:** _____ 12/8/00
(Date/Signature)

| Sample No. | Sample ID | Lab. ID | Hits (Y/N) | Quals. | Comments |
|---|---|---|---|---|---|
| 1 | GW-19A | 0010166-01A | N | NA | None |
| 2 | | | | | |
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# DATA VALIDATION WORKSHEET

**Analytical Method:** Various **QC Identification[a]:** various

**Laboratory:** Barringer **Work Order:** 0010166

| Validation Criteria | Sample Number | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| Hardcopy vs. Chain-of-Custody | A | | | | | | | | | | | | | | | | |
| Holding Time | NA | | | | | | | | | | | | | | | | |
| Analyte List | A | | | | | | | | | | | | | | | | |
| Reporting Limits | I | | | | | | | | | | | | | | | | |
| Initial Calibration (all methods) | NA | | | | | | | | | | | | | | | | |
| Initial Check Blank (ICP & AA methods) | NA | | | | | | | | | | | | | | | | |
| Continuing Calibration (ICP & AA methods) | NA | | | | | | | | | | | | | | | | |
| Injection Time(s) (all methods) | NA | | | | | | | | | | | | | | | | |
| Interference Check Standard (ICP Method | NA | | | | | | | | | | | | | | | | |
| Method Blank (all methods) | AL | | | | | | | | | | | | | | | | |
| Laboratory Control Sample (all methods) | AL | | | | | | | | | | | | | | | | |
| Laboratory Control Sample Duplicate (lab specific) | AL | | | | | | | | | | | | | | | | |
| Matrix Spike/Matrix Spike Duplicate | AL | | | | | | | | | | | | | | | | |
| Matrix Duplicate (Lab Specific) | NA | | | | | | | | | | | | | | | | |
| Field Duplicate/Replicate | NA | | | | | | | | | | | | | | | | |
| Equipment Rinsate Blanks | NA | | | | | | | | | | | | | | | | |
| Electronic Deliverable vs. Hardcopy | A | | | | | | | | | | | | | | | | |
| Electronic Deliverable vs. Chain of Custody | A | | | | | | | | | | | | | | | | |

(a) List QC batch identification if different than Batch ID
A indicates validation criteria were met
A/L indicates validation criteria were met based upon Laboratory's QC Summary Form
X indicates validation criteria were not met
N indicates data review were not a project specific requirement
N/A indicates criteria are not applicable for the specified analytical method
N/R indicates data not available for review

NOTES: None

## FIGURE B.12-2
## INORGANIC ANALYSIS DATA VALIDATION WORKSHEET

Analytical Method/Analytes: Various Radiochemical Sample Collection Date: 10/18/00

Laboratory: Barringer Job Number: 0010185

Batch Identification: various Matrix: Waters

QC Identification[a]: Page: 1 of 2

Validation Complete: 1/16/01

(Date/Signature)

| Sample No. | Sample ID | Lab. ID | Hits (Y/N) | Quals. | Comments |
|---|---|---|---|---|---|
| 1 | GW-60 | 0010185-01A,C | N | NA | None |
| 2 | GW-58 | 0010185-02A,C | N | NA | None |
| 3 | GW-302 | 0010185-03A,C | N | NA | None |
| 4 | GW-28 | 0010185-04A,C | N | NA | None |
| 5 | GW-57 | 0010185-05A,C | N | NA | None |
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# DATA VALIDATION WORKSHEET

**Analytical Method:** Various **QC Identification[a]:** various

**Laboratory:** Barringer **Work Order:** 0010185

| Validation Criteria | Sample Number | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| Hardcopy vs. Chain-of-Custody | A | A | A | A | A | | | | | | | | | | | | |
| Holding Time | NA | NA | NA | NA | NA | | | | | | | | | | | | |
| Analyte List | A | A | A | A | A | | | | | | | | | | | | |
| Reporting Limits | A | A | A | A | A | | | | | | | | | | | | |
| Initial Calibration (all methods) | NA | NA | NA | NA | NA | | | | | | | | | | | | |
| Initial Check Blank (ICP & AA methods) | NA | NA | NA | NA | NA | | | | | | | | | | | | |
| Continuing Calibration (ICP & AA methods) | NA | NA | NA | NA | NA | | | | | | | | | | | | |
| Injection Time(s) (all methods) | NA | NA | NA | NA | NA | | | | | | | | | | | | |
| Interference Check Standard (ICP Method | NA | NA | NA | NA | NA | | | | | | | | | | | | |
| Method Blank (all methods) | AL | AL | AL | AL | AL | | | | | | | | | | | | |
| Laboratory Control Sample (all methods) | AL | AL | AL | AL | AL | | | | | | | | | | | | |
| Laboratory Control Sample Duplicate (lab specific) | AL | AL | AL | AL | AL | | | | | | | | | | | | |
| Matrix Spike/Matrix Spike Duplicate | AL | AL | AL | AL | AL | | | | | | | | | | | | |
| Matrix Duplicate (Lab Specific) | NA | NA | NA | NA | NA | | | | | | | | | | | | |
| Field Duplicate/Replicate | NA | NA | NA | NA | NA | | | | | | | | | | | | |
| Equipment Rinsate Blanks | NA | NA | NA | NA | NA | | | | | | | | | | | | |
| Electronic Deliverable vs. Hardcopy | A | A | A | A | A | | | | | | | | | | | | |
| Electronic Deliverable vs. Chain of Custody | A | A | A | A | A | | | | | | | | | | | | |

(a) List QC batch identification if different than Batch ID
A indicates validation criteria were met
A/L indicates validation criteria were met based upon Laboratory's QC Summary Form
X indicates validation criteria were not met
N indicates data review were not a project specific requirement
N/A indicates criteria are not applicable for the specified analytical method
N/R indicates data not available for review

NOTES: None

# FIGURE B.12-2
# INORGANIC ANALYSIS DATA VALIDATION WORKSHEET

**Analytical Method/Analytes:** Various Radiochemical **Sample Collection Date:** 10/19/00

**Laboratory:** Barringer **Job Number:** 0010202

**Batch Identification:** various **Matrix:** Waters

**QC Identification[a]:** _____ **Page:** 1 of 2

**Validation Complete:** _____ 1/10/01

(Date/Signature)

| Sample No. | Sample ID | Lab. ID | Hits (Y/N) | Quals. | Comments |
|---|---|---|---|---|---|
| 1 | GW-25 | 0010202-01A,B,C | N | NA | None |
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# DATA VALIDATION WORKSHEET

**Analytical Method:** Various **QC Identification[a]:** various

**Laboratory:** Barringer **Work Order:** 0010202

| Validation Criteria | Sample Number | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| Hardcopy vs. Chain-of-Custody | A | | | | | | | | | | | | | | | | |
| Holding Time | NA | | | | | | | | | | | | | | | | |
| Analyte List | A | | | | | | | | | | | | | | | | |
| Reporting Limits | A | | | | | | | | | | | | | | | | |
| Initial Calibration (all methods) | NA | | | | | | | | | | | | | | | | |
| Initial Check Blank (ICP & AA methods) | NA | | | | | | | | | | | | | | | | |
| Continuing Calibration (ICP & AA methods) | NA | | | | | | | | | | | | | | | | |
| Injection Time(s) (all methods) | NA | | | | | | | | | | | | | | | | |
| Interference Check Standard (ICP Method | NA | | | | | | | | | | | | | | | | |
| Method Blank (all methods) | AL | | | | | | | | | | | | | | | | |
| Laboratory Control Sample (all methods) | AL | | | | | | | | | | | | | | | | |
| Laboratory Control Sample Duplicate (lab specific) | AL | | | | | | | | | | | | | | | | |
| Matrix Spike/Matrix Spike Duplicate | AL | | | | | | | | | | | | | | | | |
| Matrix Duplicate (Lab Specific) | NA | | | | | | | | | | | | | | | | |
| Field Duplicate/Replicate | NA | | | | | | | | | | | | | | | | |
| Equipment Rinsate Blanks | NA | | | | | | | | | | | | | | | | |
| Electronic Deliverable vs. Hardcopy | A | | | | | | | | | | | | | | | | |
| Electronic Deliverable vs. Chain of Custody | A | | | | | | | | | | | | | | | | |

(a) List QC batch identification if different than Batch ID
A indicates validation criteria were met
A/L indicates validation criteria were met based upon Laboratory's QC Summary Form
X indicates validation criteria were not met
N indicates data review were not a project specific requirement
N/A indicates criteria are not applicable for the specified analytical method
N/R indicates data not available for review

NOTES: None

FIGURE B.12-2
INORGANIC ANALYSIS DATA VALIDATION WORKSHEET

Analytical Method/Analytes: Various Radiochemical Sample Collection Date: 10/19/00

Laboratory: Barringer Job Number: 0010203

Batch Identification: various Matrix: Waters

QC Identification[a]: Page: 1 of 2

Validation Complete: 1/11/01

(Date/Signature)

| Sample No. | Sample ID | Lab. ID | Hits (Y/N) | Quals. | Comments |
|---|---|---|---|---|---|
| 1 | GW-27 | 0010203-01A,B | N | NA | None |
| 2 | GW-36 | 0010203-01A | N | NA | None |
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# DATA VALIDATION WORKSHEET

**Analytical Method:** Various **QC Identification[a]:** various

**Laboratory:** Barringer **Work Order:** 0010203

| Validation Criteria | Sample Number | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| Hardcopy vs. Chain-of-Custody | A | | | | | | | | | | | | | | | | |
| Holding Time | NA | | | | | | | | | | | | | | | | |
| Analyte List | A | | | | | | | | | | | | | | | | |
| Reporting Limits | A | | | | | | | | | | | | | | | | |
| Initial Calibration (all methods) | NA | | | | | | | | | | | | | | | | |
| Initial Check Blank (ICP & AA methods) | NA | | | | | | | | | | | | | | | | |
| Continuing Calibration (ICP & AA methods) | NA | | | | | | | | | | | | | | | | |
| Injection Time(s) (all methods) | NA | | | | | | | | | | | | | | | | |
| Interference Check Standard (ICP Method | NA | | | | | | | | | | | | | | | | |
| Method Blank (all methods) | AL | | | | | | | | | | | | | | | | |
| Laboratory Control Sample (all methods) | AL | | | | | | | | | | | | | | | | |
| Laboratory Control Sample Duplicate (lab specific) | AL | | | | | | | | | | | | | | | | |
| Matrix Spike/Matrix Spike Duplicate | AL | | | | | | | | | | | | | | | | |
| Matrix Duplicate (Lab Specific) | NA | | | | | | | | | | | | | | | | |
| Field Duplicate/Replicate | NA | | | | | | | | | | | | | | | | |
| Equipment Rinsate Blanks | NA | | | | | | | | | | | | | | | | |
| Electronic Deliverable vs. Hardcopy | A | | | | | | | | | | | | | | | | |
| Electronic Deliverable vs. Chain of Custody | A | | | | | | | | | | | | | | | | |

(a) List QC batch identification if different than Batch ID
A indicates validation criteria were met
A/L indicates validation criteria were met based upon Laboratory's QC Summary Form
X indicates validation criteria were not met
N indicates data review were not a project specific requirement
N/A indicates criteria are not applicable for the specified analytical method
N/R indicates data not available for review

NOTES: None

FIGURE B.12-2
INORGANIC ANALYSIS DATA VALIDATION WORKSHEET

**Analytical Method/Analytes:** Various Radiochemical **Sample Collection Date:** 10/25/00

**Laboratory:** Barringer **Job Number:** 0010250

**Batch Identification:** various **Matrix:** Waters

**QC Identification[a]:** _____ **Page:** 1 of 2

**Validation Complete:** _____ 2/23/01
(Date/Signature)

| Sample No. | Sample ID | Lab. ID | Hits (Y/N) | Quals. | Comments |
|---|---|---|---|---|---|
| 1 | GW-84 | 0010250-01A | N | NA | Alpha, Beta reporting limits were exceeded. |
| 2 | GW-85 | 0010250-02A | N | NA | Alpha, Beta reporting limits were exceeded. |
| 3 | GW-86 | 0010250-03A | N | NA | Alpha, Beta reporting limits were exceeded. |
| 4 | GW-406 | 0010250-04A | N | NA | Alpha, Beta reporting limits were exceeded. |
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# DATA VALIDATION WORKSHEET

**Analytical Method:** Various **QC Identification[a]:** various

**Laboratory:** Barringer **Work Order:** 0010250

| Validation Criteria | Sample Number | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| Hardcopy vs. Chain-of-Custody | A | A | A | A | | | | | | | | | | | | | |
| Holding Time | NA | NA | NA | NA | | | | | | | | | | | | | |
| Analyte List | A | A | A | A | | | | | | | | | | | | | |
| Reporting Limits | 1 | 1 | 1 | 1 | | | | | | | | | | | | | |
| Initial Calibration (all methods) | NA | NA | NA | NA | | | | | | | | | | | | | |
| Initial Check Blank (ICP & AA methods) | NA | NA | NA | NA | | | | | | | | | | | | | |
| Continuing Calibration (ICP & AA methods) | NA | NA | NA | NA | | | | | | | | | | | | | |
| Injection Time(s) (all methods) | NA | NA | NA | NA | | | | | | | | | | | | | |
| Interference Check Standard (ICP Method | NA | NA | NA | NA | | | | | | | | | | | | | |
| Method Blank (all methods) | AL | AL | AL | AL | | | | | | | | | | | | | |
| Laboratory Control Sample (all methods) | AL | AL | AL | AL | | | | | | | | | | | | | |
| Laboratory Control Sample Duplicate (lab specific) | AL | AL | AL | AL | | | | | | | | | | | | | |
| Matrix Spike/Matrix Spike Duplicate | AL | AL | AL | AL | | | | | | | | | | | | | |
| Matrix Duplicate (Lab Specific) | NA | NA | NA | NA | | | | | | | | | | | | | |
| Field Duplicate/Replicate | NA | NA | NA | NA | | | | | | | | | | | | | |
| Equipment Rinsate Blanks | NA | NA | NA | NA | | | | | | | | | | | | | |
| Electronic Deliverable vs. Hardcopy | A | A | A | A | | | | | | | | | | | | | |
| Electronic Deliverable vs. Chain of Custody | A | A | A | A | | | | | | | | | | | | | |

(a) List QC batch identification if different than Batch ID
A indicates validation criteria were met
A/L indicates validation criteria were met based upon Laboratory's QC Summary Form
X indicates validation criteria were not met
N indicates data review were not a project specific requirement
N/A indicates criteria are not applicable for the specified analytical method
N/R indicates data not available for review

NOTES: 1. Alpha, Beta reporting limits were exceeded.

## FIGURE B.12-2
## INORGANIC ANALYSIS DATA VALIDATION WORKSHEET

**Analytical Method/Analytes:** Various Radiochemical **Sample Collection Date:** 10/30/00

**Laboratory:** Barringer **Job Number:** 0011021

**Batch Identification:** various **Matrix:** Waters

**QC Identification[a]:** 1 **Page:** 1 of 2

**Validation Complete:** _____ 1/11/01
(Date/Signature)

| Sample No. | Sample ID | Lab. ID | Hits (Y/N) | Quals. | Comments |
|---|---|---|---|---|---|
| 1 | GW-103 | 0011021-01A,B,C | N | NA | Laboratory MDAs exceeded project limits for Tc, Alpha, Beta. |
| 2 | GW-104 | 0011021-01A,B,C | N | NA | Laboratory MDAs exceeded project limits for Tc, Alpha, Beta. |
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# DATA VALIDATION WORKSHEET

**Analytical Method:** Various **QC Identification[a]:** various

**Laboratory:** Barringer **Work Order:** 0011021

| Validation Criteria | Sample Number | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| Hardcopy vs. Chain-of-Custody | A | A | | | | | | | | | | | | | | | |
| Holding Time | NA | NA | | | | | | | | | | | | | | | |
| Analyte List | A | A | | | | | | | | | | | | | | | |
| Reporting Limits | 1 | 1 | | | | | | | | | | | | | | | |
| Initial Calibration (all methods) | NA | NA | | | | | | | | | | | | | | | |
| Initial Check Blank (ICP & AA methods) | NA | NA | | | | | | | | | | | | | | | |
| Continuing Calibration (ICP & AA methods) | NA | NA | | | | | | | | | | | | | | | |
| Injection Time(s) (all methods) | NA | NA | | | | | | | | | | | | | | | |
| Interference Check Standard (ICP Method | NA | NA | | | | | | | | | | | | | | | |
| Method Blank (all methods) | AL | AL | | | | | | | | | | | | | | | |
| Laboratory Control Sample (all methods) | AL | AL | | | | | | | | | | | | | | | |
| Laboratory Control Sample Duplicate (lab specific) | AL | AL | | | | | | | | | | | | | | | |
| Matrix Spike/Matrix Spike Duplicate | AL | AL | | | | | | | | | | | | | | | |
| Matrix Duplicate (Lab Specific) | NA | NA | | | | | | | | | | | | | | | |
| Field Duplicate/Replicate | NA | NA | | | | | | | | | | | | | | | |
| Equipment Rinsate Blanks | NA | NA | | | | | | | | | | | | | | | |
| Electronic Deliverable vs. Hardcopy | A | A | | | | | | | | | | | | | | | |
| Electronic Deliverable vs. Chain of Custody | A | A | | | | | | | | | | | | | | | |

(a) List QC batch identification if different than Batch ID
A indicates validation criteria were met
A/L indicates validation criteria were met based upon Laboratory's QC Summary Form
X indicates validation criteria were not met
N indicates data review were not a project specific requirement
N/A indicates criteria are not applicable for the specified analytical method
N/R indicates data not available for review

NOTES: 1. Laboratory MDAs exceeded project limits for Tc, Alpha, Beta.

## FIGURE B.12-2
## INORGANIC ANALYSIS DATA VALIDATION WORKSHEET

**Analytical Method/Analytes:** Various Radiochemical **Sample Collection Date:** 11/02/00

**Laboratory:** Barringer **Job Number:** 0011084

**Batch Identification:** various **Matrix:** Waters

**QC Identification[a]:** _____ **Page:** 1 of 2

**Validation Complete:** _____ 2/23/01
(Date/Signature)

| Sample No. | Sample ID | Lab. ID | Hits (Y/N) | Quals. | Comments |
|---|---|---|---|---|---|
| 1 | GW-99 | 0011084-01A | N | NA | Alpha, Beta reporting limits were exceeded. |
| 2 | GW-94 | 0011084-02A | N | NA | Alpha, Beta reporting limits were exceeded. |
| 3 | GW-95 | 0011084-03A | N | NA | Alpha, Beta reporting limits were exceeded. |
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# DATA VALIDATION WORKSHEET

**Analytical Method:** Various **QC Identification[a]:** various

**Laboratory:** Barringer **Work Order:** 0011084

| Validation Criteria | Sample Number | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| Hardcopy vs. Chain-of-Custody | A | A | A | | | | | | | | | | | | | | |
| Holding Time | NA | NA | NA | | | | | | | | | | | | | | |
| Analyte List | A | A | A | | | | | | | | | | | | | | |
| Reporting Limits | 1 | 1 | 1 | | | | | | | | | | | | | | |
| Initial Calibration (all methods) | NA | NA | NA | | | | | | | | | | | | | | |
| Initial Check Blank (ICP & AA methods) | NA | NA | NA | | | | | | | | | | | | | | |
| Continuing Calibration (ICP & AA methods) | NA | NA | NA | | | | | | | | | | | | | | |
| Injection Time(s) (all methods) | NA | NA | NA | | | | | | | | | | | | | | |
| Interference Check Standard (ICP Method | NA | NA | NA | | | | | | | | | | | | | | |
| Method Blank (all methods) | AL | AL | AL | | | | | | | | | | | | | | |
| Laboratory Control Sample (all methods) | AL | AL | AL | | | | | | | | | | | | | | |
| Laboratory Control Sample Duplicate (lab specific) | AL | AL | AL | | | | | | | | | | | | | | |
| Matrix Spike/Matrix Spike Duplicate | AL | AL | AL | | | | | | | | | | | | | | |
| Matrix Duplicate (Lab Specific) | NA | NA | NA | | | | | | | | | | | | | | |
| Field Duplicate/Replicate | NA | NA | NA | | | | | | | | | | | | | | |
| Equipment Rinsate Blanks | NA | NA | NA | | | | | | | | | | | | | | |
| Electronic Deliverable vs. Hardcopy | A | A | A | | | | | | | | | | | | | | |
| Electronic Deliverable vs. Chain of Custody | A | A | A | | | | | | | | | | | | | | |

(a) List QC batch identification if different than Batch ID
A indicates validation criteria were met
A/L indicates validation criteria were met based upon Laboratory's QC Summary Form
X indicates validation criteria were not met
N indicates data review were not a project specific requirement
N/A indicates criteria are not applicable for the specified analytical method
N/R indicates data not available for review

NOTES: 1. Alpha, Beta reporting limits were exceeded.

## FIGURE B.12-2
## INORGANIC ANALYSIS DATA VALIDATION WORKSHEET

**Analytical Method/Analytes:** Various Radiochemical **Sample Collection Date:** 10/23/00

**Laboratory:** Barringer **Job Number:** 0010219

**Batch Identification:** various **Matrix:** Waters

**QC Identification[a]:** _____ **Page:** 1 of 2

**Validation Complete:** _____ 2/12/01

(Date/Signature)

| Sample No. | Sample ID | Lab. ID | Hits (Y/N) | Quals. | Comments |
|---|---|---|---|---|---|
| 1 | GW-26 | 0010219-01 | N | NA | none |
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# DATA VALIDATION WORKSHEET

**Analytical Method:** Various **QC Identification[(a)]:** various

**Laboratory:** Barringer **Work Order:** 0010219

| Validation Criteria | Sample Number | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| Hardcopy vs. Chain-of-Custody | A | | | | | | | | | | | | | | | | |
| Holding Time | NA | | | | | | | | | | | | | | | | |
| Analyte List | A | | | | | | | | | | | | | | | | |
| Reporting Limits | 1 | | | | | | | | | | | | | | | | |
| Initial Calibration (all methods) | NA | | | | | | | | | | | | | | | | |
| Initial Check Blank (ICP & AA methods) | NA | | | | | | | | | | | | | | | | |
| Continuing Calibration (ICP & AA methods) | NA | | | | | | | | | | | | | | | | |
| Injection Time(s) (all methods) | NA | | | | | | | | | | | | | | | | |
| Interference Check Standard (ICP Method | NA | | | | | | | | | | | | | | | | |
| Method Blank (all methods) | AL | | | | | | | | | | | | | | | | |
| Laboratory Control Sample (all methods) | AL | | | | | | | | | | | | | | | | |
| Laboratory Control Sample Duplicate (lab specific) | AL | | | | | | | | | | | | | | | | |
| Matrix Spike/Matrix Spike Duplicate | AL | | | | | | | | | | | | | | | | |
| Matrix Duplicate (Lab Specific) | NA | | | | | | | | | | | | | | | | |
| Field Duplicate/Replicate | NA | | | | | | | | | | | | | | | | |
| Equipment Rinsate Blanks | NA | | | | | | | | | | | | | | | | |
| Electronic Deliverable vs. Hardcopy | A | | | | | | | | | | | | | | | | |
| Electronic Deliverable vs. Chain of Custody | A | | | | | | | | | | | | | | | | |

(a) List QC batch identification if different than Batch ID
A indicates validation criteria were met
A/L indicates validation criteria were met based upon Laboratory's QC Summary Form
X indicates validation criteria were not met
N indicates data review were not a project specific requirement
N/A indicates criteria are not applicable for the specified analytical method
N/R indicates data not available for review

NOTES: 1. none

## FIGURE B.12-2
## INORGANIC ANALYSIS DATA VALIDATION WORKSHEET

**Analytical Method/Analytes:** Various Radiochemical **Sample Collection Date:** 10/23/00

**Laboratory:** Barringer **Job Number:** 0010220

**Batch Identification:** various **Matrix:** Waters

**QC Identification[a]:** _____ **Page:** 1 of 2

**Validation Complete:** _____ 2/23/01

(Date/Signature)

| Sample No. | Sample ID | Lab. ID | Hits (Y/N) | Quals. | Comments |
|---|---|---|---|---|---|
| 1 | GW-20 | 0010220-01 | N | NA | Alpha, Beta, Tc-99 exceeded reporting limits. |
| 2 | GW-24 | 0010220-02 | N | NA | Alpha, Beta, Tc-99 exceeded reporting limits. |
| 3 | GW-23 | 0010220-03 | N | NA | Alpha, Beta, Tc-99 exceeded reporting limits. |
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# DATA VALIDATION WORKSHEET

**Analytical Method:** Various **QC Identification[a]:** various

**Laboratory:** Barringer **Work Order:** 0010220

| Validation Criteria | Sample Number | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| Hardcopy vs. Chain-of-Custody | A | A | A | | | | | | | | | | | | | | |
| Holding Time | NA | NA | NA | | | | | | | | | | | | | | |
| Analyte List | A | A | A | | | | | | | | | | | | | | |
| Reporting Limits | 1 | 1 | 1 | | | | | | | | | | | | | | |
| Initial Calibration (all methods) | NA | NA | NA | | | | | | | | | | | | | | |
| Initial Check Blank (ICP & AA methods) | NA | NA | NA | | | | | | | | | | | | | | |
| Continuing Calibration (ICP & AA methods) | NA | NA | NA | | | | | | | | | | | | | | |
| Injection Time(s) (all methods) | NA | NA | NA | | | | | | | | | | | | | | |
| Interference Check Standard (ICP Method | NA | NA | NA | | | | | | | | | | | | | | |
| Method Blank (all methods) | AL | AL | AL | | | | | | | | | | | | | | |
| Laboratory Control Sample (all methods) | AL | AL | AL | | | | | | | | | | | | | | |
| Laboratory Control Sample Duplicate (lab specific) | AL | AL | AL | | | | | | | | | | | | | | |
| Matrix Spike/Matrix Spike Duplicate | AL | AL | AL | | | | | | | | | | | | | | |
| Matrix Duplicate (Lab Specific) | NA | NA | NA | | | | | | | | | | | | | | |
| Field Duplicate/Replicate | NA | NA | NA | | | | | | | | | | | | | | |
| Equipment Rinsate Blanks | NA | NA | NA | | | | | | | | | | | | | | |
| Electronic Deliverable vs. Hardcopy | A | A | A | | | | | | | | | | | | | | |
| Electronic Deliverable vs. Chain of Custody | A | A | A | | | | | | | | | | | | | | |

(a) List QC batch identification if different than Batch ID
A indicates validation criteria were met
A/L indicates validation criteria were met based upon Laboratory's QC Summary Form
X indicates validation criteria were not met
N indicates data review were not a project specific requirement
N/A indicates criteria are not applicable for the specified analytical method
N/R indicates data not available for review

NOTES: 1. Alpha, Beta, Tc-99 exceeded reporting limits.

## FIGURE B.12-2
## INORGANIC ANALYSIS DATA VALIDATION WORKSHEET

**Analytical Method/Analytes:** Various Radiochemical **Sample Collection Date:** 10/24/00

**Laboratory:** Barringer **Job Number:** 0010243

**Batch Identification:** various **Matrix:** Waters

**QC Identification[a]:** _____ **Page:** 1 of 2

**Validation Complete:** _____ 2/24/01 _____
(Date/Signature)

| Sample No. | Sample ID | Lab. ID | Hits (Y/N) | Quals. | Comments |
|---|---|---|---|---|---|
| 1 | GW-22 | 0010243-01 | N | NA | Alpha, Beta, TC-99 reporting limits were exceeded. |
| 2 | GW-81 | 0010243-02 | N | NA | Alpha, Beta, TC-99 reporting limits were exceeded. |
| 3 | GW-82 | 0010243-03 | N | NA | Alpha, Beta, TC-99 reporting limits were exceeded. |
| 4 | GW-83 | 0010243-04 | N | NA | Alpha, Beta, TC-99 reporting limits were exceeded. |
| 5 | GW-405 | 0010243-054 | N | NA | Alpha, Beta, TC-99 reporting limits were exceeded. |
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# DATA VALIDATION WORKSHEET

**Analytical Method:** Various **QC Identification[a]:** various

**Laboratory:** Barringer **Work Order:** 0010243

| Validation Criteria | Sample Number | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| Hardcopy vs. Chain-of-Custody | A | A | A | A | A | | | | | | | | | | | | |
| Holding Time | NA | NA | NA | NA | NA | | | | | | | | | | | | |
| Analyte List | A | A | A | A | A | | | | | | | | | | | | |
| Reporting Limits | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | | |
| Initial Calibration (all methods) | NA | NA | NA | NA | NA | | | | | | | | | | | | |
| Initial Check Blank (ICP & AA methods) | NA | NA | NA | NA | NA | | | | | | | | | | | | |
| Continuing Calibration (ICP & AA methods) | NA | NA | NA | NA | NA | | | | | | | | | | | | |
| Injection Time(s) (all methods) | NA | NA | NA | NA | NA | | | | | | | | | | | | |
| Interference Check Standard (ICP Method | NA | NA | NA | NA | NA | | | | | | | | | | | | |
| Method Blank (all methods) | AL | AL | AL | AL | AL | | | | | | | | | | | | |
| Laboratory Control Sample (all methods) | AL | AL | AL | AL | AL | | | | | | | | | | | | |
| Laboratory Control Sample Duplicate (lab specific) | AL | AL | AL | AL | AL | | | | | | | | | | | | |
| Matrix Spike/Matrix Spike Duplicate | AL | AL | AL | AL | AL | | | | | | | | | | | | |
| Matrix Duplicate (Lab Specific) | NA | NA | NA | NA | NA | | | | | | | | | | | | |
| Field Duplicate/Replicate | NA | NA | NA | NA | NA | | | | | | | | | | | | |
| Equipment Rinsate Blanks | NA | NA | NA | NA | NA | | | | | | | | | | | | |
| Electronic Deliverable vs. Hardcopy | A | A | A | A | A | | | | | | | | | | | | |
| Electronic Deliverable vs. Chain of Custody | A | A | A | A | A | | | | | | | | | | | | |

(a) List QC batch identification if different than Batch ID
A indicates validation criteria were met
A/L indicates validation criteria were met based upon Laboratory's QC Summary Form
X indicates validation criteria were not met
N indicates data review were not a project specific requirement
N/A indicates criteria are not applicable for the specified analytical method
N/R indicates data not available for review

NOTES: 1. Alpha, Beta, TC-99 reporting limits were exceeded.

## FIGURE B.12-2
## INORGANIC ANALYSIS DATA VALIDATION WORKSHEET

**Analytical Method/Analytes:** Various Radiochemical **Sample Collection Date:** 10/26/00

**Laboratory:** Barringer **Job Number:** 0011002

**Batch Identification:** various **Matrix:** Waters

**QC Identification[a]:** _____ **Page:** 1 of 2

**Validation Complete:** _____ 2/2-1/01
(Date/Signature)

| Sample No. | Sample ID | Lab. ID | Hits (Y/N) | Quals. | Comments |
|---|---|---|---|---|---|
| 1 | GW-92 | 0011002-01 | N | J | Alpha, Beta reporting limits were exceeded. RPDs for iso-U outside project limits. |
| 2 | GW-93 | 0011002-02 | N | J | Alpha, Beta reporting limits were exceeded. RPDs for iso-U outside project limits. |
| 3 | GW-407 | 0011002-03 | N | J | Alpha, Beta reporting limits were exceeded. RPDs for iso-U outside project limits. |
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# DATA VALIDATION WORKSHEET

**Analytical Method:** Various **QC Identification[a]:** various

**Laboratory:** Barringer **Work Order:** 0011002

| Validation Criteria | Sample Number | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| Hardcopy vs. Chain-of-Custody | A | A | A | | | | | | | | | | | | | | |
| Holding Time | NA | NA | NA | | | | | | | | | | | | | | |
| Analyte List | A | A | A | | | | | | | | | | | | | | |
| Reporting Limits | 1 | 1 | 1 | | | | | | | | | | | | | | |
| Initial Calibration (all methods) | NA | NA | NA | | | | | | | | | | | | | | |
| Initial Check Blank (ICP & AA methods) | NA | NA | NA | | | | | | | | | | | | | | |
| Continuing Calibration (ICP & AA methods) | NA | NA | NA | | | | | | | | | | | | | | |
| Injection Time(s) (all methods) | NA | NA | NA | | | | | | | | | | | | | | |
| Interference Check Standard (ICP Method | NA | NA | NA | | | | | | | | | | | | | | |
| Method Blank (all methods) | AL | AL | AL | | | | | | | | | | | | | | |
| Laboratory Control Sample (all methods) | AL | AL | AL | | | | | | | | | | | | | | |
| Laboratory Control Sample Duplicate (lab specific) | AL | AL | AL | | | | | | | | | | | | | | |
| Matrix Spike/Matrix Spike Duplicate | AL | AL | AL | | | | | | | | | | | | | | |
| Matrix Duplicate (Lab Specific) | NA | NA | NA | | | | | | | | | | | | | | |
| Field Duplicate/Replicate | NA | NA | NA | | | | | | | | | | | | | | |
| Equipment Rinsate Blanks | NA | NA | NA | | | | | | | | | | | | | | |
| Electronic Deliverable vs. Hardcopy | A | A | A | | | | | | | | | | | | | | |
| Electronic Deliverable vs. Chain of Custody | A | A | A | | | | | | | | | | | | | | |

(a) List QC batch identification if different than Batch ID
A indicates validation criteria were met
A/L indicates validation criteria were met based upon Laboratory's QC Summary Form
X indicates validation criteria were not met
N indicates data review were not a project specific requirement
N/A indicates criteria are not applicable for the specified analytical method
N/R indicates data not available for review

NOTES: 1. Reporting limits were exceeded for indicated parameters.

# FIGURE B.12-2
## INORGANIC ANALYSIS DATA VALIDATION WORKSHEET

**Analytical Method/Analytes:** Various Radiochemical **Sample Collection Date:** 10/31/00

**Laboratory:** Barringer **Job Number:** 0011030

**Batch Identification:** various **Matrix:** Waters

**QC Identification[a]:** _____ **Page:** 1 of 2

**Validation Complete:** _____ 1/11/01

(Date/Signature)

| Sample No. | Sample ID | Lab. ID | Hits (Y/N) | Quals. | Comments |
|---|---|---|---|---|---|
| 1 | GW-105 | 0011030-01A,B,C | N | NA | Laboratory MDAs exceeded project limits for Tc, Alpha, Beta. |
| 2 | GW-102 | 0011030-01A,B,C | N | NA | Laboratory MDAs exceeded project limits for Tc, Alpha, Beta. |
| 3 | GW-101 | 0011030-01A,B,C | N | NA | Laboratory MDAs exceeded project limits for Tc, Alpha, Beta. |
| 4 | GW-100 | 0011030-01A,B,C | N | NA | Laboratory MDAs exceeded project limits for Tc, Alpha, Beta. |
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# DATA VALIDATION WORKSHEET

**Analytical Method:** Various **QC Identification[a]:** various

**Laboratory:** Barringer **Work Order:** 0011030

| Validation Criteria | Sample Number | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| Hardcopy vs. Chain-of-Custody | A | A | A | A | | | | | | | | | | | | | |
| Holding Time | NA | NA | NA | NA | | | | | | | | | | | | | |
| Analyte List | A | A | A | A | | | | | | | | | | | | | |
| Reporting Limits | I | I | I | I | | | | | | | | | | | | | |
| Initial Calibration (all methods) | NA | NA | NA | NA | | | | | | | | | | | | | |
| Initial Check Blank (ICP & AA methods) | NA | NA | NA | NA | | | | | | | | | | | | | |
| Continuing Calibration (ICP & AA methods) | NA | NA | NA | NA | | | | | | | | | | | | | |
| Injection Time(s) (all methods) | NA | NA | NA | NA | | | | | | | | | | | | | |
| Interference Check Standard (ICP Method | NA | NA | NA | NA | | | | | | | | | | | | | |
| Method Blank (all methods) | AL | AL | AL | AL | | | | | | | | | | | | | |
| Laboratory Control Sample (all methods) | AL | AL | AL | AL | | | | | | | | | | | | | |
| Laboratory Control Sample Duplicate (lab specific) | AL | AL | AL | AL | | | | | | | | | | | | | |
| Matrix Spike/Matrix Spike Duplicate | AL | AL | AL | AL | | | | | | | | | | | | | |
| Matrix Duplicate (Lab Specific) | NA | NA | NA | NA | | | | | | | | | | | | | |
| Field Duplicate/Replicate | NA | NA | NA | NA | | | | | | | | | | | | | |
| Equipment Rinsate Blanks | NA | NA | NA | NA | | | | | | | | | | | | | |
| Electronic Deliverable vs. Hardcopy | A | A | A | A | | | | | | | | | | | | | |
| Electronic Deliverable vs. Chain of Custody | A | A | A | A | | | | | | | | | | | | | |

(a) List QC batch identification if different than Batch ID
A indicates validation criteria were met
A/L indicates validation criteria were met based upon Laboratory's QC Summary Form
X indicates validation criteria were not met
N indicates data review were not a project specific requirement
N/A indicates criteria are not applicable for the specified analytical method
N/R indicates data not available for review

NOTES: 1. Laboratory MDAs exceeded project limits for Tc, Alpha, Beta.

## FIGURE B.12-2
## INORGANIC ANALYSIS DATA VALIDATION WORKSHEET

**Analytical Method/Analytes:** Various Radiochemical **Sample Collection Date:** 11/13/00

**Laboratory:** Barringer **Job Number:** 0011142

**Batch Identification:** various **Matrix:** Waters

**QC Identification[a]:** _____ **Page:** 1 of 2

**Validation Complete:** 2/2-1/01
(Date/Signature)

| Sample No. | Sample ID | Lab. ID | Hits (Y/N) | Quals. | Comments |
|---|---|---|---|---|---|
| 1 | GW-29 | 0011142-01 | N | J | Alpha, Beta reporting limits were exceeded. |
| 2 | GW-77 | 0011142-02 | N | J | Alpha, Beta reporting limits were exceeded. |
| 3 | GW-64 | 0011142-03 | N | J | Alpha, Beta reporting limits were exceeded. |
| 4 | I-2-30 | 0011142-04 | N | J | Alpha, Beta Tc-99 reporting limits were exceeded. |
| 5 | GW-56R | 0011142-05 | N | J | Alpha, Beta Tc-99 reporting limits were exceeded. |
| 6 | GW-16R | 0011142-06 | N | J | Alpha, Beta Tc-99 reporting limits were exceeded. |
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# DATA VALIDATION WORKSHEET

**Analytical Method:** Various **QC Identification[a]:** various

**Laboratory:** Barringer **Work Order:** 0011142

| Validation Criteria | Sample Number | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| Hardcopy vs. Chain-of-Custody | A | A | A | A | A | A | | | | | | | | | | | |
| Holding Time | NA | NA | NA | NA | NA | NA | | | | | | | | | | | |
| Analyte List | A | A | A | A | A | A | | | | | | | | | | | |
| Reporting Limits | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | |
| Initial Calibration (all methods) | NA | NA | NA | NA | NA | NA | | | | | | | | | | | |
| Initial Check Blank (ICP & AA methods) | NA | NA | NA | NA | NA | NA | | | | | | | | | | | |
| Continuing Calibration (ICP & AA methods) | NA | NA | NA | NA | NA | NA | | | | | | | | | | | |
| Injection Time(s) (all methods) | NA | NA | NA | NA | NA | NA | | | | | | | | | | | |
| Interference Check Standard (ICP Method | NA | NA | NA | NA | NA | NA | | | | | | | | | | | |
| Method Blank (all methods) | AL | AL | AL | AL | AL | AL | | | | | | | | | | | |
| Laboratory Control Sample (all methods) | AL | AL | AL | AL | AL | AL | | | | | | | | | | | |
| Laboratory Control Sample Duplicate (lab specific) | AL | AL | AL | AL | AL | AL | | | | | | | | | | | |
| Matrix Spike/Matrix Spike Duplicate | AL | AL | AL | AL | AL | AL | | | | | | | | | | | |
| Matrix Duplicate (Lab Specific) | NA | NA | NA | NA | NA | NA | | | | | | | | | | | |
| Field Duplicate/Replicate | NA | NA | NA | NA | NA | NA | | | | | | | | | | | |
| Equipment Rinsate Blanks | NA | NA | NA | NA | NA | NA | | | | | | | | | | | |
| Electronic Deliverable vs. Hardcopy | A | A | A | A | A | A | | | | | | | | | | | |
| Electronic Deliverable vs. Chain of Custody | A | A | A | A | A | A | | | | | | | | | | | |

(a) List QC batch identification if different than Batch ID
A indicates validation criteria were met
A/L indicates validation criteria were met based upon Laboratory's QC Summary Form
X indicates validation criteria were not met
N indicates data review were not a project specific requirement
N/A indicates criteria are not applicable for the specified analytical method
N/R indicates data not available for review

NOTES: 1. Reporting limits were exceeded for indicated parameters.

## FIGURE B.12-2
## INORGANIC ANALYSIS DATA VALIDATION WORKSHEET

**Analytical Method/Analytes:** Tc-99 **Sample Collection Date:** Various

**Laboratory:** Barringer **Job Number:** 0012009

**Batch Identification:** various **Matrix:** Waters

**QC Identification[a]:** _____ **Page:** 1 of 2

**Validation Complete:** _____ 1/22/01

(Date/Signature)

| Sample No. | Sample ID | Lab. ID | Hits (Y/N) | Quals. | Comments |
|---|---|---|---|---|---|
| 1 | GW-119 | 0012009-01 | N | NA | None |
| 2 | GW-120 | 0012009-02 | N | NA | None |
| 3 | GW-121 | 0012009-03 | N | NA | None |
| 4 | GW-122 | 0012009-04 | N | NA | None |
| 5 | GW-108 | 0012009-05 | N | NA | None |
| 6 | GW-109 | 0012009-06 | N | NA | None |
| 7 | GW-110 | 0012009-07 | N | NA | None |
| 8 | GW-111 | 0012009-08 | N | NA | None |
| 9 | GW-112 | 0012009-09 | N | NA | None |
| 10 | GW-113 | 0012009-10 | N | NA | None |
| 11 | GW-114 | 0012009-11 | N | NA | None |
| 12 | GW-115 | 0012009-12 | N | NA | None |
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# DATA VALIDATION WORKSHEET

**Analytical Method:** Various **QC Identification[a]:** various

**Laboratory:** Barringer **Work Order:** 0012009

| Validation Criteria | Sample Number | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| Hardcopy vs. Chain-of-Custody | A | A | A | A | A | A | A | A | A | A | A | A | | | | | |
| Holding Time | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | | | |
| Analyte List | A | A | A | A | A | A | A | A | A | A | A | A | | | | | |
| Reporting Limits | AL | AL | AL | AL | AL | AL | AL | AL | AL | AL | AL | AL | | | | | |
| Initial Calibration (all methods) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | | | |
| Initial Check Blank (ICP & AA methods) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | | | |
| Continuing Calibration (ICP & AA methods) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | | | |
| Injection Time(s) (all methods) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | | | |
| Interference Check Standard (ICP Method | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | | | |
| Method Blank (all methods) | AL | AL | AL | AL | AL | AL | AL | AL | AL | AL | AL | AL | | | | | |
| Laboratory Control Sample (all methods) | AL | AL | AL | AL | AL | AL | AL | AL | AL | AL | AL | AL | | | | | |
| Laboratory Control Sample Duplicate (lab specific) | AL | AL | AL | AL | AL | AL | AL | AL | AL | AL | AL | AL | | | | | |
| Matrix Spike/Matrix Spike Duplicate | AL | AL | AL | AL | AL | AL | AL | AL | AL | AL | AL | AL | | | | | |
| Matrix Duplicate (Lab Specific) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | | | |
| Field Duplicate/Replicate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | | | |
| Equipment Rinsate Blanks | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | | | |
| Electronic Deliverable vs. Hardcopy | A | A | A | A | A | A | A | A | A | A | A | A | | | | | |
| Electronic Deliverable vs. Chain of Custody | A | A | A | A | A | A | A | A | A | A | A | A | | | | | |

(a) List QC batch identification if different than Batch ID
A indicates validation criteria were met
A/L indicates validation criteria were met based upon Laboratory's QC Summary Form
X indicates validation criteria were not met
N indicates data review were not a project specific requirement
N/A indicates criteria are not applicable for the specified analytical method
N/R indicates data not available for review

NOTES: None

## FIGURE B.12-2
## INORGANIC ANALYSIS DATA VALIDATION WORKSHEET

**Analytical Method/Analytes:** Various Radiochemical **Sample Collection Date:** 11/13/00

**Laboratory:** Barringer **Job Number:** 0011158

**Batch Identification:** various **Matrix:** Waters

**QC Identification[a]:** _____ **Page:** 1 of 2

**Validation Complete:** _____ 1/24/01
(Date/Signature)

| Sample No. | Sample ID | Lab. ID | Hits (Y/N) | Quals. | Comments |
|---|---|---|---|---|---|
| 1 | P3-95 SWC | 0011158-01 | N | J | Alpha, Beta, Iso-U reporting limits were exceeded. |
| 2 | P3-95 NEC | 0011158-02 | N | J | Alpha, Beta, Tc-99 reporting limits were exceeded. |
| 3 | P3-97 NEC | 0011158-03 | N | J | Alpha, Beta reporting limits were exceeded. |
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# DATA VALIDATION WORKSHEET

**Analytical Method:** Various **QC Identification[a]:** various

**Laboratory:** Barringer **Work Order:** 0011158

| Validation Criteria | Sample Number | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| Hardcopy vs. Chain-of-Custody | A | A | A | | | | | | | | | | | | | | |
| Holding Time | NA | NA | NA | | | | | | | | | | | | | | |
| Analyte List | A | A | A | | | | | | | | | | | | | | |
| Reporting Limits | 1 | 1 | 1 | | | | | | | | | | | | | | |
| Initial Calibration (all methods) | NA | NA | NA | | | | | | | | | | | | | | |
| Initial Check Blank (ICP & AA methods) | NA | NA | NA | | | | | | | | | | | | | | |
| Continuing Calibration (ICP & AA methods) | NA | NA | NA | | | | | | | | | | | | | | |
| Injection Time(s) (all methods) | NA | NA | NA | | | | | | | | | | | | | | |
| Interference Check Standard (ICP Method | NA | NA | NA | | | | | | | | | | | | | | |
| Method Blank (all methods) | AL | AL | AL | | | | | | | | | | | | | | |
| Laboratory Control Sample (all methods) | AL | AL | AL | | | | | | | | | | | | | | |
| Laboratory Control Sample Duplicate (lab specific) | AL | AL | AL | | | | | | | | | | | | | | |
| Matrix Spike/Matrix Spike Duplicate | AL | AL | AL | | | | | | | | | | | | | | |
| Matrix Duplicate (Lab Specific) | NA | NA | NA | | | | | | | | | | | | | | |
| Field Duplicate/Replicate | NA | NA | NA | | | | | | | | | | | | | | |
| Equipment Rinsate Blanks | NA | NA | NA | | | | | | | | | | | | | | |
| Electronic Deliverable vs. Hardcopy | A | A | A | | | | | | | | | | | | | | |
| Electronic Deliverable vs. Chain of Custody | A | A | A | | | | | | | | | | | | | | |

(a) List QC batch identification if different than Batch ID
A indicates validation criteria were met
A/L indicates validation criteria were met based upon Laboratory's QC Summary Form
X indicates validation criteria were not met
N indicates data review were not a project specific requirement
N/A indicates criteria are not applicable for the specified analytical method
N/R indicates data not available for review

NOTES: 1. Reporting limits were exceeded for indicated parameters.

## FIGURE B.12-2
## INORGANIC ANALYSIS DATA VALIDATION WORKSHEET

**Analytical Method/Analytes:** Various Radiochemical **Sample Collection Date:** 11/15/00

**Laboratory:** Barringer **Job Number:** 0011180

**Batch Identification:** various **Matrix:** Waters

**QC Identification[a]:** _____ **Page:** 1 of 2

**Validation Complete:** _____ 2/21/01
(Date/Signature)

| Sample No. | Sample ID | Lab. ID | Hits (Y/N) | Quals. | Comments |
|---|---|---|---|---|---|
| 1 | P3-97A | 0011180-01 | N | J | Beta reporting limits were exceeded. |
| 2 | CL-4 | 0011180-02 | N | J | Alpha, Beta, Tc-99, iso-U reporting limits were exceeded. |
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# DATA VALIDATION WORKSHEET

**Analytical Method:** Various **QC Identification[a]:** various

**Laboratory:** Barringer **Work Order:** 0011180

| Validation Criteria | Sample Number | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| Hardcopy vs. Chain-of-Custody | A | A | | | | | | | | | | | | | | | |
| Holding Time | NA | NA | | | | | | | | | | | | | | | |
| Analyte List | A | A | | | | | | | | | | | | | | | |
| Reporting Limits | 1 | 1 | | | | | | | | | | | | | | | |
| Initial Calibration (all methods) | NA | NA | | | | | | | | | | | | | | | |
| Initial Check Blank (ICP & AA methods) | NA | NA | | | | | | | | | | | | | | | |
| Continuing Calibration (ICP & AA methods) | NA | NA | | | | | | | | | | | | | | | |
| Injection Time(s) (all methods) | NA | NA | | | | | | | | | | | | | | | |
| Interference Check Standard (ICP Method | NA | NA | | | | | | | | | | | | | | | |
| Method Blank (all methods) | AL | AL | | | | | | | | | | | | | | | |
| Laboratory Control Sample (all methods) | AL | AL | | | | | | | | | | | | | | | |
| Laboratory Control Sample Duplicate (lab specific) | AL | AL | | | | | | | | | | | | | | | |
| Matrix Spike/Matrix Spike Duplicate | AL | AL | | | | | | | | | | | | | | | |
| Matrix Duplicate (Lab Specific) | NA | NA | | | | | | | | | | | | | | | |
| Field Duplicate/Replicate | NA | NA | | | | | | | | | | | | | | | |
| Equipment Rinsate Blanks | NA | NA | | | | | | | | | | | | | | | |
| Electronic Deliverable vs. Hardcopy | A | A | | | | | | | | | | | | | | | |
| Electronic Deliverable vs. Chain of Custody | A | A | | | | | | | | | | | | | | | |

(a) List QC batch identification if different than Batch ID
A indicates validation criteria were met
A/L indicates validation criteria were met based upon Laboratory's QC Summary Form
X indicates validation criteria were not met
N indicates data review were not a project specific requirement
N/A indicates criteria are not applicable for the specified analytical method
N/R indicates data not available for review

NOTES: 1. Reporting limits were exceeded for indicated parameters.

## FIGURE B.12-2
## INORGANIC ANALYSIS DATA VALIDATION WORKSHEET

**Analytical Method/Analytes:** Tc-99 **Sample Collection Date:** Various

**Laboratory:** Barringer **Job Number:** 0012013

**Batch Identification:** various **Matrix:** Waters

**QC Identification[a]:** _____ **Page:** 1 of 2

**Validation Complete:** _____ 1/22/01
(Date/Signature)

| Sample No. | Sample ID | Lab. ID | Hits (Y/N) | Quals. | Comments |
|---|---|---|---|---|---|
| 1 | GW-63 | 0012013-01 | N | NA | None |
| 2 | GW-707 | 0012013-02 | N | NA | None |
| 3 | I-1-30 | 0012013-03 | N | NA | None |
| 4 | GW-71 | 0012013-04 | N | NA | None |
| 5 | GW-659 | 0012013-05 | N | NA | None |
| 6 | GW-79 | 0012013-06 | N | NA | None |
| 7 | GW-666 | 0012013-07 | N | NA | None |
| 8 | GW-80 | 0012013-08 | N | NA | None |
| 9 | GW-88 | 0012013-09 | N | NA | None |
| 10 | GW-89 | 0012013-10 | N | NA | None |
| 11 | GW-90 | 0012013-11 | N | NA | None |
| 12 | GW-91 | 0012013-12 | N | NA | None |
| 13 | GW-116 | 0012013-13 | N | NA | None |
| 14 | GW-117 | 0012013-14 | N | NA | None |
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# DATA VALIDATION WORKSHEET

**Analytical Method:** Various **QC Identification[a]:** various

**Laboratory:** Barringer **Work Order:** 0012013

| Validation Criteria | Sample Number | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| Hardcopy vs. Chain-of-Custody | A | A | A | A | A | A | A | A | A | A | A | A | A | A | | | |
| Holding Time | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | |
| Analyte List | A | A | A | A | A | A | A | A | A | A | A | A | A | A | | | |
| Reporting Limits | AL | AL | AL | AL | AL | AL | AL | AL | AL | AL | AL | AL | AL | AL | | | |
| Initial Calibration (all methods) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | |
| Initial Check Blank (ICP & AA methods) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | |
| Continuing Calibration (ICP & AA methods) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | |
| Injection Time(s) (all methods) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | |
| Interference Check Standard (ICP Method | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | |
| Method Blank (all methods) | AL | AL | AL | AL | AL | AL | AL | AL | AL | AL | AL | AL | AL | AL | | | |
| Laboratory Control Sample (all methods) | AL | AL | AL | AL | AL | AL | AL | AL | AL | AL | AL | AL | AL | AL | | | |
| Laboratory Control Sample Duplicate (lab specific) | AL | AL | AL | AL | AL | AL | AL | AL | AL | AL | AL | AL | AL | AL | | | |
| Matrix Spike/Matrix Spike Duplicate | AL | AL | AL | AL | AL | AL | AL | AL | AL | AL | AL | AL | AL | AL | | | |
| Matrix Duplicate (Lab Specific) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | |
| Field Duplicate/Replicate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | |
| Equipment Rinsate Blanks | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | |
| Electronic Deliverable vs. Hardcopy | A | A | A | A | A | A | A | A | A | A | A | A | A | A | | | |
| Electronic Deliverable vs. Chain of Custody | A | A | A | A | A | A | A | A | A | A | A | A | A | A | | | |

(a) List QC batch identification if different than Batch ID
A indicates validation criteria were met
A/L indicates validation criteria were met based upon Laboratory's QC Summary Form
X indicates validation criteria were not met
N indicates data review were not a project specific requirement
N/A indicates criteria are not applicable for the specified analytical method
N/R indicates data not available for review

NOTES: None

## FIGURE B.12-2
## INORGANIC ANALYSIS DATA VALIDATION WORKSHEET

**Analytical Method/Analytes:** Tc-99 **Sample Collection Date:** Various

**Laboratory:** Barringer **Job Number:** 0012014

**Batch Identification:** various **Matrix:** Waters

**QC Identification[a]:** _____ **Page:** 1 of 2

**Validation Complete:** _____ 1/22/01

(Date/Signature)

| Sample No. | Sample ID | Lab. ID | Hits (Y/N) | Quals. | Comments |
|---|---|---|---|---|---|
| 1 | GW-66 | 0012014-01 | N | NA | None |
| 2 | GW-41 | 0012014-02 | N | NA | None |
| 3 | GW-42 | 0012014-03 | N | NA | None |
| 4 | GW-67 | 0012014-04 | N | NA | None |
| 5 | GW-67R | 0012014-05 | N | NA | None |
| 6 | GW-68 | 0012014-06 | N | NA | None |
| 7 | GW-68R | 0012014-07 | N | NA | None |
| 8 | GW-69 | 0012014-08 | N | NA | None |
| 9 | GW-69R | 0012014-09 | N | NA | None |
| 10 | GW-70 | 0012014-10 | N | NA | None |
| 11 | GW-25 | 0012014-11 | N | NA | None |
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# DATA VALIDATION WORKSHEET

**Analytical Method:** Various **QC Identification[a]:** various

**Laboratory:** Barringer **Work Order:** 0012014

| Validation Criteria | Sample Number | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| Hardcopy vs. Chain-of-Custody | A | A | A | A | A | A | A | A | A | A | A | | | | | | |
| Holding Time | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | | | | |
| Analyte List | A | A | A | A | A | A | A | A | A | A | A | | | | | | |
| Reporting Limits | AL | AL | AL | AL | AL | AL | AL | AL | AL | AL | AL | | | | | | |
| Initial Calibration (all methods) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | | | | |
| Initial Check Blank (ICP & AA methods) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | | | | |
| Continuing Calibration (ICP & AA methods) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | | | | |
| Injection Time(s) (all methods) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | | | | |
| Interference Check Standard (ICP Method | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | | | | |
| Method Blank (all methods) | AL | AL | AL | AL | AL | AL | AL | AL | AL | AL | AL | | | | | | |
| Laboratory Control Sample (all methods) | AL | AL | AL | AL | AL | AL | AL | AL | AL | AL | AL | | | | | | |
| Laboratory Control Sample Duplicate (lab specific) | AL | AL | AL | AL | AL | AL | AL | AL | AL | AL | AL | | | | | | |
| Matrix Spike/Matrix Spike Duplicate | AL | AL | AL | AL | AL | AL | AL | AL | AL | AL | AL | | | | | | |
| Matrix Duplicate (Lab Specific) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | | | | |
| Field Duplicate/Replicate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | | | | |
| Equipment Rinsate Blanks | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | | | | |
| Electronic Deliverable vs. Hardcopy | A | A | A | A | A | A | A | A | A | A | A | | | | | | |
| Electronic Deliverable vs. Chain of Custody | A | A | A | A | A | A | A | A | A | A | A | | | | | | |

(a) List QC batch identification if different than Batch ID
A indicates validation criteria were met
A/L indicates validation criteria were met based upon Laboratory's QC Summary Form
X indicates validation criteria were not met
N indicates data review were not a project specific requirement
N/A indicates criteria are not applicable for the specified analytical method
N/R indicates data not available for review

NOTES: None

## FIGURE B.12-2
## INORGANIC ANALYSIS DATA VALIDATION WORKSHEET

**Analytical Method/Analytes:** Various Radiochemical **Sample Collection Date:** 12/18/00

**Laboratory:** Barringer **Job Number:** 0012158

**Batch Identification:** various **Matrix:** Waters

**QC Identification[a]:** 1 **Page:** 1 of 2

**Validation Complete:** 2/24/01
(Date/Signature)

| Sample No. | Sample ID | Lab. ID | Hits (Y/N) | Quals. | Comments |
|---|---|---|---|---|---|
| 1 | P3-95 SWC | 0012158-01 | N | J | Alpha, Beta reporting limits were exceeded. |
| 2 | GW-701 | 0012158-02 | N | J | Alpha, Beta reporting limits were exceeded. |
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