Reference 15

LPC# 085 813 5001 Jo Daviess County
Bautsch-Gray Mine
ILN 000 508 088
SF/HRS
volume 2

# CERCLA Expanded Site Inspection Analytical Data

Prepared by:
Office of Site Evaluation
Division of Remediation Management
Bureau of Land

US EPA RECORDS CENTER REGION 5
427686

**ESAT Controlled Number:** ESAT5.17.01067 - pg 3/12/10

DATE: March 12, 2010

IEPA
**Attn: Mr. Mark Wagner**
1001 North Grand Avenue East
P.O. Box 19276
Springfield, IL 62794-9276

SITE NAME: **Bautsch-Grey Mine (IL)**

| Case | Lab | Samples | SDG | Matrix |
|---|---|---|---|---|
| 39260 | Bonner | 20 | ME0002 | soil |

**Analysis**: metals and cyanide

Upon receipt of data, please check each package for completeness and note any missing deliverables below.

**Send this form back to Sylvia Griffin, Data Management Coordinator after filling in the blanks below.**

Data Received by:_____ Date:_____

PROBLEMS:

Please indicate if data is complete, and note if there are any deliverables missing from the cases noted above.

_____

_____

Received by Data Management Coordinator, CRL for file.

Signature:_____ Date:_____

FROM: **U.S. EPA - Region 5**
Sylvia Griffin
Central Regional Laboratory
536 S. Clark, 10th Floor
Chicago, IL 60605

RECEIVED
MAR 15 2010
IEPA/BOL

Sent By: Pat Joyner
Data Coordinator

Controlled Document

# ESAT5.15.00431
ack
3-11-10

**Regional Transmittal Form**

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**
**REGION V**

**DATE:** 3/2/10

**SUBJECT:** Review of Data
Received for review on 12/11/09

**FROM:** Stephen L. Ostrodka, Chief (SRT-5J)
Superfund Field Services Section

**TO:** Data User: IEPA

**We have reviewed the data by CADRE for the following case:**

**SITE NAME:** Bautsch-Grey Mine (IL)

**CASE NUMBER:** 39260 **SDG NUMBER:** ME0002

**Number and Type of Samples:** 20 soils

**Sample Numbers:** ME0002-21

**Laboratory:** Bonner **Hrs. for Review:** 12.5 + 2.0 2/11/10

**Following are our findings:**

CC: Howard Pham
Region 5 TOPO
Mail Code: SRT-5J

**Below is a summary of the out-of-control audits and the possible effects on the data for this case:**

Twenty (20) soil samples, numbered ME0002-21, were collected on November 16-18, 2009. The lab received the samples on November 20, 2009. Although the cooler containing samples ME0002-06 was outside the required temperature range, no sample results are qualified for this deficiency. All samples were analyzed for metals and cyanide. All samples were analyzed using the CLP SOW ILM05.4 analysis procedures.

Mercury analysis was performed using a Cold Vapor AA Technique. Cyanide analysis was performed using the MIDI Distillation procedure. The remaining inorganic analyses were performed using an Inductively Coupled Plasma-Atomic Emission Spectroscopy (ICP-AES) procedure.

No Chain of Custody seal numbers are recorded on Form DC-1 for either cooler. The Inorganic Traffic Report & Chain of Custody Record lists the same 2 seal numbers for both coolers. One seal is included with the airbill for samples ME0002-06. There is a notation with the other airbill indicating no custody seal was present; however, the Sample Receipt Form for that cooler (Case page number 225) indicates there was a seal present. No sample results are qualified for this inconsistent information.

The laboratory performed matrix spikes for aluminum and iron (not required by ILM05.4). The results were evaluated according to spike concentrations reported by the laboratory. The laboratory reported recoveries for the CRQL Check Standard for aluminum, calcium, iron, magnesium, potassium and sodium (not required by ILM05.4). No data are qualified for values outside the standard acceptance range for this standard.

It appears that the serial dilution may have been performed using a 4X dilution instead of the required 5X. 13 elements (all elements where the undiluted sample is greater than 50X the MDL) failed the serial dilution. If the dilution is recalculated using a 4X dilution factor instead of 5X, none of the elements fail serial dilution limits. Additionally, several of the samples which were run at dilutions appear to have been run at different dilutions than those which were reported. ME0003 is reported at 4X; the % differences match closer if 3X is used as the dilution factor. ME0006 is reported at 5X; 4X matches better. Results are reported as per laboratory dilution factors without further qualification.

No handwritten preparation logs were included. It is unclear whether the actual weight used for preparation of the samples was correct as listed. Two out of the twenty values reported by the laboratory were rounded up when they should not have been. The reported results were corrected on samples ME0015 and ME0020 by this reviewer.

The CRQL value for cyanide on Form 9-IN was incorrectly reported as 125 ug/L. The correct value should be reported as 50 ug/L.

**1. HOLDING TIME:**

The following inorganic samples did not meet primary holding time criteria.
Hits are qualified "J-" and non-detects are qualified "UJ".

Cyanide
ME0002, ME0003, ME0004, ME0005, ME0006, ME0011, ME0012, ME0013, ME0014, ME0015, ME0016, ME0017, ME0018, ME0019, ME0020, ME0021

**2. CALIBRATIONS:**

No defects were found for the calibration or the CRQL standards.

**3. BLANKS:**

The following inorganic samples are associated with an ICB/CCB or preparation blank concentration which is greater than the method detection limit (MDL). The sample result is greater than the MDL.
Hits less than the CRQL are qualified "U". The sample result is raised to the CRQL.
Hits greater than the CRQL but less than 5 times the blank are qualified "U" and reported at the sample value.

Barium
ME0002, ME0003, ME0004, ME0005, ME0006, ME0013, ME0019

Beryllium
ME0002, ME0003, ME0004, ME0005, ME0006, ME0007, ME0009, ME0010, ME0011, ME0012

Cadmium
ME0009, ME0019

Cobalt
ME0002, ME0003, ME0010, ME0011, ME0012, ME0013, ME0014, ME0016, ME0017, ME0019, ME0020, ME0021

Selenium
ME0004, ME0005, ME0006, ME0007, ME0008, ME0009, ME0011, ME0014, ME0016, ME0018, ME0019, ME0020, ME0021

Sodium
ME0002, ME0003, ME0004, ME0005, ME0006, ME0007, ME0008, ME0009, ME0010, ME0011, ME0012, ME0013, ME0014, ME0015, ME0016, ME0017, ME0018, ME0019, ME0020, ME0021

The following inorganic samples are associated with an ICB/CCB or preparation blank concentration which is greater than the method detection limit (MDL) and with a negative

ICB/CCB or preparation blank whose absolute value is greater than the MDL. The sample result is greater than the MDL.

Hits less than the CRQL are qualified "U". The sample result is raised to the CRQL.

Hits greater than the CRQL but less than 5 times the blank are qualified "U" and reported at the sample value.

Thallium

ME0002, ME0006

**4. MATRIX SPIKE/MATRIX SPIKE DUPLICATE AND LAB CONTROL SAMPLE:**

The following inorganic samples are associated with a matrix spike recovery which is high (>125%) indicating that sample results may be biased high. The required post spike was performed and results were greater than 125%.

Hits are qualified "J+"; non-detects are not qualified.

Zinc

ME0002, ME0003, ME0004, ME0005, ME0006, ME0007, ME0008, ME0009, ME0010, ME0011, ME0012, ME0013, ME0014, ME0015, ME0016, ME0017, ME0018, ME0019, ME0020, ME0021

The following inorganic samples are associated with a matrix spike recovery which is low (30-74%) indicating that sample results may be biased low. The required post spike was performed and results were greater than or equal to 75%.

Hits are qualified "J" and non-detects are qualified "UJ".

Cyanide

ME0002, ME0003, ME0004, ME0005, ME0006, ME0007, ME0008, ME0009, ME0010, ME0011, ME0012, ME0013, ME0014, ME0015, ME0016, ME0017, ME0018, ME0019, ME0020, ME0021

The following inorganic samples are associated with a matrix spike recovery which is extremely low (<30%) indicating that sample results may be biased low. The required post spike was performed and results were greater than or equal to 75%.

Hits are qualified "J" and non-detects are qualified "UJ".

Antimony

ME0002, ME0003, ME0004, ME0005, ME0006, ME0007, ME0008, ME0009, ME0010, ME0011, ME0012, ME0013, ME0014, ME0015, ME0016, ME0017, ME0018, ME0019, ME0020, ME0021

No defects were found for the laboratory control sample.

**5. LABORATORY AND FIELD DUPLICATE:**

No defects were found for the laboratory duplicate samples.

ME0008 and ME0009 may be field duplicates. The following inorganic analytes are associated with field duplicate results which did not meet technical data validation criteria; however, no sample results are qualified for field duplicates.

Cadmium, Manganese, Zinc

**6. ICP ANALYSIS:**

The following inorganic samples are associated with an ICP serial dilution percent difference which is not in control.

Hits are qualified "J" and non-detects are qualified "UJ".

Aluminum

ME0002, ME0003, ME0004, ME0005, ME0006, ME0007, ME0008, ME0009, ME0010, ME0011, ME0012, ME0013, ME0014, ME0015, ME0016, ME0017, ME0018, ME0019, ME0020, ME0021

Barium

ME0002, ME0003, ME0004, ME0005, ME0006, ME0007, ME0008, ME0009, ME0010, ME0011, ME0012, ME0013, ME0014, ME0015, ME0016, ME0017, ME0018, ME0019, ME0020, ME0021

Calcium

ME0002, ME0003, ME0004, ME0005, ME0006, ME0007, ME0008, ME0009, ME0010, ME0011, ME0012, ME0013, ME0014, ME0015, ME0016, ME0017, ME0018, ME0019, ME0020, ME0021

Cobalt

ME0002, ME0003, ME0004, ME0005, ME0006, ME0007, ME0008, ME0009, ME0010, ME0011, ME0012, ME0013, ME0014, ME0015, ME0016, ME0017, ME0018, ME0019, ME0020, ME0021

Copper

ME0002, ME0003, ME0004, ME0005, ME0006, ME0007, ME0008, ME0009, ME0010, ME0011, ME0012, ME0013, ME0014, ME0015, ME0016, ME0017, ME0018, ME0019, ME0020, ME0021

Iron

ME0002, ME0003, ME0004, ME0005, ME0006, ME0007, ME0008, ME0009, ME0010, ME0011, ME0012, ME0013, ME0014, ME0015, ME0016, ME0017, ME0018, ME0019, ME0020, ME0021

Lead

ME0002, ME0003, ME0004, ME0005, ME0006, ME0007, ME0008, ME0009, ME0010, ME0011, ME0012, ME0013, ME0014, ME0015, ME0016, ME0017, ME0018, ME0019, ME0020, ME0021

Magnesium
ME0002, ME0003, ME0004, ME0005, ME0006, ME0007, ME0008, ME0009, ME0010, ME0011, ME0012, ME0013, ME0014, ME0015, ME0016, ME0017, ME0018, ME0019, ME0020, ME0021

Manganese
ME0002, ME0003, ME0004, ME0005, ME0006, ME0007, ME0008, ME0009, ME0010, ME0011, ME0012, ME0013, ME0014, ME0015, ME0016, ME0017, ME0018, ME0019, ME0020, ME0021

Nickel
ME0002, ME0003, ME0004, ME0005, ME0006, ME0007, ME0008, ME0009, ME0010, ME0011, ME0012, ME0013, ME0014, ME0015, ME0016, ME0017, ME0018, ME0019, ME0020, ME0021

Potassium
ME0002, ME0003, ME0004, ME0005, ME0006, ME0007, ME0008, ME0009, ME0010, ME0011, ME0012, ME0013, ME0014, ME0015, ME0016, ME0017, ME0018, ME0019, ME0020, ME0021

Vanadium
ME0002, ME0003, ME0004, ME0005, ME0006, ME0007, ME0008, ME0009, ME0010, ME0011, ME0012, ME0013, ME0014, ME0015, ME0016, ME0017, ME0018, ME0019, ME0020, ME0021

Zinc
ME0002, ME0003, ME0004, ME0005, ME0006, ME0007, ME0008, ME0009, ME0010, ME0011, ME0012, ME0013, ME0014, ME0015, ME0016, ME0017, ME0018, ME0019, ME0020, ME0021

The following inorganic sample results are affected by an interference check "A" sample (ICSA) for which false positive concentration values greater than the MDL were obtained. The sample contains Al, Ca, Fe, or Mg at a level comparable to the ICSA.

Hits less than 10 times the value of the ICSA are qualified "J+"; non-detects are not qualified. Hits greater than 10 times the ICSA are not qualified.

Beryllium
ME0013, ME0018

The following results are affected by an interference check "A" sample (ICSA) for which false negative concentration values greater than the absolute value of the MDL were obtained. The sample contains Al, Ca, Fe or Mg at a level comparable to that of the ICSA.

Hits less than 10 times the absolute value of the ICSA are qualified "J-", non-detects are qualified "UJ". Hits greater than 10 times the ICSA are not qualified.

Antimony
ME0002, ME0003, ME0004, ME0005, ME0006, ME0007, ME0008, ME0009, ME0010, ME0011, ME0012, ME0013, ME0014, ME0015, ME0016, ME0017, ME0018

Cadmium
ME0009

Copper
ME0003, ME0007, ME0008, ME0009, ME0010, ME0011, ME0012, ME0013, ME0014, ME0016, ME0017

Thallium
ME0002, ME0003, ME0004, ME0005, ME0006, ME0007, ME0008, ME0009, ME0010, ME0011, ME0012, ME0013, ME0014, ME0015, ME0016, ME0017, ME0018

**7. SAMPLE RESULTS:**

The following inorganic samples have analyte concentrations reported above the method detection limit (MDL) but below the quantitation limit (CRQL).
Results are qualified "J".

Beryllium
ME0013, ME0018

Chromium
ME0002

Copper
ME0010, ME0012, ME0013

Mercury
ME0003, ME0004, ME0006, ME0007, ME0008, ME0009, ME0012, ME0013, ME0014, ME0015, ME0016, ME0019, ME0020

Potassium
ME0002, ME0003, ME0004, ME0010, ME0011, ME0012, ME0013, ME0014, ME0015, ME0016, ME0017, ME0018, ME0019, ME0020, ME0021

Silver
ME0007, ME0008, ME0010, ME0012, ME0014, ME0015, ME0017

Vanadium
ME0002, ME0003, ME0004, ME0005, ME0006, ME0012, ME0013

All data, except those qualified above, are acceptable.

**CADRE ILM05.4 Data Qualifier Sheet**

| Qualifiers | Data Qualifier Definitions |
|---|---|
| U | The analyte was analyzed for, but was not detected above the reported sample quantitation limit. |
| J | The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample. |
| J+ | The result is an estimated quantity, but the result may be biased high. |
| J- | The result is an estimated quantity, but the result may be biased low. |
| R | The data are unusable. The sample results are rejected due to serious deficiencies in meeting Quality Control (QC) criteria. The analyte may or may not be present in the sample. |
| UJ | The analyte was analyzed for, but not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise. |

**Analytical Results (Qualified Data)**

Case #: 39260 SDG : ME0002
Site : BAUTSCH-GREY MINE
Lab. : BONNER
Reviewer : S. CONNET
Date : 3/2/2010

Number of Soil Samples : 20
Number of Water Samples : 0

| Sample Number : | ME0002 | | ME0003 | | ME0004 | | ME0005 | | ME0006 | |
|---|---|---|---|---|---|---|---|---|---|---|
| Sampling Location : | X302 | | X303 | | X304 | | X305 | | X301 | |
| Matrix : | Soil | | Soil | | Soil | | Soil | | Soil | |
| Units : | mg/Kg | | mg/Kg | | mg/Kg | | mg/Kg | | mg/Kg | |
| Date Sampled : | 11/17/2009 | | 11/17/2009 | | 11/17/2009 | | 11/17/2009 | | 11/17/2009 | |
| Time Sampled : | | | | | | | | | | |
| %Solids : | 93.3 | | 91.8 | | 81.8 | | 79.8 | | 74.1 | |
| Dilution Factor : | 1.0 | | 1.0 | | 1.0 | | 1.0 | | 1.0 | |
| ANALYTE | Result | Flag | Result | Flag | Result | Flag | Result | Flag | Result | Flag |
| ALUMINUM | 122 | J | 335 | J | 1020 | J | 1520 | J | 3260 | J |
| ANTIMONY | 6.4 | UJ | 6.5 | UJ | 7.3 | UJ | 7.5 | UJ | 8.1 | UJ |
| ARSENIC | 15.3 | | 30.2 | | 14.4 | | 68.0 | | 26.1 | |
| BARIUM | 21.4 | UJ | 21.8 | UJ | 24.4 | UJ | 25.1 | UJ | 27.0 | UJ |
| BERYLLIUM | 0.54 | U | 0.54 | U | 0.61 | U | 0.63 | U | 0.67 | U |
| CADMIUM | 39.0 | | 19.0 | | 19.8 | | 37.8 | | 33.0 | |
| CALCIUM | 165000 | J | 199000 | J | 141000 | J | 85600 | J | 106000 | J |
| CHROMIUM | 0.77 | J | 1.3 | | 2.5 | | 2.5 | | 6.7 | |
| COBALT | 5.4 | UJ | 5.4 | UJ | 9.3 | J | 26.2 | J | 17.3 | J |
| COPPER | 66.2 | J | 5.8 | J- | 36.2 | J | 44.1 | J | 265 | J |
| IRON | 26100 | J | 28100 | J | 43900 | J | 79000 | J | 29300 | J |
| LEAD | 3610 | J | 3120 | J | 8970 | J | 15500 | J | 1460 | J |
| MAGNESIUM | 90200 | J | 77400 | J | 60600 | J | 37700 | J | 36500 | J |
| MANGANESE | 1120 | J | 1160 | J | 904 | J | 913 | J | 826 | J |
| MERCURY | 0.11 | U | 0.052 | J | 0.088 | J | 0.13 | | 0.10 | J |
| NICKEL | 6.2 | J | 12.6 | J | 24.2 | J | 59.7 | J | 33.5 | J |
| POTASSIUM | 82.5 | J | 228 | J | 606 | J | 1000 | J | 1910 | J |
| SELENIUM | 3.8 | U | 3.8 | U | 4.3 | U | 4.4 | U | 4.7 | U |
| SILVER | 2.8 | | 2.1 | | 2.4 | | 3.8 | | 2.5 | |
| SODIUM | 536 | U | 545 | U | 611 | U | 627 | U | 675 | U |
| THALLIUM | 2.7 | UJ | 2.7 | UJ | 3.1 | UJ | 3.1 | UJ | 3.4 | UJ |
| VANADIUM | 0.75 | J | 1.7 | J | 2.4 | J | 2.7 | J | 4.7 | J |
| ZINC | 15400 | J+ | 7880 | J+ | 8800 | J+ | 19000 | J+ | 16100 | J+ |
| CYANIDE | 2.7 | UJ | 2.7 | UJ | 3.1 | UJ | 3.1 | UJ | 3.4 | UJ |

**Analytical Results (Qualified Data)**

Case #: 39260 SDG : ME0002
Site : BAUTSCH-GREY MINE
Lab. : BONNER
Reviewer : S. CONNET
Date : 3/2/2010

| Sample Number : | ME0007 | | ME0008 | | ME0009 | | ME0010 | | ME0011 | |
|---|---|---|---|---|---|---|---|---|---|---|
| Sampling Location : | X200 | | X201A | | X201B | | X202 | | X203 | |
| Matrix : | Soil | | Soil | | Soil | | Soil | | Soil | |
| Units : | mg/Kg | | mg/Kg | | mg/Kg | | mg/Kg | | mg/Kg | |
| Date Sampled : | 11/18/2009 | | 11/18/2009 | | 11/18/2009 | | 11/18/2009 | | 11/16/2009 | |
| Time Sampled : | | | | | | | | | | |
| %Solids : | 52.8 | | 70.5 | | 68.9 | | 36.6 | | 75.6 | |
| Dilution Factor : | 1.0 | | 1.0 | | 1.0 | | 1.0 | | 1.0 | |
| ANALYTE | Result | Flag | Result | Flag | Result | Flag | Result | Flag | Result | Flag |
| ALUMINUM | 6260 | J | 7770 | J | 7680 | J | 6030 | J | 5760 | J |
| ANTIMONY | 11.4 | UJ | 8.5 | UJ | 8.7 | UJ | 16.4 | UJ | 7.9 | UJ |
| ARSENIC | 20.8 | | 5.1 | | 6.0 | | 24.8 | | 9.8 | |
| BARIUM | 112 | J | 86.1 | J | 86.3 | J | 91.0 | J | 102 | J |
| BERYLLIUM | 0.95 | U | 0.71 | U | 0.73 | U | 1..4 | U | 0.66 | U |
| CADMIUM | 5.8 | | 6.9 | | 0.73 | UJ | 16.7 | | 12.6 | |
| CALCIUM | 124000 | J | 57000 | J | 54400 | J | 286000 | J | 34900 | J |
| CHROMIUM | 14.7 | | 14.8 | | 14.7 | | 12.1 | | 9.8 | |
| COBALT | 13.1 | J | 7.1 | J | 8.7 | J | 13.7 | UJ | 6.6 | UJ |
| COPPER | 9.5 | J- | 13.8 | J- | 11.3 | J- | 6.1 | J- | 5.9 | J- |
| IRON | 36800 | J | 12800 | J | 14500 | J | 46300 | J | 20500 | J |
| LEAD | 113 | J | 13.6 | J | 14.1 | J | 213 | J | 34.0 | J |
| MAGNESIUM | 47300 | J | 25200 | J | 24600 | J | 106000 | J | 17900 | J |
| MANGANESE | 1680 | J | 431 | J | 643 | J | 2870 | J | 875 | J |
| MERCURY | 0.10 | J | 0.047 | J | 0.039 | J | 0.27 | U | 0.13 | U |
| NICKEL | 21.7 | J | 16.4 | J | 18.8 | J | 20.1 | J | 10.2 | J |
| POTASSIUM | 1090 | J | 1140 | J | 1210 | J | 958 | J | 563 | J |
| SELENIUM | 6.6 | U | 5.0 | U | 5.1 | U | 9.6 | U | 4.6 | U |
| SILVER | 1.2 | J | 0.68 | J | 1.5 | U | 1.7 | J | 1.3 | |
| SODIUM | 947 | U | 709 | U | 726 | U | 1370 | U | 661 | U |
| THALLIUM | 4.7 | UJ | 3.5 | UJ | 3.6 | UJ | 6.8 | UJ | 3.3 | UJ |
| VANADIUM | 24.2 | J | 23.1 | J | 23.0 | J | 21.4 | J | 13.4 | J |
| ZINC | 1570 | J+ | 3760 | J+ | 151 | J+ | 6490 | J+ | 4680 | J+ |
| CYANIDE | 4.7 | UJ | 3.5 | UJ | 3.6 | UJ | 6.8 | UJ | 3.3 | UJ |

## Analytical Results (Qualified Data)

Case #: 39260 SDG : ME0002
Site BAUTSCH-GREY MINE
Lab. : BONNER
Reviewer : S. CONNET
Date : 3/2/2010

| Sample Number : | ME0012 | | ME0013 | | ME0014 | | ME0015 | | ME0016 | |
|---|---|---|---|---|---|---|---|---|---|---|
| Sampling Location : | X204 | | X205 | | X206 | | X207 | | X208 | |
| Matrix : | Soil | | Soil | | Soil | | Soil | | Soil | |
| Units : | mg/Kg | | mg/Kg | | mg/Kg | | mg/Kg | | mg/Kg | |
| Date Sampled : | 11/16/2009 | | 11/16/2009 | | 11/16/2009 | | 11/16/2009 | | 11/16/2009 | |
| Time Sampled : | | | | | | | | | | |
| %Solids : | 78.7 | | 91.6 | | 66.3 | | 73.4 | | 66.0 | |
| Dilution Factor : | 1.0 | | 1.0 | | 1.0 | | 1.0 | | 1.0 | |
| ANALYTE | Result | Flag | Result | Flag | Result | Flag | Result | Flag | Result | Flag |
| ALUMINUM | 1450 | J | 838 | J | 4740 | J | 4070 | J | 4810 | J |
| ANTIMONY | 7.6 | UJ | 6.6 | UJ | 9.0 | UJ | 8.2 | UJ | 9.1 | UJ |
| ARSENIC | 11.1 | | 11.1 | | 11.9 | | 20.5 | | 5.1 | |
| BARIUM | 27.8 | J | 21.8 | UJ | 85.5 | J | 62.7 | J | 89.7 | J |
| BERYLLIUM | 0.64 | U | 0.069 | J+ | 0.75 | U | 0.68 | U | 0.76 | U |
| CADMIUM | 11.9 | | 10.8 | | 12.5 | | 10.6 | | 3.5 | |
| CALCIUM | 180000 | J | 136000 | J | 85100 | J | 61600 | J | 46100 | J |
| CHROMIUM | 3.4 | | 2.4 | | 8.4 | | 6.4 | | 8.1 | |
| COBALT | 6.4 | UJ | 5.5 | UJ | 7.5 | UJ | 7.3 | J | 7.6 | UJ |
| COPPER | 1.9 | J- | 1.1 | J- | 7.0 | J- | 31.0 | J | 6.8 | J- |
| IRON | 22100 | J | 16900 | J | 23200 | J | 26600 | J | 12800 | J |
| LEAD | 101 | J | 95.1 | J | 986 | J | 533 | J | 127 | J |
| MAGNESIUM | 63400 | J | 59200 | J | 34400 | J | 29500 | J | 22000 | J |
| MANGANESE | 2280 | J | 1740 | J | 1310 | J | 1040 | J | 921 | J |
| MERCURY | 0.045 | J | 0.057 | J | 0.10 | J | 0.076 | J | 0.059 | J |
| NICKEL | 6.1 | J | 5.1 | J | 15.0 | J | 14.1 | J | 10.5 | J |
| POTASSIUM | 282 | J | 186 | J | 646 | J | 576 | J | 602 | J |
| SELENIUM | 4.4 | U | 3.8 | U | 5.3 | U | 4.8 | U | 5.3 | U |
| SILVER | 1.1 | J | 1.1 | | 1.1 | J | 1.3 | J | 1.5 | U |
| SODIUM | 635 | U | 546 | U | 754 | U | 681 | U | 758 | U |
| THALLIUM | 3.2 | UJ | 2.7 | UJ | 3.8 | UJ | 3.4 | UJ | 3.8 | UJ |
| VANADIUM | 5.7 | J | 3.9 | J | 14.2 | J | 10.9 | J | 13.6 | J |
| ZINC | 4650 | J+ | 4270 | J+ | 5070 | J+ | 4310 | J+ | 1530 | J+ |
| CYANIDE | 3.2 | UJ | 2.7 | UJ | 3.8 | UJ | 3.4 | UJ | 3.8 | UJ |

**Analytical Results (Qualified Data)**

Case #: 39260 SDG : ME0002
Site : BAUTSCH-GREY MINE
Lab. : BONNER
Reviewer : S. CONNET
Date : 3/2/2010

| Sample Number : | ME0017 | | ME0018 | | ME0019 | | ME0020 | | ME0021 | |
|---|---|---|---|---|---|---|---|---|---|---|
| Sampling Location : | X209 | | X210 | | X211 | | X212 | | X213 | |
| Matrix : | Soil | | Soil | | Soil | | Soil | | Soil | |
| Units : | mg/Kg | | mg/Kg | | mg/Kg | | mg/Kg | | mg/Kg | |
| Date Sampled : | 11/16/2009 | | 11/16/2009 | | 11/17/2009 | | 11/17/2009 | | 11/17/2009 | |
| Time Sampled : | | | | | | | | | | |
| %Solids : | 87.1 | | 70.2 | | 31.5 | | 55.9 | | 71.9 | |
| Dilution Factor : | 1.0 | | 1.0 | | 1.0 | | 1.0 | | 1.0 | |
| ANALYTE | Result | Flag | Result | Flag | Result | Flag | Result | Flag | Result | Flag |
| ALUMINUM | 3820 | J | 3060 | J | 7030 | J | 5380 | J | 5340 | J |
| ANTIMONY | 6.9 | UJ | 8.5 | UJ | 19.0 | UJ | 10.7 | UJ | 8.3 | UJ |
| ARSENIC | 6.5 | | 33.9 | | 6.4 | | 2.9 | | 5.3 | |
| BARIUM | 59.3 | J | 86.7 | J | 63.5 | UJ | 78.8 | J | 88.7 | J |
| BERYLLIUM | 0.57 | U | 0.10 | J+ | 1.6 | U | 0.89 | U | 0.70 | U |
| CADMIUM | 5.9 | | 24.9 | | 1.6 | U | 3.0 | | 0.93 | |
| CALCIUM | 39700 | J | 121000 | J | 12300 | J | 16800 | J | 19600 | J |
| CHROMIUM | 6.6 | | 6.2 | | 10.3 | | 8.4 | | 8.3 | |
| COBALT | 5.7 | UJ | 11.6 | J | 15.9 | UJ | 8.9 | UJ | 7.0 | UJ |
| COPPER | 7.4 | J- | 380 | J | 13.6 | J | 9.2 | J | 7.0 | J |
| IRON | 13200 | J | 52800 | J | 17700 | J | 9080 | J | 12800 | J |
| LEAD | 357 | J | 2070 | J | 61.6 | J | 36.1 | J | 67.3 | J |
| MAGNESIUM | 20800 | J | 44000 | J | 5390 | J | 8550 | J | 10700 | J |
| MANGANESE | 713 | J | 1360 | J | 169 | J | 593 | J | 556 | J |
| MERCURY | 0.11 | U | 0.26 | | 0.13 | J | 0.058 | J | 0.14 | U |
| NICKEL | 12.2 | J | 30.9 | J | 22.0 | J | 11.1 | J | 12.1 | J |
| POTASSIUM | 450 | J | 679 | J | 878 | J | 892 | J | 668 | J |
| SELENIUM | 4.0 | U | 5.0 | U | 11.1 | U | 6.3 | U | 4.9 | U |
| SILVER | 0.59 | J | 2.7 | | 3.2 | U | 1.8 | U | 1.4 | U |
| SODIUM | 574 | U | 712 | U | 1590 | U | 894 | U | 695 | U |
| THALLIUM | 2.9 | UJ | 3.6 | UJ | 7.9 | U | 4.5 | U | 3.5 | U |
| VANADIUM | 11.3 | J | 7.9 | J | 17.3 | J | 13.3 | J | 13.8 | J |
| ZINC | 2540 | J+ | 9490 | J+ | 5650 | J+ | 1240 | J+ | 425 | J+ |
| CYANIDE | 2.9 | UJ | 3.6 | UJ | 7.9 | UJ | 4.5 | UJ | 3.5 | UJ |

# USEPA Contract Laboratory Program
## Inorganic Traffic Report & Chain of Custody Record

**Case No:** 39260
DAS No:
SDG No: ME0002

**L**

| | |
|---|---|
| Date Shipped: | 11/19/2009 |
| Carrier Name: | UPS |
| Airbill: | 1z6215892210084177 |
| Shipped to: | Bonner Analytical Testing Company<br>2703 Oak Grove Road<br>Hattiesburg MS 39402<br>(601) 264-2854 |

**Chain of Custody Record**

| Relinquished By | (Date / Time) | Received By | (Date / Time) |
|---|---|---|---|
| [signature] | 11/19/09 0900 | [signature] | 11-20-09 0930 |
| 2 | | | |
| 3 | | | |
| 4 | | | |

Sampler Signature: [signature]

**For Lab Use Only**

Lab Contract No: EPW08064
Unit Price:
Transfer To:
Lab Contract No:
Unit Price: 11-20-09

| INORGANIC SAMPLE No. | MATRIX/ SAMPLER | CONC/ TYPE | ANALYSIS/ TURNAROUND | TAG No./ PRESERVATIVE/ Bottles | STATION LOCATION | SAMPLE COLLECT DATE/TIME | ORGANIC SAMPLE No. | FOR LAB USE ONLY Sample Condition On Receipt |
|---|---|---|---|---|---|---|---|---|
| ME0002 | Waste/ Lance Range | M/G | ICP-AES (21) | 5c105060 (Ice Only) (1) | X302 | S: 11/17/2009 16:00 | | good |
| ME0003 | Waste/ Lance Range | M/G | ICP-AES (21) | 5c105061 (Ice Only) (1) | X303 | S: 11/17/2009 16:10 | | |
| ME0004 | Waste/ Lance Range | M/G | ICP-AES (21) | 5c105062 (Ice Only) (1) | X304 | S: 11/17/2009 16:20 | | |
| ME0005 | Waste/ Lance Range | M/G | ICP-AES (21) | 5c105063 (Ice Only) (1) | X305 | S: 11/17/2009 16:30 | | |
| ME0006 | Waste/ Lance Range | M/G | ICP-AES (21) | 5c105059 (Ice Only) (1) | X301 | S: 11/17/2009 15:30 | | |
| ME0007 | Sediment/ Lance Range | L/G | ICP-AES (21) | 5c105064 (Ice Only) (1) | X200 | S: 11/18/2009 9:45 | | |
| ME0008 | Sediment/ Lance Range | L/G | ICP-AES (21) | 5c105065 (Ice Only) (1) | X201A | S: 11/18/2009 9:20 | | |
| ME0009 | Sediment/ Lance Range | L/G | ICP-AES (21) | 5c105066 (Ice Only) (1) | x201B | S: 11/18/2009 9:20 | | |
| ME0010 | Sediment/ Lance Range | L/G | ICP-AES (21) | 5c105067 (Ice Only) (1) | X202 | S: 11/18/2009 9:00 | | |
| ME0011 | Sediment/ Lance Range | L/G | ICP-AES (21) | 5c105068 (Ice Only) (1) | X203 | S: 11/16/2009 15:30 | | |

| | | | | |
|---|---|---|---|---|
| Shipment for Case Complete?N | Sample(s) to be used for laboratory QC: ME0009 / ME0026 | Additional Sampler Signature(s): | Cooler Temperature Upon Receipt: | Chain of Custody Seal Number: 28899/28898 |
| Analysis Key: | Concentration: L = Low, M = Low/Medium, H = High | Type/Designate: Composite = C, Grab = G | | Custody Seal Intact? Y / Shipment Iced? Y |

ICP-AES = HG, CN, ICP METALS

**TR Number: 5-554006491-111809-0001**

**LABORATORY COPY**

PR provides preliminary results. Requests for preliminary results will increase analytical costs.
Send Copy to: Sample Management Office, 2000 Edmund Halley Dr., Reston, VA. 20191-3400 Phone 703/264-9348 Fax 703/264-9222

# USEPA Contract Laboratory Program
# Inorganic Traffic Report & Chain of Custody Record

EPA

**Case No:** 39260
DAS No:
SDG No: ME0002

**L**

| | |
|---|---|
| Date Shipped: | 11/19/2009 |
| Carrier Name: | UPS |
| Airbill: | 1z6215892210084177 |
| Shipped to: | Bonner Analytical Testing Company<br>2703 Oak Grove Road<br>Hattiesburg MS 39402<br>(601) 264-2854 |

**Chain of Custody Record**

Sampler Signature:

| Relinquished By | (Date / Time) | Received By | (Date / Time) |
|---|---|---|---|
| 1 | 11/19/09 0900 | | 11-20-09 0930 |
| 2 | | | |
| 3 | | | |
| 4 | | | |

**For Lab Use Only**

Lab Contract No: EPW08044
Unit Price:
Transfer To:
Lab Contract No:
Unit Price: 11-20-09

| INORGANIC SAMPLE No. | MATRIX/ SAMPLER | CONC/ TYPE | ANALYSIS/ TURNAROUND | TAG No./ PRESERVATIVE/ Bottles | STATION LOCATION | SAMPLE COLLECT DATE/TIME | ORGANIC SAMPLE No. | FOR LAB USE ONLY Sample Condition On Receipt |
|---|---|---|---|---|---|---|---|---|
| ME0012 | Sediment/ Lance Range | L/G | ICP-AES (21) | 5c105069 (Ice Only) (1) | X204 | S: 11/16/2009 14:30 | | good |
| ME0013 | Sediment/ Lance Range | L/G | ICP-AES (21) | 5c105070 (Ice Only) (1) | X205 | S: 11/16/2009 14:00 | | |
| ME0014 | Sediment/ Lance Range | L/G | ICP-AES (21) | 5c105071 (Ice Only) (1) | X206 | S: 11/16/2009 13:45 | | |
| ME0015 | Sediment/ Lance Range | L/G | ICP-AES (21) | 5c105072 (Ice Only) (1) | X207 | S: 11/16/2009 13:15 | | |
| ME0016 | Sediment/ Lance Range | L/G | ICP-AES (21) | 5c105073 (Ice Only) (1) | X208 | S: 11/16/2009 11:30 | | |
| ME0017 | Sediment/ Lance Range | L/G | ICP-AES (21) | 5c105074 (Ice Only) (1) | X209 | S: 11/16/2009 11:00 | | |
| ME0018 | Sediment/ Lance Range | L/G | ICP-AES (21) | 5c105075 (Ice Only) (1) | X210 | S: 11/16/2009 10:30 | | |
| ME0019 | Sediment/ Lance Range | L/G | ICP-AES (21) | 5c105076 (Ice Only) (1) | X211 | S: 11/17/2009 9:00 | | |
| ME0020 | Sediment/ Lance Range | L/G | ICP-AES (21) | 5c105077 (Ice Only) (1) | X212 | S: 11/17/2009 9:45 | | |
| ME0021 | Sediment/ Lance Range | L/G | ICP-AES (21) | 5c105078 (Ice Only) (1) | X213 | S: 11/17/2009 10:00 | | |

| | | | | |
|---|---|---|---|---|
| Shipment for Case Complete?N | Sample(s) to be used for laboratory QC: ME0009 / ME0026 | Additional Sampler Signature(s): | Cooler Temperature Upon Receipt: | Chain of Custody Seal Number: 28899 / 28898 |
| Analysis Key: | Concentration: L = Low, M = Low/Medium, H = High | Type/Designate: Composite = C, Grab = G | | Custody Seal Intact? Y Shipment Iced? Y |

ICP-AES = HG, CN, ICP METALS

**TR Number:** 5-554006491-111809-0001

**LABORATORY COPY**

PR provides preliminary results. Requests for preliminary results will increase analytical costs.
Send Copy to: Sample Management Office, 2000 Edmund Halley Dr., Reston, VA. 20191-3400 Phone 703/264-9348 Fax 703/264-9222



9

# Bonner Analytical Testing Company

2703 Oak Grove Road, Hattiesburg, MS 39402
Phone: (601) 264-2854 Fax: (601) 268-7084

**SDG NARRATIVE:**

**SDG Number: ME0002**
**Case Number: 39260**
**Contract Number: EPW08064**

Sample Receipt:
On November 20, 2009, we received 20 soil samples in 2 coolers under UPS tracking numbers 1Z621 589 22 1008 4186 and 1Z621 589 22 1008 4177. Custody seals were present and intact. Cooler temps were determined to be 3°C and 8.5°C. Samples were received in good condition with no discrepancies.

Metals
The analytical run began 12/06/2009 @ 1521 hrs. ME0002, 03, 04, 10, 12, 13, 17 and 18 were over the range for Ca; 02, 03, 04, 05, 06 and 18 were over the range for Zn; 05 was over the range for Pb—the samples were reanalyzed at appropriate dilutions. The matrix spike was inconclusive in the first run; the matrix spike was reanalyzed. The matrix spike failed for Sb and Zn; a post spike was analyzed at twice the CRQL for Sb and at twice the indigenous level for Zn.

Mercury
No Discrepancies

Cyanide
The analytical run began 12/02/2009 @ 1031 hrs. There were bubbles in the line during the analysis of ME0002, 03, 04, 12 and 13; the samples were reanalyzed. The matrix spike failed; a post spike was analyzed at 100 ppb.

CSF
No Discrepancies

Sample Equation:

Lab ID 0911277-03 EPA Sample # ME0004

Date & Time 12/06/2009@1613

Metals: 358.48 µg/L * (0.100 L) * 100 % * 1000 g * 1 mg = 41.4 mg/Kg
(Analyte As ) (1.00 g) 81.8 % 1 kg 1000 µg

Date & Time 12/02/2009@1155

Hg: 0.1438 µg/L * (0.100 L) * 100 % * 1000 g * 1 mg = 0.088 mg/Kg
(0.20 g) 81.8 % 1 kg 1000 µg

Date & Time 12/02/2009@1551

CN: -5.02 µg/L * (0.050 L) * 100 % * 1000 g * 1 mg = -0.31 mg/Kg
(1.00 g) 81.8 % 1 kg 1000 µg

(CRQL reported)

Authorized by [signature]
Daniel Antrim
Document Control Officer

USEPA - CLP

COVER PAGE

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: SDG No.: ME0002

SOW No.: ILM05.4

| EPA SAMPLE NO. | Lab Sample ID: |
|---|---|
| ME0002 | 0911277-01 |
| ME0003 | 0911277-02 |
| ME0004 | 0911277-03 |
| ME0005 | 0911277-04 |
| ME0006 | 0911277-05 |
| ME0007 | 0911277-06 |
| ME0008 | 0911277-07 |
| ME0009 | 0911277-08 |
| ME0009D | 0911277-08DUP |
| ME0009S | 0911277-08MS |
| ME0010 | 0911277-09 |
| ME0011 | 0911277-10 |
| ME0012 | 0911277-11 |
| ME0013 | 0911277-12 |
| ME0014 | 0911277-13 |
| ME0015 | 0911277-14 |
| ME0016 | 0911277-15 |
| ME0017 | 0911277-16 |
| ME0018 | 0911277-17 |
| ME0019 | 0911277-18 |
| ME0020 | 0911277-19 |
| ME0021 | 0911277-20 |

| | | ICP-AES | ICP-MS |
|---|---|---|---|
| Were ICP-AES and ICP interelement corrections applied? | (Yes/No) | Yes | Yes |
| Were ICP-AES and ICP background corrections applied? | (Yes/No) | Yes | Yes |
| If yes, were raw data generated before application of background corrections? | (Yes/No) | No | No |

Comments:

Al, Ba, Ca, Co, Cu, Fe, Pb, Mg, Mn, Ni, K, V, Zn were flagged as "E" estimated due to interferences occurring during the analysis of the Serial Dilution.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy Sample Data Package and in the computer-readable data submitted on diskette (or via an alternate means of electronic transmission, if approved in advance by USEPA), has been authorized by the Labortory Mangager or the Manager's designee, as verified by the following signature.

Signature: Name: Brandon G. Beck For Chris Bonner

Date: 12/10/09 Title: President

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1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
ME0002

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: SDG No.: ME0002

Matrix: (Soil/Water) SOIL Lab Sample ID: 0911277-01

Level: (low/med) LOW Date Received: 11/20/2009

% Solids 93.3

Concentration Units (**ug/L** or **mg/kg** dry weight): mg/Kg

| CAS NO. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 122 | | E | P |
| 7440-36-0 | Antimony | 6.4 | U | N | P |
| 7440-38-2 | Arsenic | 15.3 | | | P |
| 7440-39-3 | Barium | 11.9 | J | E | P |
| 7440-41-7 | Beryllium | 0.065 | J | | P |
| 7440-43-9 | Cadmium | 39.0 | | | P |
| 7440-70-2 | Calcium | 165000 | | D E | P |
| 7440-47-3 | Chromium | 0.77 | J | | P |
| 7440-48-4 | Cobalt | 2.9 | J | E | P |
| 7440-50-8 | Copper | 66.2 | | E | P |
| 7439-89-6 | Iron | 26100 | | E | P |
| 7439-92-1 | Lead | 3610 | | E | P |
| 7439-95-4 | Magnesium | 90200 | | D * E | P |
| 7439-96-5 | Manganese | 1120 | | * E | P |
| 7439-97-6 | Mercury | 0.11 | U | | CV |
| 7440-02-0 | Nickel | 6.2 | | E | P |
| 7440-09-7 | Potassium | 82.5 | J | E | P |
| 7782-49-2 | Selenium | 3.8 | U | | P |
| 7440-22-4 | Silver | 2.8 | | | P |
| 7440-23-5 | Sodium | 176 | J | | P |
| 7440-28-0 | Thallium | 0.18 | J | | P |
| 7440-62-2 | Vanadium | 0.75 | J | E | P |
| 7440-66-6 | Zinc | 15400 | | D * N E | P |
| 57-12-5 | Cyanide | 2.7 | U | N | AS |

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: COLORLESS Clarity After: Artifacts:

Comments:

FORM IA-IN ILM05.4

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ME0003

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: SDG No.: ME0002

Matrix: (Soil/Water) SOIL Lab Sample ID: 0911277-02

Level: (low/med) LOW Date Received: 11/20/2009

% Solids 91.8

Concentration Units (ug/L or mg/kg dry weight): mg/Kg

| CAS NO. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 335 | | E | P |
| 7440-36-0 | Antimony | 6.5 | U | N | P |
| 7440-38-2 | Arsenic | 30.2 | | | P |
| 7440-39-3 | Barium | 3.3 | J | E | P |
| 7440-41-7 | Beryllium | 0.075 | J | | P |
| 7440-43-9 | Cadmium | 19.0 | | | P |
| 7440-70-2 | Calcium | 199000 | | D E | P |
| 7440-47-3 | Chromium | 1.3 | | | P |
| 7440-48-4 | Cobalt | 3.8 | J | E | P |
| 7440-50-8 | Copper | 5.8 | | E | P |
| 7439-89-6 | Iron | 28100 | | E | P |
| 7439-92-1 | Lead | 3120 | | E | P |
| 7439-95-4 | Magnesium | 77400 | | * E | P |
| 7439-96-5 | Manganese | 1160 | | * E | P |
| 7439-97-6 | Mercury | 0.052 | J | | CV |
| 7440-02-0 | Nickel | 12.6 | | E | P |
| 7440-09-7 | Potassium | 228 | J | E | P |
| 7782-49-2 | Selenium | 3.8 | U | | P |
| 7440-22-4 | Silver | 2.1 | | | P |
| 7440-23-5 | Sodium | 186 | J | | P |
| 7440-28-0 | Thallium | 2.7 | U | | P |
| 7440-62-2 | Vanadium | 1.7 | J | E | P |
| 7440-66-6 | Zinc | 7880 | | D * N E | P |
| 57-12-5 | Cyanide | 2.7 | U | N | AS |

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: COLORLESS Clarity After: Artifacts:

Comments:

FORM IA-IN ILM05.4

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ME0004

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: SDG No.: ME0002

Matrix: (Soil/Water) SOIL Lab Sample ID: 0911277-03

Level: (low/med) LOW Date Received: 11/20/2009

% Solids 81.8

Concentration Units (ug/L or mg/kg dry weight): mg/Kg

| CAS NO. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 1020 | | E | P |
| 7440-36-0 | Antimony | 7.3 | U | N | P |
| 7440-38-2 | Arsenic | 41.4 | | | P |
| 7440-39-3 | Barium | 21.0 | J | E | P |
| 7440-41-7 | Beryllium | 0.20 | J | | P |
| 7440-43-9 | Cadmium | 19.8 | | | P |
| 7440-70-2 | Calcium | 141000 | | D E | P |
| 7440-47-3 | Chromium | 2.5 | | | P |
| 7440-48-4 | Cobalt | 9.3 | | E | P |
| 7440-50-8 | Copper | 36.2 | | E | P |
| 7439-89-6 | Iron | 43900 | | E | P |
| 7439-92-1 | Lead | 8970 | | E | P |
| 7439-95-4 | Magnesium | 60600 | | * E | P |
| 7439-96-5 | Manganese | 904 | | * E | P |
| 7439-97-6 | Mercury | 0.088 | J | | CV |
| 7440-02-0 | Nickel | 24.2 | | E | P |
| 7440-09-7 | Potassium | 606 | J | E | P |
| 7782-49-2 | Selenium | 0.64 | J | | P |
| 7440-22-4 | Silver | 2.4 | | | P |
| 7440-23-5 | Sodium | 111 | J | | P |
| 7440-28-0 | Thallium | 3.1 | U | | P |
| 7440-62-2 | Vanadium | 2.4 | J | E | P |
| 7440-66-6 | Zinc | 8800 | | D * N E | P |
| 57-12-5 | Cyanide | 3.1 | U | N | AS |

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: COLORLESS Clarity After: Artifacts:

Comments:

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
ME0005

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: SDG No.: ME0002

Matrix: (Soil/Water) SOIL Lab Sample ID: 0911277-04

Level: (low/med) LOW Date Received: 11/20/2009

% Solids 79.8

Concentration Units (ug/L or mg/kg dry weight): mg/Kg

| CAS NO. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 1520 | | E | P |
| 7440-36-0 | Antimony | 7.5 | U | N | P |
| 7440-38-2 | Arsenic | 68.0 | | | P |
| 7440-39-3 | Barium | 18.6 | J | E | P |
| 7440-41-7 | Beryllium | 0.30 | J | | P |
| 7440-43-9 | Cadmium | 37.8 | | | P |
| 7440-70-2 | Calcium | 85600 | | E | P |
| 7440-47-3 | Chromium | 2.5 | | | P |
| 7440-48-4 | Cobalt | 26.2 | | E | P |
| 7440-50-8 | Copper | 44.1 | | E | P |
| 7439-89-6 | Iron | 79000 | | D E | P |
| 7439-92-1 | Lead | 15500 | | D E | P |
| 7439-95-4 | Magnesium | 37700 | | * E | P |
| 7439-96-5 | Manganese | 913 | | * E | P |
| 7439-97-6 | Mercury | 0.13 | | | CV |
| 7440-02-0 | Nickel | 59.7 | | E | P |
| 7440-09-7 | Potassium | 1000 | | E | P |
| 7782-49-2 | Selenium | 0.62 | J | | P |
| 7440-22-4 | Silver | 3.8 | | | P |
| 7440-23-5 | Sodium | 66.6 | J | | P |
| 7440-28-0 | Thallium | 3.1 | U | | P |
| 7440-62-2 | Vanadium | 2.7 | J | E | P |
| 7440-66-6 | Zinc | 19000 | | D * N E | P |
| 57-12-5 | Cyanide | 3.1 | U | N | AS |

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: COLORLESS Clarity After: Artifacts:

Comments:

FORM IA-IN ILM05.4

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ME0006

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: SDG No.: ME0002

Matrix: (Soil/Water) SOIL Lab Sample ID: 0911277-05

Level: (low/med) LOW Date Received: 11/20/2009

% Solids 74.1

Concentration Units (ug/L or mg/kg dry weight): mg/Kg

| CAS NO. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 3260 | | E | P |
| 7440-36-0 | Antimony | 8.1 | U | N | P |
| 7440-38-2 | Arsenic | 26.1 | | | P |
| 7440-39-3 | Barium | 22.9 | J | E | P |
| 7440-41-7 | Beryllium | 0.50 | J | | P |
| 7440-43-9 | Cadmium | 33.0 | | | P |
| 7440-70-2 | Calcium | 106000 | | E | P |
| 7440-47-3 | Chromium | 6.7 | | | P |
| 7440-48-4 | Cobalt | 17.3 | | E | P |
| 7440-50-8 | Copper | 265 | | E | P |
| 7439-89-6 | Iron | 29300 | | E | P |
| 7439-92-1 | Lead | 1460 | | E | P |
| 7439-95-4 | Magnesium | 36500 | | * E | P |
| 7439-96-5 | Manganese | 826 | | * E | P |
| 7439-97-6 | Mercury | 0.10 | J | | CV |
| 7440-02-0 | Nickel | 33.5 | | E | P |
| 7440-09-7 | Potassium | 1910 | | E | P |
| 7782-49-2 | Selenium | 0.59 | J | | P |
| 7440-22-4 | Silver | 2.5 | | | P |
| 7440-23-5 | Sodium | 89.9 | J | | P |
| 7440-28-0 | Thallium | 0.28 | J | | P |
| 7440-62-2 | Vanadium | 4.7 | J | E | P |
| 7440-66-6 | Zinc | 16100 | | D * N E | P |
| 57-12-5 | Cyanide | 3.4 | U | N | AS |

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: COLORLESS Clarity After: Artifacts:

Comments:

FORM IA-IN ILM05.4

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
ME0007

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: SDG No.: ME0002

Matrix: (Soil/Water) SOIL Lab Sample ID: 0911277-06

Level: (low/med) LOW Date Received: 11/20/2009

% Solids 52.8

Concentration Units (ug/L or mg/kg dry weight): mg/Kg

| CAS NO. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 6260 | | E | P |
| 7440-36-0 | Antimony | 11.4 | U | N | P |
| 7440-38-2 | Arsenic | 20.8 | | | P |
| 7440-39-3 | Barium | 112 | | E | P |
| 7440-41-7 | Beryllium | 0.067 | J | | P |
| 7440-43-9 | Cadmium | 5.8 | | | P |
| 7440-70-2 | Calcium | 124000 | | E | P |
| 7440-47-3 | Chromium | 14.7 | | | P |
| 7440-48-4 | Cobalt | 13.1 | | E | P |
| 7440-50-8 | Copper | 9.5 | | E | P |
| 7439-89-6 | Iron | 36800 | | E | P |
| 7439-92-1 | Lead | 113 | | E | P |
| 7439-95-4 | Magnesium | 47300 | | * E | P |
| 7439-96-5 | Manganese | 1680 | | * E | P |
| 7439-97-6 | Mercury | 0.10 | J | | CV |
| 7440-02-0 | Nickel | 21.7 | | E | P |
| 7440-09-7 | Potassium | 1090 | | E | P |
| 7782-49-2 | Selenium | 0.70 | J | | P |
| 7440-22-4 | Silver | 1.2 | J | | P |
| 7440-23-5 | Sodium | 202 | J | | P |
| 7440-28-0 | Thallium | 4.7 | U | | P |
| 7440-62-2 | Vanadium | 24.2 | | E | P |
| 7440-66-6 | Zinc | 1570 | | * N E | P |
| 57-12-5 | Cyanide | 4.7 | U | N | AS |

Color Before: BROWN Clarity Before: Texture: COARSE

Color After: COLORLESS Clarity After: Artifacts:

Comments:

FORM IA-IN ILM05.4

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1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
ME0008

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: SDG No.: ME0002

Matrix: (Soil/Water) SOIL Lab Sample ID: 0911277-07

Level: (low/med) LOW Date Received: 11/20/2009

% Solids 70.5

Concentration Units (ug/L or mg/kg dry weight): mg/Kg

| CAS NO. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 7770 | | E | P |
| 7440-36-0 | Antimony | 8.5 | U | N | P |
| 7440-38-2 | Arsenic | 5.1 | | | P |
| 7440-39-3 | Barium | 86.1 | | E | P |
| 7440-41-7 | Beryllium | 0.71 | U | | P |
| 7440-43-9 | Cadmium | 6.9 | | | P |
| 7440-70-2 | Calcium | 57000 | | E | P |
| 7440-47-3 | Chromium | 14.8 | | | P |
| 7440-48-4 | Cobalt | 7.1 | | E | P |
| 7440-50-8 | Copper | 13.8 | | E | P |
| 7439-89-6 | Iron | 12800 | | E | P |
| 7439-92-1 | Lead | 13.6 | | E | P |
| 7439-95-4 | Magnesium | 25200 | | * E | P |
| 7439-96-5 | Manganese | 431 | | * E | P |
| 7439-97-6 | Mercury | 0.047 | J | | CV |
| 7440-02-0 | Nickel | 16.4 | | E | P |
| 7440-09-7 | Potassium | 1140 | | E | P |
| 7782-49-2 | Selenium | 0.63 | J | | P |
| 7440-22-4 | Silver | 0.68 | J | | P |
| 7440-23-5 | Sodium | 133 | J | | P |
| 7440-28-0 | Thallium | 3.5 | U | | P |
| 7440-62-2 | Vanadium | 23.1 | | E | P |
| 7440-66-6 | Zinc | 3760 | | * N E | P |
| 57-12-5 | Cyanide | 3.5 | U | N | AS |

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: COLORLESS Clarity After: Artifacts:

Comments:

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
ME0009

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: SDG No.: ME0002

Matrix: (Soil/Water) SOIL Lab Sample ID: 0911277-08

Level: (low/med) LOW Date Received: 11/20/2009

% Solids 68.9

Concentration Units (**ug/L** or **mg/kg** dry weight): mg/Kg

| CAS NO. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 7680 | | E | P |
| 7440-36-0 | Antimony | 8.7 | U | N | P |
| 7440-38-2 | Arsenic | 6.0 | | | P |
| 7440-39-3 | Barium | 86.3 | | E | P |
| 7440-41-7 | Beryllium | 0.046 | J | | P |
| 7440-43-9 | Cadmium | 0.36 | J | | P |
| 7440-70-2 | Calcium | 54400 | | E | P |
| 7440-47-3 | Chromium | 14.7 | | | P |
| 7440-48-4 | Cobalt | 8.7 | | E | P |
| 7440-50-8 | Copper | 11.3 | | E | P |
| 7439-89-6 | Iron | 14500 | | E | P |
| 7439-92-1 | Lead | 14.1 | | E | P |
| 7439-95-4 | Magnesium | 24600 | | * E | P |
| 7439-96-5 | Manganese | 643 | | * E | P |
| 7439-97-6 | Mercury | 0.038 | J | | CV |
| 7440-02-0 | Nickel | 18.8 | | E | P |
| 7440-09-7 | Potassium | 1210 | | E | P |
| 7782-49-2 | Selenium | 0.57 | J | | P |
| 7440-22-4 | Silver | 1.5 | U | | P |
| 7440-23-5 | Sodium | 119 | J | | P |
| 7440-28-0 | Thallium | 3.6 | U | | P |
| 7440-62-2 | Vanadium | 23.0 | | E | P |
| 7440-66-6 | Zinc | 151 | | * N E | P |
| 57-12-5 | Cyanide | 3.6 | U | N | AS |

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: COLORLESS Clarity After: Artifacts:

Comments:

FORM IA-IN ILM05.4

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1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ME0010

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: SDG No.: ME0002

Matrix: (Soil/Water) SOIL Lab Sample ID: 0911277-09

Level: (low/med) LOW Date Received: 11/20/2009

% Solids 36.6

Concentration Units (ug/L or mg/kg dry weight): mg/Kg

| CAS NO. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 6030 | | E | P |
| 7440-36-0 | Antimony | 16.4 | U | N | P |
| 7440-38-2 | Arsenic | 24.8 | | | P |
| 7440-39-3 | Barium | 91.0 | | E | P |
| 7440-41-7 | Beryllium | 0.095 | J | | P |
| 7440-43-9 | Cadmium | 16.7 | | | P |
| 7440-70-2 | Calcium | 286000 | | D E | P |
| 7440-47-3 | Chromium | 12.1 | | | P |
| 7440-48-4 | Cobalt | 10.1 | J | E | P |
| 7440-50-8 | Copper | 6.1 | J | E | P |
| 7439-89-6 | Iron | 46300 | | E | P |
| 7439-92-1 | Lead | 213 | | E | P |
| 7439-95-4 | Magnesium | 106000 | | * E | P |
| 7439-96-5 | Manganese | 2870 | | * E | P |
| 7439-97-6 | Mercury | 0.27 | U | | CV |
| 7440-02-0 | Nickel | 20.1 | | E | P |
| 7440-09-7 | Potassium | 958 | J | E | P |
| 7782-49-2 | Selenium | 9.6 | U | | P |
| 7440-22-4 | Silver | 1.7 | J | | P |
| 7440-23-5 | Sodium | 308 | J | | P |
| 7440-28-0 | Thallium | 6.8 | U | | P |
| 7440-62-2 | Vanadium | 21.4 | | E | P |
| 7440-66-6 | Zinc | 6490 | | * N E | P |
| 57-12-5 | Cyanide | 6.8 | U | N | AS |

Color Before: BROWN Clarity Before: Texture: COARSE

Color After: COLORLESS Clarity After: Artifacts:

Comments:

FORM IA-IN ILM05.4

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1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ME0011

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: SDG No.: ME0002

Matrix: (Soil/Water) SOIL Lab Sample ID: 0911277-10

Level: (low/med) LOW Date Received: 11/20/2009

% Solids 75.6

Concentration Units (ug/L or mg/kg dry weight): mg/Kg

| CAS NO. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 5760 | | E | P |
| 7440-36-0 | Antimony | 7.9 | U | N | P |
| 7440-38-2 | Arsenic | 9.8 | | | P |
| 7440-39-3 | Barium | 102 | | E | P |
| 7440-41-7 | Beryllium | 0.066 | J | | P |
| 7440-43-9 | Cadmium | 12.6 | | | P |
| 7440-70-2 | Calcium | 34900 | | E | P |
| 7440-47-3 | Chromium | 9.8 | | | P |
| 7440-48-4 | Cobalt | 5.6 | J | E | P |
| 7440-50-8 | Copper | 5.9 | | E | P |
| 7439-89-6 | Iron | 20500 | | E | P |
| 7439-92-1 | Lead | 34.0 | | E | P |
| 7439-95-4 | Magnesium | 17900 | | * E | P |
| 7439-96-5 | Manganese | 875 | | * E | P |
| 7439-97-6 | Mercury | 0.13 | U | | CV |
| 7440-02-0 | Nickel | 10.2 | | E | P |
| 7440-09-7 | Potassium | 563 | J | E | P |
| 7782-49-2 | Selenium | 0.91 | J | | P |
| 7440-22-4 | Silver | 1.3 | | | P |
| 7440-23-5 | Sodium | 70.9 | J | | P |
| 7440-28-0 | Thallium | 3.3 | U | | P |
| 7440-62-2 | Vanadium | 13.4 | | E | P |
| 7440-66-6 | Zinc | 4680 | | * N E | P |
| 57-12-5 | Cyanide | 3.3 | U | N | AS |

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: COLORLESS Clarity After: Artifacts:

Comments:

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1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ME0012

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: SDG No.: ME0002

Matrix: (Soil/Water) SOIL Lab Sample ID: 0911277-11

Level: (low/med) LOW Date Received: 11/20/2009

% Solids 78.7

Concentration Units (**ug/L** or **mg/kg** dry weight): mg/Kg

| CAS NO. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 1450 | | E | P |
| 7440-36-0 | Antimony | 7.6 | U | N | P |
| 7440-38-2 | Arsenic | 11.1 | | | P |
| 7440-39-3 | Barium | 27.8 | | E | P |
| 7440-41-7 | Beryllium | 0.057 | J | | P |
| 7440-43-9 | Cadmium | 11.9 | | | P |
| 7440-70-2 | Calcium | 180000 | | D E | P |
| 7440-47-3 | Chromium | 3.4 | | | P |
| 7440-48-4 | Cobalt | 3.2 | J | E | P |
| 7440-50-8 | Copper | 1.9 | J | E | P |
| 7439-89-6 | Iron | 22100 | | E | P |
| 7439-92-1 | Lead | 101 | | E | P |
| 7439-95-4 | Magnesium | 63400 | | * E | P |
| 7439-96-5 | Manganese | 2280 | | * E | P |
| 7439-97-6 | Mercury | 0.045 | J | | CV |
| 7440-02-0 | Nickel | 6.1 | | E | P |
| 7440-09-7 | Potassium | 282 | J | E | P |
| 7782-49-2 | Selenium | 4.4 | U | | P |
| 7440-22-4 | Silver | 1.1 | J | | P |
| 7440-23-5 | Sodium | 173 | J | | P |
| 7440-28-0 | Thallium | 3.2 | U | | P |
| 7440-62-2 | Vanadium | 5.7 | J | E | P |
| 7440-66-6 | Zinc | 4650 | | * N E | P |
| 57-12-5 | Cyanide | 3.2 | U | N | AS |

Color Before: BROWN Clarity Before: Texture: COARSE

Color After: COLORLESS Clarity After: Artifacts:

Comments:

FORM IA-IN ILM05.4

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1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ME0013

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: SDG No.: ME0002

Matrix: (Soil/Water) SOIL Lab Sample ID: 0911277-12

Level: (low/med) LOW Date Received: 11/20/2009

% Solids 91.6

Concentration Units (ug/L or mg/kg dry weight): mg/Kg

| CAS NO. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 838 | | E | P |
| 7440-36-0 | Antimony | 6.6 | U | N | P |
| 7440-38-2 | Arsenic | 11.1 | | | P |
| 7440-39-3 | Barium | 20.0 | J | E | P |
| 7440-41-7 | Beryllium | 0.069 | J | | P |
| 7440-43-9 | Cadmium | 10.8 | | | P |
| 7440-70-2 | Calcium | 136000 | | D E | P |
| 7440-47-3 | Chromium | 2.4 | | | P |
| 7440-48-4 | Cobalt | 2.8 | J | E | P |
| 7440-50-8 | Copper | 1.1 | J | E | P |
| 7439-89-6 | Iron | 16900 | | E | P |
| 7439-92-1 | Lead | 95.1 | | E | P |
| 7439-95-4 | Magnesium | 59200 | | * E | P |
| 7439-96-5 | Manganese | 1740 | | * E | P |
| 7439-97-6 | Mercury | 0.057 | J | | CV |
| 7440-02-0 | Nickel | 5.1 | | E | P |
| 7440-09-7 | Potassium | 186 | J | E | P |
| 7782-49-2 | Selenium | 3.8 | U | | P |
| 7440-22-4 | Silver | 1.1 | | | P |
| 7440-23-5 | Sodium | 143 | J | | P |
| 7440-28-0 | Thallium | 2.7 | U | | P |
| 7440-62-2 | Vanadium | 3.9 | J | E | P |
| 7440-66-6 | Zinc | 4270 | | * N E | P |
| 57-12-5 | Cyanide | 2.7 | U | N | AS |

Color Before: BROWN Clarity Before: Texture: COARSE

Color After: COLORLESS Clarity After: Artifacts:

Comments:

FORM IA-IN ILM05.4

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1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ME0014

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: SDG No.: ME0002

Matrix: (Soil/Water) SOIL Lab Sample ID: 0911277-13

Level: (low/med) LOW Date Received: 11/20/2009

% Solids 66.3

Concentration Units (**ug/L** or **mg/kg** dry weight): mg/Kg

| CAS NO. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 4740 | | E | P |
| 7440-36-0 | Antimony | 9.0 | U | N | P |
| 7440-38-2 | Arsenic | 11.9 | | | P |
| 7440-39-3 | Barium | 85.5 | | E | P |
| 7440-41-7 | Beryllium | 0.75 | U | | P |
| 7440-43-9 | Cadmium | 12.5 | | | P |
| 7440-70-2 | Calcium | 85100 | | E | P |
| 7440-47-3 | Chromium | 8.4 | | | P |
| 7440-48-4 | Cobalt | 7.1 | J | E | P |
| 7440-50-8 | Copper | 7.0 | | E | P |
| 7439-89-6 | Iron | 23200 | | E | P |
| 7439-92-1 | Lead | 986 | | E | P |
| 7439-95-4 | Magnesium | 34400 | | * E | P |
| 7439-96-5 | Manganese | 1310 | | * E | P |
| 7439-97-6 | Mercury | 0.10 | J | | CV |
| 7440-02-0 | Nickel | 15.0 | | E | P |
| 7440-09-7 | Potassium | 646 | J | E | P |
| 7782-49-2 | Selenium | 0.51 | J | | P |
| 7440-22-4 | Silver | 1.1 | J | | P |
| 7440-23-5 | Sodium | 112 | J | | P |
| 7440-28-0 | Thallium | 3.8 | U | | P |
| 7440-62-2 | Vanadium | 14.2 | | E | P |
| 7440-66-6 | Zinc | 5070 | | * N E | P |
| 57-12-5 | Cyanide | 3.8 | U | N | AS |

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: COLORLESS Clarity After: Artifacts:

Comments:

FORM IA-IN ILM05.4

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1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ME0015

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: SDG No.: ME0002

Matrix: (Soil/Water) SOIL Lab Sample ID: 0911277-14

Level: (low/med) LOW Date Received: 11/20/2009

% Solids 73.3

Concentration Units (ug/L or mg/kg dry weight): mg/Kg

| CAS NO. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 4070 | | E | P |
| 7440-36-0 | Antimony | 8.2 | U | N | P |
| 7440-38-2 | Arsenic | 20.6 | | | P |
| 7440-39-3 | Barium | 62.8 | | E | P |
| 7440-41-7 | Beryllium | 0.68 | U | | P |
| 7440-43-9 | Cadmium | 10.6 | | | P |
| 7440-70-2 | Calcium | 61700 | | E | P |
| 7440-47-3 | Chromium | 6.4 | | | P |
| 7440-48-4 | Cobalt | 7.4 | | E | P |
| 7440-50-8 | Copper | 31.1 | | E | P |
| 7439-89-6 | Iron | 26600 | | E | P |
| 7439-92-1 | Lead | 533 | | E | P |
| 7439-95-4 | Magnesium | 29600 | | * E | P |
| 7439-96-5 | Manganese | 1040 | | * E | P |
| 7439-97-6 | Mercury | 0.076 | J | | CV |
| 7440-02-0 | Nickel | 14.1 | | E | P |
| 7440-09-7 | Potassium | 577 | J | E | P |
| 7782-49-2 | Selenium | 4.8 | U | | P |
| 7440-22-4 | Silver | 1.3 | J | | P |
| 7440-23-5 | Sodium | 97.6 | J | | P |
| 7440-28-0 | Thallium | 3.4 | U | | P |
| 7440-62-2 | Vanadium | 11.0 | | E | P |
| 7440-66-6 | Zinc | 4320 | | * N E | P |
| 57-12-5 | Cyanide | 3.4 | U | N | AS |

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: COLORLESS Clarity After: Artifacts:

Comments:

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ME0016

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: SDG No.: ME0002

Matrix: (Soil/Water) SOIL Lab Sample ID: 0911277-15

Level: (low/med) LOW Date Received: 11/20/2009

% Solids 66.0

Concentration Units (ug/L or mg/kg dry weight): mg/Kg

| CAS NO. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 4810 | | E | P |
| 7440-36-0 | Antimony | 9.1 | U | N | P |
| 7440-38-2 | Arsenic | 5.1 | | | P |
| 7440-39-3 | Barium | 89.7 | | E | P |
| 7440-41-7 | Beryllium | 0.76 | U | | P |
| 7440-43-9 | Cadmium | 3.5 | | | P |
| 7440-70-2 | Calcium | 46100 | | E | P |
| 7440-47-3 | Chromium | 8.1 | | | P |
| 7440-48-4 | Cobalt | 5.9 | J | E | P |
| 7440-50-8 | Copper | 6.8 | | E | P |
| 7439-89-6 | Iron | 12800 | | E | P |
| 7439-92-1 | Lead | 127 | | E | P |
| 7439-95-4 | Magnesium | 22000 | | * E | P |
| 7439-96-5 | Manganese | 921 | | * E | P |
| 7439-97-6 | Mercury | 0.059 | J | | CV |
| 7440-02-0 | Nickel | 10.5 | | E | P |
| 7440-09-7 | Potassium | 602 | J | E | P |
| 7782-49-2 | Selenium | 0.77 | J | | P |
| 7440-22-4 | Silver | 1.5 | U | | P |
| 7440-23-5 | Sodium | 75.5 | J | | P |
| 7440-28-0 | Thallium | 3.8 | U | | P |
| 7440-62-2 | Vanadium | 13.6 | | E | P |
| 7440-66-6 | Zinc | 1530 | | * N E | P |
| 57-12-5 | Cyanide | 3.8 | U | N | AS |

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: COLORLESS Clarity After: Artifacts:

Comments:

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1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ME0017

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: SDG No.: ME0002

Matrix: (Soil/Water) SOIL Lab Sample ID: 0911277-16

Level: (low/med) LOW Date Received: 11/20/2009

% Solids 87.1

Concentration Units (ug/L or mg/kg dry weight): mg/Kg

| CAS NO. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 3820 | | E | P |
| 7440-36-0 | Antimony | 6.9 | U | N | P |
| 7440-38-2 | Arsenic | 6.5 | | | P |
| 7440-39-3 | Barium | 59.3 | | E | P |
| 7440-41-7 | Beryllium | 0.57 | U | | P |
| 7440-43-9 | Cadmium | 5.9 | | | P |
| 7440-70-2 | Calcium | 39700 | | E | P |
| 7440-47-3 | Chromium | 6.6 | | | P |
| 7440-48-4 | Cobalt | 4.8 | J | E | P |
| 7440-50-8 | Copper | 7.4 | | E | P |
| 7439-89-6 | Iron | 13200 | | E | P |
| 7439-92-1 | Lead | 357 | | E | P |
| 7439-95-4 | Magnesium | 20800 | | * E | P |
| 7439-96-5 | Manganese | 713 | | * E | P |
| 7439-97-6 | Mercury | 0.11 | U | | CV |
| 7440-02-0 | Nickel | 12.2 | | E | P |
| 7440-09-7 | Potassium | 450 | J | E | P |
| 7782-49-2 | Selenium | 4.0 | U | | P |
| 7440-22-4 | Silver | 0.59 | J | | P |
| 7440-23-5 | Sodium | 67.9 | J | | P |
| 7440-28-0 | Thallium | 2.9 | U | | P |
| 7440-62-2 | Vanadium | 11.3 | | E | P |
| 7440-66-6 | Zinc | 2540 | | * N E | P |
| 57-12-5 | Cyanide | 2.9 | U | N | AS |

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: COLORLESS Clarity After: Artifacts:

Comments:

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1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
ME0018

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: SDG No.: ME0002

Matrix: (Soil/Water) SOIL Lab Sample ID: 0911277-17

Level: (low/med) LOW Date Received: 11/20/2009

% Solids 70.2

Concentration Units (**ug/L** or **mg/kg** dry weight): mg/Kg

| CAS NO. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 3060 | | E | P |
| 7440-36-0 | Antimony | 8.5 | U | N | P |
| 7440-38-2 | Arsenic | 33.9 | | | P |
| 7440-39-3 | Barium | 86.7 | | E | P |
| 7440-41-7 | Beryllium | 0.10 | J | | P |
| 7440-43-9 | Cadmium | 24.9 | | | P |
| 7440-70-2 | Calcium | 121000 | | D E | P |
| 7440-47-3 | Chromium | 6.2 | | | P |
| 7440-48-4 | Cobalt | 11.6 | | E | P |
| 7440-50-8 | Copper | 380 | | E | P |
| 7439-89-6 | Iron | 52800 | | E | P |
| 7439-92-1 | Lead | 2070 | | E | P |
| 7439-95-4 | Magnesium | 44000 | | * E | P |
| 7439-96-5 | Manganese | 1360 | | * E | P |
| 7439-97-6 | Mercury | 0.26 | | | CV |
| 7440-02-0 | Nickel | 30.9 | | E | P |
| 7440-09-7 | Potassium | 679 | J | E | P |
| 7782-49-2 | Selenium | 0.84 | J | | P |
| 7440-22-4 | Silver | 2.7 | | | P |
| 7440-23-5 | Sodium | 73.5 | J | | P |
| 7440-28-0 | Thallium | 3.6 | U | | P |
| 7440-62-2 | Vanadium | 7.9 | | E | P |
| 7440-66-6 | Zinc | 9490 | | D * N E | P |
| 57-12-5 | Cyanide | 3.6 | U | N | AS |

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: COLORLESS Clarity After: Artifacts:

Comments:

FORM IA-IN ILM05.4

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ME0019

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: SDG No.: ME0002

Matrix: (Soil/Water) SOIL Lab Sample ID: 0911277-18

Level: (low/med) LOW Date Received: 11/20/2009

% Solids 31.5

Concentration Units (ug/L or mg/kg dry weight): mg/Kg

| CAS NO. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 7030 | | E | P |
| 7440-36-0 | Antimony | 19.0 | U | N | P |
| 7440-38-2 | Arsenic | 6.4 | | | P |
| 7440-39-3 | Barium | 53.6 | J | E | P |
| 7440-41-7 | Beryllium | 1.6 | U | | P |
| 7440-43-9 | Cadmium | 1.4 | J | | P |
| 7440-70-2 | Calcium | 12300 | | E | P |
| 7440-47-3 | Chromium | 10.3 | | | P |
| 7440-48-4 | Cobalt | 11.8 | J | E | P |
| 7440-50-8 | Copper | 13.6 | | E | P |
| 7439-89-6 | Iron | 17700 | | E | P |
| 7439-92-1 | Lead | 61.6 | | E | P |
| 7439-95-4 | Magnesium | 5390 | | * E | P |
| 7439-96-5 | Manganese | 169 | | * E | P |
| 7439-97-6 | Mercury | 0.13 | J | | CV |
| 7440-02-0 | Nickel | 22.0 | | E | P |
| 7440-09-7 | Potassium | 878 | J | E | P |
| 7782-49-2 | Selenium | 1.6 | J | | P |
| 7440-22-4 | Silver | 3.2 | U | | P |
| 7440-23-5 | Sodium | 117 | J | | P |
| 7440-28-0 | Thallium | 7.9 | U | | P |
| 7440-62-2 | Vanadium | 17.3 | | E | P |
| 7440-66-6 | Zinc | 5650 | | * N E | P |
| 57-12-5 | Cyanide | 7.9 | U | N | AS |

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: COLORLESS Clarity After: Artifacts:

Comments:

FORM IA-IN ILM05.4

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
ME0020

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: SDG No.: ME0002

Matrix: (Soil/Water) SOIL Lab Sample ID: 0911277-19

Level: (low/med) LOW Date Received: 11/20/2009

% Solids 56.0

Concentration Units (ug/L or mg/kg dry weight): mg/Kg

| CAS NO. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 5370 | | E | P |
| 7440-36-0 | Antimony | 10.7 | U | N | P |
| 7440-38-2 | Arsenic | 2.9 | | | P |
| 7440-39-3 | Barium | 78.6 | | E | P |
| 7440-41-7 | Beryllium | 0.89 | U | | P |
| 7440-43-9 | Cadmium | 3.0 | | | P |
| 7440-70-2 | Calcium | 16800 | | E | P |
| 7440-47-3 | Chromium | 8.4 | | | P |
| 7440-48-4 | Cobalt | 5.9 | J | E | P |
| 7440-50-8 | Copper | 9.2 | | E | P |
| 7439-89-6 | Iron | 9060 | | E | P |
| 7439-92-1 | Lead | 36.1 | | E | P |
| 7439-95-4 | Magnesium | 8530 | | * E | P |
| 7439-96-5 | Manganese | 592 | | * E | P |
| 7439-97-6 | Mercury | 0.058 | J | | CV |
| 7440-02-0 | Nickel | 11.1 | | E | P |
| 7440-09-7 | Potassium | 890 | J | E | P |
| 7782-49-2 | Selenium | 0.66 | J | | P |
| 7440-22-4 | Silver | 1.8 | U | | P |
| 7440-23-5 | Sodium | 48.8 | J | | P |
| 7440-28-0 | Thallium | 4.5 | U | | P |
| 7440-62-2 | Vanadium | 13.2 | | E | P |
| 7440-66-6 | Zinc | 1240 | | * N E | P |
| 57-12-5 | Cyanide | 4.5 | U | N | AS |

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: COLORLESS Clarity After: Artifacts:

Comments:

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ME0021

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: SDG No.: ME0002

Matrix: (Soil/Water) SOIL Lab Sample ID: 0911277-20

Level: (low/med) LOW Date Received: 11/20/2009

% Solids 71.9

Concentration Units (ug/L or mg/kg dry weight): mg/Kg

| CAS NO. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 5340 | | E | P |
| 7440-36-0 | Antimony | 8.3 | U | N | P |
| 7440-38-2 | Arsenic | 5.3 | | | P |
| 7440-39-3 | Barium | 88.7 | | E | P |
| 7440-41-7 | Beryllium | 0.70 | U | | P |
| 7440-43-9 | Cadmium | 0.93 | | | P |
| 7440-70-2 | Calcium | 19600 | | E | P |
| 7440-47-3 | Chromium | 8.3 | | | P |
| 7440-48-4 | Cobalt | 6.6 | J | E | P |
| 7440-50-8 | Copper | 7.0 | | E | P |
| 7439-89-6 | Iron | 12800 | | E | P |
| 7439-92-1 | Lead | 67.3 | | E | P |
| 7439-95-4 | Magnesium | 10700 | | * E | P |
| 7439-96-5 | Manganese | 556 | | * E | P |
| 7439-97-6 | Mercury | 0.14 | U | | CV |
| 7440-02-0 | Nickel | 12.1 | | E | P |
| 7440-09-7 | Potassium | 668 | J | E | P |
| 7782-49-2 | Selenium | 0.92 | J | | P |
| 7440-22-4 | Silver | 1.4 | U | | P |
| 7440-23-5 | Sodium | 48.7 | J | | P |
| 7440-28-0 | Thallium | 3.5 | U | | P |
| 7440-62-2 | Vanadium | 13.8 | | E | P |
| 7440-66-6 | Zinc | 425 | | * N E | P |
| 57-12-5 | Cyanide | 3.5 | U | N | AS |

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: COLORLESS Clarity After: Artifacts:

Comments:

FORM IA-IN ILM05.4

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3-IN
BLANKS

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: SDG No.: ME0002

Preparation Blank Matrix (soil/water): Soil

Preparation Blank Concentration Units (ug/L or mg/kg): mg/Kg

| Analyte | Initial Calibration Blank (ug/L) | | Continuing Calibration Blank (ug/L) | | | | | | Preparation Blank | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | C | 1 | C | 2 | C | 3 | C | | C | M |
| Aluminum | 200.000 | U | 200.000 | U | 34.725 | J | 31.847 | J | 20.000 | U | P |
| Antimony | 60.000 | U | 60.000 | U | 60.000 | U | 60.000 | U | 6.000 | U | P |
| Arsenic | 10.000 | U | 10.000 | U | 10.000 | U | 10.000 | U | -0.280 | J | P |
| Barium | 200.000 | U | 200.000 | U | 4.746 | J | 5.010 | J | 20.000 | U | P |
| Beryllium | 5.000 | U | 5.000 | U | 0.129 | J | 5.000 | U | 0.500 | U | P |
| Cadmium | 5.000 | U | 0.113 | J | 0.563 | J | 0.605 | J | 0.500 | U | P |
| Calcium | 5,000.000 | U | 5,000.000 | U | 5,000.000 | U | 5,000.000 | U | 500.000 | U | P |
| Chromium | 10.000 | U | 10.000 | U | 10.000 | U | 10.000 | U | 1.000 | U | P |
| Cobalt | 50.000 | U | 50.000 | U | 1.022 | J | 1.051 | J | -0.037 | J | P |
| Copper | 25.000 | U | 25.000 | U | 25.000 | U | 25.000 | U | 2.500 | U | P |
| Iron | 100.000 | U | 100.000 | U | 26.956 | J | 25.062 | J | 10.000 | U | P |
| Lead | 10.000 | U | 10.000 | U | 10.000 | U | 10.000 | U | 1.000 | U | P |
| Magnesium | 5,000.000 | U | 5,000.000 | U | 5,000.000 | U | 5,000.000 | U | 500.000 | U | P |
| Manganese | 15.000 | U | 15.000 | U | 1.699 | J | 1.870 | J | 1.500 | U | P |
| Nickel | 40.000 | U | 40.000 | U | 40.000 | U | 40.000 | U | 4.000 | U | P |
| Potassium | 5,000.000 | U | 5,000.000 | U | 5,000.000 | U | 5,000.000 | U | 500.000 | U | P |
| Selenium | 3.500 | J | 35.000 | U | 4.751 | J | 4.744 | J | 3.500 | U | P |
| Silver | 10.000 | U | 10.000 | U | 10.000 | U | 10.000 | U | 1.000 | U | P |
| Sodium | 5,000.000 | U | 5,000.000 | U | 51.141 | J | 42.737 | J | 500.000 | U | P |
| Thallium | 25.000 | U | 1.621 | J | 2.053 | J | 2.008 | J | -0.183 | J | P |
| Vanadium | 50.000 | U | 50.000 | U | 50.000 | U | 50.000 | U | 5.000 | U | P |
| Zinc | 60.000 | U | 60.000 | U | 3.400 | J | 2.741 | J | 0.095 | J | P |

USEPA - CLP

3-IN
BLANKS

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: _____ SDG No.: ME0002

Preparation Blank Matrix (soil/water): Soil

Preparation Blank Concentration Units (ug/L or mg/kg): mg/Kg

| Analyte | Initial Calibration Blank (ug/L) | C | Continuing Calibration Blank (ug/L) 1 | C | 2 | C | 3 | C | Preparation Blank | C | M |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Aluminum | | | 27.880 | J | 34.920 | J | 200.000 | U | | | P |
| Antimony | | | 60.000 | U | 60.000 | U | 60.000 | U | | | P |
| Arsenic | | | 10.000 | U | 10.000 | U | 10.000 | U | | | P |
| Barium | | | 5.036 | J | 5.536 | J | 1.037 | J | | | P |
| Beryllium | | | 5.000 | U | 5.000 | U | -0.180 | J | | | P |
| Cadmium | | | 0.634 | J | 0.706 | J | 0.190 | J | | | P |
| Calcium | | | 5,000.000 | U | 5,000.000 | U | 5,000.000 | U | | | P |
| Chromium | | | 10.000 | U | 10.000 | U | 10.000 | U | | | P |
| Cobalt | | | 1.214 | J | 1.496 | J | 0.360 | J | | | P |
| Copper | | | 25.000 | U | 25.000 | U | 25.000 | U | | | P |
| Iron | | | 24.057 | J | 29.203 | J | 7.626 | J | | | P |
| Lead | | | 10.000 | U | 10.000 | U | 10.000 | U | | | P |
| Magnesium | | | 5,000.000 | U | 5,000.000 | U | 5,000.000 | U | | | P |
| Manganese | | | 1.928 | J | 2.314 | J | 0.577 | J | | | P |
| Nickel | | | 40.000 | U | 40.000 | U | 40.000 | U | | | P |
| Potassium | | | 5,000.000 | U | 5,000.000 | U | 5,000.000 | U | | | P |
| Selenium | | | 35.000 | U | 3.210 | J | 35.000 | U | | | P |
| Silver | | | 10.000 | U | 10.000 | U | 10.000 | U | | | P |
| Sodium | | | 51.083 | J | 34.103 | J | 31.754 | J | | | P |
| Thallium | | | 2.042 | J | 2.650 | J | 25.000 | U | | | P |
| Vanadium | | | 50.000 | U | 50.000 | U | 50.000 | U | | | P |
| Zinc | | | 3.256 | J | 3.316 | J | 1.852 | J | | | P |

USEPA - CLP

3-IN
BLANKS

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: SDG No.: ME0002

Preparation Blank Matrix (soil/water): Soil

Preparation Blank Concentration Units (ug/L or mg/kg): mg/Kg

| Analyte | Initial Calibration Blank (ug/L) | C | Continuing Calibration Blank (ug/L) 1 | C | 2 | C | 3 | C | Preparation Blank | C | M |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Aluminum | 200.000 | U | 18.207 | J | 200.000 | U | 200.000 | U | | | P |
| Antimony | 60.000 | U | 60.000 | U | 60.000 | U | 60.000 | U | | | P |
| Arsenic | 10.000 | U | 10.000 | U | 10.000 | U | 10.000 | U | | | P |
| Barium | 200.000 | U | 200.000 | U | 200.000 | U | 0.868 | J | | | P |
| Beryllium | -0.652 | J | -0.664 | J | -0.468 | J | -0.424 | J | | | P |
| Cadmium | 5.000 | U | 0.163 | J | 0.211 | J | 0.379 | J | | | P |
| Calcium | 5,000.000 | U | 5,000.000 | U | 5,000.000 | U | 5,000.000 | U | | | P |
| Chromium | 10.000 | U | 10.000 | U | 10.000 | U | 10.000 | U | | | P |
| Cobalt | 50.000 | U | 50.000 | U | 0.558 | J | 0.580 | J | | | P |
| Copper | 25.000 | U | 1.117 | J | 25.000 | U | 25.000 | U | | | P |
| Iron | 7.897 | J | 8.393 | J | 17.788 | J | 14.339 | J | | | P |
| Lead | 10.000 | U | 3.252 | J | 10.000 | U | 10.000 | U | | | P |
| Magnesium | 5,000.000 | U | 5,000.000 | U | 5,000.000 | U | 5,000.000 | U | | | P |
| Manganese | 15.000 | U | 1.073 | J | 15.000 | U | 0.966 | J | | | P |
| Nickel | 40.000 | U | 40.000 | U | 40.000 | U | 40.000 | U | | | P |
| Potassium | 5,000.000 | U | 5,000.000 | U | 5,000.000 | U | 5,000.000 | U | | | P |
| Selenium | 35.000 | U | 35.000 | U | 35.000 | U | 35.000 | U | | | P |
| Silver | 10.000 | U | 10.000 | U | 10.000 | U | 10.000 | U | | | P |
| Sodium | 5,000.000 | U | 22.283 | J | 5,000.000 | U | 5,000.000 | U | | | P |
| Thallium | 25.000 | U | 25.000 | U | 1.483 | J | 1.694 | J | | | P |
| Vanadium | 50.000 | U | 3.108 | J | 3.834 | J | 50.000 | U | | | P |
| Zinc | 60.000 | U | 60.000 | U | 60.000 | U | 60.000 | U | | | P |

USEPA - CLP

3-IN
BLANKS

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: SDG No.: ME0002

Preparation Blank Matrix (soil/water): Soil

Preparation Blank Concentration Units (ug/L or mg/kg): mg/Kg

| Analyte | Initial Calibration Blank (ug/L) | | Continuing Calibration Blank (ug/L) | | | | | | Preparation Blank | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | C | 1 | C | 2 | C | 3 | C | | C | M |
| Mercury | 0.048 | J | -0.043 | J | -0.030 | J | 0.200 | U | 0.100 | U | CV |

USEPA - CLP

3-IN
BLANKS

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: _____ SDG No.: ME0002

Preparation Blank Matrix (soil/water): Soil

Preparation Blank Concentration Units (ug/L or mg/kg): mg/Kg

| Analyte | Initial Calibration Blank (ug/L) | | Continuing Calibration Blank (ug/L) | | | | | | Preparation Blank | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | C | 1 | C | 2 | C | 3 | C | | C | M |
| Mercury | | | 0.200 | U | | | | | | | CV |

USEPA - CLP

3-IN
BLANKS

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: _____ SDG No.: ME0002

Preparation Blank Matrix (soil/water): Soil

Preparation Blank Concentration Units (ug/L or mg/kg): mg/Kg

| Analyte | Initial Calibration Blank (ug/L) | | Continuing Calibration Blank (ug/L) | | | | | | Preparation Blank | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | C | 1 | C | 2 | C | 3 | C | | C | M |
| Cyanide | 50.000 | U | 50.000 | U | 50.000 | U | -1.390 | J | 2.500 | U | AS |

USEPA - CLP

3-IN
BLANKS

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: _____ SDG No.: ME0002

Preparation Blank Matrix (soil/water): Soil

Preparation Blank Concentration Units (ug/L or mg/kg): mg/Kg

| Analyte | Initial Calibration Blank (ug/L) | | Continuing Calibration Blank (ug/L) | | | | | | Preparation Blank | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | C | 1 | C | 2 | C | 3 | C | | C | M |
| Cyanide | | | -1.360 | J | 50.000 | U | | | | | AS |

USEPA - CLP

3-IN
BLANKS

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: _____ SDG No.: ME0002

Preparation Blank Matrix (soil/water): Soil

Preparation Blank Concentration Units (ug/L or mg/kg): mg/Kg

| Analyte | Initial Calibration Blank (ug/L) | | Continuing Calibration Blank (ug/L) | | | | | | Preparation Blank | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | C | 1 | C | 2 | C | 3 | C | | C | M |
| Cyanide | 50.000 | U | -0.760 | J | 50.000 | U | 50.000 | U | | | AS |

USEPA - CLP

4A-IN
ICP-AES INTERFERENCE CHECK SAMPLE

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: SDG No.: ME0002

ICP-AES Instrument ID: ICAPP 6500 ICS Source: USEPA, Lot Part A(1206) B(0203)

Concentration Units: ug/L

| Analyte | True | | Initial found | | | | Final found | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Sol. A | Sol. AB | Sol. A | %R | Sol. AB | %R | Sol. A | %R | Sol. AB | %R |
| Aluminum | 244000 | 244000 | 254000 | 104 | 256000 | 105 | 253000 | 104 | 256000 | 105 |
| Antimony | 0 | 589 | -4.4 | | 617 | 105 | -2.5 | | 629 | 107 |
| Arsenic | 0 | 101 | 0.050 | | 102 | 101 | 0.11 | | 102 | 101 |
| Barium | 2 | 495 | 3.0 | 150 | 523 | 106 | 2.6 | 130 | 525 | 106 |
| Beryllium | 0 | 475 | 0.73 | | 521 | 110 | 0.39 | | 514 | 108 |
| Cadmium | 0 | 940 | -0.25 | | 978 | 104 | -0.44 | | 993 | 106 |
| Calcium | 235000 | 231000 | 250000 | 106 | 253000 | 109 | 248000 | 106 | 251000 | 109 |
| Chromium | 43 | 511 | 45.3 | 105 | 559 | 109 | 45.4 | 106 | 556 | 109 |
| Cobalt | 4 | 461 | 4.6 | 115 | 480 | 104 | 4.5 | 113 | 488 | 106 |
| Copper | 23 | 548 | 13.4 | 58 | 541 | 99 | 13.3 | 58 | 545 | 99 |
| Iron | 95600 | 94800 | 96800 | 101 | 97600 | 103 | 94300 | 99 | 95400 | 101 |
| Lead | 10 | 61 | 1.1 | 11 | 50.9 | 83 | 2.2 | 22 | 53.5 | 88 |
| Magnesium | 248000 | 251000 | 257000 | 104 | 254000 | 101 | 249000 | 101 | 251000 | 100 |
| Manganese | 19 | 502 | 22.2 | 117 | 531 | 106 | 22.1 | 116 | 521 | 104 |
| Nickel | 21 | 984 | 18.9 | 90 | 979 | 99 | 18.1 | 86 | 1010 | 103 |
| Potassium | 0 | 0 | 31.2 | | 28.3 | | -60.1 | | -43.0 | |
| Selenium | 0 | 53 | 4.2 | | 53.2 | 100 | 6.4 | | 55.1 | 104 |
| Silver | 0 | 206 | 2.9 | | 224 | 109 | 2.6 | | 226 | 110 |
| Sodium | 0 | 0 | 850 | | 847 | | 851 | | 850 | |
| Thallium | 0 | 103 | 2.2 | | 104 | 101 | -2.3 | | 105 | 102 |
| Vanadium | 0 | 494 | -0.1 | | 507 | 103 | -0.20 | | 500 | 101 |
| Zinc | 28 | 1030 | 31.0 | 111 | 1000 | 97 | 31.4 | 112 | 1010 | 98 |

USEPA - CLP

4A-IN
ICP-AES INTERFERENCE CHECK SAMPLE

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: _____ SDG No.: ME0002

ICP-AES Instrument ID: ICAPP 6500 ICS Source: USEPA, Lot Part A(1206) B(0203

Concentration Units: ug/L

| Analyte | True | | Initial found | | | | Final found | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Sol. A | Sol. AB | Sol. A | %R | Sol. AB | %R | Sol. A | %R | Sol. AB | %R |
| Aluminum | 244000 | 244000 | | | | | 254000 | 104 | 259000 | 106 |
| Antimony | 0 | 589 | | | | | -4.3 | | 624 | 106 |
| Arsenic | 0 | 101 | | | | | -0.23 | | 102 | 101 |
| Barium | 2 | 495 | | | | | 2.7 | 135 | 533 | 108 |
| Beryllium | 0 | 475 | | | | | 0.47 | | 520 | 109 |
| Cadmium | 0 | 940 | | | | | -0.28 | | 980 | 104 |
| Calcium | 235000 | 231000 | | | | | 247000 | 105 | 251000 | 109 |
| Chromium | 43 | 511 | | | | | 44.5 | 103 | 545 | 107 |
| Cobalt | 4 | 461 | | | | | 4.4 | 110 | 483 | 105 |
| Copper | 23 | 548 | | | | | 13.4 | 58 | 539 | 98 |
| Iron | 95600 | 94800 | | | | | 93000 | 97 | 94400 | 100 |
| Lead | 10 | 61 | | | | | 0.42 | 4 | 50.8 | 83 |
| Magnesium | 248000 | 251000 | | | | | 249000 | 101 | 251000 | 100 |
| Manganese | 19 | 502 | | | | | 21.9 | 115 | 519 | 103 |
| Nickel | 21 | 984 | | | | | 18.0 | 86 | 989 | 101 |
| Potassium | 0 | 0 | | | | | -36.8 | | -59.0 | |
| Selenium | 0 | 53 | | | | | 4.5 | | 55.2 | 104 |
| Silver | 0 | 206 | | | | | 2.5 | | 223 | 108 |
| Sodium | 0 | 0 | | | | | 851 | | 851 | |
| Thallium | 0 | 103 | | | | | -0.16 | | 102 | 99 |
| Vanadium | 0 | 494 | | | | | -0.036 | | 503 | 102 |
| Zinc | 28 | 1030 | | | | | 31.4 | 112 | 996 | 97 |

USEPA - CLP

4A-IN
ICP-AES INTERFERENCE CHECK SAMPLE

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: _____ SDG No.: ME0002

ICP-AES Instrument ID: ICAPP 6500 ICS Source: USEPA, Lot Part A(1206) B(0203

Concentration Units: ug/L

| Analyte | True | | Initial found | | | | Final found | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Sol. A | Sol. AB | Sol. A | %R | Sol. AB | %R | Sol. A | %R | Sol. AB | %R |
| Aluminum | 244000 | 244000 | | | | | 252000 | 103 | 254000 | 104 |
| Antimony | 0 | 589 | | | | | -3.2 | | 609 | 103 |
| Arsenic | 0 | 101 | | | | | -0.41 | | 99.1 | 98 |
| Barium | 2 | 495 | | | | | 3.0 | 150 | 522 | 105 |
| Beryllium | 0 | 475 | | | | | 0.68 | | 503 | 106 |
| Cadmium | 0 | 940 | | | | | -0.23 | | 960 | 102 |
| Calcium | 235000 | 231000 | | | | | 247000 | 105 | 249000 | 108 |
| Chromium | 43 | 511 | | | | | 45.9 | 107 | 566 | 111 |
| Cobalt | 4 | 461 | | | | | 4.6 | 115 | 473 | 103 |
| Copper | 23 | 548 | | | | | 13.2 | 57 | 540 | 99 |
| Iron | 95600 | 94800 | | | | | 92400 | 97 | 93200 | 98 |
| Lead | 10 | 61 | | | | | 1.9 | 19 | 50.1 | 82 |
| Magnesium | 248000 | 251000 | | | | | 242000 | 98 | 244000 | 97 |
| Manganese | 19 | 502 | | | | | 21.9 | 115 | 513 | 102 |
| Nickel | 21 | 984 | | | | | 18.2 | 87 | 965 | 98 |
| Potassium | 0 | 0 | | | | | -18.0 | | -22.9 | |
| Selenium | 0 | 53 | | | | | 5.7 | | 51.2 | 97 |
| Silver | 0 | 206 | | | | | 2.3 | | 225 | 109 |
| Sodium | 0 | 0 | | | | | 869 | | 850 | |
| Thallium | 0 | 103 | | | | | 1.3 | | 99.9 | 97 |
| Vanadium | 0 | 494 | | | | | -0.19 | | 499 | 101 |
| Zinc | 28 | 1030 | | | | | 31.5 | 113 | 982 | 96 |

USEPA - CLP

5A-IN
MATRIX SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

ME0009S

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: _____ SDG No.: ME0002

Matrix: (Soil/Water) Soil Level: (low/med) LOW

% Solids for Sample: 68.9

Concentration Units (ug/L or mg/kg dry weight): mg/Kg

| Analyte | Control Limit %R | Spiked Sample Result (SSR) | C | Sample Result (SR) | C | Spike Added (SA) | %R | Q | M |
|---|---|---|---|---|---|---|---|---|---|
| Aluminum | | 9,251.0880 | | 7,680.4060 | | 580.60 | 271 | | P |
| Antimony | 75-125 | 4.8055 | J | 8.7000 | U | 29.03 | 17 | N | P |
| Arsenic | 75-125 | 16.3948 | | 5.9848 | | 11.61 | 90 | | P |
| Barium | 75-125 | 582.0029 | | 86.3411 | | 580.60 | 85 | | P |
| Beryllium | 75-125 | 11.4225 | | 0.0455 | J | 14.51 | 78 | | P |
| Cadmium | 75-125 | 16.7605 | | 0.3635 | J | 14.51 | 113 | | P |
| Chromium | 75-125 | 60.9303 | | 14.6952 | | 58.06 | 80 | | P |
| Cobalt | 75-125 | 124.7126 | | 8.7383 | | 145.10 | 80 | | P |
| Copper | 75-125 | 68.2554 | | 11.3464 | | 72.57 | 78 | | P |
| Iron | | 14,058.3500 | | 14,501.6000 | | 290.30 | -153 | | P |
| Lead | 75-125 | 21.2061 | | 14.0582 | | 5.81 | 123 | | P |
| Manganese | | 636.2409 | | 643.0479 | | 145.10 | -5 | | P |
| Nickel | 75-125 | 129.3367 | | 18.7518 | | 145.10 | 76 | | P |
| Selenium | 75-125 | 12.3421 | | 0.5659 | J | 14.51 | 81 | | P |
| Silver | 75-125 | 11.5202 | | 1.5000 | U | 14.51 | 79 | | P |
| Thallium | 75-125 | 13.8872 | | 3.6000 | U | 14.51 | 96 | | P |
| Vanadium | 75-125 | 146.1248 | | 22.9840 | | 145.10 | 85 | | P |
| Zinc | 75-125 | 2,025.3990 | | 151.1321 | | 145.10 | 1291 | N | P |

Comments:

USEPA - CLP

5A-IN
MATRIX SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

ME0009S

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: _____ SDG No.: ME0002

Matrix: (Soil/Water) Soil Level: (low/med) LOW

% Solids for Sample: 68.9

Concentration Units (ug/L or mg/kg dry weight): mg/Kg

| Analyte | Control Limit %R | Spiked Sample Result (SSR) | C | Sample Result (SR) | C | Spike Added (SA) | %R | Q | M |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | 75-125 | 0.8026 | | 0.0385 | J | 0.73 | 105 | | CV |

Comments:

USEPA - CLP

5A-IN
MATRIX SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

ME0009S

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: _____ SDG No.: ME0002

Matrix: (Soil/Water) Soil Level: (low/med) LOW

% Solids for Sample: 68.9

Concentration Units (ug/L or mg/kg dry weight): mg/Kg

| Analyte | Control Limit %R | Spiked Sample Result (SSR) | C | Sample Result (SR) | C | Spike Added (SA) | %R | Q | M |
|---|---|---|---|---|---|---|---|---|---|
| Cyanide | 75-125 | 4.9927 | | 3.6000 | U | 7.26 | 69 | N | AS |

Comments:

USEPA - CLP

5B-IN
POST SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

ME0009A

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: SDG No.: ME0002

Matrix: (Soil/Water) Soil Level: (low/med) LOW

% Solids for Sample: 68.9

Concentration Units ug/L: ug/L

| Analyte | Control Limit %R | Spiked Sample Result (SSR) | C | Sample Result (SR) | C | Spike Added (SA) | %R | Q | M |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | | 90.06 | | 60.00 | U | 120.0 | 75 | | P |

Comments:

FORM VB-IN ILM05.4

USEPA - CLP

5B-IN
POST SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

ME0009A

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: SDG No.: ME0002

Matrix: (Soil/Water) Soil Level: (low/med) LOW

% Solids for Sample: 68.9

Concentration Units ug/L: ug/L

| Analyte | Control Limit %R | Spiked Sample Result (SSR) | C | Sample Result (SR) | C | Spike Added (SA) | %R | Q | M |
|---|---|---|---|---|---|---|---|---|---|
| Zinc | | 20,477.00 | | 1,041.30 | | 2082.0 | 934 | | P |

Comments:

FORM VB-IN ILM05.4

USEPA - CLP

5B-IN
POST SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

ME0009A

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: SDG No.: ME0002

Matrix: (Soil/Water) Soil Level: (low/med) LOW

% Solids for Sample: 68.9

Concentration Units ug/L: ug/L

| Analyte | Control Limit %R | Spiked Sample Result (SSR) | C | Sample Result (SR) | C | Spike Added (SA) | %R | Q | M |
|---|---|---|---|---|---|---|---|---|---|
| Cyanide | | 94.41 | | 25.00 | U | 100.0 | 94 | | AS |

Comments:

FORM VB-IN ILM05.4

USEPA - CLP

6-IN
DUPLICATES

EPA SAMPLE NO.

ME0009D

Lab Name: Bonner Analytical Testing Contract EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: SDG No.: ME0002

Matrix: (Soil/Water) Soil Level: (low/med) LOW

% Solids for Sample: 68.9 % Solids for Duplicate: 68.9

Concentration Units (ug/L or mg/kg dry weight): mg/Kg

| Analyte | Control Limit | Sample (S) | C | Duplicate (D) | C | RPD | Q | M |
|---|---|---|---|---|---|---|---|---|
| Aluminum | | 7680.4060 | | 7383.5990 | | 4 | | P |
| Antimony | | 8.7 | U | 8.7 | U | 0 | | P |
| Arsenic | 1.5 | 5.9848 | | 5.7360 | | 4 | | P |
| Barium | 29.0 | 86.3411 | | 83.1814 | | 4 | | P |
| Beryllium | | 0.0455 | J | 0.73 | U | 200 | | P |
| Cadmium | | 0.3635 | J | 0.5800 | J | 46 | | P |
| Calcium | | 54412.1900 | | 45015.9600 | | 19 | | P |
| Chromium | | 14.6952 | | 14.5167 | | 1 | | P |
| Cobalt | 7.3 | 8.7383 | | 12.5703 | | 36 | | P |
| Copper | 3.6 | 11.3464 | | 11.6511 | | 3 | | P |
| Iron | | 14501.6000 | | 12523.5100 | | 15 | | P |
| Lead | | 14.0582 | | 12.5161 | | 12 | | P |
| Magnesium | | 24612.4800 | | 17934.6900 | | 31 | * | P |
| Manganese | | 643.0479 | | 509.0856 | | 23 | * | P |
| Nickel | 5.8 | 18.7518 | | 22.8157 | | 20 | | P |
| Potassium | 726 | 1214.1510 | | 1158.0120 | | 5 | | P |
| Selenium | | 0.5659 | J | 0.7550 | J | 29 | | P |
| Silver | | 1.5 | U | 1.5 | U | 0 | | P |
| Sodium | | 119.1379 | J | 100.3309 | J | 17 | | P |
| Thallium | | 3.6 | U | 3.6 | U | 0 | | P |
| Vanadium | 7.3 | 22.9840 | | 20.9724 | | 9 | | P |
| Zinc | | 151.1321 | | 211.2627 | | 33 | * | P |

USEPA - CLP

6-IN
DUPLICATES

EPA SAMPLE NO.

ME0009D

Lab Name: Bonner Analytical Testing Contract EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: _____ SDG No.: ME0002

Matrix: (Soil/Water) Soil Level: (low/med) LOW

% Solids for Sample: 68.9 % Solids for Duplicate: 68.9

Concentration Units (ug/L or mg/kg dry weight): mg/Kg

| Analyte | Control Limit | Sample (S) | C | Duplicate (D) | C | RPD | Q | M |
|---|---|---|---|---|---|---|---|---|
| Mercury | | 0.0385 | J | 0.15 | U | 200 | | CV |

USEPA - CLP

6-IN
DUPLICATES

EPA SAMPLE NO.

ME0009D

Lab Name: Bonner Analytical Testing Contract EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: _____ SDG No.: ME0002

Matrix: (Soil/Water) Soil Level: (low/med) LOW

% Solids for Sample: 68.9 % Solids for Duplicate: 68.9

Concentration Units (ug/L or mg/kg dry weight): mg/Kg

| Analyte | Control Limit | Sample (S) | C | Duplicate (D) | C | RPD | Q | M |
|---|---|---|---|---|---|---|---|---|
| Cyanide | | 3.6 | U | 3.6 | U | 0 | | AS |

USEPA - CLP

8-IN
ICP-AES and ICP-MS SERIAL DILUTIONS

EPA SAMPLE NO.

ME0009L

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: SDG No.: ME0002

Matrix: (Soil/Water) Soil Level: (low/med) LOW

Concentration Units: ug/L

| Analyte | Initial Sample Result (I) | C | Serial Dilution Result (S) | C | % Difference | Q | M |
|---|---|---|---|---|---|---|---|
| Aluminum | 52917.50 | | 62010.00 | | 17 | E | P |
| Antimony | 60.00 | U | 300.00 | U | | | P |
| Arsenic | 41.24 | | 46.03 | J | 12 | | P |
| Barium | 594.89 | | 706.78 | | 19 | E | P |
| Beryllium | 0.31 | J | 25.00 | U | 100 | | P |
| Cadmium | 2.50 | J | 2.58 | J | 3 | | P |
| Calcium | 374900.00 | | 453267.50 | | 21 | E | P |
| Chromium | 101.25 | | 124.76 | J | 23 | | P |
| Cobalt | 60.21 | | 74.88 | J | 24 | E | P |
| Copper | 78.18 | | 90.92 | J | 16 | E | P |
| Iron | 99915.50 | | 121477.50 | | 22 | E | P |
| Lead | 96.86 | | 111.61 | J | 15 | E | P |
| Magnesium | 169585.00 | | 203432.50 | | 20 | E | P |
| Manganese | 4430.60 | | 5435.50 | | 23 | E | P |
| Nickel | 129.20 | | 159.78 | J | 24 | E | P |
| Potassium | 8365.55 | | 9451.75 | | 13 | E | P |
| Selenium | 3.90 | J | 175.00 | U | 100 | | P |
| Silver | 10.00 | U | 50.00 | U | | | P |
| Sodium | 820.86 | J | 946.95 | | 15 | | P |
| Thallium | 25.00 | U | 125.00 | U | | | P |
| Vanadium | 158.37 | | 189.69 | J | 20 | E | P |
| Zinc | 1041.30 | | 1313.13 | | 26 | E | P |

USEPA - CLP

9-IN
METHOD DETECTION LIMITS (ANNUALLY)

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: SDG No.: ME0002

Instrument Type: P Instrument ID: ICAPP 6500 Date: 01/15/2009

Preparation NP1

Concentration Units (ug/L or mg/Kg): ug/L

| Analyte | Wavelength /Mass | CRQL | MDL |
|---|---|---|---|
| Aluminum | 396.10 | 200 | 17.7 |
| Antimony | 206.80 | 60.0 | 2.2 |
| Arsenic | 189.00 | 10.0 | 2.1 |
| Barium | 455.40 | 200 | 0.80 |
| Beryllium | 313.10 | 5.0 | 0.12 |
| Cadmium | 214.40 | 5.0 | 0.092 |
| Calcium | 318.10 | 5000 | 62.5 |
| Chromium | 267.70 | 10.0 | 2.6 |
| Cobalt | 228.60 | 50.0 | 0.29 |
| Copper | 324.70 | 25.0 | 0.73 |
| Iron | 238.20 | 100.0 | 5.1 |
| Lead | 220.30 | 10.0 | 2.0 |
| Magnesium | 279.00 | 5000 | 44.5 |
| Manganese | 257.60 | 15.0 | 0.56 |
| Nickel | 231.60 | 40.0 | 1.39 |
| Potassium | 766.40 | 5000 | 40.1 |
| Selenium | 196.00 | 35.0 | 2.9 |
| Silver | 328.00 | 10.0 | 3.2 |
| Sodium | 589.50 | 5000 | 20.0 |
| Thallium | 190.80 | 25.0 | 1.2 |
| Vanadium | 292.40 | 50.0 | 3.1 |
| Zinc | 206.20 | 60.0 | 1.4 |

Comments:

USEPA - CLP

9-IN
METHOD DETECTION LIMITS (ANNUALLY)

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: SDG No.: ME0002

Instrument Type: P Instrument ID: ICAPP 6500 Date: 01/15/2009

Preparation HS1

Concentration Units (ug/L or mg/Kg): mg/Kg

| Analyte | Wavelength /Mass | CRQL | MDL |
|---|---|---|---|
| Aluminum | 396.10 | 20.0 | 3.9 |
| Antimony | 206.80 | 6.00 | 0.21 |
| Arsenic | 189.00 | 1.00 | 0.19 |
| Barium | 455.40 | 20.0 | 0.068 |
| Beryllium | 313.10 | 0.500 | 0.016 |
| Cadmium | 214.40 | 0.500 | 0.012 |
| Calcium | 318.10 | 500 | 7.3 |
| Chromium | 267.70 | 1.00 | 0.21 |
| Cobalt | 228.60 | 5.00 | 0.020 |
| Copper | 324.70 | 2.50 | 0.091 |
| Iron | 238.20 | 10.0 | 0.59 |
| Lead | 220.30 | 1.00 | 0.16 |
| Magnesium | 279.00 | 500 | 2.8 |
| Manganese | 257.60 | 1.50 | 0.061 |
| Nickel | 231.60 | 4.00 | 0.067 |
| Potassium | 766.40 | 500 | 6.8 |
| Selenium | 196.00 | 3.50 | 0.31 |
| Silver | 328.00 | 1.00 | 0.45 |
| Sodium | 589.50 | 500 | 4.6 |
| Thallium | 190.80 | 2.50 | 0.16 |
| Vanadium | 292.40 | 5.00 | 0.25 |
| Zinc | 206.20 | 6.00 | 0.079 |

Comments:

USEPA - CLP

9-IN
METHOD DETECTION LIMITS (ANNUALLY)

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: SDG No.: ME0002

Instrument Type: P Instrument ID: ICAPP 6500 Date: 01/15/2009

Preparation HS1

Concentration Units (ug/L or mg/Kg): ug/L

| Analyte | Wavelength /Mass | CRQL | MDL |
|---|---|---|---|
| Aluminum | 396.10 | 200 | 39 |
| Antimony | 206.80 | 60.0 | 2.1 |
| Arsenic | 189.00 | 10.0 | 1.90 |
| Barium | 455.40 | 200 | 0.68 |
| Beryllium | 313.10 | 5.0 | 0.16 |
| Cadmium | 214.40 | 5.0 | 0.12 |
| Calcium | 318.10 | 5000 | 73 |
| Chromium | 267.70 | 10.0 | 2.10 |
| Cobalt | 228.60 | 50.0 | 0.2 |
| Copper | 324.70 | 25.0 | 0.91 |
| Iron | 238.20 | 100 | 5.90 |
| Lead | 220.30 | 10.0 | 1.6 |
| Magnesium | 279.00 | 5000 | 28 |
| Manganese | 257.60 | 15.0 | 0.61 |
| Nickel | 231.60 | 40.0 | 0.67 |
| Potassium | 766.40 | 5000 | 68 |
| Selenium | 196.00 | 35.0 | 3.1 |
| Silver | 328.00 | 10.0 | 4.50 |
| Sodium | 589.50 | 5000 | 46.0 |
| Thallium | 190.80 | 25.0 | 1.6 |
| Vanadium | 292.40 | 50.0 | 2.50 |
| Zinc | 206.20 | 60.0 | 0.79 |

Comments:

USEPA - CLP

9-IN
METHOD DETECTION LIMITS (ANNUALLY)

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: SDG No.: ME0002

Instrument Type: CV Instrument ID: LM02 Date: 01/08/2009

Preparation CS1

Concentration Units (ug/L or mg/Kg): mg/Kg

| Analyte | Wavelength /Mass | CRQL | MDL |
|---|---|---|---|
| Mercury | 257.00 | 0.100 | 0.026 |

Comments:

USEPA - CLP

9-IN
METHOD DETECTION LIMITS (ANNUALLY)

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: _____ SDG No.: ME0002

Instrument Type: AS Instrument ID: CN01 Date: 01/13/2009

Preparation NP1

Concentration Units (ug/L or mg/Kg): ug/L

| Analyte | Wavelength /Mass | CRQL | MDL |
|---|---|---|---|
| Cyanide | 578.00 | 125 | 0.72 |

Comments:

USEPA - CLP

9-IN
METHOD DETECTION LIMITS (ANNUALLY)

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: SDG No.: ME0002

Instrument Type: AS Instrument ID: CN01 Date: 01/13/2009

Preparation DS2

Concentration Units (ug/L or mg/Kg): mg/Kg

| Analyte | Wavelength /Mass | CRQL | MDL |
|---|---|---|---|
| Cyanide | 578.00 | 2.50 | 0.15 |

Comments:

USEPA - CLP

12-IN
PREPARATION LOG

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: SDG ME0002

Preparation HS1

| EPA Sample No. | Preparation Date | Weight (gram) | Volume (mL) |
|---|---|---|---|
| LCSS01 | 12/05/09 | 1.00 | 100 |
| ME0002 | 12/05/09 | 1.00 | 100 |
| ME0003 | 12/05/09 | 1.00 | 100 |
| ME0004 | 12/05/09 | 1.00 | 100 |
| ME0005 | 12/05/09 | 1.00 | 100 |
| ME0006 | 12/05/09 | 1.00 | 100 |
| ME0007 | 12/05/09 | 1.00 | 100 |
| ME0008 | 12/05/09 | 1.00 | 100 |
| ME0009 | 12/05/09 | 1.00 | 100 |
| ME0009D | 12/05/09 | 1.00 | 100 |
| ME0009S | 12/05/09 | 1.00 | 100 |
| ME0010 | 12/05/09 | 1.00 | 100 |
| ME0011 | 12/05/09 | 1.00 | 100 |
| ME0012 | 12/05/09 | 1.00 | 100 |
| ME0013 | 12/05/09 | 1.00 | 100 |
| ME0014 | 12/05/09 | 1.00 | 100 |
| ME0015 | 12/05/09 | 1.00 | 100 |
| ME0016 | 12/05/09 | 1.00 | 100 |
| ME0017 | 12/05/09 | 1.00 | 100 |
| ME0018 | 12/05/09 | 1.00 | 100 |
| ME0019 | 12/05/09 | 1.00 | 100 |
| ME0020 | 12/05/09 | 1.00 | 100 |
| ME0021 | 12/05/09 | 1.00 | 100 |
| PBS01 | 12/05/09 | 1.00 | 100 |

USEPA - CLP

12-IN
PREPARATION LOG

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: SDG ME0002

Preparation CS1

| EPA Sample No. | Preparation Date | Weight (gram) | Volume (mL) |
|---|---|---|---|
| CCB01 | 12/01/09 | 0.20 | 100 |
| CCB02 | 12/01/09 | 0.20 | 100 |
| CCB03 | 12/01/09 | 0.20 | 100 |
| CCB04 | 12/01/09 | 0.20 | 100 |
| CCV01 | 12/01/09 | 0.20 | 100 |
| CCV02 | 12/01/09 | 0.20 | 100 |
| CCV03 | 12/01/09 | 0.20 | 100 |
| CCV04 | 12/01/09 | 0.20 | 100 |
| CRI01 | 12/01/09 | 0.20 | 100 |
| CRI02 | 12/01/09 | 0.20 | 100 |
| CRI03 | 12/01/09 | 0.20 | 100 |
| ICB01 | 12/01/09 | 0.20 | 100 |
| ICV01 | 12/01/09 | 0.20 | 100 |
| LCSS01 | 12/01/09 | 0.20 | 100 |
| ME0002 | 12/01/09 | 0.20 | 100 |
| ME0003 | 12/01/09 | 0.20 | 100 |
| ME0004 | 12/01/09 | 0.20 | 100 |
| ME0005 | 12/01/09 | 0.20 | 100 |
| ME0006 | 12/01/09 | 0.20 | 100 |
| ME0007 | 12/01/09 | 0.20 | 100 |
| ME0008 | 12/01/09 | 0.20 | 100 |
| ME0009 | 12/01/09 | 0.20 | 100 |
| ME0009D | 12/01/09 | 0.20 | 100 |
| ME0009S | 12/01/09 | 0.20 | 100 |
| ME0010 | 12/01/09 | 0.20 | 100 |
| ME0011 | 12/01/09 | 0.20 | 100 |
| ME0012 | 12/01/09 | 0.20 | 100 |
| ME0013 | 12/01/09 | 0.20 | 100 |
| ME0014 | 12/01/09 | 0.20 | 100 |
| ME0015 | 12/01/09 | 0.20 | 100 |
| ME0016 | 12/01/09 | 0.20 | 100 |
| ME0017 | 12/01/09 | 0.20 | 100 |

USEPA - CLP

12-IN
PREPARATION LOG

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: SDG ME0002

Preparation CS1

| EPA Sample No. | Preparation Date | Weight (gram) | Volume (mL) |
|---|---|---|---|
| ME0018 | 12/01/09 | 0.20 | 100 |
| ME0019 | 12/01/09 | 0.20 | 100 |
| ME0020 | 12/01/09 | 0.20 | 100 |
| ME0021 | 12/01/09 | 0.20 | 100 |
| PBS01 | 12/01/09 | 0.20 | 100 |
| S0 | 12/01/09 | 0.20 | 100 |
| S0.2 | 12/01/09 | 0.20 | 100 |
| S0.5 | 12/01/09 | 0.20 | 100 |
| S1 | 12/01/09 | 0.20 | 100 |
| S2 | 12/01/09 | 0.20 | 100 |
| S6 | 12/01/09 | 0.20 | 100 |

USEPA - CLP

12-IN
PREPARATION LOG

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: SDG ME0002

Preparation DS2

| EPA Sample No. | Preparation Date | Weight (gram) | Volume (mL) |
|---|---|---|---|
| ICV01 | 12/01/09 | 1.00 | 50 |
| LCSS01 | 12/01/09 | 1.00 | 50 |
| ME0002 | 12/01/09 | 1.00 | 50 |
| ME0003 | 12/01/09 | 1.00 | 50 |
| ME0004 | 12/01/09 | 1.00 | 50 |
| ME0005 | 12/01/09 | 1.00 | 50 |
| ME0006 | 12/01/09 | 1.00 | 50 |
| ME0007 | 12/01/09 | 1.00 | 50 |
| ME0008 | 12/01/09 | 1.00 | 50 |
| ME0009 | 12/01/09 | 1.00 | 50 |
| ME0009A | 12/01/09 | 1.00 | 50 |
| ME0009D | 12/01/09 | 1.00 | 50 |
| ME0009S | 12/01/09 | 1.00 | 50 |
| ME0010 | 12/01/09 | 1.00 | 50 |
| ME0011 | 12/01/09 | 1.00 | 50 |
| ME0012 | 12/01/09 | 1.00 | 50 |
| ME0013 | 12/01/09 | 1.00 | 50 |
| ME0014 | 12/01/09 | 1.00 | 50 |
| ME0015 | 12/01/09 | 1.00 | 50 |
| ME0016 | 12/01/09 | 1.00 | 50 |
| ME0017 | 12/01/09 | 1.00 | 50 |
| ME0018 | 12/01/09 | 1.00 | 50 |
| ME0019 | 12/01/09 | 1.00 | 50 |
| ME0020 | 12/01/09 | 1.00 | 50 |
| ME0021 | 12/01/09 | 1.00 | 50 |
| MIDRANGE250 | 12/01/09 | 1.00 | 50 |
| PBS01 | 12/01/09 | 1.00 | 50 |

USEPA - CLP

13-IN
ANALYSIS RUN LOG

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: SDG No.: ME0002

Instrument ICAPP 6500 Analysis Method: P

Start Date: 12/06/2009 End Date: 12/10/2009

| EPA Sample NO. | D/F | Time | Analytes | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | AL | SB | AS | BA | BE | CD | CA | CO | CR | CU | FE | PB | MG | MN | HG | NI | K | SE | AG | NA | TL | V | ZN | CN | | |
| S0 | 1 | 15:21 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| S | 1 | 15:24 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| S | 1 | 15:27 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| S | 1 | 15:30 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| S | 1 | 15:34 | | | | | | | | | | | X | | | | | | | | | X | | | | | | |
| ICV01 | 1 | 15:37 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| ICB01 | 1 | 15:40 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| CRI01 | 1 | 15:44 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| ICSA01 | 1 | 15:47 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| ICSAB01 | 1 | 15:50 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| CCV01 | 1 | 15:54 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| CCB01 | 1 | 15:57 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| PBS01 | 1 | 16:00 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| LCSS01 | 1 | 16:03 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| ME0002 | 1 | 16:07 | X | X | X | X | X | X | | X | X | X | X | X | | X | | X | X | X | X | X | X | X | | | | |
| ME0003 | 1 | 16:10 | X | X | X | X | X | X | | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | | | | |
| ME0004 | 1 | 16:13 | X | X | X | X | X | X | | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | | | | |
| ME0005 | 1 | 16:17 | X | X | X | X | X | X | X | X | X | X | | | X | X | | X | X | X | X | X | X | X | | | | |
| ME0006 | 1 | 16:20 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | | | | |
| ME0007 | 1 | 16:23 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| ME0008 | 1 | 16:26 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| ME0009 | 1 | 16:30 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| CCV02 | 1 | 16:33 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| CCB02 | 1 | 16:36 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| ZZZZZZ | 1 | 16:40 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| ME0009D | 1 | 16:43 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| ME0010 | 1 | 16:46 | X | X | X | X | X | X | | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| ME0011 | 1 | 16:49 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| ME0012 | 1 | 16:53 | X | X | X | X | X | X | | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| ME0009L | 5 | 16:56 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| CRI02 | 1 | 16:59 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| CRI03 | 1 | 17:02 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ICSA02 | 1 | 17:06 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| ICSAB02 | 1 | 17:09 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| CCV03 | 1 | 17:12 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| CCB03 | 1 | 17:16 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| ME0013 | 1 | 17:19 | X | X | X | X | X | X | | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |

USEPA - CLP

13-IN
ANALYSIS RUN LOG

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: SDG No.: ME0002

Instrument ICAPP 6500 Analysis Method: P

Start Date: 12/06/2009 End Date: 12/10/2009

| EPA Sample NO. | D/F | Time | Analytes | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | AL | SB | AS | BA | BE | CD | CA | CO | CR | CU | FE | PB | MG | MN | HG | NI | K | SE | AG | NA | TL | V | ZN | CN | | |
| ME0014 | 1 | 17:22 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| ME0015 | 1 | 17:25 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| ME0016 | 1 | 17:29 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| ME0017 | 1 | 17:32 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| ME0018 | 1 | 17:35 | X | X | X | X | X | X | | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | | | | |
| ME0019 | 1 | 17:38 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| ME0020 | 1 | 17:42 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| ME0021 | 1 | 17:45 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| ME0009A | 1 | 17:48 | | X | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV04 | 1 | 17:51 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| CCB04 | 1 | 17:55 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| ME0002 | 4 | 17:58 | | | | | | | X | | | | | | | | | | | | | | | | X | | | |
| ME0003 | 4 | 18:01 | | | | | | | X | | | | | | | | | | | | | | | | X | | | |
| ME0004 | 4 | 18:04 | | | | | | | X | | | | | | | | | | | | | | | | X | | | |
| ME0005 | 4 | 18:08 | | | | | | | | | | | X | X | | | | | | | | | | | X | | | |
| ME0006 | 5 | 18:11 | | | | | | | | | | | | | | | | | | | | | | | X | | | |
| ME0010 | 3 | 18:14 | | | | | | | X | | | | | | | | | | | | | | | | | | | |
| ME0012 | 4 | 18:17 | | | | | | | X | | | | | | | | | | | | | | | | | | | |
| CRI04 | 1 | 18:21 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| ICSA03 | 1 | 18:24 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| ICSAB03 | 1 | 18:27 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| CCV05 | 1 | 18:31 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| CCB05 | 1 | 18:34 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| ME0018 | 3 | 18:37 | | | | | | | X | | | | | | | | | | | | | | | | X | | | |
| ME0002 | 3 | 18:40 | | | | | | | | | | | | | X | | | | | | | | | | | | | |
| ME0013 | 4 | 18:44 | | | | | | | X | | | | | | | | | | | | | | | | | | | |
| CRI05 | 1 | 18:47 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| CRI06 | 1 | 18:50 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ICSA04 | 1 | 18:54 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| ICSAB04 | 1 | 18:57 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| CCV06 | 1 | 19:00 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| CCB06 | 1 | 19:03 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |

USEPA - CLP

13-IN
ANALYSIS RUN LOG

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: SDG No.: ME0002

Instrument ICAPP 6500 Analysis Method: P

Start Date: 12/10/2009 End Date: 12/10/2009

| EPA Sample NO. | D/F | Time | Analytes | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | AL | SB | AS | BA | BE | CD | CA | CO | CR | CU | FE | PB | MG | MN | HG | NI | K | SE | AG | NA | TL | V | ZN | CN | | |
| SO | 1 | 12:13 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| S | 1 | 12:17 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| S | 1 | 12:20 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| S | 1 | 12:23 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| S | 1 | 12:27 | | | | | | | | | | | X | | | | | | | | | X | | | | | | |
| ICV01 | 1 | 12:30 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| ICB01 | 1 | 12:33 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| CRI01 | 1 | 12:36 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| ICSA01 | 1 | 12:40 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| ICSAB01 | 1 | 12:43 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| CCV01 | 1 | 12:46 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| CCB01 | 1 | 12:50 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| ZZZZZZ | 1 | 12:53 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ME0009A | 1 | 12:56 | | | | | | | | | | | | | | | | | | | | | | | X | | | |
| CRI02 | 1 | 12:59 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| ICSA02 | 1 | 13:03 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| ICSAB02 | 1 | 13:06 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| CCV02 | 1 | 13:09 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| CCB02 | 1 | 13:13 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| ME0009S | 1 | 13:16 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| CRI03 | 1 | 13:19 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| ICSA03 | 1 | 13:23 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| ICSAB03 | 1 | 13:26 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| CCV03 | 1 | 13:29 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| CCB03 | 1 | 13:32 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |

USEPA - CLP

13-IN
ANALYSIS RUN LOG

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: SDG No.: ME0002

Instrument LM02 Analysis Method: CV

Start Date: 12/02/2009 End Date: 12/02/2009

| EPA Sample NO. | D/F | Time | Analytes | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | AL | SB | AS | BA | BE | CD | CA | CO | CR | CU | FE | PB | MG | MN | HG | NI | K | SE | AG | NA | TL | V | ZN | CN | | |
| S0 | 1 | 11:26 | | | | | | | | | | | | | | | X | | | | | | | | | | | |
| S0.2 | 1 | 11:28 | | | | | | | | | | | | | | | X | | | | | | | | | | | |
| S0.5 | 1 | 11:29 | | | | | | | | | | | | | | | X | | | | | | | | | | | |
| S1 | 1 | 11:31 | | | | | | | | | | | | | | | X | | | | | | | | | | | |
| S2 | 1 | 11:34 | | | | | | | | | | | | | | | X | | | | | | | | | | | |
| S6 | 1 | 11:36 | | | | | | | | | | | | | | | X | | | | | | | | | | | |
| ICV01 | 1 | 11:38 | | | | | | | | | | | | | | | X | | | | | | | | | | | |
| ICB01 | 1 | 11:40 | | | | | | | | | | | | | | | X | | | | | | | | | | | |
| CRI01 | 1 | 11:42 | | | | | | | | | | | | | | | X | | | | | | | | | | | |
| CCV01 | 1 | 11:44 | | | | | | | | | | | | | | | X | | | | | | | | | | | |
| CCB01 | 1 | 11:46 | | | | | | | | | | | | | | | X | | | | | | | | | | | |
| PBS01 | 1 | 11:48 | | | | | | | | | | | | | | | X | | | | | | | | | | | |
| LCSS01 | 2 | 11:50 | | | | | | | | | | | | | | | X | | | | | | | | | | | |
| ME0002 | 1 | 11:51 | | | | | | | | | | | | | | | X | | | | | | | | | | | |
| ME0003 | 1 | 11:53 | | | | | | | | | | | | | | | X | | | | | | | | | | | |
| ME0004 | 1 | 11:55 | | | | | | | | | | | | | | | X | | | | | | | | | | | |
| ME0005 | 1 | 11:57 | | | | | | | | | | | | | | | X | | | | | | | | | | | |
| ME0006 | 1 | 11:59 | | | | | | | | | | | | | | | X | | | | | | | | | | | |
| ME0007 | 1 | 12:01 | | | | | | | | | | | | | | | X | | | | | | | | | | | |
| ME0008 | 1 | 12:03 | | | | | | | | | | | | | | | X | | | | | | | | | | | |
| ME0009 | 1 | 12:04 | | | | | | | | | | | | | | | X | | | | | | | | | | | |
| CCV02 | 1 | 12:06 | | | | | | | | | | | | | | | X | | | | | | | | | | | |
| CCB02 | 1 | 12:08 | | | | | | | | | | | | | | | X | | | | | | | | | | | |
| ME0009D | 1 | 12:10 | | | | | | | | | | | | | | | X | | | | | | | | | | | |
| ME0009S | 1 | 12:12 | | | | | | | | | | | | | | | X | | | | | | | | | | | |
| ME0010 | 1 | 12:14 | | | | | | | | | | | | | | | X | | | | | | | | | | | |
| ME0011 | 1 | 12:16 | | | | | | | | | | | | | | | X | | | | | | | | | | | |
| ME0012 | 1 | 12:18 | | | | | | | | | | | | | | | X | | | | | | | | | | | |
| ME0013 | 1 | 12:20 | | | | | | | | | | | | | | | X | | | | | | | | | | | |
| ME0014 | 1 | 12:22 | | | | | | | | | | | | | | | X | | | | | | | | | | | |
| ME0015 | 1 | 12:24 | | | | | | | | | | | | | | | X | | | | | | | | | | | |
| CRI02 | 1 | 12:26 | | | | | | | | | | | | | | | X | | | | | | | | | | | |
| CCV03 | 1 | 12:28 | | | | | | | | | | | | | | | X | | | | | | | | | | | |
| CCB03 | 1 | 12:30 | | | | | | | | | | | | | | | X | | | | | | | | | | | |
| ME0016 | 1 | 12:32 | | | | | | | | | | | | | | | X | | | | | | | | | | | |
| ME0017 | 1 | 12:34 | | | | | | | | | | | | | | | X | | | | | | | | | | | |

USEPA - CLP

13-IN
ANALYSIS RUN LOG

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: SDG No.: ME0002

Instrument LM02 Analysis Method: CV

Start Date: 12/02/2009 End Date: 12/02/2009

| EPA Sample NO. | D/F | Time | Analytes | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | AL | SB | AS | BA | BE | CD | CA | CO | CR | CU | FE | PB | MG | MN | HG | NI | K | SE | AG | NA | TL | V | ZN | CN | | |
| ME0018 | 1 | 12:36 | | | | | | | | | | | | | | | X | | | | | | | | | | | |
| ME0019 | 1 | 12:38 | | | | | | | | | | | | | | | X | | | | | | | | | | | |
| ME0020 | 1 | 12:39 | | | | | | | | | | | | | | | X | | | | | | | | | | | |
| ME0021 | 1 | 12:41 | | | | | | | | | | | | | | | X | | | | | | | | | | | |
| CRI03 | 1 | 12:44 | | | | | | | | | | | | | | | X | | | | | | | | | | | |
| CCV04 | 1 | 12:45 | | | | | | | | | | | | | | | X | | | | | | | | | | | |
| CCB04 | 1 | 12:47 | | | | | | | | | | | | | | | X | | | | | | | | | | | |

USEPA - CLP

13-IN
ANALYSIS RUN LOG

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: SDG No.: ME0002

Instrument CN01 Analysis Method: AS

Start Date: 12/02/2009 End Date: 12/02/2009

| EPA Sample NO. | D/F | Time | Analytes | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | AL | SB | AS | BA | BE | CD | CA | CO | CR | CU | FE | PB | MG | MN | HG | NI | K | SE | AG | NA | TL | V | ZN | CN | | |
| S0 | 1 | 10:31 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| S5 | 1 | 10:32 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| S10 | 1 | 10:34 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| S50 | 1 | 10:35 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| S100 | 1 | 10:36 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| S250 | 1 | 10:38 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| S500 | 1 | 10:39 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| ICV01 | 1 | 10:41 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| ICB01 | 1 | 10:42 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| CRI01 | 1 | 10:44 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| CCV01 | 1 | 10:45 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| CCB01 | 1 | 10:46 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| BASELINE | 1 | 10:48 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| MIDRANGE | 1 | 10:49 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| PBS01 | 1 | 10:51 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| LCSS01 | 1 | 10:52 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| ZZZZZZ | 1 | 10:53 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| ZZZZZZ | 1 | 10:55 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| ZZZZZZ | 1 | 10:56 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| ME0005 | 1 | 10:58 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| ME0006 | 1 | 10:59 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| ME0007 | 1 | 11:01 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| ME0008 | 1 | 11:02 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| CCV02 | 1 | 11:03 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| CCB02 | 1 | 11:05 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| BASELINE | 1 | 11:06 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| ME0009 | 1 | 11:08 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| ME0009D | 1 | 11:09 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| ME0009S | 1 | 11:10 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| ME0010 | 1 | 11:12 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| ME0011 | 1 | 11:13 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| ZZZZZZ | 1 | 11:15 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| ZZZZZZ | 1 | 11:16 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| ME0014 | 1 | 11:18 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| ME0015 | 1 | 11:19 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| CRI02 | 1 | 11:20 | | | | | | | | | | | | | | | | | | | | | | | | X | | |

USEPA - CLP

13-IN
ANALYSIS RUN LOG

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: SDG No.: ME0002

Instrument CN01 Analysis Method: AS

Start Date: 12/02/2009 End Date: 12/02/2009

| EPA Sample NO. | D/F | Time | Analytes | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | AL | SB | AS | BA | BE | CD | CA | CO | CR | CU | FE | PB | MG | MN | HG | NI | K | SE | AG | NA | TL | V | ZN | CN | | |
| CCV03 | 1 | 11:22 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| CCB03 | 1 | 11:23 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| BASELINE | 1 | 11:25 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| ME0016 | 1 | 11:26 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| ME0017 | 1 | 11:27 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| ME0018 | 1 | 11:29 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| ME0019 | 1 | 11:30 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| ME0020 | 1 | 11:32 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| ME0021 | 1 | 11:33 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| ZZZZZZ | 1 | 11:35 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| ZZZZZZ | 1 | 11:36 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| ZZZZZZ | 1 | 11:37 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| CCV04 | 1 | 11:39 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| CCB04 | 1 | 11:40 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| BASELINE | 1 | 11:42 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| ME0009A | 1 | 11:43 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| ZZZZZZ | 1 | 11:44 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| ZZZZZZ | 1 | 11:46 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| ZZZZZZ | 1 | 11:47 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| ZZZZZZ | 1 | 11:49 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| ZZZZZZ | 1 | 11:50 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| CRI03 | 1 | 11:52 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| CCV05 | 1 | 11:53 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| CCB05 | 1 | 11:54 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| BASELINE | 1 | 11:56 | | | | | | | | | | | | | | | | | | | | | | | | X | | |

USEPA - CLP

13-IN
ANALYSIS RUN LOG

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: SDG No.: ME0002

Instrument CN01 Analysis Method: AS

Start Date: 12/02/2009 End Date: 12/02/2009

| EPA Sample NO. | D/F | Time | Analytes | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | AL | SB | AS | BA | BE | CD | CA | CO | CR | CU | FE | PB | MG | MN | HG | NI | K | SE | AG | NA | TL | V | ZN | CN | | |
| S0 | 1 | 15:25 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| S5 | 1 | 15:27 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| S10 | 1 | 15:28 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| S50 | 1 | 15:30 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| S100 | 1 | 15:31 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| S250 | 1 | 15:32 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| S500 | 1 | 15:34 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| ICV01 | 1 | 15:35 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| ICB01 | 1 | 15:37 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| CRI01 | 1 | 15:38 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| CCV01 | 1 | 15:40 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| CCB01 | 1 | 15:41 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| BASELINE | 1 | 15:42 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| MIDRANGE | 1 | 15:44 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| ME0002 | 1 | 15:45 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| ZZZZZZ | 1 | 15:47 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| ME0003 | 1 | 15:48 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| ZZZZZZ | 1 | 15:49 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| ME0004 | 1 | 15:51 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| ZZZZZZ | 1 | 15:52 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| ME0012 | 1 | 15:54 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| CCV02 | 1 | 15:55 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| CCB02 | 1 | 15:57 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| BASELINE | 1 | 15:58 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| ME0013 | 1 | 15:59 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| CRI02 | 1 | 16:01 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| CCV03 | 1 | 16:02 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| CCB03 | 1 | 16:04 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| BASELINE | 1 | 16:05 | | | | | | | | | | | | | | | | | | | | | | | | X | | |

**ESAT Controlled Number:** ~~SEATE~~ 17.01067 - py 3/12/10

DATE: March 12, 2010

IEPA
**Attn: Mr. Mark Wagner**
1001 North Grand Avenue East
P.O. Box 19276
Springfield, IL 62794-9276

SITE NAME: **Bautsch-Grey Mine (IL)**

| Case | Lab | Samples | SDG | Matrix |
|---|---|---|---|---|
| 39260 | Bonner | 13 | ME0022 | soil |

**Analysis**: metals and cyanide

Upon receipt of data, please check each package for completeness and note any missing deliverables below.

**Send this form back to Sylvia Griffin, Data Management Coordinator after filling in the blanks below.**

Data Received by:_____ Date:_____

PROBLEMS:

Please indicate if data is complete, and note if there are any deliverables missing from the cases noted above.

_____

_____

Received by Data Management Coordinator, CRL for file.

Signature:_____ Date:_____

FROM: **U.S. EPA - Region 5**
Sylvia Griffin
Central Regional Laboratory
536 S. Clark, 10th Floor
Chicago, IL 60605

Sent By: Pat Joyner
Data Coordinator

Controlled Document

# ESAT5 15.00430

ack
3-11-10

**Regional Transmittal Form**

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**
**REGION V**

**DATE:** 3/8/10

**SUBJECT:** Review of Data
Received for review on 12/11/09

**FROM:** Stephen L. Ostrodka, Chief (SRT-5J)
Superfund Field Services Section

**TO:** Data User: IEPA

**We have reviewed the data by CADRE for the following case:**

**SITE NAME:** Bautsch-Grey Mine (IL)

**CASE NUMBER:** 39260 **SDG NUMBER:** ME0022

**Number and Type of Samples:** 13 soils

**Sample Numbers:** ME0022-34

**Laboratory:** Bonner **Hrs. for Review:** 13.0 + 1.5 for [illegible]

**Following are our findings:**

CC: Howard Pham
Region 5 TOPO
Mail Code: SRT-5J

**Below is a summary of the out-of-control audits and the possible effects on the data for this case:**

Thirteen (13) soil samples, numbered ME0022-34, were collected on November 17, 2009. The lab received the samples on November 20, 2009. Although the cooler containing samples ME0027-34 was outside the required temperature range, no sample results are qualified for this deficiency. All samples were analyzed for metals and cyanide. All samples were analyzed using the CLP SOW ILM05.4 analysis procedures.

Mercury analysis was performed using a Cold Vapor AA Technique. Cyanide analysis was performed using the MIDI Distillation procedure. The remaining inorganic analyses were performed using an Inductively Coupled Plasma-Atomic Emission Spectroscopy (ICP-AES) procedure.

No Chain of Custody seal numbers are recorded on Form DC-1 for either cooler. The Inorganic Traffic Report & Chain of Custody Record lists the same 2 seal numbers for both coolers. One seal is included with the airbill copy for samples ME0027-34. There is a notation with the other airbill copy indicating no custody seal was present; however, the Sample Receipt Form for that cooler (Case page number 158) indicates there was a seal present. No sample results are qualified for this inconsistent information.

The laboratory performed matrix spikes for aluminum and iron (not required by ILM05.4). The results were evaluated according to spike concentrations reported by the laboratory. The laboratory reported recoveries for the CRQL Check Standard for aluminum, calcium, iron, magnesium, potassium and sodium (not required by ILM05.4). No data are qualified for values outside the standard acceptance range for this standard.

The CRQL value for cyanide on Form 9-IN was incorrectly reported as 125 ug/L. The correct value should be reported as 50 ug/L.

It appears that the serial dilution may have been performed using a 4X dilution instead of the required 5X. 13 elements (all elements where the undiluted sample is greater than 50X the MDL) failed the serial dilution. If the dilution is recalculated using a 4X dilution factor instead of 5X, none of the elements fail serial dilution limits. Additionally, several of the samples which were run at dilutions appear to have been run at different dilutions than those which were reported. ME0023, ME0024, ME0025 and ME0029 are reported at 4X; the % differences match closer if 3X is used as the dilution factor. Results are reported as per laboratory dilution factors without further qualification.

No raw data for percent solids or preparation logs were provided. Data were presented on a computer generated spreadsheet. It is unclear whether the actual weight used for preparation of the samples was correct as listed.

## 1. HOLDING TIME:

The following inorganic samples did not meet primary holding time criteria.
Hits are qualified "J-" and non-detects are qualified "UJ".

Cyanide
ME0022, ME0023, ME0024, ME0025, ME0026, ME0027, ME0028, ME0029, ME0030, ME0031, ME0032, ME0033, ME0034

The inorganic soil samples were reviewed for holding time violations using criteria developed for water samples.

## 2. CALIBRATIONS:

No defects were found for the calibration or the CRQL standards.

## 3. BLANKS:

The following inorganic samples are associated with an ICB/CCB or preparation blank concentration which is greater than the method detection limit (MDL). The sample result is greater than the MDL.
Hits less than the CRQL are qualified "U". The sample result is raised to the CRQL.
Hits greater than the CRQL but less than 5 times the blank are qualified "U" and reported at the sample value.

Barium
ME0023, ME0024, ME0025, ME0032, ME0033, ME0034

Beryllium
ME0022, ME0023, ME0024, ME0025, ME0026, ME0028, ME0029, ME0030, ME0031, ME0032, ME0033, ME0034

Cadmium
ME0027, ME0028

Cobalt
ME0022, ME0027, ME0028

Sodium
ME0022, ME0023, ME0024, ME0025, ME0026, ME0027, ME0028, ME0029, ME0030, ME0031, ME0032, ME0033, ME0034

Cyanide
ME0029

The following inorganic samples are associated with a negative ICB/CCB or preparation blank concentration whose absolute value is greater than the method detection limit (MDL).

The sample result is also greater than the MDL.
Hits less than 5 times the blank are qualified "J-".

Mercury
ME0023, ME0029, ME0033

**4. MATRIX SPIKE/MATRIX SPIKE DUPLICATE AND LAB CONTROL SAMPLE:**

The following inorganic samples are associated with a matrix spike recovery which is low (30-74%) indicating that sample results may be biased low. The required post spike was performed and results were greater than or equal to 75%.
Hits are qualified "J" and non-detects are qualified "UJ".

Cadmium
ME0022, ME0023, ME0024, ME0025, ME0026, ME0027, ME0028, ME0029, ME0030, ME0031, ME0032, ME0033, ME0034

Cobalt
ME0022, ME0023, ME0024, ME0025, ME0026, ME0027, ME0028, ME0029, ME0030, ME0031, ME0032, ME0033, ME0034

Nickel
ME0022, ME0023, ME0024, ME0025, ME0026, ME0027, ME0028, ME0029, ME0030, ME0031, ME0032, ME0033, ME0034

The following inorganic samples are associated with a matrix spike recovery which is low (30-74%) indicating that sample results may be biased low. The required post spike was performed and results were less than 75%.
Hits are qualified "J-" and non-detects are qualified "UJ".

Antimony
ME0022, ME0023, ME0024, ME0025, ME0026, ME0027, ME0028, ME0029, ME0030, ME0031, ME0032, ME0033, ME0034

No defects were found for the laboratory control sample.

**5. LABORATORY AND FIELD DUPLICATE:**

No defects were found for the laboratory duplicate samples. No samples were identified as field duplicates.

**6. ICP ANALYSIS:**

The following inorganic samples are associated with an ICP serial dilution percent difference which is not in control.
Hits are qualified "J" and non-detects are qualified "UJ".

Cadmium
ME0022, ME0023, ME0024, ME0025, ME0026, ME0027, ME0028, ME0029, ME0030, ME0031, ME0032, ME0033, ME0034

Cobalt
ME0022, ME0023, ME0024, ME0025, ME0026, ME0027, ME0028, ME0029, ME0030, ME0031, ME0032, ME0033, ME0034

Iron
ME0022, ME0023, ME0024, ME0025, ME0026, ME0027, ME0028, ME0029, ME0030, ME0031, ME0032, ME0033, ME0034

Lead
ME0022, ME0023, ME0024, ME0025, ME0026, ME0027, ME0028, ME0029, ME0030, ME0031, ME0032, ME0033, ME0034

Nickel
ME0022, ME0023, ME0024, ME0025, ME0026, ME0027, ME0028, ME0029, ME0030, ME0031, ME0032, ME0033, ME0034

The following inorganic sample results are affected by an interference check "A" sample (ICSA) for which false positive concentration values greater than the MDL were obtained. The sample contains Al, Ca, Fe, or Mg at a level comparable to the ICSA.
Hits less than 10 times the value of the ICSA are qualified "J+"; non-detects are not qualified. Hits greater than 10 times the ICSA are not qualified.

Vanadium
ME0023, ME0024, ME0025, ME0026, ME0032, ME0033, ME0034

The following results are affected by an interference check "A" sample (ICSA) for which false negative concentration values greater than the absolute value of the MDL were obtained. The sample contains Al, Ca, Fe or Mg at a level comparable to that of the ICSA.
Hits less than 10 times the absolute value of the ICSA are qualified "J-", non-detects are qualified "UJ". Hits greater than 10 times the ICSA are not qualified.

Antimony
ME0022, ME0023, ME0024, ME0025, ME0026, ME0029, ME0030, ME0031, ME0032, ME0033, ME0034

Copper
ME0022

**7. SAMPLE RESULTS:**

The following inorganic samples have analyte concentrations reported above the method detection limit (MDL) but below the quantitation limit (CRQL).
Results are qualified "J".

Chromium
ME0034

Mercury
ME0023, ME0029, ME0033

Potassium
ME0022, ME0025, ME0026, ME0027, ME0033, ME0034

Selenium
ME0028, ME0029, ME0030

Silver
ME0022

Vanadium
ME0023, ME0024, ME0025, ME0026, ME0030, ME0032, ME0033, ME0034

All data, except those qualified above, are acceptable.

**CADRE ILM05.4 Data Qualifier Sheet**

| Qualifiers | Data Qualifier Definitions |
|---|---|
| U | The analyte was analyzed for, but was not detected above the reported sample quantitation limit. |
| J | The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample. |
| J+ | The result is an estimated quantity, but the result may be biased high. |
| J- | The result is an estimated quantity, but the result may be biased low. |
| R | The data are unusable. The sample results are rejected due to serious deficiencies in meeting Quality Control (QC) criteria. The analyte may or may not be present in the sample. |
| UJ | The analyte was analyzed for, but not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise. |

## Analytical Results (Qualified Data)

Case #: 39260 SDG : ME0022
Site : BAUTSCH-GREY MINE
Lab. : BONNER
Reviewer : S. CONNET
Date : 3/8/2010

Number of Soil Samples : 13
Number of Water Samples : 0

| Sample Number : | ME0022 | | ME0023 | | ME0024 | | ME0025 | | ME0026 | |
|---|---|---|---|---|---|---|---|---|---|---|
| Sampling Location : | X214 | | X215 | | X216 | | X217 | | X218 | |
| Matrix : | Soil | | Soil | | Soil | | Soil | | Soil | |
| Units : | mg/Kg | | mg/Kg | | mg/Kg | | mg/Kg | | mg/Kg | |
| Date Sampled : | 11/17/2009 | | 11/17/2009 | | 11/17/2009 | | 11/17/2009 | | 11/17/2009 | |
| Time Sampled : | | | | | | | | | | |
| %Solids : | 65.3 | | 83.9 | | 76.5 | | 79.3 | | 79.9 | |
| Dilution Factor : | 1.0 | | 1.0 | | 1.0 | | 1.0 | | 1.0 | |
| ANALYTE | Result | Flag | Result | Flag | Result | Flag | Result | Flag | Result | Flag |
| ALUMINUM | 6240 | | 2010 | | 2080 | | 950 | | 990 | |
| ANTIMONY | 9.2 | UJ | 7.2 | UJ | 7.8 | UJ | 7.6 | UJ | 7.5 | UJ |
| ARSENIC | 5.5 | | 47.5 | | 38.6 | | 43.5 | | 49.7 | |
| BARIUM | 92.2 | | 23.8 | U | 26.1 | U | 25.2 | U | 25.7 | |
| BERYLLIUM | 0.77 | U | 0.60 | U | 0.65 | U | 0.63 | U | 0.63 | U |
| CADMIUM | 1.1 | J | 19.6 | J | 18.8 | J | 15.7 | J | 16.9 | J |
| CALCIUM | 29900 | | 165000 | | 136000 | | 181000 | | 152000 | |
| CHROMIUM | 10.1 | | 4.4 | | 4.4 | | 2.5 | | 2.4 | |
| COBALT | 7.7 | UJ | 10.6 | J | 8.3 | J | 7.9 | J | 8.5 | J |
| COPPER | 12.9 | J- | 157 | | 147 | | 79.9 | | 101 | |
| IRON | 20600 | J | 50800 | J | 43500 | J | 48600 | J | 55800 | J |
| LEAD | 66.4 | J | 1890 | J | 2010 | J | 2020 | J | 2970 | J |
| MAGNESIUM | 9520 | | 66500 | | 53300 | | 73100 | | 59500 | |
| MANGANESE | 2080 | | 1160 | | 903 | | 1140 | | 967 | |
| MERCURY | 0.15 | U | 0.032 | J- | 0.13 | U | 0.13 | U | 0.13 | U |
| NICKEL | 11.2 | J | 29.3 | J | 25.4 | J | 23.1 | J | 28.0 | J |
| POTASSIUM | 726 | J | 962 | | 1070 | | 496 | J | 486 | J |
| SELENIUM | 5.4 | U | 4.2 | U | 4.6 | U | 4.4 | U | 4.4 | U |
| SILVER | 0.72 | J | 2.3 | | 2.2 | | 2.0 | | 2.3 | |
| SODIUM | 766 | U | 596 | U | 654 | U | 631 | U | 626 | U |
| THALLIUM | 3.8 | U | 3.0 | U | 3.3 | U | 3.2 | U | 3.1 | U |
| VANADIUM | 15.8 | | 4.6 | J+ | 4.6 | J+ | 2.9 | J+ | 3.1 | J+ |
| ZINC | 1010 | | 9790 | | 9160 | | 7610 | | 9190 | |
| CYANIDE | 3.8 | U | 3.0 | U | 3.3 | U | 3.2 | U | 3.1 | U |

**Analytical Results (Qualified Data)**

Case #: 39260 SDG : ME0022
Site : BAUTSCH-GREY MINE
Lab. : BONNER
Reviewer : S. CONNET
Date : 3/8/2010

| Sample Number : | ME0027 | | ME0028 | | ME0029 | | ME0030 | | ME0031 | |
|---|---|---|---|---|---|---|---|---|---|---|
| Sampling Location : | X101 | | X102 | | X103 | | X104 | | X105 | |
| Matrix : | Soil | | Soil | | Soil | | Soil | | Soil | |
| Units : | mg/Kg | | mg/Kg | | mg/Kg | | mg/Kg | | mg/Kg | |
| Date Sampled : | 11/18/2009 | | 11/18/2009 | | 11/17/2009 | | 11/17/2009 | | 11/17/2009 | |
| Time Sampled : | | | | | | | | | | |
| %Solids : | 77.7 | | 48.1 | | 64.6 | | 69.4 | | 68.9 | |
| Dilution Factor : | 1.0 | | 1.0 | | 1.0 | | 1.0 | | 1.0 | |
| ANALYTE | Result | Flag | Result | Flag | Result | Flag | Result | Flag | Result | Flag |
| ALUMINUM | 5820 | | 9880 | | 4970 | | 2930 | | 3390 | |
| ANTIMONY | 7.7 | UJ | 12.5 | UJ | 9.3 | UJ | 8.6 | UJ | 8.7 | UJ |
| ARSENIC | 3.6 | | 5.6 | | 37.5 | | 41.8 | | 56.8 | |
| BARIUM | 87.9 | | 120 | | 46.2 | | 35.8 | | 41.6 | |
| BERYLLIUM | 0.64 | U | 1.0 | U | 0.77 | U | 0.72 | U | 0.73 | U |
| CADMIUM | 0.64 | UJ | 1.0 | UJ | 25.6 | J | 20.8 | J | 25.6 | J |
| CALCIUM | 3760 | | 17700 | | 98000 | | 114000 | | 167000 | |
| CHROMIUM | 8.6 | | 16.7 | | 9.0 | | 5.7 | | 6.5 | |
| COBALT | 6.4 | UJ | 10.4 | UJ | 11.5 | J | 10.4 | J | 12.2 | J |
| COPPER | 5.8 | | 22.4 | | 199 | | 154 | | 201 | |
| IRON | 8690 | J | 15000 | J | 41900 | J | 47800 | J | 61300 | J |
| LEAD | 35.2 | J | 44.5 | J | 2720 | J | 2560 | J | 3300 | J |
| MAGNESIUM | 1570 | | 5600 | | 40900 | | 48600 | | 62000 | |
| MANGANESE | 491 | | 392 | | 953 | | 962 | | 1180 | |
| MERCURY | 0.13 | U | 0.21 | U | 0.061 | J- | 0.14 | U | 0.15 | U |
| NICKEL | 9.2 | J | 20.4 | J | 32.3 | J | 29.8 | J | 37.7 | J |
| POTASSIUM | 485 | J | 2570 | | 1750 | | 1130 | | 1410 | |
| SELENIUM | 4.5 | U | 0.97 | J | 0.65 | J | 0.76 | J | 5.1 | U |
| SILVER | 1.3 | U | 2.1 | U | 2.5 | | 2.4 | | 2.9 | |
| SODIUM | 644 | U | 1040 | U | 774 | U | 720 | U | 726 | U |
| THALLIUM | 3.2 | U | 5.2 | U | 3.9 | U | 3.6 | U | 3.6 | U |
| VANADIUM | 16.5 | | 29.9 | | 10.0 | | 6.6 | J | 7.5 | |
| ZINC | 135 | | 255 | | 12500 | | 10700 | | 12700 | |
| CYANIDE | 3.2 | U | 5.2 | U | 3.9 | U | 3.6 | U | 3.6 | U |

**Analytical Results (Qualified Data)**

Case #: 39260 SDG : ME0022
Site : BAUTSCH-GREY MINE
Lab. : BONNER
Reviewer : S. CONNET
Date : 3/8/2010

| Sample Number : | ME0032 | | ME0033 | | ME0034 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Sampling Location : | X106 | | X107 | | X108 | | | | | |
| Matrix : | Soil | | Soil | | Soil | | | | | |
| Units : | mg/Kg | | mg/Kg | | mg/Kg | | | | | |
| Date Sampled : | 11/17/2009 | | 11/17/2009 | | 11/17/2009 | | | | | |
| Time Sampled : | | | | | | | | | | |
| %Solids : | 77.7 | | 82.2 | | 77.8 | | | | | |
| Dilution Factor : | 1.0 | | 1.0 | | 1.0 | | | | | |
| ANALYTE | Result | Flag | Result | Flag | Result | Flag | Result | Flag | Result | Flag |
| ALUMINUM | 1950 | | 1190 | | 519 | | | | | |
| ANTIMONY | 7.7 | UJ | 7.3 | UJ | 7.7 | UJ | | | | |
| ARSENIC | 38.3 | | 42.0 | | 91.2 | | | | | |
| BARIUM | 25.7 | U | 24.3 | U | 25.7 | U | | | | |
| BERYLLIUM | 0.64 | U | 0.61 | U | 0.64 | U | | | | |
| CADMIUM | 17.3 | J | 14.2 | J | 12.2 | J | | | | |
| CALCIUM | 129000 | | 144000 | | 142000 | | | | | |
| CHROMIUM | 4.1 | | 2.8 | | 1.1 | J | | | | |
| COBALT | 8.5 | J | 9.8 | J | 10.6 | J | | | | |
| COPPER | 133 | | 96.7 | | 80.9 | | | | | |
| IRON | 45200 | J | 46900 | J | 118000 | J | | | | |
| LEAD | 2100 | J | 1690 | J | 2440 | J | | | | |
| MAGNESIUM | 51100 | | 60600 | | 62400 | | | | | |
| MANGANESE | 923 | | 1040 | | 995 | | | | | |
| MERCURY | 0.13 | U | 0.038 | J- | 0.13 | U | | | | |
| NICKEL | 24.8 | J | 23.6 | J | 44.7 | J | | | | |
| POTASSIUM | 915 | | 546 | J | 216 | J | | | | |
| SELENIUM | 4.5 | U | 4.3 | U | 4.5 | U | | | | |
| SILVER | 2.2 | | 2.0 | | 2.9 | | | | | |
| SODIUM | 644 | U | 608 | U | 643 | U | | | | |
| THALLIUM | 3.2 | U | 3.0 | U | 3.2 | U | | | | |
| VANADIUM | 4.3 | J+ | 3.5 | J+ | 2.6 | J+ | | | | |
| ZINC | 8720 | | 7650 | | 4430 | | | | | |
| CYANIDE | 3.2 | U | 3.0 | U | 3.2 | U | | | | |

# USEPA Contract Laboratory Program
# Inorganic Traffic Report & Chain of Custody Record

**Case No:** 39260
DAS No:
SDG No: ME0022

**L**

| | |
|---|---|
| Date Shipped: | 11/19/2009 |
| Carrier Name: | UPS |
| Airbill: | 1z6215892210084177 |
| Shipped to: | Bonner Analytical Testing Company<br>2703 Oak Grove Road<br>Hattiesburg MS 39402<br>(601) 264-2854 |

**Chain of Custody Record**

Sampler Signature:

| Relinquished By | (Date / Time) | Received By | (Date / Time) |
|---|---|---|---|
| 1 | 11/19/09 0900 | | 11-20-09 0930 |
| 2 | | | |
| 3 | | | |
| 4 | | | |

**For Lab Use Only**

Lab Contract No: EPW08064
Unit Price:
Transfer To:
Lab Contract No:
Unit Price: 11-20-09

| INORGANIC SAMPLE No. | MATRIX/ SAMPLER | CONC/ TYPE | ANALYSIS/ TURNAROUND | TAG No./ PRESERVATIVE/ Bottles | STATION LOCATION | SAMPLE COLLECT DATE/TIME | ORGANIC SAMPLE No. | FOR LAB USE ONLY Sample Condition On Receipt |
|---|---|---|---|---|---|---|---|---|
| ME0022 | Sediment/ Lance Range | L/G | ICP-AES (21) | 5c105079 (Ice Only) (1) | X214 | S: 11/17/2009 10:20 | | good |
| ME0023 | Sediment/ Lance Range | L/G | ICP-AES (21) | 5c105080 (Ice Only) (1) | X215 | S: 11/17/2009 14:00 | | |
| ME0024 | Sediment/ Lance Range | L/G | ICP-AES (21) | 5c105081 (Ice Only) (1) | X216 | S: 11/17/2009 14:15 | | |
| ME0025 | Sediment/ Lance Range | L/G | ICP-AES (21) | 5c105082 (Ice Only) (1) | X217 | S: 11/17/2009 14:20 | | |
| ME0026 | Sediment/ Lance Range | L/G | ICP-AES (21) | 5c105083 (Ice Only) (1) | X218 | S: 11/17/2009 14:20 | | |
| ME0027 | Soil/Sediment/ Lance Range | L/G | ICP-AES (21) | 5c105084 (Ice Only) (1) | x101 | S: 11/18/2009 14:00 | | |
| ME0028 | Soil/Sediment/ Lance Range | L/G | ICP-AES (21) | 5c105085 (Ice Only) (1) | x102 | S: 11/18/2009 14:40 | | |
| ME0029 | Soil/Sediment/ Lance Range | L/G | ICP-AES (21) | 5c105086 (Ice Only) (1) | x103 | S: 11/17/2009 12:50 | | |
| ME0030 | Soil/Sediment/ Lance Range | L/G | ICP-AES (21) | 5c105087 (Ice Only) (1) | x104 | S: 11/17/2009 13:20 | | |
| ME0031 | Soil/Sediment/ Lance Range | L/G | ICP-AES (21) | 5c105088 (Ice Only) (1) | x105 | S: 11/17/2009 13:20 | | |

| | | | | |
|---|---|---|---|---|
| Shipment for Case complete?N | Sample(s) to be used for laboratory QC: ME0009/ME0026 | Additional Sampler Signature(s): | Cooler Temperature Upon Receipt: | Chain of Custody Seal Number: 28899/28898 |
| Analysis Key: | Concentration: L = Low, M = Low/Medium, H = High | Type/Designate: Composite = C, Grab = G | | Custody Seal Intact? Y / Shipment Iced? Y |

ICP-AES = HG, CN, ICP METALS

**TR Number:** 5-554006491-111809-0001

**LABORATORY COPY**

PR provides preliminary results. Requests for preliminary results will increase analytical costs.
Send Copy to: Sample Management Office, 2000 Edmund Halley Dr., Reston, VA. 20191-3400 Phone 703/264-9348 Fax 703/264-9222

# USEPA Contract Laboratory Program
## Inorganic Traffic Report & Chain of Custody Record

Case No: 39260
DAS No:
SDC No: ME0022

L

| | |
|---|---|
| Date Shipped: | 11/19/2009 |
| Carrier Name: | UPS |
| Airbill: | 1z6215892210084177 |
| Shipped to: | Bonner Analytical Testing Company<br>2703 Oak Grove Road<br>Hattiesburg MS 39402<br>(601) 264-2854 |

**Chain of Custody Record**

Sampler Signature:

| Relinquished By | (Date / Time) | Received By | (Date / Time) |
|---|---|---|---|
| 1 | 11/19/09 0900 | | 11-20-09 0930 |
| 2 | | | |
| 3 | | | |
| 4 | | | |

**For Lab Use Only**

Lab Contract No: EPW08064
Unit Price:
Transfer To:
Lab Contract No:
Unit Price: 11-20-09

| INORGANIC SAMPLE No. | MATRIX/ SAMPLER | CONC/ TYPE | ANALYSIS/ TURNAROUND | TAG No./ PRESERVATIVE/ Bottles | STATION LOCATION | SAMPLE COLLECT DATE/TIME | ORGANIC SAMPLE No. | FOR LAB USE ONLY Sample Condition On Receipt |
|---|---|---|---|---|---|---|---|---|
| ME0032 | Soil/Sediment/ Lance Range | L/G | ICP-AES (21) | 5c105089 (Ice Only) (1) | x106 | S: 11/17/2009 13:30 | | good |
| ME0033 | Soil/Sediment/ Lance Range | L/G | ICP-AES (21) | 5c105090 (Ice Only) (1) | x107 | S: 11/17/2009 13:45 | | |
| ME0034 | Soil/Sediment/ Lance Range | L/G | ICP-AES (21) | 5c105091 (Ice Only) (1) | x108 | S: 11/17/2009 13:50 | | |

| | | | | |
|---|---|---|---|---|
| Shipment for Case Complete?N | Sample(s) to be used for laboratory QC: ME0029 / ME0026 | Additional Sampler Signature(s): | Cooler Temperature Upon Receipt: | Chain of Custody Seal Number: 28899 / 28898 |
| Analysis Key: | Concentration: L = Low, M = Low/Medium, H = High | Type/Designate: Composite = C, Grab = G | | Custody Seal Intact? Y / Shipment Iced? Y |

ICP-AES = HG, CN, ICP METALS

**TR Number: 5-554006491-111809-0001**

**LABORATORY COPY**

PR provides preliminary results. Requests for preliminary results will increase analytical costs.
Send Copy to: Sample Management Office, 2000 Edmund Halley Dr., Reston, VA. 20191-3400 Phone 703/264-9348 Fax 703/264-9222

# Bonner Analytical Testing Company

2703 Oak Grove Road, Hattiesburg, MS 39402
Phone: (601) 264-2854 Fax: (601) 268-7084

**SDG NARRATIVE:**

**SDG Number: ME0022**
**Case Number: 39260**
**Contract Number: EPW08064**

Sample Receipt:
On November 20, 2009, we received 13 soil samples in 2 coolers under UPS tracking numbers 1Z621 589 22 1008 4186 and 1Z621 589 22 1008 4177. Custody seals were present and intact. Cooler temps were determined to be 3°C and 8.5°C. Samples were received in good condition with no discrepancies.

Metals
The analytical run began 12/04/2009 @ 1153 hrs. The matrix spike failed for Sb, Co, Cd and Ni; a post spike was analyzed at twice the CRQL for Sb and at twice the indigenous level for Co, Cd and Ni. ME0023, 24, 25, 26, 26S, 26D, 26L, 31, 32 and 33 were over the linear range for Ca and Zn; the samples were reanalyzed at appropriate dilutions. ME0034 was over the linear range for Ca and Fe; the sample was reanalyzed at an appropriate dilution.

Mercury
The analytical run began 12/02/2009 @ 0923 hrs. S1 was not used in the calibration curve. LCSS01 was over the linear range; the LCSS was reanalyzed at a 2X dilution.

Cyanide
The analytical run began 12/02/2009 @ 1359 hrs. There was a bubble in the line during the analysis of ME0025, 26, 26D, 26S, 27 and 28; the samples were reanalyzed.

CSF
No Discrepancies

Sample Equation:

Lab ID 0911284-08 EPA Sample # ME0029

Date & Time 12/04/2009 @ 1319

Metals: 2.8187 µg/L * (0.100 L) / (1.00 g) * 100 % / 64.6 % * 1000 g / 1 kg * 1 mg / 1000 µg = 0.44 mg/Kg
(Analyte Be)

Date & Time 12/02/2009 @ 1039

Hg: 0.0785 µg/L * (0.100 L) / (0.20 g) * 100 % / 64.6 % * 1000 g / 1 kg * 1 mg / 1000 µg = 0.061 mg/Kg

Date & Time 12/02/2009 @ 1445

CN: 4.28 µg/L * (0.050 L) / (1.00 g) * 100 % / 64.6 % * 1000 g / 1 kg * 1 mg / 1000 µg = 0.33 mg/Kg

Authorized by _____
Daniel Antrim
Document Control Officer

USEPA - CLP

COVER PAGE

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: SDG No.: ME0022

SOW No.: ILM05.4

| EPA SAMPLE NO. | Lab Sample ID: |
|---|---|
| ME0022 | 0911284-01 |
| ME0023 | 0911284-02 |
| ME0024 | 0911284-03 |
| ME0025 | 0911284-04 |
| ME0026 | 0911284-05 |
| ME0026D | 0911284-05DUP |
| ME0026S | 0911284-05MS |
| ME0027 | 0911284-06 |
| ME0028 | 0911284-07 |
| ME0029 | 0911284-08 |
| ME0030 | 0911284-09 |
| ME0031 | 0911284-10 |
| ME0032 | 0911284-11 |
| ME0033 | 0911284-12 |
| ME0034 | 0911284-13 |

| | | ICP-AES | ICP-MS |
|---|---|---|---|
| Were ICP-AES and ICP interelement corrections applied? | (Yes/No) | Yes | Yes |
| Were ICP-AES and ICP background corrections applied? | (Yes/No) | Yes | Yes |
| If yes, were raw data generated before application of background corrections? | (Yes/No) | No | No |

Comments:

As, Cd, Co, Fe, Pb, Ni were flagged as "E" estimated due to interferences occurring during the analysis of the Serial Dilution.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy Sample Data Package and in the computer-readable data submitted on diskette (or via an alternate means of electronic transmission, if approved in advance by USEPA), has been authorized by the Labortory Mangager or the Manager's designee, as verified by the following signature.

Signature: Name: Brandon G. Beck For Chris Bonner

Date: 12/10/09 Title: President

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
ME0022

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: SDG No.: ME0022

Matrix: (Soil/Water) SOIL Lab Sample ID: 0911284-01

Level: (low/med) LOW Date Received: 11/20/2009

% Solids 65.3

Concentration Units (ug/L or mg/kg dry weight): mg/Kg

| CAS NO. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 6240 | | | P |
| 7440-36-0 | Antimony | 9.2 | U | N | P |
| 7440-38-2 | Arsenic | 5.5 | | E | P |
| 7440-39-3 | Barium | 92.2 | | | P |
| 7440-41-7 | Beryllium | 0.068 | J | | P |
| 7440-43-9 | Cadmium | 1.1 | | N E | P |
| 7440-70-2 | Calcium | 29900 | | | P |
| 7440-47-3 | Chromium | 10.1 | | | P |
| 7440-48-4 | Cobalt | 6.1 | J | N E | P |
| 7440-50-8 | Copper | 12.9 | | | P |
| 7439-89-6 | Iron | 20600 | | E | P |
| 7439-92-1 | Lead | 66.4 | | E | P |
| 7439-95-4 | Magnesium | 9520 | | | P |
| 7439-96-5 | Manganese | 2080 | | | P |
| 7439-97-6 | Mercury | 0.15 | U | | CV |
| 7440-02-0 | Nickel | 11.2 | | N E | P |
| 7440-09-7 | Potassium | 726 | J | | P |
| 7782-49-2 | Selenium | 5.4 | U | | P |
| 7440-22-4 | Silver | 0.72 | J | | P |
| 7440-23-5 | Sodium | 56.0 | J | | P |
| 7440-28-0 | Thallium | 3.8 | U | | P |
| 7440-62-2 | Vanadium | 15.8 | | | P |
| 7440-66-6 | Zinc | 1010 | | | P |
| 57-12-5 | Cyanide | 3.8 | U | | AS |

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: COLORLESS Clarity After: Artifacts:

Comments:

FORM IA-IN ILM05.4

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1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ME0023

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: SDG No.: ME0022

Matrix: (Soil/Water) SOIL Lab Sample ID: 0911284-02

Level: (low/med) LOW Date Received: 11/20/2009

% Solids 83.9

Concentration Units (**ug/L** or **mg/kg** dry weight): mg/Kg

| CAS NO. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 2010 | | | P |
| 7440-36-0 | Antimony | 7.2 | U | N | P |
| 7440-38-2 | Arsenic | 47.5 | | E | P |
| 7440-39-3 | Barium | 23.7 | J | | P |
| 7440-41-7 | Beryllium | 0.30 | J | | P |
| 7440-43-9 | Cadmium | 19.6 | | N E | P |
| 7440-70-2 | Calcium | 165000 | | D | P |
| 7440-47-3 | Chromium | 4.4 | | | P |
| 7440-48-4 | Cobalt | 10.6 | | N E | P |
| 7440-50-8 | Copper | 157 | | | P |
| 7439-89-6 | Iron | 50800 | | E | P |
| 7439-92-1 | Lead | 1890 | | E | P |
| 7439-95-4 | Magnesium | 66500 | | | P |
| 7439-96-5 | Manganese | 1160 | | | P |
| 7439-97-6 | Mercury | 0.032 | J | | CV |
| 7440-02-0 | Nickel | 29.3 | | N E | P |
| 7440-09-7 | Potassium | 962 | | | P |
| 7782-49-2 | Selenium | 4.2 | U | | P |
| 7440-22-4 | Silver | 2.3 | | | P |
| 7440-23-5 | Sodium | 134 | J | | P |
| 7440-28-0 | Thallium | 3.0 | U | | P |
| 7440-62-2 | Vanadium | 4.6 | J | | P |
| 7440-66-6 | Zinc | 9790 | | D | P |
| 57-12-5 | Cyanide | 3.0 | U | | AS |

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: COLORLESS Clarity After: Artifacts:

Comments:

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
ME0024

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: SDG No.: ME0022

Matrix: (Soil/Water) SOIL Lab Sample ID: 0911284-03

Level: (low/med) LOW Date Received: 11/20/2009

% Solids 76.5

Concentration Units (**ug/L** or **mg/kg** dry weight): mg/Kg

| CAS NO. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 2080 | | | P |
| 7440-36-0 | Antimony | 7.8 | U | N | P |
| 7440-38-2 | Arsenic | 38.6 | | E | P |
| 7440-39-3 | Barium | 22.0 | J | | P |
| 7440-41-7 | Beryllium | 0.30 | J | | P |
| 7440-43-9 | Cadmium | 18.8 | | N E | P |
| 7440-70-2 | Calcium | 136000 | | D | P |
| 7440-47-3 | Chromium | 4.4 | | | P |
| 7440-48-4 | Cobalt | 8.3 | | N E | P |
| 7440-50-8 | Copper | 147 | | | P |
| 7439-89-6 | Iron | 43500 | | E | P |
| 7439-92-1 | Lead | 2010 | | E | P |
| 7439-95-4 | Magnesium | 53300 | | | P |
| 7439-96-5 | Manganese | 903 | | | P |
| 7439-97-6 | Mercury | 0.13 | U | | CV |
| 7440-02-0 | Nickel | 25.4 | | N E | P |
| 7440-09-7 | Potassium | 1070 | | | P |
| 7782-49-2 | Selenium | 4.6 | U | | P |
| 7440-22-4 | Silver | 2.2 | | | P |
| 7440-23-5 | Sodium | 115 | J | | P |
| 7440-28-0 | Thallium | 3.3 | U | | P |
| 7440-62-2 | Vanadium | 4.6 | J | | P |
| 7440-66-6 | Zinc | 9160 | | D | P |
| 57-12-5 | Cyanide | 3.3 | U | | AS |

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: COLORLESS Clarity After: Artifacts:

Comments:

FORM IA-IN ILM05.4

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ME0025

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: SDG No.: ME0022

Matrix: (Soil/Water) SOIL Lab Sample ID: 0911284-04

Level: (low/med) LOW Date Received: 11/20/2009

% Solids 79.3

Concentration Units (**ug/L** or **mg/kg** dry weight): mg/Kg

| CAS NO. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 950 | | | P |
| 7440-36-0 | Antimony | 7.6 | U | N | P |
| 7440-38-2 | Arsenic | 43.5 | | E | P |
| 7440-39-3 | Barium | 18.8 | J | | P |
| 7440-41-7 | Beryllium | 0.15 | J | | P |
| 7440-43-9 | Cadmium | 15.7 | | N E | P |
| 7440-70-2 | Calcium | 181000 | | D | P |
| 7440-47-3 | Chromium | 2.5 | | | P |
| 7440-48-4 | Cobalt | 7.9 | | N E | P |
| 7440-50-8 | Copper | 79.9 | | | P |
| 7439-89-6 | Iron | 48600 | | E | P |
| 7439-92-1 | Lead | 2020 | | E | P |
| 7439-95-4 | Magnesium | 73100 | | | P |
| 7439-96-5 | Manganese | 1140 | | | P |
| 7439-97-6 | Mercury | 0.13 | U | | CV |
| 7440-02-0 | Nickel | 23.1 | | N E | P |
| 7440-09-7 | Potassium | 496 | J | | P |
| 7782-49-2 | Selenium | 4.4 | U | | P |
| 7440-22-4 | Silver | 2.0 | | | P |
| 7440-23-5 | Sodium | 139 | J | | P |
| 7440-28-0 | Thallium | 3.2 | U | | P |
| 7440-62-2 | Vanadium | 2.9 | J | | P |
| 7440-66-6 | Zinc | 7610 | | D | P |
| 57-12-5 | Cyanide | 3.2 | U | | AS |

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: COLORLESS Clarity After: Artifacts:

Comments:

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
ME0026

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: SDG No.: ME0022

Matrix: (Soil/Water) SOIL Lab Sample ID: 0911284-05

Level: (low/med) LOW Date Received: 11/20/2009

% Solids 79.9

Concentration Units (ug/L or mg/kg dry weight): mg/Kg

| CAS NO. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 990 | | | P |
| 7440-36-0 | Antimony | 7.5 | U | N | P |
| 7440-38-2 | Arsenic | 49.7 | | E | P |
| 7440-39-3 | Barium | 25.7 | | | P |
| 7440-41-7 | Beryllium | 0.15 | J | | P |
| 7440-43-9 | Cadmium | 16.9 | | N E | P |
| 7440-70-2 | Calcium | 152000 | | D | P |
| 7440-47-3 | Chromium | 2.4 | | | P |
| 7440-48-4 | Cobalt | 8.5 | | N E | P |
| 7440-50-8 | Copper | 101 | | | P |
| 7439-89-6 | Iron | 55800 | | E | P |
| 7439-92-1 | Lead | 2970 | | E | P |
| 7439-95-4 | Magnesium | 59500 | | | P |
| 7439-96-5 | Manganese | 967 | | | P |
| 7439-97-6 | Mercury | 0.13 | U | | CV |
| 7440-02-0 | Nickel | 28.0 | | N E | P |
| 7440-09-7 | Potassium | 486 | J | | P |
| 7782-49-2 | Selenium | 4.4 | U | | P |
| 7440-22-4 | Silver | 2.3 | | | P |
| 7440-23-5 | Sodium | 95.1 | J | | P |
| 7440-28-0 | Thallium | 3.1 | U | | P |
| 7440-62-2 | Vanadium | 3.1 | J | | P |
| 7440-66-6 | Zinc | 9190 | | D | P |
| 57-12-5 | Cyanide | 3.1 | U | | AS |

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: COLORLESS Clarity After: Artifacts:

Comments:

FORM IA-IN ILM05.4

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
ME0027

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: SDG No.: ME0022

Matrix: (Soil/Water) SOIL Lab Sample ID: 0911284-06

Level: (low/med) LOW Date Received: 11/20/2009

% Solids 77.7

Concentration Units (**ug/L** or **mg/kg** dry weight): mg/Kg

| CAS NO. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 5820 | | | P |
| 7440-36-0 | Antimony | 7.7 | U | N | P |
| 7440-38-2 | Arsenic | 3.6 | | E | P |
| 7440-39-3 | Barium | 87.9 | | | P |
| 7440-41-7 | Beryllium | 0.64 | U | | P |
| 7440-43-9 | Cadmium | 0.32 | J | N E | P |
| 7440-70-2 | Calcium | 3760 | | | P |
| 7440-47-3 | Chromium | 8.6 | | | P |
| 7440-48-4 | Cobalt | 5.3 | J | N E | P |
| 7440-50-8 | Copper | 5.8 | | | P |
| 7439-89-6 | Iron | 8690 | | E | P |
| 7439-92-1 | Lead | 35.2 | | E | P |
| 7439-95-4 | Magnesium | 1570 | | | P |
| 7439-96-5 | Manganese | 491 | | | P |
| 7439-97-6 | Mercury | 0.13 | U | | CV |
| 7440-02-0 | Nickel | 9.2 | | N E | P |
| 7440-09-7 | Potassium | 485 | J | | P |
| 7782-49-2 | Selenium | 4.5 | U | | P |
| 7440-22-4 | Silver | 1.3 | U | | P |
| 7440-23-5 | Sodium | 16.1 | J | | P |
| 7440-28-0 | Thallium | 3.2 | U | | P |
| 7440-62-2 | Vanadium | 16.5 | | | P |
| 7440-66-6 | Zinc | 135 | | | P |
| 57-12-5 | Cyanide | 3.2 | U | | AS |

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: COLORLESS Clarity After: Artifacts:

Comments:

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ME0028

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: SDG No.: ME0022

Matrix: (Soil/Water) SOIL Lab Sample ID: 0911284-07

Level: (low/med) LOW Date Received: 11/20/2009

% Solids 48.1

Concentration Units (ug/L or mg/kg dry weight): mg/Kg

| CAS NO. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 9880 | | | P |
| 7440-36-0 | Antimony | 12.5 | U | N | P |
| 7440-38-2 | Arsenic | 5.6 | | E | P |
| 7440-39-3 | Barium | 120 | | | P |
| 7440-41-7 | Beryllium | 0.25 | J | | P |
| 7440-43-9 | Cadmium | 0.53 | J | N E | P |
| 7440-70-2 | Calcium | 17700 | | | P |
| 7440-47-3 | Chromium | 16.7 | | | P |
| 7440-48-4 | Cobalt | 6.5 | J | N E | P |
| 7440-50-8 | Copper | 22.4 | | | P |
| 7439-89-6 | Iron | 15000 | | E | P |
| 7439-92-1 | Lead | 44.5 | | E | P |
| 7439-95-4 | Magnesium | 5600 | | | P |
| 7439-96-5 | Manganese | 392 | | | P |
| 7439-97-6 | Mercury | 0.21 | U | | CV |
| 7440-02-0 | Nickel | 20.4 | | N E | P |
| 7440-09-7 | Potassium | 2570 | | | P |
| 7782-49-2 | Selenium | 0.97 | J | | P |
| 7440-22-4 | Silver | 2.1 | U | | P |
| 7440-23-5 | Sodium | 29.9 | J | | P |
| 7440-28-0 | Thallium | 5.2 | U | | P |
| 7440-62-2 | Vanadium | 29.9 | | | P |
| 7440-66-6 | Zinc | 255 | | | P |
| 57-12-5 | Cyanide | 5.2 | U | | AS |

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: COLORLESS Clarity After: Artifacts:

Comments:

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1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ME0029

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: SDG No.: ME0022

Matrix: (Soil/Water) SOIL Lab Sample ID: 0911284-08

Level: (low/med) LOW Date Received: 11/20/2009

% Solids 64.6

Concentration Units (**ug/L** or **mg/kg** dry weight): mg/Kg

| CAS NO. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 4970 | | | P |
| 7440-36-0 | Antimony | 9.3 | U | N | P |
| 7440-38-2 | Arsenic | 37.5 | | E | P |
| 7440-39-3 | Barium | 46.2 | | | P |
| 7440-41-7 | Beryllium | 0.44 | J | | P |
| 7440-43-9 | Cadmium | 25.6 | | N E | P |
| 7440-70-2 | Calcium | 98000 | | | P |
| 7440-47-3 | Chromium | 9.0 | | | P |
| 7440-48-4 | Cobalt | 11.5 | | N E | P |
| 7440-50-8 | Copper | 199 | | | P |
| 7439-89-6 | Iron | 41900 | | E | P |
| 7439-92-1 | Lead | 2720 | | E | P |
| 7439-95-4 | Magnesium | 40900 | | | P |
| 7439-96-5 | Manganese | 953 | | | P |
| 7439-97-6 | Mercury | 0.061 | J | | CV |
| 7440-02-0 | Nickel | 32.3 | | N E | P |
| 7440-09-7 | Potassium | 1750 | | | P |
| 7782-49-2 | Selenium | 0.65 | J | | P |
| 7440-22-4 | Silver | 2.5 | | | P |
| 7440-23-5 | Sodium | 88.1 | J | | P |
| 7440-28-0 | Thallium | 3.9 | U | | P |
| 7440-62-2 | Vanadium | 10.0 | | | P |
| 7440-66-6 | Zinc | 12500 | | D | P |
| 57-12-5 | Cyanide | 0.33 | J | | AS |

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: COLORLESS Clarity After: Artifacts:

Comments:

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USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ME0030

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: SDG No.: ME0022

Matrix: (Soil/Water) SOIL Lab Sample ID: 0911284-09

Level: (low/med) LOW Date Received: 11/20/2009

% Solids 69.4

Concentration Units (ug/L or mg/kg dry weight): mg/Kg

| CAS NO. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 2930 | | | P |
| 7440-36-0 | Antimony | 8.6 | U | N | P |
| 7440-38-2 | Arsenic | 41.8 | | E | P |
| 7440-39-3 | Barium | 35.8 | | | P |
| 7440-41-7 | Beryllium | 0.28 | J | | P |
| 7440-43-9 | Cadmium | 20.8 | | N E | P |
| 7440-70-2 | Calcium | 114000 | | | P |
| 7440-47-3 | Chromium | 5.7 | | | P |
| 7440-48-4 | Cobalt | 10.4 | | N E | P |
| 7440-50-8 | Copper | 154 | | | P |
| 7439-89-6 | Iron | 47800 | | E | P |
| 7439-92-1 | Lead | 2560 | | E | P |
| 7439-95-4 | Magnesium | 48700 | | | P |
| 7439-96-5 | Manganese | 962 | | | P |
| 7439-97-6 | Mercury | 0.14 | U | | CV |
| 7440-02-0 | Nickel | 29.8 | | N E | P |
| 7440-09-7 | Potassium | 1130 | | | P |
| 7782-49-2 | Selenium | 0.76 | J | | P |
| 7440-22-4 | Silver | 2.4 | | | P |
| 7440-23-5 | Sodium | 95.7 | J | | P |
| 7440-28-0 | Thallium | 3.6 | U | | P |
| 7440-62-2 | Vanadium | 6.6 | J | | P |
| 7440-66-6 | Zinc | 10700 | | D | P |
| 57-12-5 | Cyanide | 3.6 | U | | AS |

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: COLORLESS Clarity After: Artifacts:

Comments:

FORM IA-IN ILM05.4

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ME0031

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: SDG No.: ME0022

Matrix: (Soil/Water) SOIL Lab Sample ID: 0911284-10

Level: (low/med) LOW Date Received: 11/20/2009

% Solids 68.9

Concentration Units (ug/L or mg/kg dry weight): mg/Kg

| CAS NO. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 3390 | | | P |
| 7440-36-0 | Antimony | 8.7 | U | N | P |
| 7440-38-2 | Arsenic | 56.8 | | E | P |
| 7440-39-3 | Barium | 41.6 | | | P |
| 7440-41-7 | Beryllium | 0.36 | J | | P |
| 7440-43-9 | Cadmium | 25.6 | | N E | P |
| 7440-70-2 | Calcium | 167000 | | D | P |
| 7440-47-3 | Chromium | 6.5 | | | P |
| 7440-48-4 | Cobalt | 12.2 | | N E | P |
| 7440-50-8 | Copper | 201 | | | P |
| 7439-89-6 | Iron | 61300 | | E | P |
| 7439-92-1 | Lead | 3300 | | E | P |
| 7439-95-4 | Magnesium | 62000 | | | P |
| 7439-96-5 | Manganese | 1180 | | | P |
| 7439-97-6 | Mercury | 0.15 | U | | CV |
| 7440-02-0 | Nickel | 37.7 | | N E | P |
| 7440-09-7 | Potassium | 1410 | | | P |
| 7782-49-2 | Selenium | 5.1 | U | | P |
| 7440-22-4 | Silver | 2.9 | | | P |
| 7440-23-5 | Sodium | 124 | J | | P |
| 7440-28-0 | Thallium | 3.6 | U | | P |
| 7440-62-2 | Vanadium | 7.5 | | | P |
| 7440-66-6 | Zinc | 12700 | | D | P |
| 57-12-5 | Cyanide | 3.6 | U | | AS |

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: COLORLESS Clarity After: Artifacts:

Comments:

FORM IA-IN ILM05.4

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ME0032

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: SDG No.: ME0022

Matrix: (Soil/Water) SOIL Lab Sample ID: 0911284-11

Level: (low/med) LOW Date Received: 11/20/2009

% Solids 77.7

Concentration Units (ug/L or mg/kg dry weight): mg/Kg

| CAS NO. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 1950 | | | P |
| 7440-36-0 | Antimony | 7.7 | U | N | P |
| 7440-38-2 | Arsenic | 38.3 | | E | P |
| 7440-39-3 | Barium | 23.9 | J | | P |
| 7440-41-7 | Beryllium | 0.22 | J | | P |
| 7440-43-9 | Cadmium | 17.3 | | N E | P |
| 7440-70-2 | Calcium | 129000 | | D | P |
| 7440-47-3 | Chromium | 4.1 | | | P |
| 7440-48-4 | Cobalt | 8.5 | | N E | P |
| 7440-50-8 | Copper | 133 | | | P |
| 7439-89-6 | Iron | 45200 | | E | P |
| 7439-92-1 | Lead | 2100 | | E | P |
| 7439-95-4 | Magnesium | 51100 | | | P |
| 7439-96-5 | Manganese | 923 | | | P |
| 7439-97-6 | Mercury | 0.13 | U | | CV |
| 7440-02-0 | Nickel | 24.8 | | N E | P |
| 7440-09-7 | Potassium | 915 | | | P |
| 7782-49-2 | Selenium | 4.5 | U | | P |
| 7440-22-4 | Silver | 2.2 | | | P |
| 7440-23-5 | Sodium | 87.4 | J | | P |
| 7440-28-0 | Thallium | 3.2 | U | | P |
| 7440-62-2 | Vanadium | 4.3 | J | | P |
| 7440-66-6 | Zinc | 8720 | | D | P |
| 57-12-5 | Cyanide | 3.2 | U | | AS |

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: COLORLESS Clarity After: Artifacts:

Comments:

FORM IA-IN ILM05.4

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ME0033

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: SDG No.: ME0022

Matrix: (Soil/Water) SOIL Lab Sample ID: 0911284-12

Level: (low/med) LOW Date Received: 11/20/2009

% Solids 82.2

Concentration Units (**ug/L** or **mg/kg** dry weight): mg/Kg

| CAS NO. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 1190 | | | P |
| 7440-36-0 | Antimony | 7.3 | U | N | P |
| 7440-38-2 | Arsenic | 42.0 | | E | P |
| 7440-39-3 | Barium | 17.5 | J | | P |
| 7440-41-7 | Beryllium | 0.16 | J | | P |
| 7440-43-9 | Cadmium | 14.2 | | N E | P |
| 7440-70-2 | Calcium | 144000 | | D | P |
| 7440-47-3 | Chromium | 2.8 | | | P |
| 7440-48-4 | Cobalt | 9.8 | | N E | P |
| 7440-50-8 | Copper | 96.7 | | | P |
| 7439-89-6 | Iron | 46900 | | E | P |
| 7439-92-1 | Lead | 1690 | | E | P |
| 7439-95-4 | Magnesium | 60600 | | | P |
| 7439-96-5 | Manganese | 1040 | | | P |
| 7439-97-6 | Mercury | 0.038 | J | | CV |
| 7440-02-0 | Nickel | 23.6 | | N E | P |
| 7440-09-7 | Potassium | 546 | J | | P |
| 7782-49-2 | Selenium | 4.3 | U | | P |
| 7440-22-4 | Silver | 2.0 | | | P |
| 7440-23-5 | Sodium | 120 | J | | P |
| 7440-28-0 | Thallium | 3.0 | U | | P |
| 7440-62-2 | Vanadium | 3.5 | J | | P |
| 7440-66-6 | Zinc | 7650 | | D | P |
| 57-12-5 | Cyanide | 3.0 | U | | AS |

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: COLORLESS Clarity After: Artifacts:

Comments:

FORM IA-IN ILM05.4

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ME0034

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: SDG No.: ME0022

Matrix: (Soil/Water) SOIL Lab Sample ID: 0911284-13

Level: (low/med) LOW Date Received: 11/20/2009

% Solids 77.8

Concentration Units (ug/L or mg/kg dry weight): mg/Kg

| CAS NO. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 519 | | | P |
| 7440-36-0 | Antimony | 7.7 | U | N | P |
| 7440-38-2 | Arsenic | 91.2 | | E | P |
| 7440-39-3 | Barium | 14.6 | J | | P |
| 7440-41-7 | Beryllium | 0.12 | J | | P |
| 7440-43-9 | Cadmium | 12.2 | | N E | P |
| 7440-70-2 | Calcium | 142000 | | D | P |
| 7440-47-3 | Chromium | 1.1 | J | | P |
| 7440-48-4 | Cobalt | 10.6 | | N E | P |
| 7440-50-8 | Copper | 80.9 | | | P |
| 7439-89-6 | Iron | 118000 | | D E | P |
| 7439-92-1 | Lead | 2440 | | E | P |
| 7439-95-4 | Magnesium | 62400 | | | P |
| 7439-96-5 | Manganese | 995 | | | P |
| 7439-97-6 | Mercury | 0.13 | U | | CV |
| 7440-02-0 | Nickel | 44.7 | | N E | P |
| 7440-09-7 | Potassium | 216 | J | | P |
| 7782-49-2 | Selenium | 4.5 | U | | P |
| 7440-22-4 | Silver | 2.9 | | | P |
| 7440-23-5 | Sodium | 118 | J | | P |
| 7440-28-0 | Thallium | 3.2 | U | | P |
| 7440-62-2 | Vanadium | 2.6 | J | | P |
| 7440-66-6 | Zinc | 4430 | | | P |
| 57-12-5 | Cyanide | 3.2 | U | | AS |

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: COLORLESS Clarity After: Artifacts:

Comments:

USEPA - CLP

3-IN
BLANKS

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: _____ SDG No.: ME0022

Preparation Blank Matrix (soil/water): Soil

Preparation Blank Concentration Units (ug/L or mg/kg): mg/Kg

| Analyte | Initial Calibration Blank (ug/L) | | Continuing Calibration Blank (ug/L) | | | | | | Preparation Blank | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | C | 1 | C | 2 | C | 3 | C | | C | M |
| Aluminum | 200.000 | U | 200.000 | U | 39.893 | J | 41.539 | J | 20.000 | U | P |
| Antimony | 60.000 | U | 60.000 | U | 2.997 | J | 2.573 | J | 6.000 | U | P |
| Arsenic | 10.000 | U | 10.000 | U | 10.000 | U | 10.000 | U | 1.000 | U | P |
| Barium | 200.000 | U | 200.000 | U | 8.519 | J | 8.794 | J | 20.000 | U | P |
| Beryllium | 5.000 | U | 5.000 | U | 0.173 | J | 0.449 | J | 0.500 | U | P |
| Cadmium | 5.000 | U | 5.000 | U | 0.989 | J | 1.009 | J | 0.500 | U | P |
| Calcium | 5,000.000 | U | 5,000.000 | U | 5,000.000 | U | 5,000.000 | U | -10.824 | J | P |
| Chromium | 10.000 | U | 10.000 | U | 10.000 | U | 10.000 | U | 1.000 | U | P |
| Cobalt | 50.000 | U | 50.000 | U | 2.125 | J | 2.183 | J | 5.000 | U | P |
| Copper | 25.000 | U | 25.000 | U | 1.447 | J | 1.201 | J | 2.500 | U | P |
| Iron | 100.000 | U | 100.000 | U | 17.019 | J | 22.907 | J | -1.452 | J | P |
| Lead | 10.000 | U | 10.000 | U | 10.000 | U | 10.000 | U | -0.340 | J | P |
| Magnesium | 5,000.000 | U | 5,000.000 | U | 5,000.000 | U | 5,000.000 | U | -5.992 | J | P |
| Manganese | 15.000 | U | 15.000 | U | 3.024 | J | 2.932 | J | -0.115 | J | P |
| Nickel | 40.000 | U | 40.000 | U | 1.983 | J | 2.068 | J | -0.092 | J | P |
| Potassium | 5,000.000 | U | 5,000.000 | U | 5,000.000 | U | 5,000.000 | U | 500.000 | U | P |
| Selenium | 35.000 | U | 35.000 | U | 35.000 | U | 35.000 | U | 3.500 | U | P |
| Silver | 10.000 | U | 10.000 | U | 10.000 | U | 10.000 | U | 1.000 | U | P |
| Sodium | 5,000.000 | U | 5,000.000 | U | 198.830 | J | 183.450 | J | 500.000 | U | P |
| Thallium | 25.000 | U | 25.000 | U | 1.628 | J | 25.000 | U | -0.266 | J | P |
| Vanadium | 50.000 | U | 50.000 | U | 50.000 | U | 50.000 | U | 5.000 | U | P |
| Zinc | 60.000 | U | 60.000 | U | 60.000 | U | 60.000 | U | -0.508 | J | P |

USEPA - CLP

3-IN
BLANKS

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: _____ SDG No.: ME0022

Preparation Blank Matrix (soil/water): Soil

Preparation Blank Concentration Units (ug/L or mg/kg): mg/Kg

| Analyte | Initial Calibration Blank (ug/L) | | Continuing Calibration Blank (ug/L) | | | | | | Preparation Blank | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | C | 1 | C | 2 | C | 3 | C | | C | M |
| Aluminum | | | 22.249 | J | 200.000 | U | | | | | P |
| Antimony | | | 2.476 | J | 60.000 | U | | | | | P |
| Arsenic | | | 10.000 | U | 10.000 | U | | | | | P |
| Barium | | | 4.461 | J | 0.991 | J | | | | | P |
| Beryllium | | | 0.235 | J | 5.000 | U | | | | | P |
| Cadmium | | | 0.526 | J | 0.173 | J | | | | | P |
| Calcium | | | -64.876 | J | 86.305 | J | | | | | P |
| Chromium | | | 10.000 | U | 10.000 | U | | | | | P |
| Cobalt | | | 1.135 | J | 50.000 | U | | | | | P |
| Copper | | | 25.000 | U | 25.000 | U | | | | | P |
| Iron | | | 5.412 | J | 21.262 | J | | | | | P |
| Lead | | | 10.000 | U | 10.000 | U | | | | | P |
| Magnesium | | | 5,000.000 | U | 5,000.000 | U | | | | | P |
| Manganese | | | 1.022 | J | 0.909 | J | | | | | P |
| Nickel | | | 40.000 | U | 40.000 | U | | | | | P |
| Potassium | | | 5,000.000 | U | 5,000.000 | U | | | | | P |
| Selenium | | | 35.000 | U | 35.000 | U | | | | | P |
| Silver | | | 10.000 | U | 10.000 | U | | | | | P |
| Sodium | | | 72.315 | J | -28.700 | J | | | | | P |
| Thallium | | | 25.000 | U | 25.000 | U | | | | | P |
| Vanadium | | | 50.000 | U | 50.000 | U | | | | | P |
| Zinc | | | 60.000 | U | 7.342 | J | | | | | P |

USEPA - CLP

3-IN
BLANKS

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: _____ SDG No.: ME0022

Preparation Blank Matrix (soil/water): Soil

Preparation Blank Concentration Units (ug/L or mg/kg): mg/Kg

| Analyte | Initial Calibration Blank (ug/L) | | Continuing Calibration Blank (ug/L) | | | | | | Preparation Blank | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | C | 1 | C | 2 | C | 3 | C | | C | M |
| Mercury | -0.037 | J | -0.103 | J | -0.061 | J | -0.115 | J | 0.100 | U | CV |

USEPA - CLP

3-IN
BLANKS

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: _____ SDG No.: ME0022

Preparation Blank Matrix (soil/water): Soil

Preparation Blank Concentration Units (ug/L or mg/kg): mg/Kg

| Analyte | Initial Calibration Blank (ug/L) | | Continuing Calibration Blank (ug/L) | | | | | | Preparation Blank | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | C | 1 | C | 2 | C | 3 | C | | C | M |
| Mercury | | | -0.083 | J | | | | | | | CV |

USEPA - CLP

3-IN
BLANKS

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: SDG No.: ME0022

Preparation Blank Matrix (soil/water): Soil

Preparation Blank Concentration Units (ug/L or mg/kg): mg/Kg

| | Initial Calibration Blank (ug/L) | | Continuing Calibration Blank (ug/L) | | | | | | Preparation Blank | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Analyte | | C | 1 | C | 2 | C | 3 | C | | C | M |
| Cyanide | 2.150 | J | 2.270 | J | 2.180 | J | 2.380 | J | 0.205 | J | AS |

USEPA - CLP

3-IN
BLANKS

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: _____ SDG No.: ME0022

Preparation Blank Matrix (soil/water): Soil

Preparation Blank Concentration Units (ug/L or mg/kg): mg/Kg

| Analyte | Initial Calibration Blank (ug/L) | | Continuing Calibration Blank (ug/L) | | | | | | Preparation Blank | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | C | 1 | C | 2 | C | 3 | C | | C | M |
| Cyanide | | | 2.040 | J | | | | | | | AS |

USEPA - CLP

4A-IN
ICP-AES INTERFERENCE CHECK SAMPLE

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: _____ SDG No.: ME0022

ICP-AES Instrument ID: ICAPP 6500 ICS Source: USEPA, Lot Part A(1206) B(0203)

Concentration Units: ug/L

| Analyte | True | | Initial found | | | | Final found | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Sol. A | Sol. AB | Sol. A | %R | Sol. AB | %R | Sol. A | %R | Sol. AB | %R |
| Aluminum | 244000 | 244000 | 256000 | 105 | 257000 | 105 | 263000 | 108 | 265000 | 109 |
| Antimony | 0 | 589 | -3.2 | | 613 | 104 | -5.3 | | 619 | 105 |
| Arsenic | 0 | 101 | 1.7 | | 100 | 99 | 2.4 | | 102 | 101 |
| Barium | 2 | 495 | 2.7 | 135 | 523 | 106 | 2.7 | 135 | 538 | 109 |
| Beryllium | 0 | 475 | 0.71 | | 501 | 105 | 0.68 | | 514 | 108 |
| Cadmium | 0 | 940 | -0.27 | | 958 | 102 | -0.44 | | 969 | 103 |
| Calcium | 235000 | 231000 | 256000 | 109 | 255000 | 110 | 261000 | 111 | 262000 | 113 |
| Chromium | 43 | 511 | 47.4 | 110 | 561 | 110 | 48.6 | 113 | 576 | 113 |
| Cobalt | 4 | 461 | 4.9 | 123 | 477 | 103 | 4.8 | 120 | 482 | 105 |
| Copper | 23 | 548 | 14.2 | 62 | 542 | 99 | 15.0 | 65 | 557 | 102 |
| Iron | 95600 | 94800 | 98500 | 103 | 97200 | 103 | 98700 | 103 | 98900 | 104 |
| Lead | 10 | 61 | -0.79 | -8 | 48.6 | 80 | -0.53 | -5 | 46.5 | 76 |
| Magnesium | 248000 | 251000 | 251000 | 101 | 248000 | 99 | 253000 | 102 | 254000 | 101 |
| Manganese | 19 | 502 | 21.6 | 114 | 536 | 107 | 22.2 | 117 | 543 | 108 |
| Nickel | 21 | 984 | 18.1 | 86 | 972 | 99 | 18.4 | 88 | 978 | 99 |
| Potassium | 0 | 0 | 8.5 | | -7.3 | | -46.5 | | -49.4 | |
| Selenium | 0 | 53 | 1.5 | | 50.3 | 95 | 2.8 | | 50.1 | 95 |
| Silver | 0 | 206 | 2.8 | | 226 | 110 | 2.1 | | 231 | 112 |
| Sodium | 0 | 0 | 841 | | 811 | | 839 | | 828 | |
| Thallium | 0 | 103 | 1.4 | | 99.5 | 97 | 0.66 | | 101 | 98 |
| Vanadium | 0 | 494 | 2.6 | | 513 | 104 | 4.1 | | 521 | 105 |
| Zinc | 28 | 1030 | 26.0 | 93 | 989 | 96 | 27.9 | 100 | 1000 | 97 |

USEPA - CLP

4A-IN
ICP-AES INTERFERENCE CHECK SAMPLE

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: _____ SDG No.: ME0022

ICP-AES Instrument ID: ICAPP 6500 ICS Source: USEPA, Lot Part A(1206) B(0203

Concentration Units: ug/L

| Analyte | True | | Initial found | | | | Final found | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Sol. A | Sol. AB | Sol. A | %R | Sol. AB | %R | Sol. A | %R | Sol. AB | %R |
| Aluminum | 244000 | 244000 | | | | | 262000 | 107 | 261000 | 107 |
| Antimony | 0 | 589 | | | | | -2.8 | | 611 | 104 |
| Arsenic | 0 | 101 | | | | | 1.8 | | 99.3 | 98 |
| Barium | 2 | 495 | | | | | 3.0 | 150 | 531 | 107 |
| Beryllium | 0 | 475 | | | | | 0.74 | | 491 | 103 |
| Cadmium | 0 | 940 | | | | | -0.25 | | 966 | 103 |
| Calcium | 235000 | 231000 | | | | | 259000 | 110 | 259000 | 112 |
| Chromium | 43 | 511 | | | | | 49.4 | 115 | 575 | 113 |
| Cobalt | 4 | 461 | | | | | 4.9 | 123 | 477 | 103 |
| Copper | 23 | 548 | | | | | 14.2 | 62 | 547 | 100 |
| Iron | 95600 | 94800 | | | | | 94500 | 99 | 94900 | 100 |
| Lead | 10 | 61 | | | | | -1.1 | -11 | 47.2 | 77 |
| Magnesium | 248000 | 251000 | | | | | 245000 | 99 | 244000 | 97 |
| Manganese | 19 | 502 | | | | | 21.8 | 115 | 536 | 107 |
| Nickel | 21 | 984 | | | | | 18.2 | 87 | 966 | 98 |
| Potassium | 0 | 0 | | | | | -35.5 | | -65.9 | |
| Selenium | 0 | 53 | | | | | 2.9 | | 49.7 | 94 |
| Silver | 0 | 206 | | | | | 2.4 | | 232 | 113 |
| Sodium | 0 | 0 | | | | | 850 | | 829 | |
| Thallium | 0 | 103 | | | | | 0.11 | | 109 | 106 |
| Vanadium | 0 | 494 | | | | | 4.1 | | 518 | 105 |
| Zinc | 28 | 1030 | | | | | 27.1 | 97 | 992 | 96 |

USEPA - CLP

5A-IN
MATRIX SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

ME0026S

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: SDG No.: ME0022

Matrix: (Soil/Water) Soil Level: (low/med) LOW

% Solids for Sample: 79.9

Concentration Units (ug/L or mg/kg dry weight): mg/Kg

| Analyte | Control Limit %R | Spiked Sample Result (SSR) | C | Sample Result (SR) | C | Spike Added (SA) | %R | Q | M |
|---|---|---|---|---|---|---|---|---|---|
| Aluminum | 75-125 | 1,426.7830 | | 989.9875 | | 500.60 | 87 | | P |
| Antimony | 75-125 | 8.7620 | | 7.5000 | U | 25.03 | 35 | N | P |
| Arsenic | | 56.0901 | | 49.7472 | | 10.01 | 63 | | P |
| Barium | 75-125 | 487.6971 | | 25.7222 | | 500.60 | 92 | | P |
| Beryllium | 75-125 | 11.0353 | | 0.1514 | J | 12.52 | 87 | | P |
| Cadmium | 75-125 | 25.3392 | | 16.8974 | | 12.52 | 67 | N | P |
| Chromium | 75-125 | 46.8573 | | 2.4229 | | 50.06 | 89 | | P |
| Cobalt | 75-125 | 101.4869 | | 8.4793 | | 125.20 | 74 | N | P |
| Copper | 75-125 | 157.5594 | | 100.5307 | | 62.58 | 91 | | P |
| Iron | | 54,374.2200 | | 55,814.7700 | | 250.30 | -576 | | P |
| Lead | | 2,846.0570 | | 2,973.0910 | | 5.01 | -2536 | | P |
| Manganese | | 1,073.7800 | | 967.4843 | | 125.20 | 85 | | P |
| Nickel | 75-125 | 118.2703 | | 28.0213 | | 125.20 | 72 | N | P |
| Selenium | 75-125 | 10.1660 | | 4.4000 | U | 12.52 | 81 | | P |
| Silver | 75-125 | 12.9862 | | 2.3075 | | 12.52 | 85 | | P |
| Thallium | 75-125 | 9.9591 | | 3.1000 | U | 12.52 | 80 | | P |
| Vanadium | 75-125 | 112.8373 | | 3.1091 | J | 125.20 | 88 | | P |
| Zinc | | 8,774.9680 | | 9,189.4870 | | 125.20 | -331 | | P |

Comments:

USEPA - CLP

5A-IN
MATRIX SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

ME0026S

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: _____ SDG No.: ME0022

Matrix: (Soil/Water) Soil Level: (low/med) LOW

% Solids for Sample: 79.9

Concentration Units (ug/L or mg/kg dry weight): mg/Kg

| Analyte | Control Limit %R | Spiked Sample Result (SSR) | C | Sample Result (SR) | C | Spike Added (SA) | %R | Q | M |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | 75-125 | 0.7541 | | 0.1300 | U | 0.63 | 118 | | CV |

Comments:

USEPA - CLP

5A-IN
MATRIX SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

ME0026S

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: _____ SDG No.: ME0022

Matrix: (Soil/Water) Soil Level: (low/med) LOW

% Solids for Sample: 79.9

Concentration Units (ug/L or mg/kg dry weight): mg/Kg

| Analyte | Control Limit %R | Spiked Sample Result (SSR) | C | Sample Result (SR) | C | Spike Added (SA) | %R | Q | M |
|---|---|---|---|---|---|---|---|---|---|
| Cyanide | 75-125 | 6.2503 | | 3.1000 | U | 6.26 | 100 | | AS |

Comments:

USEPA - CLP

5B-IN
POST SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

ME0026A

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: SDG No.: ME0022

Matrix: (Soil/Water) Soil Level: (low/med) LOW

% Solids for Sample: 79.9

Concentration Units ug/L: ug/L

| Analyte | Control Limit %R | Spiked Sample Result (SSR) | C | Sample Result (SR) | C | Spike Added (SA) | %R | Q | M |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | | 86.24 | | 60.00 | U | 120.0 | 72 | | P |
| Cadmium | | 379.77 | | 135.01 | | 266.0 | 92 | | P |
| Cobalt | | 175.18 | | 67.75 | | 134.0 | 80 | | P |
| Nickel | | 580.40 | | 223.89 | | 446.0 | 80 | | P |

Comments:

USEPA - CLP

6-IN
DUPLICATES

EPA SAMPLE NO.

ME0026D

Lab Name: Bonner Analytical Testing Contract EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: _____ SDG No.: ME0022

Matrix: (Soil/Water) Soil Level: (low/med) LOW

% Solids for Sample: 79.9 % Solids for Duplicate: 79.9

Concentration Units (ug/L or mg/kg dry weight): mg/Kg

| Analyte | Control Limit | Sample (S) | C | Duplicate (D) | C | RPD | Q | M |
|---|---|---|---|---|---|---|---|---|
| Aluminum | | 989.9875 | | 1016.5330 | | 3 | | P |
| Antimony | | 7.5 | U | 7.5 | U | 0 | | P |
| Arsenic | | 49.7472 | | 46.0150 | | 8 | | P |
| Barium | 25.0 | 25.7222 | | 25.2353 | | 2 | | P |
| Beryllium | | 0.1514 | J | 0.1497 | J | 1 | | P |
| Cadmium | | 16.8974 | | 16.3354 | | 3 | | P |
| Calcium | | 152370.5000 | | 155138.9000 | | 2 | | P |
| Chromium | 1.3 | 2.4229 | | 2.5378 | | 5 | | P |
| Cobalt | 6.3 | 8.4793 | | 8.3334 | | 2 | | P |
| Copper | | 100.5307 | | 99.5657 | | 1 | | P |
| Iron | | 55814.7700 | | 51754.6900 | | 8 | | P |
| Lead | | 2973.0910 | | 2795.3690 | | 6 | | P |
| Magnesium | | 59459.3200 | | 59292.8600 | | 0 | | P |
| Manganese | | 967.4843 | | 968.7484 | | 0 | | P |
| Nickel | | 28.0213 | | 26.4743 | | 6 | | P |
| Potassium | | 486.0576 | J | 505.7322 | J | 4 | | P |
| Selenium | | 4.4 | U | 4.4 | U | 0 | | P |
| Silver | 1.3 | 2.3075 | | 2.1894 | | 5 | | P |
| Sodium | | 95.1202 | J | 94.3755 | J | 1 | | P |
| Thallium | | 3.1 | U | 3.1 | U | 0 | | P |
| Vanadium | | 3.1091 | J | 3.1110 | J | 0 | | P |
| Zinc | | 9189.4870 | | 8615.7690 | | 6 | | P |

USEPA - CLP

6-IN
DUPLICATES

EPA SAMPLE NO.

ME0026D

Lab Name: Bonner Analytical Testing Contract EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: _____ SDG No.: ME0022

Matrix: (Soil/Water) Soil Level: (low/med) LOW

% Solids for Sample: 79.9 % Solids for Duplicate: 79.9

Concentration Units (ug/L or mg/kg dry weight): mg/Kg

| Analyte | Control Limit | Sample (S) | C | Duplicate (D) | C | RPD | Q | M |
|---|---|---|---|---|---|---|---|---|
| Mercury | | 0.13 | U | 0.13 | U | 0 | | CV |

FORM VI-IN ILM05.4

USEPA - CLP

6-IN
DUPLICATES

EPA SAMPLE NO.

ME0026D

Lab Name: Bonner Analytical Testing Contract EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: SDG No.: ME0022

Matrix: (Soil/Water) Soil Level: (low/med) LOW

% Solids for Sample: 79.9 % Solids for Duplicate: 79.9

Concentration Units (ug/L or mg/kg dry weight): mg/Kg

| Analyte | Control Limit | Sample (S) | C | Duplicate (D) | C | RPD | Q | M |
|---|---|---|---|---|---|---|---|---|
| Cyanide | | 3.1 | U | 3.1 | U | 0 | | AS |

USEPA - CLP

8-IN
ICP-AES and ICP-MS SERIAL DILUTIONS

EPA SAMPLE NO.

ME0026L

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: SDG No.: ME0022

Matrix: (Soil/Water) Soil Level: (low/med) LOW

Concentration Units: ug/L

| Analyte | Initial Sample Result (I) | C | Serial Dilution Result (S) | C | % Difference | Q | M |
|---|---|---|---|---|---|---|---|
| Aluminum | 7910.00 | | 8244.75 | | 4 | | P |
| Antimony | 60.00 | U | 300.00 | U | | | P |
| Arsenic | 397.48 | | 439.22 | | 11 | E | P |
| Barium | 205.53 | | 217.90 | J | 6 | | P |
| Beryllium | 1.21 | J | 25.00 | U | 100 | | P |
| Cadmium | 135.01 | | 160.69 | J | 19 | E | P |
| Calcium | 217440.00 | | 255360.00 | | 3 | | P |
| Chromium | 19.36 | | 25.19 | J | 30 | | P |
| Cobalt | 67.75 | | 80.56 | J | 19 | E | P |
| Copper | 803.24 | | 815.68 | | 2 | | P |
| Iron | 445960.00 | | 536925.00 | | 20 | E | P |
| Lead | 23755.00 | | 28559.00 | | 20 | E | P |
| Magnesium | 475085.00 | | 516925.00 | | 9 | | P |
| Manganese | 7730.20 | | 8518.00 | | 10 | | P |
| Nickel | 223.89 | | 264.46 | J | 18 | E | P |
| Potassium | 3883.60 | J | 3915.23 | | 1 | | P |
| Selenium | 35.00 | U | 175.00 | U | | | P |
| Silver | 18.44 | | 50.00 | U | 100 | | P |
| Sodium | 760.01 | J | 757.08 | | 0 | | P |
| Thallium | 25.00 | U | 125.00 | U | | | P |
| Vanadium | 24.84 | J | 24.17 | J | 3 | | P |
| Zinc | 73424.00 | | 79957.00 | | 9 | | P |

USEPA - CLP

9-IN
METHOD DETECTION LIMITS (ANNUALLY)

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: SDG No.: ME0022

Instrument Type: P Instrument ID: ICAPP 6500 Date: 01/15/2009

Preparation NP1

Concentration Units (ug/L or mg/Kg): ug/L

| Analyte | Wavelength /Mass | CRQL | MDL |
|---|---|---|---|
| Aluminum | 396.10 | 200 | 17.7 |
| Antimony | 206.80 | 60.0 | 2.2 |
| Arsenic | 189.00 | 10.0 | 2.1 |
| Barium | 455.40 | 200 | 0.80 |
| Beryllium | 313.10 | 5.0 | 0.12 |
| Cadmium | 214.40 | 5.0 | 0.092 |
| Calcium | 318.10 | 5000 | 62.5 |
| Chromium | 267.70 | 10.0 | 2.6 |
| Cobalt | 228.60 | 50.0 | 0.29 |
| Copper | 324.70 | 25.0 | 0.73 |
| Iron | 238.20 | 100.0 | 5.1 |
| Lead | 220.30 | 10.0 | 2.0 |
| Magnesium | 279.00 | 5000 | 44.5 |
| Manganese | 257.60 | 15.0 | 0.56 |
| Nickel | 231.60 | 40.0 | 1.39 |
| Potassium | 766.40 | 5000 | 40.1 |
| Selenium | 196.00 | 35.0 | 2.9 |
| Silver | 328.00 | 10.0 | 3.2 |
| Sodium | 589.50 | 5000 | 20.0 |
| Thallium | 190.80 | 25.0 | 1.2 |
| Vanadium | 292.40 | 50.0 | 3.1 |
| Zinc | 206.20 | 60.0 | 1.4 |

Comments:

USEPA - CLP

9-IN
METHOD DETECTION LIMITS (ANNUALLY)

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: SDG No.: ME0022

Instrument Type: P Instrument ID: ICAPP 6500 Date: 01/15/2009

Preparation HS1

Concentration Units (ug/L or mg/Kg): mg/Kg

| Analyte | Wavelength /Mass | CRQL | MDL |
|---|---|---|---|
| Aluminum | 396.10 | 20.0 | 3.9 |
| Antimony | 206.80 | 6.00 | 0.21 |
| Arsenic | 189.00 | 1.00 | 0.19 |
| Barium | 455.40 | 20.0 | 0.068 |
| Beryllium | 313.10 | 0.500 | 0.016 |
| Cadmium | 214.40 | 0.500 | 0.012 |
| Calcium | 318.10 | 500 | 7.3 |
| Chromium | 267.70 | 1.00 | 0.21 |
| Cobalt | 228.60 | 5.00 | 0.020 |
| Copper | 324.70 | 2.50 | 0.091 |
| Iron | 238.20 | 10.0 | 0.59 |
| Lead | 220.30 | 1.00 | 0.16 |
| Maghesium | 279.00 | 500 | 2.8 |
| Manganese | 257.60 | 1.50 | 0.061 |
| Nickel | 231.60 | 4.00 | 0.067 |
| Potassium | 766.40 | 500 | 6.8 |
| Selenium | 196.00 | 3.50 | 0.31 |
| Silver | 328.00 | 1.00 | 0.45 |
| Sodium | 589.50 | 500 | 4.6 |
| Thallium | 190.80 | 2.50 | 0.16 |
| Vanadium | 292.40 | 5.00 | 0.25 |
| Zinc | 206.20 | 6.00 | 0.079 |

Comments:

USEPA - CLP

12-IN
PREPARATION LOG

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: SDG ME0022

Preparation HS1

| EPA Sample No. | Preparation Date | Weight (gram) | Volume (mL) |
|---|---|---|---|
| LCSS01 | 12/01/09 | 1.00 | 100 |
| ME0022 | 12/01/09 | 1.00 | 100 |
| ME0023 | 12/01/09 | 1.00 | 100 |
| ME0024 | 12/01/09 | 1.00 | 100 |
| ME0025 | 12/01/09 | 1.00 | 100 |
| ME0026 | 12/01/09 | 1.00 | 100 |
| ME0026D | 12/01/09 | 1.00 | 100 |
| ME0026S | 12/01/09 | 1.00 | 100 |
| ME0027 | 12/01/09 | 1.00 | 100 |
| ME0028 | 12/01/09 | 1.00 | 100 |
| ME0029 | 12/01/09 | 1.00 | 100 |
| ME0030 | 12/01/09 | 1.00 | 100 |
| ME0031 | 12/01/09 | 1.00 | 100 |
| ME0032 | 12/01/09 | 1.00 | 100 |
| ME0033 | 12/01/09 | 1.00 | 100 |
| ME0034 | 12/01/09 | 1.00 | 100 |
| PBS01 | 12/01/09 | 1.00 | 100 |

USEPA - CLP

12-IN
PREPARATION LOG

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: SDG ME0022

Preparation CS1

| EPA Sample No. | Preparation Date | Weight (gram) | Volume (mL) |
|---|---|---|---|
| CCB01 | 12/01/09 | 0.20 | 100 |
| CCB02 | 12/01/09 | 0.20 | 100 |
| CCB03 | 12/01/09 | 0.20 | 100 |
| CCB04 | 12/01/09 | 0.20 | 100 |
| CCV01 | 12/01/09 | 0.20 | 100 |
| CCV02 | 12/01/09 | 0.20 | 100 |
| CCV03 | 12/01/09 | 0.20 | 100 |
| CCV04 | 12/01/09 | 0.20 | 100 |
| CRI01 | 12/01/09 | 0.20 | 100 |
| CRI02 | 12/01/09 | 0.20 | 100 |
| CRI03 | 12/01/09 | 0.20 | 100 |
| ICB01 | 12/01/09 | 0.20 | 100 |
| ICV01 | 12/01/09 | 0.20 | 100 |
| LCSS01 | 12/01/09 | 0.20 | 100 |
| ME0022 | 12/01/09 | 0.20 | 100 |
| ME0023 | 12/01/09 | 0.20 | 100 |
| ME0024 | 12/01/09 | 0.20 | 100 |
| ME0025 | 12/01/09 | 0.20 | 100 |
| ME0026 | 12/01/09 | 0.20 | 100 |
| ME0026D | 12/01/09 | 0.20 | 100 |
| ME0026S | 12/01/09 | 0.20 | 100 |
| ME0027 | 12/01/09 | 0.20 | 100 |
| ME0028 | 12/01/09 | 0.20 | 100 |
| ME0029 | 12/01/09 | 0.20 | 100 |
| ME0030 | 12/01/09 | 0.20 | 100 |
| ME0031 | 12/01/09 | 0.20 | 100 |
| ME0032 | 12/01/09 | 0.20 | 100 |
| ME0033 | 12/01/09 | 0.20 | 100 |
| ME0034 | 12/01/09 | 0.20 | 100 |
| PBS01 | 12/01/09 | 0.20 | 100 |
| S0 | 12/01/09 | 0.20 | 100 |
| S0.2 | 12/01/09 | 0.20 | 100 |

USEPA - CLP

12-IN
PREPARATION LOG

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: SDG ME0022

Preparation CS1

| EPA Sample No. | Preparation Date | Weight (gram) | Volume (mL) |
|---|---|---|---|
| S0.5 | 12/01/09 | 0.20 | 100 |
| S1 | 12/01/09 | 0.20 | 100 |
| S2 | 12/01/09 | 0.20 | 100 |
| S6 | 12/01/09 | 0.20 | 100 |

USEPA - CLP

12-IN
PREPARATION LOG

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: SDG ME0022

Preparation DS2

| EPA Sample No. | Preparation Date | Weight (gram) | Volume (mL) |
|---|---|---|---|
| ICV01 | 12/01/09 | 1.00 | 50 |
| LCSS01 | 12/01/09 | 1.00 | 50 |
| ME0022 | 12/01/09 | 1.00 | 50 |
| ME0023 | 12/01/09 | 1.00 | 50 |
| ME0024 | 12/01/09 | 1.00 | 50 |
| ME0025 | 12/01/09 | 1.00 | 50 |
| ME0026 | 12/01/09 | 1.00 | 50 |
| ME0026D | 12/01/09 | 1.00 | 50 |
| ME0026S | 12/01/09 | 1.00 | 50 |
| ME0027 | 12/01/09 | 1.00 | 50 |
| ME0028 | 12/01/09 | 1.00 | 50 |
| ME0029 | 12/01/09 | 1.00 | 50 |
| ME0030 | 12/01/09 | 1.00 | 50 |
| ME0031 | 12/01/09 | 1.00 | 50 |
| ME0032 | 12/01/09 | 1.00 | 50 |
| ME0033 | 12/01/09 | 1.00 | 50 |
| ME0034 | 12/01/09 | 1.00 | 50 |
| MIDRANGE250 | 12/01/09 | 1.00 | 50 |
| PBS01 | 12/01/09 | 1.00 | 50 |

USEPA - CLP

13-IN
ANALYSIS RUN LOG

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: SDG No.: ME0022

Instrument ICAPP 6500 Analysis Method: P

Start Date: 12/04/2009 End Date: 12/04/2009

| EPA Sample NO. | D/F | Time | Analytes | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | AL | SB | AS | BA | BE | CD | CA | CO | CR | CU | FE | PB | MG | MN | HG | NI | K | SE | AG | NA | TL | V | ZN | CN | | |
| S0 | 1 | 11:53 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| S | 1 | 11:56 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| S | 1 | 11:59 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| S | 1 | 12:03 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| S | 1 | 12:06 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ICV01 | 1 | 12:09 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| ICB01 | 1 | 12:12 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| CRI01 | 1 | 12:16 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| ICSA01 | 1 | 12:19 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| ICSAB01 | 1 | 12:22 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| CCV01 | 1 | 12:26 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| CCB01 | 1 | 12:29 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| PBS01 | 1 | 12:32 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| LCSS01 | 1 | 12:36 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| ME0022 | 1 | 12:39 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| ME0023 | 1 | 12:42 | X | X | X | X | X | X | | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | | | | |
| ME0024 | 1 | 12:45 | X | X | X | X | X | X | | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | | | | |
| ME0025 | 1 | 12:49 | X | X | X | X | X | X | | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | | | | |
| ME0026 | 1 | 12:52 | X | X | X | X | X | X | | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | | | | |
| ME0026S | 1 | 12:55 | X | X | X | X | X | X | | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | | | | |
| ME0026D | 1 | 12:59 | X | X | X | X | X | X | | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | | | | |
| ME0026L | 5 | 13:02 | X | X | X | X | X | X | | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | | | | |
| CCV02 | 1 | 13:05 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| CCB02 | 1 | 13:09 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| ME0027 | 1 | 13:12 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| ME0028 | 1 | 13:16 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| ME0029 | 1 | 13:19 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | | | | |
| ME0030 | 1 | 13:23 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | | | | |
| ME0023 | 4 | 13:26 | | | | | | | X | | | | | | | | | | | | | | | | X | | | |
| ME0024 | 4 | 13:29 | | | | | | | X | | | | | | | | | | | | | | | | X | | | |
| ME0025 | 4 | 13:32 | | | | | | | X | | | | | | | | | | | | | | | | X | | | |
| CRI02 | 1 | 13:36 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| ICSA02 | 1 | 13:39 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| ICSAB02 | 1 | 13:42 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| CCV03 | 1 | 13:46 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| CCB03 | 1 | 13:49 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |

USEPA - CLP

13-IN
ANALYSIS RUN LOG

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: SDG No.: ME0022

Instrument ICAPP 6500 Analysis Method: P

Start Date: 12/04/2009 End Date: 12/04/2009

| EPA Sample NO. | D/F | Time | Analytes | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | AL | SB | AS | BA | BE | CD | CA | CO | CR | CU | FE | PB | MG | MN | HG | NI | K | SE | AG | NA | TL | V | ZN | CN | | |
| ME0031 | 1 | 13:58 | X | X | X | X | X | X | | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | | | | |
| ME0032 | 1 | 14:01 | X | X | X | X | X | X | | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | | | | |
| ME0033 | 1 | 14:05 | X | X | X | X | X | X | | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | | | | |
| ME0034 | 1 | 14:08 | X | X | X | X | X | X | | X | X | X | | X | X | X | | X | X | X | X | X | X | X | X | | | |
| ME0026A | 1 | 14:12 | | X | | | | X | | X | | | | | | | | X | | | | | | | | | | |
| ME0026 | 4 | 14:15 | | | | | | | X | | | | | | | | | | | | | | | | X | | | |
| ME0026S | 4 | 14:18 | | | | | | | X | | | | | | | | | | | | | | | | X | | | |
| ME0026D | 4 | 14:21 | | | | | | | X | | | | | | | | | | | | | | | | X | | | |
| ME0029 | 4 | 14:25 | | | | | | | | | | | | | | | | | | | | | | | X | | | |
| ME0030 | 4 | 14:28 | | | | | | | | | | | | | | | | | | | | | | | X | | | |
| CCV04 | 1 | 14:31 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| CCB04 | 1 | 14:34 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| ME0031 | 3 | 14:38 | | | | | | | X | | | | | | | | | | | | | | | | X | | | |
| ME0032 | 3 | 14:41 | | | | | | | X | | | | | | | | | | | | | | | | X | | | |
| ME0033 | 4 | 14:44 | | | | | | | X | | | | | | | | | | | | | | | | X | | | |
| ME0034 | 4 | 14:47 | | | | | | | X | | | | X | | | | | | | | | | | | | | | |
| ME0026L | 20 | 14:51 | | | | | | | X | | | | | | | | | | | | | | | | X | | | |
| CRI03 | 1 | 14:54 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| ICSA03 | 1 | 14:57 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| ICSAB03 | 1 | 15:01 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| CCVC5 | 1 | 15:04 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |
| CCBC5 | 1 | 15:07 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |

USEPA - CLP

13-IN
ANALYSIS RUN LOG

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: SDG No.: ME0022

Instrument LM02 Analysis Method: CV

Start Date: 12/02/2009 End Date: 12/02/2009

| EPA Sample NO. | D/F | Time | Analytes | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | AL | SB | AS | BA | BE | CD | CA | CO | CR | CU | FE | PB | MG | MN | HG | NI | K | SE | AG | NA | TL | V | ZN | CN | | |
| S0 | 1 | 9:23 | | | | | | | | | | | | | | | X | | | | | | | | | | | |
| S0.2 | 1 | 9:25 | | | | | | | | | | | | | | | X | | | | | | | | | | | |
| S0.5 | 1 | 9:27 | | | | | | | | | | | | | | | X | | | | | | | | | | | |
| S1 | 1 | 9:29 | | | | | | | | | | | | | | | X | | | | | | | | | | | |
| S2 | 1 | 9:31 | | | | | | | | | | | | | | | X | | | | | | | | | | | |
| S6 | 1 | 9:33 | | | | | | | | | | | | | | | X | | | | | | | | | | | |
| ICV01 | 1 | 9:37 | | | | | | | | | | | | | | | X | | | | | | | | | | | |
| ICB01 | 1 | 9:39 | | | | | | | | | | | | | | | X | | | | | | | | | | | |
| CRI01 | 1 | 9:41 | | | | | | | | | | | | | | | X | | | | | | | | | | | |
| CCV01 | 1 | 9:43 | | | | | | | | | | | | | | | X | | | | | | | | | | | |
| CCB01 | 1 | 9:45 | | | | | | | | | | | | | | | X | | | | | | | | | | | |
| PBS01 | 1 | 9:47 | | | | | | | | | | | | | | | X | | | | | | | | | | | |
| ZZZZZZ | 1 | 9:49 | | | | | | | | | | | | | | | X | | | | | | | | | | | |
| ZZZZZZ | 1 | 9:53 | | | | | | | | | | | | | | | X | | | | | | | | | | | |
| ZZZZZZ | 1 | 9:55 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1 | 9:57 | | | | | | | | | | | | | | | X | | | | | | | | | | | |
| ZZZZZZ | 1 | 9:59 | | | | | | | | | | | | | | | X | | | | | | | | | | | |
| ZZZZZZ | 1 | 10:01 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ME0022 | 1 | 10:02 | | | | | | | | | | | | | | | X | | | | | | | | | | | |
| ME0023 | 1 | 10:04 | | | | | | | | | | | | | | | X | | | | | | | | | | | |
| ME0024 | 1 | 10:06 | | | | | | | | | | | | | | | X | | | | | | | | | | | |
| CCV02 | 1 | 10:09 | | | | | | | | | | | | | | | X | | | | | | | | | | | |
| CCB02 | 1 | 10:11 | | | | | | | | | | | | | | | X | | | | | | | | | | | |
| ME0025 | 1 | 10:12 | | | | | | | | | | | | | | | X | | | | | | | | | | | |
| ZZZZZZ | 1 | 10:15 | | | | | | | | | | | | | | | X | | | | | | | | | | | |
| LCSS01 | 2 | 10:21 | | | | | | | | | | | | | | | X | | | | | | | | | | | |
| ME0026 | 1 | 10:23 | | | | | | | | | | | | | | | X | | | | | | | | | | | |
| ME0026D | 1 | 10:25 | | | | | | | | | | | | | | | X | | | | | | | | | | | |
| ME0026S | 1 | 10:27 | | | | | | | | | | | | | | | X | | | | | | | | | | | |
| ME0027 | 1 | 10:29 | | | | | | | | | | | | | | | X | | | | | | | | | | | |
| ME0028 | 1 | 10:31 | | | | | | | | | | | | | | | X | | | | | | | | | | | |
| CRI02 | 1 | 10:33 | | | | | | | | | | | | | | | X | | | | | | | | | | | |
| CCV03 | 1 | 10:34 | | | | | | | | | | | | | | | X | | | | | | | | | | | |
| CCB03 | 1 | 10:36 | | | | | | | | | | | | | | | X | | | | | | | | | | | |
| ME0029 | 1 | 10:39 | | | | | | | | | | | | | | | X | | | | | | | | | | | |
| ME0030 | 1 | 10:41 | | | | | | | | | | | | | | | X | | | | | | | | | | | |

USEPA - CLP

13-IN
ANALYSIS RUN LOG

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: SDG No.: ME0022

Instrument LM02 Analysis Method: CV

Start Date: 12/02/2009 End Date: 12/02/2009

| EPA Sample NO. | D/F | Time | Analytes | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | AL | SB | AS | BA | BE | CD | CA | CO | CR | CU | FE | PB | MG | MN | HG | NI | K | SE | AG | NA | TL | V | ZN | CN | | |
| ME0031 | 1 | 10:43 | | | | | | | | | | | | | | | X | | | | | | | | | | | |
| ME0032 | 1 | 10:45 | | | | | | | | | | | | | | | X | | | | | | | | | | | |
| ME0033 | 1 | 10:46 | | | | | | | | | | | | | | | X | | | | | | | | | | | |
| ME0034 | 1 | 10:48 | | | | | | | | | | | | | | | X | | | | | | | | | | | |
| CRI03 | 1 | 10:50 | | | | | | | | | | | | | | | X | | | | | | | | | | | |
| CCV04 | 1 | 10:52 | | | | | | | | | | | | | | | X | | | | | | | | | | | |
| CCB04 | 1 | 10:54 | | | | | | | | | | | | | | | X | | | | | | | | | | | |

USEPA - CLP

13-IN
ANALYSIS RUN LOG

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: SDG No.: ME0022

Instrument CN01 Analysis Method: AS

Start Date: 12/02/2009 End Date: 12/02/2009

| EPA Sample NO. | D/F | Time | Analytes | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | AL | SB | AS | BA | BE | CD | CA | CO | CR | CU | FE | PB | MG | MN | HG | NI | K | SE | AG | NA | TL | V | ZN | CN | | |
| S0 | 1 | 13:59 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| S5 | 1 | 14:01 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| S10 | 1 | 14:02 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| S50 | 1 | 14:04 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| S100 | 1 | 14:05 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| S250 | 1 | 14:06 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| S500 | 1 | 14:08 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| ICV01 | 1 | 14:09 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| ICB01 | 1 | 14:11 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| CRI01 | 1 | 14:12 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| CCV01 | 1 | 14:13 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| CCB01 | 1 | 14:15 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| BASELINE | 1 | 14:16 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| MIDRANGE | 1 | 14:18 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| PBS01 | 1 | 14:19 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| LCSS01 | 1 | 14:21 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| ZZZZZZ | 1 | 14:22 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1 | 14:23 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| ZZZZZZ | 1 | 14:25 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| ZZZZZZ | 1 | 14:26 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ME0022 | 1 | 14:28 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| ME0023 | 1 | 14:29 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| ME0024 | 1 | 14:30 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| CCV02 | 1 | 14:32 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| CCB02 | 1 | 14:33 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| BASELINE | 1 | 14:35 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| ZZZZZZ | 1 | 14:36 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| ZZZZZZ | 1 | 14:38 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| ZZZZZZ | 1 | 14:39 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| ZZZZZZ | 1 | 14:40 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| ZZZZZZ | 1 | 14:42 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| ZZZZZZ | 1 | 14:43 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| ME0029 | 1 | 14:45 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| ME0030 | 1 | 14:46 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| ME0031 | 1 | 14:47 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| CRI02 | 1 | 14:49 | | | | | | | | | | | | | | | | | | | | | | | | X | | |

USEPA - CLP

13-IN
ANALYSIS RUN LOG

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 39260 NRAS No.: SDG No.: ME0022

Instrument CN01 Analysis Method: AS

Start Date: 12/02/2009 End Date: 12/02/2009

| EPA Sample NO. | D/F | Time | Analytes | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | AL | SB | AS | BA | BE | CD | CA | CO | CR | CU | FE | PB | MG | MN | HG | NI | K | SE | AG | NA | TL | V | ZN | CN | | |
| CCV03 | 1 | 14:50 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| CCB03 | 1 | 14:52 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| BASELINE | 1 | 14:53 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| ME0032 | 1 | 14:55 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| ME0033 | 1 | 14:56 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| ME0034 | 1 | 14:57 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| ME0025 | 1 | 14:59 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| ME0026 | 1 | 15:00 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| ME0026D | 1 | 15:02 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| ME0026S | 1 | 15:03 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| ME0027 | 1 | 15:04 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| ME0028 | 1 | 15:06 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| CRI03 | 1 | 15:07 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| CCV04 | 1 | 15:09 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| CCB04 | 1 | 15:10 | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| BASELINE | 1 | 15:12 | | | | | | | | | | | | | | | | | | | | | | | | X | | |

**ESAT Controlled Number:** 66FT5.17.01111 - PJ 3/31/10

DATE: March 31, 2010

IEPA
**Attn: Mr. Mark Wagner**
1001 North Grand Avenue East
P.O. Box 19276
Springfield, IL 62794-9276

SITE NAME: **Bautsch-Grey Mine (IL)**

| Case | Lab | Samples | SDG | Matrix |
|---|---|---|---|---|
| 39416 | CompuChem | 5 | ME00Y1 | soil |

**Analysis**: metals and cyanide

Upon receipt of data, please check each package for completeness and note any missing deliverables below.

**Send this form back to Sylvia Griffin, Data Management Coordinator after filling in the blanks below.**

Data Received by:_____ Date:_____

PROBLEMS:

Please indicate if data is complete, and note if there are any deliverables missing from the cases noted above.

_____

_____

Received by Data Management Coordinator, CRL for file.

Signature:_____ Date:_____

FROM: **U.S. EPA - Region 5**
Sylvia Griffin
Central Regional Laboratory
536 S. Clark, 10th Floor
Chicago, IL 60605

RECEIVED
APR 05 2010
IEPA-BOL-FSRS

Sent By: Pat Joyner
Data Coordinator
ESAT Region 5 **TechLaw**

Controlled Document

# ESAT 5.15.00443
ACK
3-29-10

**Regional Transmittal Form**

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**
**REGION V**

**DATE:** 3/17/10

**SUBJECT:** Review of Data
Received for review on 2/18/10

**FROM:** Stephen L. Ostrodka, Chief (SRT-5J)
Superfund Field Services Section

**TO:** Data User: IEPA

**We have reviewed the data by CADRE for the following case:**

**SITE NAME:** Bautsch-Gray Mine (IL)

**CASE NUMBER:** 39416 **SDG NUMBER:** ME00Y1

**Number and Type of Samples:** 5 soils

**Sample Numbers:** ME00Y1-Y5

**Laboratory:** Compuchem **Hrs. for Review:** 8.0
+1.0

**Following are our findings:**

CC: Howard Pham
Region 5 TOPO
Mail Code: SRT-5J

**Below is a summary of the out-of-control audits and the possible effects on the data for this case:**

Five (5) soil samples, numbered ME00Y1-Y5, were collected on January 20, 2010. The lab received the samples on January 23, 2010 in good condition. All samples were analyzed for metals and cyanide. All samples were analyzed using the CLP SOW ILM05.4 analysis procedures.

Mercury analysis was performed using a Cold Vapor AA Technique. Cyanide analysis was performed using the MIDI Distillation procedure. The remaining inorganic analyses were performed using an Inductively Coupled Plasma-Atomic Emission Spectroscopy (ICP-AES) procedure.

**1. HOLDING TIME:**

No defects were found.

**2. CALIBRATIONS:**

No defects were found for the calibration or the CRQL standards.

**3. BLANKS:**

The following inorganic samples are associated with an ICB/CCB or preparation blank concentration which is greater than the method detection limit (MDL). The sample result is greater than the MDL.

Hits less than the CRQL are qualified "U". The sample result is raised to the CRQL. Hits greater than the CRQL but less than 5 times the blank are qualified "U" and reported at the sample value.

Beryllium
ME00Y5

Cadmium
ME00Y5

Sodium
ME00Y1, ME00Y2, ME00Y3, ME00Y4, ME00Y5

The following inorganic samples are associated with a negative ICB/CCB or preparation blank concentration whose absolute value is greater than the method detection limit (MDL). The sample result is also greater than the MDL.

Hits less than 5 times the blank are qualified "J-".

Cyanide
ME00Y2

The following inorganic samples are associated with a negative ICB/CCB or preparation blank concentration whose absolute value is greater than the method detection limit (MDL). The sample result is also greater than the MDL. The samples are also associated with a positive ICSA (see below).

Hits less than 5 times the blank AND less than 10 times the ICSA are qualified "J".

Cadmium
ME00Y2, ME00Y3, ME00Y4

Thallium
ME00Y1, ME00Y2, ME00Y3, ME00Y4, ME00Y5

**4. MATRIX SPIKE/MATRIX SPIKE DUPLICATE AND LAB CONTROL SAMPLE:**

The following inorganic samples are associated with a matrix spike recovery which is extremely low (<30%) indicating that sample results may be biased low. The required post spike was performed and results were greater than or equal to 75%.

Hits are qualified "J" and non-detects are qualified "UJ".

Antimony

ME00Y1, ME00Y2, ME00Y3, ME00Y4, ME00Y5

No defects were found for the laboratory control sample.

**5. LABORATORY AND FIELD DUPLICATE:**

No defects were found for the laboratory duplicate samples. No samples were identified as field duplicates.

**6. ICP ANALYSIS:**

The following inorganic samples are associated with an ICP serial dilution percent difference which is not in control.

Hits are qualified "J" and non-detects are qualified "UJ".

Barium

ME00Y1, ME00Y2, ME00Y3, ME00Y4, ME00Y5

Lead

ME00Y1, ME00Y2, ME00Y3, ME00Y4, ME00Y5

Zinc

ME00Y1, ME00Y2, ME00Y3, ME00Y4, ME00Y5

The following inorganic sample results are affected by an interference check "A" sample (ICSA) for which false positive concentration values greater than the MDL were obtained. The sample contains Al, Ca, Fe, or Mg at a level comparable to the ICSA.

Hits less than 10 times the value of the ICSA are qualified "J+"; non-detects are not qualified. Hits greater than 10 times the ICSA are not qualified.

Beryllium

ME00Y1, ME00Y2, ME00Y3, ME00Y4

Selenium

ME00Y5

The following results are affected by an interference check "A" sample (ICSA) for which false positive concentration values greater than the MDL were obtained. The sample contains Al, Ca, Fe or Mg at a level comparable to that of the ICSA. The samples are also

associated with a negative ICB/CCB or preparation blank concentration whose absolute value is greater than the MDL (see above).

Hits less than 10 times the absolute value of the ICSA AND less than 5 times the blank value are qualified "J".

Cadmium

ME00Y2, ME00Y3, ME00Y4

Thallium

ME00Y1, ME00Y2, ME00Y3, ME00Y4, ME00Y5

The following results are affected by an interference check "A" sample (ICSA) for which false negative concentration values greater than the absolute value of the MDL were obtained. The sample contains Al, Ca, Fe or Mg at a level comparable to that of the ICSA.

Hits less than 10 times the absolute value of the ICSA are qualified "J-", non-detects are qualified "UJ". Hits greater than 10 times the ICSA are not qualified.

Antimony

ME00Y1, ME00Y2, ME00Y3, ME00Y4, ME00Y5

Cadmium

ME00Y5

Selenium

ME00Y1, ME00Y2, ME00Y3, ME00Y4

**7. SAMPLE RESULTS:**

The following inorganic samples have analyte concentrations reported above the method detection limit (MDL) but below the quantitation limit (CRQL).

Results are qualified "J".

Beryllium

ME00Y1, ME00Y2, ME00Y3, ME00Y4

Cadmium

ME00Y1, ME00Y2, ME00Y3, ME00Y4

Selenium

ME00Y5

Thallium

ME00Y1, ME00Y2, ME00Y3, ME00Y4, ME00Y5

Cyanide

ME00Y2

All data, except those qualified above, are acceptable.

**CADRE ILM05.4 Data Qualifier Sheet**

| Qualifiers | Data Qualifier Definitions |
|---|---|
| U | The analyte was analyzed for, but was not detected above the reported sample quantitation limit. |
| J | The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample. |
| J+ | The result is an estimated quantity, but the result may be biased high. |
| J- | The result is an estimated quantity, but the result may be biased low. |
| R | The data are unusable. The sample results are rejected due to serious deficiencies in meeting Quality Control (QC) criteria. The analyte may or may not be present in the sample. |
| UJ | The analyte was analyzed for, but not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise. |

**1. HOLDING TIME:**

The inorganic soil samples were reviewed for holding time violations using criteria developed for water samples. No defects were found.

**2. CALIBRATIONS:**

No defects were found for the calibration or the CRQL standards.

CRQL are qualified "J". Non-detects are not qualified.

**3. BLANKS:**

The following inorganic samples are associated with an ICB/CCB or preparation blank concentration which is greater than the method detection limit (MDL). The sample result is greater than the MDL.

Hits less than the CRQL are qualified "U". The sample result is raised to the CRQL. Hits greater than the CRQL but less than 5 times the blank are qualified "U" and reported at the sample value.

Antimony
ME4M18, ME4M19, ME4M47, ME4M48, ME4M49, ME4M50, ME4M51, ME4M52

Barium
ME4M18, ME4M50

Beryllium
ME4M11, ME4M16, ME4M18, ME4M19, ME4M47, ME4M50

Cadmium
ME4M18, ME4M50

Cobalt
ME4M07, ME4M08, ME4M09, ME4M10, ME4M11, ME4M12, ME4M13, ME4M14, ME4M15, ME4M16, ME4M17, ME4M18, ME4M19, ME4M47, ME4M48, ME4M49, ME4M50, ME4M51, ME4M52, ME4M53

Copper
ME4M18

Mercury
ME4M09, ME4M11, ME4M12, ME4M13, ME4M14, ME4M15, ME4M17, ME4M19, ME4M47, ME4M48, ME4M49, ME4M51

**Analytical Results (Qualified Data)**



Case #: 39416 SDG : ME00Y1
Site : BAUTSCH-GRAY MINE
Lab. : LIBRTY
Reviewer : L. MOORE
Date : 3/17/2010

Number of Soil Samples : 5
Number of Water Samples : 0

| Sample Number : | ME00Y1 | | ME00Y2 | | ME00Y3 | | ME00Y4 | | ME00Y5 | |
|---|---|---|---|---|---|---|---|---|---|---|
| Sampling Location : | X211-A | | X211-B | | X212 | | X213-A | | X213-B | |
| Matrix : | Soil | | Soil | | Soil | | Soil | | Soil | |
| Units : | mg/Kg | | mg/Kg | | mg/Kg | | mg/Kg | | mg/Kg | |
| Date Sampled : | 1/20/2010 | | 1/20/2010 | | 1/20/2010 | | 1/20/2010 | | 1/20/2010 | |
| Time Sampled : | | | | | | | | | | |
| %Solids : | 69.3 | | 67.6 | | 70.4 | | 72.2 | | 72.3 | |
| Dilution Factor : | 1.0 | | 1.0 | | 1.0 | | 1.0 | | 1.0 | |
| ANALYTE | Result | Flag | Result | Flag | Result | Flag | Result | Flag | Result | Flag |
| ALUMINUM | 9650 | | 7870 | | 7070 | | 9630 | | 8500 | |
| ANTIMONY | 8.6 | UJ | 8.8 | UJ | 8.1 | UJ | 8.1 | UJ | 8.3 | UJ |
| ARSENIC | 6.5 | | 5.2 | | 2.9 | | 3.8 | | 4.4 | |
| BARIUM | 126 | J | 130 | J | 98.6 | J | 118 | J | 115 | J |
| BERYLLIUM | 0.69 | J+ | 0.53 | J+ | 0.50 | J+ | 0.65 | J+ | 0.69 | U |
| CADMIUM | 0.55 | J+ | 0.46 | J | 0.42 | J | 0.39 | J | 0.69 | UJ |
| CALCIUM | 59400 | | 93600 | | 49100 | | 59500 | | 70100 | |
| CHROMIUM | 18.7 | | 14.6 | | 11.5 | | 17.1 | | 15.7 | |
| COBALT | 13.9 | | 11.8 | | 7.6 | | 13.3 | | 15.0 | |
| COPPER | 18.3 | | 14.1 | | 12.1 | | 18.2 | | 16.7 | |
| IRON | 20000 | | 13900 | | 9920 | | 14900 | | 13500 | |
| LEAD | 14.6 | J | 11.0 | J | 14.7 | J | 11.9 | J | 12.2 | J |
| MAGNESIUM | 22400 | | 17800 | | 21600 | | 18300 | | 17300 | |
| MANGANESE | 1120 | | 628 | | 383 | | 470 | | 390 | |
| MERCURY | 0.14 | U | 0.16 | U | 0.14 | U | 0.13 | U | 0.14 | U |
| NICKEL | 24.9 | | 19.7 | | 15.2 | | 24.9 | | 24.0 | |
| POTASSIUM | 1820 | | 1380 | | 1030 | | 1640 | | 1390 | |
| SELENIUM | 5.0 | UJ | 5.1 | UJ | 4.7 | UJ | 4.8 | UJ | 0.80 | J+ |
| SILVER | 1.4 | U | 1.5 | U | 1.4 | U | 1.4 | U | 1.4 | U |
| SODIUM | 714 | U | 732 | U | 676 | U | 679 | U | 692 | U |
| THALLIUM | 3.2 | J | 1.7 | J | 0.80 | J | 2.0 | J | 2.1 | J |
| VANADIUM | 32.2 | | 22.8 | | 20.0 | | 28.3 | | 25.6 | |
| ZINC | 72.3 | J | 71.7 | J | 68.9 | J | 64.5 | J | 73.0 | J |
| CYANIDE | 3.5 | U | 0.32 | J | 3.4 | U | 3.4 | U | 3.5 | U |

# USEPA Contract Laboratory Program
# Inorganic Traffic Report & Chain of Custody Record

| | |
|---|---|
| Case No: | 39416 |
| DAS No: | |
| SDG No: | ME0041 |

L

| | |
|---|---|
| Date Shipped: | 1/21/2010 |
| Carrier Name: | UPS |
| Airbill: | 1Z6215892210022993 |
| Shipped to: | Liberty Analytical Corporation<br>501 Madison Avenue<br>Cary NC 27513<br>(919) 379-4100 |

**Chain of Custody Record**

| Relinquished By | (Date / Time) | Received By | (Date / Time) |
|---|---|---|---|
| 1 Lance Range | 1/21/10 1200 | K Manning | 01.23.10 1000 |
| 2 | | | |
| 3 | | | |
| 4 | | | |

Sampler Signature: Bruce Everetts

**For Lab Use Only**

Lab Contract No: EPW05067

Unit Price:

Transfer To:

Lab Contract No:

Unit Price:

| INORGANIC SAMPLE No. | MATRIX/ SAMPLER | CONC/ TYPE | ANALYSIS/ TURNAROUND | TAG No./ PRESERVATIVE/ Bottles | STATION LOCATION | SAMPLE COLLECT DATE/TIME | ORGANIC SAMPLE No. | FOR LAB USE ONLY Sample Condition On Receipt |
|---|---|---|---|---|---|---|---|---|
| ME00Y1 | Soil/Sediment/ Bruce Everetts | L/G | ICP, Hg,CN (21) | 5-303205 (Ice Only) (1) | X211-A | S: 1/20/2010 10:50 | | Good |
| ME00Y2 | Soil/Sediment/ Bruce Everetts | L/G | ICP, Hg,CN (21) | 5-303206 (Ice Only) (1) | X211-B | S: 1/20/2010 10:50 | | |
| ME00Y3 | Soil/Sediment/ Bruce Everetts | L/G | ICP, Hg,CN (21) | 5-303207 (Ice Only) (1) | X212 | S: 1/20/2010 11:00 | | |
| ME00Y4 | Soil/Sediment/ Bruce Everetts | L/G | ICP, Hg,CN (21) | 5-303208 (Ice Only) (1) | X213-A | S: 1/20/2010 11:15 | | |
| ME00Y5 | Soil/Sediment/ Bruce Everetts | L/G | ICP, Hg,CN (21) | 5-303209 (Ice Only) (1) | X213-B | S: 1/20/2010 11:15 | D6 single sample | |

ORIGINAL

| | | | | |
|---|---|---|---|---|
| Shipment for Case Complete? Y 11R yes | Sample(s) to be used for laboratory QC: | Additional Sampler Signature(s): | Cooler Temperature Upon Receipt: 2.4°C | Chain of Custody Seal Number: 82887 |
| Analysis Key: | Concentration: L = Low, M = Low/Medium, H = High | Type/Designate: Composite = C, Grab = G | SN0010 | Custody Seal Intact? Y / Shipment Iced? Y |

ICP, Hg,CN = CLP ICP Metals, Hg, CN

**TR Number: 5-162075208-012110-0001**

LABORATORY COPY

PR provides preliminary results. Requests for preliminary results will increase analytical costs.
Send Copy to: Sample Management Office, Attn: Heather Bauer, CSC, 15000 Conference Center Dr., Chantilly, VA 20151-3819; Phone 703/818-4200; Fax 703/818-4602

**CompuChem**
**a Division of Liberty Analytical Corp.**
501 Madison Avenue Cary, NC 27513

**SDG NARRATIVE**
**CASE # 39416 SDG # ME00Y1**
**CONTRACT # EPW08067**

The indicated Sample Delivery Group (SDG) consisting of five (5) solid samples was received on January 23, 2010. The samples were intact and in good condition with Chain of Custody (COC) Records.

**SAMPLE IDs:**

The following customer IDs are associated with this SDG:

ME00Y1, ME00Y2, ME00Y3, ME00Y4, ME00Y5

The samples were analyzed, in accordance with EPA - CLP Statement of Work (SOW) document ILM05.4 for the requested ICP-AES TAL metals, mercury, and cyanide.

The correlation coefficient for the mercury and cyanide analytical runs is confirmed to be $\geq$ 0.9950.

The cooler temperature indicator bottle was found with the samples, and the sample's temperature was 2.4 degrees Celsius. Temperature was recorded by IR temperature gun.

**EQUATIONS FOR SOLID SAMPLE CALCULATIONS:**

Client sample ME00Y1 used for illustration.

ICP Equation:

Equation for obtaining metals sample results in mg/Kg as presented on FORM I data sheets from ICP instrument acquired results in µg/L (ppb).

$$\text{Concentration (\% solids) (mg/Kg)} \quad \frac{C \times V}{W \times S} \times DF$$

Where
C = concentration (µg/L)
DF = dilution factor
V = final volume in liters after sample preparation
W = weight in grams of wet sample
S = % solids/100

Example: **Lead** result µg/L to mg/Kg.

$$\frac{101.926\ \mu g/L \times 0.1\ L\ (V)}{1.01\ g\ (W) \times 0.693} \times 1 = 14.562\ mg/Kg \text{ reported as } 14.6\ mg/Kg$$

Mercury Equation:

Equation for obtaining mercury sample results in mg/Kg as presented on FORM I data sheets from instrument acquired results in µg/L (ppb).

$$\frac{A \times D \times F}{B \times E}$$

Where
A = µg/L Hg
B = wet weight of sample
D = dilution factor to bring sample into analysis range
E = % solids/100
F = final volume in liters (0.1 L)

Example: mercury result µg/L to mg/Kg

$$\frac{0.031\ \mu g/L\ (A) \times 1\ (D) \times 0.1\ (F)}{0.20\ g\ (B) \times 0.693\ (E)} = 0.022\ mg/Kg \text{ reported as } 0.14\ U\ mg/Kg$$

**Cyanide Equation:**

Equation for obtaining cyanide sample results in mg/kg as presented on FORM I data sheets from instrument acquired results in µg/l (ppb).

$$\frac{C \times D \times V}{W \times S}$$

Where

C = concentration of cyanide (µg/l)

W = wet weight of sample

D = dilution factor to bring sample into analysis range

S = % solids/100

V = final volume in liters

Example: cyanide result µg/L to mg/kg

$$\frac{-0.1191296\ \mu g/l\ (C) \times 1\ (D) \times 0.05\ (V)}{1.04\ g\ (W) \times 0.693\ (S)} = -0.0083\ mg/kg \text{ reported as } 3.5\ U\ mg/kg$$

## INSTRUMENTAL QUALITY CONTROL:

All calibration verification solutions (ICV, CCV, & CRI), blanks (ICB, & CCB), and interference check samples (ICSA & ICSAB) associated with this data were confirmed to be within EPA CLP allowable limits. The laboratory monitors two different wavelengths for selenium and lead to obtain interelement correction factor(s). For selenium 196.021 and 196.022 are monitored and the first wavelength's contribution is 1/3 of the total factor and the second contributes 2/3 of the total factor. For lead 220.351 and 220.352 are

monitored and first wavelength's contribution is 2/3 of the total factor and the second contributes 1/3 of the total factor.

## SAMPLE PREPARATION QUALITY CONTROL:

The sample preparation procedure verifications (LCSS & PBS) were found to be within acceptable ranges and the field sample was prepared and analyzed within the contract specified holding times.

## MATRIX RELATED QUALITY CONTROL:

The ICP sample matrix spike, CCN = 0012708-MS1 (ME00Y5S) was found to be inside CLP control limits except antimony.

The mercury sample matrix spike, CCN = 0012709-MS1 (ME00Y5S) was found to be inside CLP control limits.

The cyanide sample matrix spike, CCN = 0012710-MS1 (ME00Y5S) was found to be inside CLP control limits.

The ICP sample matrix duplicate, CCN = 0012708-DUP1 (ME00Y5D) was found to be inside CLP control limits except magnesium.

The mercury sample matrix duplicate, CCN = 0012709-DUP1 (ME00Y5D) was found to be inside CLP control limits.

The cyanide sample matrix duplicate, CCN = 0012710-DUP1 (ME00Y5D) was found to be inside CLP control limits.

A five-fold serial dilution of sample, CCN = 1001146-05 (ME00Y5L) was performed in accordance with CLP requirements for ICP analysis.

The adjusted sample concentrations were inside CLP control limits except barium, lead, and zinc.

The laboratory manager or his designee, as verified by the following signature has authorized release of the data contained in this hard copy data package.

Susan W. Bass
Senior Chemist
February 11, 2010

# US EPA - CLP

## COVER PAGE

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No: 39416 NRAS No.: SDG No: ME00Y1

SOW No.: ILM05.4

| EPA Sample No. | Lab Sample ID |
|---|---|
| ME00Y1 | 1001146-01 |
| ME00Y2 | 1001146-02 |
| ME00Y3 | 1001146-03 |
| ME00Y4 | 1001146-04 |
| ME00Y5 | 1001146-05 |
| ME00Y5D | 0012710-DUP1 |
| ME00Y5D | 0012708-DUP1 |
| ME00Y5D | 0012709-DUP1 |
| ME00Y5S | 0012710-MS1 |
| ME00Y5S | 0012708-MS1 |
| ME00Y5S | 0012709-MS1 |

| | | ICP-AES | ICP-MS |
|---|---|---|---|
| Were ICP-AES and ICP-MS interelement corrections applied? | (Yes/No) | YES | NO |
| Were ICP-AES and ICP-MS background corrections applied? | (Yes/No) | YES | NO |
| If yes, were raw data generated before application of background corrections? | (Yes/No) | NO | NO |

Comments: THE FOLLOWING ANALYTES HAVE BEEN FLAGGED WITH AN "E" TO INDICATE SERIAL DILUTION RESULTS WHICH ARE NOT WITHIN CONTROL LIMITS: BARIUM, LEAD, ZINC

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette (or via an alternate means of electronic transmission, if approved in advance by USEPA) has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: [illegible] for Susan Bass Name: Susan W Bass

Date: 2-12-10 Title: Senior Chemist

# US EPA - CLP

## 1A-IN

## INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ME00Y1

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39416 NRAS No.: SDG NO.: ME00Y1

Matrix (soil/water): SOIL Lab Sample ID: 1001146-01

Level (low/med): LOW Date Received: 01/23/2010

% Solids: 69.3

Concentration Units (ug/L or mg/kg dry weight): MG/KG

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 9650 | | | P |
| 7440-36-0 | Antimony | 8.6 | U | N | P |
| 7440-38-2 | Arsenic | 6.5 | | | P |
| 7440-39-3 | Barium | 126 | | E | P |
| 7440-41-7 | Beryllium | 0.69 | J | | P |
| 7440-43-9 | Cadmium | 0.55 | J | | P |
| 7440-70-2 | Calcium | 59400 | | | P |
| 7440-47-3 | Chromium | 18.7 | | | P |
| 7440-48-4 | Cobalt | 13.9 | | | P |
| 7440-50-8 | Copper | 18.3 | | | P |
| 7439-89-6 | Iron | 20000 | | | P |
| 7439-92-1 | Lead | 14.6 | | E | P |
| 7439-95-4 | Magnesium | 22400 | | * | P |
| 7439-96-5 | Manganese | 1120 | | | P |
| 7439-97-6 | Mercury | 0.14 | U | | CV |
| 7440-02-0 | Nickel | 24.9 | | | P |
| 7440-09-7 | Potassium | 1820 | | | P |
| 7782-49-2 | Selenium | 5.0 | U | | P |
| 7440-22-4 | Silver | 1.4 | U | | P |
| 7440-23-5 | Sodium | 176 | J | | P |
| 7440-28-0 | Thallium | 3.2 | J | | P |
| 7440-62-2 | Vanadium | 32.2 | | | P |
| 7440-66-6 | Zinc | 72.3 | | E | P |
| 57-12-5 | Cyanide | 3.5 | U | | AS |

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

# US EPA - CLP

## 1A-IN

## INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ME00Y2

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39416 NRAS No.: SDG NO.: ME00Y1

Matrix (soil/water): SOIL Lab Sample ID: 1001146-02

Level (low/med): LOW Date Received: 01/23/2010

% Solids: 67.6

Concentration Units (ug/L or mg/kg dry weight): MG/KG

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 7870 | | | P |
| 7440-36-0 | Antimony | 8.8 | U | N | P |
| 7440-38-2 | Arsenic | 5.2 | | | P |
| 7440-39-3 | Barium | 130 | | E | P |
| 7440-41-7 | Beryllium | 0.53 | J | | P |
| 7440-43-9 | Cadmium | 0.46 | J | | P |
| 7440-70-2 | Calcium | 93600 | | | P |
| 7440-47-3 | Chromium | 14.6 | | | P |
| 7440-48-4 | Cobalt | 11.8 | | | P |
| 7440-50-8 | Copper | 14.1 | | | P |
| 7439-89-6 | Iron | 13900 | | | P |
| 7439-92-1 | Lead | 11.0 | | E | P |
| 7439-95-4 | Magnesium | 17800 | | * | P |
| 7439-96-5 | Manganese | 628 | | | P |
| 7439-97-6 | Mercury | 0.15 | U | | CV |
| 7440-02-0 | Nickel | 19.7 | | | P |
| 7440-09-7 | Potassium | 1380 | | | P |
| 7782-49-2 | Selenium | 5.1 | U | | P |
| 7440-22-4 | Silver | 1.5 | U | | P |
| 7440-23-5 | Sodium | 176 | J | | P |
| 7440-28-0 | Thallium | 1.7 | J | | P |
| 7440-62-2 | Vanadium | 22.8 | | | P |
| 7440-66-6 | Zinc | 71.7 | | E | P |
| 57-12-5 | Cyanide | 0.32 | J | | AS |

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

# US EPA - CLP

## 1A-IN

## INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ME00Y3

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39416 NRAS No.: SDG NO.: ME00Y1

Matrix (soil/water): SOIL Lab Sample ID: 1001146-03

Level (low/med): LOW Date Received: 01/23/2010

% Solids: 70.4

Concentration Units (ug/L or mg/kg dry weight): MG/KG

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 7070 | | | P |
| 7440-36-0 | Antimony | 8.1 | U | N | P |
| 7440-38-2 | Arsenic | 2.9 | | | P |
| 7440-39-3 | Barium | 98.6 | | E | P |
| 7440-41-7 | Beryllium | 0.50 | J | | P |
| 7440-43-9 | Cadmium | 0.42 | J | | P |
| 7440-70-2 | Calcium | 49100 | | | P |
| 7440-47-3 | Chromium | 11.5 | | | P |
| 7440-48-4 | Cobalt | 7.6 | | | P |
| 7440-50-8 | Copper | 12.1 | | | P |
| 7439-89-6 | Iron | 9920 | | | P |
| 7439-92-1 | Lead | 14.7 | | E | P |
| 7439-95-4 | Magnesium | 21600 | | * | P |
| 7439-96-5 | Manganese | 383 | | | P |
| 7439-97-6 | Mercury | 0.14 | U | | CV |
| 7440-02-0 | Nickel | 15.2 | | | P |
| 7440-09-7 | Potassium | 1030 | | | P |
| 7782-49-2 | Selenium | 4.7 | U | | P |
| 7440-22-4 | Silver | 1.4 | U | | P |
| 7440-23-5 | Sodium | 122 | J | | P |
| 7440-28-0 | Thallium | 0.80 | J | | P |
| 7440-62-2 | Vanadium | 20.0 | | | P |
| 7440-66-6 | Zinc | 68.9 | | E | P |
| 57-12-5 | Cyanide | 3.4 | U | | AS |

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

# US EPA - CLP

## 1A-IN

## INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ME00Y4

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39416 NRAS No.: SDG NO.: ME00Y1

Matrix (soil/water): SOIL Lab Sample ID: 1001146-04

Level (low/med): LOW Date Received: 01/23/2010

% Solids: 72.2

Concentration Units (ug/L or mg/kg dry weight): MG/KG

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 9630 | | | P |
| 7440-36-0 | Antimony | 8.1 | U | N | P |
| 7440-38-2 | Arsenic | 3.8 | | | P |
| 7440-39-3 | Barium | 118 | | E | P |
| 7440-41-7 | Beryllium | 0.65 | J | | P |
| 7440-43-9 | Cadmium | 0.39 | J | | P |
| 7440-70-2 | Calcium | 59500 | | | P |
| 7440-47-3 | Chromium | 17.1 | | | P |
| 7440-48-4 | Cobalt | 13.3 | | | P |
| 7440-50-8 | Copper | 18.2 | | | P |
| 7439-89-6 | Iron | 14900 | | | P |
| 7439-92-1 | Lead | 11.9 | | E | P |
| 7439-95-4 | Magnesium | 18300 | | * | P |
| 7439-96-5 | Manganese | 470 | | | P |
| 7439-97-6 | Mercury | 0.14 | U | | CV |
| 7440-02-0 | Nickel | 24.9 | | | P |
| 7440-09-7 | Potassium | 1640 | | | P |
| 7782-49-2 | Selenium | 4.8 | U | | P |
| 7440-22-4 | Silver | 1.4 | U | | P |
| 7440-23-5 | Sodium | 154 | J | | P |
| 7440-28-0 | Thallium | 2.0 | J | | P |
| 7440-62-2 | Vanadium | 28.3 | | | P |
| 7440-66-6 | Zinc | 64.5 | | E | P |
| 57-12-5 | Cyanide | 3.4 | U | | AS |

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

# US EPA - CLP

## 1A-IN

## INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ME00Y5

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39416 NRAS No.: SDG NO.: ME00Y1

Matrix (soil/water): SOIL Lab Sample ID: 1001146-05

Level (low/med): LOW Date Received: 01/23/2010

% Solids: 72.3

Concentration Units (ug/L or mg/kg dry weight): MG/KG

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 8500 | | | P |
| 7440-36-0 | Antimony | 8.3 | U | N | P |
| 7440-38-2 | Arsenic | 4.4 | | | P |
| 7440-39-3 | Barium | 115 | | E | P |
| 7440-41-7 | Beryllium | 0.64 | J | | P |
| 7440-43-9 | Cadmium | 0.54 | J | | P |
| 7440-70-2 | Calcium | 70100 | | | P |
| 7440-47-3 | Chromium | 15.7 | | | P |
| 7440-48-4 | Cobalt | 15.0 | | | P |
| 7440-50-8 | Copper | 16.7 | | | P |
| 7439-89-6 | Iron | 13500 | | | P |
| 7439-92-1 | Lead | 12.2 | | E | P |
| 7439-95-4 | Magnesium | 17300 | | * | P |
| 7439-96-5 | Manganese | 390 | | | P |
| 7439-97-6 | Mercury | 0.14 | U | | CV |
| 7440-02-0 | Nickel | 24.0 | | | P |
| 7440-09-7 | Potassium | 1390 | | | P |
| 7782-49-2 | Selenium | 0.80 | J | | P |
| 7440-22-4 | Silver | 1.4 | U | | P |
| 7440-23-5 | Sodium | 211 | J | | P |
| 7440-28-0 | Thallium | 2.1 | J | | P |
| 7440-62-2 | Vanadium | 25.6 | | | P |
| 7440-66-6 | Zinc | 73.0 | | E | P |
| 57-12-5 | Cyanide | 3.5 | U | | AS |

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

US EPA - CLP

3-IN
BLANKS

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39416 NRAS No.: _____ SDG NO.: ME00Y1

Preparation Blank Matrix (soil/water): SOIL

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

| Analyte | Initial Calibration Blank(ug/L) | | Continuing Calibration Blank (ug/L) | | | | | | Preparation Blank | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | C | 1 | C | 2 | C | 3 | C | | C | M |
| Aluminum | 200.000 | U | 31.584 | J | 76.918 | J | 75.452 | J | 20.000 | U | P |
| Antimony | 60.000 | U | 60.000 | U | 60.000 | U | 60.000 | U | 0.821 | J | P |
| Arsenic | 10.000 | U | 2.022 | J | 1.717 | J | 10.000 | U | 1.000 | U | P |
| Barium | 200.000 | U | 200.000 | U | 200.000 | U | 200.000 | U | 20.000 | U | P |
| Beryllium | 5.000 | U | 5.000 | U | 1.201 | J | 1.280 | J | 0.500 | U | P |
| Cadmium | 5.000 | U | 5.000 | U | 0.872 | J | 5.000 | U | 0.500 | U | P |
| Calcium | 5000.000 | U | 5000.000 | U | 5000.000 | U | 5000.000 | U | 14.940 | J | P |
| Chromium | 1.593 | J | -0.959 | J | -0.846 | J | 10.000 | U | 1.000 | U | P |
| Cobalt | 50.000 | U | 50.000 | U | 3.031 | J | 2.606 | J | 5.000 | U | P |
| Copper | 0.693 | J | -0.454 | J | -1.229 | J | -1.348 | J | -0.108 | J | P |
| Iron | 100.000 | U | 100.000 | U | 100.000 | U | 100.000 | U | 10.000 | U | P |
| Lead | 10.000 | U | 10.000 | U | 10.000 | U | 10.000 | U | 0.426 | J | P |
| Magnesium | 5000.000 | U | 24.717 | J | 5000.000 | U | 5000.000 | U | 2.531 | J | P |
| Manganese | 15.000 | U | 15.000 | U | 15.000 | U | 15.000 | U | 1.500 | U | P |
| Mercury | -0.112 | J | -0.119 | J | -0.092 | J | -0.118 | J | 0.100 | U | CV |
| Nickel | 3.245 | J | -2.279 | J | -1.640 | J | 40.000 | U | 4.000 | U | P |
| Potassium | 5000.000 | U | 5000.000 | U | 5000.000 | U | 5000.000 | U | 2.622 | J | P |
| Selenium | 35.000 | U | 35.000 | U | 35.000 | U | 35.000 | U | 3.500 | U | P |
| Silver | 10.000 | U | 10.000 | U | 10.000 | U | 10.000 | U | 1.000 | U | P |
| Sodium | 5000.000 | U | 5000.000 | U | 5000.000 | U | 5000.000 | U | 71.936 | J | P |
| Thallium | 25.000 | U | 25.000 | U | 25.000 | U | 25.000 | U | -0.452 | J | P |
| Vanadium | -0.608 | J | 50.000 | U | 50.000 | U | -0.623 | J | 5.000 | U | P |
| Zinc | 60.000 | U | 60.000 | U | 60.000 | U | 60.000 | U | 0.177 | J | P |
| Cyanide | -1.327 | J | -1.153 | J | -0.951 | J | 10.000 | U | 2.500 | U | AS |

# US EPA - CLP

## 3-IN
## BLANKS

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39416 NRAS No.: _____ SDG NO.: ME00Y1

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

| Analyte | Initial Calibration Blank(ug/L) | | Continuing Calibration Blank (ug/L) | | | | | | Preparation Blank | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | C | 1 | C | 2 | C | 3 | C | | C | M |
| Aluminum | 200.000 | U | 40.777 | J | 200.000 | U | | | | | P |
| Antimony | 60.000 | U | 60.000 | U | 60.000 | U | | | | | P |
| Arsenic | 10.000 | U | 10.000 | U | 10.000 | U | | | | | P |
| Barium | 200.000 | U | 200.000 | U | 200.000 | U | | | | | P |
| Beryllium | 5.000 | U | 5.000 | U | 5.000 | U | | | | | P |
| Cadmium | 5.000 | U | 5.000 | U | -0.761 | J | | | | | P |
| Calcium | 5000.000 | U | 38.812 | J | 5000.000 | U | | | | | P |
| Chromium | 10.000 | U | 10.000 | U | 10.000 | U | | | | | P |
| Cobalt | 50.000 | U | -2.201 | J | -2.814 | J | | | | | P |
| Copper | 25.000 | U | 25.000 | U | 25.000 | U | | | | | P |
| Iron | 100.000 | U | 20.111 | J | 100.000 | U | | | | | P |
| Lead | 10.000 | U | 10.000 | U | 10.000 | U | | | | | P |
| Magnesium | 5000.000 | U | 36.029 | J | 5000.000 | U | | | | | P |
| Manganese | 15.000 | U | 15.000 | U | 15.000 | U | | | | | P |
| Nickel | 40.000 | U | 40.000 | U | 40.000 | U | | | | | P |
| Potassium | 5000.000 | U | 5000.000 | U | 5000.000 | U | | | | | P |
| Selenium | 35.000 | U | 35.000 | U | 35.000 | U | | | | | P |
| Silver | 10.000 | U | 10.000 | U | 10.000 | U | | | | | P |
| Sodium | 5000.000 | U | 5000.000 | U | 5000.000 | U | | | | | P |
| Thallium | 25.000 | U | 25.000 | U | 25.000 | U | | | | | P |
| Vanadium | 50.000 | U | 50.000 | U | 50.000 | U | | | | | P |
| Zinc | 60.000 | U | 60.000 | U | 60.000 | U | | | | | P |

# US EPA - CLP

## 4A-IN

## ICP-AES INTERFERENCE CHECK SAMPLE

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39416 NRAS No.: _____ SDG NO.: ME00Y1

ICP-AES Instrument ID: P4 ICS Source: EPA-1206-203

Concentration Units: ug/L

| Analyte | True | | Initial Found | | | | Final Found | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Sol.A | Sol AB | Sol.A | %R | Sol AB | %R | Sol.A | %R | Sol.AB | %R |
| Aluminum | 244000 | 241000 | 251000 | 103 | 252000 | 105 | 252000 | 103 | 255000 | 106 |
| Antimony | 0 | 589 | 3.4 | | 623 | 106 | -3.4 | | 645 | 110 |
| Arsenic | 0 | 101 | 2.0 | | 101 | 100 | 0.80 | | 106 | 105 |
| Barium | 2 | 495 | 1.5 | 75 | 476 | 96 | 1.5 | 75 | 471 | 95 |
| Beryllium | 0 | 475 | 1.2 | | 493 | 104 | 2.3 | | 507 | 107 |
| Cadmium | 0 | 940 | -1.0 | | 949 | 101 | 0.020 | | 993 | 106 |
| Calcium | 235000 | 231000 | 248000 | 106 | 245000 | 106 | 245000 | 104 | 251000 | 109 |
| Chromium | 43 | 511 | 43.4 | 101 | 522 | 102 | 41.4 | 96 | 526 | 103 |
| Cobalt | 4 | 461 | 5.7 | 142 | 496 | 108 | 9.0 | 225 | 516 | 112 |
| Copper | 23 | 548 | 23.4 | 102 | 543 | 99 | 21.3 | 93 | 538 | 98 |
| Iron | 95600 | 94800 | 97800 | 102 | 96400 | 102 | 99000 | 104 | 100000 | 105 |
| Lead | 10 | 61 | 13.4 | 134 | 64.2 | 105 | 13.6 | 136 | 67.0 | 110 |
| Magnesium | 248000 | 251000 | 266000 | 107 | 261000 | 104 | 266000 | 107 | 269000 | 107 |
| Manganese | 19 | 502 | 18.5 | 97 | 516 | 103 | 18.0 | 95 | 522 | 104 |
| Nickel | 21 | 984 | 19.9 | 95 | 1010 | 103 | 20.1 | 96 | 1050 | 107 |
| Potassium | 0 | 0 | 0.035 | | -1.6 | | 0.73 | | 0.72 | |
| Selenium | 0 | 53 | 2.6 | | 53.1 | 100 | 3.3 | | 56.2 | 106 |
| Silver | 0 | 206 | -0.32 | | 202 | 98 | -0.26 | | 202 | 98 |
| Sodium | 0 | 0 | 878 | | 855 | | 997 | | 1000 | |
| Thallium | 0 | 103 | 10.9 | | 114 | 111 | 15.1 | | 122 | 118 |
| Vanadium | 0 | 494 | -2.2 | | 500 | 101 | -1.7 | | 503 | 102 |
| Zinc | 28 | 1030 | 31.6 | 113 | 936 | 91 | 31.0 | 111 | 995 | 97 |

# US EPA - CLP

## 4A-IN

## ICP-AES INTERFERENCE CHECK SAMPLE

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39416 NRAS No.: _____ SDG NO.: ME00Y1

ICP-AES Instrument ID: P4 ICS Source: EPA-1206-203

Concentration Units: ug/L

| Analyte | True | | Initial Found | | | | Final Found | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Sol.A | Sol AB | Sol.A | %R | Sol AB | %R | Sol.A | %R | Sol.AB | %R |
| Aluminum | 244000 | 241000 | 244000 | 100 | 246000 | 102 | 243000 | 100 | 249000 | 103 |
| Antimony | 0 | 589 | -0.74 | | 600 | 102 | 1.6 | | 600 | 102 |
| Arsenic | 0 | 101 | 0.19 | | 97.3 | 96 | -0.86 | | 100 | 99 |
| Barium | 2 | 495 | 1.4 | 70 | 447 | 90 | 1.4 | 70 | 452 | 91 |
| Beryllium | 0 | 475 | 1.1 | | 500 | 105 | 0.85 | | 500 | 105 |
| Cadmium | 0 | 940 | 1.6 | | 936 | 100 | 1.2 | | 938 | 100 |
| Calcium | 235000 | 231000 | 234000 | 100 | 251000 | 109 | 241000 | 103 | 251000 | 109 |
| Chromium | 43 | 511 | 41.3 | 96 | 515 | 101 | 43.1 | 100 | 517 | 101 |
| Cobalt | 4 | 461 | 4.8 | 120 | 495 | 107 | 5.0 | 125 | 498 | 108 |
| Copper | 23 | 548 | 23.6 | 103 | 527 | 96 | 23.4 | 102 | 531 | 97 |
| Iron | 95600 | 94800 | 94900 | 99 | 99400 | 105 | 96700 | 101 | 100000 | 105 |
| Lead | 10 | 61 | 9.9 | 99 | 60.3 | 99 | 11.6 | 116 | 60.9 | 100 |
| Magnesium | 248000 | 251000 | 251000 | 101 | 261000 | 104 | 254000 | 102 | 261000 | 104 |
| Manganese | 19 | 502 | 18.4 | 97 | 513 | 102 | 19.0 | 100 | 517 | 103 |
| Nickel | 21 | 984 | 21.0 | 100 | 975 | 99 | 21.5 | 102 | 977 | 99 |
| Potassium | 0 | 0 | 2.8 | | 5.3 | | 4.6 | | 5.3 | |
| Selenium | 0 | 53 | -3.5 | | 46.4 | 88 | -1.3 | | 48.8 | 92 |
| Silver | 0 | 206 | -0.017 | | 199 | 97 | -0.22 | | 199 | 97 |
| Sodium | 0 | 0 | 877 | | 823 | | 840 | | 821 | |
| Thallium | 0 | 103 | 13.6 | | 109 | 106 | 9.7 | | 110 | 107 |
| Vanadium | 0 | 494 | -1.5 | | 494 | 100 | -1.2 | | 494 | 100 |
| Zinc | 28 | 1030 | 28.6 | 102 | 934 | 91 | 30.0 | 107 | 929 | 90 |

# US EPA - CLP

## 5A-IN

## MATRIX SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

ME00Y5S

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39416 NRAS No.: SDG NO.: ME00Y1

Matrix (soil/water): SOIL Level (low/med): LOW

% Solids for Sample: 72.3

Concentration Units (ug/L or mg/kg dry weight): MG/KG

| Analyte | Control Limit %R | Spiked Sample Result (SSR) | C | Sample Result (SR) | C | Spike Added (SA) | %R | Q | M |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | 75 - 125 | 5.0908 | J | 8.2988 | U | 27.66 | 18 | N | P |
| Arsenic | 75 - 125 | 13.3112 | | 4.3993 | | 11.07 | 81 | | P |
| Barium | 75 - 125 | 725.4578 | | 114.5730 | | 553.25 | 110 | | P |
| Beryllium | 75 - 125 | 12.8453 | | 0.6390 | J | 13.83 | 88 | | P |
| Cadmium | 75 - 125 | 12.6005 | | 0.5365 | J | 13.83 | 87 | | P |
| Chromium | 75 - 125 | 65.5653 | | 15.7431 | | 55.33 | 90 | | P |
| Cobalt | 75 - 125 | 134.9708 | | 15.0360 | | 138.31 | 87 | | P |
| Copper | 75 - 125 | 86.9376 | | 16.6624 | | 69.16 | 102 | | P |
| Lead | 75 - 125 | 16.9873 | | 12.2229 | | 5.53 | 86 | | P |
| Manganese | 75 - 125 | 509.1828 | | 390.3200 | | 138.31 | 86 | | P |
| Mercury | 75 - 125 | 0.6515 | | 0.1383 | U | 0.69 | 94 | | CV |
| Nickel | 75 - 125 | 144.3892 | | 23.9591 | | 138.31 | 87 | | P |
| Selenium | 75 - 125 | 12.1366 | | 0.8040 | J | 13.83 | 82 | | P |
| Silver | 75 - 125 | 12.6994 | | 1.3831 | U | 13.83 | 92 | | P |
| Thallium | 75 - 125 | 14.3112 | | 2.0987 | J | 13.83 | 88 | | P |
| Vanadium | 75 - 125 | 151.9867 | | 25.5871 | | 138.31 | 91 | | P |
| Zinc | 75 - 125 | 185.2556 | | 73.0358 | | 138.31 | 81 | | P |
| Cyanide | 75 - 125 | 6.8562 | | 3.4578 | U | 6.92 | 99 | | AS |

Comments:

# US EPA - CLP

## 5B-IN

## POST-DIGESTION SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

ME00Y5A

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39416 NRAS No.: SDG NO.: ME00Y1

Matrix (soil/water): SOIL Level (low/med): LOW

Concentration Units: ug/L

| Analyte | Control Limit %R | Spiked Sample Result (SSR) | C | Sample Result (SR) | C | Spike Added (SA) | %R | Q | M |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | | 122.72 | | 14.70 | U | 120.0 | 102 | | P |

Comments:

US EPA - CLP

6-IN

DUPLICATES

EPA SAMPLE NO.

ME00Y5D

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39416 NRAS No.: SDG NO.: ME00Y1

Matrix (soil/water): SOIL Level (low/med): LOW

% Solids for Sample: 72.3 % Solids for Duplicate: 72.3

Concentration Units: (ug/L or mg/kg dry weight): MG/KG

| Analyte | Control Limit | Sample (S) | C | Duplicate (D) | C | RPD | Q | M |
|---|---|---|---|---|---|---|---|---|
| Aluminum | | 8499.6450 | | 9982.3840 | | 16 | | P |
| Antimony | | 8.2988 | U | 8.2988 | U | | | P |
| Arsenic | 1.3831 | 4.3993 | | 3.6761 | | 18 | | P |
| Barium | 27.6625 | 114.5730 | | 120.0486 | | 5 | | P |
| Beryllium | | 0.6390 | J | 0.6675 | J | 4 | | P |
| Cadmium | | 0.5365 | J | 0.3477 | J | 43 | | P |
| Calcium | | 70107.2000 | | 64319.2800 | | 9 | | P |
| Chromium | | 15.7431 | | 18.4390 | | 16 | | P |
| Cobalt | 6.9156 | 15.0360 | | 14.4466 | | 4 | | P |
| Copper | 3.4578 | 16.6624 | | 19.8787 | | 18 | | P |
| Iron | | 13506.6700 | | 16220.6500 | | 18 | | P |
| Lead | | 12.2229 | | 12.7806 | | 4 | | P |
| Magnesium | | 17346.1400 | | 12949.6500 | | 29 | * | P |
| Manganese | | 390.3200 | | 427.9991 | | 9 | | P |
| Mercury | | 0.1383 | U | 0.1383 | U | | | CV |
| Nickel | 5.5325 | 23.9591 | | 23.6754 | | 1 | | P |
| Potassium | 691.5629 | 1389.3820 | | 1680.3640 | | 19 | | P |
| Selenium | | 0.8040 | J | 0.6486 | J | 21 | | P |
| Silver | | 1.3831 | U | 1.3831 | U | | | P |
| Sodium | | 211.3048 | J | 205.0010 | J | 3 | | P |
| Thallium | | 2.0987 | J | 2.5758 | J | 20 | | P |
| Vanadium | 6.9156 | 25.5871 | | 31.3469 | | 20 | | P |
| Zinc | | 73.0358 | | 66.2028 | | 10 | | P |
| Cyanide | | 3.4578 | U | 0.9668 | J | 200 | | AS |

# US EPA - CLP

## 8-IN

## ICP-AES and ICP-MS SERIAL DILUTIONS

EPA SAMPLE NO.

ME00Y5L

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39416 NRAS No.: SDG NO.: ME00Y1

Matrix (soil/water): SOIL Level (low/med): LOW

Concentration Units: ug/L

| Analyte | Initial Sample Result (I) | C | Serial Dilution Result (S) | C | % Difference | Q | M |
|---|---|---|---|---|---|---|---|
| Aluminum | 61452.43 | | 64597.80 | | 5 | | P |
| Antimony | 60.00 | U | 300.00 | U | | | P |
| Arsenic | 31.81 | | 32.92 | J | 3 | | P |
| Barium | 828.36 | | 727.29 | J | 12 | E | P |
| Beryllium | 4.62 | J | 9.86 | J | 113 | | P |
| Cadmium | 3.88 | J | 6.01 | J | 55 | | P |
| Calcium | 506875.00 | | 544534.00 | | 7 | | P |
| Chromium | 113.82 | | 113.86 | | 0 | | P |
| Cobalt | 108.71 | | 131.90 | J | 21 | | P |
| Copper | 120.47 | | 110.63 | J | 8 | | P |
| Iron | 97653.22 | | 106538.90 | | 9 | | P |
| Lead | 88.37 | | 101.70 | | 15 | E | P |
| Magnesium | 125412.60 | | 130695.30 | | 4 | | P |
| Manganese | 2822.01 | | 3030.27 | | 7 | | P |
| Nickel | 173.22 | | 179.91 | J | 4 | | P |
| Potassium | 10045.23 | | 9452.69 | J | 6 | | P |
| Selenium | 5.81 | J | 175.00 | U | 100 | | P |
| Silver | 10.00 | U | 50.00 | U | | | P |
| Sodium | 1527.73 | J | 1518.52 | J | 1 | | P |
| Thallium | 15.17 | J | 125.00 | U | 100 | | P |
| Vanadium | 184.99 | | 193.08 | J | 4 | | P |
| Zinc | 528.05 | | 594.27 | | 13 | E | P |

# US EPA - CLP

## 9-IN
## METHOD DETECTION LIMITS (ANNUALLY)

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39416 NRAS No.: _____ SDG NO.: ME00Y1

Instrument Type: AS Instrument ID: C2 Date: 01/15/2010

Preparation Method: NP1

Concentration Units (ug/L or mg/kg): UG/L

| Analyte | Wave-Length /Mass | CRQL | MDL |
|---|---|---|---|
| Cyanide | 578.00 | 10 | 0.82 |

Comments: _____

# US EPA - CLP

## 9-IN
## METHOD DETECTION LIMITS (ANNUALLY)

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39416 NRAS No.: _____ SDG NO.: ME00Y1

Instrument Type: AS Instrument ID: C2 Date: 01/15/2010

Preparation Method: DS2

Concentration Units (ug/L or mg/kg): UG/L

| Analyte | Wave-Length /Mass | CRQL | MDL |
|---|---|---|---|
| Cyanide | 578.00 | 10 | 1.60 |

Comments: _____

# US EPA - CLP

## 9-IN
## METHOD DETECTION LIMITS (ANNUALLY)

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39416 NRAS No.: _____ SDG NO.: ME00Y1

Instrument Type: AS Instrument ID: C2 Date: 01/15/2010

Preparation Method: DS2

Concentration Units (ug/L or mg/kg): MG/KG

| Analyte | Wave-Length /Mass | CRQL | MDL |
|---|---|---|---|
| Cyanide | 578.00 | 2.50 | 0.160 |

Comments: _____

# US EPA - CLP

## 9-IN

## *METHOD DETECTION LIMITS (ANNUALLY)*

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39416 NRAS No.: _____ SDG NO.: ME00Y1

Instrument Type: P Instrument ID: P4 Date: 01/15/2010

Preparation Method: NP1

Concentration Units (ug/L or mg/kg): UG/L

| Analyte | Wave-Length /Mass | CRQL | MDL |
|---|---|---|---|
| Aluminum | 308.22 | 200 | 25.6 |
| Antimony | 206.84 | 60 | 2.8 |
| Arsenic | 189.04 | 10 | 1.7 |
| Barium | 493.41 | 200 | 0.18 |
| Beryllium | 313.04 | 5 | 0.55 |
| Cadmium | 226.50 | 5 | 0.65 |
| Calcium | 317.93 | 5000 | 27.4 |
| Chromium | 267.72 | 10 | 0.66 |
| Cobalt | 228.62 | 50 | 1.20 |
| Copper | 324.75 | 25 | 0.43 |
| Iron | 271.44 | 100 | 10.8 |
| Lead | 220.35 | 10 | 2.1 |
| Magnesium | 279.08 | 5000 | 24.2 |
| Manganese | 257.61 | 15 | 0.31 |
| Nickel | 231.60 | 40 | 0.83 |
| Potassium | 766.49 | 5000 | 18.7 |
| Selenium | 196.02 | 35 | 1.8 |
| Silver | 328.07 | 10 | 0.58 |
| Sodium | 330.23 | 5000 | 90 |
| Thallium | 190.86 | 25 | 3.4 |
| Vanadium | 292.40 | 50 | 0.50 |
| Zinc | 206.20 | 60 | 2.00 |

Comments: _____

# US EPA - CLP

## 9-IN
## METHOD DETECTION LIMITS (ANNUALLY)

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39416 NRAS No.: _____ SDG NO.: ME00Y1

Instrument Type: P Instrument ID: P4 Date: 01/15/2010

Preparation Method: HS1

Concentration Units (ug/L or mg/kg): MG/KG

| Analyte | Wave-Length /Mass | CRQL | MDL |
|---|---|---|---|
| Aluminum | 308.22 | 20.00 | 5.1 |
| Antimony | 206.84 | 6.00 | 0.64 |
| Arsenic | 189.04 | 1.00 | 0.22 |
| Barium | 493.41 | 20.00 | 0.099 |
| Beryllium | 313.04 | 0.50 | 0.110 |
| Cadmium | 226.50 | 0.50 | 0.068 |
| Calcium | 317.93 | 500.00 | 3.5 |
| Chromium | 267.72 | 1.00 | 0.051 |
| Cobalt | 228.62 | 5.00 | 0.360 |
| Copper | 324.75 | 2.50 | 0.052 |
| Iron | 271.44 | 10.00 | 3.7 |
| Lead | 220.35 | 1.00 | 0.079 |
| Magnesium | 279.08 | 500.00 | 1.1 |
| Manganese | 257.61 | 1.50 | 0.160 |
| Nickel | 231.60 | 4.00 | 0.590 |
| Potassium | 766.49 | 500.00 | 1.7 |
| Selenium | 196.02 | 3.50 | 0.38 |
| Silver | 328.07 | 1.00 | 0.048 |
| Sodium | 330.23 | 500.00 | 16.7 |
| Thallium | 190.86 | 2.50 | 0.35 |
| Vanadium | 292.40 | 5.00 | 0.076 |
| Zinc | 206.20 | 6.00 | 0.084 |

Comments: _____

# US EPA - CLP

## 9-IN
## METHOD DETECTION LIMITS (ANNUALLY)

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39416 NRAS No.: _____ SDG NO.: ME00Y1

Instrument Type: P Instrument ID: P4 Date: 01/15/2010

Preparation Method: HS1

Concentration Units (ug/L or mg/kg): UG/L

| Analyte | Wave-Length /Mass | CRQL | MDL |
|---|---|---|---|
| Aluminum | 308.22 | 200 | 42.1 |
| Antimony | 206.84 | 60 | 14.7 |
| Arsenic | 189.04 | 10 | 2.0 |
| Barium | 493.41 | 200 | 0.85 |
| Beryllium | 313.04 | 5 | 0.86 |
| Cadmium | 226.50 | 5 | 1.10 |
| Calcium | 317.93 | 5000 | 134.0 |
| Chromium | 267.72 | 10 | 0.68 |
| Cobalt | 228.62 | 50 | 6.70 |
| Copper | 324.75 | 25 | 4.50 |
| Iron | 271.44 | 100 | 24.1 |
| Lead | 220.35 | 10 | 1.5 |
| Magnesium | 279.08 | 5000 | 16.6 |
| Manganese | 257.61 | 15 | 1.30 |
| Nickel | 231.60 | 40 | 5.90 |
| Potassium | 766.49 | 5000 | 21.5 |
| Selenium | 196.02 | 35 | 2.3 |
| Silver | 328.07 | 10 | 0.68 |
| Sodium | 330.23 | 5000 | 271 |
| Thallium | 190.86 | 25 | 3.9 |
| Vanadium | 292.40 | 50 | 0.43 |
| Zinc | 206.20 | 60 | 1.70 |

Comments: _____

# US EPA - CLP

## 9-IN
## METHOD DETECTION LIMITS (ANNUALLY)

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39416 NRAS No.: _____ SDG NO.: ME00Y1

Instrument Type: CV Instrument ID: V4 Date: 01/15/2010

Preparation Method: CS1

Concentration Units (ug/L or mg/kg): UG/L

| Analyte | Wave-Length /Mass | CRQL | MDL |
|---|---|---|---|
| Mercury | 253.70 | 0.2 | 0.065 |

Comments: _____

# US EPA - CLP

## 9-IN
## METHOD DETECTION LIMITS (ANNUALLY)

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39416 NRAS No.: _____ SDG NO.: ME00Y1

Instrument Type: CV Instrument ID: V4 Date: 01/15/2010

Preparation Method: CS1

Concentration Units (ug/L or mg/kg): MG/KG

| Analyte | Wave-Length /Mass | CRQL | MDL |
|---|---|---|---|
| Mercury | 253.70 | 0.1 | 0.042 |

Comments: _____

US EPA - CLP

12-IN

PREPARATION LOG

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39416 NRAS No.: SDG NO.: ME00Y1

Preparation Method: HS1

| EPA Sample No. | Preparation Date | Weight (gram) | Volume (mL) |
|---|---|---|---|
| LCSS | 01/28/2010 | 1.00 | 100 |
| ME00Y1 | 01/28/2010 | 1.01 | 100 |
| ME00Y2 | 01/28/2010 | 1.01 | 100 |
| ME00Y3 | 01/28/2010 | 1.05 | 100 |
| ME00Y4 | 01/28/2010 | 1.02 | 100 |
| ME00Y5 | 01/28/2010 | 1.00 | 100 |
| ME00Y5D | 01/28/2010 | 1.00 | 100 |
| ME00Y5S | 01/28/2010 | 1.00 | 100 |
| PBS | 01/28/2010 | 1.00 | 100 |

Comments:

# US EPA - CLP

## 12-IN

## PREPARATION LOG

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39416 NRAS No.: SDG NO.: ME00Y1

Preparation Method: CS1

| EPA Sample No. | Preparation Date | Weight (gram) | Volume (mL) |
|---|---|---|---|
| CCB | 01/28/2010 | | 100 |
| CCB | 01/28/2010 | | 100 |
| CCB | 01/28/2010 | | 100 |
| CCV | 01/28/2010 | | 100 |
| CCV | 01/28/2010 | | 100 |
| CCV | 01/28/2010 | | 100 |
| CRI | 01/28/2010 | | 100 |
| CRI | 01/28/2010 | | 100 |
| ICB | 01/28/2010 | | 100 |
| ICV | 01/28/2010 | | 100 |
| LCSS | 01/28/2010 | 0.20 | 100 |
| ME00Y1 | 01/28/2010 | 0.20 | 100 |
| ME00Y2 | 01/28/2010 | 0.19 | 100 |
| ME00Y3 | 01/28/2010 | 0.21 | 100 |
| ME00Y4 | 01/28/2010 | 0.21 | 100 |
| ME00Y5 | 01/28/2010 | 0.20 | 100 |
| ME00Y5D | 01/28/2010 | 0.20 | 100 |
| ME00Y5S | 01/28/2010 | 0.20 | 100 |
| PBS | 01/28/2010 | 0.20 | 100 |
| S0 | 01/28/2010 | | 100 |
| S0.2 | 01/28/2010 | | 100 |
| S0.5 | 01/28/2010 | | 100 |
| S1 | 01/28/2010 | | 100 |
| S10 | 01/28/2010 | | 100 |
| S5 | 01/28/2010 | | 100 |

Comments:

# US EPA - CLP

## 12-IN

## PREPARATION LOG

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39416 NRAS No.: SDG NO.: ME00Y1

Preparation Method: DS2

| EPA Sample No. | Preparation Date | Weight (gram) | Volume(mL) |
|---|---|---|---|
| ICV | 01/28/2010 | | 50 |
| LCSS | 01/28/2010 | 1.00 | 50 |
| ME00Y1 | 01/28/2010 | 1.04 | 50 |
| ME00Y2 | 01/28/2010 | 1.01 | 50 |
| ME00Y3 | 01/28/2010 | 1.05 | 50 |
| ME00Y4 | 01/28/2010 | 1.02 | 50 |
| ME00Y5 | 01/28/2010 | 1.00 | 50 |
| ME00Y5D | 01/28/2010 | 1.00 | 50 |
| ME00Y5S | 01/28/2010 | 1.00 | 50 |
| MIDRANGE | 01/28/2010 | | 50 |
| PBS | 01/28/2010 | 1.00 | 50 |

Comments:

# US EPA - CLP

## 13-IN

## ANALYSIS RUN LOG

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39416 NRAS No.: _____ SDG No.: ME00Y1

Instrument ID: C2 Analysis Method: AS

Start Date: 02/01/2010 End Date: 02/01/2010

| EPA Sample NO. | D/F | Time | Analytes | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | AL | SB | AS | BA | BE | CD | CA | CR | CO | CU | FE | PB | MG | MN | HG | NI | K | SE | AG | NA | TL | V | ZN | CN |
| S200 | 1.0 | 1656 | | | | | | | | | | | | | | | | | | | | | | | | X |
| S100 | 1.0 | 1657 | | | | | | | | | | | | | | | | | | | | | | | | X |
| S50 | 1.0 | 1658 | | | | | | | | | | | | | | | | | | | | | | | | X |
| S20 | 1.0 | 1658 | | | | | | | | | | | | | | | | | | | | | | | | X |
| S10 | 1.0 | 1659 | | | | | | | | | | | | | | | | | | | | | | | | X |
| S0 | 1.0 | 1700 | | | | | | | | | | | | | | | | | | | | | | | | X |
| ICV | 1.0 | 1702 | | | | | | | | | | | | | | | | | | | | | | | | X |
| ICB | 1.0 | 1702 | | | | | | | | | | | | | | | | | | | | | | | | X |
| CRI | 1.0 | 1703 | | | | | | | | | | | | | | | | | | | | | | | | X |
| CCV | 1.0 | 1704 | | | | | | | | | | | | | | | | | | | | | | | | X |
| CCB | 1.0 | 1705 | | | | | | | | | | | | | | | | | | | | | | | | X |
| MIDRANGE | 1.0 | 1707 | | | | | | | | | | | | | | | | | | | | | | | | X |
| PBS | 1.0 | 1707 | | | | | | | | | | | | | | | | | | | | | | | | X |
| LCSS | 1.0 | 1708 | | | | | | | | | | | | | | | | | | | | | | | | X |
| ME00Y1 | 1.0 | 1709 | | | | | | | | | | | | | | | | | | | | | | | | X |
| ME00Y2 | 1.0 | 1710 | | | | | | | | | | | | | | | | | | | | | | | | X |
| ME00Y3 | 1.0 | 1710 | | | | | | | | | | | | | | | | | | | | | | | | X |
| ME00Y4 | 1.0 | 1711 | | | | | | | | | | | | | | | | | | | | | | | | X |
| ME00Y5 | 1.0 | 1712 | | | | | | | | | | | | | | | | | | | | | | | | X |
| ME00Y5D | 1.0 | 1713 | | | | | | | | | | | | | | | | | | | | | | | | X |
| ME00Y5S | 1.0 | 1713 | | | | | | | | | | | | | | | | | | | | | | | | X |
| CCV | 1.0 | 1714 | | | | | | | | | | | | | | | | | | | | | | | | X |
| CCB | 1.0 | 1715 | | | | | | | | | | | | | | | | | | | | | | | | X |
| ZZZZZZ | 1.0 | 1717 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.0 | 1717 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.0 | 1718 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.0 | 1719 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.0 | 1719 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.0 | 1720 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.0 | 1721 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.0 | 1722 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.0 | 1723 | | | | | | | | | | | | | | | | | | | | | | | | |
| CRI | 1.0 | 1723 | | | | | | | | | | | | | | | | | | | | | | | | X |
| CCV | 1.0 | 1724 | | | | | | | | | | | | | | | | | | | | | | | | X |
| CCB | 1.0 | 1725 | | | | | | | | | | | | | | | | | | | | | | | | X |

US EPA - CLP

13-IN

ANALYSIS RUN LOG

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39416 NRAS No.: _____ SDG No.: ME00Y1

Instrument ID: P4 Analysis Method: P

Start Date: 02/09/2010 End Date: 02/09/2010

| EPA Sample NO. | D/F | Time | Analytes | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | AL | SB | AS | BA | BE | CD | CA | CR | CO | CU | FE | PB | MG | MN | HG | NI | K | SE | AG | NA | TL | V | ZN | CN |
| S0 | 1.0 | 0824 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | |
| S | 1.0 | 0831 | | | | | | X | | X | | X | | X | | | | X | | X | X | | X | | X | |
| S | 1.0 | 0837 | X | | | | | | X | | | | | | X | | | | X | | | X | | | | |
| S | 1.0 | 0842 | | | X | X | X | | | | X | | X | | | X | | | | | | | | X | | |
| S | 1.0 | 0848 | | X | | | | | | | | | | | | | | | | | | | | | | |
| ICV | 1.0 | 0853 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | |
| ICB | 1.0 | 0900 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | |
| CRI | 1.0 | 0907 | | X | X | | X | X | | X | X | X | | X | | X | | X | | X | X | | X | X | X | |
| ICSA | 1.0 | 0913 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | |
| ICSAB | 1.0 | 0920 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | |
| CCV | 1.0 | 0926 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | |
| CCB | 1.0 | 0933 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | |
| ZZZZZZ | 1.0 | 0943 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.0 | 0949 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.0 | 0956 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.0 | 1003 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.0 | 1009 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.0 | 1016 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.0 | 1023 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.0 | 1029 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.0 | 1036 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.0 | 1042 | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV | 1.0 | 1049 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | |
| CCB | 1.0 | 1056 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | |
| ZZZZZZ | 1.0 | 1102 | | | | | | | | | | | | | | | | | | | | | | | | |
| PBS | 1.0 | 1109 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | |
| LCSS | 1.0 | 1116 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | |
| ME00Y5 | 1.0 | 1122 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | |
| ME00Y5D | 1.0 | 1129 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | |
| ME00Y5S | 1.0 | 1136 | | X | X | X | X | X | | X | X | X | | X | | X | | X | | X | X | | X | X | X | |
| ME00Y5L | 5.0 | 1142 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | |
| CRI | 1.0 | 1149 | | X | X | | X | X | | X | X | X | | X | | X | | X | | X | X | | X | X | X | |
| ICSA | 1.0 | 1156 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | |
| ICSAB | 1.0 | 1202 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | |
| CCV | 1.0 | 1209 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | |

# US EPA - CLP

## 13-IN

## ANALYSIS RUN LOG

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39416 NRAS No.: _____ SDG No.: ME00Y1

Instrument ID: P4 Analysis Method: P

Start Date: 02/09/2010 End Date: 02/09/2010

| EPA Sample NO. | D/F | Time | Analytes | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | AL | SB | AS | BA | BE | CD | CA | CR | CO | CU | FE | PB | MG | MN | HG | NI | K | SE | AG | NA | TL | V | ZN | CN |
| CCB | 1.0 | 1215 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | |

# US EPA - CLP

## 13-IN

## ANALYSIS RUN LOG

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39416 NRAS No.: _____ SDG No.: ME00Y1

Instrument ID: P4 Analysis Method: P

Start Date: 02/11/2010 End Date: 02/11/2010

| EPA Sample NO. | D/F | Time | Analytes | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | AL | SB | AS | BA | BE | CD | CA | CR | CO | CU | FE | PB | MG | MN | HG | NI | K | SE | AG | NA | TL | V | ZN | CN |
| S0 | 1.0 | 1007 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | |
| S | 1.0 | 1013 | | | | | | X | | X | | X | | X | | | | X | | X | X | | X | | X | |
| S | 1.0 | 1020 | X | | | | | | X | | | | | | X | | | | X | | | X | | | | |
| S | 1.0 | 1025 | | | X | X | X | | | | X | | X | | | X | | | | | | | | X | | |
| S | 1.0 | 1031 | | X | | | | | | | | | | | | | | | | | | | | | | |
| ICV | 1.0 | 1036 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | |
| ICB | 1.0 | 1043 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | |
| CRI | 1.0 | 1049 | | X | X | | X | X | | X | X | X | | X | | X | | X | | X | X | | X | X | X | |
| ICSA | 1.0 | 1056 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | |
| ICSAB | 1.0 | 1103 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | |
| CCV | 1.0 | 1109 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | |
| CCB | 1.0 | 1116 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | |
| ZZZZZZ | 1.0 | 1133 | | | | | | | | | | | | | | | | | | | | | | | | |
| ME00Y5A | 1.0 | 1139 | | X | | | | | | | | | | | | | | | | | | | | | | |
| ME00Y1 | 1.0 | 1146 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | |
| ME00Y2 | 1.0 | 1153 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | |
| ME00Y3 | 1.0 | 1159 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | |
| ME00Y4 | 1.0 | 1206 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | |
| CRI | 1.0 | 1213 | | X | X | | X | X | | X | X | X | | X | | X | | X | | X | X | | X | X | X | |
| ICSA | 1.0 | 1219 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | |
| ICSAB | 1.0 | 1226 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | |
| CCV | 1.0 | 1232 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | |
| CCB | 1.0 | 1239 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | |

# US EPA - CLP

## 13-IN

## ANALYSIS RUN LOG

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39416 NRAS No.: _____ SDG No.: ME00Y1

Instrument ID: V4 Analysis Method: CV

Start Date: 01/29/2010 End Date: 01/29/2010

| EPA Sample NO. | D/F | Time | Analytes | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | AL | SB | AS | BA | BE | CD | CA | CR | CO | CU | FE | PB | MG | MN | HG | NI | K | SE | AG | NA | TL | V | ZN | CN |
| S0 | 1.0 | 1601 | | | | | | | | | | | | | | | X | | | | | | | | | |
| S0.2 | 1.0 | 1604 | | | | | | | | | | | | | | | X | | | | | | | | | |
| S0.5 | 1.0 | 1606 | | | | | | | | | | | | | | | X | | | | | | | | | |
| S1 | 1.0 | 1608 | | | | | | | | | | | | | | | X | | | | | | | | | |
| S5 | 1.0 | 1610 | | | | | | | | | | | | | | | X | | | | | | | | | |
| S10 | 1.0 | 1612 | | | | | | | | | | | | | | | X | | | | | | | | | |
| ICV | 1.0 | 1614 | | | | | | | | | | | | | | | X | | | | | | | | | |
| ICB | 1.0 | 1616 | | | | | | | | | | | | | | | X | | | | | | | | | |
| CRI | 1.0 | 1618 | | | | | | | | | | | | | | | X | | | | | | | | | |
| CCV | 1.0 | 1620 | | | | | | | | | | | | | | | X | | | | | | | | | |
| CCB | 1.0 | 1622 | | | | | | | | | | | | | | | X | | | | | | | | | |
| PBS | 1.0 | 1624 | | | | | | | | | | | | | | | X | | | | | | | | | |
| LCSS | 1.0 | 1626 | | | | | | | | | | | | | | | X | | | | | | | | | |
| ME00Y5 | 1.0 | 1628 | | | | | | | | | | | | | | | X | | | | | | | | | |
| ME00Y5D | 1.0 | 1631 | | | | | | | | | | | | | | | X | | | | | | | | | |
| ME00Y5S | 1.0 | 1633 | | | | | | | | | | | | | | | X | | | | | | | | | |
| ME00Y1 | 1.0 | 1635 | | | | | | | | | | | | | | | X | | | | | | | | | |
| ME00Y2 | 1.0 | 1637 | | | | | | | | | | | | | | | X | | | | | | | | | |
| ME00Y3 | 1.0 | 1639 | | | | | | | | | | | | | | | X | | | | | | | | | |
| ME00Y4 | 1.0 | 1641 | | | | | | | | | | | | | | | X | | | | | | | | | |
| ZZZZZZ | 1.0 | 1643 | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV | 1.0 | 1645 | | | | | | | | | | | | | | | X | | | | | | | | | |
| CCB | 1.0 | 1647 | | | | | | | | | | | | | | | X | | | | | | | | | |
| ZZZZZZ | 1.0 | 1649 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.0 | 1651 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.0 | 1653 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.0 | 1655 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.0 | 1657 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.0 | 1659 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.0 | 1701 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.0 | 1703 | | | | | | | | | | | | | | | | | | | | | | | | |
| CRI | 1.0 | 1705 | | | | | | | | | | | | | | | X | | | | | | | | | |
| CCV | 1.0 | 1707 | | | | | | | | | | | | | | | X | | | | | | | | | |
| CCB | 1.0 | 1709 | | | | | | | | | | | | | | | X | | | | | | | | | |