



May 19, 2015

ALS1505185

Ft. Collins, Colorado

LIMS Version: 6.761

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Tuesday, May 19, 2015

Karen Waters-Husted
CH2M HILL Plateau Remediation Company
2420 Stevens Center
Richland, WA 99352

Re: ALS Workorder: 1505185
Project Name: 100-KR-4, MAY 2015
Project Number: I15-024

Dear Ms. Waters-Husted:

Two water samples were received from CH2M HILL Plateau Remediation Company, on 5/9/2015. The samples were scheduled for the following analysis:

Metals

The results for these analyses are contained in the enclosed reports.

The data contained in the following report have been reviewed and approved by the personnel listed below. In addition, ALS certifies that the analyses reported herein are true, complete and correct within the limits of the methods employed.

Thank you for your confidence in ALS Environmental. Should you have any questions, please call.

Sincerely,

ALS Environmental
Julie Ellingson
Project Manager

ALS Environmental – Fort Collins is accredited by the following accreditation bodies for various testing scopes in accordance with requirements of each accreditation body. All testing is performed under the laboratory management system, which is maintained to meet these requirement and regulations. Please contact the laboratory or accreditation body for the current scope testing parameters.

| ALS Environmental – Fort Collins | |
|----------------------------------|---------------------------------|
| Accreditation Body | License or Certification Number |
| Alaska (AK) | UST-086 |
| Alaska (AK) | CO01099 |
| Arizona (AZ) | AZ0742 |
| California (CA) | 06251CA |
| Colorado (CO) | CO01099 |
| Connecticut (CT) | PH-0232 |
| Florida (FL) | E87914 |
| Idaho (ID) | CO01099 |
| Kansas (KS) | E-10381 |
| Kentucky (KY) | 90137 |
| L-A-B (DoD ELAP/ISO 170250) | L2257 |
| Maryland (MD) | 285 |
| Missouri (MO) | 175 |
| Nebraska(NE) | NE-OS-24-13 |
| Nevada (NV) | CO000782008A |
| New Jersey (NJ) | CO003 |
| New York (NY) | 12036 |
| North Dakota (ND) | R-057 |
| Oklahoma (OK) | 1301 |
| Pennsylvania (PA) | 68-03116 |
| Tennessee (TN) | 2976 |
| Texas (TX) | T104704241 |
| Utah (UT) | CO01099 |
| Washington (WA) | C1280 |

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ALS Environmental -- FC

Sample Number(s) Cross-Reference Table

OrderNum: 1505185

Client Name: CH2M HILL Plateau Remediation Company

Client Project Name: 100-KR-4, MAY 2015

Client Project Number: I15-024

Client PO Number: BOA 54854

| Client Sample Number | Lab Sample Number | COC Number | Matrix | Date Collected | Time Collected |
|----------------------|-------------------|------------|--------|----------------|----------------|
| B30XN9 | 1505185-1 | | WATER | 08-May-15 | 10:20 |
| B30XP7 | 1505185-2 | | WATER | 08-May-15 | 10:20 |

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

1505185

C.O.C. #

I15-024-006

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Collector: S.W. King/CHPRC
 SAF No.: I15-024
 Project Title: 100-KR-4, MAY 2015
 Shipped To (Lab): ALS Environmental Ft. Collins
 Protocol: CERCLA

Contact/Requester: Karen Waters-Husted
 Sampling Origin: Hanford Site
 Logbook No.: HNF-N-506 70/81
 Method of Shipment: Commercial Carrier
 Priority: 30 Days **PRIORITY**

Telephone No.: 509-376-4650
 Purchase Order/Charge Code: 300071
 Ice Chest No.: 6005-2918
 Bill of Lading/Air Bill No.: 77356319 1240
 Offsite Property No.: 5025

SPECIAL INSTRUCTIONS: Hold Time
 SPECIAL INSTRUCTIONS: N/A
 Total Activity Exemption: Yes No

POSSIBLE SAMPLE HAZARDS/REMARKS
 ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1

| Sample No. | Filter | Date | Time | No/Type Container | Sample Analysis | Holding Time | Preservative |
|------------|--------|-------------|------|-------------------|----------------------------------------------------|--------------|---------------|
| B30XN9 | N | MAY 08 2015 | 1020 | 1x500-ml G/P | 6010_METALS_ICP: COMMON; 6010_METALS_ICP: GW 03 | 6 Months | HNO3 to pH <2 |
| B30XP7 | Y | W | ↓ | 1x500-ml G/P | 6010_METALS_ICP: COMMON; 6010_METALS_ICP: GW 03 | 6 Months | HNO3 to pH <2 |

Relinquished By: S.W. King/CHPRC [Signature] Date/Time: MAY 08 2015 1145
 Received By: L.D. Wall CHPRC [Signature] Date/Time: MAY 08 2015 1145

Relinquished By: L.D. Wall CHPRC [Signature] Date/Time: MAY 08 2015 1400
 Received By: L.D. Wall CHPRC [Signature] Date/Time: MAY 08 2015 1400

Relinquished By: FedEx [Signature] Date/Time: MAY 08 2015 1400
 Received By: Erin Peterson ALS [Signature] Date/Time: 5/9/15 0905

Relinquished By: [Signature] Date/Time: [Blank]
 Received By: [Signature] Date/Time: [Blank]

Disposal Method (e.g., Return to customer, per lab procedure, used in process)
 Disposed By: [Blank] Date/Time: [Blank]

Matrix *
 S - Soil DS - Drum Solids
 SE - Sediment DL - Drum Liquids
 SO - Solid T - Tissue
 SL - Sludge WI - Wipe
 W - Water L - Liquid
 O - Oil V - Vegetation
 A - Air X - Other

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 40
 5

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ALS Environmental - Fort Collins
CONDITION OF SAMPLE UPON RECEIPT FORM

Client: CHPRC

Workorder No: 1505185

Project Manager: JME

Initials: ECP

Date: 5/8/15

| | | | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|--------------------------------------|-------------------------------------|
| 1. Does this project require any special handling in addition to standard ALS procedures? | | YES | <input checked="" type="radio"/> NO |
| 2. Are custody seals on shipping containers intact? | NONE | <input checked="" type="radio"/> YES | NO |
| 3. Are Custody seals on sample containers intact? | NONE | <input checked="" type="radio"/> YES | NO |
| 4. Is there a COC (Chain-of-Custody) present or other representative documents? | | <input checked="" type="radio"/> YES | NO |
| 5. Are the COC and bottle labels complete and legible? | | <input checked="" type="radio"/> YES | NO |
| 6. Is the COC in agreement with samples received? (IDs, dates, times, no. of samples, no. of containers, matrix, requested analyses, etc.) | | <input checked="" type="radio"/> YES | NO |
| 7. Were airbills / shipping documents present and/or removable? | DROP OFF | <input checked="" type="radio"/> YES | NO |
| 8. Are all aqueous samples requiring preservation preserved correctly? (excluding volatiles) | N/A | <input checked="" type="radio"/> YES | NO |
| 9. Are all aqueous non-preserved samples pH 4-9? | <input checked="" type="radio"/> N/A | YES | NO |
| 10. Is there sufficient sample for the requested analyses? | | <input checked="" type="radio"/> YES | NO |
| 11. Were all samples placed in the proper containers for the requested analyses? | | <input checked="" type="radio"/> YES | NO |
| 12. Are all samples within holding times for the requested analyses? | | <input checked="" type="radio"/> YES | NO |
| 13. Were all sample containers received intact? (not broken or leaking, etc.) | | <input checked="" type="radio"/> YES | NO |
| 14. Are all samples requiring no headspace (VOC, GRO, RSK/MEE, Rx CN/S, radon) headspace free? Size of bubble: ___ < green pea ___ > green pea | <input checked="" type="radio"/> N/A | YES | NO |
| 15. Do any water samples contain sediment? Amount of sediment: ___ dusting ___ moderate ___ heavy | Amount N/A | YES | <input checked="" type="radio"/> NO |
| 16. Were the samples shipped on ice? | | <input checked="" type="radio"/> YES | NO |
| 17. Were cooler temperatures measured at 0.1-6.0°C? IR gun used*: #2 <input checked="" type="radio"/> #4 | RAD ONLY | <input checked="" type="radio"/> YES | NO |
| Cooler #: <u>1</u> | | | |
| Temperature (°C): <u>1.2°</u> | | | |
| No. of custody seals on cooler: <u>2</u> | | | |
| External µR/hr reading: <u>11</u> | | | |
| Background µR/hr reading: <u>12</u> | | | |
| Were external µR/hr readings ≤ two times background and within DOT acceptance criteria? <input checked="" type="radio"/> YES / NO / NA (If no, see Form 008.) | | | |

Additional Information: PROVIDE DETAILS BELOW FOR A NO RESPONSE TO ANY QUESTION ABOVE, EXCEPT #1 AND #16.

If applicable, was the client contacted? YES / NO NA Contact: _____ Date/Time: _____

Project Manager Signature / Date: Debbie Fazio 5/9/15

May 19, 2015

ALS1505185

11
2

From: (509) 528-9426
Lesly Wall
CH2M
6267 Latah St
6269 Latah St
Richland, WA 99354

Origin ID: PSCA



J151215022000uv

Ship Date: 08MAY15
ActWgt: 47.0 LB
CAD: 107068051/NET3610

1505185

SHIP TO: (970) 490-1511

BILL THIRD PARTY

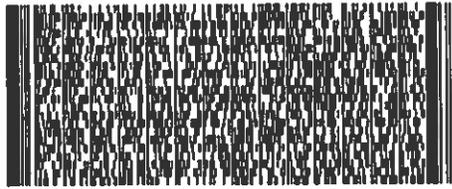
Julie Ellingson
ALS Global
225 Commerce Drive

FORT COLLINS, CO 80524

Delivery Address Bar Code



Ref # ptr# 5825
Invoice #
PO #
Dept #



TRK# 7735 6319 1240

0261

SATURDAY 12:00P
PRIORITY OVERNIGHT

X0 FTCA 1.2⁰

DSR
80524
CO-US
DEN



537 J1125E2/EEL4B

After printing this label:

1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges your FedEx account number.

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Metals

Case Narrative

CH2M HILL Plateau Remediation Company

100-KR-4, MAY 2015 – I15-024

Work Order Number: 1505185

1. This report consists of 2 water samples for total recoverable or dissolved metals.
2. The samples were received cool and intact by ALS on 05/08/15.
3. The sample for dissolved metals had been filtered prior to receipt. Both samples had a pH less than 2 upon receipt.
4. The samples were prepared and analyzed based on SW-846, 3rd Edition procedures.

For analysis by Trace ICP, the samples were digested following method 3005A and the current revision of SOP 806.

5. Analysis by Trace ICP followed method 6010B and the current revision of SOP 834.
6. All standards and solutions are NIST traceable and were used within their recommended shelf life.
7. The samples were prepared and analyzed within the established hold time.

All in house quality control procedures were followed, as described below.

8. General quality control procedures.
 - A preparation (method) blank and laboratory control sample were digested and analyzed with the samples in this digestion batch.
 - The preparation (method) blank associated with this digestion batch was below the reporting limit for the requested analytes. Barium, chromium, iron, and strontium have results above the MDL. Sample results have been compared to the blank results.
 - All laboratory control sample criteria were met.



- All initial and continuing calibration blanks were below the reporting limit for the requested analytes.
- All initial and continuing calibration verifications were within the acceptance criteria for the requested analytes.
- The interference check samples and high standard readbacks associated with Method 6010B were within acceptance criteria.

9. Matrix specific quality control procedures.

Sample 1505185-1 was designated as the quality control sample for this analysis.

Similarity of matrix and therefore relevance of the QC results should not be automatically inferred for any sample other than the native sample selected for QC.

- A matrix spike and matrix spike duplicate were digested and analyzed with this batch. All acceptance criteria for accuracy were met.
- A sample duplicate and matrix spike duplicate were digested and analyzed with this batch. All acceptance criteria for precision were met.
- A serial dilution was analyzed with this ICP batch. All acceptance criteria were met.

10. Sample dilutions were not required for the requested analysis.

The data contained in the following report have been reviewed and approved by the personnel listed below. In addition, ALS certifies that the analyses reported herein are true, complete and correct within the limits of the methods employed.



Jill Latelle
Inorganics Primary Data Reviewer

5/18/15
Date



Aprilia Ellinger
Inorganics Final Data Reviewer

5/19/15
Date



Inorganic Data Reporting Qualifiers

The following qualifiers are used as needed by the laboratory when reporting results of inorganic analyses.

- Result qualifier -- A "B" is entered if the reported value was obtained from a reading that was less than the Reporting Limit but greater than or equal to the Method Detection Limit (MDL). If the analyte was analyzed for but not detected a "U" is entered. For samples, negative values are reported as non-detects ("U" flagged). For blanks, if the absolute value of the negative value is above the MDL and below the reporting limit, then the result is "B" flagged.
- QC qualifier -- Specified entries and their meanings are as follows:
 - E - The reported value is estimated because of the presence of interference. An explanatory note may be included in the narrative.
 - M - Duplicate injection precision was not met.
 - N - Spiked sample recovery not within control limits. A post spike is analyzed for all ICP analyses when the matrix spike and or spike duplicate fail and the native sample concentration is less than four times the spike added concentration.
 - Z - Spiked recovery not within control limits. An explanatory note may be included in the narrative.
 - * - Duplicate analysis (relative percent difference) not within control limits.
 - S - SAR value is estimated as one or more analytes used in the calculation were not detected above the detection limit.
 - C - The analyte was detected in both the sample and the associated QC blank, and the sample concentration was $\leq 5X$ the blank concentration.
 - D - Analyte was reported at a secondary dilution factor, typically $DF > 1$ (i.e., the primary preparation required dilution to either bring the analyte within the calibration range or to minimize interference). Required for organics/wetchem if the sample was diluted.

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Total Recoverable ICP Metals

Method SW6010B

Sample Results

Lab Name: ALS Environmental -- FC

Work Order Number: 1505185

Client Name: CH2M HILL Plateau Remediation Company

ClientProject ID: 100-KR-4, MAY 2015 I15-024

| | |
|-----------|-----------|
| Field ID: | B30XN9 |
| Lab ID: | 1505185-1 |

Sample Matrix: WATER
 % Moisture: N/A
 Date Collected: 08-May-15
 Date Extracted: 11-May-15
 Date Analyzed: 13-May-15
 Prep Method: SW3005 Rev A

Prep Batch: IP150511-3
 QCBatchID: IP150511-3-4
 Run ID: IT150513-1A5
 Cleanup: NONE
 Basis: As Received
 File Name: 150513A.

Analyst: Steve Workman
 Sample Aliquot: 50 ml
 Final Volume: 50 ml
 Result Units: UG/L
 Clean DF: 1

| CASNO | Target Analyte | Dilution Factor | Result | RptLimit/ LOQ/LOD | MDL/DL | Result Qualifier | EPA Qualifier |
|-----------|----------------|-----------------|--------|-------------------|--------|------------------|---------------|
| 7440-36-0 | ANTIMONY | 1 | 5.4 | 20 | 5.4 | U | |
| 7440-38-2 | ARSENIC | 1 | 5.4 | 10 | 5.4 | U | |
| 7440-39-3 | BARIUM | 1 | 69 | 20 | 0.96 | | |
| 7440-41-7 | BERYLLIUM | 1 | 0.49 | 4 | 0.49 | U | |
| 7440-43-9 | CADMIUM | 1 | 0.75 | 5 | 0.75 | U | |
| 7440-70-2 | CALCIUM | 1 | 74000 | 1000 | 18 | | |
| 7440-47-3 | CHROMIUM | 1 | 210 | 10 | 1.3 | | |
| 7440-48-4 | COBALT | 1 | 1.2 | 10 | 1.2 | U | |
| 7440-50-8 | COPPER | 1 | 2.3 | 8 | 1.8 | B | |
| 7439-89-6 | IRON | 1 | 230 | 50 | 16 | | |
| 7439-95-4 | MAGNESIUM | 1 | 18000 | 750 | 22 | | |
| 7439-96-5 | MANGANESE | 1 | 6.5 | 5 | 0.91 | | |
| 7440-02-0 | NICKEL | 1 | 10 | 20 | 2.9 | B | |
| 7440-09-7 | POTASSIUM | 1 | 7200 | 1000 | 190 | | |
| 7440-22-4 | SILVER | 1 | 1.6 | 10 | 1.6 | U | |
| 7440-23-5 | SODIUM | 1 | 29000 | 500 | 49 | | |
| 7440-24-6 | STRONTIUM | 1 | 370 | 10 | 1.8 | | |
| 7440-62-2 | VANADIUM | 1 | 11 | 10 | 1.2 | | |
| 7440-66-6 | ZINC | 1 | 2.7 | 20 | 2.7 | U | |

Data Package ID: *it1505185-1*

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Dissolved ICP Metals

Method SW6010B

Sample Results

Lab Name: ALS Environmental -- FC

Work Order Number: 1505185

Client Name: CH2M HILL Plateau Remediation Company

ClientProject ID: 100-KR-4, MAY 2015 I15-024

| | |
|-----------|-----------|
| Field ID: | B30XP7 |
| Lab ID: | 1505185-2 |

Sample Matrix: WATER
 % Moisture: N/A
 Date Collected: 08-May-15
 Date Extracted: 11-May-15
 Date Analyzed: 13-May-15
 Prep Method: SW3005 Rev A

Prep Batch: IP150511-3
 QCBatchID: IP150511-3-4
 Run ID: IT150513-1A5
 Cleanup: NONE
 Basis: As Received
 File Name: 150513A.

Analyst: Steve Workman
 Sample Aliquot: 50 ml
 Final Volume: 50 ml
 Result Units: UG/L
 Clean DF: 1

| CASNO | Target Analyte | Dilution Factor | Result | RptLimit/ LOQ/LOD | MDL/DL | Result Qualifier | EPA Qualifier |
|-----------|----------------|-----------------|--------|-------------------|--------|------------------|---------------|
| 7440-36-0 | ANTIMONY | 1 | 5.4 | 20 | 5.4 | U | |
| 7440-38-2 | ARSENIC | 1 | 5.4 | 10 | 5.4 | U | |
| 7440-39-3 | BARIUM | 1 | 67 | 20 | 0.96 | | |
| 7440-41-7 | BERYLLIUM | 1 | 0.49 | 4 | 0.49 | U | |
| 7440-43-9 | CADMIUM | 1 | 0.75 | 5 | 0.75 | U | |
| 7440-70-2 | CALCIUM | 1 | 70000 | 1000 | 18 | | |
| 7440-47-3 | CHROMIUM | 1 | 160 | 10 | 1.3 | | |
| 7440-48-4 | COBALT | 1 | 1.2 | 10 | 1.2 | U | |
| 7440-50-8 | COPPER | 1 | 1.8 | 8 | 1.8 | U | |
| 7439-89-6 | IRON | 1 | 16 | 50 | 16 | U | |
| 7439-95-4 | MAGNESIUM | 1 | 17000 | 750 | 22 | | |
| 7439-96-5 | MANGANESE | 1 | 0.91 | 5 | 0.91 | U | |
| 7440-02-0 | NICKEL | 1 | 4.8 | 20 | 2.9 | B | |
| 7440-09-7 | POTASSIUM | 1 | 7100 | 1000 | 190 | | |
| 7440-22-4 | SILVER | 1 | 1.6 | 10 | 1.6 | U | |
| 7440-23-5 | SODIUM | 1 | 29000 | 500 | 49 | | |
| 7440-24-6 | STRONTIUM | 1 | 360 | 10 | 1.8 | | |
| 7440-62-2 | VANADIUM | 1 | 9.6 | 10 | 1.2 | B | |
| 7440-66-6 | ZINC | 1 | 2.7 | 20 | 2.7 | U | |

Data Package ID: it1505185-1

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ALS1505185

ICP Metals

Method SW6010B

Method Blank

Lab Name: ALS Environmental -- FC

Work Order Number: 1505185

Client Name: CH2M HILL Plateau Remediation Company

ClientProject ID: 100-KR-4, MAY 2015 I15-024

Lab ID: FP150511-3MB

Sample Matrix: WATER

% Moisture: N/A

Date Collected: N/A

Date Extracted: 11-May-15

Date Analyzed: 13-May-15

Prep Batch: IP150511-3

QCBatchID: IP150511-3-4

Run ID: IT150513-1A5

Cleanup: NONE

Basis: N/A

File Name: 150513A.

Sample Aliquot: 50 ml

Final Volume: 50 ml

Result Units: UG/L

Clean DF: 1

| CASNO | Target Analyte | DF | Result | RptLimit/ LOQ/LOD | MDL/DL | Result Qualifier | EPA Qualifier |
|-----------|----------------|----|--------|----------------------|--------|---------------------|------------------|
| 7440-36-0 | ANTIMONY | 1 | 5.4 | 20 | 5.4 | U | |
| 7440-38-2 | ARSENIC | 1 | 5.4 | 10 | 5.4 | U | |
| 7440-39-3 | BARIUM | 1 | -1 | 20 | 0.96 | B | |
| 7440-41-7 | BERYLLIUM | 1 | 0.49 | 4 | 0.49 | U | |
| 7440-43-9 | CADMIUM | 1 | 0.75 | 5 | 0.75 | U | |
| 7440-70-2 | CALCIUM | 1 | 18 | 1000 | 18 | U | |
| 7440-47-3 | CHROMIUM | 1 | -1.8 | 10 | 1.3 | B | |
| 7440-48-4 | COBALT | 1 | 1.2 | 10 | 1.2 | U | |
| 7440-50-8 | COPPER | 1 | 1.8 | 8 | 1.8 | U | |
| 7439-89-6 | IRON | 1 | 17 | 50 | 16 | B | |
| 7439-95-4 | MAGNESIUM | 1 | 22 | 750 | 22 | U | |
| 7439-96-5 | MANGANESE | 1 | 0.91 | 5 | 0.91 | U | |
| 7440-02-0 | NICKEL | 1 | 2.9 | 20 | 2.9 | U | |
| 7440-09-7 | POTASSIUM | 1 | 190 | 1000 | 190 | U | |
| 7440-22-4 | SILVER | 1 | 1.6 | 10 | 1.6 | U | |
| 7440-23-5 | SODIUM | 1 | 49 | 500 | 49 | U | |
| 7440-24-6 | STRONTIUM | 1 | -2.3 | 10 | 1.8 | B | |
| 7440-62-2 | VANADIUM | 1 | 1.2 | 10 | 1.2 | U | |
| 7440-66-6 | ZINC | 1 | 2.7 | 20 | 2.7 | U | |

Data Package ID: it1505185-1

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ICP Metals

Method SW6010B

Laboratory Control Sample

Lab Name: ALS Environmental -- FC

Work Order Number: 1505185

Client Name: CH2M HILL Plateau Remediation Company

ClientProject ID: 100-KR-4, MAY 2015 I15-024

Lab ID: FP150511-3LCS

Sample Matrix: WATER

% Moisture: N/A

Date Collected: N/A

Date Extracted: 05/11/2015

Date Analyzed: 05/13/2015

Prep Method: SW3005A

Prep Batch: IP150511-3

QCBatchID: IP150511-3-4

Run ID: IT150513-1A5

Cleanup: NONE

Basis: N/A

File Name: 150513A.

Sample Aliquot: 50 ml

Final Volume: 50 ml

Result Units: UG/L

Clean DF: 1

| CASNO | Target Analyte | Spike Added | LCS Result | Reporting Limit | Result Qualifier | LCS % Rec. | Control Limits |
|-----------|----------------|-------------|------------|-----------------|------------------|------------|----------------|
| 7440-36-0 | ANTIMONY | 500 | 536 | 20 | | 107 | 80 - 120% |
| 7440-38-2 | ARSENIC | 1000 | 1100 | 10 | | 110 | 80 - 120% |
| 7440-39-3 | BARIUM | 1000 | 1070 | 20 | | 107 | 80 - 120% |
| 7440-41-7 | BERYLLIUM | 50 | 54.9 | 4 | | 110 | 80 - 120% |
| 7440-43-9 | CADMIUM | 50 | 54.8 | 5 | | 110 | 80 - 120% |
| 7440-70-2 | CALCIUM | 40000 | 41300 | 1000 | | 103 | 80 - 120% |
| 7440-47-3 | CHROMIUM | 200 | 210 | 10 | | 105 | 80 - 120% |
| 7440-48-4 | COBALT | 500 | 545 | 10 | | 109 | 80 - 120% |
| 7440-50-8 | COPPER | 250 | 271 | 8 | | 109 | 80 - 120% |
| 7439-89-6 | IRON | 1000 | 1010 | 50 | | 101 | 80 - 120% |
| 7439-95-4 | MAGNESIUM | 40000 | 40600 | 750 | | 101 | 80 - 120% |
| 7439-96-5 | MANGANESE | 500 | 568 | 5 | | 114 | 80 - 120% |
| 7440-02-0 | NICKEL | 500 | 554 | 20 | | 111 | 80 - 120% |
| 7440-09-7 | POTASSIUM | 40000 | 41000 | 1000 | | 103 | 80 - 120% |
| 7440-22-4 | SILVER | 100 | 102 | 10 | | 102 | 80 - 120% |
| 7440-23-5 | SODIUM | 40000 | 41300 | 500 | | 103 | 80 - 120% |
| 7440-24-6 | STRONTIUM | 500 | 547 | 10 | | 109 | 80 - 120% |
| 7440-62-2 | VANADIUM | 500 | 552 | 10 | | 110 | 80 - 120% |
| 7440-66-6 | ZINC | 500 | 563 | 20 | | 113 | 80 - 120% |

Data Package ID: *it1505185-1*

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ALS1505185

ICP Metals

Method SW6010B

Matrix Spike And Matrix Spike Duplicate

Lab Name: ALS Environmental -- FC

Work Order Number: 1505185

Client Name: CH2M HILL Plateau Remediation Company

ClientProject ID: 100-KR-4, MAY 2015 I15-024

| | | | |
|--------------------|---------------------------|-------------------------|-----------------------|
| Field ID: B30XN9 | Sample Matrix: WATER | Prep Batch: IP150511-3 | Sample Aliquot: 50 ml |
| LabID: 1505185-1MS | % Moisture: N/A | QCBatchID: IP150511-3-4 | Final Volume: 50 ml |
| | Date Collected: 08-May-15 | Run ID: IT150513-1A5 | Result Units: UG/L |
| | Date Extracted: 11-May-15 | Cleanup: NONE | File Name: 150513A. |
| | Date Analyzed: 13-May-15 | Basis: As Received | |
| | Prep Method: SW3005 Rev A | | |

| CASNO | Target Analyte | Sample Result | Samp Qual | MS Result | MS Qual | Reporting Limit | Spike Added | MS % Rec. | Control Limits |
|-----------|----------------|---------------|-----------|-----------|---------|-----------------|-------------|-----------|----------------|
| 7440-36-0 | ANTIMONY | 5.4 | U | 520 | | 20 | 500 | 104 | 80 - 120% |
| 7440-38-2 | ARSENIC | 5.4 | U | 1060 | | 10 | 1000 | 106 | 80 - 120% |
| 7440-39-3 | BARIUM | 69 | | 1110 | | 20 | 1000 | 104 | 80 - 120% |
| 7440-41-7 | BERYLLIUM | 0.49 | U | 51.9 | | 4 | 50 | 104 | 80 - 120% |
| 7440-43-9 | CADMIUM | 0.75 | U | 53 | | 5 | 50 | 106 | 80 - 120% |
| 7440-70-2 | CALCIUM | 74000 | | 112000 | | 1000 | 40000 | 96 | 80 - 120% |
| 7440-47-3 | CHROMIUM | 210 | | 408 | | 10 | 200 | 98 | 80 - 120% |
| 7440-48-4 | COBALT | 1.2 | U | 515 | | 10 | 500 | 103 | 80 - 120% |
| 7440-50-8 | COPPER | 2.3 | B | 269 | | 8 | 250 | 107 | 80 - 120% |
| 7439-89-6 | IRON | 230 | | 1230 | | 50 | 1000 | 100 | 80 - 120% |
| 7439-95-4 | MAGNESIUM | 18000 | | 56300 | | 750 | 40000 | 97 | 80 - 120% |
| 7439-96-5 | MANGANESE | 6.5 | | 545 | | 5 | 500 | 108 | 80 - 120% |
| 7440-02-0 | NICKEL | 10 | B | 542 | | 20 | 500 | 106 | 80 - 120% |
| 7440-09-7 | POTASSIUM | 7200 | | 50700 | | 1000 | 40000 | 109 | 80 - 120% |
| 7440-22-4 | SILVER | 1.6 | U | 98.7 | | 10 | 100 | 99 | 80 - 120% |
| 7440-23-5 | SODIUM | 29000 | | 74800 | | 500 | 40000 | 115 | 80 - 120% |
| 7440-24-6 | STRONTIUM | 370 | | 894 | | 10 | 500 | 105 | 80 - 120% |
| 7440-62-2 | VANADIUM | 11 | | 540 | | 10 | 500 | 106 | 80 - 120% |
| 7440-66-6 | ZINC | 2.7 | U | 520 | | 20 | 500 | 104 | 80 - 120% |

Data Package ID: *it1505185-1*

May 19, 2015

ALS1505185

ICP Metals

Method SW6010B

Matrix Spike And Matrix Spike Duplicate

Lab Name: ALS Environmental -- FC

Work Order Number: 1505185

Client Name: CH2M HILL Plateau Remediation Company

ClientProject ID: 100-KR-4, MAY 2015 I15-024

| |
|---------------------|
| Field ID: B30XN9 |
| LabID: 1505185-1MSD |

Sample Matrix: WATER

% Moisture: N/A

Date Collected: 08-May-15

Date Extracted: 11-May-15

Date Analyzed: 13-May-15

Prep Method: SW3005 Rev A

Prep Batch: IP150511-3

QCBatchID: IP150511-3-4

Run ID: IT150513-1A5

Cleanup: NONE

Basis: As Received

Sample Aliquot: 50 ml

Final Volume: 50 ml

Result Units: UG/L

File Name: 150513A.

| CASNO | Target Analyte | MSD Result | MSD Qual | Spike Added | MSD % Rec. | Reporting Limit | RPD Limit | RPD |
|-----------|----------------|------------|----------|-------------|------------|-----------------|-----------|-----|
| 7440-36-0 | ANTIMONY | 512 | | 500 | 102 | 20 | 20 | 1 |
| 7440-38-2 | ARSENIC | 1050 | | 1000 | 105 | 10 | 20 | 0 |
| 7440-39-3 | BARIUM | 1100 | | 1000 | 103 | 20 | 20 | 1 |
| 7440-41-7 | BERYLLIUM | 52.1 | | 50 | 104 | 4 | 20 | 0 |
| 7440-43-9 | CADMIUM | 52.2 | | 50 | 104 | 5 | 20 | 2 |
| 7440-70-2 | CALCIUM | 113000 | | 40000 | 99 | 1000 | 20 | 1 |
| 7440-47-3 | CHROMIUM | 407 | | 200 | 98 | 10 | 20 | 0 |
| 7440-48-4 | COBALT | 516 | | 500 | 103 | 10 | 20 | 0 |
| 7440-50-8 | COPPER | 267 | | 250 | 106 | 8 | 20 | 1 |
| 7439-89-6 | IRON | 1250 | | 1000 | 102 | 50 | 20 | 2 |
| 7439-95-4 | MAGNESIUM | 56500 | | 40000 | 97 | 750 | 20 | 0 |
| 7439-96-5 | MANGANESE | 544 | | 500 | 107 | 5 | 20 | 0 |
| 7440-02-0 | NICKEL | 543 | | 500 | 107 | 20 | 20 | 0 |
| 7440-09-7 | POTASSIUM | 50500 | | 40000 | 108 | 1000 | 20 | 0 |
| 7440-22-4 | SILVER | 97.5 | | 100 | 98 | 10 | 20 | 1 |
| 7440-23-5 | SODIUM | 74000 | | 40000 | 113 | 500 | 20 | 1 |
| 7440-24-6 | STRONTIUM | 890 | | 500 | 104 | 10 | 20 | 0 |
| 7440-62-2 | VANADIUM | 536 | | 500 | 105 | 10 | 20 | 1 |
| 7440-66-6 | ZINC | 521 | | 500 | 104 | 20 | 20 | 0 |

Data Package ID: *it1505185-1*