



May 19, 2015

ALS1505067

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: 1505067
Project Name: RCRA, MAY 2015
Project Number: W15-005

Dear Ms. Waters-Husted:

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

Total Organic Carbon

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

May 19, 2015

ALS1505067

ALS Environmental -- FC

Sample Number(s) Cross-Reference Table

OrderNum: 1505067

Client Name: CH2M HILL Plateau Remediation Company

Client Project Name: RCRA, MAY 2015

Client Project Number: W15-005

Client PO Number: BOA 54854

Client Sample Number	Lab Sample Number	COC Number	Matrix	Date Collected	Time Collected
B314P1	1505067-1		WATER	04-May-15	8:46
B314P6	1505067-2		WATER	04-May-15	10:55

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. #

W15-005-152

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Collector: K.C. Patterson
 CHPRC
 SAF No.: W15-005
 Project Title: RCRA, MAY 2015
 Shipped To (Lab): ALS Environmental Ft. Collins
 Protocol: RCRA

Contact/Requester: Karen Waters-Husted
 Sampling Origin: Hanford Site
 Logbook No.: HNF-N-506 74 / 70
 Method of Shipment: Commercial Carrier
 Priority: 30 Days **PRIORITY**

Telephone No.: 509-376-4650
 Purchase Order/Charge Code: 300071
 Ice Chest No.: 6005-356
 Bill of Lading/Air Bill No.: 773521674427
 Offsite Property No.: 5810

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

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

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B314P1	N	W	5-4-15	0846	1x250-mL aG	9060_TOC: COMMON	28 Days	HCl or H2SO4 to pH <2/Cool <=6C

ALS1505067

Relinquished By	Print	Date/Time	Received By	Print	Date/Time	Matrix *
K.C. Patterson		MAY 04 2015 1120	L.D. Wall		MAY 04 2015 1120	DS = Drum Solids DL = Drum Liquids T = Tissue WI = Wipe L = Liquid V = Vegetation X = Other
CHPRC		MAY 04 2015 1400	CHPRC	FEDEX		S = Soil SE = Sediment SO = Solid SL = Sludge W = Water O = Oil A = Air
Relinquished By	FED EX		C. Trumble		5-5-15 0940	
Relinquished By						

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FINAL SAMPLE DISPOSITION

Disposal Method (e.g., Return to customer, per lab procedure, used in process)

Disposed By

Date/Time

May 19, 2015

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ALS Environmental - Fort Collins
CONDITION OF SAMPLE UPON RECEIPT FORM

Client: CHPRC

Workorder No: 1505067

Project Manager: JF

Initials: CDT Date: 5-5-15

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 Amount of sediment: ___ dusting ___ moderate ___ heavy	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*: <input checked="" type="radio"/> #2 #4 RAD ONLY		<input checked="" type="radio"/> YES	NO
Cooler #: <u>1</u>			
Temperature (°C): <u>3.6</u>			
No. of custody seals on cooler: <u>1</u>			
External µR/hr reading: <u>11</u>			
Background µR/hr reading: <u>11</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: [Signature] 5/5/15

From: (500) 373-3547
Chris Aiken
CH20J
6267 latak at
richland, WA 99354

Origin ID: PSCA



Ship Date: 04MAY15
ActWgt: 17.0 LB
CAC: 107066051/NET3610

1505067

Delivery Address Bar Code



SHIP TO: (378) 430-1511
Julie Ellingson

BILL THIRD PARTY

Ref #
Invoice #
PO #
Dept #

ptr#5010

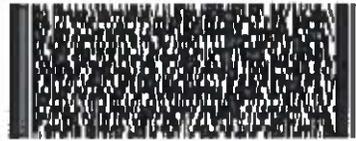
225 Commerca Drive
FORT COLLINS, CO 80524

TUE - 05 MAY 10:30A
PRIORITY OVERNIGHT

TRK# 7735 2167 7427
E201

DSR
80524
CO-US
DEN

XH FTCA



537112522EE-0

11
-1
3.6'

After printing this label:

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Organic Carbon Case Narrative

CH2M HILL Plateau Remediation Company

RCRA, MAY 2015 -- W15-005

Work Order Number: 1505067

1. This report consists of two water samples.
2. The samples were received cool and intact by ALS on 05/05/15.
3. The samples had been correctly preserved for the requested analysis.
4. The samples were prepared for analysis based on SW-846, 3rd Edition procedures.
5. The samples were analyzed following SW-846, 3rd Edition procedures for the current revision of the following SOP and method:

<u>Analyte</u>	<u>Method</u>	<u>SOP #</u>
TOC (Total Organic Carbon)	9060	670

6. All standards and solutions were used within their recommended shelf life.
7. The samples were prepared and analyzed within the established hold time for TOC analysis.

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

8. General quality control procedures.
 - n A preparation (method) blank, laboratory control sample (LCS), and laboratory control sample duplicate (LCSD) were prepared and analyzed with the samples in this preparation batch.
 - n The method blank associated with this batch was below the reporting limit for the requested analyte.
 - n All laboratory control sample criteria were met.



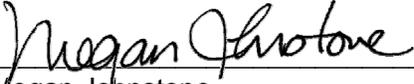
- n All initial and continuing calibration verifications were within the acceptance criteria for the requested analyte.

9. Matrix specific quality control procedures.

Per method requirements, matrix QC was performed for this analysis. Since a sample from this project name and number was not the selected quality control (QC) sample, matrix specific QC results are not included in this report.

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.



Megan Johnstone
Organics Primary Data Reviewer

5/15/15
Date



Julie Ellinger
Organics Final Data Reviewer

5/19/15
Date



Data Reporting Qualifiers

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

- Concentration qualifier -- If the analyte was analyzed for but not detected a "U" is entered.
- QC qualifier -- Specified entries and their meanings are as follows:
 - N - Spiked sample recovery not within control limits.
 - * - Duplicate analysis (relative percent difference) not within control limits.
 - 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).

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ALS1505067

Organic Carbon

Method SW9060

Method Blank

Lab Name: ALS Environmental -- FC

Work Order Number: 1505067

Client Name: CH2M HILL Plateau Remediation Company

ClientProject ID: RCRA, MAY 2015 W15-005

Lab ID: MO150506-2MB

Sample Matrix: WATER

% Moisture: N/A

Date Collected: N/A

Date Extracted: 06-May-15

Date Analyzed: 06-May-15

Prep Method: NONE

Prep Batch: MO150506-2

QCBatchID: MO150506-2-1

Run ID: MO150506-1A1

Cleanup: NONE

Basis: N/A

File Name: 05061017

Sample Aliquot: 40 ml

Final Volume: 40 ml

Result Units: MG/L

Clean DF: 1

CASNO	Target Analyte	DF	Result	RptLimit/ LOQ/LOD	Result Qualifier	EPA Qualifier
10-35-5	TOTAL ORGANIC CARBON	1	1	1	U	

Data Package ID: MO1505067-1

Date Printed: Friday, May 15, 2015

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TOTAL ORGANIC CARBON

Method SW9060

Sample Results

Lab Name: ALS Environmental -- FC
Client Name: CH2M HILL Plateau Remediation Company
Client Project ID: RCRA, MAY 2015 W15-005
Work Order Number: 1505067 **Final Volume:** 40 ml
Reporting Basis: As Received **Matrix:** WATER
Prep Method: NONE **Result Units:** MG/L
Analyst: Steven D. White

Client Sample ID	Lab ID	Date Collected	Date Prepared	Date Analyzed	Percent Moisture	Dilution Factor	Result	RptLimit/ LOQ/LOD	Flag	Sample Aliquot
B314P1	1505067-1	05/04/2015	05/06/2015	05/06/2015	N/A	1	1	1	U	40 ml
B314P6	1505067-2	05/04/2015	05/06/2015	05/06/2015	N/A	1	1	1	U	40 ml

Comments:

1. ND or U = Not Detected at or above the client requested detection limit.

Data Package ID: MO1505067-1

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Organic Carbon

Method SW9060

Laboratory Control Sample and Laboratory Control Sample Duplicate

Lab Name: ALS Environmental -- FC

Work Order Number: 1505067

Client Name: CH2M HILL Plateau Remediation Company

ClientProject ID: RCRA, MAY 2015 W15-005

Lab ID: MO150506-2LCS	Sample Matrix: WATER % Moisture: N/A Date Collected: N/A Date Extracted: 05/06/2015 Date Analyzed: 05/06/2015 Prep Method: NONE	Prep Batch: MO150506-2 QCBatchID: MO150506-2-1 Run ID: MO150506-1A1 Cleanup: NONE Basis: N/A File Name: 05061017	Sample Aliquot: 40 ml Final Volume: 40 ml Result Units: MG/L Clean DF: 1
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CASNO	Target Analyte	Spike Added	LCS Result	Reporting Limit	Result Qualifier	LCS % Rec.	Control Limits
10-35-5	TOTAL ORGANIC CARBON	15	15.5	1		103	85 - 115%

Lab ID: MO150506-2LCSD	Sample Matrix: WATER % Moisture: N/A Date Collected: N/A Date Extracted: 05/06/2015 Date Analyzed: 05/06/2015 Prep Method: NONE	Prep Batch: MO150506-2 QCBatchID: MO150506-2-1 Run ID: MO150506-1A1 Cleanup: NONE Basis: N/A File Name: 05061017	Sample Aliquot: 40 ml Final Volume: 40 ml Result Units: MG/L Clean DF: 1
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CASNO	Target Analyte	Spike Added	LCSD Result	Reporting Limit	Result Qualifier	LCSD % Rec.	RPD Limit	RPD
10-35-5	TOTAL ORGANIC CARBON	15	15.5	1		103	20	0

Data Package ID: MO1505067-1