



June 04, 2015

ALS1505215

Ft. Collins, Colorado

LIMS Version: 6.763

Page 1 of 1

Monday, June 01, 2015

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

Re: ALS Workorder: 1505215
Project Name: RCRA, MAY 2015
Project Number: W15-005

Dear Ms. Waters-Husted:

Four water samples were received from CH2M HILL Plateau Remediation Company, on 5/12/2015. 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

ALS Environmental -- FC

Sample Number(s) Cross-Reference Table

OrderNum: 1505215

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
B314R8	1505215-1		WATER	11-May-15	10:05
B314R9	1505215-2		WATER	11-May-15	10:05
B314T0	1505215-3		WATER	11-May-15	10:05
B314T1	1505215-4		WATER	11-May-15	10:05

June 04, 2015

ALS1505215

ALS Environmental - Fort Collins

CONDITION OF SAMPLE UPON RECEIPT FORM



Client: CHPRC

Workorder No: 1505215

Project Manager: JE

Initials: CDJ Date: 5-12-15

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*: <input checked="" type="radio"/> #2 #4	RAD ONLY	<input checked="" type="radio"/> YES	NO

Cooler #: 1

Temperature (°C): 3.6

No. of custody seals on cooler: 2

External µR/hr reading: 12

Background µR/hr reading: 12

Were external µR/hr readings ≤ two times background and within DOT acceptance criteria? 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] 5/12/15

June 04, 2015

ALS1505215

1505215 12
-2

From: (509) 528-0426
Lesly Wall
CH2M
6267 Latah St.
6269 Latah St.
Richland, WA 99354

Origin ID: PSCA



Ship Date: 11MAY15
ActWgt: 17.0 LB
CAD: 107066051/MNET3810

Delivery Address Bar Code



SHIP TO: (970) 498-1511
Julie Ellingson
ALS Global
225 Commerce Drive

BILL THRD PARTY

Ref # ptr# 5632
Invoice #
PO #
Dept #

3.6'

FORT COLLINS, CO 80524

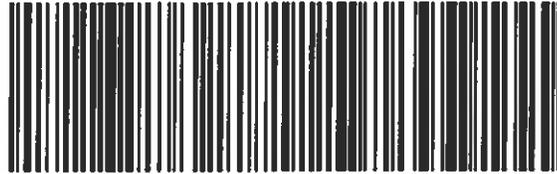
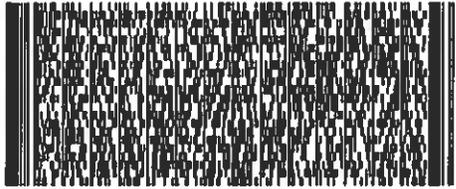
TUE - 12 MAY 10:30A
PRIORITY OVERNIGHT

TRK# 7735 7298 7714

0281

DSR
80524
CO-US
DEN

XH FTCA



537.J3/C918/EE4B

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: 1505215

1. This report consists of four water samples.
2. The samples were received cool and intact by ALS on 05/12/15.
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.

Sample 1505215-4 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.

- n A matrix spike (MS) and matrix spike duplicate (MSD) were prepared and analyzed with this batch. All guidance criteria for precision and accuracy 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.

Megan Johnstone
Megan Johnstone
Organics Primary Data Reviewer

5/26/15
Date

Arlin Elljes
Arlin Elljes
Organics Final Data Reviewer

5/31/15
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).

June 04, 2015

ALS1505215

Organic Carbon

Method SW9060

Method Blank

Lab Name: ALS Environmental -- FC

Work Order Number: 1505215

Client Name: CH2M HILL Plateau Remediation Company

ClientProject ID: RCRA, MAY 2015 W15-005

Lab ID: MO150513-2MB

Sample Matrix: WATER

% Moisture: N/A

Date Collected: N/A

Date Extracted: 13-May-15

Date Analyzed: 13-May-15

Prep Method: NONE

Prep Batch: MO150513-2

QCBatchID: MO150513-2-1

Run ID: MO150513-1A1

Cleanup: NONE

Basis: N/A

File Name: 05130906

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: MO1505215-1

Date Printed: Tuesday, May 26, 2015

ALS Environmental -- FC

Page 1 of 1

LIMS Version: 6.761

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: 1505215 **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
B314R8	1505215-1	05/11/2015	05/13/2015	05/13/2015	N/A	1	1	1	U	40 ml
B314R9	1505215-2	05/11/2015	05/13/2015	05/13/2015	N/A	1	1	1	U	40 ml
B314T0	1505215-3	05/11/2015	05/13/2015	05/13/2015	N/A	1	1	1	U	40 ml
B314T1	1505215-4	05/11/2015	05/13/2015	05/13/2015	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: MO1505215-1

June 04, 2015

ALS1505215

Organic Carbon

Method SW9060

Laboratory Control Sample and Laboratory Control Sample Duplicate

Lab Name: ALS Environmental -- FC

Work Order Number: 1505215

Client Name: CH2M HILL Plateau Remediation Company

ClientProject ID: RCRA, MAY 2015 W15-005

Lab ID: MO150513-2LCS

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 05/13/2015
Date Analyzed: 05/13/2015
Prep Method: NONE

Prep Batch: MO150513-2
QCBatchID: MO150513-2-1
Run ID: MO150513-1A1
Cleanup: NONE
Basis: N/A
File Name: 05130906

Sample Aliquot: 40 ml
Final Volume: 40 ml
Result Units: MG/L
Clean DF: 1

CASNO	Target Analyte	Spike Added	LCS Result	Reporting Limit	Result Qualifier	LCS % Rec.	Control Limits
10-35-5	TOTAL ORGANIC CARBON	15	15.8	1		105	85 - 115%

Lab ID: MO150513-2LCSD

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 05/13/2015
Date Analyzed: 05/13/2015
Prep Method: NONE

Prep Batch: MO150513-2
QCBatchID: MO150513-2-1
Run ID: MO150513-1A1
Cleanup: NONE
Basis: N/A
File Name: 05130906

Sample Aliquot: 40 ml
Final Volume: 40 ml
Result Units: MG/L
Clean DF: 1

CASNO	Target Analyte	Spike Added	LCSD Result	Reporting Limit	Result Qualifier	LCSD % Rec.	RPD Limit	RPD
10-35-5	TOTAL ORGANIC CARBON	15	15.8	1		105	20	0

Data Package ID: MO1505215-1

June 04, 2015

ALS1505215

Organic Carbon

Method SW9060

Matrix Spike And Matrix Spike Duplicate

Lab Name: ALS Environmental -- FC

Work Order Number: 1505215

Client Name: CH2M HILL Plateau Remediation Company

ClientProject ID: RCRA, MAY 2015 W15-005

Field ID: B314T1
LabID: 1505215-4MS

Sample Matrix: WATER
 % Moisture: N/A
 Date Collected: 11-May-15
 Date Extracted: 13-May-15
 Date Analyzed: 13-May-15
 Prep Method: NONE

Prep Batch: MO150513-2
 QCBatchID: MO150513-2-1
 Run ID: MO150513-1A1
 Cleanup: NONE
 Basis: As Received

Sample Aliquot: 40 ml
 Final Volume: 40 ml
 Result Units: MG/L
 File Name: 05130906

CASNO	Target Analyte	Sample Result	Samp Qual	MS Result	MS Qual	Reporting Limit	Spike Added	MS % Rec.	Control Limits
10-35-5	TOTAL ORGANIC CARBON	1	U	11		1	10	109	80 - 120%

Field ID: B314T1
LabID: 1505215-4MSD

Sample Matrix: WATER
 % Moisture: N/A
 Date Collected: 11-May-15
 Date Extracted: 13-May-15
 Date Analyzed: 13-May-15
 Prep Method: NONE

Prep Batch: MO150513-2
 QCBatchID: MO150513-2-1
 Run ID: MO150513-1A1
 Cleanup: NONE
 Basis: As Received

Sample Aliquot: 40 ml
 Final Volume: 40 ml
 Result Units: MG/L
 File Name: 05130906

CASNO	Target Analyte	MSD Result	MSD Qual	Spike Added	MSD % Rec.	Reporting Limit	RPD Limit	RPD
10-35-5	TOTAL ORGANIC CARBON	11.5		10	114	1	20	4

Data Package ID: MO1505215-1