



October 8, 2015

Stan Spencer
NW Environmental Protection Specialist
Colorado Oil and Gas Conservation Commission
796 Megan Ave, Suite 201,
Rifle, CO 81650

Re: Parachute Centralized E&P WMF produced water spill closure request

Dear Mr. Spencer,

Attached are the laboratory results and the sample location map for soil samples collected from the impacted area and nearby non-impacted native soil in order to close the produced water spill discovered on July 13, 2015 at the Parachute Centralized E&P WMF.

Soil samples collected from the impacted area were analyzed for a reduced list of analytes which included organic compounds and inorganics listed in COGCC Table 910-1. The abbreviated list of analytes was approved by COGCC via supplemental Form 19. Three grab samples were collected from nearby non-impacted, native soil to establish the background concentrations for arsenic. In accordance with the COGCC Rule 910.b.(3)E, one grab sample was analyzed for inorganics to establish background soil conditions.

As the attached lab reports indicate, all organic compounds listed in the COGCC Table 910-1 are in compliance with the cleanup requirements. The excavated area was backfilled with the excavated material.

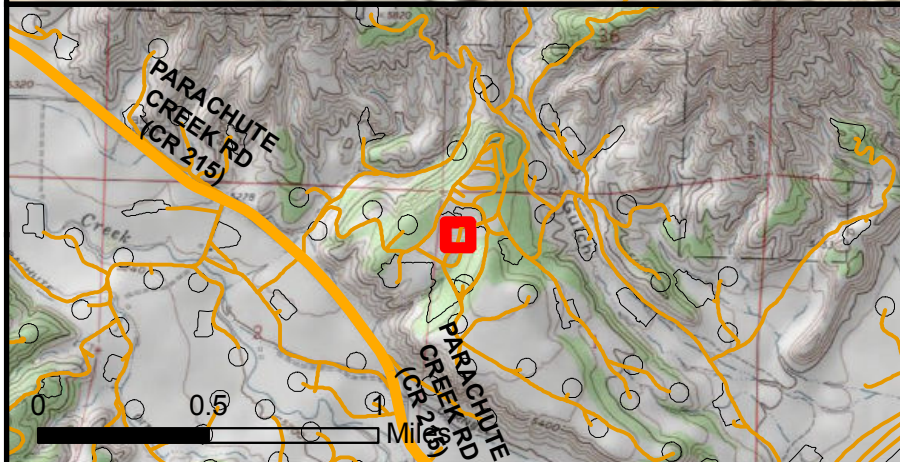
Please do not hesitate to contact me at (970) 683-2295 should you have any questions or concerns regarding this information.

Sincerely,

Karolina Blaney
Environmental Specialist

Attachments (2)

- Sampling Location Map
- Laboratory Reports



Spill Closure Map

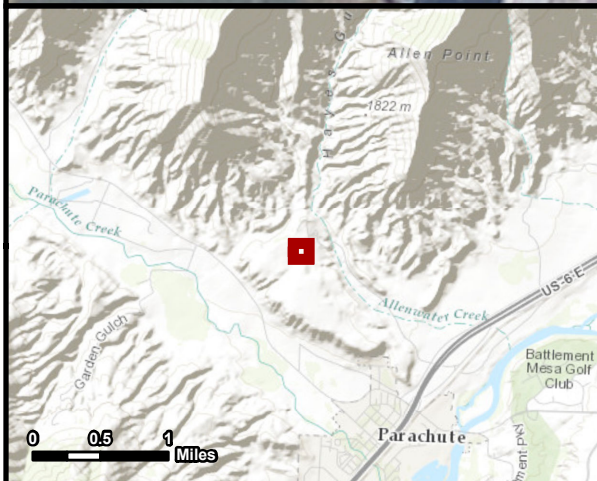
Parachute WMF

39.471308 -108.065741

Section 1, Township 7 South, Range 96 West

- Sample Location
- Impacted Area
- Road (from Garfield County)
- Existing Road
- Stream
- Existing Pad
- River





NOTES / COMMENTS:

DISCLAIMER: This representation and the Geographic Information System (GIS) used to create it are designed as a source of reference and not intended to replace official records and/or legal surveys. HCSL assumes no responsibility for any risks, dangers, or liabilities that may result from its use and makes no guarantee as to the quality or accuracy of the underlying data.



Background Location Map Parachute Centralized E&P WM Facility

39.473323 -108.065146
Section 36, Township 6 South, Range 96 West

Mapped Features

● Background Locations

PLSS

□ Township

□ Section

Transportation

— CO Highways

— County Roads

— Local Streets

— Access Roads

Hydrography

— Ditch

— Intermittent Stream

— Perennial Stream

— Waterbody

— Watershed



HRL COMPLIANCE SOLUTIONS, INC.
Environmental Consultants

Author: E. Fought

Revision: 0

Date: 10/5/2015

		Location	Parachute Evap impacted area	BKGD 1	BKGD 2	BKGD 3
Contaminant of Concern ↓	COGCC standards	Date	9/28/2015	10/17/2014	10/17/2014	10/17/2014
Organic Compounds in Soil						
TPH (DRO+GRO)	500	mg/kg	ND			
DRO		mg/kg	ND			
GRO		mg/kg	ND			
Benzene	0.17	mg/kg	ND			
Toluene	85	mg/kg	ND			
Ethylbenzene	100	mg/kg	ND			
Xylenes (Total)	175	mg/kg	ND			
Acenaphthene	1,000	mg/kg	ND			
Anthracene	1,000	mg/kg	ND			
Benzo(A)anthracene	0.22	mg/kg	ND			
Benzo(B)fluoranthene	0.22	mg/kg	ND			
Benzo(K)fluoranthene	2.2	mg/kg	ND			
Benzo(A)pyrene	0.022	mg/kg	ND			
Chrysene	22	mg/kg	ND			
Dibenzo(A,H)anthracene	0.022	mg/kg	ND			
Fluoranthene	1,000	mg/kg	ND			
Fluorene	1,000	mg/kg	ND			
Indeno(1,2,3-cd)pyrene	0.22	mg/kg	ND			
Naphthalene	23	mg/kg	ND			
Pyrene	1,000	mg/kg	ND			
Inorganics in Soil						
EC	<4 or 2 x background	mmhos/cm	1.6			1
SAR	<12		18			0.62
pH	6-9		9.7			8.5
Metals in Soil						
Arsenic	0.39	mg/kg		21	24	9.7

Note:

ND = Non Detect

mg/Kg = milligrams per kilogram = parts per million

Exceeds COGCC standards



07-Oct-2015

Karolina Blaney
WPX Energy Rocky Mountain, LLC
1058 Country Rd 215
Parachute, CO 81635

Re: **Parachute Evap**

Work Order: **15091653**

Dear Karolina,

ALS Environmental received 1 sample on 29-Sep-2015 09:00 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested.

Sample results are compliant with NELAP standard requirements and QC results achieved laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 9.

If you have any questions regarding this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Les Arnold".

Electronically approved by: Les Arnold

Les Arnold
Senior Project Manager



Certificate No: MN 532786

Report of Laboratory Analysis

ADDRESS 3352 128th Avenue Holland, Michigan 49424-9263 | PHONE (616) 399-6070 | FAX (616) 399-6185

ALS GROUP USA, CORP Part of the ALS Laboratory Group A Campbell Brothers Limited Company

Environmental The ALS logo, a stylized 'A' with a flame inside a triangle.

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

Client: WPX Energy Rocky Mountain, LLC
Project: Parachute Evap
Work Order: 15091653

Work Order Sample Summary

<u>Lab Samp ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Tag Number</u>	<u>Collection Date</u>	<u>Date Received</u>	<u>Hold</u>
15091653-01	Parachute Evap	Soil		9/28/2015 12:05	9/29/2015 09:00	<input type="checkbox"/>

Client: WPX Energy Rocky Mountain, LLC
Project: Parachute Evap
Work Order: 15091653

Case Narrative

Samples for the above noted Work Order were received on 09/29/2015. The attached "Sample Receipt Checklist" documents the status of custody seals, container integrity, preservation, and temperature compliance.

Samples were analyzed according to the analytical methodology previously transmitted in the "Work Order Acknowledgement". Methodologies are also documented in the "Analytical Result" section for each sample. Quality control results are listed in the "QC Report" section. Sample association for the reported quality control is located at the end of each batch summary. If applicable, results are appropriately qualified in the Analytical Result and QC Report sections. The "Qualifiers" section documents the various qualifiers, units, and acronyms utilized in reporting.

With the following exceptions, all sample analyses achieved analytical criteria.

Sample Receiving:

No deviations or anomalies were noted.

Volatile Organics:

No deviations or anomalies were noted.

Extractable Organics:

No deviations or anomalies were noted.

Metals:

No deviations or anomalies were noted.

Wet Chemistry:

No deviations or anomalies were noted.

ALS Group USA, Corp

Date: 07-Oct-15

Client: WPX Energy Rocky Mountain, LLC
Project: Parachute Evap
Sample ID: Parachute Evap
Collection Date: 9/28/2015 12:05 PM

Work Order: 15091653
Lab ID: 15091653-01
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
			SW8015M		Prep: SW3541 / 10/2/15	Analyst: IT
DRO (C10-C28)	ND		4.1	mg/Kg-dry	1	10/5/2015 12:01 PM
Surr: 4-Terphenyl-d14	57.4		39-133	%REC	1	10/5/2015 12:01 PM
GASOLINE RANGE ORGANICS BY GC-FID						
			SW8015D		Prep: SW5035 / 9/29/15	Analyst: IT
GRO (C6-C10)	ND		2.5	mg/Kg-dry	1	9/29/2015 04:08 PM
Surr: Toluene-d8	111		50-150	%REC	1	9/29/2015 04:08 PM
SOLUBLE CATIONS FOR SAR						
			SW846 6010C		Prep: USDA Method 20B / 10/5/15	Analyst: JEC
Calcium	13		5.0	mg/L	10	10/5/2015 12:09 PM
Magnesium	2.9		2.0	mg/L	10	10/5/2015 12:09 PM
Sodium	270		2.0	mg/L	10	10/5/2015 12:09 PM
SODIUM ADSORPTION RATIO						
			USDA H60 METHO		Prep: USDA Method 20B / 10/5/15	Analyst: JEC
Sodium Adsorption Ratio	18		0.010	none	1	10/5/2015
SEMI-VOLATILE ORGANIC COMPOUNDS						
			SW846 8270D		Prep: SW3541 / 10/2/15	Analyst: RS
Acenaphthene	ND		0.0067	mg/Kg-dry	1	10/3/2015 05:24 AM
Anthracene	ND		0.0067	mg/Kg-dry	1	10/3/2015 05:24 AM
Benzo(a)anthracene	ND		0.0067	mg/Kg-dry	1	10/3/2015 05:24 AM
Benzo(a)pyrene	ND		0.0067	mg/Kg-dry	1	10/3/2015 05:24 AM
Benzo(b)fluoranthene	ND		0.0067	mg/Kg-dry	1	10/3/2015 05:24 AM
Benzo(k)fluoranthene	ND		0.0067	mg/Kg-dry	1	10/3/2015 05:24 AM
Chrysene	ND		0.0067	mg/Kg-dry	1	10/3/2015 05:24 AM
Dibenzo(a,h)anthracene	ND		0.0067	mg/Kg-dry	1	10/3/2015 05:24 AM
Fluoranthene	ND		0.0067	mg/Kg-dry	1	10/3/2015 05:24 AM
Fluorene	ND		0.0067	mg/Kg-dry	1	10/3/2015 05:24 AM
Indeno(1,2,3-cd)pyrene	ND		0.0067	mg/Kg-dry	1	10/3/2015 05:24 AM
Naphthalene	ND		0.0067	mg/Kg-dry	1	10/3/2015 05:24 AM
Pyrene	ND		0.0067	mg/Kg-dry	1	10/3/2015 05:24 AM
Surr: 2-Fluorobiphenyl	58.1		12-100	%REC	1	10/3/2015 05:24 AM
Surr: 4-Terphenyl-d14	73.8		25-137	%REC	1	10/3/2015 05:24 AM
Surr: Nitrobenzene-d5	60.5		37-107	%REC	1	10/3/2015 05:24 AM
VOLATILE ORGANIC COMPOUNDS						
			SW8260B		Prep: SW5035 / 9/29/15	Analyst: AK
Benzene	ND		0.030	mg/Kg-dry	1	10/7/2015 01:17 PM
Ethylbenzene	ND		0.030	mg/Kg-dry	1	10/7/2015 01:17 PM
m,p-Xylene	ND		0.061	mg/Kg-dry	1	10/7/2015 01:17 PM
o-Xylene	ND		0.030	mg/Kg-dry	1	10/7/2015 01:17 PM
Toluene	ND		0.030	mg/Kg-dry	1	10/7/2015 01:17 PM
Xylenes, Total	ND		0.091	mg/Kg-dry	1	10/7/2015 01:17 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 07-Oct-15

Client: WPX Energy Rocky Mountain, LLC

Project: Parachute Evap

Work Order: 15091653

Sample ID: Parachute Evap

Lab ID: 15091653-01

Collection Date: 9/28/2015 12:05 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: 1,2-Dichloroethane-d4	97.7		70-130	%REC	1	10/7/2015 01:17 PM
Surr: 4-Bromofluorobenzene	102		70-130	%REC	1	10/7/2015 01:17 PM
Surr: Dibromofluoromethane	95.0		70-130	%REC	1	10/7/2015 01:17 PM
Surr: Toluene-d8	95.6		70-130	%REC	1	10/7/2015 01:17 PM
ELECTRICAL CONDUCTIVITY (SAR)			USDA H60 METHO	Prep: USDA Method 20B / 10/5/15		Analyst: JB
Electrical Conductivity @ Saturation	1.6		0.050	mmhos/cm @2	10	10/5/2015 04:30 PM
MOISTURE			E160.3M			Analyst: TM
Moisture	1.0		0.050	% of sample	1	9/30/2015 04:16 PM
PH			SW9045D	Prep: EXTRACT / 9/30/15		Analyst: STP
pH	9.7			s.u.	1	9/30/2015 02:30 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

<u>Qualifier</u>	<u>Description</u>
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte is present at an estimated concentration between the MDL and Report Limit
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL
X	Analyte was detected in the Method Blank between the MDL and PQL, sample results may exhibit background or reagent contamination at the observed level.

<u>Acronym</u>	<u>Description</u>
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
LOD	Limit of Detection (see MDL)
LOQ	Limit of Quantitation (see PQL)
MBLK	Method Blank
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
TDL	Target Detection Limit
TNTC	Too Numerous To Count
A	APHA Standard Methods
D	ASTM
E	EPA
SW	SW-846 Update III

<u>Units Reported</u>	<u>Description</u>
% of sample	Percent of Sample
mg/Kg-dry	Milligrams per Kilogram Dry Weight
mg/L	Milligrams per Liter
mmhos/cm @25°C	Millimhos-Centimeter at 25 Degrees Celcius
none	
s.u.	Standard Units

WORKORDER
#

15091653

PAGE

1 of 1

DISPOSAL







By Lab or Return to Client

[illegible]

*Time Zone (Circle): EST CST MST PST Matrix: O = oil S = soil NS = non-soil solid W = water L = liquid E = extract F = filter

For metals or anions, please detail analytes below.

Comments: <div style="text-align: center; font-size: 2em; transform: rotate(-15deg);">8205</div>	QC PACKAGE (check below):	
	<input checked="" type="checkbox"/> X	LEVEL II (Standard QC)
	<input type="checkbox"/>	LEVEL III (Std QC + forms)
	<input type="checkbox"/>	LEVEL IV (Std QC + forms + raw data)
	<input type="checkbox"/>	
Preservative Key: 1-HCl 2-HNO3 3-H2SO4 4-NaOH 5-NaHSO4 7-Other 8-4 degrees C 9-5035		

	SIGNATURE	PRINTED NAME	DATE	TIME
RELINQUISHED BY	Karolina Blaney	Karolina Blaney	9/28/2015	16:00:00 PM
RECEIVED BY			9-28-15	1610
RELINQUISHED BY			9-28-15	1630
RECEIVED BY			9-29-15	900
RELINQUISHED BY				
RECEIVED BY				

ORIGIN ID: RILA (616) 298-1033
 NICK MARTINEZ
 ALS ENVIRONMENTAL PARACHUTE
 PARACHUTE SERVICE CENTER
 127 EAST 1ST ST
 PARACHUTE, CO 81635
 UNITED STATES US

SHIP DATE: 28SEP15
 ACTWGT: 78.00 LB
 CAD: 2264840/NET3870
 DIMS: 24x15x15 IN
 BILL SENDER:

TO **SAMPLE RECEIVING**
ALS ENVIRONMENTAL HOLLAND LAB
3352 128TH AVE

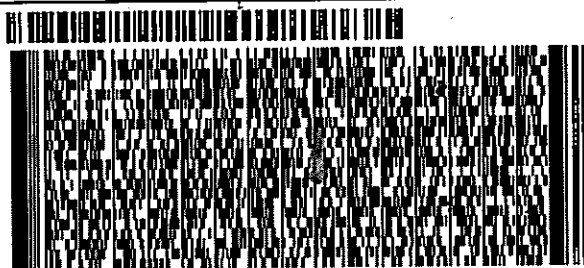
HOLLAND MI 49424

(616) 399-8070

REF: 092815-1

INV.
 PO: PARACHUTE

DEPT:



FedEx
 Express



REL#
 3785346

2 of 3

MPS# **7746 1479 8550**

0263

Mstr# **7746 1479 8458**

0201

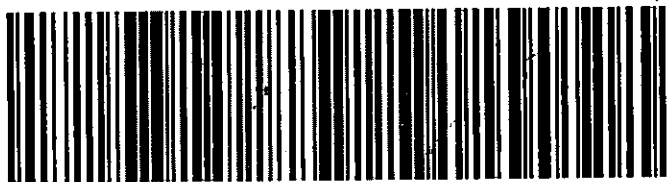
XX HLMA

TUE - 29 SEP 10:30A
PRIORITY OVERNIGHT

49424

MI-US

GRR



539129707/3100

After printing this label:

1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
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be read and scanned.

poses is fraudulent and could result in a delay, non-delivery, misdelivery, or and file a timely claim. Limitations of intrinsic value of the package, loss initial, consequential, or special is stated loss. Maximum for items of d in our Service Guide. Written

3352 128th Avenue
 Holland, MI 49424
 (616) 399-8070

ALS Environmental

Client: Sample ID: Date: Analysis: Signature: Stamp: 09/28/2015 10:30 AM

Collected BY

Signature

Signature: Stamp: 09/28/2015 10:30 AM

Signature: Stamp: 09/28/2015 10:30 AM

Sample Receipt Checklist

Client Name: **WPX**

Date/Time Received: **29-Sep-15 09:00**

Work Order: **15091653**

Received by: **NML**

Checklist completed by *Diane Shaw* 29-Sep-15
eSignature Date

Reviewed by: *Lee Arnold* 29-Sep-15
eSignature Date

Matrices: **Soil**

Carrier name: **FedEx**

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature in compliance?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample(s) received on ice?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Temperature(s)/Thermometer(s):	<u>3.2/3.2 c</u>		<u>SR2</u>
Cooler(s)/Kit(s):	<u></u>		
Date/Time sample(s) sent to storage:	<u>9/29/2015 1:35:11 PM</u>		
Water - VOA vials have zero headspace?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input checked="" type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
pH adjusted?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
pH adjusted by:	<u>-</u>		

Login Notes:

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:

Comments:

CorrectiveAction:



27-Oct-2014

Mark Mumby
HRL Compliance Solutions, Inc
2385 F 1/2 Road
Grand Junction, CO 81505

Re: **WPX WM Facility Backgrounds 10.17.14**

Work Order: **14101135**

Dear Mark,

ALS Environmental received 3 samples on 18-Oct-2014 11:00 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested.

Sample results are compliant with NELAP standard requirements and QC results achieved laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 15.

If you have any questions regarding this report, please feel free to contact me.

Sincerely,

A handwritten signature in cursive script that reads "Ann Preston".

Electronically approved by: Ann Preston

Ann Preston
Project Manager



Certificate No: MN 532786

Report of Laboratory Analysis

ADDRESS 3352 128th Avenue Holland, Michigan 49424-9263 | PHONE (616) 399-6070 | FAX (616) 399-6185

ALS GROUP USA, CORP Part of the ALS Laboratory Group A Campbell Brothers Limited Company

Environmental 

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Client: HRL Compliance Solutions, Inc
Project: WPX WM Facility Backgrounds 10.17.14
Work Order: 14101135

Work Order Sample Summary

<u>Lab Samp ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Tag Number</u>	<u>Collection Date</u>	<u>Date Received</u>	<u>Hold</u>
14101135-01	BKGD 01	Soil		10/17/2014 11:18	10/18/2014 11:00	<input type="checkbox"/>
14101135-02	BKGD 02	Soil		10/17/2014 11:20	10/18/2014 11:00	<input type="checkbox"/>
14101135-03	BKGD 03	Soil		10/17/2014 11:25	10/18/2014 11:00	<input type="checkbox"/>

ALS Group USA, Corp

Date: 27-Oct-14

Client: HRL Compliance Solutions, Inc
Project: WPX WM Facility Backgrounds 10.17.14
Work Order: 14101135

Case Narrative

Batch R150976 duplicate data for % Moisture is not related to this project's samples. No data requires qualification.

<u>Qualifier</u>	<u>Description</u>
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte is present at an estimated concentration between the MDL and Report Limit
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL

<u>Acronym</u>	<u>Description</u>
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
LOD	Limit of Detection (see MDL)
LOQ	Limit of Quantitation (see PQL)
MBLK	Method Blank
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
TDL	Target Detection Limit
TNTC	Too Numerous To Count
A	APHA Standard Methods
D	ASTM
E	EPA
SW	SW-846 Update III

<u>Units Reported</u>	<u>Description</u>
% of sample	Percent of Sample
mg/Kg-dry	Milligrams per Kilogram Dry Weight
mg/L	Milligrams per Liter
mmhos/cm @25°C	Millimhos-Centimeter at 25 Degrees Celcius
none	
s.u.	Standard Units

ALS Group USA, Corp

Date: 27-Oct-14

Client: HRL Compliance Solutions, Inc
Project: WPX WM Facility Backgrounds 10.17.14
Sample ID: BKGD 01
Collection Date: 10/17/2014 11:18 AM

Work Order: 14101135
Lab ID: 14101135-01
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS ANALYSIS BY ICP						
Arsenic	21		SW846 6010C 0.46	mg/Kg-dry	1	Prep: SW3050B / 10/21/14 Analyst: JEC 10/21/2014 01:05 PM
MOISTURE						
Moisture	14		A2540 G 0.050	% of sample	1	Analyst: RLM 10/22/2014 12:48 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 27-Oct-14

Client: HRL Compliance Solutions, Inc
Project: WPX WM Facility Backgrounds 10.17.14
Sample ID: BKGD 02
Collection Date: 10/17/2014 11:20 AM

Work Order: 14101135
Lab ID: 14101135-02
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS ANALYSIS BY ICP						
Arsenic	24		SW846 6010C 0.38	mg/Kg-dry	1	Prep: SW3050B / 10/21/14 Analyst: JEC 10/21/2014 01:57 PM
MOISTURE						
Moisture	13		A2540 G 0.050	% of sample	1	Analyst: RLM 10/22/2014 12:48 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 27-Oct-14

Client: HRL Compliance Solutions, Inc
Project: WPX WM Facility Backgrounds 10.17.14
Sample ID: BKGD 03
Collection Date: 10/17/2014 11:25 AM

Work Order: 14101135
Lab ID: 14101135-03
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS ANALYSIS BY ICP						
Arsenic	9.7		SW846 6010C 0.38	mg/Kg-dry	Prep: SW3050B / 10/21/14 1	Analyst: JEC 10/21/2014 02:03 PM
SOLUBLE CATIONS FOR SAR						
Calcium	140		SW846 6010C 5.0	mg/L	Prep: USDA Method 20B / 10/22/14 10	Analyst: JEC 10/22/2014 01:30 PM
Magnesium	22		2.0	mg/L	10	10/22/2014 01:30 PM
Sodium	30		2.0	mg/L	10	10/22/2014 01:30 PM
SODIUM ADSORPTION RATIO						
Sodium Adsorption Ratio	0.62		USDA H60 METHOD 0.010	none	Prep: USDA Method 20B / 10/22/14 1	Analyst: JEC 10/22/2014
ELECTRICAL CONDUCTIVITY (SAR)						
Electrical Conductivity @ Saturation	1.0		USDA H60 METHOD 0.050	mmhos/cm @25	Prep: USDA Method 20B / 10/22/14 10	Analyst: JB 10/23/2014 12:45 PM
MOISTURE						
Moisture	9.8		A2540 G 0.050	% of sample	1	Analyst: RLM 10/22/2014 12:48 PM
PH						
pH	8.5		SW9045D	s.u.	Prep: EXTRACT / 10/20/14 1	Analyst: STP 10/20/2014 12:50 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Client: HRL Compliance Solutions, Inc

QC BATCH REPORT

Work Order: 14101135

Project: WPX WM Facility Backgrounds 10.17.14

Batch ID: 64148

Instrument ID ICP2

Method: SW846 6010C

MBLK		Sample ID: MBLK-64148-64148				Units: mg/Kg		Analysis Date: 10/21/2014 12:36 PM		
Client ID:		Run ID: ICP2_141021A				SeqNo: 2992393		Prep Date: 10/21/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	ND	0.25								

LCS		Sample ID: LCS-64148-64148				Units: mg/Kg		Analysis Date: 10/21/2014 12:42 PM		
Client ID:		Run ID: ICP2_141021A				SeqNo: 2992396		Prep Date: 10/21/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	5.184	0.25	5	0	104	80-120	0			

MS		Sample ID: 14101135-01AMS				Units: mg/Kg		Analysis Date: 10/21/2014 01:11 PM		
Client ID: BKGD 01		Run ID: ICP2_141021A				SeqNo: 2992411		Prep Date: 10/21/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	26.37	0.39	7.899	17.64	111	75-125	0			

MSD		Sample ID: 14101135-01AMSD				Units: mg/Kg		Analysis Date: 10/21/2014 01:17 PM		
Client ID: BKGD 01		Run ID: ICP2_141021A				SeqNo: 2992413		Prep Date: 10/21/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	25.32	0.39	7.886	17.64	97.5	75-125	26.37	4.04	20	

The following samples were analyzed in this batch:

14101135-01A	14101135-02A	14101135-03A
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Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions, Inc
Work Order: 14101135
Project: WPX WM Facility Backgrounds 10.17.14

QC BATCH REPORT

Batch ID: **64156** Instrument ID **ICP2** Method: **SW846 6010C**

DUP		Sample ID: 14101133-02CDUP				Units: mg/L		Analysis Date: 10/22/2014 01:18 PM		
Client ID:		Run ID: ICP2_141022A				SeqNo: 2994883		Prep Date: 10/22/2014		DF: 10
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	409.8	5.0	0	0	0	0-0	0			
Magnesium	84.26	2.0	0	0	0	0-0	0			

DUP		Sample ID: 14101133-02CDUP				Units: mg/L		Analysis Date: 10/22/2014 02:03 PM		
Client ID:		Run ID: ICP2_141022A				SeqNo: 2994891		Prep Date: 10/22/2014		DF: 100
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sodium	5096	20	0	0	0	0-0	0			

DUP		Sample ID: 14101133-02CDUP				Units: none		Analysis Date: 10/22/2014		
Client ID:		Run ID: SAR_141022A				SeqNo: 2995158		Prep Date: 10/22/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sodium Adsorption Ratio	59.9	0.010	0	0	0		59.75	0.253	50	

The following samples were analyzed in this batch:

14101135-03B

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions, Inc
Work Order: 14101135
Project: WPX WM Facility Backgrounds 10.17.14

QC BATCH REPORT

Batch ID: **64112** Instrument ID **WETCHEM** Method: **SW9045D**

Sample ID: 1410964-02A DUP					Units: s.u.		Analysis Date: 10/20/2014 12:50 PM				
Client ID:			Run ID: WETCHEM_141020J			SeqNo:2989419		Prep Date: 10/20/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
pH	7.44	0	0	0	0	0-0	7.39	0.674	20		

DUP					Sample ID: 1410968-02A DUP					Units: s.u.			Analysis Date: 10/20/2014 12:50 PM				
Client ID:					Run ID: WETCHEM_141020J					SeqNo:2989422			Prep Date: 10/20/2014			DF: 1	
Analyte					Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual			
pH					7.78	0	0	0	0	0-0	7.75	0.386	20				

The following samples were analyzed in this batch:

14101135-03A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions, Inc
Work Order: 14101135
Project: WPX WM Facility Backgrounds 10.17.14

QC BATCH REPORT

Batch ID: **64156** Instrument ID **WETCHEM** Method: **USDA H60 Method**

DUP		Sample ID: 14101133-02C DUP				Units: mmhos/cm @25°C		Analysis Date: 10/23/2014 12:45 PM		
Client ID:		Run ID: WETCHEM_141023D				SeqNo: 2996473		Prep Date: 10/22/2014		DF: 10
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Electrical Conductivity @ Saturation	29	0.050	0	0	0		30.4	4.71	50	

The following samples were analyzed in this batch:

14101135-03B

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions, Inc
Work Order: 14101135
Project: WPX WM Facility Backgrounds 10.17.14

QC BATCH REPORT

Batch ID: **R150976** Instrument ID **MOIST** Method: **A2540 G**

MBLK		Sample ID: WBLKS-R150976				Units: % of sample			Analysis Date: 10/22/2014 12:48 PM		
Client ID:		Run ID: MOIST_141022C				SeqNo: 2997050			Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	

Moisture ND 0.050

LCS		Sample ID: LCS-R150976				Units: % of sample			Analysis Date: 10/22/2014 12:48 PM		
Client ID:		Run ID: MOIST_141022C				SeqNo: 2997049			Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	

Moisture 100 0.050 100 0 100 99.5-100.5 0

DUP		Sample ID: 14101169-03A DUP				Units: % of sample			Analysis Date: 10/22/2014 12:48 PM		
Client ID:		Run ID: MOIST_141022C				SeqNo: 2997037			Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	

Moisture 28.65 0.050 0 0 0 0-0 29.62 3.33 20

DUP		Sample ID: 14101210-01A DUP				Units: % of sample			Analysis Date: 10/22/2014 12:48 PM		
Client ID:		Run ID: MOIST_141022C				SeqNo: 2997048			Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	

Moisture 14.3 0.050 0 0 0 0-0 14.04 1.83 20 H

The following samples were analyzed in this batch:

14101135-01A	14101135-02A	14101135-03A
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Note: See Qualifiers Page for a list of Qualifiers and their explanation.



ALS Laboratory Group

3352 128th Ave. Holland, MI 49424
TF: (800) 443-1511 PH: (616) 399-6070 FX: (616) 399-6185

Chain-of-Custody

Form 202r8

WORKORDER #

14101135

PAGE

1 of 1

DISPOSAL

Lab or Return to Client

TURNAROUND

5 DAY

DATE

10.17.14

SAMPLER

CASEY RICHARDSON

SITE ID

BACKGROUND

EDD FORMAT

PURCHASE ORDER

BILL TO COMPANY

WPX ENERGY

INVOICE ATTN TO

KAROLINA BLANEY

ADDRESS

1058 COUNTY RD 215

CITY/STATE/ZIP

PARACHUTE, CO 81635

PHONE

FAX

E-MAIL

karolina.blaney@wpxenergy.com

PROJECT NAME WPX WIM FACILITY

PROJECT No.

COMPANY NAME HCSI

SEND REPORT TO MARK MUMBY

ADDRESS 2385 F 1/2 Road

CITY/STATE/ZIP Grand Junction, CO. 81505

PHONE 970-243-3271

FAX 970-243-3280

E-MAIL mmumby@hcr.com

Lab ID

Field ID

Matrix

Sample Date

Sample Time

Bottles

Pres.

QC

ARSENIC

SAR, EC, PH

1 BKGD 01

S

10.17.14

1118

1

8

K

2 BKGD 02

1

1120

1

1

X

3 BKGD 03

1

1125

2

1

X

X

ne Zone (Circle): EST CST MST PST Matrix: O = oil S = soil NS = non-soil solid W = water L = liquid E = extract F = filter

r metals or anions, please detail analytes below.

iments:

QC PACKAGE (check below)

x LEVEL II (Standard QC)
LEVEL III (Std QC + forms)
LEVEL IV (Std QC + forms + raw data)

servative Key: 1-HCl 2-HNO3 3-H2SO4 4-NaOH 5-NaHSO4 7-Other 8-4 degrees C 9-5035

SIGNATURE

PRINTED NAME

DATE

TIME

RELINQUISHED BY

Casey Richardson

CASEY RICHARDSON

10.17.14

1300

RECEIVED BY

MM

MM

10.17.14

1350

RELINQUISHED BY

MM

MM

10.17.14

1340

RECEIVED BY

MM

MM

10.18.14

1100

RELINQUISHED BY

MM

MM

10.18.14

1100

RECEIVED BY

MM

MM

10.18.14

1100

Sample Receipt Checklist

Client Name: **HRL**

Date/Time Received: **18-Oct-14 11:00**

Work Order: **14101135**

Received by: **DS**

Checklist completed by <u>Ann Preston</u>	19-Oct-14	Reviewed by: <u>Ann Preston</u>	19-Oct-14
eSignature	Date	eSignature	Date

Matrices: **soil**

Carrier name: **FedEx**

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature in compliance?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample(s) received on ice?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Temperature(s)/Thermometer(s):	<u>4.4°C</u>		
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:	<u>1110/19/201400</u>		
Water - VOA vials have zero headspace?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input checked="" type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
pH adjusted?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
pH adjusted by:			

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

CorrectiveAction:

From: (816) 399-0070
 Nick Martinez
 ALS Environmental
 127 E. 1st Street
 Parachute, CO 81635

Origin ID: RLA



Ship Date: 17OCT14
 ActWgt: 64.0 LB
 CAD: 2264840/NET3550

Dim: 24 X 15 X 15 IN

SHIP TO: (816) 399-0070
 sample receiving
 ALS Laboratory Group
 3352 128TH AVE

HOLLAND, MI 49424

BILL SENDER

Delivery Address Bar Code



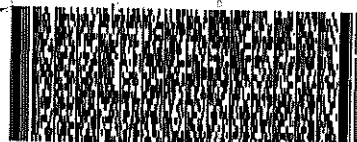
Ref # 101714-1
 Invoice #
 PO # Parachute
 Dept #

SATURDAY 12:00P
 PRIORITY OVERNIGHT

TRK# 7715 4172 0198
 8201

X0 HLMA

49424
 MI-US
 GRR



822G1HF84BAC3

After printing this label:

1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
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ALS Parachute Custody Seal
 DATE 10-17-14 Time 7:00
 Name [Signature]