

State of Colorado  
**Oil and Gas Conservation Commission**

1120 Lincoln Street, Suite 801, Denver, Colorado 80203 (303)894-2100 Fax:(303)894-2109



FOR OGCC USE ONLY

**SITE INVESTIGATION AND REMEDIATION WORKPLAN**

This form shall be submitted to the Director for approval prior to the initiation of site investigation and remediation activities. Form 27 is intended to be used whenever possible. Additional documentation will be required when large volumes of soil and groundwater have been impacted or involve large facilities with multiple source areas. See Rule 910. Attach as many pages as needed to fully describe the proposed work.

**CAUSE OF CONDITION BEING INVESTIGATED AND REMEDIATED**

☒ Spill or Release ☐ Plug & Abandon ☐ Central Facility Closure ☐ Site/Facility Closure ☐ Other (describe): \_\_\_\_\_

OGCC Employee:

☐ Spill ☐ Complaint  
☐ Inspection ☐ NOAV

Tracking No:

OGCC Operator Number: 10456

Name of Operator: Caerus Piceance LLC

Address: 600 17th Street #1600N

City: Denver State: CO Zip: 80202

Contact Name and Telephone:

Jake Janicek

No: 970-285-9606

Fax: 970-285-9619

API Number: \_\_\_\_\_

County: Garfield

Facility Name: Savage – 67S94W/8NWNW (Savage 8D)

Facility Number: 335006

Well Name: \_\_\_\_\_

Well Number: \_\_\_\_\_

Location: (QtrQtr, Sec, Twp, Rng, Meridian): NWNW, 8, 7S, 94W, 6 Latitude: 39.456370 Longitude: -107.916307

**TECHNICAL CONDITIONS**

Type of Waste Causing Impact (crude oil, condensate, produced water, etc): condensate and produced water

Site Conditions: Is location within a sensitive area (according to Rule 901e)? ☒ Y ☐ N If yes, attach evaluation.

Adjacent land use (cultivated, irrigated, dry land farming, industrial, residential, etc.): non-crop land

Soil type, if not previously identified on Form 2A or Federal Surface Use Plan: Villa Grove-Zoltay loams, 15 to 30 percent slopes

Potential receptors (water wells within 1/4 mi, surface waters, etc.): surface water 675'

Description of Impact (if previously provided, refer to that form or document):

Impacted Media (check):

- ☒ Soils  
☐ Vegetation  
☐ Groundwater  
☐ Surface Water

Extent of Impact:

50 feet length x 35 feet width x 23 feet deep

How Determined:

laboratory analysis and field screening

**REMEDIALATION WORKPLAN**

Describe initial action taken (if previously provided, refer to that form or document):

See attached

Describe how source is to be removed:

See attached

Describe how remediation of existing impacts is to be accomplished, including removal and disposal at an injection well or licensed facility, land treatment on site, removal of impacted groundwater, insitu bioremediation, burning of oily vegetation, etc.:

See attached



REMEDIATION WORKPLAN (Cont.)

Tracking Number:	_____
Name of Operator:	_____
OGCC Operator No:	_____
Received Date:	_____
Well Name & No:	_____
Facility Name & No:	_____

OGCC Employee: \_\_\_\_\_

If groundwater has been impacted, describe proposed monitoring plan (# of wells or sample points, sampling schedule, analytical methods, etc.):

See attached

**Describe reclamation plan.** Discuss existing and new grade recontouring; method and testing of compaction alleviation; and reseeding program, including location of new seed, seed mix and noxious weed prevention. Attach diagram or drawing. Use additional sheet for description if required.

See attached

Attach samples and analytical results taken to verify remediation of impacts. Show locations of samples on an onsite schematic or drawing.

Is further site investigation required? ☐ Y ☒ N If yes, describe:

See attached

**Final disposition of E&P waste** (landtreated and disposed onsite, name of licensed disposal facility, recycling, reuse, etc.):

See attached

IMPLEMENTATION SCHEDULE

Date Site Investigation Began: 11/6/2014	Date Site Investigation Completed: 11/18/2014	Date Remediation Plan Submitted: 12/9/2014
Remediation Start Date: 11/6/2014	Anticipated Completion Date: Fall 2015	Actual Completion Date: TBD

I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct, and complete.

Print Name: Jake Janicek

Signed: \_\_\_\_\_

Title: EHS Professional

Date: 12/9/2014

OGCC Approved: \_\_\_\_\_ Title: \_\_\_\_\_ Date: \_\_\_\_\_

**Savage – 67S94W/8NWNW (Savage 8D) (Location ID 335006)**

**Form 27 (Remediation Plan/Notice of Work Completed)**

**Narrative Attachment**

**Document Date – 12/9/2014**

This Form 27 (Remediation Plan/Notice of Work Completed) was prepared for the purpose of describing completed and planned work associated with the remediation of impacted soil resulting from a subsurface release (Spill/Release Point ID 439840) at the Savage – 67S94W/8NWNW (Savage 8D) pad location (Location ID 335006) in Caerus Piceance LLC (Caerus) area of operations. This document presents analytical evidence that observed impacts have been remediated to COGCC standards. It also presents a plan to treat the soil removed during the remediation project that is currently being stockpiled on site. A Sample Location Map is included as an attachment to this form.

**Describe initial action taken (if previously provided, refer to that form or document):**

Caerus submitted the initial release details via a Form 19 (Initial) submitted on 11/13/2014 (Document Number 400731473).

**Describe how source is to be removed:**

Impacted soil was removed through excavation activities. After excavation activities were completed, confirmation soil samples were collected and submitted for laboratory analysis of all total petroleum hydrocarbons (TPH), benzene, toluene, ethylbenzene, and total xylenes (BTEX), COGCC Table 910-1 polycyclic aromatic hydrocarbons (PAHs), COGCC Table 910-1 metals, electrical conductivity (EC), pH, and sodium adsorption ratio (SAR). Please refer to the attached tables for a summary of sample results from excavation activities. Laboratory analytical reports are included as an attachment.

**Describe how remediation of existing impacts is to be accomplished, including removal and disposal at an injection well or licensed facility, land treatment on site, removal of impacted groundwater, insitu bioremediation, burning of oily vegetation, etc.:**

Soil removed during excavation activities is being stockpiled on site within a containment area. Soil will be routinely stirred/agitated in order to help volatilize any remaining hydrocarbons. An alternative remediation strategy would be to apply an ex-situ treatment to the stockpiled soil in order to aid in the removal of any remaining hydrocarbons. We anticipate this soil will be remediated to within COGCC Table 910-1 Concentration Levels by fall 2015.

**If groundwater has been impacted, describe proposed monitoring plan (# of wells or sample points, sampling schedule, analytical methods, etc.):**

Groundwater was not encountered during excavation activities.

**Describe reclamation plan. Discuss existing and new grade re-contouring; method and testing of compaction alleviation; and reseeding program, including location of new seed, seed mix and noxious weed prevention. Attach diagram or drawing. Use additional sheet for description if required.**

The excavation was backfilled with clean backfill soil and the facility was re-contoured to original grade.

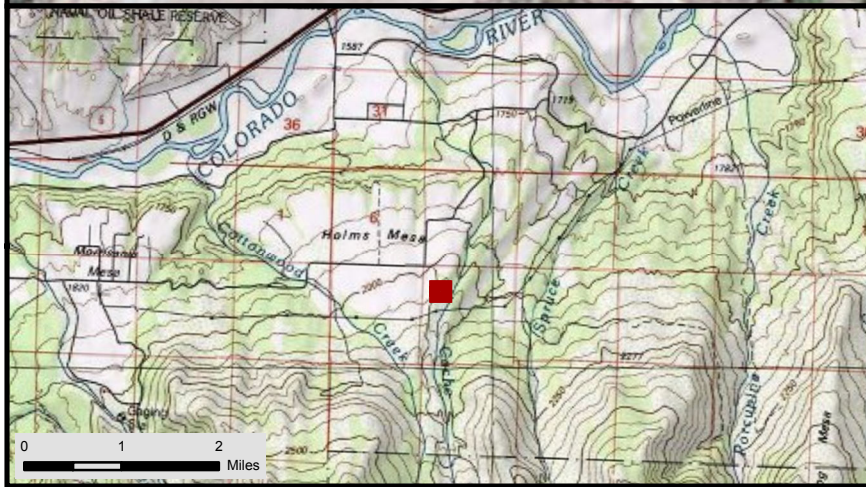
**Attach samples and analytical results taken to verify remediation of impacts. Show locations of samples on an onsite schematic or drawing. Is further site investigation required? If yes, describe:**

On November 18, 2014, confirmation soil samples were collected from sidewalls and the bottom of the excavated area (North Wall, 9'; South Wall, 8'; East Wall, 8.5'; West Wall, 9'; and Footprint, 23'). Soil samples were submitted for laboratory analysis of COGCC Table 910-1 analytes listed above. Laboratory analytical results indicate all excavation soil samples were in compliance with COGCC Table 910-1 Concentration Levels for all analytes except for arsenic, pH, EC, and SAR. However, each of these confirmation samples were collected at depths greater than three feet below the ground surface and the COGCC does not apply the Concentration Levels for pH, EC, and SAR to soils deeper than three feet below ground surface. Verbal approval was given by Carlos Lujan of the COGCC on November 25, 2014 to backfill the excavation after considering arsenic concentrations of background and confirmation soil samples. Sample locations are depicted on the attached Sample Location Map and laboratory analytical results are summarized in the attached analytical tables. Laboratory analytical reports are included as an attachment.

**Final disposition of E&P waste (landtreated and disposed onsite, name of licensed disposal facility, recycling, reuse, etc.):**

Soil removed during excavation activities is being stockpiled on site within a containment area. Soil will be routinely stirred/agitated in order to help volatilize any remaining hydrocarbons. An alternative remediation strategy would be to apply an ex-situ treatment to the stockpiled soil in order to aid in the removal of any remaining hydrocarbons. We anticipate this soil will be remediated to within COGCC Table 910-1 Concentration Levels by fall 2015.





**Sample Location Map: Savage 8D**

39.456372 -107.916305  
 Section 8, Township 7 South, Range 94 West

<ul style="list-style-type: none"> <li>Sample Location</li> <li>Impacted Area</li> <li>PLSS</li> <li>Township</li> <li>Section</li> </ul>	<b>Transportation</b> <ul style="list-style-type: none"> <li>CO Highways</li> <li>County Roads</li> <li>Local Streets</li> <li>Access Roads</li> </ul>	<b>Hydrography</b> <ul style="list-style-type: none"> <li>Ditch</li> <li>Intermittent Stream</li> <li>Perennial Stream</li> <li>Waterbody</li> <li>Watershed</li> </ul>
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Author: B. Hall  
 Revision: 1  
 Date: 12/5/2014



Caerus Oil and Gas LLC: Savage 8-11D Dumpline Release  
Confirmation Analytical Results 11/18/14

		Sample Location				
COGCC Table 910-1 Analyte Suite	Table 910-1 Standard	North Wall, 9'	South Wall, 8'	East Wall, 8.5'	West Wall, 9'	Footprint, 23'
Organics						
TEPH (DRO)	500	27	20	43	29	63
TVPH (GRO)	500	27	ND	ND	ND	38
BENZENE	0.17	ND	ND	ND	ND	ND
TOLUENE	85	ND	ND	ND	ND	0.087
ETHYLBENZENE	100	ND	ND	ND	ND	0.65
XYLENE TOTAL	175	ND	ND	ND	ND	ND
ACENAPHTHENE	1,000	ND	ND	ND	ND	ND
ANTHRACENE	1,000	ND	ND	ND	ND	ND
BENZO(A)ANTHRACENE	0.22	ND	ND	ND	ND	ND
BENZO(A)PYRENE	0.022	ND	ND	ND	ND	ND
BENZO(B)FLUORANTHENE	0.22	ND	ND	ND	ND	ND
BENZO(K)FLUORANTHENE	2.2	ND	ND	ND	ND	ND
CHRYSENE	22	ND	ND	ND	ND	ND
DIBENZO(A,H)ANTHRACENE	0.022	ND	ND	ND	ND	ND
FLUORANTHENE	1,000	ND	ND	ND	ND	ND
FLUORENE	1,000	ND	ND	ND	ND	ND
INDENO(1,2,3-CD)PYRENE	0.22	ND	ND	ND	ND	ND
NAPHTHALENE	23	ND	ND	ND	ND	ND
PYRENE	1,000	ND	ND	ND	ND	ND
Metals						
MERCURY	23	ND	ND	0.017	ND	ND
ARSENIC	0.39	5.3	4.9	6.6	5.3	6.7
BARIUM	15,000	190	160	160	140	190
CADMIUM	70	ND	ND	ND	ND	ND
CHROMIUM (III)	120,000	17	17	17	17	20
CHROMIUM (IV)	23	ND	ND	ND	ND	ND
COPPER	3,100	20	23	25	20	20
LEAD	400	10	9.9	11	10	11
NICKEL	1,600	35	38	40	34	37
SELENIUM	390	ND	ND	ND	ND	ND
SILVER	390	ND	ND	ND	ND	ND
ZINC	23,000	50	52	54	50	59
Inorganics						
Sodium Absorption Ratio (unitless)	<12 <sup>5</sup>	4.4	4.7	4.2	2.4	12
Electric Conductivity (mmhos/cm)	<4mmhos/cm or 2x background	0.36	1.0	0.78	0.88	12
pH (unitless)	6 to 9	8.7	9.2	9.1	9.0	8.5

all results in mg/kg unless noted

highlight indicates reading above COGCC Table 910-1 standards

NS=no sample

ND=non detect

Caerus Oil and Gas, LLC: Savage 8-11D  
Background Analytical Results 11/21/14

		Sample Location		
COGCC Table 910-1 Analyte Suite	Table 910-1 Standard	BKGD 01	BKGD 02	BKGD 03
Arsenic	0.39	4	4	4.80
Sodium Absorption Ratio (unitless)	$<12^5$	NS	NS	0.11
Electric Conductivity (mmhos/cm)	$<4\text{mmhos/cm}$ or 2x background	NS	NS	1.10
pH (unitless)	6 to 9	NS	NS	7.8

highlight indicates reading above COGCC Table 910-1 standards

NS=no sample



21-Nov-2014

Casey Richardson  
HRL Compliance Solutions, Inc  
2385 F 1/2 Road  
Grand Junction, CO 81505

Re: **Caerus Savage 8D Confirmation 11.18.14**

Work Order: **1411958**

Dear Casey,

ALS Environmental received 5 samples on 19-Nov-2014 10:30 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 33.

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 The ALS logo, a small blue triangle with a yellow flame.

[www.alsglobal.com](http://www.alsglobal.com)

RIGHT SOLUTIONS RIGHT PARTNER



**Client:** HRL Compliance Solutions, Inc  
**Project:** Caerus Savage 8D Confirmation 11.18.14  
**Work Order:** 1411958

## 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>
1411958-01	North Wall, 9'	Soil		11/18/2014 10:02	11/19/2014 10:30	<input type="checkbox"/>
1411958-02	South Wall, 8'	Soil		11/18/2014 09:52	11/19/2014 10:30	<input type="checkbox"/>
1411958-03	East Wall, 8.5'	Soil		11/18/2014 09:59	11/19/2014 10:30	<input type="checkbox"/>
1411958-04	West Wall, 9'	Soil		11/18/2014 09:56	11/19/2014 10:30	<input type="checkbox"/>
1411958-05	Footprint, 23	Soil		11/18/2014 13:30	11/19/2014 10:30	<input type="checkbox"/>

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**Client:** HRL Compliance Solutions, Inc  
**Project:** Caerus Savage 8D Confirmation 11.18.14  
**Work Order:** 1411958

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**Case Narrative**

Batch 65228 sample 1411958-05 MS/MSD recoveries for Barium, and MS recovery for Zinc were outside control limits, however, the results in the parent sample were greater than 4x the spiked amount. No qualification is required for Barium and Zinc. The MSD recovery for Nickel was above control limits. Both the MS recovery and RPD met quality control limits. No data requires qualification for Nickel.

Batch 65262 sample 1411958-01 MS/MSD recoveries for Hexavalent Chromium were below control limits. The corresponding result in the parent sample may be biased low for Hexavalent Chromium.

<b><u>Qualifier</u></b>	<b><u>Description</u></b>
*	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

<b><u>Acronym</u></b>	<b><u>Description</u></b>
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

<b><u>Units Reported</u></b>	<b><u>Description</u></b>
% of sample	Percent of Sample
µg/Kg-dry	Micrograms per Kilogram Dry Weight
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: 21-Nov-14

**Client:** HRL Compliance Solutions, Inc  
**Project:** Caerus Savage 8D Confirmation 11.18.14  
**Sample ID:** North Wall, 9'  
**Collection Date:** 11/18/2014 10:02 AM

**Work Order:** 1411958  
**Lab ID:** 1411958-01  
**Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>DIESEL RANGE ORGANICS BY GC-FID</b>						
			<b>SW8015M</b>		Prep: SW3541 / 11/19/14	Analyst: <b>IT</b>
<b>DRO (C10-C28)</b>	<b>27</b>		<b>4.9</b>	<b>mg/Kg-dry</b>	<b>1</b>	11/19/2014 09:15 PM
Surr: 4-Terphenyl-d14	64.4		39-133	%REC	1	11/19/2014 09:15 PM
<b>GASOLINE RANGE ORGANICS BY GC-FID</b>						
			<b>SW8015</b>		Prep: SW5035 / 11/19/14	Analyst: <b>IT</b>
<b>GRO (C6-C10)</b>	<b>27</b>		<b>3.0</b>	<b>mg/Kg-dry</b>	<b>1</b>	11/19/2014 09:43 PM
Surr: Toluene-d8	122		50-150	%REC	1	11/19/2014 09:43 PM
<b>MERCURY BY CVAA</b>						
			<b>SW7471</b>		Prep: SW7471 / 11/20/14	Analyst: <b>LR</b>
Mercury	ND		0.019	mg/Kg-dry	1	11/20/2014 03:49 PM
<b>METALS ANALYSIS BY ICP</b>						
			<b>SW846 6010C</b>		Prep: SW3050B / 11/19/14	Analyst: <b>JEC</b>
<b>Arsenic</b>	<b>5.3</b>		<b>0.42</b>	<b>mg/Kg-dry</b>	<b>1</b>	11/19/2014 07:03 PM
<b>Barium</b>	<b>190</b>		<b>0.42</b>	<b>mg/Kg-dry</b>	<b>1</b>	11/19/2014 07:03 PM
Cadmium	ND		0.34	mg/Kg-dry	1	11/19/2014 07:03 PM
<b>Chromium</b>	<b>18</b>		<b>0.42</b>	<b>mg/Kg-dry</b>	<b>1</b>	11/19/2014 07:03 PM
<b>Copper</b>	<b>20</b>		<b>0.42</b>	<b>mg/Kg-dry</b>	<b>1</b>	11/19/2014 07:03 PM
<b>Lead</b>	<b>10</b>		<b>0.42</b>	<b>mg/Kg-dry</b>	<b>1</b>	11/19/2014 07:03 PM
<b>Nickel</b>	<b>35</b>		<b>0.42</b>	<b>mg/Kg-dry</b>	<b>1</b>	11/19/2014 07:03 PM
Selenium	ND		0.42	mg/Kg-dry	1	11/19/2014 07:03 PM
Silver	ND		0.42	mg/Kg-dry	1	11/19/2014 07:03 PM
<b>Zinc</b>	<b>50</b>		<b>0.85</b>	<b>mg/Kg-dry</b>	<b>1</b>	11/19/2014 07:03 PM
<b>SOLUBLE CATIONS FOR SAR</b>						
			<b>SW846 6010C</b>		Prep: USDA Method 20B / 11/21/14	Analyst: <b>JEC</b>
<b>Calcium</b>	<b>56</b>		<b>5.0</b>	<b>mg/L</b>	<b>10</b>	11/21/2014 01:04 PM
<b>Magnesium</b>	<b>47</b>		<b>2.0</b>	<b>mg/L</b>	<b>10</b>	11/21/2014 01:04 PM
<b>Sodium</b>	<b>180</b>		<b>2.0</b>	<b>mg/L</b>	<b>10</b>	11/21/2014 01:04 PM
<b>SODIUM ADSORPTION RATIO</b>						
			<b>USDA H60 METHOD</b>		Prep: USDA Method 20B / 11/21/14	Analyst: <b>JEC</b>
<b>Sodium Adsorption Ratio</b>	<b>4.4</b>		<b>0.010</b>	<b>none</b>	<b>1</b>	11/21/2014
<b>SEMI-VOLATILE ORGANIC COMPOUNDS</b>						
			<b>SW846 8270D</b>		Prep: SW3541 / 11/19/14	Analyst: <b>RS</b>
Acenaphthene	ND		7.8	µg/Kg-dry	1	11/20/2014 12:37 PM
Acenaphthylene	ND		7.8	µg/Kg-dry	1	11/20/2014 12:37 PM
Anthracene	ND		7.8	µg/Kg-dry	1	11/20/2014 12:37 PM
Benzo(a)anthracene	ND		7.8	µg/Kg-dry	1	11/20/2014 12:37 PM
Benzo(a)pyrene	ND		7.8	µg/Kg-dry	1	11/20/2014 12:37 PM
Benzo(b)fluoranthene	ND		7.8	µg/Kg-dry	1	11/20/2014 12:37 PM
Benzo(g,h,i)perylene	ND		7.8	µg/Kg-dry	1	11/20/2014 12:37 PM
Benzo(k)fluoranthene	ND		7.8	µg/Kg-dry	1	11/20/2014 12:37 PM
Chrysene	ND		7.8	µg/Kg-dry	1	11/20/2014 12:37 PM

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

# ALS Group USA, Corp

Date: 21-Nov-14

**Client:** HRL Compliance Solutions, Inc  
**Project:** Caerus Savage 8D Confirmation 11.18.14  
**Sample ID:** North Wall, 9'  
**Collection Date:** 11/18/2014 10:02 AM

**Work Order:** 1411958  
**Lab ID:** 1411958-01  
**Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Dibenzo(a,h)anthracene	ND		7.8	µg/Kg-dry	1	11/20/2014 12:37 PM
Fluoranthene	ND		7.8	µg/Kg-dry	1	11/20/2014 12:37 PM
Fluorene	ND		7.8	µg/Kg-dry	1	11/20/2014 12:37 PM
Indeno(1,2,3-cd)pyrene	ND		7.8	µg/Kg-dry	1	11/20/2014 12:37 PM
Naphthalene	ND		7.8	µg/Kg-dry	1	11/20/2014 12:37 PM
Pyrene	ND		7.8	µg/Kg-dry	1	11/20/2014 12:37 PM
Surr: 2-Fluorobiphenyl	59.0		12-100	%REC	1	11/20/2014 12:37 PM
Surr: 4-Terphenyl-d14	85.9		25-137	%REC	1	11/20/2014 12:37 PM
Surr: Nitrobenzene-d5	54.1		37-107	%REC	1	11/20/2014 12:37 PM
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260B</b>	Prep: SW5035 / 11/19/14 Analyst: <b>AK</b>		
Benzene	ND		36	µg/Kg-dry	1	11/19/2014 03:19 PM
Ethylbenzene	ND		36	µg/Kg-dry	1	11/19/2014 03:19 PM
m,p-Xylene	ND		72	µg/Kg-dry	1	11/19/2014 03:19 PM
o-Xylene	ND		36	µg/Kg-dry	1	11/19/2014 03:19 PM
Toluene	ND		36	µg/Kg-dry	1	11/19/2014 03:19 PM
Xylenes, Total	ND		110	µg/Kg-dry	1	11/19/2014 03:19 PM
Surr: 1,2-Dichloroethane-d4	102		70-130	%REC	1	11/19/2014 03:19 PM
Surr: 4-Bromofluorobenzene	97.2		70-130	%REC	1	11/19/2014 03:19 PM
Surr: Dibromofluoromethane	99.4		70-130	%REC	1	11/19/2014 03:19 PM
Surr: Toluene-d8	99.3		70-130	%REC	1	11/19/2014 03:19 PM
<b>ELECTRICAL CONDUCTIVITY (SAR)</b>			<b>USDA H60 METHOD</b>	Prep: USDA Method 20B / 11/21/14 Analyst: <b>JB</b>		
Electrical Conductivity @ Saturation	0.36		0.050	mmhos/cm @25	10	11/21/2014 04:15 PM
<b>CHROMIUM, TRIVALENT</b>			<b>CALCULATION</b>	Analyst: <b>MB</b>		
Chromium, Trivalent	17		0.60	mg/Kg-dry	1	11/21/2014 12:30 PM
<b>CHROMIUM, HEXAVALENT</b>			<b>SW7196A</b>	Prep: SW3060A / 11/19/14 Analyst: <b>DAH</b>		
Chromium, Hexavalent	ND		0.59	mg/Kg-dry	1	11/20/2014 06:31 PM
<b>MOISTURE</b>			<b>A2540 G</b>	Analyst: <b>EVB</b>		
Moisture	17		0.050	% of sample	1	11/19/2014 04:25 PM
<b>PH</b>			<b>SW9045D</b>	Prep: EXTRACT / 11/20/14 Analyst: <b>AXL</b>		
pH	8.7		s.u.		1	11/20/2014 01:00 PM

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

# ALS Group USA, Corp

Date: 21-Nov-14

**Client:** HRL Compliance Solutions, Inc  
**Project:** Caerus Savage 8D Confirmation 11.18.14  
**Sample ID:** South Wall, 8'  
**Collection Date:** 11/18/2014 09:52 AM

**Work Order:** 1411958  
**Lab ID:** 1411958-02  
**Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>DIESEL RANGE ORGANICS BY GC-FID</b>						
			<b>SW8015M</b>		Prep: SW3541 / 11/19/14	Analyst: <b>IT</b>
<b>DRO (C10-C28)</b>	<b>20</b>		<b>4.8</b>	<b>mg/Kg-dry</b>	<b>1</b>	11/19/2014 10:11 PM
Surr: 4-Terphenyl-d14	73.1		39-133	%REC	1	11/19/2014 10:11 PM
<b>GASOLINE RANGE ORGANICS BY GC-FID</b>						
			<b>SW8015</b>		Prep: SW5035 / 11/19/14	Analyst: <b>IT</b>
<b>GRO (C6-C10)</b>	<b>ND</b>		<b>2.9</b>	<b>mg/Kg-dry</b>	<b>1</b>	11/19/2014 10:09 PM
Surr: Toluene-d8	106		50-150	%REC	1	11/19/2014 10:09 PM
<b>MERCURY BY CVAA</b>						
			<b>SW7471</b>		Prep: SW7471 / 11/20/14	Analyst: <b>LR</b>
Mercury	ND		0.017	mg/Kg-dry	1	11/20/2014 03:55 PM
<b>METALS ANALYSIS BY ICP</b>						
			<b>SW846 6010C</b>		Prep: SW3050B / 11/19/14	Analyst: <b>JEC</b>
<b>Arsenic</b>	<b>4.9</b>		<b>0.43</b>	<b>mg/Kg-dry</b>	<b>1</b>	11/19/2014 07:08 PM
<b>Barium</b>	<b>160</b>		<b>0.43</b>	<b>mg/Kg-dry</b>	<b>1</b>	11/19/2014 07:08 PM
Cadmium	ND		0.35	mg/Kg-dry	1	11/19/2014 07:08 PM
<b>Chromium</b>	<b>17</b>		<b>0.43</b>	<b>mg/Kg-dry</b>	<b>1</b>	11/19/2014 07:08 PM
<b>Copper</b>	<b>23</b>		<b>0.43</b>	<b>mg/Kg-dry</b>	<b>1</b>	11/19/2014 07:08 PM
<b>Lead</b>	<b>9.9</b>		<b>0.43</b>	<b>mg/Kg-dry</b>	<b>1</b>	11/19/2014 07:08 PM
<b>Nickel</b>	<b>38</b>		<b>0.43</b>	<b>mg/Kg-dry</b>	<b>1</b>	11/19/2014 07:08 PM
Selenium	ND		0.43	mg/Kg-dry	1	11/19/2014 07:08 PM
Silver	ND		0.43	mg/Kg-dry	1	11/19/2014 07:08 PM
<b>Zinc</b>	<b>52</b>		<b>0.87</b>	<b>mg/Kg-dry</b>	<b>1</b>	11/19/2014 07:08 PM
<b>SOLUBLE CATIONS FOR SAR</b>						
			<b>SW846 6010C</b>		Prep: USDA Method 20B / 11/21/14	Analyst: <b>JEC</b>
<b>Calcium</b>	<b>24</b>		<b>5.0</b>	<b>mg/L</b>	<b>10</b>	11/21/2014 01:15 PM
<b>Magnesium</b>	<b>23</b>		<b>2.0</b>	<b>mg/L</b>	<b>10</b>	11/21/2014 01:15 PM
<b>Sodium</b>	<b>130</b>		<b>2.0</b>	<b>mg/L</b>	<b>10</b>	11/21/2014 01:15 PM
<b>SODIUM ADSORPTION RATIO</b>						
			<b>USDA H60 METHOD</b>		Prep: USDA Method 20B / 11/21/14	Analyst: <b>JEC</b>
<b>Sodium Adsorption Ratio</b>	<b>4.7</b>		<b>0.010</b>	<b>none</b>	<b>1</b>	11/21/2014
<b>SEMI-VOLATILE ORGANIC COMPOUNDS</b>						
			<b>SW846 8270D</b>		Prep: SW3541 / 11/19/14	Analyst: <b>RS</b>
Acenaphthene	ND		7.7	µg/Kg-dry	1	11/20/2014 01:01 PM
Acenaphthylene	ND		7.7	µg/Kg-dry	1	11/20/2014 01:01 PM
Anthracene	ND		7.7	µg/Kg-dry	1	11/20/2014 01:01 PM
Benzo(a)anthracene	ND		7.7	µg/Kg-dry	1	11/20/2014 01:01 PM
Benzo(a)pyrene	ND		7.7	µg/Kg-dry	1	11/20/2014 01:01 PM
Benzo(b)fluoranthene	ND		7.7	µg/Kg-dry	1	11/20/2014 01:01 PM
Benzo(g,h,i)perylene	ND		7.7	µg/Kg-dry	1	11/20/2014 01:01 PM
Benzo(k)fluoranthene	ND		7.7	µg/Kg-dry	1	11/20/2014 01:01 PM
Chrysene	ND		7.7	µg/Kg-dry	1	11/20/2014 01:01 PM

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



# ALS Group USA, Corp

Date: 21-Nov-14

**Client:** HRL Compliance Solutions, Inc  
**Project:** Caerus Savage 8D Confirmation 11.18.14  
**Sample ID:** South Wall, 8'  
**Collection Date:** 11/18/2014 09:52 AM

**Work Order:** 1411958  
**Lab ID:** 1411958-02  
**Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Dibenzo(a,h)anthracene	ND		7.7	µg/Kg-dry	1	11/20/2014 01:01 PM
Fluoranthene	ND		7.7	µg/Kg-dry	1	11/20/2014 01:01 PM
Fluorene	ND		7.7	µg/Kg-dry	1	11/20/2014 01:01 PM
Indeno(1,2,3-cd)pyrene	ND		7.7	µg/Kg-dry	1	11/20/2014 01:01 PM
Naphthalene	ND		7.7	µg/Kg-dry	1	11/20/2014 01:01 PM
Pyrene	ND		7.7	µg/Kg-dry	1	11/20/2014 01:01 PM
Surr: 2-Fluorobiphenyl	69.3		12-100	%REC	1	11/20/2014 01:01 PM
Surr: 4-Terphenyl-d14	86.9		25-137	%REC	1	11/20/2014 01:01 PM
Surr: Nitrobenzene-d5	67.0		37-107	%REC	1	11/20/2014 01:01 PM
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260B</b>	Prep: SW5035 / 11/19/14 Analyst: <b>AK</b>		
Benzene	ND		35	µg/Kg-dry	1	11/19/2014 03:43 PM
Ethylbenzene	ND		35	µg/Kg-dry	1	11/19/2014 03:43 PM
<b>m,p-Xylene</b>	<b>86</b>		<b>70</b>	<b>µg/Kg-dry</b>	1	11/19/2014 03:43 PM
o-Xylene	ND		35	µg/Kg-dry	1	11/19/2014 03:43 PM
Toluene	ND		35	µg/Kg-dry	1	11/19/2014 03:43 PM
Xylenes, Total	ND		110	µg/Kg-dry	1	11/19/2014 03:43 PM
Surr: 1,2-Dichloroethane-d4	101		70-130	%REC	1	11/19/2014 03:43 PM
Surr: 4-Bromofluorobenzene	98.6		70-130	%REC	1	11/19/2014 03:43 PM
Surr: Dibromofluoromethane	98.0		70-130	%REC	1	11/19/2014 03:43 PM
Surr: Toluene-d8	99.8		70-130	%REC	1	11/19/2014 03:43 PM
<b>ELECTRICAL CONDUCTIVITY (SAR)</b>			<b>USDA H60 METHOD</b>	Prep: USDA Method 20B / 11/21/14 Analyst: <b>JB</b>		
Electrical Conductivity @ Saturation	1.0		0.050	mmhos/cm @25	10	11/21/2014 04:15 PM
<b>CHROMIUM, TRIVALENT</b>			<b>CALCULATION</b>	Analyst: <b>MB</b>		
Chromium, Trivalent	17		0.58	mg/Kg-dry	1	11/21/2014 12:30 PM
<b>CHROMIUM, HEXAVALENT</b>			<b>SW7196A</b>	Prep: SW3060A / 11/19/14 Analyst: <b>DAH</b>		
Chromium, Hexavalent	ND		0.58	mg/Kg-dry	1	11/20/2014 06:31 PM
<b>MOISTURE</b>			<b>A2540 G</b>	Analyst: <b>EVB</b>		
Moisture	14		0.050	% of sample	1	11/19/2014 04:25 PM
<b>PH</b>			<b>SW9045D</b>	Prep: EXTRACT / 11/20/14 Analyst: <b>AXL</b>		
pH	9.2			s.u.	1	11/20/2014 01:00 PM

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

# ALS Group USA, Corp

Date: 21-Nov-14

**Client:** HRL Compliance Solutions, Inc  
**Project:** Caerus Savage 8D Confirmation 11.18.14  
**Sample ID:** East Wall, 8.5'  
**Collection Date:** 11/18/2014 09:59 AM

**Work Order:** 1411958  
**Lab ID:** 1411958-03  
**Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>DIESEL RANGE ORGANICS BY GC-FID</b>						
<b>DRO (C10-C28)</b>	<b>43</b>		<b>SW8015M</b>		Prep: SW3541 / 11/19/14	Analyst: <b>IT</b>
<i>Surr: 4-Terphenyl-d14</i>	66.5		4.7	mg/Kg-dry	1	11/19/2014 10:38 PM
			39-133	%REC	1	11/19/2014 10:38 PM
<b>GASOLINE RANGE ORGANICS BY GC-FID</b>						
<b>GRO (C6-C10)</b>	<b>ND</b>		<b>SW8015</b>		Prep: SW5035 / 11/19/14	Analyst: <b>IT</b>
<i>Surr: Toluene-d8</i>	119		2.9	mg/Kg-dry	1	11/19/2014 10:34 PM
			50-150	%REC	1	11/19/2014 10:34 PM
<b>MERCURY BY CVAA</b>						
<b>Mercury</b>	<b>0.017</b>		<b>SW7471</b>		Prep: SW7471 / 11/20/14	Analyst: <b>LR</b>
			0.015	mg/Kg-dry	1	11/20/2014 03:57 PM
<b>METALS ANALYSIS BY ICP</b>						
<b>Arsenic</b>	<b>6.6</b>		<b>SW846 6010C</b>		Prep: SW3050B / 11/19/14	Analyst: <b>JEC</b>
<b>Barium</b>	<b>160</b>		0.44	mg/Kg-dry	1	11/19/2014 07:14 PM
<b>Cadmium</b>	<b>ND</b>		0.44	mg/Kg-dry	1	11/19/2014 07:14 PM
<b>Chromium</b>	<b>17</b>		0.35	mg/Kg-dry	1	11/19/2014 07:14 PM
<b>Copper</b>	<b>25</b>		0.44	mg/Kg-dry	1	11/19/2014 07:14 PM
<b>Lead</b>	<b>11</b>		0.44	mg/Kg-dry	1	11/19/2014 07:14 PM
<b>Nickel</b>	<b>40</b>		0.44	mg/Kg-dry	1	11/19/2014 07:14 PM
<b>Selenium</b>	<b>ND</b>		0.44	mg/Kg-dry	1	11/19/2014 07:14 PM
<b>Silver</b>	<b>ND</b>		0.44	mg/Kg-dry	1	11/19/2014 07:14 PM
<b>Zinc</b>	<b>54</b>		0.44	mg/Kg-dry	1	11/19/2014 07:14 PM
<b>SOLUBLE CATIONS FOR SAR</b>						
			<b>SW846 6010C</b>		Prep: USDA Method 20B / 11/21/14	Analyst: <b>JEC</b>
<b>Calcium</b>	<b>21</b>		5.0	mg/L	10	11/21/2014 01:21 PM
<b>Magnesium</b>	<b>17</b>		2.0	mg/L	10	11/21/2014 01:21 PM
<b>Sodium</b>	<b>110</b>		2.0	mg/L	10	11/21/2014 01:21 PM
<b>SODIUM ADSORPTION RATIO</b>						
			<b>USDA H60 METHOD</b>		Prep: USDA Method 20B / 11/21/14	Analyst: <b>JEC</b>
<b>Sodium Adsorption Ratio</b>	<b>4.2</b>		0.010	none	1	11/21/2014
<b>SEMI-VOLATILE ORGANIC COMPOUNDS</b>						
			<b>SW846 8270D</b>		Prep: SW3541 / 11/19/14	Analyst: <b>RS</b>
<b>Acenaphthene</b>	<b>ND</b>		7.6	µg/Kg-dry	1	11/20/2014 01:24 PM
<b>Acenaphthylene</b>	<b>ND</b>		7.6	µg/Kg-dry	1	11/20/2014 01:24 PM
<b>Anthracene</b>	<b>ND</b>		7.6	µg/Kg-dry	1	11/20/2014 01:24 PM
<b>Benzo(a)anthracene</b>	<b>ND</b>		7.6	µg/Kg-dry	1	11/20/2014 01:24 PM
<b>Benzo(a)pyrene</b>	<b>ND</b>		7.6	µg/Kg-dry	1	11/20/2014 01:24 PM
<b>Benzo(b)fluoranthene</b>	<b>ND</b>		7.6	µg/Kg-dry	1	11/20/2014 01:24 PM
<b>Benzo(g,h,i)perylene</b>	<b>ND</b>		7.6	µg/Kg-dry	1	11/20/2014 01:24 PM
<b>Benzo(k)fluoranthene</b>	<b>ND</b>		7.6	µg/Kg-dry	1	11/20/2014 01:24 PM
<b>Chrysene</b>	<b>ND</b>		7.6	µg/Kg-dry	1	11/20/2014 01:24 PM

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

# ALS Group USA, Corp

Date: 21-Nov-14

**Client:** HRL Compliance Solutions, Inc  
**Project:** Caerus Savage 8D Confirmation 11.18.14  
**Sample ID:** East Wall, 8.5'  
**Collection Date:** 11/18/2014 09:59 AM

**Work Order:** 1411958  
**Lab ID:** 1411958-03  
**Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Dibenzo(a,h)anthracene	ND		7.6	µg/Kg-dry	1	11/20/2014 01:24 PM
Fluoranthene	ND		7.6	µg/Kg-dry	1	11/20/2014 01:24 PM
Fluorene	ND		7.6	µg/Kg-dry	1	11/20/2014 01:24 PM
Indeno(1,2,3-cd)pyrene	ND		7.6	µg/Kg-dry	1	11/20/2014 01:24 PM
Naphthalene	ND		7.6	µg/Kg-dry	1	11/20/2014 01:24 PM
Pyrene	ND		7.6	µg/Kg-dry	1	11/20/2014 01:24 PM
Surr: 2-Fluorobiphenyl	65.7		12-100	%REC	1	11/20/2014 01:24 PM
Surr: 4-Terphenyl-d14	89.0		25-137	%REC	1	11/20/2014 01:24 PM
Surr: Nitrobenzene-d5	62.8		37-107	%REC	1	11/20/2014 01:24 PM
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260B</b>	Prep: SW5035 / 11/19/14 Analyst: <b>JDW</b>		
Benzene	ND		35	µg/Kg-dry	1	11/19/2014 03:18 PM
Ethylbenzene	ND		35	µg/Kg-dry	1	11/19/2014 03:18 PM
m,p-Xylene	ND		70	µg/Kg-dry	1	11/19/2014 03:18 PM
o-Xylene	ND		35	µg/Kg-dry	1	11/19/2014 03:18 PM
Toluene	ND		35	µg/Kg-dry	1	11/19/2014 03:18 PM
Xylenes, Total	ND		100	µg/Kg-dry	1	11/19/2014 03:18 PM
Surr: 1,2-Dichloroethane-d4	96.4		70-130	%REC	1	11/19/2014 03:18 PM
Surr: 4-Bromofluorobenzene	101		70-130	%REC	1	11/19/2014 03:18 PM
Surr: Dibromofluoromethane	87.6		70-130	%REC	1	11/19/2014 03:18 PM
Surr: Toluene-d8	97.0		70-130	%REC	1	11/19/2014 03:18 PM
<b>ELECTRICAL CONDUCTIVITY (SAR)</b>			<b>USDA H60 METHOD</b>	Prep: USDA Method 20B / 11/21/14 Analyst: <b>JB</b>		
Electrical Conductivity @ Saturation	0.78		0.050	mmhos/cm @25	10	11/21/2014 04:15 PM
<b>CHROMIUM, TRIVALENT</b>			<b>CALCULATION</b>	Analyst: <b>MB</b>		
Chromium, Trivalent	17		0.58	mg/Kg-dry	1	11/21/2014 12:30 PM
<b>CHROMIUM, HEXAVALENT</b>			<b>SW7196A</b>	Prep: SW3060A / 11/19/14 Analyst: <b>DAH</b>		
Chromium, Hexavalent	ND		0.58	mg/Kg-dry	1	11/20/2014 06:31 PM
<b>MOISTURE</b>			<b>A2540 G</b>	Analyst: <b>EVB</b>		
Moisture	14		0.050	% of sample	1	11/19/2014 04:25 PM
<b>PH</b>			<b>SW9045D</b>	Prep: EXTRACT / 11/20/14 Analyst: <b>AXL</b>		
pH	9.1			s.u.	1	11/20/2014 01:00 PM

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



# ALS Group USA, Corp

Date: 21-Nov-14

**Client:** HRL Compliance Solutions, Inc  
**Project:** Caerus Savage 8D Confirmation 11.18.14  
**Sample ID:** West Wall, 9'  
**Collection Date:** 11/18/2014 09:56 AM

**Work Order:** 1411958  
**Lab ID:** 1411958-04  
**Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>DIESEL RANGE ORGANICS BY GC-FID</b>						
			<b>SW8015M</b>		Prep: SW3541 / 11/19/14	Analyst: <b>IT</b>
<b>DRO (C10-C28)</b>	<b>29</b>		<b>4.8</b>	<b>mg/Kg-dry</b>	<b>1</b>	11/20/2014 03:15 AM
Surr: 4-Terphenyl-d14	57.0		39-133	%REC	1	11/20/2014 03:15 AM
<b>GASOLINE RANGE ORGANICS BY GC-FID</b>						
			<b>SW8015</b>		Prep: SW5035 / 11/19/14	Analyst: <b>IT</b>
<b>GRO (C6-C10)</b>	<b>ND</b>		<b>3.0</b>	<b>mg/Kg-dry</b>	<b>1</b>	11/19/2014 10:59 PM
Surr: Toluene-d8	116		50-150	%REC	1	11/19/2014 10:59 PM
<b>MERCURY BY CVAA</b>						
			<b>SW7471</b>		Prep: SW7471 / 11/20/14	Analyst: <b>LR</b>
Mercury	ND		0.018	mg/Kg-dry	1	11/20/2014 04:07 PM
<b>METALS ANALYSIS BY ICP</b>						
			<b>SW846 6010C</b>		Prep: SW3050B / 11/19/14	Analyst: <b>JEC</b>
<b>Arsenic</b>	<b>5.3</b>		<b>0.44</b>	<b>mg/Kg-dry</b>	<b>1</b>	11/19/2014 07:20 PM
<b>Barium</b>	<b>140</b>		<b>0.44</b>	<b>mg/Kg-dry</b>	<b>1</b>	11/19/2014 07:20 PM
Cadmium	ND		0.36	mg/Kg-dry	1	11/19/2014 07:20 PM
<b>Chromium</b>	<b>17</b>		<b>0.44</b>	<b>mg/Kg-dry</b>	<b>1</b>	11/19/2014 07:20 PM
<b>Copper</b>	<b>20</b>		<b>0.44</b>	<b>mg/Kg-dry</b>	<b>1</b>	11/19/2014 07:20 PM
<b>Lead</b>	<b>9.7</b>		<b>0.44</b>	<b>mg/Kg-dry</b>	<b>1</b>	11/19/2014 07:20 PM
<b>Nickel</b>	<b>34</b>		<b>0.44</b>	<b>mg/Kg-dry</b>	<b>1</b>	11/19/2014 07:20 PM
Selenium	ND		0.44	mg/Kg-dry	1	11/19/2014 07:20 PM
Silver	ND		0.44	mg/Kg-dry	1	11/19/2014 07:20 PM
<b>Zinc</b>	<b>50</b>		<b>0.89</b>	<b>mg/Kg-dry</b>	<b>1</b>	11/19/2014 07:20 PM
<b>SOLUBLE CATIONS FOR SAR</b>						
			<b>SW846 6010C</b>		Prep: USDA Method 20B / 11/21/14	Analyst: <b>JEC</b>
<b>Calcium</b>	<b>31</b>		<b>5.0</b>	<b>mg/L</b>	<b>10</b>	11/21/2014 01:32 PM
<b>Magnesium</b>	<b>32</b>		<b>2.0</b>	<b>mg/L</b>	<b>10</b>	11/21/2014 01:32 PM
<b>Sodium</b>	<b>81</b>		<b>2.0</b>	<b>mg/L</b>	<b>10</b>	11/21/2014 01:32 PM
<b>SODIUM ADSORPTION RATIO</b>						
			<b>USDA H60 METHOD</b>		Prep: USDA Method 20B / 11/21/14	Analyst: <b>JEC</b>
<b>Sodium Adsorption Ratio</b>	<b>2.4</b>		<b>0.010</b>	<b>none</b>	<b>1</b>	11/21/2014
<b>SEMI-VOLATILE ORGANIC COMPOUNDS</b>						
			<b>SW846 8270D</b>		Prep: SW3541 / 11/19/14	Analyst: <b>RS</b>
Acenaphthene	ND		7.7	µg/Kg-dry	1	11/20/2014 01:48 PM
Acenaphthylene	ND		7.7	µg/Kg-dry	1	11/20/2014 01:48 PM
Anthracene	ND		7.7	µg/Kg-dry	1	11/20/2014 01:48 PM
Benzo(a)anthracene	ND		7.7	µg/Kg-dry	1	11/20/2014 01:48 PM
Benzo(a)pyrene	ND		7.7	µg/Kg-dry	1	11/20/2014 01:48 PM
Benzo(b)fluoranthene	ND		7.7	µg/Kg-dry	1	11/20/2014 01:48 PM
Benzo(g,h,i)perylene	ND		7.7	µg/Kg-dry	1	11/20/2014 01:48 PM
Benzo(k)fluoranthene	ND		7.7	µg/Kg-dry	1	11/20/2014 01:48 PM
Chrysene	ND		7.7	µg/Kg-dry	1	11/20/2014 01:48 PM

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

# ALS Group USA, Corp

Date: 21-Nov-14

**Client:** HRL Compliance Solutions, Inc  
**Project:** Caerus Savage 8D Confirmation 11.18.14  
**Sample ID:** West Wall, 9'  
**Collection Date:** 11/18/2014 09:56 AM

**Work Order:** 1411958  
**Lab ID:** 1411958-04  
**Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Dibenzo(a,h)anthracene	ND		7.7	µg/Kg-dry	1	11/20/2014 01:48 PM
Fluoranthene	ND		7.7	µg/Kg-dry	1	11/20/2014 01:48 PM
Fluorene	ND		7.7	µg/Kg-dry	1	11/20/2014 01:48 PM
Indeno(1,2,3-cd)pyrene	ND		7.7	µg/Kg-dry	1	11/20/2014 01:48 PM
Naphthalene	ND		7.7	µg/Kg-dry	1	11/20/2014 01:48 PM
Pyrene	ND		7.7	µg/Kg-dry	1	11/20/2014 01:48 PM
Surr: 2-Fluorobiphenyl	63.9		12-100	%REC	1	11/20/2014 01:48 PM
Surr: 4-Terphenyl-d14	77.1		25-137	%REC	1	11/20/2014 01:48 PM
Surr: Nitrobenzene-d5	60.7		37-107	%REC	1	11/20/2014 01:48 PM
VOLATILE ORGANIC COMPOUNDS			SW8260B	Prep: SW5035 / 11/19/14		Analyst: JDW
Benzene	ND		36	µg/Kg-dry	1	11/19/2014 03:43 PM
Ethylbenzene	ND		36	µg/Kg-dry	1	11/19/2014 03:43 PM
m,p-Xylene	ND		71	µg/Kg-dry	1	11/19/2014 03:43 PM
o-Xylene	ND		36	µg/Kg-dry	1	11/19/2014 03:43 PM
Toluene	ND		36	µg/Kg-dry	1	11/19/2014 03:43 PM
Xylenes, Total	ND		110	µg/Kg-dry	1	11/19/2014 03:43 PM
Surr: 1,2-Dichloroethane-d4	97.5		70-130	%REC	1	11/19/2014 03:43 PM
Surr: 4-Bromofluorobenzene	98.5		70-130	%REC	1	11/19/2014 03:43 PM
Surr: Dibromofluoromethane	88.2		70-130	%REC	1	11/19/2014 03:43 PM
Surr: Toluene-d8	97.4		70-130	%REC	1	11/19/2014 03:43 PM
ELECTRICAL CONDUCTIVITY (SAR)			USDA H60 METHOD	Prep: USDA Method 20B / 11/21/14		Analyst: JB
Electrical Conductivity @ Saturation	0.88		0.050	mmhos/cm @25	10	11/21/2014 04:15 PM
CHROMIUM, TRIVALENT			CALCULATION			Analyst: MB
Chromium, Trivalent	17		0.59	mg/Kg-dry	1	11/21/2014 12:30 PM
CHROMIUM, HEXAVALENT			SW7196A	Prep: SW3060A / 11/19/14		Analyst: DAH
Chromium, Hexavalent	ND		0.58	mg/Kg-dry	1	11/20/2014 06:31 PM
MOISTURE			A2540 G			Analyst: EVB
Moisture	16		0.050	% of sample	1	11/19/2014 04:25 PM
PH			SW9045D	Prep: EXTRACT / 11/20/14		Analyst: AXL
pH	9.0			s.u.	1	11/20/2014 01:00 PM

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

# ALS Group USA, Corp

Date: 21-Nov-14

**Client:** HRL Compliance Solutions, Inc  
**Project:** Caerus Savage 8D Confirmation 11.18.14  
**Sample ID:** Footprint, 23  
**Collection Date:** 11/18/2014 01:30 PM

**Work Order:** 1411958  
**Lab ID:** 1411958-05  
**Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>DIESEL RANGE ORGANICS BY GC-FID</b>						
			<b>SW8015M</b>		Prep: SW3541 / 11/19/14	Analyst: <b>IT</b>
<b>DRO (C10-C28)</b>	<b>63</b>		<b>4.8</b>	<b>mg/Kg-dry</b>	<b>1</b>	11/20/2014 03:43 AM
<i>Surr: 4-Terphenyl-d14</i>	<i>58.0</i>		<i>39-133</i>	<i>%REC</i>	<i>1</i>	11/20/2014 03:43 AM
<b>GASOLINE RANGE ORGANICS BY GC-FID</b>						
			<b>SW8015</b>		Prep: SW5035 / 11/19/14	Analyst: <b>IT</b>
<b>GRO (C6-C10)</b>	<b>38</b>		<b>2.9</b>	<b>mg/Kg-dry</b>	<b>1</b>	11/19/2014 11:25 PM
<i>Surr: Toluene-d8</i>	<i>132</i>		<i>50-150</i>	<i>%REC</i>	<i>1</i>	11/19/2014 11:25 PM
<b>MERCURY BY CVAA</b>						
			<b>SW7471</b>		Prep: SW7471 / 11/20/14	Analyst: <b>LR</b>
Mercury	ND		0.016	mg/Kg-dry	1	11/20/2014 04:09 PM
<b>METALS ANALYSIS BY ICP</b>						
			<b>SW846 6010C</b>		Prep: SW3050B / 11/19/14	Analyst: <b>JEC</b>
Arsenic	6.7		0.46	mg/Kg-dry	1	11/19/2014 07:25 PM
Barium	190		0.46	mg/Kg-dry	1	11/19/2014 07:25 PM
Cadmium	ND		0.37	mg/Kg-dry	1	11/19/2014 07:25 PM
Chromium	20		0.46	mg/Kg-dry	1	11/19/2014 07:25 PM
Copper	20		0.46	mg/Kg-dry	1	11/19/2014 07:25 PM
Lead	11		0.46	mg/Kg-dry	1	11/19/2014 07:25 PM
Nickel	37		0.46	mg/Kg-dry	1	11/19/2014 07:25 PM
Selenium	ND		0.46	mg/Kg-dry	1	11/19/2014 07:25 PM
Silver	ND		0.46	mg/Kg-dry	1	11/19/2014 07:25 PM
Zinc	56		0.93	mg/Kg-dry	1	11/19/2014 07:25 PM
<b>SOLUBLE CATIONS FOR SAR</b>						
			<b>SW846 6010C</b>		Prep: USDA Method 20B / 11/21/14	Analyst: <b>JEC</b>
Calcium	230		5.0	mg/L	10	11/21/2014 01:38 PM
Magnesium	330		2.0	mg/L	10	11/21/2014 01:38 PM
Sodium	1,200		2.0	mg/L	10	11/21/2014 01:38 PM
<b>SODIUM ADSORPTION RATIO</b>						
			<b>USDA H60 METHOD</b>		Prep: USDA Method 20B / 11/21/14	Analyst: <b>JEC</b>
Sodium Adsorption Ratio	12		0.010	none	1	11/21/2014
<b>SEMI-VOLATILE ORGANIC COMPOUNDS</b>						
			<b>SW846 8270D</b>		Prep: SW3541 / 11/19/14	Analyst: <b>RS</b>
Acenaphthene	ND		7.6	µg/Kg-dry	1	11/20/2014 02:11 PM
Acenaphthylene	ND		7.6	µg/Kg-dry	1	11/20/2014 02:11 PM
Anthracene	ND		7.6	µg/Kg-dry	1	11/20/2014 02:11 PM
Benzo(a)anthracene	ND		7.6	µg/Kg-dry	1	11/20/2014 02:11 PM
Benzo(a)pyrene	ND		7.6	µg/Kg-dry	1	11/20/2014 02:11 PM
Benzo(b)fluoranthene	ND		7.6	µg/Kg-dry	1	11/20/2014 02:11 PM
Benzo(g,h,i)perylene	ND		7.6	µg/Kg-dry	1	11/20/2014 02:11 PM
Benzo(k)fluoranthene	ND		7.6	µg/Kg-dry	1	11/20/2014 02:11 PM
Chrysene	ND		7.6	µg/Kg-dry	1	11/20/2014 02:11 PM

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

# ALS Group USA, Corp

Date: 21-Nov-14

**Client:** HRL Compliance Solutions, Inc  
**Project:** Caerus Savage 8D Confirmation 11.18.14  
**Sample ID:** Footprint, 23  
**Collection Date:** 11/18/2014 01:30 PM

**Work Order:** 1411958  
**Lab ID:** 1411958-05  
**Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Dibenzo(a,h)anthracene	ND		7.6	µg/Kg-dry	1	11/20/2014 02:11 PM
Fluoranthene	ND		7.6	µg/Kg-dry	1	11/20/2014 02:11 PM
Fluorene	ND		7.6	µg/Kg-dry	1	11/20/2014 02:11 PM
Indeno(1,2,3-cd)pyrene	ND		7.6	µg/Kg-dry	1	11/20/2014 02:11 PM
Naphthalene	ND		7.6	µg/Kg-dry	1	11/20/2014 02:11 PM
Pyrene	ND		7.6	µg/Kg-dry	1	11/20/2014 02:11 PM
Surr: 2-Fluorobiphenyl	61.6		12-100	%REC	1	11/20/2014 02:11 PM
Surr: 4-Terphenyl-d14	74.9		25-137	%REC	1	11/20/2014 02:11 PM
Surr: Nitrobenzene-d5	55.6		37-107	%REC	1	11/20/2014 02:11 PM
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260B</b>	Prep: SW5035 / 11/19/14 Analyst: <b>JDW</b>		
Benzene	ND		35	µg/Kg-dry	1	11/19/2014 04:08 PM
Ethylbenzene	ND		35	µg/Kg-dry	1	11/19/2014 04:08 PM
<b>m,p-Xylene</b>	<b>550</b>		<b>69</b>	<b>µg/Kg-dry</b>	1	11/19/2014 04:08 PM
<b>o-Xylene</b>	<b>110</b>		<b>35</b>	<b>µg/Kg-dry</b>	1	11/19/2014 04:08 PM
<b>Toluene</b>	<b>87</b>		<b>35</b>	<b>µg/Kg-dry</b>	1	11/19/2014 04:08 PM
<b>Xylenes, Total</b>	<b>650</b>		<b>100</b>	<b>µg/Kg-dry</b>	1	11/19/2014 04:08 PM
Surr: 1,2-Dichloroethane-d4	98.4		70-130	%REC	1	11/19/2014 04:08 PM
Surr: 4-Bromofluorobenzene	98.2		70-130	%REC	1	11/19/2014 04:08 PM
Surr: Dibromofluoromethane	88.3		70-130	%REC	1	11/19/2014 04:08 PM
Surr: Toluene-d8	97.4		70-130	%REC	1	11/19/2014 04:08 PM
<b>ELECTRICAL CONDUCTIVITY (SAR)</b>			<b>USDA H60 METHOD</b>	Prep: USDA Method 20B / 11/21/14 Analyst: <b>JB</b>		
<b>Electrical Conductivity @ Saturation</b>	<b>12</b>		<b>0.050</b>	<b>mmhos/cm @25</b>	10	11/21/2014 04:15 PM
<b>CHROMIUM, TRIVALENT</b>			<b>CALCULATION</b>	Analyst: <b>MB</b>		
<b>Chromium, Trivalent</b>	<b>20</b>		<b>0.58</b>	<b>mg/Kg-dry</b>	1	11/21/2014 12:30 PM
<b>CHROMIUM, HEXAVALENT</b>			<b>SW7196A</b>	Prep: SW3060A / 11/19/14 Analyst: <b>DAH</b>		
<b>Chromium, Hexavalent</b>	ND		0.57	mg/Kg-dry	1	11/20/2014 06:31 PM
<b>MOISTURE</b>			<b>A2540 G</b>	Analyst: <b>EVb</b>		
<b>Moisture</b>	<b>14</b>		<b>0.050</b>	<b>% of sample</b>	1	11/19/2014 04:25 PM
<b>PH</b>			<b>SW9045D</b>	Prep: EXTRACT / 11/20/14 Analyst: <b>AXL</b>		
<b>pH</b>	<b>8.5</b>			<b>s.u.</b>	1	11/20/2014 01:00 PM

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1411958  
**Project:** Caerus Savage 8D Confirmation 11.18.14

**QC BATCH REPORT**

Batch ID: **65206** Instrument ID **GC8** Method: **SW8015M**

<b>MBLK</b>		Sample ID: <b>DBLKS1-65206-65206</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>11/19/2014 05:06 PM</b>		
Client ID:		Run ID: <b>GC8_141119A</b>				SeqNo: <b>3044505</b>		Prep Date: <b>11/19/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	ND	5.0								
Surr: 4-Terphenyl-d14	1.216	0	2	0	60.8	39-133	0			

<b>LCS</b>		Sample ID: <b>DLCSS1-65206-65206</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>11/19/2014 05:34 PM</b>		
Client ID:		Run ID: <b>GC8_141119A</b>				SeqNo: <b>3044506</b>		Prep Date: <b>11/19/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	148.6	5.0	200	0	74.3	61-109	0			
Surr: 4-Terphenyl-d14	1.055	0	2	0	52.7	39-133	0			

<b>MS</b>		Sample ID: <b>1411786-06C MS</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>11/19/2014 06:02 PM</b>		
Client ID:		Run ID: <b>GC8_141119A</b>				SeqNo: <b>3044508</b>		Prep Date: <b>11/19/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	220.2	7.8	313.9	18.15	64.4	48-110	0			
Surr: 4-Terphenyl-d14	1.753	0	3.139	0	55.9	39-133	0			

<b>MSD</b>		Sample ID: <b>1411786-06C MSD</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>11/19/2014 06:29 PM</b>		
Client ID:		Run ID: <b>GC8_141119A</b>				SeqNo: <b>3044509</b>		Prep Date: <b>11/19/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	242.8	8.1	325.3	18.15	69	48-110	220.2	9.76	30	
Surr: 4-Terphenyl-d14	2.013	0	3.253	0	61.9	39-133	1.753	13.8	30	

The following samples were analyzed in this batch:

1411958-01B	1411958-02B	1411958-03B
1411958-04B	1411958-05B	

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1411958  
**Project:** Caerus Savage 8D Confirmation 11.18.14

## QC BATCH REPORT

Batch ID: **65209**      Instrument ID **GC9**      Method: **SW8015**

<b>MBLK</b>		Sample ID: <b>MBLK-65209-65209</b>				Units: <b>µg/Kg</b>		Analysis Date: <b>11/19/2014 03:44 PM</b>		
Client ID:		Run ID: <b>GC9_141119A</b>				SeqNo: <b>3043901</b>		Prep Date: <b>11/19/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	ND	2,500								
<i>Surr: Toluene-d8</i>	6342	0	5000	0	127	50-150	0			

<b>LCS</b>		Sample ID: <b>LCS-65209-65209</b>				Units: <b>µg/Kg</b>		Analysis Date: <b>11/19/2014 02:53 PM</b>		
Client ID:		Run ID: <b>GC9_141119A</b>				SeqNo: <b>3043900</b>		Prep Date: <b>11/19/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	588000	2,500	500000	0	118	70-130	0			
<i>Surr: Toluene-d8</i>	5017	0	5000	0	100	50-150	0			

<b>MS</b>		Sample ID: <b>1411948-01A MS</b>				Units: <b>µg/Kg</b>		Analysis Date: <b>11/20/2014 01:06 AM</b>		
Client ID:		Run ID: <b>GC9_141119A</b>				SeqNo: <b>3044417</b>		Prep Date: <b>11/19/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	537300	2,500	500000	0	107	70-130	0			
<i>Surr: Toluene-d8</i>	4587	0	5000	0	91.7	50-150	0			

<b>MSD</b>		Sample ID: <b>1411948-01A MSD</b>				Units: <b>µg/Kg</b>		Analysis Date: <b>11/20/2014 01:31 AM</b>		
Client ID:		Run ID: <b>GC9_141119A</b>				SeqNo: <b>3044418</b>		Prep Date: <b>11/19/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	512200	2,500	500000	0	102	70-130	537300	4.78	30	
<i>Surr: Toluene-d8</i>	4618	0	5000	0	92.4	50-150	4587	0.684	30	

The following samples were analyzed in this batch:

1411958-01A	1411958-02A	1411958-03A
1411958-04A	1411958-05A	

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



**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1411958  
**Project:** Caerus Savage 8D Confirmation 11.18.14

## QC BATCH REPORT

Batch ID: **65226** Instrument ID **HG1** Method: **SW7471**

<b>MBLK</b>		Sample ID: <b>MBLK-65226-65226</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>11/20/2014 03:44 PM</b>		
Client ID:		Run ID: <b>HG1_141120A</b>				SeqNo: <b>3045502</b>		Prep Date: <b>11/20/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury ND 0.020

<b>LCS</b>		Sample ID: <b>LCS-65226-65226</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>11/20/2014 03:47 PM</b>		
Client ID:		Run ID: <b>HG1_141120A</b>				SeqNo: <b>3045503</b>		Prep Date: <b>11/20/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.1732 0.020 0.1665 0 104 80-120 0

<b>MS</b>		Sample ID: <b>1411958-05BMS</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>11/20/2014 04:11 PM</b>		
Client ID: <b>Footprint, 23</b>		Run ID: <b>HG1_141120A</b>				SeqNo: <b>3045548</b>		Prep Date: <b>11/20/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.124 0.014 0.1138 0.008236 102 75-125 0

<b>MSD</b>		Sample ID: <b>1411958-05BMSD</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>11/20/2014 04:20 PM</b>		
Client ID: <b>Footprint, 23</b>		Run ID: <b>HG1_141120A</b>				SeqNo: <b>3045590</b>		Prep Date: <b>11/20/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.1397 0.014 0.1179 0.008236 111 75-125 0.124 11.9 35

The following samples were analyzed in this batch:

1411958-01B	1411958-02B	1411958-03B
1411958-04B	1411958-05B	

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1411958  
**Project:** Caerus Savage 8D Confirmation 11.18.14

## QC BATCH REPORT

Batch ID: **65227**      Instrument ID **ICP2**      Method: **SW846 6010C**

<b>DUP</b>		Sample ID: <b>1411958-01CDUP</b>				Units: <b>mg/L</b>		Analysis Date: <b>11/21/2014 01:10 PM</b>		
Client ID: <b>North Wall, 9'</b>		Run ID: <b>ICP2_141121A</b>				SeqNo: <b>3047292</b>		Prep Date: <b>11/21/2014</b>		DF: <b>10</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	48.45	5.0	0	0	0	0-0	56.06	14.6		
Magnesium	39.72	2.0	0	0	0	0-0	47.38	17.6		
Sodium	155	2.0	0	0	0	0-0	183.1	16.6		

<b>DUP</b>		Sample ID: <b>1411958-01CDUP</b>				Units: <b>none</b>		Analysis Date: <b>11/21/2014</b>		
Client ID: <b>North Wall, 9'</b>		Run ID: <b>SAR_141121A</b>				SeqNo: <b>3047566</b>		Prep Date: <b>11/21/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sodium Adsorption Ratio	3.999	0.010	0	0	0		4.354	8.5	50	

The following samples were analyzed in this batch:

1411958-01C	1411958-02C	1411958-03C
1411958-04C	1411958-05C	

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1411958  
**Project:** Caerus Savage 8D Confirmation 11.18.14

## QC BATCH REPORT

Batch ID: **65228** Instrument ID **ICP2** Method: **SW846 6010C**

MBLK		Sample ID: <b>MBLK-65228-65228</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>11/19/2014 06:40 PM</b>		
Client ID:		Run ID: <b>ICP2_141119B</b>				SeqNo: <b>3043928</b>		Prep Date: <b>11/19/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	ND	0.25								
Barium	ND	0.25								
Cadmium	ND	0.50								
Chromium	ND	0.25								
Copper	ND	0.50								
Lead	ND	0.25								
Nickel	ND	0.25								
Selenium	ND	0.50								
Silver	ND	0.25								
Zinc	ND	0.50								

LCS		Sample ID: <b>LCS-65228-65228</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>11/19/2014 06:52 PM</b>		
Client ID:		Run ID: <b>ICP2_141119B</b>				SeqNo: <b>3043929</b>		Prep Date: <b>11/19/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	4.911	0.25	5	0	98.2	80-120	0			
Barium	4.674	0.25	5	0	93.5	80-120	0			
Cadmium	4.555	0.50	5	0	91.1	80-120	0			
Chromium	4.89	0.25	5	0	97.8	80-120	0			
Copper	4.932	0.50	5	0	98.6	80-120	0			
Lead	4.796	0.25	5	0	95.9	80-120	0			
Nickel	4.779	0.25	5	0	95.6	80-120	0			
Selenium	4.919	0.50	5	0	98.4	80-120	0			
Silver	4.581	0.25	5	0	91.6	80-120	0			
Zinc	5.053	0.50	5	0	101	80-120	0			

MS		Sample ID: <b>1411958-05BMS</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>11/19/2014 07:31 PM</b>		
Client ID: <b>Footprint, 23</b>		Run ID: <b>ICP2_141119B</b>				SeqNo: <b>3043936</b>		Prep Date: <b>11/19/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	15.01	0.40	8.091	5.812	114	75-125	0			
Barium	160.4	0.40	8.091	166.2	-71.2	75-125	0			SO
Chromium	26.85	0.40	8.091	17.71	113	75-125	0			
Lead	16.74	0.40	8.091	9.698	87	75-125	0			
Selenium	8.247	0.81	8.091	-0.1142	103	75-125	0			
Silver	8.724	0.40	8.091	0.04666	107	75-125	0			
Zinc	58.89	0.81	8.091	48.12	133	75-125	0			SO

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1411958  
**Project:** Caerus Savage 8D Confirmation 11.18.14

## QC BATCH REPORT

Batch ID: **65228**      Instrument ID **ICP2**      Method: **SW846 6010C**

MS					Sample ID: 1411958-05BMS			Units:mg/Kg		Analysis Date: 11/20/2014 09:55 AM	
Client ID: Footprint, 23			Run ID: ICP2_141120A			SeqNo:3044603		Prep Date: 11/19/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Cadmium	7.157	0.81	8.091	-0.08748	89.5	75-125	0				
Chromium	25.93	0.40	8.091	17.2	108	75-125	0				
Copper	25.73	0.81	8.091	17.26	105	75-125	0				
Nickel	38.78	0.40	8.091	31.96	84.4	75-125	0				

MSD				Sample ID: 1411958-05BMSD			Units:mg/Kg		Analysis Date: 11/19/2014 07:36 PM		
Client ID: Footprint, 23			Run ID: ICP2_141119B			SeqNo:3043937		Prep Date: 11/19/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Arsenic	14.72	0.40	8.013	5.812	111	75-125	15.01	1.91	20		
Barium	162.4	0.40	8.013	166.2	-47.7	75-125	160.4	1.2	20	SO	
Lead	16.51	0.40	8.013	9.698	85.1	75-125	16.74	1.35	20		
Selenium	8.183	0.80	8.013	-0.1142	104	75-125	8.247	0.779	20		
Silver	8.436	0.40	8.013	0.04666	105	75-125	8.724	3.36	20		
Zinc	55.4	0.80	8.013	48.12	90.7	75-125	58.89	6.11	20	O	

MSD				Sample ID: 1411958-05BMSD			Units:mg/Kg		Analysis Date: 11/20/2014 10:00 AM		
Client ID: Footprint, 23			Run ID: ICP2_141120A			SeqNo:3044604		Prep Date: 11/19/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Cadmium	7.317	0.80	8.013	-0.08748	92.4	75-125	7.157	2.22	20		
Chromium	26.25	0.40	8.013	17.2	113	75-125	25.93	1.24	20		
Copper	25.38	0.80	8.013	17.26	101	75-125	25.73	1.38	20		
Nickel	43.01	0.40	8.013	31.96	138	75-125	38.78	10.3	20	S	

The following samples were analyzed in this batch:

1411958-01B	1411958-02B	1411958-03B
1411958-04B	1411958-05B	

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1411958  
**Project:** Caerus Savage 8D Confirmation 11.18.14

## QC BATCH REPORT

Batch ID: **65219** Instrument ID **SVMS7** Method: **SW846 8270D**

MBLK		Sample ID: <b>SBLKS1-65219-65219</b>				Units: <b>µg/Kg</b>		Analysis Date: <b>11/20/2014 09:05 AM</b>		
Client ID:		Run ID: <b>SVMS7_141120A</b>				SeqNo: <b>3046018</b>		Prep Date: <b>11/19/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	ND	6.7								
Acenaphthylene	ND	6.7								
Anthracene	ND	6.7								
Benzo(a)anthracene	ND	6.7								
Benzo(a)pyrene	ND	6.7								
Benzo(b)fluoranthene	ND	6.7								
Benzo(g,h,i)perylene	ND	6.7								
Benzo(k)fluoranthene	ND	6.7								
Chrysene	ND	6.7								
Dibenzo(a,h)anthracene	ND	6.7								
Fluoranthene	ND	6.7								
Fluorene	ND	6.7								
Indeno(1,2,3-cd)pyrene	ND	6.7								
Naphthalene	ND	6.7								
Pyrene	ND	6.7								
Surr: 2-Fluorobiphenyl	1361	0	1667	0	81.7	12-100	0			
Surr: 4-Terphenyl-d14	1619	0	1667	0	97.1	25-137	0			
Surr: Nitrobenzene-d5	1335	0	1667	0	80.1	37-107	0			

LCS		Sample ID: <b>SLCSS1-65219-65219</b>				Units: <b>µg/Kg</b>		Analysis Date: <b>11/20/2014 09:29 AM</b>		
Client ID:		Run ID: <b>SVMS7_141120A</b>				SeqNo: <b>3046019</b>		Prep Date: <b>11/19/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	573.3	6.7	666.7	0	86	45-110	0			
Acenaphthylene	574.7	6.7	666.7	0	86.2	45-105	0			
Anthracene	671	6.7	666.7	0	101	55-105	0			
Benzo(a)anthracene	657	6.7	666.7	0	98.5	50-110	0			
Benzo(a)pyrene	653.7	6.7	666.7	0	98	50-110	0			
Benzo(b)fluoranthene	649.3	6.7	666.7	0	97.4	45-115	0			
Benzo(g,h,i)perylene	658.7	6.7	666.7	0	98.8	40-125	0			
Benzo(k)fluoranthene	665	6.7	666.7	0	99.7	45-115	0			
Chrysene	684.7	6.7	666.7	0	103	55-110	0			
Dibenzo(a,h)anthracene	635	6.7	666.7	0	95.2	40-125	0			
Fluoranthene	733.3	6.7	666.7	0	110	55-115	0			
Fluorene	599.3	6.7	666.7	0	89.9	50-110	0			
Indeno(1,2,3-cd)pyrene	650.3	6.7	666.7	0	97.5	40-120	0			
Naphthalene	538	6.7	666.7	0	80.7	40-105	0			
Pyrene	688.7	6.7	666.7	0	103	45-125	0			
Surr: 2-Fluorobiphenyl	1282	0	1667	0	76.9	12-100	0			
Surr: 4-Terphenyl-d14	1571	0	1667	0	94.3	25-137	0			
Surr: Nitrobenzene-d5	1294	0	1667	0	77.7	37-107	0			

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1411958  
**Project:** Caerus Savage 8D Confirmation 11.18.14

## QC BATCH REPORT

Batch ID: **65219** Instrument ID **SVMS7** Method: **SW846 8270D**

MS				Sample ID: 1411940-02A MS			Units: µg/Kg		Analysis Date: 11/20/2014 09:52 AM	
Client ID:		Run ID: SVMS7_141120A			SeqNo: 3046020		Prep Date: 11/19/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	1378	18	1832	0	75.2	45-110	0			
Acenaphthylene	1409	18	1832	0	76.9	45-105	0			
Anthracene	1608	18	1832	0	87.8	55-105	0			
Benzo(a)anthracene	1611	18	1832	0	87.9	50-110	0			
Benzo(a)pyrene	1595	18	1832	0	87	50-110	0			
Benzo(b)fluoranthene	1581	18	1832	0	86.3	45-115	0			
Benzo(g,h,i)perylene	1496	18	1832	0	81.6	40-125	0			
Benzo(k)fluoranthene	1598	18	1832	0	87.2	45-115	0			
Chrysene	1668	18	1832	0	91	55-110	0			
Dibenzo(a,h)anthracene	1511	18	1832	0	82.5	40-125	0			
Fluoranthene	1664	18	1832	0	90.8	55-115	0			
Fluorene	1475	18	1832	0	80.5	50-110	0			
Indeno(1,2,3-cd)pyrene	1532	18	1832	0	83.6	40-120	0			
Naphthalene	1322	18	1832	0	72.1	40-105	0			
Pyrene	1660	18	1832	0	90.6	45-125	0			
Surr: 2-Fluorobiphenyl	3132	0	4580	0	68.4	12-100	0			
Surr: 4-Terphenyl-d14	3875	0	4580	0	84.6	25-137	0			
Surr: Nitrobenzene-d5	3188	0	4580	0	69.6	37-107	0			

MSD				Sample ID: 1411940-02A MSD			Units: µg/Kg		Analysis Date: 11/20/2014 10:16 AM	
Client ID:		Run ID: SVMS7_141120A			SeqNo: 3046021		Prep Date: 11/19/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	1335	19	1914	0	69.7	45-110	1378	3.14	30	
Acenaphthylene	1350	19	1914	0	70.5	45-105	1409	4.24	30	
Anthracene	1673	19	1914	0	87.4	55-105	1608	3.92	30	
Benzo(a)anthracene	1661	19	1914	0	86.8	50-110	1611	3.06	30	
Benzo(a)pyrene	1668	19	1914	0	87.1	50-110	1595	4.5	30	
Benzo(b)fluoranthene	1661	19	1914	0	86.8	45-115	1581	4.96	30	
Benzo(g,h,i)perylene	1499	19	1914	0	78.3	40-125	1496	0.192	30	
Benzo(k)fluoranthene	1714	19	1914	0	89.5	45-115	1598	6.98	30	
Chrysene	1730	19	1914	0	90.4	55-110	1668	3.66	30	
Dibenzo(a,h)anthracene	1518	19	1914	0	79.3	40-125	1511	0.425	30	
Fluoranthene	1722	19	1914	0	90	55-115	1664	3.44	30	
Fluorene	1487	19	1914	0	77.7	50-110	1475	0.841	30	
Indeno(1,2,3-cd)pyrene	1528	19	1914	0	79.8	40-120	1532	0.268	30	
Naphthalene	1279	19	1914	0	66.8	40-105	1322	3.25	30	
Pyrene	1723	19	1914	0	90	45-125	1660	3.77	30	
Surr: 2-Fluorobiphenyl	2906	0	4785	0	60.7	12-100	3132	7.49	40	
Surr: 4-Terphenyl-d14	3924	0	4785	0	82	25-137	3875	1.26	40	
Surr: Nitrobenzene-d5	3016	0	4785	0	63	37-107	3188	5.55	40	

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



**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1411958  
**Project:** Caerus Savage 8D Confirmation 11.18.14

**QC BATCH REPORT**

Batch ID: **65219**      Instrument ID **SVMS7**      Method: **SW846 8270D**

**The following samples were analyzed in this batch:**

1411958-01B	1411958-02B	1411958-03B
1411958-04B	1411958-05B	

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1411958  
**Project:** Caerus Savage 8D Confirmation 11.18.14

## QC BATCH REPORT

Batch ID: **65208**      Instrument ID **VMS6**      Method: **SW8260B**

Sample ID: <b>MBLK-65208-65208</b>				Units: <b>µg/Kg</b>			Analysis Date: <b>11/19/2014 02:53 PM</b>			
Client ID:		Run ID: <b>VMS6_141119A</b>			SeqNo: <b>3045078</b>		Prep Date: <b>11/19/2014</b>		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	30								
Ethylbenzene	ND	30								
m,p-Xylene	ND	60								
o-Xylene	ND	30								
Toluene	ND	30								
Xylenes, Total	ND	90								
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>936.5</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>93.6</i>	<i>70-130</i>	<i>0</i>			
<i>Surr: 4-Bromofluorobenzene</i>	<i>930</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>93</i>	<i>70-130</i>	<i>0</i>			
<i>Surr: Dibromofluoromethane</i>	<i>917</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>91.7</i>	<i>70-130</i>	<i>0</i>			
<i>Surr: Toluene-d8</i>	<i>1009</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>101</i>	<i>70-130</i>	<i>0</i>			

LCS				Sample ID: LCS-65208-65208			Units: µg/Kg		Analysis Date: 11/19/2014 01:35 PM		
Client ID:			Run ID: VMS6_141119A			SeqNo:3045077		Prep Date: 11/19/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	1059	30	1000	0	106	75-125	0				
Ethylbenzene	1014	30	1000	0	101	75-125	0				
m,p-Xylene	1961	60	2000	0	98	80-125	0				
o-Xylene	1000	30	1000	0	100	75-125	0				
Toluene	965.5	30	1000	0	96.6	70-125	0				
Xylenes, Total	2961	90	3000	0	98.7	75-125	0				
Surr: 1,2-Dichloroethane-d4	957	0	1000	0	95.7	70-130	0				
Surr: 4-Bromofluorobenzene	991.5	0	1000	0	99.2	70-130	0				
Surr: Dibromofluoromethane	971.5	0	1000	0	97.2	70-130	0				
Surr: Toluene-d8	991.5	0	1000	0	99.2	70-130	0				

MS					Sample ID: 1411958-01A MS		Units: µg/Kg		Analysis Date: 11/19/2014 09:40 PM	
Client ID: North Wall, 9'			Run ID: VMS8_141119A			SeqNo:3045000		Prep Date: 11/19/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	976	30	1000	0	97.6	75-125	0			
Ethylbenzene	979.5	30	1000	0	98	75-125	0			
m,p-Xylene	1963	60	2000	0	98.2	80-125	0			
o-Xylene	963	30	1000	0	96.3	75-125	0			
Toluene	967.5	30	1000	0	96.8	70-125	0			
Xylenes, Total	2926	90	3000	0	97.5	75-125	0			
Surr: 1,2-Dichloroethane-d4	1006	0	1000	0	101	70-130	0			
Surr: 4-Bromofluorobenzene	1015	0	1000	0	102	70-130	0			
Surr: Dibromofluoromethane	997.5	0	1000	0	99.8	70-130	0			
Surr: Toluene-d8	974	0	1000	0	97.4	70-130	0			

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1411958  
**Project:** Caerus Savage 8D Confirmation 11.18.14

## QC BATCH REPORT

Batch ID: **65208**      Instrument ID **VMS6**      Method: **SW8260B**

MSD				Sample ID: 1411958-01A MSD			Units: µg/Kg		Analysis Date: 11/19/2014 10:04 PM	
Client ID: North Wall, 9'				Run ID: VMS8_141119A			SeqNo: 3045001		Prep Date: 11/19/2014	
									DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	984	30	1000	0	98.4	75-125	976	0.816	30	
Ethylbenzene	994.5	30	1000	0	99.4	75-125	979.5	1.52	30	
m,p-Xylene	1972	60	2000	0	98.6	80-125	1963	0.483	30	
o-Xylene	985	30	1000	0	98.5	75-125	963	2.26	30	
Toluene	960.5	30	1000	0	96	70-125	967.5	0.726	30	
Xylenes, Total	2958	90	3000	0	98.6	75-125	2926	1.07	30	
Surr: 1,2-Dichloroethane-d4	1011	0	1000	0	101	70-130	1006	0.496	30	
Surr: 4-Bromofluorobenzene	996	0	1000	0	99.6	70-130	1015	1.89	30	
Surr: Dibromofluoromethane	990	0	1000	0	99	70-130	997.5	0.755	30	
Surr: Toluene-d8	965.5	0	1000	0	96.6	70-130	974	0.877	30	

The following samples were analyzed in this batch:

1411958-01A	1411958-02A	1411958-03A
1411958-04A	1411958-05A	

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1411958  
**Project:** Caerus Savage 8D Confirmation 11.18.14

## QC BATCH REPORT

Batch ID: **65227** Instrument ID **WETCHEM** Method: **USDA H60 Method**

<b>DUP</b>		Sample ID: <b>1411958-01C DUP</b>				Units: <b>mmhos/cm @25°C</b>		Analysis Date: <b>11/21/2014 04:15 PM</b>		
Client ID: <b>North Wall, 9'</b>			Run ID: <b>WETCHEM_141121F</b>			SeqNo: <b>3047608</b>		Prep Date: <b>11/21/2014</b>		DF: <b>10</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Electrical Conductivity @ Saturation	0.328	0.050	0	0	0		0.365	10.7	50	

The following samples were analyzed in this batch:

1411958-01C	1411958-02C	1411958-03C
1411958-04C	1411958-05C	

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1411958  
**Project:** Caerus Savage 8D Confirmation 11.18.14

## QC BATCH REPORT

Batch ID: **65262**      Instrument ID **WETCHEM**      Method: **SW7196A**

<b>MBLK</b>		Sample ID: <b>MBLK-65262-65262</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>11/20/2014 06:31 PM</b>		
Client ID:		Run ID: <b>WETCHEM_141120L</b>				SeqNo: <b>3046058</b>		Prep Date: <b>11/19/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent      ND      0.50

<b>LCS</b>		Sample ID: <b>LCS-65262-65262</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>11/20/2014 06:31 PM</b>		
Client ID:		Run ID: <b>WETCHEM_141120L</b>				SeqNo: <b>3046059</b>		Prep Date: <b>11/19/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent      1.872      0.50      2      0      93.6      80-120      0

<b>MS</b>		Sample ID: <b>1411958-01B MS</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>11/20/2014 06:31 PM</b>		
Client ID: <b>North Wall, 9'</b>		Run ID: <b>WETCHEM_141120L</b>				SeqNo: <b>3046061</b>		Prep Date: <b>11/19/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent      1.414      0.50      1.992      0.2118      60.4      75-125      0      S

<b>MS</b>		Sample ID: <b>1411958-01B MSI</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>11/20/2014 06:31 PM</b>		
Client ID: <b>North Wall, 9'</b>		Run ID: <b>WETCHEM_141120L</b>				SeqNo: <b>3046063</b>		Prep Date: <b>11/19/2014</b>		DF: <b>100</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent      968.8      49      1157      0.2118      83.7      75-125      0

<b>MSD</b>		Sample ID: <b>1411958-01B MSD</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>11/20/2014 06:31 PM</b>		
Client ID: <b>North Wall, 9'</b>		Run ID: <b>WETCHEM_141120L</b>				SeqNo: <b>3046062</b>		Prep Date: <b>11/19/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent      1.449      0.49      1.969      0.2118      62.8      75-125      1.414      2.41      20      S

The following samples were analyzed in this batch:

1411958-01B	1411958-02B	1411958-03B
1411958-04B	1411958-05B	

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1411958  
**Project:** Caerus Savage 8D Confirmation 11.18.14

## QC BATCH REPORT

Batch ID: **65277**      Instrument ID **WETCHEM**      Method: **SW9045D**

LCS				Sample ID: LCS-65277-65277				Units:s.u.			Analysis Date: 11/20/2014 01:00 PM			
Client ID:				Run ID: WETCHEM_141120F				SeqNo: 3045016			Prep Date: 11/20/2014		DF: 1	
Analyte				Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
pH				3.98	0	4	0	99.5	90-110	0				

DUP					Sample ID: 1411958-01B DUP				Units:s.u.			Analysis Date: 11/20/2014 01:00 PM				
Client ID: North Wall, 9'					Run ID: WETCHEM_141120F				SeqNo: 3045019			Prep Date: 11/20/2014			DF: 1	
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual					
pH		8.8	0	0	0	0	0-0	8.74	0.684	20						

DUP				Sample ID: 1411996-01A DUP				Units: s.u.			Analysis Date: 11/20/2014 01:00 PM			
Client ID:				Run ID: WETCHEM_141120F				SeqNo: 3045033			Prep Date: 11/20/2014		DF: 1	
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual			
pH		7.85	0	0	0	0	0-0	7.78	0.896	20				

The following samples were analyzed in this batch:

1411958-01B	1411958-02B	1411958-03B
1411958-04B	1411958-05B	

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



**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1411958  
**Project:** Caerus Savage 8D Confirmation 11.18.14

## QC BATCH REPORT

Batch ID: **R152854**      Instrument ID **MOIST**      Method: **A2540 G**

<b>MBLK</b>		Sample ID: <b>WBLKS-R152854</b>				Units: % of sample		Analysis Date: <b>11/19/2014 04:25 PM</b>		
Client ID:		Run ID: <b>MOIST_141119F</b>				SeqNo: <b>3045797</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture      ND      0.050

<b>LCS</b>		Sample ID: <b>LCS-R152854</b>				Units: % of sample		Analysis Date: <b>11/19/2014 04:25 PM</b>		
Client ID:		Run ID: <b>MOIST_141119F</b>				SeqNo: <b>3045796</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture      99.99      0.050      100      0      100      99.5-100.5      0

<b>DUP</b>		Sample ID: <b>1411940-01A DUP</b>				Units: % of sample		Analysis Date: <b>11/19/2014 04:25 PM</b>		
Client ID:		Run ID: <b>MOIST_141119F</b>				SeqNo: <b>3045770</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture      6.68      0.050      0      0      0      0-0      6.96      4.11      20

<b>DUP</b>		Sample ID: <b>1411962-03A DUP</b>				Units: % of sample		Analysis Date: <b>11/19/2014 04:25 PM</b>		
Client ID:		Run ID: <b>MOIST_141119F</b>				SeqNo: <b>3045788</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture      5.18      0.050      0      0      0      0-0      5.33      2.85      20

The following samples were analyzed in this batch:

1411958-01B	1411958-02B	1411958-03B
1411958-04B	1411958-05B	

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

## Chain-of-Custody

Form 202r8

**WORKORDER**  
#

141958

PAGE 1 of 1

DISPOSAL ☒ By Lab or ☐ Return to Client

PROJECT NAME		SAMPLER		DATE		PAGE	
PROJECT No.		SITE ID		TURNAROUND		DISPOSAL	
COMPANY NAME		EDD FORMAT				By Lab or Return to Client	
SEND REPORT TO		PURCHASE ORDER					
ADDRESS		BILL TO COMPANY					
CITY / STATE / ZIP		INVOICE ATTN TO					
PHONE		ADDRESS					
FAX		CITY / STATE / ZIP					
E-MAIL		PHONE					
		FAX					
		E-MAIL					
Lab ID	Field ID	Matrix	Sample Date	Sample Time	# Bottles	Pres.	QC
1	NORTH WALL, 9'	SOIL	11-18-14	1002	3	8	
2	SOUTH WALL, 8'			952	1	1	
3	EAST WALL, 8.5'			959	1	1	
4	WEST WALL, 9'			956	1	1	
5	FOOTPRINT, 23'			1330	1	1	

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

or metals or anions, please detail analytes below.

**Comments:**

PLEASE SUBMIT PRELIM REPORT.





QC PACKAGE (check below)

x	LEVEL II (Standard QC)
---	------------------------

LEVEL III (Std OC + forms)

LEVEL IV (Std QC + forms + raw data)	
---	--

**Preservative Key:** 1-HCl 2-HNO<sub>3</sub> 3-H<sub>2</sub>SO<sub>4</sub> 4-NaOH 5-NaHSO<sub>4</sub> 7-Other 8-4 degrees C 9-5035

	SIGNATURE	PRINTED NAME	DATE	TIME
RELINQUISHED BY		CASEY RICHARDSON	11-18-14	1530
RECEIVED BY		T. B. SMITH	11-18-14	1540
RELINQUISHED BY		T. B. SMITH	11/19/14	1030
RECEIVED BY		T. B. SMITH		
RELINQUISHED BY				
RECEIVED BY				

Sample Receipt Checklist

Client Name: **HRL**

Date/Time Received: **19-Nov-14 10:30**

Work Order: **1411958**

Received by: **TBB**

Checklist completed by <u><i>Diane Shaw</i></u>	19-Nov-14	Reviewed by: <u><i>Ann Preston</i></u>	19-Nov-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 checked="" type="checkbox"/>	No <input type="checkbox"/>	
Temperature(s)/Thermometer(s):	<u>4.4 c</u>		
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:	<u>11/19/2014 11:55:31 AM</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  
 Nisk Martinez  
 ALS Environmental  
 127 E. 1st Street  
 PARACHUTE, CO 81035

Origin ID: RLA



Ship Date: 18 NOV 14  
 Actual Wt: 58.0 LB  
 CAD: 22548404NET3550

Dims: 24 X 15 X 15 IN

Delivery Address Bar Code



Ref # 111814-1  
 Invoice #  
 PO # Parachute  
 Dept #

SHIP TO: (816) 399-4478  
 sample receiving  
 ALS Laboratory Group  
 3352 128TH AVE

BILL BENDER

HOLLAND, MI 48424

4 of 5

WED - 19 NOV 10:30A  
 PRIORITY OVERNIGHT

MP# 7719 0841 9100

E293

Mstr# 7719 0841 8458

E291

49424

MS US

GRR

**XX HLMA**

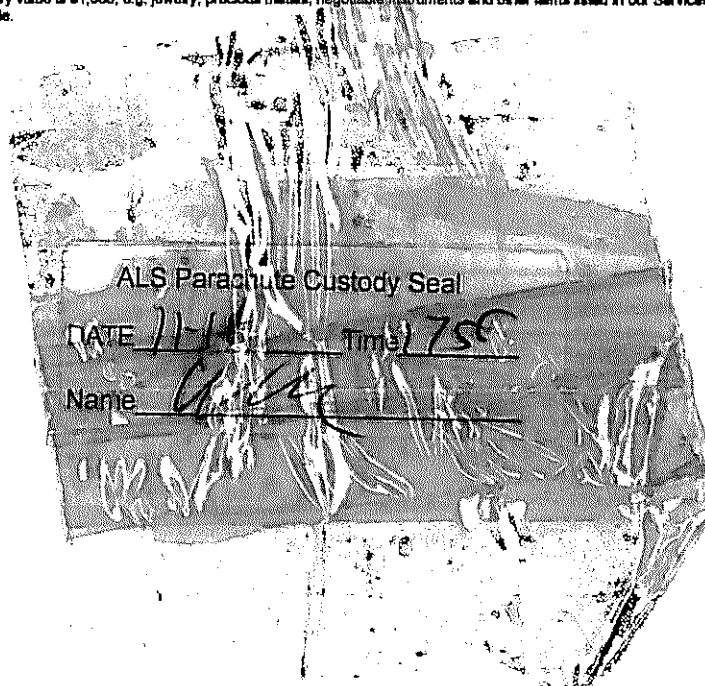
827318180343

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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.

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From: (816) 399-8970  
 Nick Martinez  
 ALS Environmental  
 127 E. 1st Street  
 PARACHUTE, CO 81635

Origin ID: RLA



Ship Date: 18NOV14  
 Actual: 52.0 LB  
 CAD: 22640409/ET3550

Dim: 24 X 15 X 15 IN

SHIP TO: (816) 399-4478  
 sample receiving  
 ALS Laboratory Group  
 3352 128TH AVE

BILL SENDER

HOLLAND, MI 49424

Delivery Address Bar Code



Ref # 111814-1  
 Invoice #  
 PO # Parachute  
 Dept #

5 of 5

WED - 19 NOV 10:30A  
 PRIORITY OVERNIGHT

MP# 7719 0841 9599

623

Mstr# 7719 0841 8456

K01

49424

M-LR

GRR

XX HLMA



020181638429

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ALS Parachute Custody Seal

DATE 11-19-14 Time 1745

Name [Signature]



26-Nov-2014

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

Re: **Caerus Savage 8D Background 11.21.14**

Work Order: **14111199**

Dear Mark,

ALS Environmental received 3 samples on 22-Nov-2014 10:00 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: Joseph Ribar

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 

[www.alsglobal.com](http://www.alsglobal.com)

RIGHT SOLUTIONS RIGHT PARTNER



**Client:** HRL Compliance Solutions, Inc  
**Project:** Caerus Savage 8D Background 11.21.14  
**Work Order:** 14111199

## 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>
14111199-01	BKGD 01	Soil		11/21/2014 10:47	11/22/2014 10:00	<input type="checkbox"/>
14111199-02	BKGD 02	Soil		11/21/2014 10:50	11/22/2014 10:00	<input type="checkbox"/>
14111199-03	BKGD 03	Soil		11/21/2014 10:55	11/22/2014 10:00	<input type="checkbox"/>

# ALS Group USA, Corp

Date: 26-Nov-14

**Client:** HRL Compliance Solutions, Inc  
**Project:** Caerus Savage 8D Background 11.21.14  
**Sample ID:** BKGD 01  
**Collection Date:** 11/21/2014 10:47 AM

**Work Order:** 14111199  
**Lab ID:** 14111199-01  
**Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<hr/>						
<b>METALS ANALYSIS BY ICP</b>			<b>SW846 6010C</b>		Prep: SW3050B / 11/24/14	Analyst: <b>JEC</b>
Arsenic	4.1		0.41	mg/Kg-dry	1	11/24/2014 12:24 PM
<b>MOISTURE</b>			<b>A2540 G</b>			Analyst: <b>EVB</b>
Moisture	7.6		0.050	% of sample	1	11/24/2014 09:45 AM

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

# ALS Group USA, Corp

Date: 26-Nov-14

**Client:** HRL Compliance Solutions, Inc  
**Project:** Caerus Savage 8D Background 11.21.14  
**Sample ID:** BKGD 02  
**Collection Date:** 11/21/2014 10:50 AM

**Work Order:** 14111199  
**Lab ID:** 14111199-02  
**Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<hr/>						
<b>METALS ANALYSIS BY ICP</b>			<b>SW846 6010C</b>		Prep: SW3050B / 11/24/14	Analyst: <b>JEC</b>
Arsenic	4.1		0.42	mg/Kg-dry	1	11/24/2014 12:29 PM
<b>MOISTURE</b>			<b>A2540 G</b>			Analyst: <b>EVB</b>
Moisture	17		0.050	% of sample	1	11/24/2014 09:45 AM

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

# ALS Group USA, Corp

Date: 26-Nov-14

**Client:** HRL Compliance Solutions, Inc  
**Project:** Caerus Savage 8D Background 11.21.14  
**Sample ID:** BKGD 03  
**Collection Date:** 11/21/2014 10:55 AM

**Work Order:** 14111199  
**Lab ID:** 14111199-03  
**Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>METALS ANALYSIS BY ICP</b>						
Arsenic	4.8		SW846 6010C 0.46	mg/Kg-dry	Prep: SW3050B / 11/24/14 1	Analyst: JEC 11/24/2014 12:35 PM
<b>SOLUBLE CATIONS FOR SAR</b>						
Calcium	170		SW846 6010C 5.0	mg/L	Prep: USDA Method 20B / 11/26/14 10	Analyst: JEC 11/26/2014 12:01 PM
Magnesium	31		2.0	mg/L	10	11/26/2014 12:01 PM
Sodium	6.1		2.0	mg/L	10	11/26/2014 12:01 PM
<b>SODIUM ADSORPTION RATIO</b>						
Sodium Adsorption Ratio	0.11		USDA H60 METHO 0.010	none	Prep: USDA Method 20B / 11/26/14 1	Analyst: JEC 11/26/2014
<b>ELECTRICAL CONDUCTIVITY (SAR)</b>						
Electrical Conductivity @ Saturation	1.1		USDA H60 METHO 0.050	mmhos/cm @2	Prep: USDA Method 20B / 11/26/14 10	Analyst: JB 11/26/2014 11:45 AM
<b>MOISTURE</b>						
Moisture	14		A2540 G 0.050	% of sample	1	Analyst: EVB 11/24/2014 09:45 AM
<b>PH</b>						
pH	7.8		SW9045D s.u.		Prep: EXTRACT / 11/24/14 1	Analyst: STP 11/24/2014 02:15 PM

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

<b><u>Qualifier</u></b>	<b><u>Description</u></b>
*	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

<b><u>Acronym</u></b>	<b><u>Description</u></b>
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

<b><u>Units Reported</u></b>	<b><u>Description</u></b>
% 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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 14111199  
**Project:** Caerus Savage 8D Background 11.21.14

# QC BATCH REPORT

Batch ID: **65366** Instrument ID **ICP2** Method: **SW846 6010C**

DUP		Sample ID: 14111151-01BDUP				Units: mg/L		Analysis Date: 11/26/2014 11:55 A		
Client ID:		Run ID: ICP2_141126A				SeqNo: 3054414		Prep Date: 11/26/2014		DF: 10
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	265.1	5.0	0	0	0	0-0	290.8	9.25		
Magnesium	81.39	2.0	0	0	0	0-0	88.69	8.58		
Sodium	124.4	2.0	0	0	0	0-0	138.1	10.4		

DUP		Sample ID: 14111151-01BDUP				Units: none		Analysis Date: 11/26/2014		
Client ID:		Run ID: SAR_141126A				SeqNo: 3054437		Prep Date: 11/26/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sodium Adsorption Ratio	1.714	0.010	0	0	0		1.819	5.94	50	

The following samples were analyzed in this batch:

14111199-03B

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 14111199  
**Project:** Caerus Savage 8D Background 11.21.14

## QC BATCH REPORT

Batch ID: **65367** Instrument ID **ICP2** Method: **SW846 6010C**

<b>MBLK</b>	Sample ID: <b>MBLK-65367-65367</b>					Units: <b>mg/Kg</b>		Analysis Date: <b>11/24/2014 11:51 A</b>		
Client ID:	Run ID: <b>ICP2_141124A</b>				SeqNo: <b>3050136</b>		Prep Date: <b>11/24/2014</b>		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Arsenic ND 0.25

<b>MBLK</b>	Sample ID: <b>MBLK-65367-65367</b>					Units: <b>mg/Kg</b>		Analysis Date: <b>11/25/2014 03:48 PM</b>		
Client ID:	Run ID: <b>ICP2_141125A</b>				SeqNo: <b>3053809</b>		Prep Date: <b>11/24/2014</b>		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Arsenic ND 0.25

<b>LCS</b>	Sample ID: <b>LCS-65367-65367</b>					Units: <b>mg/Kg</b>		Analysis Date: <b>11/24/2014 12:00 PM</b>		
Client ID:	Run ID: <b>ICP2_141124A</b>				SeqNo: <b>3050137</b>		Prep Date: <b>11/24/2014</b>		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Arsenic 4.688 0.25 5 0 93.8 80-120 0

<b>LCS</b>	Sample ID: <b>LCS-65367-65367</b>					Units: <b>mg/Kg</b>		Analysis Date: <b>11/25/2014 03:53 PM</b>		
Client ID:	Run ID: <b>ICP2_141125A</b>				SeqNo: <b>3053810</b>		Prep Date: <b>11/24/2014</b>		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Arsenic 4.645 0.25 5 0 92.9 80-120 0

<b>MS</b>	Sample ID: <b>14111151-01AMS</b>					Units: <b>mg/Kg</b>		Analysis Date: <b>11/24/2014 12:46 PM</b>		
Client ID:	Run ID: <b>ICP2_141124A</b>				SeqNo: <b>3050623</b>		Prep Date: <b>11/24/2014</b>		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Arsenic 18.35 0.36 7.215 9.563 122 75-125 0

<b>MSD</b>	Sample ID: <b>14111151-01AMSD</b>					Units: <b>mg/Kg</b>		Analysis Date: <b>11/24/2014 01:26 PM</b>		
Client ID:	Run ID: <b>ICP2_141124A</b>				SeqNo: <b>3050637</b>		Prep Date: <b>11/24/2014</b>		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Arsenic 17.83 0.36 7.236 9.563 114 75-125 18.35 2.86 20

The following samples were analyzed in this batch:

14111199-01A	14111199-02A	14111199-03A
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**Note:** See Qualifiers Page for a list of Qualifiers and their explanation.

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 14111199  
**Project:** Caerus Savage 8D Background 11.21.14

## QC BATCH REPORT

Batch ID: **65366** Instrument ID **WETCHEM** Method: **USDA H60 Metho**

<b>DUP</b>		Sample ID: <b>14111151-01B DUP</b>				Units: <b>mmhos/cm @25°</b>		Analysis Date: <b>11/26/2014 11:45 A</b>		
Client ID:		Run ID: <b>WETCHEM_141126F</b>				SeqNo: <b>3054303</b>		Prep Date: <b>11/26/2014</b>		DF: <b>10</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Electrical Conductivity @ Saturation	3.12	0.050	0	0	0		3.01	3.59	50	

The following samples were analyzed in this batch:

14111199-03B

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



**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 14111199  
**Project:** Caerus Savage 8D Background 11.21.14

## QC BATCH REPORT

Batch ID: **65386** Instrument ID **WETCHEM** Method: **SW9045D**

LCS				Sample ID: LCS-R153135-65386				Units: s.u.			Analysis Date: 11/24/2014 02:15 PM			
Client ID:				Run ID: WETCHEM_141124I				SeqNo: 3051066			Prep Date: 11/24/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual				
pH	4	0	4	0	100	90-110	0							

DUP				Sample ID: 14111073-01A DUP				Units: s.u.		Analysis Date: 11/24/2014 02:15 PM			
Client ID:				Run ID: WETCHEM_141124I				SeqNo: 3051068		Prep Date: 11/24/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual			
pH	10.2	0	0	0	0	0-0	10.31	1.07	20				

<b>DUP</b>				Sample ID: <b>14111146-01B DUP</b>				Units: <b>s.u.</b>		Analysis Date: <b>11/24/2014 02:15 PM</b>			
Client ID:				Run ID: <b>WETCHEM_141124I</b>				SeqNo: <b>3051078</b>		Prep Date: <b>11/24/2014</b>		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual			
pH	7.88	0	0	0	0	0-0	7.93	0.633	20				

The following samples were analyzed in this batch:

14111199-03A

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 14111199  
**Project:** Caerus Savage 8D Background 11.21.14

## QC BATCH REPORT

Batch ID: **R153148** Instrument ID **MOIST** Method: **A2540 G**

<b>MBLK</b>		Sample ID: <b>WBLKS-R153148</b>				Units: % of sample		Analysis Date: <b>11/24/2014 09:45 A</b>		
Client ID:		Run ID: <b>MOIST_141124A</b>				SeqNo: <b>3051514</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture ND 0.050

<b>LCS</b>		Sample ID: <b>LCS-R153148</b>				Units: % of sample		Analysis Date: <b>11/24/2014 09:45 A</b>		
Client ID:		Run ID: <b>MOIST_141124A</b>				SeqNo: <b>3051512</b>		Prep Date:		DF: <b>1</b>
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

<b>DUP</b>		Sample ID: <b>14111100-01B DUP</b>				Units: % of sample		Analysis Date: <b>11/24/2014 09:45 A</b>		
Client ID:		Run ID: <b>MOIST_141124A</b>				SeqNo: <b>3051497</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 3.89 0.050 0 0 0 0-0 3.9 0.257 20

The following samples were analyzed in this batch:

14111199-01A	14111199-02A	14111199-03A
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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  
#

1411199

PAGE

1 of 1

DISPOSAL

~~Back~~ or Return to Client

DATE

11-21-14

TURNAROUND

5 DAY 24 HR

SAMPLER

CASEY RICHARDSON

SITE ID

BACKGROUND

EDD FORMAT

PURCHASE ORDER

BILL TO COMPANY

Caerus Piceance LLC

INVOICE ATTN TO

JAKE JANICEK

ADDRESS

120 Railroad Ave. Suite D

CITY / STATE / ZIP

Parachute, CO 81635

PHONE

970-285-9606

FAX

E-MAIL

jjanicek@caerusoilandgas.com

Lab ID

Field ID

Matrix

Sample  
Date

Sample  
Time

#  
Bottles

Pres.

QC

ARSENIC

SAR

EC

PH

1

BKGD 01

SOIL

11-21-14

1047

1

8

X

2

BKGD 02

1

1

1050

1

1

X

3

BKGD 03

1

1

1055

2

1

X

X

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.

Comments:

3.40

QC PACKAGE (check below):

x

LEVEL II (Standard QC)

LEVEL III (Std QC + forms)

LEVEL IV (Std QC + forms  
+ raw data)

ervative 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

C. Richardson

CASEY RICHARDSON

11-21-14

1140

RECEIVED BY

J. Janicek

J. Janicek

11-21-14

1445

RELINQUISHED BY

J. Janicek

J. Janicek

11-21-14

1200

RECEIVED BY

J. Janicek

J. Janicek

11-22-14

1000

RELINQUISHED BY

J. Janicek

J. Janicek

RECEIVED BY

J. Janicek

J. Janicek

From: (616) 395-6070  
Nick Marinaz  
ALS Environmental  
127 E. 1st Street  
PARACHUTE, CO 81635

Origin ID: RLA



Ship Date: 21NOV14  
Actual: 59.0 LB  
CAD: 2284840RNET3550

Dims: 24 X 15 X 15 IN



Delivery Address Bar Code



JAN21 16027034V

BILL SENDER

SHIP TO: (616) 395-6070  
sample receiving  
ALS Laboratory Group  
3352 128TH AVE  
HOLLAND, MI 49424

Ref # 112114-1  
Invoice #  
PO #  
Dept #

1 of 2  
SATURDAY 12:00P  
PRIORITY OVERNIGHT

TRK#: 7719 5652 1870

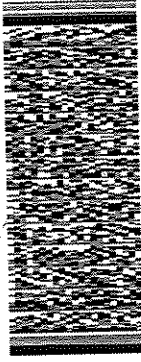
1291

49424

MLUS

## MASTER ##  
**X0 HLMA**

GRR

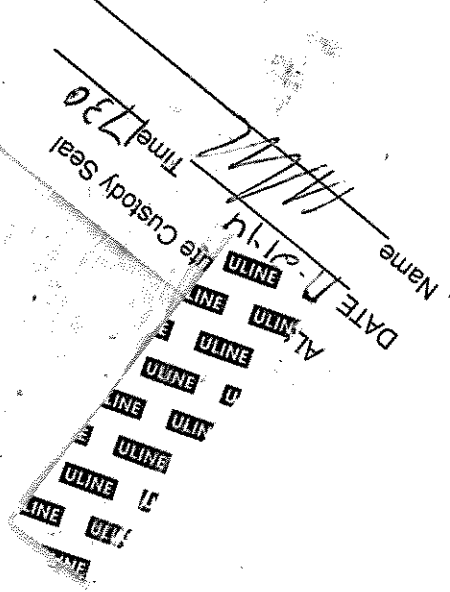


5231416269403

**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, along with the cancellation of your FedEx account number.  
Use of this system constitutes your agreement to the Service conditions in the current FedEx Service Guide, available on [fedex.com](http://fedex.com). FedEx will not be responsible for any claim in excess of \$100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of \$100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is \$1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.



Sample Receipt Checklist

Client Name: HRL

Date/Time Received: 22-Nov-14 10:00

Work Order: 14111199

Received by: KRW

Checklist completed by Keith Wurenga  
eSignature

22-Nov-14  
Date

Reviewed by: Joseph Ribar  
eSignature

24-Nov-14  
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>3.4 C</u>		
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:	<u>11/22/2014 11:54:00 AM</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:

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Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:

Comments:

CorrectiveAction: