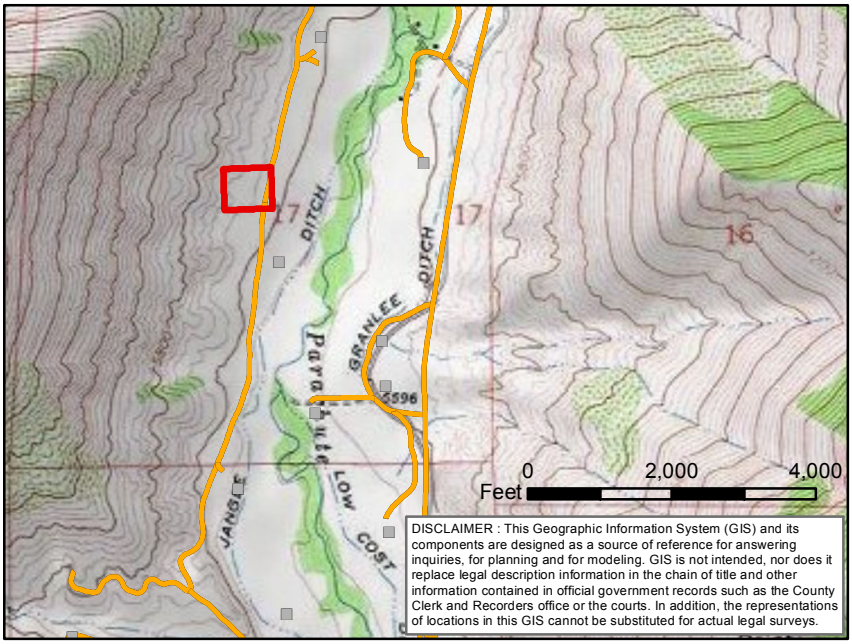
**Parachute Creek 4 (Chevron 23C-17D) (Location ID 335773)**
**Partially Buried Vessel Removal (Non-Facility ID 435750)**
**Form 4 (Notice of Completion)**
**Narrative Attachment**

This Form 4 (Notice of Completion) was prepared for the purpose of describing completed work associated with the assessment of soil during the removal of a partially buried vessel (PBV) (Non-Facility ID 435750) at the Parachute Creek 4 (Chevron 23C-17D) pad location (Location ID 335773) in the Caerus Piceance, LLC (Caerus) area of operations. This assessment was conducted using procedures approved under COGCC Remediation #8164. A Form 19 was submitted to the COGCC, but at the time of reporting, a spill/release tracking number had not been assigned. However, based on analytical data, Carlos Lujan of the COGCC approved the closure of this project without this tracking number. A sample Location map is included as an attachment to this form.

Upon removing the PBV from the ground, visual observations and field screening of soil around and below the tank indicated that impacted soil was present. All impacted soil was removed and disposed of at ECDC Landfill in East Carbon, Utah.

On August 7, 2013, confirmation soil samples were collected from the soil around and beneath the removed PBV (North Wall 6', South Wall 7', East Wall 6', West Wall 6', and Footprint 12'). Soil samples were submitted for laboratory analysis of all COGCC Table 910-1 analytes. Analytical results indicate all soil samples were in compliance with COGCC Table 910-1 Concentration Levels for all analytes or were within background concentrations, except for the electrical conductivity (EC) measurements of soil samples West Wall 6' and Footprint 12'. However, these confirmation samples were collected at a depth greater than three feet below the ground surface and the COGCC does not apply the Concentration Level for EC to soils deeper than three feet below ground surface. Background sample were collected from an undisturbed areas north of the excavated area. Laboratory analytical results are summarized in the attached analytical table and laboratory analytical reports are included as an attachment.

Based on removal of the PBV and soil analytical results, Caerus requests an NFA designation for this project.


DISCLAIMER : This Geographic Information System (GIS) and its components are designed as a source of reference for answering inquiries, for planning and for modeling. GIS is not intended, nor does it replace legal description information in the chain of title and other information contained in official government records such as the County Clerk and Recorders office or the courts. In addition, the representations of locations in this GIS cannot be substituted for actual legal surveys.

## Attachment A - Sample Location Map

**Location: Parachute Creek #4**

*Caerus Piceance, LLC*

### Legend

- Sample Location
- Public Road
- Affected Area

Comments:

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ENVIRONMENTAL CONSULTANTS

T:\Client_Specific\2008\PDC\Spills\2013\Parachute Creek 4\ParachuteCreek4_SampleLocation_081613.mxd HCSI_mspinelli

Revision Date: 8/16/2013 11:34:20 AM

**Caerus Piceance LLC**
**Parachute Creek 4 PBV Removal**
**Soil Sample Confirmation and Background Analytical Results**

| | | | Sample ID | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **COGCC Table 901-1 Analytical Suite** | **Table 910-1 Standard** | **Units** | **North Wall 6'** | **South Wall 7'** | **East Wall 6'** | **West Wall 6'** | **Footprint 12'** | **BKGD 1** | **BKGD 2** | **BKGD 3** |
| **Sample Date** | | | 8/7/2013 | 8/7/2013 | 8/7/2013 | 8/7/2013 | 8/7/2013 | 8/7/2013 | 8/7/2013 | 8/7/2013 |
| **Sample Type** | | | Confirmation | Confirmation | Confirmation | Confirmation | Confirmation | Background | Background | Background |
| **Metals** | | | | | | | | | | |
| **Arsenic** | **0.39** | **mg/kg** | 9.7 | 7.9 | 8.8 | 9.1 | 9.0 | 6.9 | 11 | 4.4 |
| **Barium** | **15,000** | **mg/kg** | 260 | 200 | 300 | 180 | 180 | NA | NA | NA |
| **Cadmium** | **70** | **mg/kg** | ND | ND | ND | ND | ND | NA | NA | NA |
| **Chromium (III)** | **120,000** | **mg/kg** | 11 | 12 | 9.7 | 11 | 11 | NA | NA | NA |
| **Chromium (VI)** | **23** | **mg/kg** | ND | ND | ND | ND | ND | NA | NA | NA |
| **Copper** | **3,100** | **mg/kg** | 18 | 19 | 15 | 17 | 19 | NA | NA | NA |
| **Lead** | **400** | **mg/kg** | 12 | 14 | 12 | 14 | 15 | NA | NA | NA |
| **Mercury** | **23** | **mg/kg** | 0.019 | ND | 0.021 | 0.017 | 0.020 | NA | NA | NA |
| **Nickel** | **1,600** | **mg/kg** | 17 | 19 | 16 | 18 | 19 | NA | NA | NA |
| **Selenium** | **390** | **mg/kg** | ND | 2.2 | ND | ND | ND | NA | NA | NA |
| **Silver** | **390** | **mg/kg** | ND | ND | ND | ND | ND | NA | NA | NA |
| **Zinc** | **23,000** | **mg/kg** | 63 | 69 | 60 | 64 | 68 | NA | NA | NA |
| **Inorganics** | | | | | | | | | | |
| **EC** | **4 or 2x background** | **mmhos/cm** | 2.1 | 2.8 | 2.2 | 4.1 | 6.4 | 1.2 | NA | NA |
| **pH** | **6-9** | **SU** | 8.3 | 8.1 | 8.4 | 8.0 | 7.8 | 8.0 | NA | NA |
| **SAR** | **12** | **unitless** | 1.7 | 1.8 | 3.2 | 3.1 | 5.5 | 0.19 | NA | NA |
| **Organics** | | | | | | | | | | |
| **TPH-GRO** | | | ND | ND | ND | ND | ND | NA | NA | NA |
| **TPH-DRO** | | | 22 | 18 | 18 | ND | ND | NA | NA | NA |
| **TPH** | **500** | **mg/kg** | 22 | 18 | 18 | ND | ND | NA | NA | NA |
| **Benzene** | **0.17** | **mg/kg** | ND | ND | ND | ND | ND | NA | NA | NA |
| **Toluene** | **85** | **mg/kg** | ND | ND | ND | ND | ND | NA | NA | NA |
| **Ethylbenzene** | **100** | **mg/kg** | ND | ND | ND | ND | ND | NA | NA | NA |
| **Total Xylenes** | **175** | **mg/kg** | ND | ND | ND | ND | ND | NA | NA | NA |
| **Acenaphthene** | **1,000** | **mg/kg** | ND | ND | ND | ND | ND | NA | NA | NA |
| **Anthracene** | **1,000** | **mg/kg** | ND | ND | ND | ND | ND | NA | NA | NA |
| **Benz(a)anthracene** | **0.22** | **mg/kg** | ND | ND | ND | ND | ND | NA | NA | NA |
| **Benzo(b)fluoranthene** | **0.22** | **mg/kg** | ND | ND | ND | ND | ND | NA | NA | NA |
| **Benzo(k)fluoranthene** | **2.2** | **mg/kg** | ND | ND | ND | ND | ND | NA | NA | NA |
| **Benzo(a)pyrene** | **0.022** | **mg/kg** | ND | ND | ND | ND | ND | NA | NA | NA |
| **Chrysene** | **22** | **mg/kg** | ND | ND | ND | ND | ND | NA | NA | NA |
| **Dibenzo(a,h)anthracene** | **0.022** | **mg/kg** | ND | ND | ND | ND | ND | NA | NA | NA |
| **Fluoranthene** | **1,000** | **mg/kg** | ND | ND | ND | ND | ND | NA | NA | NA |
| **Fluorene** | **1,000** | **mg/kg** | ND | ND | ND | ND | ND | NA | NA | NA |
| **Indeno(1,2,3,c,d)pyrene** | **0.22** | **mg/kg** | ND | ND | ND | ND | ND | NA | NA | NA |
| **Naphthalene** | **23** | **mg/kg** | ND | ND | ND | ND | ND | NA | NA | NA |
| **Pyrene** | **1,000** | **mg/kg** | ND | ND | ND | ND | ND | NA | NA | NA |

Notes:

< - less than the stated reporting limit

Highlight - indicates result exceeds the COGCC concentration level

COGCC - Colorado Oil and Gas Conservation Commission

EC - electrical conductivity

mg/kg - milligrams per kilogram

mmhos/cm - millimhos per centimeter

ND- not detected

NA - not analyzed

SAR - sodium adsorption ratio

SU - standard unit

TPH-GRO - total petroleum hydrocarbons-gasoline range organics

TPH-DRO - total petroleum hydrocarbons-diesel range organics

TPH - combination of TPH-GRO and TPH-DRO

12-Aug-2013

Herman Lucero
HRL Compliance Solutions
2385 F 1/2 Road
Grand Junction, CO 81505

Re: **Caerus Parachute Creek 4 Tank Removal 8/7/13** Work Order: **1308304**

Dear Herman,

ALS Environmental received 5 samples on 08-Aug-2013 09:45 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 31.

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

Sincerely,

Ann Preston

Electronically approved by: Ann Preston

Ann Preston
Project Manager

Certificate No: MN 532786



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

# ALS Group USA, Corp

Date: 12-Aug-13

**Client:** HRL Compliance Solutions
**Project:** Caerus Parachute Creek 4 Tank Removal 8/7/13
**Work Order:** **1308304**

## Work Order Sample Summary

| Lab Samp ID | Client Sample ID | Matrix | Tag Number | Collection Date | Date Received | Hold |
|---|---|---|---|---|---|---|
| 1308304-01 | North Wall, 6' | Soil | | 8/7/2013 14:46 | 8/8/2013 09:45 | ☐ |
| 1308304-02 | South Wall, 7' | Soil | | 8/7/2013 14:43 | 8/8/2013 09:45 | ☐ |
| 1308304-03 | East Wall, 6' | Soil | | 8/7/2013 14:37 | 8/8/2013 09:45 | ☐ |
| 1308304-04 | West Wall, 6' | Soil | | 8/7/2013 14:12 | 8/8/2013 09:45 | ☐ |
| 1308304-05 | Footprint, 12' | Soil | | 8/7/2013 14:05 | 8/8/2013 09:45 | ☐ |

## ALS Group USA, Corp

*Date: 12-Aug-13*

**Client:** HRL Compliance Solutions
**Project:** Caerus Parachute Creek 4 Tank Removal 8/7/13
**Work Order:** 1308304

# Case Narrative

Batch 50400 MS/MSD data for Metals is not related to this project's samples. No data requires qualification.

Batch 50484 sample Footprint,12' MSD recovery for Hexavalent Chromium was below control limits. Both the MS recovery and RPD met quality control criteria. No data requires qualification for Hexavalent Chromium.

# ALS Group USA, Corp

Date: 12-Aug-13

**Client:** HRL Compliance Solutions
**Project:** Caerus Parachute Creek 4 Tank Removal 8/7/13
**WorkOrder:** **1308304**

## QUALIFIERS, ACRONYMS, UNITS

| Qualifier | Description |
|---|---|
| * | 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 |

| Acronym | Description |
|---|---|
| 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 |
| A | APHA Standard Methods |
| D | ASTM |
| E | EPA |
| SW | SW-846 Update III |

| Units Reported | Description |
|---|---|
| % 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:** *12-Aug-13*

**Client:** HRL Compliance Solutions
**Project:** Caerus Parachute Creek 4 Tank Removal 8/7/13 **Work Order:** 1308304
**Sample ID:** North Wall, 6' **Lab ID:** 1308304-01
**Collection Date:** 8/7/2013 02:46 PM **Matrix:** SOIL

| Analyses | Result | Qual | Report Limit | Units | Dilution Factor | Date Analyzed |
|---|---|---|---|---|---|---|
| **DIESEL RANGE ORGANICS BY GC-FID** | | | **SW8015M** | | Prep Date: **8/8/2013** | Analyst: **RD** |
| **DRO (C10-C28)** | **22** | | **4.7** | **mg/Kg-dry** | 1 | 8/8/2013 09:04 PM |
| *Surr: 4-Terphenyl-d14* | *62.3* | | *39-115* | *%REC* | 1 | 8/8/2013 09:04 PM |
| **GASOLINE RANGE ORGANICS BY GC-FID** | | | **SW8015** | | Prep Date: **8/8/2013** | Analyst: **RD** |
| GRO (C6-C10) | ND | | 2.9 | mg/Kg-dry | 1 | 8/8/2013 03:14 PM |
| *Surr: Toluene-d8* | *118* | | *50-150* | *%REC* | 1 | 8/8/2013 03:14 PM |
| **MERCURY BY CVAA** | | | **SW7471** | | Prep Date: **8/8/2013** | Analyst: **LR** |
| **Mercury** | **0.019** | | **0.017** | **mg/Kg-dry** | 1 | 8/8/2013 04:56 PM |
| **METALS BY ICP-MS** | | | **SW6020A** | | Prep Date: **8/8/2013** | Analyst: **ML** |
| **Arsenic** | **9.7** | | **2.1** | **mg/Kg-dry** | 5 | 8/9/2013 08:24 AM |
| **Barium** | **260** | | **2.1** | **mg/Kg-dry** | 5 | 8/9/2013 08:24 AM |
| Cadmium | ND | | 0.85 | mg/Kg-dry | 5 | 8/9/2013 08:24 AM |
| **Chromium** | **11** | | **2.1** | **mg/Kg-dry** | 5 | 8/9/2013 08:24 AM |
| **Copper** | **18** | | **2.1** | **mg/Kg-dry** | 5 | 8/9/2013 08:24 AM |
| **Lead** | **12** | | **2.1** | **mg/Kg-dry** | 5 | 8/9/2013 08:24 AM |
| **Nickel** | **17** | | **2.1** | **mg/Kg-dry** | 5 | 8/9/2013 08:24 AM |
| Selenium | ND | | 2.1 | mg/Kg-dry | 5 | 8/9/2013 08:24 AM |
| Silver | ND | | 2.1 | mg/Kg-dry | 5 | 8/9/2013 08:24 AM |
| **Zinc** | **63** | | **4.3** | **mg/Kg-dry** | 5 | 8/9/2013 08:24 AM |
| **SOLUBLE CATIONS FOR SAR** | | | **SW6020A** | | Prep Date: **8/10/2013** | Analyst: **RH** |
| **Calcium** | **200** | | **10** | **mg/L** | 20 | 8/12/2013 01:36 PM |
| **Magnesium** | **61** | | **4.0** | **mg/L** | 20 | 8/12/2013 01:36 PM |
| **Sodium** | **100** | | **4.0** | **mg/L** | 20 | 8/12/2013 01:36 PM |
| **SODIUM ADSORPTION RATIO** | | | **USDA H60 METHO** | | Prep Date: **8/10/2013** | Analyst: **RH** |
| **Sodium Adsorption Ratio** | **1.7** | | **0.010** | **none** | 1 | 8/12/2013 |
| **SEMI-VOLATILE ORGANIC COMPOUNDS** | | | **SW8270** | | Prep Date: **8/8/2013** | Analyst: **HL** |
| Acenaphthene | ND | | 17 | µg/Kg-dry | 1 | 8/9/2013 12:05 PM |
| Acenaphthylene | ND | | 34 | µg/Kg-dry | 1 | 8/9/2013 12:05 PM |
| Anthracene | ND | | 17 | µg/Kg-dry | 1 | 8/9/2013 12:05 PM |
| Benzo(a)anthracene | ND | | 19 | µg/Kg-dry | 1 | 8/9/2013 12:05 PM |
| Benzo(a)pyrene | ND | | 19 | µg/Kg-dry | 1 | 8/9/2013 12:05 PM |
| Benzo(b)fluoranthene | ND | | 21 | µg/Kg-dry | 1 | 8/9/2013 12:05 PM |
| Benzo(g,h,i)perylene | ND | | 32 | µg/Kg-dry | 1 | 8/9/2013 12:05 PM |
| Benzo(k)fluoranthene | ND | | 21 | µg/Kg-dry | 1 | 8/9/2013 12:05 PM |
| Chrysene | ND | | 17 | µg/Kg-dry | 1 | 8/9/2013 12:05 PM |
| Dibenzo(a,h)anthracene | ND | | 21 | µg/Kg-dry | 1 | 8/9/2013 12:05 PM |
| Fluoranthene | ND | | 17 | µg/Kg-dry | 1 | 8/9/2013 12:05 PM |

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

**Client:** HRL Compliance Solutions
**Project:** Caerus Parachute Creek 4 Tank Removal 8/7/13 **Work Order:** 1308304
**Sample ID:** North Wall, 6' **Lab ID:** 1308304-01
**Collection Date:** 8/7/2013 02:46 PM **Matrix:** SOIL

| Analyses | Result | Qual | Report Limit | Units | Dilution Factor | Date Analyzed |
|---|---|---|---|---|---|---|
| Fluorene | ND | | 17 | µg/Kg-dry | 1 | 8/9/2013 12:05 PM |
| Indeno(1,2,3-cd)pyrene | ND | | 23 | µg/Kg-dry | 1 | 8/9/2013 12:05 PM |
| Naphthalene | ND | | 17 | µg/Kg-dry | 1 | 8/9/2013 12:05 PM |
| Pyrene | ND | | 17 | µg/Kg-dry | 1 | 8/9/2013 12:05 PM |
| *Surr: 2-Fluorobiphenyl* | *63.4* | | *12-100* | *%REC* | 1 | 8/9/2013 12:05 PM |
| *Surr: 4-Terphenyl-d14* | *95.0* | | *25-137* | *%REC* | 1 | 8/9/2013 12:05 PM |
| *Surr: Nitrobenzene-d5* | *63.0* | | *37-107* | *%REC* | 1 | 8/9/2013 12:05 PM |
| **VOLATILE ORGANIC COMPOUNDS** | | | **SW8260B** | | Prep Date: **8/8/2013** | Analyst: **AK** |
| Benzene | ND | | 35 | µg/Kg-dry | 1 | 8/8/2013 01:00 PM |
| Ethylbenzene | ND | | 35 | µg/Kg-dry | 1 | 8/8/2013 01:00 PM |
| m,p-Xylene | ND | | 70 | µg/Kg-dry | 1 | 8/8/2013 01:00 PM |
| o-Xylene | ND | | 35 | µg/Kg-dry | 1 | 8/8/2013 01:00 PM |
| Toluene | ND | | 35 | µg/Kg-dry | 1 | 8/8/2013 01:00 PM |
| Xylenes, Total | ND | | 110 | µg/Kg-dry | 1 | 8/8/2013 01:00 PM |
| *Surr: 1,2-Dichloroethane-d4* | *104* | | *70-130* | *%REC* | 1 | 8/8/2013 01:00 PM |
| *Surr: 4-Bromofluorobenzene* | *101* | | *70-130* | *%REC* | 1 | 8/8/2013 01:00 PM |
| *Surr: Dibromofluoromethane* | *98.8* | | *70-130* | *%REC* | 1 | 8/8/2013 01:00 PM |
| *Surr: Toluene-d8* | *102* | | *70-130* | *%REC* | 1 | 8/8/2013 01:00 PM |
| **ELECTRICAL CONDUCTIVITY (SAR)** | | | **USDA H60 METHO** | | Prep Date: **8/10/2013** | Analyst: **JB** |
| **Electrical Conductivity @ Saturation** | **2.1** | | **0.025** | **mmhos/cm @25** | 5 | 8/12/2013 10:00 AM |
| **CHROMIUM, TRIVALENT** | | | **CALCULATION** | | | Analyst: **MB** |
| **Chromium, Trivalent** | **11** | | **0.59** | **mg/Kg-dry** | 1 | 8/12/2013 05:25 PM |
| **CHROMIUM, HEXAVALENT** | | | **SW7196A** | | Prep Date: **8/9/2013** | Analyst: **RLF** |
| Chromium, Hexavalent | ND | | 0.59 | mg/Kg-dry | 1 | 8/12/2013 02:00 PM |
| **MOISTURE** | | | **A2540 G** | | | Analyst: **BD** |
| **Moisture** | **15** | | **0.050** | **% of sample** | 1 | 8/8/2013 02:50 PM |
| **PH** | | | **SW9045D** | | Prep Date: **8/8/2013** | Analyst: **JB** |
| **pH** | **8.3** | | | **s.u.** | 1 | 8/8/2013 04:30 PM |

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

# ALS Group USA, Corp

**Date:** *12-Aug-13*

**Client:** HRL Compliance Solutions
**Project:** Caerus Parachute Creek 4 Tank Removal 8/7/13 **Work Order:** 1308304
**Sample ID:** South Wall, 7' **Lab ID:** 1308304-02
**Collection Date:** 8/7/2013 02:43 PM **Matrix:** SOIL

| Analyses | Result | Qual | Report Limit | Units | Dilution Factor | Date Analyzed |
|---|---|---|---|---|---|---|
| **DIESEL RANGE ORGANICS BY GC-FID** | | | **SW8015M** | | Prep Date: **8/8/2013** | Analyst: **RD** |
| **DRO (C10-C28)** | **18** | | **5.0** | **mg/Kg-dry** | 1 | 8/8/2013 09:34 PM |
| *Surr: 4-Terphenyl-d14* | *63.8* | | *39-115* | *%REC* | 1 | 8/8/2013 09:34 PM |
| **GASOLINE RANGE ORGANICS BY GC-FID** | | | **SW8015** | | Prep Date: **8/8/2013** | Analyst: **RD** |
| GRO (C6-C10) | ND | | 3.0 | mg/Kg-dry | 1 | 8/8/2013 02:22 PM |
| *Surr: Toluene-d8* | *114* | | *50-150* | *%REC* | 1 | 8/8/2013 02:22 PM |
| **MERCURY BY CVAA** | | | **SW7471** | | Prep Date: **8/8/2013** | Analyst: **LR** |
| Mercury | ND | | 0.019 | mg/Kg-dry | 1 | 8/8/2013 04:58 PM |
| **METALS BY ICP-MS** | | | **SW6020A** | | Prep Date: **8/8/2013** | Analyst: **ML** |
| **Arsenic** | **7.9** | | **2.0** | **mg/Kg-dry** | 5 | 8/9/2013 08:30 AM |
| **Barium** | **200** | | **2.0** | **mg/Kg-dry** | 5 | 8/9/2013 08:30 AM |
| Cadmium | ND | | 0.81 | mg/Kg-dry | 5 | 8/9/2013 08:30 AM |
| **Chromium** | **12** | | **2.0** | **mg/Kg-dry** | 5 | 8/9/2013 08:30 AM |
| **Copper** | **19** | | **2.0** | **mg/Kg-dry** | 5 | 8/9/2013 08:30 AM |
| **Lead** | **14** | | **2.0** | **mg/Kg-dry** | 5 | 8/9/2013 08:30 AM |
| **Nickel** | **19** | | **2.0** | **mg/Kg-dry** | 5 | 8/9/2013 08:30 AM |
| **Selenium** | **2.2** | | **2.0** | **mg/Kg-dry** | 5 | 8/9/2013 08:30 AM |
| Silver | ND | | 2.0 | mg/Kg-dry | 5 | 8/9/2013 08:30 AM |
| **Zinc** | **69** | | **4.0** | **mg/Kg-dry** | 5 | 8/9/2013 08:30 AM |
| **SOLUBLE CATIONS FOR SAR** | | | **SW6020A** | | Prep Date: **8/10/2013** | Analyst: **RH** |
| **Calcium** | **270** | | **10** | **mg/L** | 20 | 8/12/2013 01:42 PM |
| **Magnesium** | **76** | | **4.0** | **mg/L** | 20 | 8/12/2013 01:42 PM |
| **Sodium** | **130** | | **4.0** | **mg/L** | 20 | 8/12/2013 01:42 PM |
| **SODIUM ADSORPTION RATIO** | | | **USDA H60 METHO** | | Prep Date: **8/10/2013** | Analyst: **RH** |
| **Sodium Adsorption Ratio** | **1.8** | | **0.010** | **none** | 1 | 8/12/2013 |
| **SEMI-VOLATILE ORGANIC COMPOUNDS** | | | **SW8270** | | Prep Date: **8/8/2013** | Analyst: **HL** |
| Acenaphthene | ND | | 18 | µg/Kg-dry | 1 | 8/9/2013 12:37 PM |
| Acenaphthylene | ND | | 36 | µg/Kg-dry | 1 | 8/9/2013 12:37 PM |
| Anthracene | ND | | 18 | µg/Kg-dry | 1 | 8/9/2013 12:37 PM |
| Benzo(a)anthracene | ND | | 20 | µg/Kg-dry | 1 | 8/9/2013 12:37 PM |
| Benzo(a)pyrene | ND | | 20 | µg/Kg-dry | 1 | 8/9/2013 12:37 PM |
| Benzo(b)fluoranthene | ND | | 22 | µg/Kg-dry | 1 | 8/9/2013 12:37 PM |
| Benzo(g,h,i)perylene | ND | | 34 | µg/Kg-dry | 1 | 8/9/2013 12:37 PM |
| Benzo(k)fluoranthene | ND | | 22 | µg/Kg-dry | 1 | 8/9/2013 12:37 PM |
| Chrysene | ND | | 18 | µg/Kg-dry | 1 | 8/9/2013 12:37 PM |
| Dibenzo(a,h)anthracene | ND | | 22 | µg/Kg-dry | 1 | 8/9/2013 12:37 PM |
| Fluoranthene | ND | | 18 | µg/Kg-dry | 1 | 8/9/2013 12:37 PM |

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

# ALS Group USA, Corp

**Date:** *12-Aug-13*

**Client:** HRL Compliance Solutions
**Project:** Caerus Parachute Creek 4 Tank Removal 8/7/13 **Work Order:** 1308304
**Sample ID:** South Wall, 7' **Lab ID:** 1308304-02
**Collection Date:** 8/7/2013 02:43 PM **Matrix:** SOIL

| Analyses | Result | Qual | Report Limit | Units | Dilution Factor | Date Analyzed |
|---|---|---|---|---|---|---|
| Fluorene | ND | | 18 | µg/Kg-dry | 1 | 8/9/2013 12:37 PM |
| Indeno(1,2,3-cd)pyrene | ND | | 24 | µg/Kg-dry | 1 | 8/9/2013 12:37 PM |
| Naphthalene | ND | | 18 | µg/Kg-dry | 1 | 8/9/2013 12:37 PM |
| Pyrene | ND | | 18 | µg/Kg-dry | 1 | 8/9/2013 12:37 PM |
| *Surr: 2-Fluorobiphenyl* | *70.7* | | *12-100* | *%REC* | 1 | 8/9/2013 12:37 PM |
| *Surr: 4-Terphenyl-d14* | *96.9* | | *25-137* | *%REC* | 1 | 8/9/2013 12:37 PM |
| *Surr: Nitrobenzene-d5* | *70.6* | | *37-107* | *%REC* | 1 | 8/9/2013 12:37 PM |
| **VOLATILE ORGANIC COMPOUNDS** | | | **SW8260B** | | Prep Date: **8/8/2013** | Analyst: **AK** |
| Benzene | ND | | 36 | µg/Kg-dry | 1 | 8/8/2013 01:25 PM |
| Ethylbenzene | ND | | 36 | µg/Kg-dry | 1 | 8/8/2013 01:25 PM |
| m,p-Xylene | ND | | 73 | µg/Kg-dry | 1 | 8/8/2013 01:25 PM |
| o-Xylene | ND | | 36 | µg/Kg-dry | 1 | 8/8/2013 01:25 PM |
| Toluene | ND | | 36 | µg/Kg-dry | 1 | 8/8/2013 01:25 PM |
| Xylenes, Total | ND | | 110 | µg/Kg-dry | 1 | 8/8/2013 01:25 PM |
| *Surr: 1,2-Dichloroethane-d4* | *101* | | *70-130* | *%REC* | 1 | 8/8/2013 01:25 PM |
| *Surr: 4-Bromofluorobenzene* | *99.2* | | *70-130* | *%REC* | 1 | 8/8/2013 01:25 PM |
| *Surr: Dibromofluoromethane* | *95.7* | | *70-130* | *%REC* | 1 | 8/8/2013 01:25 PM |
| *Surr: Toluene-d8* | *97.8* | | *70-130* | *%REC* | 1 | 8/8/2013 01:25 PM |
| **ELECTRICAL CONDUCTIVITY (SAR)** | | | **USDA H60 METHO** | | Prep Date: **8/10/2013** | Analyst: **JB** |
| **Electrical Conductivity @ Saturation** | **2.8** | | **0.025** | **mmhos/cm @25** | 5 | 8/12/2013 10:00 AM |
| **CHROMIUM, TRIVALENT** | | | **CALCULATION** | | | Analyst: **MB** |
| **Chromium, Trivalent** | **12** | | **0.61** | **mg/Kg-dry** | 1 | 8/12/2013 05:25 PM |
| **CHROMIUM, HEXAVALENT** | | | **SW7196A** | | Prep Date: **8/9/2013** | Analyst: **RLF** |
| Chromium, Hexavalent | ND | | 0.60 | mg/Kg-dry | 1 | 8/12/2013 02:00 PM |
| **MOISTURE** | | | **A2540 G** | | | Analyst: **BD** |
| **Moisture** | **18** | | **0.050** | **% of sample** | 1 | 8/8/2013 02:50 PM |
| **PH** | | | **SW9045D** | | Prep Date: **8/8/2013** | Analyst: **JB** |
| **pH** | **8.1** | | | **s.u.** | 1 | 8/8/2013 04:30 PM |

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

# ALS Group USA, Corp

**Date:** *12-Aug-13*

**Client:** HRL Compliance Solutions
**Project:** Caerus Parachute Creek 4 Tank Removal 8/7/13 **Work Order:** 1308304
**Sample ID:** East Wall, 6' **Lab ID:** 1308304-03
**Collection Date:** 8/7/2013 02:37 PM **Matrix:** SOIL

| Analyses | Result | Qual | Report Limit | Units | Dilution Factor | Date Analyzed |
|---|---|---|---|---|---|---|
| **DIESEL RANGE ORGANICS BY GC-FID** | | | **SW8015M** | | Prep Date: **8/8/2013** | Analyst: **RD** |
| **DRO (C10-C28)** | **18** | | **4.7** | **mg/Kg-dry** | 1 | 8/8/2013 10:04 PM |
| *Surr: 4-Terphenyl-d14* | *64.8* | | *39-115* | *%REC* | 1 | 8/8/2013 10:04 PM |
| **GASOLINE RANGE ORGANICS BY GC-FID** | | | **SW8015** | | Prep Date: **8/8/2013** | Analyst: **RD** |
| GRO (C6-C10) | ND | | 2.8 | mg/Kg-dry | 1 | 8/8/2013 02:47 PM |
| *Surr: Toluene-d8* | *112* | | *50-150* | *%REC* | 1 | 8/8/2013 02:47 PM |
| **MERCURY BY CVAA** | | | **SW7471** | | Prep Date: **8/8/2013** | Analyst: **LR** |
| **Mercury** | **0.021** | | **0.016** | **mg/Kg-dry** | 1 | 8/8/2013 05:00 PM |
| **METALS BY ICP-MS** | | | **SW6020A** | | Prep Date: **8/8/2013** | Analyst: **ML** |
| **Arsenic** | **8.8** | | **1.9** | **mg/Kg-dry** | 5 | 8/9/2013 08:37 AM |
| **Barium** | **300** | | **1.9** | **mg/Kg-dry** | 5 | 8/9/2013 08:37 AM |
| Cadmium | ND | | 0.78 | mg/Kg-dry | 5 | 8/9/2013 08:37 AM |
| **Chromium** | **9.7** | | **1.9** | **mg/Kg-dry** | 5 | 8/9/2013 08:37 AM |
| **Copper** | **15** | | **1.9** | **mg/Kg-dry** | 5 | 8/9/2013 08:37 AM |
| **Lead** | **12** | | **1.9** | **mg/Kg-dry** | 5 | 8/9/2013 08:37 AM |
| **Nickel** | **16** | | **1.9** | **mg/Kg-dry** | 5 | 8/9/2013 08:37 AM |
| Selenium | ND | | 1.9 | mg/Kg-dry | 5 | 8/9/2013 08:37 AM |
| Silver | ND | | 1.9 | mg/Kg-dry | 5 | 8/9/2013 08:37 AM |
| **Zinc** | **60** | | **3.9** | **mg/Kg-dry** | 5 | 8/9/2013 08:37 AM |
| **SOLUBLE CATIONS FOR SAR** | | | **SW6020A** | | Prep Date: **8/10/2013** | Analyst: **RH** |
| **Calcium** | **140** | | **10** | **mg/L** | 20 | 8/12/2013 01:47 PM |
| **Magnesium** | **62** | | **4.0** | **mg/L** | 20 | 8/12/2013 01:47 PM |
| **Sodium** | **180** | | **4.0** | **mg/L** | 20 | 8/12/2013 01:47 PM |
| **SODIUM ADSORPTION RATIO** | | | **USDA H60 METHO** | | Prep Date: **8/10/2013** | Analyst: **RH** |
| **Sodium Adsorption Ratio** | **3.2** | | **0.010** | **none** | 1 | 8/12/2013 |
| **SEMI-VOLATILE ORGANIC COMPOUNDS** | | | **SW8270** | | Prep Date: **8/8/2013** | Analyst: **HL** |
| Acenaphthene | ND | | 17 | µg/Kg-dry | 1 | 8/9/2013 01:08 PM |
| Acenaphthylene | ND | | 34 | µg/Kg-dry | 1 | 8/9/2013 01:08 PM |
| Anthracene | ND | | 17 | µg/Kg-dry | 1 | 8/9/2013 01:08 PM |
| Benzo(a)anthracene | ND | | 19 | µg/Kg-dry | 1 | 8/9/2013 01:08 PM |
| Benzo(a)pyrene | ND | | 19 | µg/Kg-dry | 1 | 8/9/2013 01:08 PM |
| Benzo(b)fluoranthene | ND | | 20 | µg/Kg-dry | 1 | 8/9/2013 01:08 PM |
| Benzo(g,h,i)perylene | ND | | 32 | µg/Kg-dry | 1 | 8/9/2013 01:08 PM |
| Benzo(k)fluoranthene | ND | | 20 | µg/Kg-dry | 1 | 8/9/2013 01:08 PM |
| Chrysene | ND | | 17 | µg/Kg-dry | 1 | 8/9/2013 01:08 PM |
| Dibenzo(a,h)anthracene | ND | | 20 | µg/Kg-dry | 1 | 8/9/2013 01:08 PM |
| Fluoranthene | ND | | 17 | µg/Kg-dry | 1 | 8/9/2013 01:08 PM |

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

**Client:** HRL Compliance Solutions
**Project:** Caerus Parachute Creek 4 Tank Removal 8/7/13 **Work Order:** 1308304
**Sample ID:** East Wall, 6' **Lab ID:** 1308304-03
**Collection Date:** 8/7/2013 02:37 PM **Matrix:** SOIL

| Analyses | Result | Qual | Report Limit | Units | Dilution Factor | Date Analyzed |
|---|---|---|---|---|---|---|
| Fluorene | ND | | 17 | µg/Kg-dry | 1 | 8/9/2013 01:08 PM |
| Indeno(1,2,3-cd)pyrene | ND | | 23 | µg/Kg-dry | 1 | 8/9/2013 01:08 PM |
| Naphthalene | ND | | 17 | µg/Kg-dry | 1 | 8/9/2013 01:08 PM |
| Pyrene | ND | | 17 | µg/Kg-dry | 1 | 8/9/2013 01:08 PM |
| *Surr: 2-Fluorobiphenyl* | *75.5* | | *12-100* | *%REC* | 1 | 8/9/2013 01:08 PM |
| *Surr: 4-Terphenyl-d14* | *98.0* | | *25-137* | *%REC* | 1 | 8/9/2013 01:08 PM |
| *Surr: Nitrobenzene-d5* | *75.6* | | *37-107* | *%REC* | 1 | 8/9/2013 01:08 PM |
| **VOLATILE ORGANIC COMPOUNDS** | | | **SW8260B** | | Prep Date: **8/8/2013** | Analyst: **AK** |
| Benzene | ND | | 34 | µg/Kg-dry | 1 | 8/8/2013 01:50 PM |
| Ethylbenzene | ND | | 34 | µg/Kg-dry | 1 | 8/8/2013 01:50 PM |
| m,p-Xylene | ND | | 68 | µg/Kg-dry | 1 | 8/8/2013 01:50 PM |
| o-Xylene | ND | | 34 | µg/Kg-dry | 1 | 8/8/2013 01:50 PM |
| Toluene | ND | | 34 | µg/Kg-dry | 1 | 8/8/2013 01:50 PM |
| Xylenes, Total | ND | | 100 | µg/Kg-dry | 1 | 8/8/2013 01:50 PM |
| *Surr: 1,2-Dichloroethane-d4* | *99.2* | | *70-130* | *%REC* | 1 | 8/8/2013 01:50 PM |
| *Surr: 4-Bromofluorobenzene* | *98.4* | | *70-130* | *%REC* | 1 | 8/8/2013 01:50 PM |
| *Surr: Dibromofluoromethane* | *96.1* | | *70-130* | *%REC* | 1 | 8/8/2013 01:50 PM |
| *Surr: Toluene-d8* | *97.2* | | *70-130* | *%REC* | 1 | 8/8/2013 01:50 PM |
| **ELECTRICAL CONDUCTIVITY (SAR)** | | | **USDA H60 METHO** | | Prep Date: **8/10/2013** | Analyst: **JB** |
| **Electrical Conductivity @ Saturation** | **2.2** | | **0.025** | **mmhos/cm @25** | 5 | 8/12/2013 10:00 AM |
| **CHROMIUM, TRIVALENT** | | | **CALCULATION** | | | Analyst: **MB** |
| **Chromium, Trivalent** | **9.7** | | **0.57** | **mg/Kg-dry** | 1 | 8/12/2013 05:25 PM |
| **CHROMIUM, HEXAVALENT** | | | **SW7196A** | | Prep Date: **8/9/2013** | Analyst: **RLF** |
| Chromium, Hexavalent | ND | | 0.57 | mg/Kg-dry | 1 | 8/12/2013 02:00 PM |
| **MOISTURE** | | | **A2540 G** | | | Analyst: **BD** |
| **Moisture** | **12** | | **0.050** | **% of sample** | 1 | 8/8/2013 02:50 PM |
| **PH** | | | **SW9045D** | | Prep Date: **8/8/2013** | Analyst: **JB** |
| **pH** | **8.4** | | | **s.u.** | 1 | 8/8/2013 04:30 PM |

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

# ALS Group USA, Corp

**Date:** *12-Aug-13*

**Client:** HRL Compliance Solutions
**Project:** Caerus Parachute Creek 4 Tank Removal 8/7/13 **Work Order:** 1308304
**Sample ID:** West Wall, 6' **Lab ID:** 1308304-04
**Collection Date:** 8/7/2013 02:12 PM **Matrix:** SOIL

| Analyses | Result | Qual | Report Limit | Units | Dilution Factor | Date Analyzed |
|---|---|---|---|---|---|---|
| **DIESEL RANGE ORGANICS BY GC-FID** | | | **SW8015M** | | Prep Date: **8/8/2013** | Analyst: **RD** |
| DRO (C10-C28) | ND | | 4.7 | mg/Kg-dry | 1 | 8/8/2013 11:04 PM |
| *Surr: 4-Terphenyl-d14* | *59.3* | | *39-115* | *%REC* | 1 | 8/8/2013 11:04 PM |
| **GASOLINE RANGE ORGANICS BY GC-FID** | | | **SW8015** | | Prep Date: **8/8/2013** | Analyst: **RD** |
| GRO (C6-C10) | ND | | 2.9 | mg/Kg-dry | 1 | 8/8/2013 03:39 PM |
| *Surr: Toluene-d8* | *115* | | *50-150* | *%REC* | 1 | 8/8/2013 03:39 PM |
| **MERCURY BY CVAA** | | | **SW7471** | | Prep Date: **8/8/2013** | Analyst: **LR** |
| **Mercury** | **0.017** | | **0.016** | **mg/Kg-dry** | 1 | 8/8/2013 05:09 PM |
| **METALS BY ICP-MS** | | | **SW6020A** | | Prep Date: **8/8/2013** | Analyst: **ML** |
| **Arsenic** | **9.1** | | **1.9** | **mg/Kg-dry** | 5 | 8/9/2013 08:43 AM |
| **Barium** | **180** | | **1.9** | **mg/Kg-dry** | 5 | 8/9/2013 08:43 AM |
| Cadmium | ND | | 0.76 | mg/Kg-dry | 5 | 8/9/2013 08:43 AM |
| **Chromium** | **11** | | **1.9** | **mg/Kg-dry** | 5 | 8/9/2013 08:43 AM |
| **Copper** | **17** | | **1.9** | **mg/Kg-dry** | 5 | 8/9/2013 08:43 AM |
| **Lead** | **14** | | **1.9** | **mg/Kg-dry** | 5 | 8/9/2013 08:43 AM |
| **Nickel** | **18** | | **1.9** | **mg/Kg-dry** | 5 | 8/9/2013 08:43 AM |
| Selenium | ND | | 1.9 | mg/Kg-dry | 5 | 8/9/2013 08:43 AM |
| Silver | ND | | 1.9 | mg/Kg-dry | 5 | 8/9/2013 08:43 AM |
| **Zinc** | **64** | | **3.8** | **mg/Kg-dry** | 5 | 8/9/2013 08:43 AM |
| **SOLUBLE CATIONS FOR SAR** | | | **SW6020A** | | Prep Date: **8/10/2013** | Analyst: **RH** |
| **Calcium** | **390** | | **10** | **mg/L** | 20 | 8/12/2013 02:09 PM |
| **Magnesium** | **86** | | **4.0** | **mg/L** | 20 | 8/12/2013 02:09 PM |
| **Sodium** | **260** | | **4.0** | **mg/L** | 20 | 8/12/2013 02:09 PM |
| **SODIUM ADSORPTION RATIO** | | | **USDA H60 METHO** | | Prep Date: **8/10/2013** | Analyst: **RH** |
| **Sodium Adsorption Ratio** | **3.1** | | **0.010** | **none** | 1 | 8/12/2013 |
| **SEMI-VOLATILE ORGANIC COMPOUNDS** | | | **SW8270** | | Prep Date: **8/8/2013** | Analyst: **HL** |
| Acenaphthene | ND | | 17 | µg/Kg-dry | 1 | 8/9/2013 01:39 PM |
| Acenaphthylene | ND | | 34 | µg/Kg-dry | 1 | 8/9/2013 01:39 PM |
| Anthracene | ND | | 17 | µg/Kg-dry | 1 | 8/9/2013 01:39 PM |
| Benzo(a)anthracene | ND | | 19 | µg/Kg-dry | 1 | 8/9/2013 01:39 PM |
| Benzo(a)pyrene | ND | | 19 | µg/Kg-dry | 1 | 8/9/2013 01:39 PM |
| Benzo(b)fluoranthene | ND | | 20 | µg/Kg-dry | 1 | 8/9/2013 01:39 PM |
| Benzo(g,h,i)perylene | ND | | 32 | µg/Kg-dry | 1 | 8/9/2013 01:39 PM |
| Benzo(k)fluoranthene | ND | | 20 | µg/Kg-dry | 1 | 8/9/2013 01:39 PM |
| Chrysene | ND | | 17 | µg/Kg-dry | 1 | 8/9/2013 01:39 PM |
| Dibenzo(a,h)anthracene | ND | | 20 | µg/Kg-dry | 1 | 8/9/2013 01:39 PM |
| Fluoranthene | ND | | 17 | µg/Kg-dry | 1 | 8/9/2013 01:39 PM |

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

**Client:** HRL Compliance Solutions
**Project:** Caerus Parachute Creek 4 Tank Removal 8/7/13 **Work Order:** 1308304
**Sample ID:** West Wall, 6' **Lab ID:** 1308304-04
**Collection Date:** 8/7/2013 02:12 PM **Matrix:** SOIL

| Analyses | Result | Qual | Report Limit | Units | Dilution Factor | Date Analyzed |
|---|---|---|---|---|---|---|
| Fluorene | ND | | 17 | µg/Kg-dry | 1 | 8/9/2013 01:39 PM |
| Indeno(1,2,3-cd)pyrene | ND | | 23 | µg/Kg-dry | 1 | 8/9/2013 01:39 PM |
| Naphthalene | ND | | 17 | µg/Kg-dry | 1 | 8/9/2013 01:39 PM |
| Pyrene | ND | | 17 | µg/Kg-dry | 1 | 8/9/2013 01:39 PM |
| *Surr: 2-Fluorobiphenyl* | *63.9* | | *12-100* | *%REC* | 1 | 8/9/2013 01:39 PM |
| *Surr: 4-Terphenyl-d14* | *88.7* | | *25-137* | *%REC* | 1 | 8/9/2013 01:39 PM |
| *Surr: Nitrobenzene-d5* | *64.4* | | *37-107* | *%REC* | 1 | 8/9/2013 01:39 PM |
| **VOLATILE ORGANIC COMPOUNDS** | | | **SW8260B** | | Prep Date: **8/8/2013** | Analyst: **AK** |
| Benzene | ND | | 35 | µg/Kg-dry | 1 | 8/8/2013 02:14 PM |
| Ethylbenzene | ND | | 35 | µg/Kg-dry | 1 | 8/8/2013 02:14 PM |
| m,p-Xylene | ND | | 69 | µg/Kg-dry | 1 | 8/8/2013 02:14 PM |
| o-Xylene | ND | | 35 | µg/Kg-dry | 1 | 8/8/2013 02:14 PM |
| Toluene | ND | | 35 | µg/Kg-dry | 1 | 8/8/2013 02:14 PM |
| Xylenes, Total | ND | | 100 | µg/Kg-dry | 1 | 8/8/2013 02:14 PM |
| *Surr: 1,2-Dichloroethane-d4* | *101* | | *70-130* | *%REC* | 1 | 8/8/2013 02:14 PM |
| *Surr: 4-Bromofluorobenzene* | *99.2* | | *70-130* | *%REC* | 1 | 8/8/2013 02:14 PM |
| *Surr: Dibromofluoromethane* | *97.6* | | *70-130* | *%REC* | 1 | 8/8/2013 02:14 PM |
| *Surr: Toluene-d8* | *99.9* | | *70-130* | *%REC* | 1 | 8/8/2013 02:14 PM |
| **ELECTRICAL CONDUCTIVITY (SAR)** | | | **USDA H60 METHO** | | Prep Date: **8/10/2013** | Analyst: **JB** |
| **Electrical Conductivity @ Saturation** | **4.1** | | **0.025** | **mmhos/cm @25** | 5 | 8/12/2013 10:00 AM |
| **CHROMIUM, TRIVALENT** | | | **CALCULATION** | | | Analyst: **MB** |
| **Chromium, Trivalent** | **11** | | **0.58** | **mg/Kg-dry** | 1 | 8/12/2013 05:25 PM |
| **CHROMIUM, HEXAVALENT** | | | **SW7196A** | | Prep Date: **8/9/2013** | Analyst: **RLF** |
| Chromium, Hexavalent | ND | | 0.57 | mg/Kg-dry | 1 | 8/12/2013 02:00 PM |
| **MOISTURE** | | | **A2540 G** | | | Analyst: **BD** |
| **Moisture** | **14** | | **0.050** | **% of sample** | 1 | 8/8/2013 02:50 PM |
| **PH** | | | **SW9045D** | | Prep Date: **8/8/2013** | Analyst: **JB** |
| **pH** | **8.0** | | | **s.u.** | 1 | 8/8/2013 04:30 PM |

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

# ALS Group USA, Corp

**Date:** *12-Aug-13*

**Client:** HRL Compliance Solutions
**Project:** Caerus Parachute Creek 4 Tank Removal 8/7/13 **Work Order:** 1308304
**Sample ID:** Footprint, 12' **Lab ID:** 1308304-05
**Collection Date:** 8/7/2013 02:05 PM **Matrix:** SOIL

| Analyses | Result | Qual | Report Limit | Units | Dilution Factor | Date Analyzed |
|---|---|---|---|---|---|---|
| **DIESEL RANGE ORGANICS BY GC-FID** | | | **SW8015M** | | Prep Date: **8/8/2013** | Analyst: **RD** |
| DRO (C10-C28) | ND | | 4.8 | mg/Kg-dry | 1 | 8/8/2013 11:34 PM |
| *Surr: 4-Terphenyl-d14* | *63.6* | | *39-115* | *%REC* | 1 | 8/8/2013 11:34 PM |
| **GASOLINE RANGE ORGANICS BY GC-FID** | | | **SW8015** | | Prep Date: **8/8/2013** | Analyst: **RD** |
| GRO (C6-C10) | ND | | 3.0 | mg/Kg-dry | 1 | 8/8/2013 04:04 PM |
| *Surr: Toluene-d8* | *114* | | *50-150* | *%REC* | 1 | 8/8/2013 04:04 PM |
| **MERCURY BY CVAA** | | | **SW7471** | | Prep Date: **8/8/2013** | Analyst: **LR** |
| **Mercury** | **0.020** | | **0.017** | **mg/Kg-dry** | 1 | 8/8/2013 05:11 PM |
| **METALS BY ICP-MS** | | | **SW6020A** | | Prep Date: **8/8/2013** | Analyst: **ML** |
| **Arsenic** | **9.0** | | **2.2** | **mg/Kg-dry** | 5 | 8/9/2013 08:49 AM |
| **Barium** | **180** | | **2.2** | **mg/Kg-dry** | 5 | 8/9/2013 08:49 AM |
| Cadmium | ND | | 0.89 | mg/Kg-dry | 5 | 8/9/2013 08:49 AM |
| **Chromium** | **11** | | **2.2** | **mg/Kg-dry** | 5 | 8/9/2013 08:49 AM |
| **Copper** | **19** | | **2.2** | **mg/Kg-dry** | 5 | 8/9/2013 08:49 AM |
| **Lead** | **15** | | **2.2** | **mg/Kg-dry** | 5 | 8/9/2013 08:49 AM |
| **Nickel** | **19** | | **2.2** | **mg/Kg-dry** | 5 | 8/9/2013 08:49 AM |
| Selenium | ND | | 2.2 | mg/Kg-dry | 5 | 8/9/2013 08:49 AM |
| Silver | ND | | 2.2 | mg/Kg-dry | 5 | 8/9/2013 08:49 AM |
| **Zinc** | **68** | | **4.5** | **mg/Kg-dry** | 5 | 8/9/2013 08:49 AM |
| **SOLUBLE CATIONS FOR SAR** | | | **SW6020A** | | Prep Date: **8/10/2013** | Analyst: **RH** |
| **Calcium** | **510** | | **10** | **mg/L** | 20 | 8/12/2013 02:14 PM |
| **Magnesium** | **160** | | **4.0** | **mg/L** | 20 | 8/12/2013 02:14 PM |
| **Sodium** | **560** | | **4.0** | **mg/L** | 20 | 8/12/2013 02:14 PM |
| **SODIUM ADSORPTION RATIO** | | | **USDA H60 METHO** | | Prep Date: **8/10/2013** | Analyst: **RH** |
| **Sodium Adsorption Ratio** | **5.5** | | **0.010** | **none** | 1 | 8/12/2013 |
| **SEMI-VOLATILE ORGANIC COMPOUNDS** | | | **SW8270** | | Prep Date: **8/8/2013** | Analyst: **HL** |
| Acenaphthene | ND | | 17 | µg/Kg-dry | 1 | 8/9/2013 02:11 PM |
| Acenaphthylene | ND | | 35 | µg/Kg-dry | 1 | 8/9/2013 02:11 PM |
| Anthracene | ND | | 17 | µg/Kg-dry | 1 | 8/9/2013 02:11 PM |
| Benzo(a)anthracene | ND | | 20 | µg/Kg-dry | 1 | 8/9/2013 02:11 PM |
| Benzo(a)pyrene | ND | | 20 | µg/Kg-dry | 1 | 8/9/2013 02:11 PM |
| Benzo(b)fluoranthene | ND | | 21 | µg/Kg-dry | 1 | 8/9/2013 02:11 PM |
| Benzo(g,h,i)perylene | ND | | 32 | µg/Kg-dry | 1 | 8/9/2013 02:11 PM |
| Benzo(k)fluoranthene | ND | | 21 | µg/Kg-dry | 1 | 8/9/2013 02:11 PM |
| Chrysene | ND | | 17 | µg/Kg-dry | 1 | 8/9/2013 02:11 PM |
| Dibenzo(a,h)anthracene | ND | | 21 | µg/Kg-dry | 1 | 8/9/2013 02:11 PM |
| Fluoranthene | ND | | 17 | µg/Kg-dry | 1 | 8/9/2013 02:11 PM |

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

**Client:** HRL Compliance Solutions
**Project:** Caerus Parachute Creek 4 Tank Removal 8/7/13 **Work Order:** 1308304
**Sample ID:** Footprint, 12' **Lab ID:** 1308304-05
**Collection Date:** 8/7/2013 02:05 PM **Matrix:** SOIL

| Analyses | Result | Qual | Report Limit | Units | Dilution Factor | Date Analyzed |
|---|---|---|---|---|---|---|
| Fluorene | ND | | 17 | µg/Kg-dry | 1 | 8/9/2013 02:11 PM |
| Indeno(1,2,3-cd)pyrene | ND | | 23 | µg/Kg-dry | 1 | 8/9/2013 02:11 PM |
| Naphthalene | ND | | 17 | µg/Kg-dry | 1 | 8/9/2013 02:11 PM |
| Pyrene | ND | | 17 | µg/Kg-dry | 1 | 8/9/2013 02:11 PM |
| *Surr: 2-Fluorobiphenyl* | *72.6* | | *12-100* | *%REC* | 1 | 8/9/2013 02:11 PM |
| *Surr: 4-Terphenyl-d14* | *97.6* | | *25-137* | *%REC* | 1 | 8/9/2013 02:11 PM |
| *Surr: Nitrobenzene-d5* | *73.1* | | *37-107* | *%REC* | 1 | 8/9/2013 02:11 PM |
| **VOLATILE ORGANIC COMPOUNDS** | | | **SW8260B** | | Prep Date: **8/8/2013** | Analyst: **AK** |
| Benzene | ND | | 36 | µg/Kg-dry | 1 | 8/8/2013 02:39 PM |
| Ethylbenzene | ND | | 36 | µg/Kg-dry | 1 | 8/8/2013 02:39 PM |
| m,p-Xylene | ND | | 71 | µg/Kg-dry | 1 | 8/8/2013 02:39 PM |
| o-Xylene | ND | | 36 | µg/Kg-dry | 1 | 8/8/2013 02:39 PM |
| Toluene | ND | | 36 | µg/Kg-dry | 1 | 8/8/2013 02:39 PM |
| Xylenes, Total | ND | | 110 | µg/Kg-dry | 1 | 8/8/2013 02:39 PM |
| *Surr: 1,2-Dichloroethane-d4* | *102* | | *70-130* | *%REC* | 1 | 8/8/2013 02:39 PM |
| *Surr: 4-Bromofluorobenzene* | *100* | | *70-130* | *%REC* | 1 | 8/8/2013 02:39 PM |
| *Surr: Dibromofluoromethane* | *96.9* | | *70-130* | *%REC* | 1 | 8/8/2013 02:39 PM |
| *Surr: Toluene-d8* | *99.3* | | *70-130* | *%REC* | 1 | 8/8/2013 02:39 PM |
| **ELECTRICAL CONDUCTIVITY (SAR)** | | | **USDA H60 METHO** | | Prep Date: **8/10/2013** | Analyst: **JB** |
| **Electrical Conductivity @ Saturation** | **6.4** | | **0.025** | **mmhos/cm @25** | 5 | 8/12/2013 10:00 AM |
| **CHROMIUM, TRIVALENT** | | | **CALCULATION** | | | Analyst: **MB** |
| **Chromium, Trivalent** | **11** | | **0.59** | **mg/Kg-dry** | 1 | 8/12/2013 05:25 PM |
| **CHROMIUM, HEXAVALENT** | | | **SW7196A** | | Prep Date: **8/9/2013** | Analyst: **RLF** |
| Chromium, Hexavalent | ND | | 0.60 | mg/Kg-dry | 1 | 8/12/2013 02:00 PM |
| **MOISTURE** | | | **A2540 G** | | | Analyst: **BD** |
| **Moisture** | **16** | | **0.050** | **% of sample** | 1 | 8/8/2013 02:50 PM |
| **PH** | | | **SW9045D** | | Prep Date: **8/8/2013** | Analyst: **JB** |
| **pH** | **7.8** | | | **s.u.** | 1 | 8/8/2013 04:30 PM |

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

ALS Group USA, Corp

Date: 12-Aug-13

**Client:** HRL Compliance Solutions

# QC BATCH REPORT

**Work Order:** 1308304

**Project:** Caerus Parachute Creek 4 Tank Removal 8/7/13

Batch ID: **50383** Instrument ID **GC8** Method: **SW8015M**

**MBLK** Sample ID: **DBLKS1-50383-50383** Units: **mg/Kg** Analysis Date: **8/8/2013 05:33 PM**

Client ID: Run ID: **GC8_130808B** SeqNo: **2409752** Prep Date: **8/8/2013** DF: **1**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| DRO (C10-C28) | ND | 4.2 | | | | | | | | |
| *Surr: 4-Terphenyl-d14* | *1.198* | 0 | *1.667* | 0 | *71.9* | *39-115* | 0 | | | |

**MS** Sample ID: **1308278-07A MS** Units: **mg/Kg** Analysis Date: **8/8/2013 06:33 PM**

Client ID: Run ID: **GC8_130808B** SeqNo: **2409754** Prep Date: **8/8/2013** DF: **1**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| DRO (C10-C28) | 463.8 | 12 | 469.2 | 73.52 | 83.2 | 49-130 | 0 | | | |
| *Surr: 4-Terphenyl-d14* | *3.521* | 0 | *4.692* | 0 | *75* | *39-115* | 0 | | | |

**MSD** Sample ID: **1308278-07A MSD** Units: **mg/Kg** Analysis Date: **8/8/2013 07:03 PM**

Client ID: Run ID: **GC8_130808B** SeqNo: **2409755** Prep Date: **8/8/2013** DF: **1**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| DRO (C10-C28) | 477.6 | 12 | 499.7 | 73.52 | 80.9 | 49-130 | 463.8 | 2.93 | 30 | |
| *Surr: 4-Terphenyl-d14* | *3.545* | 0 | *4.997* | 0 | *70.9* | *39-115* | 3.521 | *0.665* | *30* | |

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

| | | |
|---|---|---|
| 1308304-01B | 1308304-02B | 1308304-03B |
| 1308304-04B | 1308304-05B | |

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

**Client:** HRL Compliance Solutions
**Work Order:** 1308304
**Project:** Caerus Parachute Creek 4 Tank Removal 8/7/13

# QC BATCH REPORT

Batch ID: **50397** Instrument ID **HG1** Method: **SW7471**

**MBLK** Sample ID: **MBLK-50397-50397** Units: **mg/Kg** Analysis Date: **8/8/2013 04:04 PM**
Client ID: Run ID: **HG1_130808A** SeqNo: **2408138** Prep Date: **8/8/2013** DF: **1**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | 0.020 | | | | | | | | |

**LCS** Sample ID: **LCS-50397-50397** Units: **mg/Kg** Analysis Date: **8/8/2013 04:06 PM**
Client ID: Run ID: **HG1_130808A** SeqNo: **2408139** Prep Date: **8/8/2013** DF: **1**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | 0.1909 | 0.020 | 0.1665 | 0 | 115 | 80-120 | 0 | | | |

**MS** Sample ID: **1308246-01BMS** Units: **mg/Kg** Analysis Date: **8/8/2013 04:44 PM**
Client ID: Run ID: **HG1_130808A** SeqNo: **2408225** Prep Date: **8/8/2013** DF: **1**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | 0.1478 | 0.014 | 0.1168 | 0.02111 | 108 | 75-125 | 0 | | | |

**MSD** Sample ID: **1308246-01BMSD** Units: **mg/Kg** Analysis Date: **8/8/2013 04:46 PM**
Client ID: Run ID: **HG1_130808A** SeqNo: **2408226** Prep Date: **8/8/2013** DF: **1**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | 0.1476 | 0.014 | 0.1162 | 0.02111 | 109 | 75-125 | 0.1478 | 0.149 | 35 | |

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

| | | |
|---|---|---|
| 1308304-01B | 1308304-02B | 1308304-03B |
| 1308304-04B | 1308304-05B | |

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

**Client:** HRL Compliance Solutions
**Work Order:** 1308304
**Project:** Caerus Parachute Creek 4 Tank Removal 8/7/13

# QC BATCH REPORT

Batch ID: **50400** Instrument ID **ICPMS1** Method: **SW6020A**

**MBLK** Sample ID: **MBLK-50400-50400** Units: **mg/Kg** Analysis Date: **8/9/2013 06:17 AM**
Client ID: Run ID: **ICPMS1_130808A** SeqNo: **2408848** Prep Date: **8/8/2013** DF: **1**

| 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 | 0.10 | | | | | | | | |
| Chromium | ND | 0.25 | | | | | | | | |
| Copper | ND | 0.25 | | | | | | | | |
| Lead | ND | 0.25 | | | | | | | | |
| Nickel | ND | 0.25 | | | | | | | | |
| Selenium | 0.0629 | 0.25 | | | | | | | | J |
| Silver | ND | 0.25 | | | | | | | | |
| Zinc | 0.0549 | 0.50 | | | | | | | | J |

**LCS** Sample ID: **LCS-50400-50400** Units: **mg/Kg** Analysis Date: **8/9/2013 06:24 AM**
Client ID: Run ID: **ICPMS1_130808A** SeqNo: **2408849** Prep Date: **8/8/2013** DF: **1**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 4.497 | 0.25 | 5 | 0 | 89.9 | 80-120 | 0 | | | |
| Barium | 4.863 | 0.25 | 5 | 0 | 97.3 | 80-120 | 0 | | | |
| Cadmium | 4.823 | 0.10 | 5 | 0 | 96.5 | 80-120 | 0 | | | |
| Chromium | 4.632 | 0.25 | 5 | 0 | 92.6 | 80-120 | 0 | | | |
| Copper | 4.676 | 0.25 | 5 | 0 | 93.5 | 80-120 | 0 | | | |
| Lead | 4.87 | 0.25 | 5 | 0 | 97.4 | 80-120 | 0 | | | |
| Nickel | 4.62 | 0.25 | 5 | 0 | 92.4 | 80-120 | 0 | | | |
| Selenium | 4.498 | 0.25 | 5 | 0 | 90 | 80-120 | 0 | | | |
| Silver | 4.819 | 0.25 | 5 | 0 | 96.4 | 80-120 | 0 | | | |
| Zinc | 4.246 | 0.50 | 5 | 0 | 84.9 | 80-120 | 0 | | | |

**MS** Sample ID: **1308284-14AMS** Units: **mg/Kg** Analysis Date: **8/9/2013 09:08 AM**
Client ID: Run ID: **ICPMS1_130808A** SeqNo: **2408874** Prep Date: **8/8/2013** DF: **4**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 10.72 | 1.4 | 7.123 | 4.778 | 83.5 | 75-125 | 0 | | | |
| Barium | 36.13 | 1.4 | 7.123 | 28.31 | 110 | 75-125 | 0 | | | |
| Cadmium | 7.162 | 0.57 | 7.123 | 0.4906 | 93.7 | 75-125 | 0 | | | |
| Chromium | 29.72 | 1.4 | 7.123 | 16.98 | 179 | 75-125 | 0 | | | S |
| Copper | 28.46 | 1.4 | 7.123 | 19.04 | 132 | 75-125 | 0 | | | S |
| Lead | 23.97 | 1.4 | 7.123 | 15.72 | 116 | 75-125 | 0 | | | |
| Nickel | 18.81 | 1.4 | 7.123 | 10.65 | 115 | 75-125 | 0 | | | |
| Selenium | 7.387 | 1.4 | 7.123 | 0.6987 | 93.9 | 75-125 | 0 | | | |
| Silver | 7.017 | 1.4 | 7.123 | 0.2119 | 95.5 | 75-125 | 0 | | | |
| Zinc | 85.13 | 2.8 | 7.123 | 64.85 | 285 | 75-125 | 0 | | | SO |

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

**Client:** HRL Compliance Solutions
**Work Order:** 1308304
**Project:** Caerus Parachute Creek 4 Tank Removal 8/7/13

# QC BATCH REPORT

Batch ID: **50400** Instrument ID **ICPMS1** Method: **SW6020A**

**MSD** Sample ID: **1308284-14AMSD** Units: **mg/Kg** Analysis Date: **8/9/2013 09:14 AM**
Client ID: Run ID: **ICPMS1_130808A** SeqNo: **2408875** Prep Date: **8/8/2013** DF: **4**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 9.694 | 1.5 | 7.278 | 4.778 | 67.6 | 75-125 | 10.72 | 10.1 | 25 | S |
| Barium | 33.1 | 1.5 | 7.278 | 28.31 | 65.8 | 75-125 | 36.13 | 8.74 | 25 | S |
| Cadmium | 7.578 | 0.58 | 7.278 | 0.4906 | 97.4 | 75-125 | 7.162 | 5.64 | 25 | |
| Chromium | 23.31 | 1.5 | 7.278 | 16.98 | 86.9 | 75-125 | 29.72 | 24.2 | 25 | |
| Copper | 26.32 | 1.5 | 7.278 | 19.04 | 100 | 75-125 | 28.46 | 7.81 | 25 | |
| Lead | 22.29 | 1.5 | 7.278 | 15.72 | 90.3 | 75-125 | 23.97 | 7.25 | 25 | |
| Nickel | 16.04 | 1.5 | 7.278 | 10.65 | 74 | 75-125 | 18.81 | 15.9 | 25 | S |
| Selenium | 7.613 | 1.5 | 7.278 | 0.6987 | 95 | 75-125 | 7.387 | 3 | 25 | |
| Silver | 7.374 | 1.5 | 7.278 | 0.2119 | 98.4 | 75-125 | 7.017 | 4.96 | 25 | |
| Zinc | 66.46 | 2.9 | 7.278 | 64.85 | 22.2 | 75-125 | 85.13 | 24.6 | 25 | SO |

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

| | | |
|---|---|---|
| 1308304-01B | 1308304-02B | 1308304-03B |
| 1308304-04B | 1308304-05B | |

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

**Client:** HRL Compliance Solutions
**Work Order:** 1308304
**Project:** Caerus Parachute Creek 4 Tank Removal 8/7/13

# QC BATCH REPORT

Batch ID: **50406** Instrument ID **ICPMS2** Method: **SW6020A** **(Dissolve)**

**DUP** Sample ID: **1308305-01BDUP** Units: **mg/L** Analysis Date: **8/12/2013 02:25 PM**
Client ID: Run ID: **ICPMS2_130812A** SeqNo: **2410945** Prep Date: **8/10/2013** DF: **20**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Calcium | 165.6 | 10 | 0 | 0 | 0 | 0-0 | 170.2 | 2.74 | | |
| Magnesium | 17.18 | 4.0 | 0 | 0 | 0 | 0-0 | 17.29 | 0.673 | | |
| Sodium | 8.814 | 4.0 | 0 | 0 | 0 | 0-0 | 9.498 | 7.47 | | |

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

| | | |
|---|---|---|
| 1308304-01C | 1308304-02C | 1308304-03C |
| 1308304-04C | 1308304-05C | |

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

**Client:** HRL Compliance Solutions
**Work Order:** 1308304
**Project:** Caerus Parachute Creek 4 Tank Removal 8/7/13

# QC BATCH REPORT

Batch ID: **50382** Instrument ID **SVMS4** Method: **SW8270**

**MBLK** Sample ID: **SBLKS1-50382-50382** Units: **µg/Kg** Analysis Date: **8/9/2013 11:03 AM**
Client ID: Run ID: **SVMS4_130809A** SeqNo: **2409447** Prep Date: **8/8/2013** DF: **1**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | ND | 30 | 0 | 0 | 0 | 0-0 | 0 | | | |
| Acenaphthylene | ND | 30 | 0 | 0 | 0 | 0-0 | 0 | | | |
| Anthracene | ND | 30 | 0 | 0 | 0 | 0-0 | 0 | | | |
| Benzo(a)anthracene | ND | 30 | 0 | 0 | 0 | 0-0 | 0 | | | |
| Benzo(a)pyrene | ND | 30 | 0 | 0 | 0 | 0-0 | 0 | | | |
| Benzo(b)fluoranthene | ND | 30 | 0 | 0 | 0 | 0-0 | 0 | | | |
| Benzo(g,h,i)perylene | ND | 30 | 0 | 0 | 0 | 0-0 | 0 | | | |
| Benzo(k)fluoranthene | ND | 30 | 0 | 0 | 0 | 0-0 | 0 | | | |
| Chrysene | ND | 30 | 0 | 0 | 0 | 0-0 | 0 | | | |
| Dibenzo(a,h)anthracene | ND | 30 | 0 | 0 | 0 | 0-0 | 0 | | | |
| Fluoranthene | ND | 30 | 0 | 0 | 0 | 0-0 | 0 | | | |
| Fluorene | ND | 30 | 0 | 0 | 0 | 0-0 | 0 | | | |
| Indeno(1,2,3-cd)pyrene | ND | 30 | 0 | 0 | 0 | 0-0 | 0 | | | |
| Naphthalene | ND | 30 | 0 | 0 | 0 | 0-0 | 0 | | | |
| Pyrene | ND | 30 | 0 | 0 | 0 | 0-0 | 0 | | | |
| *Surr: 2-Fluorobiphenyl* | *1354* | 0 | *1667* | 0 | *81.2* | *12-100* | 0 | | | |
| *Surr: 4-Terphenyl-d14* | *1802* | 0 | *1667* | 0 | *108* | *25-137* | 0 | | | |
| *Surr: Nitrobenzene-d5* | *1363* | 0 | *1667* | 0 | *81.8* | *37-107* | 0 | | | |

**LCS** Sample ID: **SLCSS1-50382-50382** Units: **µg/Kg** Analysis Date: **8/9/2013 09:29 AM**
Client ID: Run ID: **SVMS4_130809A** SeqNo: **2409444** Prep Date: **8/8/2013** DF: **1**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | 555.7 | 30 | 666.7 | 0 | 83.3 | 45-110 | 0 | | | |
| Acenaphthylene | 565.7 | 30 | 666.7 | 0 | 84.8 | 45-105 | 0 | | | |
| Anthracene | 639.7 | 30 | 666.7 | 0 | 95.9 | 55-105 | 0 | | | |
| Benzo(a)anthracene | 637 | 30 | 666.7 | 0 | 95.5 | 50-110 | 0 | | | |
| Benzo(a)pyrene | 681.7 | 30 | 666.7 | 0 | 102 | 50-110 | 0 | | | |
| Benzo(b)fluoranthene | 546.7 | 30 | 666.7 | 0 | 82 | 45-115 | 0 | | | |
| Benzo(g,h,i)perylene | 753 | 30 | 666.7 | 0 | 113 | 40-125 | 0 | | | |
| Benzo(k)fluoranthene | 718.7 | 30 | 666.7 | 0 | 108 | 45-115 | 0 | | | |
| Chrysene | 648.3 | 30 | 666.7 | 0 | 97.2 | 55-110 | 0 | | | |
| Dibenzo(a,h)anthracene | 705.3 | 30 | 666.7 | 0 | 106 | 40-125 | 0 | | | |
| Fluoranthene | 634.3 | 30 | 666.7 | 0 | 95.1 | 55-115 | 0 | | | |
| Fluorene | 604.3 | 30 | 666.7 | 0 | 90.6 | 50-110 | 0 | | | |
| Indeno(1,2,3-cd)pyrene | 716.3 | 30 | 666.7 | 0 | 107 | 40-120 | 0 | | | |
| Naphthalene | 534 | 30 | 666.7 | 0 | 80.1 | 40-105 | 0 | | | |
| Pyrene | 656.3 | 30 | 666.7 | 0 | 98.4 | 45-125 | 0 | | | |
| *Surr: 2-Fluorobiphenyl* | *1205* | 0 | *1667* | 0 | *72.3* | *12-100* | 0 | | | |
| *Surr: 4-Terphenyl-d14* | *1681* | 0 | *1667* | 0 | *101* | *25-137* | 0 | | | |
| *Surr: Nitrobenzene-d5* | *1252* | 0 | *1667* | 0 | *75.1* | *37-107* | 0 | | | |

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

**Client:** HRL Compliance Solutions
**Work Order:** 1308304
**Project:** Caerus Parachute Creek 4 Tank Removal 8/7/13

# QC BATCH REPORT

Batch ID: **50382** Instrument ID **SVMS4** Method: **SW8270**

**MS** Sample ID: **1308278-07A MS** Units: **µg/Kg** Analysis Date: **8/9/2013 10:00 AM**
Client ID: Run ID: **SVMS4_130809A** SeqNo: **2409445** Prep Date: **8/8/2013** DF: **1**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | 1727 | 87 | 1931 | 0 | 89.4 | 45-110 | 0 | | | |
| Acenaphthylene | 1721 | 87 | 1931 | 0 | 89.1 | 45-105 | 0 | | | |
| Anthracene | 1855 | 87 | 1931 | 0 | 96 | 55-105 | 0 | | | |
| Benzo(a)anthracene | 1808 | 87 | 1931 | 0 | 93.6 | 50-110 | 0 | | | |
| Benzo(a)pyrene | 1859 | 87 | 1931 | 0 | 96.2 | 50-110 | 0 | | | |
| Benzo(b)fluoranthene | 1751 | 87 | 1931 | 0 | 90.6 | 45-115 | 0 | | | |
| Benzo(g,h,i)perylene | 2047 | 87 | 1931 | 0 | 106 | 40-125 | 0 | | | |
| Benzo(k)fluoranthene | 1941 | 87 | 1931 | 0 | 100 | 45-115 | 0 | | | |
| Chrysene | 1857 | 87 | 1931 | 0 | 96.1 | 55-110 | 0 | | | |
| Dibenzo(a,h)anthracene | 1982 | 87 | 1931 | 0 | 103 | 40-125 | 0 | | | |
| Fluoranthene | 1753 | 87 | 1931 | 0 | 90.8 | 55-115 | 0 | | | |
| Fluorene | 1821 | 87 | 1931 | 0 | 94.3 | 50-110 | 0 | | | |
| Indeno(1,2,3-cd)pyrene | 1990 | 87 | 1931 | 0 | 103 | 40-120 | 0 | | | |
| Naphthalene | 1669 | 87 | 1931 | 0 | 86.4 | 40-105 | 0 | | | |
| Pyrene | 1861 | 87 | 1931 | 0 | 96.3 | 45-125 | 0 | | | |
| *Surr: 2-Fluorobiphenyl* | *3819* | 0 | *4828* | 0 | *79.1* | *12-100* | 0 | | | |
| *Surr: 4-Terphenyl-d14* | *4759* | 0 | *4828* | 0 | *98.6* | *25-137* | 0 | | | |
| *Surr: Nitrobenzene-d5* | *3787* | 0 | *4828* | 0 | *78.4* | *37-107* | 0 | | | |

**MSD** Sample ID: **1308278-07A MSD** Units: **µg/Kg** Analysis Date: **8/9/2013 10:31 AM**
Client ID: Run ID: **SVMS4_130809A** SeqNo: **2409446** Prep Date: **8/8/2013** DF: **1**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | 1618 | 86 | 1917 | 0 | 84.4 | 45-110 | 1727 | 6.56 | 30 | |
| Acenaphthylene | 1629 | 86 | 1917 | 0 | 85 | 45-105 | 1721 | 5.46 | 30 | |
| Anthracene | 1819 | 86 | 1917 | 0 | 94.9 | 55-105 | 1855 | 1.95 | 30 | |
| Benzo(a)anthracene | 1772 | 86 | 1917 | 0 | 92.4 | 50-110 | 1808 | 2.04 | 30 | |
| Benzo(a)pyrene | 1859 | 86 | 1917 | 0 | 97 | 50-110 | 1859 | 0.0259 | 30 | |
| Benzo(b)fluoranthene | 1739 | 86 | 1917 | 0 | 90.7 | 45-115 | 1751 | 0.64 | 30 | |
| Benzo(g,h,i)perylene | 1982 | 86 | 1917 | 0 | 103 | 40-125 | 2047 | 3.23 | 30 | |
| Benzo(k)fluoranthene | 1993 | 86 | 1917 | 0 | 104 | 45-115 | 1941 | 2.67 | 30 | |
| Chrysene | 1833 | 86 | 1917 | 0 | 95.6 | 55-110 | 1857 | 1.27 | 30 | |
| Dibenzo(a,h)anthracene | 1971 | 86 | 1917 | 0 | 103 | 40-125 | 1982 | 0.556 | 30 | |
| Fluoranthene | 1752 | 86 | 1917 | 0 | 91.4 | 55-115 | 1753 | 0.0917 | 30 | |
| Fluorene | 1713 | 86 | 1917 | 0 | 89.4 | 50-110 | 1821 | 6.08 | 30 | |
| Indeno(1,2,3-cd)pyrene | 1981 | 86 | 1917 | 0 | 103 | 40-120 | 1990 | 0.46 | 30 | |
| Naphthalene | 1496 | 86 | 1917 | 0 | 78 | 40-105 | 1669 | 11 | 30 | |
| Pyrene | 1828 | 86 | 1917 | 0 | 95.4 | 45-125 | 1861 | 1.74 | 30 | |
| *Surr: 2-Fluorobiphenyl* | *3543* | 0 | *4792* | 0 | *73.9* | *12-100* | 3819 | *7.49* | *40* | |
| *Surr: 4-Terphenyl-d14* | *4726* | 0 | *4792* | 0 | *98.6* | *25-137* | 4759 | *0.689* | *40* | |
| *Surr: Nitrobenzene-d5* | *3446* | 0 | *4792* | 0 | *71.9* | *37-107* | 3787 | *9.42* | *40* | |

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

**Client:** HRL Compliance Solutions
**Work Order:** 1308304
**Project:** Caerus Parachute Creek 4 Tank Removal 8/7/13

# QC BATCH REPORT

Batch ID: **50382** Instrument ID **SVMS4** Method: **SW8270**

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

| | | |
|---|---|---|
| 1308304-01B | 1308304-02B | 1308304-03B |
| 1308304-04B | 1308304-05B | |

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

**Client:** HRL Compliance Solutions
**Work Order:** 1308304
**Project:** Caerus Parachute Creek 4 Tank Removal 8/7/13

# QC BATCH REPORT

Batch ID: **50396** Instrument ID **VMS6** Method: **SW8260B**

**MBLK** Sample ID: **MBLK-50396-50396** Units: **µg/Kg** Analysis Date: **8/8/2013 02:17 PM**
Client ID: Run ID: **VMS6_130808A** SeqNo: **2408759** Prep Date: **8/8/2013** DF: **1**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | ND | 30 | | | | | | | | |
| Ethylbenzene | ND | 30 | | | | | | | | |
| GRO (C6-C10) | ND | 2,500 | | | | | | | | |
| m,p-Xylene | ND | 60 | | | | | | | | |
| o-Xylene | ND | 30 | | | | | | | | |
| Toluene | ND | 30 | | | | | | | | |
| Xylenes, Total | ND | 90 | | | | | | | | |
| *Surr: 1,2-Dichloroethane-d4* | *975.5* | 0 | *1000* | 0 | *97.6* | *70-130* | 0 | | | |
| *Surr: 4-Bromofluorobenzene* | *923* | 0 | *1000* | 0 | *92.3* | *70-130* | 0 | | | |
| *Surr: Dibromofluoromethane* | *940* | 0 | *1000* | 0 | *94* | *70-130* | 0 | | | |
| *Surr: Toluene-d8* | *974* | 0 | *1000* | 0 | *97.4* | *70-130* | 0 | | | |

**LCS** Sample ID: **LCS-50396-50396** Units: **µg/Kg** Analysis Date: **8/8/2013 12:55 PM**
Client ID: Run ID: **VMS6_130808A** SeqNo: **2408757** Prep Date: **8/8/2013** DF: **1**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 1020 | 30 | 1000 | 0 | 102 | 75-125 | 0 | | | |
| Ethylbenzene | 996 | 30 | 1000 | 0 | 99.6 | 75-125 | 0 | | | |
| m,p-Xylene | 2014 | 60 | 2000 | 0 | 101 | 80-125 | 0 | | | |
| o-Xylene | 987.5 | 30 | 1000 | 0 | 98.8 | 75-125 | 0 | | | |
| Toluene | 950 | 30 | 1000 | 0 | 95 | 70-125 | 0 | | | |
| Xylenes, Total | 3002 | 90 | 3000 | 0 | 100 | 75-125 | 0 | | | |
| *Surr: 1,2-Dichloroethane-d4* | *1049* | 0 | *1000* | 0 | *105* | *70-130* | 0 | | | |
| *Surr: 4-Bromofluorobenzene* | *1004* | 0 | *1000* | 0 | *100* | *70-130* | 0 | | | |
| *Surr: Dibromofluoromethane* | *1096* | 0 | *1000* | 0 | *110* | *70-130* | 0 | | | |
| *Surr: Toluene-d8* | *984* | 0 | *1000* | 0 | *98.4* | *70-130* | 0 | | | |

**MS** Sample ID: **1308320-01A MS** Units: **µg/Kg** Analysis Date: **8/9/2013 07:52 AM**
Client ID: Run ID: **VMS8_130808B** SeqNo: **2409367** Prep Date: **8/8/2013** DF: **100**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 100200 | 3,000 | 100000 | 0 | 100 | 75-125 | 0 | | | |
| Ethylbenzene | 97750 | 3,000 | 100000 | 0 | 97.8 | 75-125 | 0 | | | |
| m,p-Xylene | 195000 | 6,000 | 200000 | 4400 | 95.3 | 80-125 | 0 | | | |
| o-Xylene | 97250 | 3,000 | 100000 | 0 | 97.2 | 75-125 | 0 | | | |
| Toluene | 100600 | 3,000 | 100000 | 2150 | 98.4 | 70-125 | 0 | | | |
| Xylenes, Total | 292300 | 9,000 | 300000 | 4400 | 96 | 75-125 | 0 | | | |
| *Surr: 1,2-Dichloroethane-d4* | *100000* | 0 | *100000* | 0 | *100* | *70-130* | 0 | | | |
| *Surr: 4-Bromofluorobenzene* | *101200* | 0 | *100000* | 0 | *101* | *70-130* | 0 | | | |
| *Surr: Dibromofluoromethane* | *102000* | 0 | *100000* | 0 | *102* | *70-130* | 0 | | | |
| *Surr: Toluene-d8* | *101000* | 0 | *100000* | 0 | *101* | *70-130* | 0 | | | |

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

**Client:** HRL Compliance Solutions
**Work Order:** 1308304
**Project:** Caerus Parachute Creek 4 Tank Removal 8/7/13

# QC BATCH REPORT

Batch ID: **50396** Instrument ID **VMS6** Method: **SW8260B**

**MSD** Sample ID: **1308320-01A MSD** Units: **µg/Kg** Analysis Date: **8/9/2013 08:17 AM**
Client ID: Run ID: **VMS8_130808B** SeqNo: **2409368** Prep Date: **8/8/2013** DF: **100**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 99900 | 3,000 | 100000 | 0 | 99.9 | 75-125 | 100200 | 0.25 | 30 | |
| Ethylbenzene | 97000 | 3,000 | 100000 | 0 | 97 | 75-125 | 97750 | 0.77 | 30 | |
| m,p-Xylene | 192800 | 6,000 | 200000 | 4400 | 94.2 | 80-125 | 195000 | 1.16 | 30 | |
| o-Xylene | 95950 | 3,000 | 100000 | 0 | 96 | 75-125 | 97250 | 1.35 | 30 | |
| Toluene | 98750 | 3,000 | 100000 | 2150 | 96.6 | 70-125 | 100600 | 1.81 | 30 | |
| Xylenes, Total | 288800 | 9,000 | 300000 | 4400 | 94.8 | 75-125 | 292300 | 1.22 | 30 | |
| *Surr: 1,2-Dichloroethane-d4* | *99700* | 0 | *100000* | 0 | *99.7* | *70-130* | 100000 | *0.3* | *30* | |
| *Surr: 4-Bromofluorobenzene* | *95650* | 0 | *100000* | 0 | *95.6* | *70-130* | 101200 | *5.64* | *30* | |
| *Surr: Dibromofluoromethane* | *98900* | 0 | *100000* | 0 | *98.9* | *70-130* | 102000 | *3.04* | *30* | |
| *Surr: Toluene-d8* | *98700* | 0 | *100000* | 0 | *98.7* | *70-130* | 101000 | *2.25* | *30* | |

**The following samples were analyzed in this batch:** 1308304-01A 1308304-02A 1308304-03A 1308304-04A 1308304-05A

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

**Client:** HRL Compliance Solutions
**Work Order:** 1308304
**Project:** Caerus Parachute Creek 4 Tank Removal 8/7/13

# QC BATCH REPORT

Batch ID: **50398** Instrument ID **WETCHEM** Method: **SW9045D**

| **LCS** | Sample ID: **LCS-50398-50398** | | | | Units: **s.u.** | | | Analysis Date: **8/8/2013 04:30 PM** | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Client ID: | | Run ID: **WETCHEM_130808T** | | | SeqNo: **2408252** | | | Prep Date: **8/8/2013** | | DF: **1** | |
| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual | |
| pH | 4.24 | 0 | 4.4 | 0 | 96.4 | 90-110 | 0 | | | | |

| **DUP** | Sample ID: **1308304-03B DUP** | | | | Units: **s.u.** | | | Analysis Date: **8/8/2013 04:30 PM** | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Client ID: **East Wall, 6'** | | Run ID: **WETCHEM_130808T** | | | SeqNo: **2408257** | | | Prep Date: **8/8/2013** | | DF: **1** | |
| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual | |
| pH | 8.34 | 0 | 0 | 0 | 0 | 0-0 | 8.38 | 0.478 | 20 | | |

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

| | | |
|---|---|---|
| 1308304-01B | 1308304-02B | 1308304-03B |
| 1308304-04B | 1308304-05B | |

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

**Client:** HRL Compliance Solutions
**Work Order:** 1308304
**Project:** Caerus Parachute Creek 4 Tank Removal 8/7/13

# QC BATCH REPORT

Batch ID: **50406** Instrument ID **WETCHEM** Method: **USDA H60 Method**

**DUP** Sample ID: **1308305-01B DUP** Units: **mmhos/cm @25°C** Analysis Date: **8/12/2013 10:00 AM**
Client ID: Run ID: **WETCHEM_130812A** SeqNo: **2410348** Prep Date: **8/10/2013** DF: **5**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Electrical Conductivity @ Saturation | 1.07 | 0.025 | 0 | 0 | 0 | | 1.16 | 8.07 | 50 | |

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

| | | |
|---|---|---|
| 1308304-01C | 1308304-02C | 1308304-03C |
| 1308304-04C | 1308304-05C | |

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

**Client:** HRL Compliance Solutions
**Work Order:** 1308304
**Project:** Caerus Parachute Creek 4 Tank Removal 8/7/13

# QC BATCH REPORT

Batch ID: **50484** Instrument ID **WETCHEM** Method: **SW7196A**

**MBLK** Sample ID: **MBLK-50484-50484** Units: **mg/Kg** Analysis Date: **8/12/2013 02:00 PM**
Client ID: Run ID: **WETCHEM_130812I** SeqNo: **2411267** Prep Date: **8/9/2013** DF: **1**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Chromium, Hexavalent | 0.24 | 0.50 | | | | | | | | J |

**LCS** Sample ID: **LCS-50484-50484** Units: **mg/Kg** Analysis Date: **8/12/2013 02:00 PM**
Client ID: Run ID: **WETCHEM_130812I** SeqNo: **2411266** Prep Date: **8/9/2013** DF: **1**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Chromium, Hexavalent | 1.924 | 0.50 | 2 | 0 | 96.2 | 80-120 | 0 | | | |

**MS** Sample ID: **1308304-05B MS** Units: **mg/Kg** Analysis Date: **8/12/2013 02:00 PM**
Client ID: **Footprint, 12'** Run ID: **WETCHEM_130812I** SeqNo: **2411264** Prep Date: **8/9/2013** DF: **1**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Chromium, Hexavalent | 1.594 | 0.49 | 1.969 | 0.09717 | 76.1 | 75-125 | 0 | | | |

**MSD** Sample ID: **1308304-05B MSD** Units: **mg/Kg** Analysis Date: **8/12/2013 02:00 PM**
Client ID: **Footprint, 12'** Run ID: **WETCHEM_130812I** SeqNo: **2411265** Prep Date: **8/9/2013** DF: **1**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Chromium, Hexavalent | 1.394 | 0.49 | 1.969 | 0.09717 | 65.9 | 75-125 | 1.594 | 13.4 | 20 | S |

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

| | | |
|---|---|---|
| 1308304-01B | 1308304-02B | 1308304-03B |
| 1308304-04B | 1308304-05B | |

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

**Client:** HRL Compliance Solutions
**Work Order:** 1308304
**Project:** Caerus Parachute Creek 4 Tank Removal 8/7/13

# QC BATCH REPORT

Batch ID: **R124889** Instrument ID **MOIST** Method: **A2540 G**

**MBLK** Sample ID: **WBLKS-R124889** Units: **% of sample** Analysis Date: **8/8/2013 02:50 PM**
Client ID: Run ID: **MOIST_130808A** SeqNo: **2409025** Prep Date: DF: **1**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Moisture | ND | 0.050 | | | | | | | | |

**LCS** Sample ID: **LCS-R124889** Units: **% of sample** Analysis Date: **8/8/2013 02:50 PM**
Client ID: Run ID: **MOIST_130808A** SeqNo: **2409021** Prep Date: DF: **1**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Moisture | 100 | 0.050 | 100 | 0 | 100 | 99.5-100.5 | 0 | | | |

**DUP** Sample ID: **1308301-01A DUP** Units: **% of sample** Analysis Date: **8/8/2013 02:50 PM**
Client ID: Run ID: **MOIST_130808A** SeqNo: **2408988** Prep Date: DF: **1**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Moisture | 14.03 | 0.050 | 0 | 0 | 0 | 0-0 | 14.23 | 1.42 | 20 | |

**DUP** Sample ID: **1308320-01B DUP** Units: **% of sample** Analysis Date: **8/8/2013 02:50 PM**
Client ID: Run ID: **MOIST_130808A** SeqNo: **2408998** Prep Date: DF: **1**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Moisture | 11.86 | 0.050 | 0 | 0 | 0 | 0-0 | 11.58 | 2.39 | 20 | |

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

| | | |
|---|---|---|
| 1308304-01B | 1308304-02B | 1308304-03B |
| 1308304-04B | 1308304-05B | |

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

# ALS Laboratory Group

225 Commerce Drive, Fort Collins, Colorado 80524
TF: (800) 443-1511 PH: (970) 490-1511 FX: (970) 490-1522

# Chain-of-Custody

Form 202r8

WORKORDER # 1308304

CAERUS

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| PROJECT NAME | PARACHUTE CREEK 4 | SAMPLER | Casey Richardson | DATE | 8.7.13 | PAGE | 1 of 1 |
| PROJECT No. | TANK REMOVAL | SITE ID | | TURNAROUND | 24 HOUR | DISPOSAL | ~~By Lab~~ or Return to Client |
| | | EDD FORMAT | | | | | |
| | | PURCHASE ORDER | | | | | |
| COMPANY NAME | HCSI | BILL TO COMPANY | ~~PDC Energy~~ CAERUS | | | | |
| SEND REPORT TO | Herman Lucero | INVOICE ATTN TO | Ed Winters | | | | |
| ADDRESS | 2385 F 1/2 Road | ADDRESS | 120 Railroad Ave. Suite D | | | | |
| CITY / STATE / ZIP | Grand Junction, CO. 81505 | CITY / STATE / ZIP | Parachute, CO 81635 | | | | |
| PHONE | 970-243-3271 | PHONE | 970-285-9606 | | | | |
| FAX | 970-243-3280 | FAX | | | | | |
| E-MAIL | hlucero@hrlcomp.com | E-MAIL | ewinters@petd.com | | | | |

| Lab ID | Field ID | Matrix | Sample Date | Sample Time | # Bottles | Pres. | QC | DRO | GRO | BTEX | TOTAL METALS - 9101 | SEMI VOLS - PAH | SAR | EC | pH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | NORTH WALL, 6' | SOIL | 8.7.13 | 1446 | 3 | 8 | | X | X | X | X | X | X | X | X |
| 2 | SOUTH WALL, 7' | | | 1443 | | | | X | X | X | X | X | X | X | X |
| 3 | EAST WALL, 6' | | | 1437 | | | | X | X | X | X | X | X | X | X |
| 4 | WEST WALL, 6' | | | 1412 | | | | X | X | X | X | X | X | X | X |
| 5 | FOOTPRINT, 12' | | | 1405 | | | | X | X | X | X | X | X | X | X |

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

**For metals or anions, please detail analytes below.**

Comments: 3.2°C

| QC PACKAGE (check below) | |
|---|---|
| x | LEVEL II (Standard QC) |
| | LEVEL III (Std QC + forms) |
| | LEVEL IV (Std QC + forms + raw data) |
| | |

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

| | SIGNATURE | PRINTED NAME | DATE | TIME |
|---|---|---|---|---|
| RELINQUISHED BY | | Casey Richardson | 8-7-13 | 1605 |
| RECEIVED BY | | | 8-7-13 | 1606 |
| RELINQUISHED BY | | | 8-7-13 | 1420 |
| RECEIVED BY | | Diane F Shaw | 8/8/13 | 0945 |
| RELINQUISHED BY | | | | |
| RECEIVED BY | | | | |

ALS Group USA, Corp

## Sample Receipt Checklist

Client Name: **HRL** Date/Time Received: **08-Aug-13 09:45**

Work Order: **1308304** Received by: **DS**

Checklist completed by Diane Shaw eSignature 08-Aug-13 Date Reviewed by: Ann Preston eSignature 09-Aug-13 Date

Matrices: Soil
Carrier name: FedEx

| | | | |
|---|---|---|---|
| Shipping container/cooler in good condition? | Yes ☑ | No ☐ | Not Present ☐ |
| Custody seals intact on shipping container/cooler? | Yes ☑ | No ☐ | Not Present ☐ |
| Custody seals intact on sample bottles? | Yes ☐ | No ☐ | Not Present ☑ |
| Chain of custody present? | Yes ☑ | No ☐ | |
| Chain of custody signed when relinquished and received? | Yes ☑ | No ☐ | |
| Chain of custody agrees with sample labels? | Yes ☑ | No ☐ | |
| Samples in proper container/bottle? | Yes ☑ | No ☐ | |
| Sample containers intact? | Yes ☑ | No ☐ | |
| Sufficient sample volume for indicated test? | Yes ☑ | No ☐ | |
| All samples received within holding time? | Yes ☑ | No ☐ | |
| Container/Temp Blank temperature in compliance? | Yes ☑ | No ☐ | |
| Temperature(s)/Thermometer(s): | 3.2 c | | |
| Cooler(s)/Kit(s): | | | |
| Date/Time sample(s) sent to storage: | 8/8/2013 10:55:01 AM | | |
| Water - VOA vials have zero headspace? | Yes ☐ | No ☐ | No VOA vials submitted ☑ |
| Water - pH acceptable upon receipt? | Yes ☐ | No ☐ | N/A ☑ |
| pH adjusted? | Yes ☐ | No ☐ | N/A ☑ |
| pH adjusted by: | | | |

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

CorrectiveAction:

From: (970) 424-4749
Lab Hub, LLC
127 E First Street
PARACHUTE, CO 81635

Origin ID: RILA

FedEx Express

J13201306280326

Ship Date: 07AUG13
ActWgt: 85.0 LB
CAD: 103923490/INET3430

Dims: 25 X 14 X 15 IN

Delivery Address Bar Code

Ref # 1001-080713-3
Invoice #
PO #
Dept #

SHIP TO: (616) 399-6070
BILL RECIPIENT

**Sample recieving**
**ALS Holland**
**3352 128TH AVE**

**HOLLAND, MI 49424**

TRK# 0201 **7964 1709 2367**

**THU - 08 AUG 10:30A**
**PRIORITY OVERNIGHT**

**XX GRRA**

**49424**
MI-US
**GRR**

51AG1/0989/1A9E

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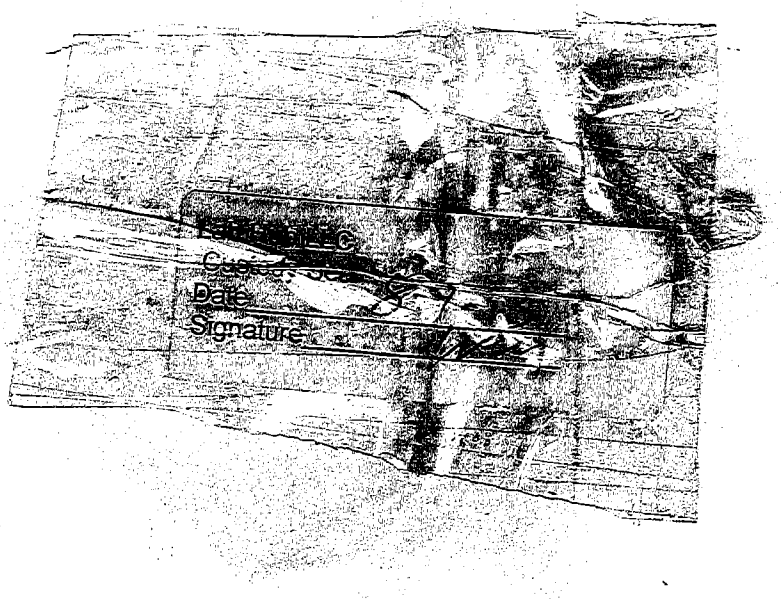
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

**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.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.



15-Aug-2013

Herman Lucero
HRL Compliance Solutions
2385 F 1/2 Road
Grand Junction, CO 81505

Re: **Caerus Parachute Creek 4 Background 8/7/13** Work Order: **1308305**

Dear Herman,

ALS Environmental received 3 samples on 08-Aug-2013 09:45 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 14.

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

Sincerely,

Ann Preston

Electronically approved by: Ann Preston

Ann Preston
Project Manager

Certificate No: MN 532786

**Report of Laboratory Analysis**

# ALS Group USA, Corp

Date: 15-Aug-13

**Client:** HRL Compliance Solutions
**Project:** Caerus Parachute Creek 4 Background 8/7/13
**Work Order:** **1308305**

## Work Order Sample Summary

| Lab Samp ID | Client Sample ID | Matrix | Tag Number | Collection Date | Date Received | Hold |
|---|---|---|---|---|---|---|
| 1308305-01 | BKGD 1 | Soil | | 8/7/2013 11:25 | 8/8/2013 09:45 | ☐ |
| 1308305-02 | BKGD 2 | Soil | | 8/7/2013 11:30 | 8/8/2013 09:45 | ☐ |
| 1308305-03 | BKGD 3 | Soil | | 8/7/2013 11:33 | 8/8/2013 09:45 | ☐ |

# ALS Group USA, Corp

Date: 15-Aug-13

**Client:** HRL Compliance Solutions
**Project:** Caerus Parachute Creek 4 Background 8/7/13
**WorkOrder:** **1308305**

## QUALIFIERS, ACRONYMS, UNITS

| Qualifier | Description |
|---|---|
| * | 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 |

| Acronym | Description |
|---|---|
| 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 |
| A | APHA Standard Methods |
| D | ASTM |
| E | EPA |
| SW | SW-846 Update III |

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

# ALS Group USA, Corp

**Date:** *15-Aug-13*

**Client:** HRL Compliance Solutions

**Project:** Caerus Parachute Creek 4 Background 8/7/13 **Work Order:** 1308305

**Sample ID:** BKGD 1 **Lab ID:** 1308305-01

**Collection Date:** 8/7/2013 11:25 AM **Matrix:** SOIL

| Analyses | Result | Qual | Report Limit | Units | Dilution Factor | Date Analyzed |
|---|---|---|---|---|---|---|
| **METALS BY ICP-MS** | | | **SW6020A** | | Prep Date: **8/12/2013** | Analyst: **ML** |
| **Arsenic** | **6.9** | | **0.40** | **mg/Kg-dry** | 1 | 8/12/2013 11:42 PM |
| **SOLUBLE CATIONS FOR SAR** | | | **SW6020A** | | Prep Date: **8/10/2013** | Analyst: **RH** |
| **Calcium** | **170** | | **10** | **mg/L** | 20 | 8/12/2013 02:20 PM |
| **Magnesium** | **17** | | **4.0** | **mg/L** | 20 | 8/12/2013 02:20 PM |
| **Sodium** | **9.5** | | **4.0** | **mg/L** | 20 | 8/12/2013 02:20 PM |
| **SODIUM ADSORPTION RATIO** | | | **USDA H60 METHO** | | Prep Date: **8/10/2013** | Analyst: **RH** |
| **Sodium Adsorption Ratio** | **0.19** | | **0.010** | **none** | 1 | 8/12/2013 |
| **ELECTRICAL CONDUCTIVITY (SAR)** | | | **USDA H60 METHO** | | Prep Date: **8/10/2013** | Analyst: **JB** |
| **Electrical Conductivity @ Saturation** | **1.2** | | **0.025** | **mmhos/cm @25** | 5 | 8/12/2013 10:00 AM |
| **MOISTURE** | | | **A2540 G** | | | Analyst: **BD** |
| **Moisture** | **3.6** | | **0.050** | **% of sample** | 1 | 8/8/2013 02:50 PM |
| **PH** | | | **SW9045D** | | Prep Date: **8/8/2013** | Analyst: **JB** |
| **pH** | **8.0** | | | **s.u.** | 1 | 8/8/2013 04:30 PM |

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

# ALS Group USA, Corp

**Date:** *15-Aug-13*

**Client:** HRL Compliance Solutions

**Project:** Caerus Parachute Creek 4 Background 8/7/13 **Work Order:** 1308305

**Sample ID:** BKGD 2 **Lab ID:** 1308305-02

**Collection Date:** 8/7/2013 11:30 AM **Matrix:** SOIL

| Analyses | Result | Qual | Report Limit | Units | Dilution Factor | Date Analyzed |
|---|---|---|---|---|---|---|
| **METALS BY ICP-MS** | | | **SW6020A** | | Prep Date: **8/12/2013** | Analyst: **ML** |
| **Arsenic** | **11** | | **0.36** | **mg/Kg-dry** | 1 | 8/12/2013 11:48 PM |
| **MOISTURE** | | | **A2540 G** | | | Analyst: **BD** |
| **Moisture** | **4.4** | | **0.050** | **% of sample** | 1 | 8/8/2013 02:50 PM |

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

# ALS Group USA, Corp

**Date:** *15-Aug-13*

**Client:** HRL Compliance Solutions
**Project:** Caerus Parachute Creek 4 Background 8/7/13 **Work Order:** 1308305
**Sample ID:** BKGD 3 **Lab ID:** 1308305-03
**Collection Date:** 8/7/2013 11:33 AM **Matrix:** SOIL

| Analyses | Result | Qual | Report Limit | Units | Dilution Factor | Date Analyzed |
|---|---|---|---|---|---|---|
| **METALS BY ICP-MS** | | | **SW6020A** | | Prep Date: **8/12/2013** | Analyst: **ML** |
| **Arsenic** | **4.4** | | **0.32** | **mg/Kg-dry** | 1 | 8/12/2013 11:54 PM |
| **MOISTURE** | | | **A2540 G** | | | Analyst: **BD** |
| **Moisture** | **2.7** | | **0.050** | **% of sample** | 1 | 8/8/2013 02:50 PM |

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

ALS Group USA, Corp

Date: 15-Aug-13

**Client:** HRL Compliance Solutions

# QC BATCH REPORT

**Work Order:** 1308305

**Project:** Caerus Parachute Creek 4 Background 8/7/13

Batch ID: **50406** Instrument ID **ICPMS2** Method: **SW6020A** **(Dissolve)**

**DUP** Sample ID: **1308305-01BDUP** Units: **mg/L** Analysis Date: **8/12/2013 02:25 PM**

Client ID: **BKGD 1** Run ID: **ICPMS2_130812A** SeqNo: **2410945** Prep Date: **8/10/2013** DF: **20**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Calcium | 165.6 | 10 | 0 | 0 | 0 | 0-0 | 170.2 | 2.74 | | |
| Magnesium | 17.18 | 4.0 | 0 | 0 | 0 | 0-0 | 17.29 | 0.673 | | |
| Sodium | 8.814 | 4.0 | 0 | 0 | 0 | 0-0 | 9.498 | 7.47 | | |

**The following samples were analyzed in this batch:** 1308305-01B

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

**Client:** HRL Compliance Solutions
**Work Order:** 1308305
**Project:** Caerus Parachute Creek 4 Background 8/7/13

# QC BATCH REPORT

Batch ID: **50478** Instrument ID **ICPMS1** Method: **SW6020A**

**MBLK** Sample ID: **MBLK-50478-50478** Units: **mg/Kg** Analysis Date: **8/12/2013 11:18 PM**
Client ID: Run ID: **ICPMS1_130812A** SeqNo: **2411511** Prep Date: **8/12/2013** DF: **1**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 0.0377 | 0.25 | | | | | | | | J |

**LCS** Sample ID: **LCS-50478-50478** Units: **mg/Kg** Analysis Date: **8/12/2013 11:24 PM**
Client ID: Run ID: **ICPMS1_130812A** SeqNo: **2411512** Prep Date: **8/12/2013** DF: **1**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 4.571 | 0.25 | 5 | 0 | 91.4 | 80-120 | 0 | | | |

**MS** Sample ID: **1308376-01AMS** Units: **mg/Kg** Analysis Date: **8/13/2013 02:34 AM**
Client ID: Run ID: **ICPMS1_130812A** SeqNo: **2411543** Prep Date: **8/12/2013** DF: **1**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 7.565 | 0.36 | 7.225 | 1.137 | 89 | 75-125 | 0 | | | |

**MSD** Sample ID: **1308376-01AMSD** Units: **mg/Kg** Analysis Date: **8/13/2013 02:40 AM**
Client ID: Run ID: **ICPMS1_130812A** SeqNo: **2411544** Prep Date: **8/12/2013** DF: **1**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 7.261 | 0.35 | 7.022 | 1.137 | 87.2 | 75-125 | 7.565 | 4.1 | 25 | |

**The following samples were analyzed in this batch:** 1308305-01A 1308305-02A 1308305-03A

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

**Client:** HRL Compliance Solutions
**Work Order:** 1308305
**Project:** Caerus Parachute Creek 4 Background 8/7/13

# QC BATCH REPORT

Batch ID: **50398** Instrument ID **WETCHEM** Method: **SW9045D**

**LCS** Sample ID: **LCS-50398-50398** Units: **s.u.** Analysis Date: **8/8/2013 04:30 PM**
Client ID: Run ID: **WETCHEM_130808T** SeqNo: **2408252** Prep Date: **8/8/2013** DF: **1**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| pH | 4.24 | 0 | 4.4 | 0 | 96.4 | 90-110 | 0 | | | |

**DUP** Sample ID: **1308304-03B DUP** Units: **s.u.** Analysis Date: **8/8/2013 04:30 PM**
Client ID: Run ID: **WETCHEM_130808T** SeqNo: **2408257** Prep Date: **8/8/2013** DF: **1**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| pH | 8.34 | 0 | 0 | 0 | 0 | 0-0 | 8.38 | 0.478 | 20 | |

**The following samples were analyzed in this batch:** 1308305-01A

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

**Client:** HRL Compliance Solutions
**Work Order:** 1308305
**Project:** Caerus Parachute Creek 4 Background 8/7/13

# QC BATCH REPORT

Batch ID: **50406** Instrument ID **WETCHEM** Method: **USDA H60 Method**

**DUP** Sample ID: **1308305-01B DUP** Units: **mmhos/cm @25°C** Analysis Date: **8/12/2013 10:00 AM**
Client ID: **BKGD 1** Run ID: **WETCHEM_130812A** SeqNo: **2410348** Prep Date: **8/10/2013** DF: **5**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Electrical Conductivity @ Saturation | 1.07 | 0.025 | 0 | 0 | 0 | | 1.16 | 8.07 | 50 | |

**The following samples were analyzed in this batch:** 1308305-01B

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

**Client:** HRL Compliance Solutions
**Work Order:** 1308305
**Project:** Caerus Parachute Creek 4 Background 8/7/13

# QC BATCH REPORT

Batch ID: **R124889** Instrument ID **MOIST** Method: **A2540 G**

**MBLK** Sample ID: **WBLKS-R124889** Units: **% of sample** Analysis Date: **8/8/2013 02:50 PM**
Client ID: Run ID: **MOIST_130808A** SeqNo: **2409025** Prep Date: DF: **1**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Moisture | ND | 0.050 | | | | | | | | |

**LCS** Sample ID: **LCS-R124889** Units: **% of sample** Analysis Date: **8/8/2013 02:50 PM**
Client ID: Run ID: **MOIST_130808A** SeqNo: **2409021** Prep Date: DF: **1**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Moisture | 100 | 0.050 | 100 | 0 | 100 | 99.5-100.5 | 0 | | | |

**DUP** Sample ID: **1308301-01A DUP** Units: **% of sample** Analysis Date: **8/8/2013 02:50 PM**
Client ID: Run ID: **MOIST_130808A** SeqNo: **2408988** Prep Date: DF: **1**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Moisture | 14.03 | 0.050 | 0 | 0 | 0 | 0-0 | 14.23 | 1.42 | 20 | |

**DUP** Sample ID: **1308320-01B DUP** Units: **% of sample** Analysis Date: **8/8/2013 02:50 PM**
Client ID: Run ID: **MOIST_130808A** SeqNo: **2408998** Prep Date: DF: **1**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Moisture | 11.86 | 0.050 | 0 | 0 | 0 | 0-0 | 11.58 | 2.39 | 20 | |

**The following samples were analyzed in this batch:** 1308305-01A 1308305-02A 1308305-03A

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

# ALS Laboratory Group

225 Commerce Drive, Fort Collins, Colorado 80524
TF: (800) 443-1511 PH: (970) 490-1511 FX: (970) 490-1522

# Chain-of-Custody

Form 202r8

WORKORDER # 1308305

CAERUS

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| PROJECT NAME | PARACHUTE CREEK 4 | SAMPLER | Casey Richardson | DATE | 8-7-13 | PAGE | 1 of 1 |
| PROJECT No. | BACKGROUND | SITE ID | PARACHUTE CREEK 4 | TURNAROUND | 5 DAY | DISPOSAL | By Lab or Return to Client |
| | | EDD FORMAT | | | | | |
| | | PURCHASE ORDER | | | | | |
| COMPANY NAME | HCSI | BILL TO COMPANY | ~~PDC Energy~~ CAERUS | | | | |
| SEND REPORT TO | Herman Lucero | INVOICE ATTN TO | Ed Winters | | | | |
| ADDRESS | 2385 F 1/2 Road | ADDRESS | 120 Railroad Ave. Suite D | | | | |
| CITY / STATE / ZIP | Grand Junction, CO. 81505 | CITY / STATE / ZIP | Parachute, CO 81635 | | | | |
| PHONE | 970-243-3271 | PHONE | 970-285-9606 | | | | |
| FAX | 970-243-3280 | FAX | | | | | |
| E-MAIL | hlucero@hrlcomp.com | E-MAIL | ewinters@petd.com | | | | |

| Lab ID | Field ID | Matrix | Sample Date | Sample Time | # Bottles | Pres. | QC | SAR, EC, pH | ARSENIC |
|---|---|---|---|---|---|---|---|---|---|
| 1 | BKGD 1 | SOIL | 8-7-13 | 1125 | 2 | 8 | | X | X |
| 2 | BKGD 2 | " | " | 1130 | 1 | 8 | | | X |
| 3 | BKGD 3 | " | " | 1133 | 1 | 8 | | | X |

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

**For metals or anions, please detail analytes below.**

Comments: 3.2°C

| QC PACKAGE (check below) | |
|---|---|
| x | LEVEL II (Standard QC) |
| | LEVEL III (Std QC + forms) |
| | LEVEL IV (Std QC + forms + raw data) |

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

| | SIGNATURE | PRINTED NAME | DATE | TIME |
|---|---|---|---|---|
| RELINQUISHED BY | | Casey Richardson | 8-7-13 | 1605 |
| RECEIVED BY | | N.M | 8-7-13 | 1610 |
| RELINQUISHED BY | | N.M | 8-7-13 | 1610 |
| RECEIVED BY | | Diane F Shaw | 8/8/13 | 0945 |
| RELINQUISHED BY | | | | |
| RECEIVED BY | | | | |

ALS Group USA, Corp

## Sample Receipt Checklist

Client Name: **HRL** Date/Time Received: **08-Aug-13 09:45**

Work Order: **1308305** Received by: **DS**

Checklist completed by Diane Shaw eSignature 08-Aug-13 Date Reviewed by: Ann Preston eSignature 09-Aug-13 Date

Matrices: Soil
Carrier name: FedEx

| | | | |
|---|---|---|---|
| Shipping container/cooler in good condition? | Yes ☑ | No ☐ | Not Present ☐ |
| Custody seals intact on shipping container/cooler? | Yes ☑ | No ☐ | Not Present ☐ |
| Custody seals intact on sample bottles? | Yes ☐ | No ☐ | Not Present ☑ |
| Chain of custody present? | Yes ☑ | No ☐ | |
| Chain of custody signed when relinquished and received? | Yes ☑ | No ☐ | |
| Chain of custody agrees with sample labels? | Yes ☑ | No ☐ | |
| Samples in proper container/bottle? | Yes ☑ | No ☐ | |
| Sample containers intact? | Yes ☑ | No ☐ | |
| Sufficient sample volume for indicated test? | Yes ☑ | No ☐ | |
| All samples received within holding time? | Yes ☑ | No ☐ | |
| Container/Temp Blank temperature in compliance? | Yes ☑ | No ☐ | |
| Temperature(s)/Thermometer(s): | 3.2 c | | |
| Cooler(s)/Kit(s): | | | |
| Date/Time sample(s) sent to storage: | 8/8/2013 10:58:32 AM | | |
| Water - VOA vials have zero headspace? | Yes ☐ | No ☐ | No VOA vials submitted ☑ |
| Water - pH acceptable upon receipt? | Yes ☐ | No ☐ | N/A ☑ |
| pH adjusted? | Yes ☐ | No ☐ | N/A ☑ |
| pH adjusted by: | | | |

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

CorrectiveAction:

From: (970) 424-4749
Lab Hub, LLC
127 E First Street
PARACHUTE, CO 81635

Origin ID: RILA

FedEx Express

J13201306280326

Ship Date: 07AUG13
ActWgt: 85.0 LB
CAD: 103923490/INET3430

Dims: 25 X 14 X 15 IN

Delivery Address Bar Code

Ref # 1001-080713-3
Invoice #
PO #
Dept #

SHIP TO: (616) 399-6070 BILL RECIPIENT
**Sample recieving**
**ALS Holland**
**3352 128TH AVE**

**HOLLAND, MI 49424**

TRK# 0201 **7964 1709 2367**

**THU - 08 AUG 10:30A**
**PRIORITY OVERNIGHT**

**XX GRRA**

**49424**
MI-US
**GRR**

51AG1/0959/1A9E

**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.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.