Garden Gulch 1 (Chevron 1B-8D) (Location ID 335582)
Partially Buried Vessel Removal (Non-Facility ID 435778)
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 435778) at the Garden Gulch 1 (Chevron 1B-8D) (Location ID 335582) in the Caerus Piceance, LLC (Caerus) area of operations. This assessment was conducted using procedures approved under Colorado Oil and Gas Conservation Commission (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.

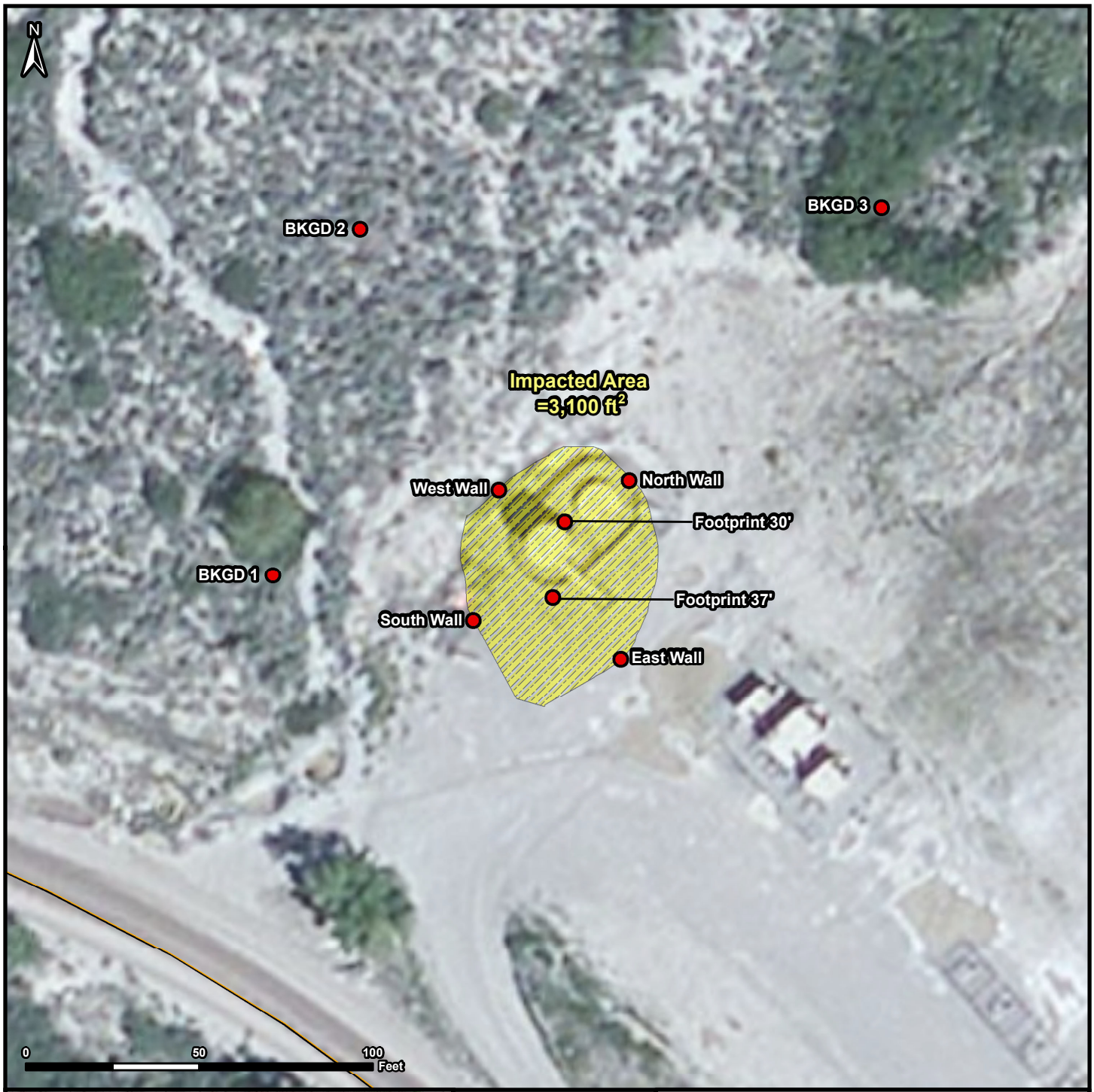
Upon removing the PBV from the ground, visual observations and field screening of soil around and below the tank indicated that impacted soil was present. Excavation of the impacted soil was conducted and field screen readings were utilized to determine the extent of the impacts.

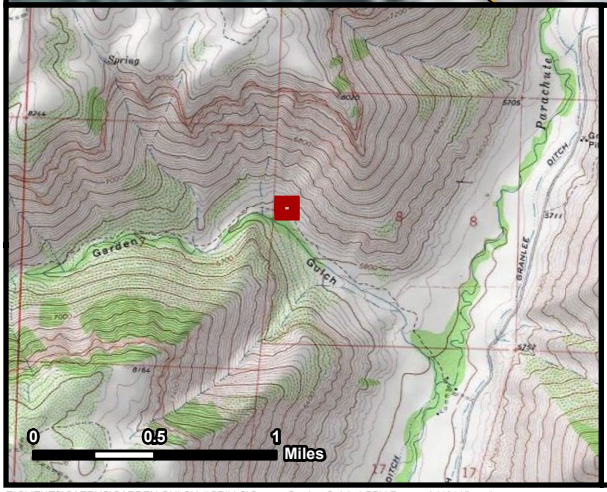
From April 24, 2014 to May 7, 2014, confirmation soil samples were collected from the soil around and beneath the removed PBV (Footprint, 28', Footprint, 30', West Wall, 15', North Wall, 15', Footprint South, 37', South Wall, 18', East Wall, 18'). Soil samples were submitted for laboratory analysis of 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) or sodium adsorption ration (SAR) for every sample. However, these 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 or SAR to soils deeper than three feet below the ground surface. Also, the benzo(A)pyrene (BaP) measurement for soil sample Footprint, 28' exceeded the COGCC Concentration Level. Additional soil was removed from the area represented by soil sample Footprint, 28' and an additional sample was collected, Footprint, 30'. This sample was submitted for BaP. Analytical results indicate that the soil sample was in compliance with the COGCC Table 910-1 Concentration Level for BaP. Background samples were collected from an undisturbed area near the Chevron 41-8D pad (COGCC Location ID 324196). Sample locations are depicted on the attached Sample Location Map and laboratory analytical results are summarized in the attached analytical table. Laboratory analytical reports are included as an attachment.

All impacted soil removed during excavation activities was remediated onsite to below COGCC Table 910-1 Concentration Levels by utilizing ex-situ remediation technologies. On August 18, 2015, confirmation soil samples were collected from the removed soil (West End of stockpile, Middle of stockpile, and East End of stockpile). These 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 measurements. However, pending COGCC approval, this soil will be used as beneficial reuse to improve stormwater drainage on North Parachute Creek Road and will not be re-vegetated for many years. Specifically, the remediated soil will be used to raise the elevation of the road surface

along areas of the road where stormwater runoff accumulates instead of draining. This will allow runoff to be conveyed to existing stormwater best management practices such as sediment traps and culverts. All remediated soil applied to the road surface will be covered with road base. Background samples were collected from an undisturbed area near the Chevron 41-8D pad (COGCC Location ID 324196).

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





NOTES / COMMENTS:

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

CAERUS OIL AND GAS LLC

Sample Location Map

Garden Gulch 1 PBV Removal

39.539523 -108.139081
Section 8, Township 6 South, Range 96 West

	Transportation	Hydrography
Sample Location	CO Highways	Ditch
Impacted Area	County Roads	Intermittent Stream
PLSS	Local Streets	Perennial Stream
Township	Access Roads	Waterbody
Section		

HRL Compliance Solutions, Inc.
Environmental Consultants

Author: E. Fought
Revision: 0
Date: 11/4/2015

T:\CLIENTS\CAERUS\GARDEN GULCH 1\SPILLS\Caerus Garden Gulch 1 PBV Removal 110415.mxd

Caerus Piceance LLC
Garden Gulch 1 Partially Buried Vault Removal
Stockpile Soil Characterization and Background Analytical Results

			SAMPLES										
COGCC Table 910-1 Analytical Suite	**Table 910-1 Standard**	**Units**	**Footprint, 28'**	**Footprint, 30'**	**West Wall, 15'**	**North Wall, 15'**	**Footprint South, 37'**	**South Wall, 18'**	**East Wall, 18'**	**West End of Stockpile**	**Middle of Stockpile**	**East End of Stockpile**	**BKGD 1***
Sample Date			**4/24/2014**	**4/29/2014**	**4/24/2014**	**4/24/2014**	**5/6/2014**	**5/6/2014**	**5/7/2014**	**8/18/2015**	**8/18/2015**	**8/18/2015**	**7/22/2013**
Organics													
TPH (DRO)	**500**	**mg/kg**	17	NS	18	11	8.2	9.3	ND	100	63	160	NA
TPH (GRO)	**500**	**mg/kg**	ND	NS	ND	ND	ND	ND	ND	220	110	48	NA
TPH	**500**	**mg/kg**	17	NS	18	11	8.2	9.3	ND	320	173	208	NA
BENZENE	**0.17**	**mg/kg**	ND	NS	ND	ND	0.051	ND	ND	ND	ND	ND	NA
TOLUENE	**85**	**mg/kg**	ND	NS	ND	ND	ND	ND	ND	NA	NA	NA	NA
ETHYLBENZENE	**100**	**mg/kg**	ND	NS	ND	ND	0.87	ND	ND	NA	NA	NA	NA
XYLENE TOTAL	**175**	**mg/kg**	ND	NS	ND	ND	ND	ND	ND	NA	NA	NA	NA
ACENAPHTHENE	**1,000**	**mg/kg**	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND	NA
ANTHRACENE	**1,000**	**mg/kg**	0.040	NS	ND	ND	ND	ND	ND	ND	ND	ND	NA
BENZO(A)ANTRHACENE	**0.22**	**mg/kg**	0.026	NS	ND	ND	ND	ND	ND	ND	ND	0.0081	NA
BENZO(A)PYRENE	**0.022**	**mg/kg**	0.057	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
BENZO(B)FLUORANTHENE	**0.22**	**mg/kg**	0.045	NS	ND	ND	ND	ND	ND	ND	ND	ND	NA
BENZO(K)FLUORANTHENE	**2.2**	**mg/kg**	0.040	NS	ND	ND	ND	ND	ND	ND	ND	ND	NA
CHRYSENE	**22**	**mg/kg**	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND	NA
DIBENZO(A,H)ANTHRANCENE	**0.022**	**mg/kg**	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND	NA
FLUORANTHENE	**1,000**	**mg/kg**	0.049	NS	ND	ND	ND	ND	ND	ND	ND	0.0081	NA
FLUORENE	**1,000**	**mg/kg**	0.029	NS	ND	ND	ND	ND	ND	ND	ND	ND	NA
INDENO(1,2,3-CD)PYRENE	**0.22**	**mg/kg**	0.050	NS	ND	ND	ND	ND	ND	ND	ND	ND	NA
NAPHTHALENE	**23**	**mg/kg**	0.022	NS	ND	ND	ND	ND	ND	0.018	0.014	0.017	NA
PYRENE	**1,000**	**mg/kg**	0.029	NS	ND	ND	ND	ND	ND	ND	ND	0.0093	NA
Metals													
MERCURY	**23**	**mg/kg**	0.042	NS	0.019	ND	0.033	0.027	0.023	0.026	0.022	0.021	NA
ARSENIC	**0.39**	**mg/kg**	8.0	NS	11	7.0	7.2	8.5	10	12	10	13	39
BARIUM	**15,000**	**mg/kg**	110	NS	230	200	140	270	280	290	250	260	NA
CADMIUM	**70**	**mg/kg**	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND	NA
CHROMIUM (III)	**120,000**	**mg/kg**	8.3	NS	10	9.0	8.9	8.8	7.9	11	10	11	NA
CHROMIUM (VI)	**23**	**mg/kg**	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND	NA
COPPER	**3,100**	**mg/kg**	18	NS	16	17	18	16	15	21	21	21	NA
LEAD	**400**	**mg/kg**	15	NS	11	12	13	11	11	8.0	8.2	8.1	NA
NICKEL	**1,600**	**mg/kg**	17	NS	17	17	18	16	16	31	31	33	NA
SELENIUM	**390**	**mg/kg**	2.2	NS	ND	2.4	ND	2.1	ND	ND	ND	ND	NA
SILVER	**390**	**mg/kg**	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND	NA
ZINC	**23,000**	**mg/kg**	73	NS	58	58	65	59	54	61	65	61	NA
Inorganics													
Sodium Adsorption Ratio	**<12**	**unitless**	7.0	NS	9.1	16	37	13	4.1	9.8	11	10	2.8
Electric Conductivity	**<4mmhos/cm or 2x background**	**mmhos/cm**	7.9	NS	8.5	12	2.4	10	7.5	10	10	12	1.2
pH	**6 to 9**	**SU**	7.3	NS	7.7	7.6	8.4	8.0	8.0	8.6	8.7	8.4	9.1

Notes:

* This background sample was collected near another pad location, Chevron 41-8D (COGCC Location ID 324196)

Highlight indicates reading above COGCC Table 910-1 standards

ND - non detect

NA - not analyzed

SU - standard unit

mg/kg - milligram per kilogram

mmhos/cm - millimhos per centimeter

TPH (DRO) - total petroleum hydrocarbons - Diesel range organics

TPH (GRO) - total petroleum hydrocarbons - Gasoline range organics

TPH - total petroleum hydrocarbons (TPH-GRO and TPH-DRO combined)

COGCC - Colorado Oil and Gas Conservation Commission

05-May-2014

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

Re: **Caerus Garden Gulch 1 PBV Removal 4.24.14** Work Order: **14041288**

Dear Mark,

ALS Environmental received 3 samples on 25-Apr-2014 09:30 AM for the analyses presented in the following report.

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

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

The total number of pages in this report is 28.

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: 05-May-14

Client: HRL Compliance Solutions, Inc
Project: Caerus Garden Gulch 1 PBV Removal 4.24.14
Work Order: **14041288**

Work Order Sample Summary

Lab Samp ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
14041288-01	Footprint, 28'	Soil		4/24/2014 15:40	4/25/2014 09:30	☐
14041288-02	West Wall, 15'	Soil		4/24/2014 11:40	4/25/2014 09:30	☐
14041288-03	North Wall, 15'	Soil		4/24/2014 14:20	4/25/2014 09:30	☐

ALS Group USA, Corp

Date: 05-May-14

Client: HRL Compliance Solutions, Inc
Project: Caerus Garden Gulch 1 PBV Removal 4.24.14
Work Order: 14041288

Case Narrative

Batch 58026 sample North Wall, 15' MS/MSD recoveries for Hexavalent Chromium were below control limits. The corresponding result in the parent sample may be biased low.

Batch 58070 MS/MSD data for Metals is not related to this project's samples. No data requires qualification.

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
TNTC	Too Numerous To Count
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: *05-May-14*

Client: HRL Compliance Solutions, Inc
Project: Caerus Garden Gulch 1 PBV Removal 4.24.14 **Work Order:** 14041288
Sample ID: Footprint, 28' **Lab ID:** 14041288-01
Collection Date: 4/24/2014 03:40 PM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID			**SW8015M**		Prep: SW3541 / 4/25/14	Analyst: **IT**
DRO (C10-C28)	**17**		**4.7**	**mg/Kg-dry**	1	4/28/2014 11:57 AM
Surr: 4-Terphenyl-d14	*77.6*		*39-133*	*%REC*	1	4/28/2014 11:57 AM
GASOLINE RANGE ORGANICS BY GC-FID			**SW8015**		Prep: SW5035 / 4/25/14	Analyst: **IT**
GRO (C6-C10)	ND		2.9	mg/Kg-dry	1	4/25/2014 08:55 PM
Surr: Toluene-d8	*94.9*		*50-150*	*%REC*	1	4/25/2014 08:55 PM
MERCURY BY CVAA			**SW7471**		Prep: SW7471 / 4/28/14	Analyst: **LR**
Mercury	**0.042**		**0.015**	**mg/Kg-dry**	1	4/28/2014 08:31 PM
METALS BY ICP-MS			**SW6020A**		Prep: SW3050B / 4/29/14	Analyst: **ML**
Arsenic	**8.0**		**1.9**	**mg/Kg-dry**	5	4/30/2014 01:22 AM
Barium	**110**		**1.9**	**mg/Kg-dry**	5	4/30/2014 01:22 AM
Cadmium	ND		0.76	mg/Kg-dry	5	4/30/2014 01:22 AM
Chromium	**8.5**		**1.9**	**mg/Kg-dry**	5	4/30/2014 01:22 AM
Copper	**18**		**1.9**	**mg/Kg-dry**	5	4/30/2014 01:22 AM
Lead	**15**		**1.9**	**mg/Kg-dry**	5	4/30/2014 01:22 AM
Nickel	**17**		**1.9**	**mg/Kg-dry**	5	4/30/2014 01:22 AM
Selenium	**2.2**		**1.9**	**mg/Kg-dry**	5	4/30/2014 01:22 AM
Silver	ND		1.9	mg/Kg-dry	5	4/30/2014 01:22 AM
Zinc	**73**		**3.8**	**mg/Kg-dry**	5	4/30/2014 01:22 AM
SOLUBLE CATIONS FOR SAR			**SW6020A**		Prep: USDA Method 20B / 4/29/14	Analyst: **RH**
Calcium	**500**		**10**	**mg/L**	20	5/2/2014 03:28 PM
Magnesium	**310**		**4.0**	**mg/L**	20	5/2/2014 03:28 PM
Sodium	**810**		**4.0**	**mg/L**	20	5/2/2014 03:28 PM
SODIUM ADSORPTION RATIO			**USDA H60 METHO**		Prep: USDA Method 20B / 4/29/14	Analyst: **RH**
Sodium Adsorption Ratio	**7.0**		**0.010**	**none**	1	5/2/2014
SEMI-VOLATILE ORGANIC COMPOUNDS			**SW8270**		Prep: SW3541 / 4/25/14	Analyst: **RM**
Acenaphthene	ND		7.6	µg/Kg-dry	1	4/28/2014 03:04 PM
Acenaphthylene	ND		7.6	µg/Kg-dry	1	4/28/2014 03:04 PM
Anthracene	**40**		**7.6**	**µg/Kg-dry**	1	4/28/2014 03:04 PM
Benzo(a)anthracene	**26**		**7.6**	**µg/Kg-dry**	1	4/28/2014 03:04 PM
Benzo(a)pyrene	**57**		**7.6**	**µg/Kg-dry**	1	4/28/2014 03:04 PM
Benzo(b)fluoranthene	**45**		**7.6**	**µg/Kg-dry**	1	4/28/2014 03:04 PM
Benzo(g,h,i)perylene	**32**		**7.6**	**µg/Kg-dry**	1	4/28/2014 03:04 PM
Benzo(k)fluoranthene	**40**		**7.6**	**µg/Kg-dry**	1	4/28/2014 03:04 PM
Chrysene	ND		7.6	µg/Kg-dry	1	4/28/2014 03:04 PM

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

Client: HRL Compliance Solutions, Inc
Project: Caerus Garden Gulch 1 PBV Removal 4.24.14 **Work Order:** 14041288
Sample ID: Footprint, 28' **Lab ID:** 14041288-01
Collection Date: 4/24/2014 03:40 PM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Dibenzo(a,h)anthracene	ND		7.6	µg/Kg-dry	1	4/28/2014 03:04 PM
Fluoranthene	**49**		**7.6**	**µg/Kg-dry**	1	4/28/2014 03:04 PM
Fluorene	**29**		**7.6**	**µg/Kg-dry**	1	4/28/2014 03:04 PM
Indeno(1,2,3-cd)pyrene	**50**		**7.6**	**µg/Kg-dry**	1	4/28/2014 03:04 PM
Naphthalene	**22**		**7.6**	**µg/Kg-dry**	1	4/28/2014 03:04 PM
Pyrene	**29**		**7.6**	**µg/Kg-dry**	1	4/28/2014 03:04 PM
Surr: 2-Fluorobiphenyl	*76.6*		*12-100*	*%REC*	1	4/28/2014 03:04 PM
Surr: 4-Terphenyl-d14	*106*		*25-137*	*%REC*	1	4/28/2014 03:04 PM
Surr: Nitrobenzene-d5	*68.2*		*37-107*	*%REC*	1	4/28/2014 03:04 PM
VOLATILE ORGANIC COMPOUNDS			**SW8260B**		Prep: SW5035 / 4/25/14	Analyst: **AK**
Benzene	ND		35	µg/Kg-dry	1	4/26/2014 03:16 AM
Ethylbenzene	ND		35	µg/Kg-dry	1	4/26/2014 03:16 AM
m,p-Xylene	ND		69	µg/Kg-dry	1	4/26/2014 03:16 AM
o-Xylene	ND		35	µg/Kg-dry	1	4/26/2014 03:16 AM
Toluene	ND		35	µg/Kg-dry	1	4/26/2014 03:16 AM
Xylenes, Total	ND		100	µg/Kg-dry	1	4/26/2014 03:16 AM
Surr: 1,2-Dichloroethane-d4	*78.2*		*70-130*	*%REC*	1	4/26/2014 03:16 AM
Surr: 4-Bromofluorobenzene	*98.0*		*70-130*	*%REC*	1	4/26/2014 03:16 AM
Surr: Dibromofluoromethane	*90.1*		*70-130*	*%REC*	1	4/26/2014 03:16 AM
Surr: Toluene-d8	*97.6*		*70-130*	*%REC*	1	4/26/2014 03:16 AM
ELECTRICAL CONDUCTIVITY (SAR)			**USDA H60 METHO**		Prep: USDA Method 20B / 4/29/14	Analyst: **JB**
Electrical Conductivity @ Saturation	**7.9**		**0.050**	**mmhos/cm @25**	10	4/30/2014 03:00 PM
CHROMIUM, TRIVALENT			**CALCULATION**			Analyst: **JJG**
Chromium, Trivalent	**8.3**		**0.58**	**mg/Kg-dry**	1	4/30/2014 04:26 PM
CHROMIUM, HEXAVALENT			**SW7196A**		Prep: SW3060A / 4/28/14	Analyst: **JI**
Chromium, Hexavalent	ND		0.58	mg/Kg-dry	1	4/28/2014 01:00 PM
MOISTURE			**A2540 G**			Analyst: **AT**
Moisture	**13**		**0.050**	**% of sample**	1	4/25/2014 12:50 PM
PH			**SW9045D**		Prep: EXTRACT / 4/25/14	Analyst: **AT**
pH	**7.3**			**s.u.**	1	4/25/2014 04:00 PM

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

ALS Group USA, Corp

Date: *05-May-14*

Client: HRL Compliance Solutions, Inc
Project: Caerus Garden Gulch 1 PBV Removal 4.24.14 **Work Order:** 14041288
Sample ID: West Wall, 15' **Lab ID:** 14041288-02
Collection Date: 4/24/2014 11:40 AM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID			**SW8015M**		Prep: SW3541 / 4/25/14	Analyst: **IT**
DRO (C10-C28)	**18**		**4.9**	**mg/Kg-dry**	1	4/28/2014 12:27 PM
Surr: 4-Terphenyl-d14	*76.1*		*39-133*	*%REC*	1	4/28/2014 12:27 PM
GASOLINE RANGE ORGANICS BY GC-FID			**SW8015**		Prep: SW5035 / 4/25/14	Analyst: **IT**
GRO (C6-C10)	ND		3.0	mg/Kg-dry	1	4/25/2014 09:21 PM
Surr: Toluene-d8	*97.0*		*50-150*	*%REC*	1	4/25/2014 09:21 PM
MERCURY BY CVAA			**SW7471**		Prep: SW7471 / 4/28/14	Analyst: **LR**
Mercury	**0.019**		**0.017**	**mg/Kg-dry**	1	4/28/2014 08:40 PM
METALS BY ICP-MS			**SW6020A**		Prep: SW3050B / 4/29/14	Analyst: **ML**
Arsenic	**11**		**2.3**	**mg/Kg-dry**	5	4/30/2014 01:28 AM
Barium	**230**		**2.3**	**mg/Kg-dry**	5	4/30/2014 01:28 AM
Cadmium	ND		0.92	mg/Kg-dry	5	4/30/2014 01:28 AM
Chromium	**10**		**2.3**	**mg/Kg-dry**	5	4/30/2014 01:28 AM
Copper	**16**		**2.3**	**mg/Kg-dry**	5	4/30/2014 01:28 AM
Lead	**11**		**2.3**	**mg/Kg-dry**	5	4/30/2014 01:28 AM
Nickel	**17**		**2.3**	**mg/Kg-dry**	5	4/30/2014 01:28 AM
Selenium	ND		2.3	mg/Kg-dry	5	4/30/2014 01:28 AM
Silver	ND		2.3	mg/Kg-dry	5	4/30/2014 01:28 AM
Zinc	**58**		**4.6**	**mg/Kg-dry**	5	4/30/2014 01:28 AM
SOLUBLE CATIONS FOR SAR			**SW6020A**		Prep: USDA Method 20B / 4/29/14	Analyst: **RH**
Calcium	**480**		**10**	**mg/L**	20	5/2/2014 03:34 PM
Magnesium	**280**		**4.0**	**mg/L**	20	5/2/2014 03:34 PM
Sodium	**1,000**		**4.0**	**mg/L**	20	5/2/2014 03:34 PM
SODIUM ADSORPTION RATIO			**USDA H60 METHO**		Prep: USDA Method 20B / 4/29/14	Analyst: **RH**
Sodium Adsorption Ratio	**9.1**		**0.010**	**none**	1	5/2/2014
SEMI-VOLATILE ORGANIC COMPOUNDS			**SW8270**		Prep: SW3541 / 4/25/14	Analyst: **RM**
Acenaphthene	ND		7.9	µg/Kg-dry	1	4/28/2014 03:24 PM
Acenaphthylene	ND		7.9	µg/Kg-dry	1	4/28/2014 03:24 PM
Anthracene	ND		7.9	µg/Kg-dry	1	4/28/2014 03:24 PM
Benzo(a)anthracene	ND		7.9	µg/Kg-dry	1	4/28/2014 03:24 PM
Benzo(a)pyrene	ND		7.9	µg/Kg-dry	1	4/28/2014 03:24 PM
Benzo(b)fluoranthene	ND		7.9	µg/Kg-dry	1	4/28/2014 03:24 PM
Benzo(g,h,i)perylene	ND		7.9	µg/Kg-dry	1	4/28/2014 03:24 PM
Benzo(k)fluoranthene	ND		7.9	µg/Kg-dry	1	4/28/2014 03:24 PM
Chrysene	ND		7.9	µg/Kg-dry	1	4/28/2014 03:24 PM

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

Client: HRL Compliance Solutions, Inc
Project: Caerus Garden Gulch 1 PBV Removal 4.24.14 **Work Order:** 14041288
Sample ID: West Wall, 15' **Lab ID:** 14041288-02
Collection Date: 4/24/2014 11:40 AM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Dibenzo(a,h)anthracene	ND		7.9	µg/Kg-dry	1	4/28/2014 03:24 PM
Fluoranthene	ND		7.9	µg/Kg-dry	1	4/28/2014 03:24 PM
Fluorene	ND		7.9	µg/Kg-dry	1	4/28/2014 03:24 PM
Indeno(1,2,3-cd)pyrene	ND		7.9	µg/Kg-dry	1	4/28/2014 03:24 PM
Naphthalene	ND		7.9	µg/Kg-dry	1	4/28/2014 03:24 PM
Pyrene	ND		7.9	µg/Kg-dry	1	4/28/2014 03:24 PM
Surr: 2-Fluorobiphenyl	*66.8*		*12-100*	*%REC*	1	4/28/2014 03:24 PM
Surr: 4-Terphenyl-d14	*114*		*25-137*	*%REC*	1	4/28/2014 03:24 PM
Surr: Nitrobenzene-d5	*67.1*		*37-107*	*%REC*	1	4/28/2014 03:24 PM
VOLATILE ORGANIC COMPOUNDS			**SW8260B**		Prep: SW5035 / 4/25/14	Analyst: **AK**
Benzene	ND		36	µg/Kg-dry	1	4/26/2014 03:41 AM
Ethylbenzene	ND		36	µg/Kg-dry	1	4/26/2014 03:41 AM
m,p-Xylene	ND		71	µg/Kg-dry	1	4/26/2014 03:41 AM
o-Xylene	ND		36	µg/Kg-dry	1	4/26/2014 03:41 AM
Toluene	ND		36	µg/Kg-dry	1	4/26/2014 03:41 AM
Xylenes, Total	ND		110	µg/Kg-dry	1	4/26/2014 03:41 AM
Surr: 1,2-Dichloroethane-d4	*78.9*		*70-130*	*%REC*	1	4/26/2014 03:41 AM
Surr: 4-Bromofluorobenzene	*95.4*		*70-130*	*%REC*	1	4/26/2014 03:41 AM
Surr: Dibromofluoromethane	*88.0*		*70-130*	*%REC*	1	4/26/2014 03:41 AM
Surr: Toluene-d8	*95.4*		*70-130*	*%REC*	1	4/26/2014 03:41 AM
ELECTRICAL CONDUCTIVITY (SAR)			**USDA H60 METHO**		Prep: USDA Method 20B / 4/29/14	Analyst: **JB**
Electrical Conductivity @ Saturation	**8.5**		**0.050**	**mmhos/cm @25**	10	4/30/2014 03:00 PM
CHROMIUM, TRIVALENT			**CALCULATION**			Analyst: **JJG**
Chromium, Trivalent	**10**		**0.60**	**mg/Kg-dry**	1	4/30/2014 04:26 PM
CHROMIUM, HEXAVALENT			**SW7196A**		Prep: SW3060A / 4/28/14	Analyst: **JI**
Chromium, Hexavalent	ND		0.60	mg/Kg-dry	1	4/28/2014 01:00 PM
MOISTURE			**A2540 G**			Analyst: **AT**
Moisture	**16**		**0.050**	**% of sample**	1	4/25/2014 12:50 PM
PH			**SW9045D**		Prep: EXTRACT / 4/25/14	Analyst: **AT**
pH	**7.7**			**s.u.**	1	4/25/2014 04:00 PM

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

ALS Group USA, Corp

Date: *05-May-14*

Client: HRL Compliance Solutions, Inc
Project: Caerus Garden Gulch 1 PBV Removal 4.24.14 **Work Order:** 14041288
Sample ID: North Wall, 15' **Lab ID:** 14041288-03
Collection Date: 4/24/2014 02:20 PM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID			**SW8015M**		Prep: SW3541 / 4/25/14	Analyst: **IT**
DRO (C10-C28)	**11**		**4.9**	**mg/Kg-dry**	1	4/28/2014 12:57 PM
Surr: 4-Terphenyl-d14	*79.7*		*39-133*	*%REC*	1	4/28/2014 12:57 PM
GASOLINE RANGE ORGANICS BY GC-FID			**SW8015**		Prep: SW5035 / 4/25/14	Analyst: **IT**
GRO (C6-C10)	ND		3.0	mg/Kg-dry	1	4/25/2014 09:47 PM
Surr: Toluene-d8	*107*		*50-150*	*%REC*	1	4/25/2014 09:47 PM
MERCURY BY CVAA			**SW7471**		Prep: SW7471 / 4/28/14	Analyst: **LR**
Mercury	ND		0.017	mg/Kg-dry	1	4/28/2014 08:42 PM
METALS BY ICP-MS			**SW6020A**		Prep: SW3050B / 4/29/14	Analyst: **ML**
Arsenic	**7.0**		**1.9**	**mg/Kg-dry**	5	4/30/2014 01:34 AM
Barium	**200**		**1.9**	**mg/Kg-dry**	5	4/30/2014 01:34 AM
Cadmium	ND		0.75	mg/Kg-dry	5	4/30/2014 01:34 AM
Chromium	**9.2**		**1.9**	**mg/Kg-dry**	5	4/30/2014 01:34 AM
Copper	**17**		**1.9**	**mg/Kg-dry**	5	4/30/2014 01:34 AM
Lead	**12**		**1.9**	**mg/Kg-dry**	5	4/30/2014 01:34 AM
Nickel	**17**		**1.9**	**mg/Kg-dry**	5	4/30/2014 01:34 AM
Selenium	**2.4**		**1.9**	**mg/Kg-dry**	5	4/30/2014 01:34 AM
Silver	ND		1.9	mg/Kg-dry	5	4/30/2014 01:34 AM
Zinc	**58**		**3.7**	**mg/Kg-dry**	5	4/30/2014 01:34 AM
SOLUBLE CATIONS FOR SAR			**SW6020A**		Prep: USDA Method 20B / 4/29/14	Analyst: **RH**
Calcium	**470**		**10**	**mg/L**	20	5/2/2014 03:40 PM
Magnesium	**280**		**4.0**	**mg/L**	20	5/2/2014 03:40 PM
Sodium	**1,800**		**4.0**	**mg/L**	20	5/2/2014 03:40 PM
SODIUM ADSORPTION RATIO			**USDA H60 METHO**		Prep: USDA Method 20B / 4/29/14	Analyst: **RH**
Sodium Adsorption Ratio	**16**		**0.010**	**none**	1	5/2/2014
SEMI-VOLATILE ORGANIC COMPOUNDS			**SW8270**		Prep: SW3541 / 4/25/14	Analyst: **RM**
Acenaphthene	ND		7.8	µg/Kg-dry	1	4/28/2014 01:41 PM
Acenaphthylene	ND		7.8	µg/Kg-dry	1	4/28/2014 01:41 PM
Anthracene	ND		7.8	µg/Kg-dry	1	4/28/2014 01:41 PM
Benzo(a)anthracene	ND		7.8	µg/Kg-dry	1	4/28/2014 01:41 PM
Benzo(a)pyrene	ND		7.8	µg/Kg-dry	1	4/28/2014 01:41 PM
Benzo(b)fluoranthene	ND		7.8	µg/Kg-dry	1	4/28/2014 01:41 PM
Benzo(g,h,i)perylene	ND		7.8	µg/Kg-dry	1	4/28/2014 01:41 PM
Benzo(k)fluoranthene	ND		7.8	µg/Kg-dry	1	4/28/2014 01:41 PM
Chrysene	ND		7.8	µg/Kg-dry	1	4/28/2014 01:41 PM

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

ALS Group USA, Corp

Date: *05-May-14*

Client: HRL Compliance Solutions, Inc
Project: Caerus Garden Gulch 1 PBV Removal 4.24.14 **Work Order:** 14041288
Sample ID: North Wall, 15' **Lab ID:** 14041288-03
Collection Date: 4/24/2014 02:20 PM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Dibenzo(a,h)anthracene	ND		7.8	µg/Kg-dry	1	4/28/2014 01:41 PM
Fluoranthene	ND		7.8	µg/Kg-dry	1	4/28/2014 01:41 PM
Fluorene	ND		7.8	µg/Kg-dry	1	4/28/2014 01:41 PM
Indeno(1,2,3-cd)pyrene	ND		7.8	µg/Kg-dry	1	4/28/2014 01:41 PM
Naphthalene	ND		7.8	µg/Kg-dry	1	4/28/2014 01:41 PM
Pyrene	ND		7.8	µg/Kg-dry	1	4/28/2014 01:41 PM
Surr: 2-Fluorobiphenyl	*67.0*		*12-100*	*%REC*	1	4/28/2014 01:41 PM
Surr: 4-Terphenyl-d14	*107*		*25-137*	*%REC*	1	4/28/2014 01:41 PM
Surr: Nitrobenzene-d5	*67.2*		*37-107*	*%REC*	1	4/28/2014 01:41 PM
VOLATILE ORGANIC COMPOUNDS			**SW8260B**		Prep: SW5035 / 4/25/14	Analyst: **AK**
Benzene	ND		36	µg/Kg-dry	1	4/26/2014 04:06 AM
Ethylbenzene	ND		36	µg/Kg-dry	1	4/26/2014 04:06 AM
m,p-Xylene	ND		72	µg/Kg-dry	1	4/26/2014 04:06 AM
o-Xylene	ND		36	µg/Kg-dry	1	4/26/2014 04:06 AM
Toluene	ND		36	µg/Kg-dry	1	4/26/2014 04:06 AM
Xylenes, Total	ND		110	µg/Kg-dry	1	4/26/2014 04:06 AM
Surr: 1,2-Dichloroethane-d4	*79.4*		*70-130*	*%REC*	1	4/26/2014 04:06 AM
Surr: 4-Bromofluorobenzene	*96.0*		*70-130*	*%REC*	1	4/26/2014 04:06 AM
Surr: Dibromofluoromethane	*89.4*		*70-130*	*%REC*	1	4/26/2014 04:06 AM
Surr: Toluene-d8	*96.4*		*70-130*	*%REC*	1	4/26/2014 04:06 AM
ELECTRICAL CONDUCTIVITY (SAR)			**USDA H60 METHO**		Prep: USDA Method 20B / 4/29/14	Analyst: **JB**
Electrical Conductivity @ Saturation	**12**		**0.050**	**mmhos/cm @25**	10	4/30/2014 03:00 PM
CHROMIUM, TRIVALENT			**CALCULATION**			Analyst: **JJG**
Chromium, Trivalent	**9.0**		**0.60**	**mg/Kg-dry**	1	4/30/2014 04:26 PM
CHROMIUM, HEXAVALENT			**SW7196A**		Prep: SW3060A / 4/28/14	Analyst: **JI**
Chromium, Hexavalent	ND		0.59	mg/Kg-dry	1	4/28/2014 01:00 PM
MOISTURE			**A2540 G**			Analyst: **AT**
Moisture	**16**		**0.050**	**% of sample**	1	4/25/2014 12:50 PM
PH			**SW9045D**		Prep: EXTRACT / 4/25/14	Analyst: **AT**
pH	**7.6**			**s.u.**	1	4/25/2014 04:00 PM

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

QC BATCH REPORT

Batch ID: **57977** Instrument ID **GC8** Method: **SW8015M**

MBLK Sample ID: **DBLKS1-57977-57977** Units: **mg/Kg** Analysis Date: **4/28/2014 09:27 AM**

Client ID: Run ID: **GC8_140428A** SeqNo: **2734258** Prep Date: **4/25/2014** 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	*1.326*	0	*1.667*	0	*79.5*	*39-133*	0			

LCS Sample ID: **DLCSS1-57977-57977** Units: **mg/Kg** Analysis Date: **4/28/2014 09:57 AM**

Client ID: Run ID: **GC8_140428A** SeqNo: **2734259** Prep Date: **4/25/2014** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	122.1	4.2	166.7	0	73.3	61-109	0			
Surr: 4-Terphenyl-d14	*1.374*	0	*1.667*	0	*82.5*	*39-133*	0			

MS Sample ID: **14041170-01B MS** Units: **mg/Kg** Analysis Date: **4/28/2014 10:27 AM**

Client ID: Run ID: **GC8_140428A** SeqNo: **2734261** Prep Date: **4/25/2014** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	552.2	8.1	324.7	320.4	71.4	48-110	0			
Surr: 4-Terphenyl-d14	*2.67*	0	*3.247*	0	*82.2*	*39-133*	0			

MSD Sample ID: **14041170-01B MSD** Units: **mg/Kg** Analysis Date: **4/28/2014 10:57 AM**

Client ID: Run ID: **GC8_140428A** SeqNo: **2734263** Prep Date: **4/25/2014** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	553.8	8.3	331.9	320.4	70.3	48-110	552.2	0.301	30	
Surr: 4-Terphenyl-d14	*3.173*	0	*3.319*	0	*95.6*	*39-133*	2.67	*17.2*	*30*	

The following samples were analyzed in this batch:

14041288-01B	14041288-02B	14041288-03B

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

Client: HRL Compliance Solutions, Inc
Work Order: 14041288
Project: Caerus Garden Gulch 1 PBV Removal 4.24.14

QC BATCH REPORT

Batch ID: **57976** Instrument ID **GC9** Method: **SW8015**

MBLK Sample ID: **MBLK-57976-57976** Units: **µg/Kg** Analysis Date: **4/25/2014 05:03 PM**
Client ID: Run ID: **GC9_140425A** SeqNo: **2733471** Prep Date: **4/25/2014** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	ND	2,500								
Surr: Toluene-d8	*4866*	0	*5000*	0	*97.3*	*50-150*	0			

LCS Sample ID: **LCS-57976-57976** Units: **µg/Kg** Analysis Date: **4/25/2014 03:47 PM**
Client ID: Run ID: **GC9_140425A** SeqNo: **2733470** Prep Date: **4/25/2014** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	437100	2,500	500000	0	87.4	70-130	0			
Surr: Toluene-d8	*4430*	0	*5000*	0	*88.6*	*50-150*	0			

MS Sample ID: **14041170-01A MS** Units: **µg/Kg** Analysis Date: **4/26/2014 12:23 PM**
Client ID: Run ID: **GC9_140425A** SeqNo: **2733486** Prep Date: **4/25/2014** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	506900	2,500	500000	0	101	70-130	0			
Surr: Toluene-d8	*4826*	0	*5000*	0	*96.5*	*50-150*	0			

MSD Sample ID: **14041170-01A MSD** Units: **µg/Kg** Analysis Date: **4/26/2014 12:49 PM**
Client ID: Run ID: **GC9_140425A** SeqNo: **2733487** Prep Date: **4/25/2014** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	493100	2,500	500000	0	98.6	70-130	506900	2.76	30	
Surr: Toluene-d8	*4780*	0	*5000*	0	*95.6*	*50-150*	4826	*0.979*	*30*	

The following samples were analyzed in this batch:

14041288-01A	14041288-02A	14041288-03A

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

Client: HRL Compliance Solutions, Inc
Work Order: 14041288
Project: Caerus Garden Gulch 1 PBV Removal 4.24.14

QC BATCH REPORT

Batch ID: **58038** Instrument ID **HG1** Method: **SW7471**

MBLK Sample ID: **MBLK-58038-58038** Units: **mg/Kg** Analysis Date: **4/28/2014 08:12 PM**
Client ID: Run ID: **HG1_140428A** SeqNo: **2734821** Prep Date: **4/28/2014** 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-58038-58038** Units: **mg/Kg** Analysis Date: **4/28/2014 08:14 PM**
Client ID: Run ID: **HG1_140428A** SeqNo: **2734822** Prep Date: **4/28/2014** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.1682	0.020	0.1665	0	101	80-120	0			

MS Sample ID: **1404759-71BMS** Units: **mg/Kg** Analysis Date: **4/28/2014 08:19 PM**
Client ID: Run ID: **HG1_140428A** SeqNo: **2734824** Prep Date: **4/28/2014** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.143	0.016	0.1328	0.02827	86.3	75-125	0			

MSD Sample ID: **1404759-71BMSD** Units: **mg/Kg** Analysis Date: **4/28/2014 08:21 PM**
Client ID: Run ID: **HG1_140428A** SeqNo: **2734825** Prep Date: **4/28/2014** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.1576	0.016	0.132	0.02827	98	75-125	0.143	9.74	35	

The following samples were analyzed in this batch:

14041288-01B	14041288-02B	14041288-03B

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

Client: HRL Compliance Solutions, Inc
Work Order: 14041288
Project: Caerus Garden Gulch 1 PBV Removal 4.24.14

QC BATCH REPORT

Batch ID: **58010** Instrument ID **ICPMS2** Method: **SW6020A**

DUP Sample ID: **14041291-01CDUP** Units: **mg/L** Analysis Date: **5/2/2014 03:58 PM**
Client ID: Run ID: **ICPMS2_140502A** SeqNo: **2743177** Prep Date: **4/29/2014** DF: **20**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	548	10	0	0	0	0-0	521.8	4.9		
Magnesium	170	4.0	0	0	0	0-0	153	10.5		
Sodium	1497	4.0	0	0	0	0-0	1334	11.6		

DUP Sample ID: **14041291-01CDUP** Units: **none** Analysis Date: **5/2/2014**
Client ID: Run ID: **SAR_140502A** SeqNo: **2743414** Prep Date: **4/29/2014** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sodium Adsorption Ratio	14.32	0.010	0	0	0		13.2	8.16	50	

The following samples were analyzed in this batch: 14041288-01C, 14041288-02C, 14041288-03C

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

Client: HRL Compliance Solutions, Inc
Work Order: 14041288
Project: Caerus Garden Gulch 1 PBV Removal 4.24.14

QC BATCH REPORT

Batch ID: **58070** Instrument ID **ICPMS1** Method: **SW6020A**

MBLK Sample ID: **MBLK-58070-58070** Units: **mg/Kg** Analysis Date: **4/29/2014 10:44 PM**
Client ID: Run ID: **ICPMS1_140429A** SeqNo: **2737236** Prep Date: **4/29/2014** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	ND	0.25								
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	ND	0.25								
Silver	ND	0.25								
Zinc	0.03112	0.50								J

LCS Sample ID: **LCS-58070-58070** Units: **mg/Kg** Analysis Date: **4/29/2014 10:50 PM**
Client ID: Run ID: **ICPMS1_140429A** SeqNo: **2737237** Prep Date: **4/29/2014** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	4.471	0.25	5	0	89.4	80-120	0			
Barium	4.77	0.25	5	0	95.4	80-120	0			
Cadmium	4.588	0.10	5	0	91.8	80-120	0			
Chromium	4.666	0.25	5	0	93.3	80-120	0			
Copper	4.572	0.25	5	0	91.4	80-120	0			
Lead	4.83	0.25	5	0	96.6	80-120	0			
Nickel	4.642	0.25	5	0	92.8	80-120	0			
Selenium	4.045	0.25	5	0	80.9	80-120	0			
Silver	4.448	0.25	5	0	89	80-120	0			
Zinc	4.096	0.50	5	0	81.9	80-120	0			

MS Sample ID: **14041170-01BMS** Units: **mg/Kg** Analysis Date: **4/29/2014 11:31 PM**
Client ID: Run ID: **ICPMS1_140429A** SeqNo: **2737245** Prep Date: **4/29/2014** DF: **5**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	13.17	2.0	8.183	4.179	110	75-125	0			
Barium	336.9	2.0	8.183	346.6	-118	75-125	0			SO
Cadmium	7.958	0.82	8.183	0.1982	94.8	75-125	0			
Chromium	32.82	2.0	8.183	24.07	107	75-125	0			
Copper	18.69	2.0	8.183	10.25	103	75-125	0			
Lead	20.95	2.0	8.183	11.03	121	75-125	0			
Nickel	21.88	2.0	8.183	13.64	101	75-125	0			
Selenium	9.251	2.0	8.183	1.75	91.7	75-125	0			
Silver	6.862	2.0	8.183	0.05732	83.1	75-125	0			
Zinc	49.8	4.1	8.183	39.01	132	75-125	0			SO

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

Client: HRL Compliance Solutions, Inc
Work Order: 14041288
Project: Caerus Garden Gulch 1 PBV Removal 4.24.14

QC BATCH REPORT

Batch ID: **58070** Instrument ID **ICPMS1** Method: **SW6020A**

MSD Sample ID: **14041170-01BMSD** Units: **mg/Kg** Analysis Date: **4/29/2014 11:37 PM**
Client ID: Run ID: **ICPMS1_140429A** SeqNo: **2737258** Prep Date: **4/29/2014** DF: **5**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	12.46	2.1	8.21	4.179	101	75-125	13.17	5.56	25	
Barium	373	2.1	8.21	346.6	322	75-125	336.9	10.2	25	SO
Cadmium	7.976	0.82	8.21	0.1982	94.7	75-125	7.958	0.225	25	
Chromium	32.14	2.1	8.21	24.07	98.2	75-125	32.82	2.09	25	
Copper	17.41	2.1	8.21	10.25	87.2	75-125	18.69	7.07	25	
Lead	19.25	2.1	8.21	11.03	100	75-125	20.95	8.46	25	
Nickel	21.33	2.1	8.21	13.64	93.7	75-125	21.88	2.54	25	
Selenium	8.76	2.1	8.21	1.75	85.4	75-125	9.251	5.45	25	
Silver	6.925	2.1	8.21	0.05732	83.7	75-125	6.862	0.922	25	
Zinc	46.14	4.1	8.21	39.01	86.8	75-125	49.8	7.62	25	O

The following samples were analyzed in this batch: 14041288-01B 14041288-02B 14041288-03B

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

Client: HRL Compliance Solutions, Inc
Work Order: 14041288
Project: Caerus Garden Gulch 1 PBV Removal 4.24.14

QC BATCH REPORT

Batch ID: **57993** Instrument ID **SVMS8** Method: **SW8270**

MBLK Sample ID: **SBLKS1-57993-57993** Units: **µg/Kg** Analysis Date: **4/28/2014 11:10 AM**
Client ID: Run ID: **SVMS8_140428A** SeqNo: **2734528** Prep Date: **4/25/2014** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	ND	6.7								
Acenaphthylene	ND	6.7								
Anthracene	ND	6.7								
Benzo(a)anthracene	ND	6.7								
Benzo(a)pyrene	ND	6.7								
Benzo(b)fluoranthene	ND	6.7								
Benzo(g,h,i)perylene	ND	6.7								
Benzo(k)fluoranthene	ND	6.7								
Chrysene	ND	6.7								
Dibenzo(a,h)anthracene	ND	6.7								
Fluoranthene	ND	6.7								
Fluorene	ND	6.7								
Indeno(1,2,3-cd)pyrene	ND	6.7								
Naphthalene	ND	6.7								
Pyrene	ND	6.7								
Surr: 2-Fluorobiphenyl	*1263*	0	*1667*	0	*75.8*	*12-100*	0			
Surr: 4-Terphenyl-d14	*1919*	0	*1667*	0	*115*	*25-137*	0			
Surr: Nitrobenzene-d5	*1193*	0	*1667*	0	*71.6*	*37-107*	0			

LCS Sample ID: **SLCSS1-57993-57993** Units: **µg/Kg** Analysis Date: **4/28/2014 11:30 AM**
Client ID: Run ID: **SVMS8_140428A** SeqNo: **2734529** Prep Date: **4/25/2014** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	464	6.7	666.7	0	69.6	45-110	0			
Acenaphthylene	464	6.7	666.7	0	69.6	45-105	0			
Anthracene	497.3	6.7	666.7	0	74.6	55-105	0			
Benzo(a)anthracene	515.3	6.7	666.7	0	77.3	50-110	0			
Benzo(a)pyrene	511.7	6.7	666.7	0	76.7	50-110	0			
Benzo(b)fluoranthene	536	6.7	666.7	0	80.4	45-115	0			
Benzo(g,h,i)perylene	447	6.7	666.7	0	67	40-125	0			
Benzo(k)fluoranthene	538	6.7	666.7	0	80.7	45-115	0			
Chrysene	554.7	6.7	666.7	0	83.2	55-110	0			
Dibenzo(a,h)anthracene	434	6.7	666.7	0	65.1	40-125	0			
Fluoranthene	518.3	6.7	666.7	0	77.7	55-115	0			
Fluorene	548.3	6.7	666.7	0	82.2	50-110	0			
Indeno(1,2,3-cd)pyrene	432.7	6.7	666.7	0	64.9	40-120	0			
Naphthalene	464	6.7	666.7	0	69.6	40-105	0			
Pyrene	576	6.7	666.7	0	86.4	45-125	0			
Surr: 2-Fluorobiphenyl	*1220*	0	*1667*	0	*73.2*	*12-100*	0			
Surr: 4-Terphenyl-d14	*1754*	0	*1667*	0	*105*	*25-137*	0			
Surr: Nitrobenzene-d5	*1211*	0	*1667*	0	*72.7*	*37-107*	0			

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

Client: HRL Compliance Solutions, Inc
Work Order: 14041288
Project: Caerus Garden Gulch 1 PBV Removal 4.24.14

QC BATCH REPORT

Batch ID: **57993** Instrument ID **SVMS8** Method: **SW8270**

MS Sample ID: **14041288-03B MS** Units: **µg/Kg** Analysis Date: **4/28/2014 01:00 PM**
Client ID: **North Wall, 15'** Run ID: **SVMS8_140428A** SeqNo: **2734530** Prep Date: **4/25/2014** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	895.5	13	1269	0	70.6	45-110	0			
Acenaphthylene	903.2	13	1269	0	71.2	45-105	0			
Anthracene	972.9	13	1269	0	76.7	55-105	0			
Benzo(a)anthracene	997	13	1269	0	78.6	50-110	0			
Benzo(a)pyrene	978	13	1269	0	77.1	50-110	0			
Benzo(b)fluoranthene	1043	13	1269	0	82.2	45-115	0			
Benzo(g,h,i)perylene	970.4	13	1269	0	76.5	40-125	0			
Benzo(k)fluoranthene	1029	13	1269	0	81.1	45-115	0			
Chrysene	1095	13	1269	0	86.3	55-110	0			
Dibenzo(a,h)anthracene	904.4	13	1269	0	71.3	40-125	0			
Fluoranthene	986.2	13	1269	0	77.7	55-115	0			
Fluorene	1019	13	1269	0	80.3	50-110	0			
Indeno(1,2,3-cd)pyrene	872.1	13	1269	0	68.7	40-120	0			
Naphthalene	886.7	13	1269	0	69.9	40-105	0			
Pyrene	1162	13	1269	0	91.6	45-125	0			
Surr: 2-Fluorobiphenyl	*2294*	0	*3171*	0	*72.3*	*12-100*	0			
Surr: 4-Terphenyl-d14	*3439*	0	*3171*	0	*108*	*25-137*	0			
Surr: Nitrobenzene-d5	*2331*	0	*3171*	0	*73.5*	*37-107*	0			

MSD Sample ID: **14041288-03B MSD** Units: **µg/Kg** Analysis Date: **4/28/2014 01:21 PM**
Client ID: **North Wall, 15'** Run ID: **SVMS8_140428A** SeqNo: **2734531** Prep Date: **4/25/2014** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	925.2	13	1324	0	69.9	45-110	895.5	3.25	30	
Acenaphthylene	948.3	13	1324	0	71.6	45-105	903.2	4.88	30	
Anthracene	1017	13	1324	0	76.8	55-105	972.9	4.44	30	
Benzo(a)anthracene	1048	13	1324	0	79.1	50-110	997	4.95	30	
Benzo(a)pyrene	1036	13	1324	0	78.3	50-110	978	5.79	30	
Benzo(b)fluoranthene	1047	13	1324	0	79.1	45-115	1043	0.405	30	
Benzo(g,h,i)perylene	1008	13	1324	0	76.1	40-125	970.4	3.79	30	
Benzo(k)fluoranthene	1079	13	1324	0	81.5	45-115	1029	4.8	30	
Chrysene	1123	13	1324	0	84.8	55-110	1095	2.5	30	
Dibenzo(a,h)anthracene	939.1	13	1324	0	70.9	40-125	904.4	3.76	30	
Fluoranthene	1028	13	1324	0	77.6	55-115	986.2	4.12	30	
Fluorene	1069	13	1324	0	80.8	50-110	1019	4.87	30	
Indeno(1,2,3-cd)pyrene	979.4	13	1324	0	74	40-120	872.1	11.6	30	
Naphthalene	949.6	13	1324	0	71.7	40-105	886.7	6.86	30	
Pyrene	1196	13	1324	0	90.3	45-125	1162	2.88	30	
Surr: 2-Fluorobiphenyl	*2453*	0	*3309*	0	*74.1*	*12-100*	2294	*6.7*	*40*	
Surr: 4-Terphenyl-d14	*3499*	0	*3309*	0	*106*	*25-137*	3439	*1.75*	*40*	
Surr: Nitrobenzene-d5	*2564*	0	*3309*	0	*77.5*	*37-107*	2331	*9.54*	*40*	

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

Client: HRL Compliance Solutions, Inc
Work Order: 14041288
Project: Caerus Garden Gulch 1 PBV Removal 4.24.14

QC BATCH REPORT

Batch ID: **57993** Instrument ID **SVMS8** Method: **SW8270**

The following samples were analyzed in this batch:

14041288-01B	14041288-02B	14041288-03B

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

Client: HRL Compliance Solutions, Inc
Work Order: 14041288
Project: Caerus Garden Gulch 1 PBV Removal 4.24.14

QC BATCH REPORT

Batch ID: **57978** Instrument ID **VMS5** Method: **SW8260B**

MBLK Sample ID: **MBLK-57978-57978** Units: **µg/Kg** Analysis Date: **4/25/2014 05:44 PM**
Client ID: Run ID: **VMS5_140425A** SeqNo: **2732181** Prep Date: **4/25/2014** 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								
m,p-Xylene	ND	60								
o-Xylene	ND	30								
Toluene	ND	30								
Xylenes, Total	ND	90								
Surr: 1,2-Dichloroethane-d4	*958.5*	0	*1000*	0	*95.8*	*70-130*	0			
Surr: 4-Bromofluorobenzene	*898.5*	0	*1000*	0	*89.8*	*70-130*	0			
Surr: Dibromofluoromethane	*991*	0	*1000*	0	*99.1*	*70-130*	0			
Surr: Toluene-d8	*980.5*	0	*1000*	0	*98*	*70-130*	0			

LCS Sample ID: **LCS-57978-57978** Units: **µg/Kg** Analysis Date: **4/25/2014 04:27 PM**
Client ID: Run ID: **VMS5_140425A** SeqNo: **2732180** Prep Date: **4/25/2014** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	992	30	1000	0	99.2	75-125	0			
Ethylbenzene	1040	30	1000	0	104	75-125	0			
m,p-Xylene	2068	60	2000	0	103	80-125	0			
o-Xylene	1019	30	1000	0	102	75-125	0			
Toluene	1018	30	1000	0	102	70-125	0			
Xylenes, Total	3088	90	3000	0	103	75-125	0			
Surr: 1,2-Dichloroethane-d4	*959.5*	0	*1000*	0	*96*	*70-130*	0			
Surr: 4-Bromofluorobenzene	*935*	0	*1000*	0	*93.5*	*70-130*	0			
Surr: Dibromofluoromethane	*1012*	0	*1000*	0	*101*	*70-130*	0			
Surr: Toluene-d8	*980*	0	*1000*	0	*98*	*70-130*	0			

MS Sample ID: **14041228-01A MS** Units: **µg/Kg** Analysis Date: **5/1/2014 12:02 PM**
Client ID: Run ID: **VMS8_140430A** SeqNo: **2739030** Prep Date: **4/25/2014** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	973	30	1000	0	97.3	75-125	0			
Ethylbenzene	914	30	1000	0	91.4	75-125	0			
m,p-Xylene	1934	60	2000	119.5	90.8	80-125	0			
o-Xylene	953.5	30	1000	0	95.4	75-125	0			
Toluene	943	30	1000	0	94.3	70-125	0			
Xylenes, Total	2888	90	3000	120	92.3	75-125	0			
Surr: 1,2-Dichloroethane-d4	*1078*	0	*1000*	0	*108*	*70-130*	0			
Surr: 4-Bromofluorobenzene	*1010*	0	*1000*	0	*101*	*70-130*	0			
Surr: Dibromofluoromethane	*998*	0	*1000*	0	*99.8*	*70-130*	0			
Surr: Toluene-d8	*1004*	0	*1000*	0	*100*	*70-130*	0			

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

Client: HRL Compliance Solutions, Inc
Work Order: 14041288
Project: Caerus Garden Gulch 1 PBV Removal 4.24.14

QC BATCH REPORT

Batch ID: **57978** Instrument ID **VMS5** Method: **SW8260B**

MSD Sample ID: **14041228-01A MSD** Units: **µg/Kg** Analysis Date: **5/1/2014 12:27 PM**
Client ID: Run ID: **VMS8_140430A** SeqNo: **2739031** Prep Date: **4/25/2014** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	981	30	1000	0	98.1	75-125	973	0.819	30	
Ethylbenzene	947.5	30	1000	0	94.8	75-125	914	3.6	30	
m,p-Xylene	1979	60	2000	119.5	93	80-125	1934	2.27	30	
o-Xylene	985	30	1000	0	98.5	75-125	953.5	3.25	30	
Toluene	955	30	1000	0	95.5	70-125	943	1.26	30	
Xylenes, Total	2964	90	3000	120	94.8	75-125	2888	2.6	30	
Surr: 1,2-Dichloroethane-d4	*1064*	0	*1000*	0	*106*	*70-130*	1078	*1.21*	*30*	
Surr: 4-Bromofluorobenzene	*1029*	0	*1000*	0	*103*	*70-130*	1010	*1.81*	*30*	
Surr: Dibromofluoromethane	*993*	0	*1000*	0	*99.3*	*70-130*	998	*0.502*	*30*	
Surr: Toluene-d8	*996.5*	0	*1000*	0	*99.6*	*70-130*	1004	*0.75*	*30*	

The following samples were analyzed in this batch: 14041288-01A 14041288-02A 14041288-03A

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

Client: HRL Compliance Solutions, Inc
Work Order: 14041288
Project: Caerus Garden Gulch 1 PBV Removal 4.24.14

QC BATCH REPORT

Batch ID: **57995** Instrument ID **WETCHEM** Method: **SW9045D**

LCS Sample ID: **LCS-57995-57995** Units: **s.u.** Analysis Date: **4/25/2014 04:00 PM**
Client ID: Run ID: **WETCHEM_140425L** SeqNo: **2730889** Prep Date: **4/25/2014** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	3.95	0	4	0	98.8	90-110	0			

DUP Sample ID: **14041288-01B DUP** Units: **s.u.** Analysis Date: **4/25/2014 04:00 PM**
Client ID: **Footprint, 28'** Run ID: **WETCHEM_140425L** SeqNo: **2730891** Prep Date: **4/25/2014** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	7.41	0	0	0	0	0-0	7.33	1.09	20	

DUP Sample ID: **14041301-05A DUP** Units: **s.u.** Analysis Date: **4/25/2014 04:00 PM**
Client ID: Run ID: **WETCHEM_140425L** SeqNo: **2730901** Prep Date: **4/25/2014** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	7.34	0	0	0	0	0-0	7.37	0.408	20	

The following samples were analyzed in this batch:

14041288-01B	14041288-02B	14041288-03B

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

Client: HRL Compliance Solutions, Inc
Work Order: 14041288
Project: Caerus Garden Gulch 1 PBV Removal 4.24.14

QC BATCH REPORT

Batch ID: **58010** Instrument ID **WETCHEM** Method: **USDA H60 Method**

DUP Sample ID: **14041291-01C DUP** Units: **mmhos/cm @25°C** Analysis Date: **4/30/2014 03:00 PM**

Client ID: Run ID: **WETCHEM_140430K** SeqNo: **2738243** Prep Date: **4/29/2014** DF: **10**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Electrical Conductivity @ Saturation	10.12	0.050	0	0	0		9.32	8.23	50	

The following samples were analyzed in this batch:

14041288-01C	14041288-02C	14041288-03C

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

Client: HRL Compliance Solutions, Inc
Work Order: 14041288
Project: Caerus Garden Gulch 1 PBV Removal 4.24.14

QC BATCH REPORT

Batch ID: **58026** Instrument ID **WETCHEM** Method: **SW7196A**

MBLK Sample ID: **MBLK-58026-58026** Units: **mg/Kg** Analysis Date: **4/28/2014 01:00 PM**
Client ID: Run ID: **WETCHEM_140428I** SeqNo: **2734653** Prep Date: **4/28/2014** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	ND	0.49								

LCS Sample ID: **LCS-58026-58026** Units: **mg/Kg** Analysis Date: **4/28/2014 01:00 PM**
Client ID: Run ID: **WETCHEM_140428I** SeqNo: **2734654** Prep Date: **4/28/2014** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	1.573	0.49	1.961	0	80.2	80-120	0			

MS Sample ID: **14041288-03BMS** Units: **mg/Kg** Analysis Date: **4/28/2014 01:00 PM**
Client ID: **North Wall, 15'** Run ID: **WETCHEM_140428I** SeqNo: **2734659** Prep Date: **4/28/2014** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	0.9516	0.50	2.016	0.1818	38.2	75-125	0			S

MS Sample ID: **14041288-03BMSI** Units: **mg/Kg** Analysis Date: **4/28/2014 01:00 PM**
Client ID: **North Wall, 15'** Run ID: **WETCHEM_140428I** SeqNo: **2734661** Prep Date: **4/28/2014** DF: **100**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	199.6	50	1092	0.1818	18.3	75-125	0			S

MSD Sample ID: **14041288-03BMSD** Units: **mg/Kg** Analysis Date: **4/28/2014 01:00 PM**
Client ID: **North Wall, 15'** Run ID: **WETCHEM_140428I** SeqNo: **2734660** Prep Date: **4/28/2014** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	1.087	0.50	1.984	0.1818	45.6	75-125	0.9516	13.3	20	S

The following samples were analyzed in this batch:

14041288-01B	14041288-02B	14041288-03B

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

Client: HRL Compliance Solutions, Inc
Work Order: 14041288
Project: Caerus Garden Gulch 1 PBV Removal 4.24.14

QC BATCH REPORT

Batch ID: **R139636** Instrument ID **MOIST** Method: **A2540 G**

MBLK Sample ID: **WBLKS-R139636** Units: **% of sample** Analysis Date: **4/25/2014 12:50 PM**
Client ID: Run ID: **MOIST_140425A** SeqNo: **2731377** 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-R139636** Units: **% of sample** Analysis Date: **4/25/2014 12:50 PM**
Client ID: Run ID: **MOIST_140425A** SeqNo: **2731376** 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: **14041288-01B DUP** Units: **% of sample** Analysis Date: **4/25/2014 12:50 PM**
Client ID: **Footprint, 28'** Run ID: **MOIST_140425A** SeqNo: **2731362** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	13.72	0.050	0	0	0	0-0	13.3	3.11	20	

DUP Sample ID: **14041301-05A DUP** Units: **% of sample** Analysis Date: **4/25/2014 12:50 PM**
Client ID: Run ID: **MOIST_140425A** SeqNo: **2731372** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	38.2	0.050	0	0	0	0-0	37.69	1.34	20	

The following samples were analyzed in this batch:

14041288-01B	14041288-02B	14041288-03B

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

ALS Laboratory Group

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

Chain-of-Custody

Form 202r8

WORKORDER #	14041288	SAMPLER	Casey Richardson	DATE	4.24.14
PAGE	1 of 1	SITE ID		TURNAROUND	24 HR
DISPOSAL	By Lab or Return to Client	EDD FORMAT			
PROJECT NAME	CAERUS GARDEN GULCH 1 PBV REMOVAL	PURCHASE ORDER			
PROJECT No.	#13.199.15	BILL TO COMPANY	Caerus Piceance LLC		
COMPANY NAME	HCSI	INVOICE ATTN TO	Ed Winters		
SEND REPORT TO	Mark Mumby	ADDRESS	120 Railroad Ave. Suite D		
ADDRESS	2385 F 1/2 Road	CITY / STATE / ZIP	Parachute, CO 81635		
CITY / STATE / ZIP	Grand Junction, CO. 81505	PHONE	970-285-9606		
PHONE	970-243-3271	FAX			
FAX	970-243-3280	E-MAIL	ewinters@caerusoilandgas.com		
E-MAIL	mmumby@hrlcomp.com crichardson@hrlcomp.com				

Lab ID	Field ID	Matrix	Sample Date	Sample Time	# Bottles	Pres.	QC	DRO	GRO	BTEX	TOTAL METALS - TABEL 910-1	SEMI VOLS - PAH	SAR	EC	pH
1	FOOTPRINT, 28'	SOIL	4.24.14	1540	3	8		X	X	X	X	X	X	X	X
2	WEST WALL, 15'	SOIL	4.24.14	1140	3	8		X	X	X	X	X	X	X	X
3	NORTH WALL, 15'	SOIL	4.24.14	1420	3	8		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:

PLEASE SUBMIT A PRELIMINARY REPORT

2.6 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	4.24.14	1515
RECEIVED BY			4-24-14	1515
RELINQUISHED BY			4-24-14	1600
RECEIVED BY		Diane F. Shaw	4/25/14	0930
RELINQUISHED BY				
RECEIVED BY				

ALS Group USA, Corp

Sample Receipt Checklist

Client Name: **HRL** Date/Time Received: **25-Apr-14 09:30**

Work Order: **14041288** Received by: **DS**

Checklist completed by Diane Shaw (eSignature) 25-Apr-14 (Date) Reviewed by: Ann Preston (eSignature) 25-Apr-14 (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 ☐	
Sample(s) received on ice?	Yes ☑	No ☐	
Temperature(s)/Thermometer(s):	2.6 c		
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:	4/25/2014 12:21:56 PM		
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:			

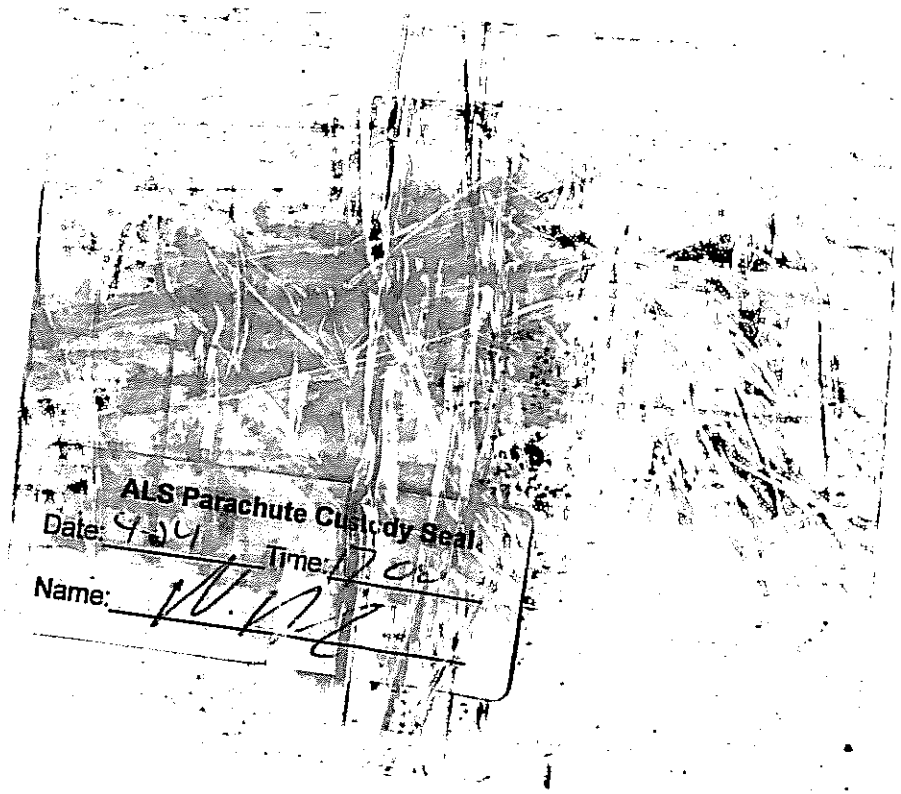
Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

CorrectiveAction:


ALS Parachute Custody Seal
Date: 4/24
Time:
Name:

01-May-2014

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

Re: **Caerus Garden Gulch 1 PBV Removal 4.29.14** Work Order: **14041495**

Dear Mark,

ALS Environmental received 1 sample on 30-Apr-2014 10:00 AM for the analyses presented in the following report.

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

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

The total number of pages in this report is 9.

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: 01-May-14

Client: HRL Compliance Solutions, Inc
Project: Caerus Garden Gulch 1 PBV Removal 4.29.14
Work Order: **14041495**

Work Order Sample Summary

Lab Samp ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
14041495-01	Footprint, 30'	Soil		4/29/2014 09:20	4/30/2014 10:00	☐

ALS Group USA, Corp

Date: 01-May-14

Client: HRL Compliance Solutions, Inc
Project: Caerus Garden Gulch 1 PBV Removal 4.29.14
WorkOrder: **14041495**

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
TNTC	Too Numerous To Count
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

ALS Group USA, Corp

Date: *01-May-14*

Client: HRL Compliance Solutions, Inc
Project: Caerus Garden Gulch 1 PBV Removal 4.29.14 **Work Order:** 14041495
Sample ID: Footprint, 30' **Lab ID:** 14041495-01
Collection Date: 4/29/2014 09:20 AM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
SEMI-VOLATILE ORGANIC COMPOUNDS			**SW8270**		Prep: SW3541 / 4/30/14	Analyst: **RM**
Benzo(a)pyrene	ND		7.6	µg/Kg-dry	1	5/1/2014 12:03 AM
Surr: 2-Fluorobiphenyl	*64.3*		*12-100*	*%REC*	1	5/1/2014 12:03 AM
Surr: 4-Terphenyl-d14	*105*		*25-137*	*%REC*	1	5/1/2014 12:03 AM
Surr: Nitrobenzene-d5	*62.2*		*37-107*	*%REC*	1	5/1/2014 12:03 AM
MOISTURE			**A2540 G**			Analyst: **AT**
Moisture	**14**		**0.050**	**% of sample**	1	4/30/2014 11:43 AM

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

QC BATCH REPORT

Batch ID: **58109** Instrument ID **SVMS8** Method: **SW8270**

MBLK Sample ID: **SBLKS1-58109-58109** Units: **µg/Kg** Analysis Date: **4/30/2014 04:14 PM**

Client ID: Run ID: **SVMS8_140430A** SeqNo: **2740531** Prep Date: **4/30/2014** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzo(a)pyrene	ND	6.7								
Surr: 2-Fluorobiphenyl	*1233*	0	*1667*	0	*74*	*12-100*	0			
Surr: 4-Terphenyl-d14	*1947*	0	*1667*	0	*117*	*25-137*	0			
Surr: Nitrobenzene-d5	*1109*	0	*1667*	0	*66.6*	*37-107*	0			

LCS Sample ID: **SLCSS1-58109-58109** Units: **µg/Kg** Analysis Date: **4/30/2014 04:34 PM**

Client ID: Run ID: **SVMS8_140430A** SeqNo: **2740532** Prep Date: **4/30/2014** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzo(a)pyrene	571	6.7	666.7	0	85.6	50-110	0			
Surr: 2-Fluorobiphenyl	*1267*	0	*1667*	0	*76*	*12-100*	0			
Surr: 4-Terphenyl-d14	*1883*	0	*1667*	0	*113*	*25-137*	0			
Surr: Nitrobenzene-d5	*1232*	0	*1667*	0	*73.9*	*37-107*	0			

MS Sample ID: **14041347-01B MS** Units: **µg/Kg** Analysis Date: **4/30/2014 05:22 PM**

Client ID: Run ID: **SVMS8_140430A** SeqNo: **2740533** Prep Date: **4/30/2014** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzo(a)pyrene	1275	13	1277	54.86	95.5	50-110	0			
Surr: 2-Fluorobiphenyl	*2336*	0	*3193*	0	*73.2*	*12-100*	0			
Surr: 4-Terphenyl-d14	*3256*	0	*3193*	0	*102*	*25-137*	0			
Surr: Nitrobenzene-d5	*2261*	0	*3193*	0	*70.8*	*37-107*	0			

MSD Sample ID: **14041347-01B MSD** Units: **µg/Kg** Analysis Date: **4/30/2014 05:42 PM**

Client ID: Run ID: **SVMS8_140430A** SeqNo: **2740534** Prep Date: **4/30/2014** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzo(a)pyrene	1148	13	1281	54.86	85.4	50-110	1275	10.5	30	
Surr: 2-Fluorobiphenyl	*2122*	0	*3202*	0	*66.3*	*12-100*	2336	*9.59*	*40*	
Surr: 4-Terphenyl-d14	*3469*	0	*3202*	0	*108*	*25-137*	3256	*6.34*	*40*	
Surr: Nitrobenzene-d5	*2205*	0	*3202*	0	*68.9*	*37-107*	2261	*2.47*	*40*	

The following samples were analyzed in this batch: 14041495-01A

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

Client: HRL Compliance Solutions, Inc
Work Order: 14041495
Project: Caerus Garden Gulch 1 PBV Removal 4.29.14

QC BATCH REPORT

Batch ID: **R139930** Instrument ID **MOIST** Method: **A2540 G**

MBLK	Sample ID: **WBLKS-R139930**				Units: **% of sample**			Analysis Date: **4/30/2014 11:43 AM**		
Client ID:	Run ID: **MOIST_140430A**				SeqNo: **2739494**		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-R139930**				Units: **% of sample**			Analysis Date: **4/30/2014 11:43 AM**		
Client ID:	Run ID: **MOIST_140430A**				SeqNo: **2739493**		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: **14041495-01A DUP**				Units: **% of sample**			Analysis Date: **4/30/2014 11:43 AM**		
Client ID: **Footprint, 30'**	Run ID: **MOIST_140430A**				SeqNo: **2739492**		Prep Date:		DF: **1**	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	14.74	0.050	0	0	0	0-0	13.59	8.12	20	

The following samples were analyzed in this batch: 14041495-01A

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

ALS Laboratory Group

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

Chain-of-Custody

Form 282r8

WORKORDER # 14041495

PAGE 1 of 1

DISPOSAL By Lab or Return to Client

PROJECT NAME	CAERUS GARDEN GULCH 1 PBV REMOVAL	SAMPLER	Casey Richardson
PROJECT No.	#13.199.15	SITE ID	
		EDD FORMAT	
		PURCHASE ORDER	
COMPANY NAME	HCSI	BILL TO COMPANY	Caerus Piceance LLC
SEND REPORT TO	MARK MUMBY	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	crichardson@hrlcomp.com	E-MAIL	ewinters@caerusoilandgas.com

DATE 4.29.14

TURNAROUND 24 HR

Lab ID	Field ID	Matrix	Sample Date	Sample Time	# Bottles	Pres.	QC	BENZO (A) PYRENE
1	FOOTPRINT, 30'	SOIL	4.29.14	920	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: 5.0 gal

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	4.29.14	1237
RECEIVED BY		N.M.	4-29-14	12:39
RELINQUISHED BY		N.M.	4-29-14	1240
RECEIVED BY		Diane F. Shaw	4/30/14	1000
RELINQUISHED BY				
RECEIVED BY				

ALS Group USA, Corp

Sample Receipt Checklist

Client Name: **HRL** Date/Time Received: **30-Apr-14 10:00**

Work Order: **14041495** Received by: **DS**

Checklist completed by Diane Shaw (eSignature) 30-Apr-14 (Date) Reviewed by: Ann Preston (eSignature) 01-May-14 (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 ☐	
Sample(s) received on ice?	Yes ☑	No ☐	
Temperature(s)/Thermometer(s):	5.0 c		
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:	4/30/2014 10:59:57 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: (616) 399-6070
Sample Receiving
ALS Laboratory Group
3352 128th Avenue

Holland, MI 49424

Origin ID: GRRA

FedEx Express

Ship Date: 28APR14
ActWgt: 58.0 LB
CAD: 2264945/INET3400

Dims: 24 X 15 X 15 IN

Delivery Address Bar Code

Ref # 042914-1
Invoice #
PO #
Dept # Parachute

SHIP TO: (616) 399-6070 BILL RECIPIENT

sample receiving
ALS Laboratory Group
3352 128TH AVE

HOLLAND, MI 49424

WED - 30 APR 10:30A
PRIORITY OVERNIGHT

TRK# 7987 0086 4412

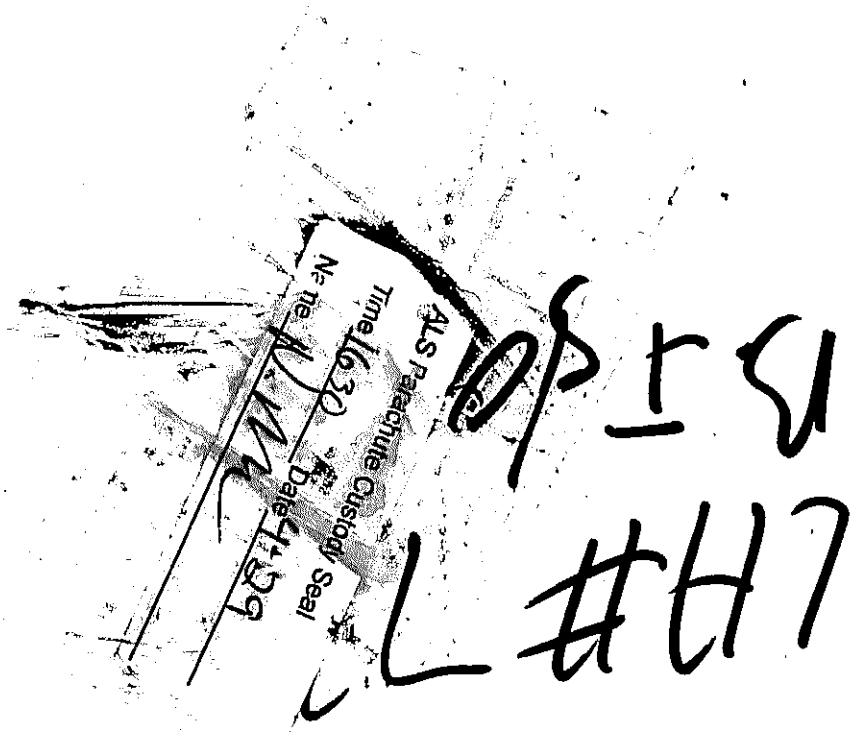
0201

68 GRRA

49424
MI-US
GRR

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.



13-May-2014

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

Re: **Caerus Garden Gulch 1 PBV Removal 5.6.14** Work Order: **1405405**

Dear Mark,

ALS Environmental received 3 samples on 08-May-2014 02:45 PM 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 29.

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: 13-May-14

Client: HRL Compliance Solutions, Inc
Project: Caerus Garden Gulch 1 PBV Removal 5.6.14
Work Order: **1405405**

Work Order Sample Summary

Lab Samp ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
1405405-01	Footprint South, 37'	Soil		5/6/2014 09:50	5/8/2014 14:45	☐
1405405-02	South Wall, 18'	Soil		5/6/2014 11:37	5/8/2014 14:45	☐
1405405-03	East Wall, 18'	Soil		5/7/2014 11:05	5/8/2014 14:45	☐

ALS Group USA, Corp

Date: 13-May-14

Client: HRL Compliance Solutions, Inc
Project: Caerus Garden Gulch 1 PBV Removal 5.6.14
Work Order: 1405405

Case Narrative

Batch 58419 MS/MSD data for Metals is not related to this project's samples. No data requires qualification.

Batch 58425 sample East Wall, 18' MS/MSD recoveries for Hexavalent Chromium were below the control limit. The corresponding result in the parent sample may be biased low for Hexavalent Chromium.

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
TNTC	Too Numerous To Count
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: *13-May-14*

Client: HRL Compliance Solutions, Inc
Project: Caerus Garden Gulch 1 PBV Removal 5.6.14 **Work Order:** 1405405
Sample ID: Footprint South, 37' **Lab ID:** 1405405-01
Collection Date: 5/6/2014 09:50 AM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID			**SW8015M**		Prep: SW3541 / 5/8/14	Analyst: **IT**
DRO (C10-C28)	**8.2**		**4.8**	**mg/Kg-dry**	1	5/9/2014 11:46 AM
Surr: 4-Terphenyl-d14	*80.2*		*39-133*	*%REC*	1	5/9/2014 11:46 AM
GASOLINE RANGE ORGANICS BY GC-FID			**SW8015**		Prep: SW5035 / 5/8/14	Analyst: **IT**
GRO (C6-C10)	ND		2.9	mg/Kg-dry	1	5/8/2014 06:25 PM
Surr: Toluene-d8	*106*		*50-150*	*%REC*	1	5/8/2014 06:25 PM
MERCURY BY CVAA			**SW7471**		Prep: SW7471 / 5/12/14	Analyst: **LR**
Mercury	**0.033**		**0.018**	**mg/Kg-dry**	1	5/12/2014 01:46 PM
METALS BY ICP-MS			**SW6020A**		Prep: SW3050B / 5/8/14	Analyst: **ML**
Arsenic	**7.2**		**2.3**	**mg/Kg-dry**	5	5/10/2014 01:35 AM
Barium	**140**		**2.3**	**mg/Kg-dry**	5	5/10/2014 01:35 AM
Cadmium	ND		0.91	mg/Kg-dry	5	5/10/2014 01:35 AM
Chromium	**9.1**		**2.3**	**mg/Kg-dry**	5	5/10/2014 01:35 AM
Copper	**18**		**2.3**	**mg/Kg-dry**	5	5/10/2014 01:35 AM
Lead	**13**		**2.3**	**mg/Kg-dry**	5	5/10/2014 01:35 AM
Nickel	**18**		**2.3**	**mg/Kg-dry**	5	5/10/2014 01:35 AM
Selenium	ND		2.3	mg/Kg-dry	5	5/10/2014 01:35 AM
Silver	ND		2.3	mg/Kg-dry	5	5/10/2014 01:35 AM
Zinc	**65**		**4.6**	**mg/Kg-dry**	5	5/10/2014 01:35 AM
SOLUBLE CATIONS FOR SAR			**SW6020A**		Prep: USDA Method 20B / 5/11/14	Analyst: **RH**
Calcium	ND		10	mg/L	20	5/12/2014 04:42 PM
Magnesium	**4.2**		**4.0**	**mg/L**	20	5/12/2014 04:42 PM
Sodium	**520**		**4.0**	**mg/L**	20	5/12/2014 04:42 PM
SODIUM ADSORPTION RATIO			**USDA H60 METHO**		Prep: USDA Method 20B / 5/11/14	Analyst: **RH**
Sodium Adsorption Ratio	**37**		**0.010**	**none**	1	5/12/2014
SEMI-VOLATILE ORGANIC COMPOUNDS			**SW8270**		Prep: SW3541 / 5/8/14	Analyst: **HL**
Acenaphthene	ND		7.6	µg/Kg-dry	1	5/9/2014 01:18 PM
Acenaphthylene	ND		7.6	µg/Kg-dry	1	5/9/2014 01:18 PM
Anthracene	ND		7.6	µg/Kg-dry	1	5/9/2014 01:18 PM
Benzo(a)anthracene	ND		7.6	µg/Kg-dry	1	5/9/2014 01:18 PM
Benzo(a)pyrene	ND		7.6	µg/Kg-dry	1	5/9/2014 01:18 PM
Benzo(b)fluoranthene	ND		7.6	µg/Kg-dry	1	5/9/2014 01:18 PM
Benzo(g,h,i)perylene	ND		7.6	µg/Kg-dry	1	5/9/2014 01:18 PM
Benzo(k)fluoranthene	ND		7.6	µg/Kg-dry	1	5/9/2014 01:18 PM
Chrysene	ND		7.6	µg/Kg-dry	1	5/9/2014 01:18 PM

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

Client: HRL Compliance Solutions, Inc
Project: Caerus Garden Gulch 1 PBV Removal 5.6.14 **Work Order:** 1405405
Sample ID: Footprint South, 37' **Lab ID:** 1405405-01
Collection Date: 5/6/2014 09:50 AM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Dibenzo(a,h)anthracene	ND		7.6	µg/Kg-dry	1	5/9/2014 01:18 PM
Fluoranthene	ND		7.6	µg/Kg-dry	1	5/9/2014 01:18 PM
Fluorene	ND		7.6	µg/Kg-dry	1	5/9/2014 01:18 PM
Indeno(1,2,3-cd)pyrene	ND		7.6	µg/Kg-dry	1	5/9/2014 01:18 PM
Naphthalene	ND		7.6	µg/Kg-dry	1	5/9/2014 01:18 PM
Pyrene	ND		7.6	µg/Kg-dry	1	5/9/2014 01:18 PM
Surr: 2-Fluorobiphenyl	*79.8*		*12-100*	*%REC*	1	5/9/2014 01:18 PM
Surr: 4-Terphenyl-d14	*116*		*25-137*	*%REC*	1	5/9/2014 01:18 PM
Surr: Nitrobenzene-d5	*67.1*		*37-107*	*%REC*	1	5/9/2014 01:18 PM
VOLATILE ORGANIC COMPOUNDS			**SW8260B**		Prep: SW5035 / 5/8/14	Analyst: **AK**
Benzene	**51**		**35**	**µg/Kg-dry**	1	5/8/2014 10:54 PM
Ethylbenzene	**870**		**35**	**µg/Kg-dry**	1	5/8/2014 10:54 PM
m,p-Xylene	ND		71	µg/Kg-dry	1	5/8/2014 10:54 PM
o-Xylene	ND		35	µg/Kg-dry	1	5/8/2014 10:54 PM
Toluene	ND		35	µg/Kg-dry	1	5/8/2014 10:54 PM
Xylenes, Total	ND		110	µg/Kg-dry	1	5/8/2014 10:54 PM
Surr: 1,2-Dichloroethane-d4	*102*		*70-130*	*%REC*	1	5/8/2014 10:54 PM
Surr: 4-Bromofluorobenzene	*106*		*70-130*	*%REC*	1	5/8/2014 10:54 PM
Surr: Dibromofluoromethane	*97.6*		*70-130*	*%REC*	1	5/8/2014 10:54 PM
Surr: Toluene-d8	*100*		*70-130*	*%REC*	1	5/8/2014 10:54 PM
ELECTRICAL CONDUCTIVITY (SAR)			**USDA H60 METHO**		Prep: USDA Method 20B / 5/11/14	Analyst: **JB**
Electrical Conductivity @ Saturation	**2.4**		**0.10**	**mmhos/cm @25**	20	5/12/2014 09:00 AM
CHROMIUM, TRIVALENT			**CALCULATION**			Analyst: **JJG**
Chromium, Trivalent	**8.9**		**0.59**	**mg/Kg-dry**	1	5/13/2014 08:00 AM
CHROMIUM, HEXAVALENT			**SW7196A**		Prep: SW3060A / 5/9/14	Analyst: **JI**
Chromium, Hexavalent	ND		0.58	mg/Kg-dry	1	5/9/2014 08:30 AM
MOISTURE			**A2540 G**			Analyst: **AT**
Moisture	**15**		**0.050**	**% of sample**	1	5/8/2014 01:17 PM
PH			**SW9045D**		Prep: EXTRACT / 5/9/14	Analyst: **AT**
pH	**8.4**			**s.u.**	1	5/9/2014 04:00 PM

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

ALS Group USA, Corp

Date: *13-May-14*

Client: HRL Compliance Solutions, Inc
Project: Caerus Garden Gulch 1 PBV Removal 5.6.14 **Work Order:** 1405405
Sample ID: South Wall, 18' **Lab ID:** 1405405-02
Collection Date: 5/6/2014 11:37 AM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID			**SW8015M**		Prep: SW3541 / 5/8/14	Analyst: **IT**
DRO (C10-C28)	**9.3**		**4.8**	**mg/Kg-dry**	1	5/9/2014 12:17 PM
Surr: 4-Terphenyl-d14	*81.2*		*39-133*	*%REC*	1	5/9/2014 12:17 PM
GASOLINE RANGE ORGANICS BY GC-FID			**SW8015**		Prep: SW5035 / 5/8/14	Analyst: **IT**
GRO (C6-C10)	ND		2.9	mg/Kg-dry	1	5/8/2014 06:51 PM
Surr: Toluene-d8	*90.2*		*50-150*	*%REC*	1	5/8/2014 06:51 PM
MERCURY BY CVAA			**SW7471**		Prep: SW7471 / 5/12/14	Analyst: **LR**
Mercury	**0.027**		**0.019**	**mg/Kg-dry**	1	5/12/2014 01:48 PM
METALS BY ICP-MS			**SW6020A**		Prep: SW3050B / 5/8/14	Analyst: **ML**
Arsenic	**8.5**		**1.9**	**mg/Kg-dry**	5	5/10/2014 01:41 AM
Barium	**270**		**1.9**	**mg/Kg-dry**	5	5/10/2014 01:41 AM
Cadmium	ND		0.75	mg/Kg-dry	5	5/10/2014 01:41 AM
Chromium	**9.0**		**1.9**	**mg/Kg-dry**	5	5/10/2014 01:41 AM
Copper	**16**		**1.9**	**mg/Kg-dry**	5	5/10/2014 01:41 AM
Lead	**11**		**1.9**	**mg/Kg-dry**	5	5/10/2014 01:41 AM
Nickel	**16**		**1.9**	**mg/Kg-dry**	5	5/10/2014 01:41 AM
Selenium	**2.1**		**1.9**	**mg/Kg-dry**	5	5/10/2014 01:41 AM
Silver	ND		1.9	mg/Kg-dry	5	5/10/2014 01:41 AM
Zinc	**59**		**3.8**	**mg/Kg-dry**	5	5/10/2014 01:41 AM
SOLUBLE CATIONS FOR SAR			**SW6020A**		Prep: USDA Method 20B / 5/11/14	Analyst: **RH**
Calcium	**400**		**10**	**mg/L**	20	5/12/2014 04:48 PM
Magnesium	**220**		**4.0**	**mg/L**	20	5/12/2014 04:48 PM
Sodium	**1,300**		**4.0**	**mg/L**	20	5/12/2014 04:48 PM
SODIUM ADSORPTION RATIO			**USDA H60 METHO**		Prep: USDA Method 20B / 5/11/14	Analyst: **RH**
Sodium Adsorption Ratio	**13**		**0.010**	**none**	1	5/12/2014
SEMI-VOLATILE ORGANIC COMPOUNDS			**SW8270**		Prep: SW3541 / 5/8/14	Analyst: **HL**
Acenaphthene	ND		7.8	µg/Kg-dry	1	5/9/2014 01:40 PM
Acenaphthylene	ND		7.8	µg/Kg-dry	1	5/9/2014 01:40 PM
Anthracene	ND		7.8	µg/Kg-dry	1	5/9/2014 01:40 PM
Benzo(a)anthracene	ND		7.8	µg/Kg-dry	1	5/9/2014 01:40 PM
Benzo(a)pyrene	ND		7.8	µg/Kg-dry	1	5/9/2014 01:40 PM
Benzo(b)fluoranthene	ND		7.8	µg/Kg-dry	1	5/9/2014 01:40 PM
Benzo(g,h,i)perylene	ND		7.8	µg/Kg-dry	1	5/9/2014 01:40 PM
Benzo(k)fluoranthene	ND		7.8	µg/Kg-dry	1	5/9/2014 01:40 PM
Chrysene	ND		7.8	µg/Kg-dry	1	5/9/2014 01:40 PM

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

Client: HRL Compliance Solutions, Inc
Project: Caerus Garden Gulch 1 PBV Removal 5.6.14 **Work Order:** 1405405
Sample ID: South Wall, 18' **Lab ID:** 1405405-02
Collection Date: 5/6/2014 11:37 AM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Dibenzo(a,h)anthracene	ND		7.8	µg/Kg-dry	1	5/9/2014 01:40 PM
Fluoranthene	ND		7.8	µg/Kg-dry	1	5/9/2014 01:40 PM
Fluorene	ND		7.8	µg/Kg-dry	1	5/9/2014 01:40 PM
Indeno(1,2,3-cd)pyrene	ND		7.8	µg/Kg-dry	1	5/9/2014 01:40 PM
Naphthalene	ND		7.8	µg/Kg-dry	1	5/9/2014 01:40 PM
Pyrene	ND		7.8	µg/Kg-dry	1	5/9/2014 01:40 PM
Surr: 2-Fluorobiphenyl	*79.1*		*12-100*	*%REC*	1	5/9/2014 01:40 PM
Surr: 4-Terphenyl-d14	*119*		*25-137*	*%REC*	1	5/9/2014 01:40 PM
Surr: Nitrobenzene-d5	*64.1*		*37-107*	*%REC*	1	5/9/2014 01:40 PM
VOLATILE ORGANIC COMPOUNDS			**SW8260B**		Prep: SW5035 / 5/8/14	Analyst: **AK**
Benzene	ND		35	µg/Kg-dry	1	5/8/2014 11:19 PM
Ethylbenzene	ND		35	µg/Kg-dry	1	5/8/2014 11:19 PM
m,p-Xylene	ND		70	µg/Kg-dry	1	5/8/2014 11:19 PM
o-Xylene	ND		35	µg/Kg-dry	1	5/8/2014 11:19 PM
Toluene	ND		35	µg/Kg-dry	1	5/8/2014 11:19 PM
Xylenes, Total	ND		110	µg/Kg-dry	1	5/8/2014 11:19 PM
Surr: 1,2-Dichloroethane-d4	*104*		*70-130*	*%REC*	1	5/8/2014 11:19 PM
Surr: 4-Bromofluorobenzene	*106*		*70-130*	*%REC*	1	5/8/2014 11:19 PM
Surr: Dibromofluoromethane	*96.4*		*70-130*	*%REC*	1	5/8/2014 11:19 PM
Surr: Toluene-d8	*100*		*70-130*	*%REC*	1	5/8/2014 11:19 PM
ELECTRICAL CONDUCTIVITY (SAR)			**USDA H60 METHO**		Prep: USDA Method 20B / 5/11/14	Analyst: **JB**
Electrical Conductivity @ Saturation	**10**		**0.050**	**mmhos/cm @25**	10	5/12/2014 09:00 AM
CHROMIUM, TRIVALENT			**CALCULATION**			Analyst: **JJG**
Chromium, Trivalent	**8.8**		**0.59**	**mg/Kg-dry**	1	5/13/2014 08:00 AM
CHROMIUM, HEXAVALENT			**SW7196A**		Prep: SW3060A / 5/9/14	Analyst: **JI**
Chromium, Hexavalent	ND		0.58	mg/Kg-dry	1	5/9/2014 08:30 AM
MOISTURE			**A2540 G**			Analyst: **AT**
Moisture	**15**		**0.050**	**% of sample**	1	5/8/2014 01:17 PM
PH			**SW9045D**		Prep: EXTRACT / 5/9/14	Analyst: **AT**
pH	**8.0**			**s.u.**	1	5/9/2014 04:00 PM

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

ALS Group USA, Corp

Date: *13-May-14*

Client: HRL Compliance Solutions, Inc
Project: Caerus Garden Gulch 1 PBV Removal 5.6.14 **Work Order:** 1405405
Sample ID: East Wall, 18' **Lab ID:** 1405405-03
Collection Date: 5/7/2014 11:05 AM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID			**SW8015M**		Prep: SW3541 / 5/8/14	Analyst: **IT**
DRO (C10-C28)	ND		4.8	mg/Kg-dry	1	5/9/2014 11:16 AM
Surr: 4-Terphenyl-d14	*77.7*		*39-133*	*%REC*	1	5/9/2014 11:16 AM
GASOLINE RANGE ORGANICS BY GC-FID			**SW8015**		Prep: SW5035 / 5/8/14	Analyst: **IT**
GRO (C6-C10)	ND		2.9	mg/Kg-dry	1	5/8/2014 07:17 PM
Surr: Toluene-d8	*107*		*50-150*	*%REC*	1	5/8/2014 07:17 PM
MERCURY BY CVAA			**SW7471**		Prep: SW7471 / 5/12/14	Analyst: **LR**
Mercury	**0.023**		**0.018**	**mg/Kg-dry**	1	5/12/2014 01:51 PM
METALS BY ICP-MS			**SW6020A**		Prep: SW3050B / 5/8/14	Analyst: **ML**
Arsenic	**10**		**2.2**	**mg/Kg-dry**	5	5/10/2014 01:47 AM
Barium	**280**		**2.2**	**mg/Kg-dry**	5	5/10/2014 01:47 AM
Cadmium	ND		0.86	mg/Kg-dry	5	5/10/2014 01:47 AM
Chromium	**8.4**		**2.2**	**mg/Kg-dry**	5	5/10/2014 01:47 AM
Copper	**15**		**2.2**	**mg/Kg-dry**	5	5/10/2014 01:47 AM
Lead	**11**		**2.2**	**mg/Kg-dry**	5	5/10/2014 01:47 AM
Nickel	**16**		**2.2**	**mg/Kg-dry**	5	5/10/2014 01:47 AM
Selenium	ND		2.2	mg/Kg-dry	5	5/10/2014 01:47 AM
Silver	ND		2.2	mg/Kg-dry	5	5/10/2014 01:47 AM
Zinc	**54**		**4.3**	**mg/Kg-dry**	5	5/10/2014 01:47 AM
SOLUBLE CATIONS FOR SAR			**SW6020A**		Prep: USDA Method 20B / 5/11/14	Analyst: **RH**
Calcium	**460**		**10**	**mg/L**	20	5/12/2014 04:55 PM
Magnesium	**380**		**4.0**	**mg/L**	20	5/12/2014 04:55 PM
Sodium	**480**		**4.0**	**mg/L**	20	5/12/2014 04:55 PM
SODIUM ADSORPTION RATIO			**USDA H60 METHO**		Prep: USDA Method 20B / 5/11/14	Analyst: **RH**
Sodium Adsorption Ratio	**4.1**		**0.010**	**none**	1	5/12/2014
SEMI-VOLATILE ORGANIC COMPOUNDS			**SW8270**		Prep: SW3541 / 5/8/14	Analyst: **HL**
Acenaphthene	ND		7.6	µg/Kg-dry	1	5/9/2014 02:02 PM
Acenaphthylene	ND		7.6	µg/Kg-dry	1	5/9/2014 02:02 PM
Anthracene	ND		7.6	µg/Kg-dry	1	5/9/2014 02:02 PM
Benzo(a)anthracene	ND		7.6	µg/Kg-dry	1	5/9/2014 02:02 PM
Benzo(a)pyrene	ND		7.6	µg/Kg-dry	1	5/9/2014 02:02 PM
Benzo(b)fluoranthene	ND		7.6	µg/Kg-dry	1	5/9/2014 02:02 PM
Benzo(g,h,i)perylene	ND		7.6	µg/Kg-dry	1	5/9/2014 02:02 PM
Benzo(k)fluoranthene	ND		7.6	µg/Kg-dry	1	5/9/2014 02:02 PM
Chrysene	ND		7.6	µg/Kg-dry	1	5/9/2014 02:02 PM

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

ALS Group USA, Corp

Date: *13-May-14*

Client: HRL Compliance Solutions, Inc
Project: Caerus Garden Gulch 1 PBV Removal 5.6.14 **Work Order:** 1405405
Sample ID: East Wall, 18' **Lab ID:** 1405405-03
Collection Date: 5/7/2014 11:05 AM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Dibenzo(a,h)anthracene	ND		7.6	µg/Kg-dry	1	5/9/2014 02:02 PM
Fluoranthene	ND		7.6	µg/Kg-dry	1	5/9/2014 02:02 PM
Fluorene	ND		7.6	µg/Kg-dry	1	5/9/2014 02:02 PM
Indeno(1,2,3-cd)pyrene	ND		7.6	µg/Kg-dry	1	5/9/2014 02:02 PM
Naphthalene	ND		7.6	µg/Kg-dry	1	5/9/2014 02:02 PM
Pyrene	ND		7.6	µg/Kg-dry	1	5/9/2014 02:02 PM
Surr: 2-Fluorobiphenyl	*69.4*		*12-100*	*%REC*	1	5/9/2014 02:02 PM
Surr: 4-Terphenyl-d14	*109*		*25-137*	*%REC*	1	5/9/2014 02:02 PM
Surr: Nitrobenzene-d5	*59.5*		*37-107*	*%REC*	1	5/9/2014 02:02 PM
VOLATILE ORGANIC COMPOUNDS			**SW8260B**		Prep: SW5035 / 5/8/14	Analyst: **AK**
Benzene	ND		35	µg/Kg-dry	1	5/8/2014 11:44 PM
Ethylbenzene	ND		35	µg/Kg-dry	1	5/8/2014 11:44 PM
m,p-Xylene	ND		70	µg/Kg-dry	1	5/8/2014 11:44 PM
o-Xylene	ND		35	µg/Kg-dry	1	5/8/2014 11:44 PM
Toluene	ND		35	µg/Kg-dry	1	5/8/2014 11:44 PM
Xylenes, Total	ND		110	µg/Kg-dry	1	5/8/2014 11:44 PM
Surr: 1,2-Dichloroethane-d4	*103*		*70-130*	*%REC*	1	5/8/2014 11:44 PM
Surr: 4-Bromofluorobenzene	*106*		*70-130*	*%REC*	1	5/8/2014 11:44 PM
Surr: Dibromofluoromethane	*97.6*		*70-130*	*%REC*	1	5/8/2014 11:44 PM
Surr: Toluene-d8	*98.9*		*70-130*	*%REC*	1	5/8/2014 11:44 PM
ELECTRICAL CONDUCTIVITY (SAR)			**USDA H60 METHO**		Prep: USDA Method 20B / 5/11/14	Analyst: **JB**
Electrical Conductivity @ Saturation	**7.5**		**0.050**	**mmhos/cm @25**	10	5/12/2014 09:00 AM
CHROMIUM, TRIVALENT			**CALCULATION**			Analyst: **JJG**
Chromium, Trivalent	**7.9**		**0.59**	**mg/Kg-dry**	1	5/13/2014 08:00 AM
CHROMIUM, HEXAVALENT			**SW7196A**		Prep: SW3060A / 5/9/14	Analyst: **JI**
Chromium, Hexavalent	ND		0.59	mg/Kg-dry	1	5/9/2014 08:30 AM
MOISTURE			**A2540 G**			Analyst: **AT**
Moisture	**15**		**0.050**	**% of sample**	1	5/8/2014 03:33 PM
PH			**SW9045D**		Prep: EXTRACT / 5/9/14	Analyst: **AT**
pH	**8.0**			**s.u.**	1	5/9/2014 04:00 PM

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

QC BATCH REPORT

Batch ID: **58414** Instrument ID **GC8** Method: **SW8015M**

MBLK Sample ID: **DBLKS1-58414-58414** Units: **mg/Kg** Analysis Date: **5/9/2014 09:16 AM**

Client ID: Run ID: **GC8_140509A** SeqNo: **2753260** Prep Date: **5/8/2014** 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	*1.46*	0	*1.667*	0	*87.6*	*39-133*	0			

LCS Sample ID: **DLCSS1-58414-58414** Units: **mg/Kg** Analysis Date: **5/9/2014 09:46 AM**

Client ID: Run ID: **GC8_140509A** SeqNo: **2753261** Prep Date: **5/8/2014** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	134.2	4.2	166.7	0	80.5	61-109	0			
Surr: 4-Terphenyl-d14	*1.341*	0	*1.667*	0	*80.5*	*39-133*	0			

MS Sample ID: **1405405-03B MS** Units: **mg/Kg** Analysis Date: **5/9/2014 10:16 AM**

Client ID: **East Wall, 18'** Run ID: **GC8_140509A** SeqNo: **2753262** Prep Date: **5/8/2014** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	269.9	8.2	328.4	0	82.2	48-110	0			
Surr: 4-Terphenyl-d14	*2.601*	0	*3.284*	0	*79.2*	*39-133*	0			

MSD Sample ID: **1405405-03B MSD** Units: **mg/Kg** Analysis Date: **5/9/2014 10:46 AM**

Client ID: **East Wall, 18'** Run ID: **GC8_140509A** SeqNo: **2753263** Prep Date: **5/8/2014** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	263.5	8.2	329.9	0	79.9	48-110	269.9	2.4	30	
Surr: 4-Terphenyl-d14	*2.661*	0	*3.299*	0	*80.7*	*39-133*	2.601	*2.28*	*30*	

The following samples were analyzed in this batch: 1405405-01B 1405405-02B 1405405-03B

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

Client: HRL Compliance Solutions, Inc
Work Order: 1405405
Project: Caerus Garden Gulch 1 PBV Removal 5.6.14

QC BATCH REPORT

Batch ID: **58397** Instrument ID **GC9** Method: **SW8015**

MBLK Sample ID: **MBLK-58397-58397** Units: **µg/Kg** Analysis Date: **5/8/2014 05:59 PM**
Client ID: Run ID: **GC9_140508A** SeqNo: **2751686** Prep Date: **5/8/2014** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	ND	2,500								
Surr: Toluene-d8	*4929*	0	*5000*	0	*98.6*	*50-150*	0			

LCS Sample ID: **LCS-58397-58397** Units: **µg/Kg** Analysis Date: **5/8/2014 05:33 PM**
Client ID: Run ID: **GC9_140508A** SeqNo: **2751685** Prep Date: **5/8/2014** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	462200	2,500	500000	0	92.4	70-130	0			
Surr: Toluene-d8	*4604*	0	*5000*	0	*92.1*	*50-150*	0			

MS Sample ID: **1405405-01A MS** Units: **µg/Kg** Analysis Date: **5/8/2014 08:38 PM**
Client ID: **Footprint South, 37'** Run ID: **GC9_140508A** SeqNo: **2751691** Prep Date: **5/8/2014** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	487900	2,500	500000	0	97.6	70-130	0			
Surr: Toluene-d8	*4357*	0	*5000*	0	*87.1*	*50-150*	0			

MSD Sample ID: **1405405-01A MSD** Units: **µg/Kg** Analysis Date: **5/8/2014 09:04 PM**
Client ID: **Footprint South, 37'** Run ID: **GC9_140508A** SeqNo: **2751692** Prep Date: **5/8/2014** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	488500	2,500	500000	0	97.7	70-130	487900	0.115	30	
Surr: Toluene-d8	*4274*	0	*5000*	0	*85.5*	*50-150*	4357	*1.91*	*30*	

The following samples were analyzed in this batch: 1405405-01A 1405405-02A 1405405-03A

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

Client: HRL Compliance Solutions, Inc
Work Order: 1405405
Project: Caerus Garden Gulch 1 PBV Removal 5.6.14

QC BATCH REPORT

Batch ID: **58476** Instrument ID **HG1** Method: **SW7471**

MBLK Sample ID: **MBLK-58476-58476** Units: **mg/Kg** Analysis Date: **5/12/2014 01:41 PM**
Client ID: Run ID: **HG1_140512A** SeqNo: **2756262** Prep Date: **5/12/2014** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.005833	0.020								J

LCS Sample ID: **LCS-58476-58476** Units: **mg/Kg** Analysis Date: **5/12/2014 01:44 PM**
Client ID: Run ID: **HG1_140512A** SeqNo: **2756263** Prep Date: **5/12/2014** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.1844	0.020	0.1665	0	111	80-120	0			

MS Sample ID: **1405405-03BMS** Units: **mg/Kg** Analysis Date: **5/12/2014 01:53 PM**
Client ID: **East Wall, 18'** Run ID: **HG1_140512A** SeqNo: **2756269** Prep Date: **5/12/2014** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.1489	0.015	0.1235	0.01938	105	75-125	0			

MSD Sample ID: **1405405-03BMSD** Units: **mg/Kg** Analysis Date: **5/12/2014 01:55 PM**
Client ID: **East Wall, 18'** Run ID: **HG1_140512A** SeqNo: **2756271** Prep Date: **5/12/2014** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.1473	0.015	0.1276	0.01938	100	75-125	0.1489	1.14	35	

The following samples were analyzed in this batch: 1405405-01B 1405405-02B 1405405-03B

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

Client: HRL Compliance Solutions, Inc
Work Order: 1405405
Project: Caerus Garden Gulch 1 PBV Removal 5.6.14

QC BATCH REPORT

Batch ID: **58419** Instrument ID **ICPMS1** Method: **SW6020A**

MBLK Sample ID: **MBLK-58419-58419** Units: **mg/Kg** Analysis Date: **5/9/2014 10:06 PM**
Client ID: Run ID: **ICPMS1_140509A** SeqNo: **2754296** Prep Date: **5/8/2014** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	ND	0.25								
Barium	0.023	0.25								J
Cadmium	0.001815	0.10								J
Chromium	ND	0.25								
Copper	ND	0.25								
Lead	0.003036	0.25								J
Nickel	ND	0.25								
Selenium	ND	0.25								
Silver	ND	0.25								
Zinc	ND	0.50								

LCS Sample ID: **LCS-58419-58419** Units: **mg/Kg** Analysis Date: **5/9/2014 10:12 PM**
Client ID: Run ID: **ICPMS1_140509A** SeqNo: **2754297** Prep Date: **5/8/2014** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	4.384	0.25	5	0	87.7	80-120	0			
Barium	4.69	0.25	5	0	93.8	80-120	0			
Cadmium	4.494	0.10	5	0	89.9	80-120	0			
Chromium	4.948	0.25	5	0	99	80-120	0			
Copper	4.846	0.25	5	0	96.9	80-120	0			
Lead	4.46	0.25	5	0	89.2	80-120	0			
Nickel	4.934	0.25	5	0	98.7	80-120	0			
Selenium	4.326	0.25	5	0	86.5	80-120	0			
Silver	4.848	0.25	5	0	97	80-120	0			
Zinc	4.464	0.50	5	0	89.3	80-120	0			

MS Sample ID: **1405286-04BMS** Units: **mg/Kg** Analysis Date: **5/9/2014 10:24 PM**
Client ID: Run ID: **ICPMS1_140509A** SeqNo: **2754299** Prep Date: **5/8/2014** DF: **5**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	14.4	2.0	7.8	6.729	98.4	75-125	0			
Barium	78.55	2.0	7.8	66.82	150	75-125	0			SO
Cadmium	7.789	0.78	7.8	0.2562	96.6	75-125	0			
Chromium	24.07	2.0	7.8	13.84	131	75-125	0			S
Copper	26.84	2.0	7.8	19.17	98.3	75-125	0			
Lead	17.88	2.0	7.8	9.457	108	75-125	0			
Nickel	34.38	2.0	7.8	25.45	114	75-125	0			
Selenium	8.354	2.0	7.8	1.828	83.7	75-125	0			
Silver	7.211	2.0	7.8	0.07771	91.5	75-125	0			
Zinc	60.06	3.9	7.8	65.39	-68.3	75-125	0			SO

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

Client: HRL Compliance Solutions, Inc
Work Order: 1405405
Project: Caerus Garden Gulch 1 PBV Removal 5.6.14

QC BATCH REPORT

Batch ID: **58419** Instrument ID **ICPMS1** Method: **SW6020A**

MSD Sample ID: **1405286-04BMSD** Units: **mg/Kg** Analysis Date: **5/9/2014 10:30 PM**
Client ID: Run ID: **ICPMS1_140509A** SeqNo: **2754300** Prep Date: **5/8/2014** DF: **5**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	25.47	2.0	7.874	6.729	238	75-125	14.4	55.5	25	SR
Barium	65.47	2.0	7.874	66.82	-17.1	75-125	78.55	18.2	25	SO
Cadmium	7.661	0.79	7.874	0.2562	94	75-125	7.789	1.65	25	
Chromium	24.05	2.0	7.874	13.84	130	75-125	24.07	0.0693	25	S
Copper	27.99	2.0	7.874	19.17	112	75-125	26.84	4.2	25	
Lead	16.77	2.0	7.874	9.457	92.8	75-125	17.88	6.43	25	
Nickel	32.07	2.0	7.874	25.45	84	75-125	34.38	6.96	25	
Selenium	8.803	2.0	7.874	1.828	88.6	75-125	8.354	5.23	25	
Silver	7.138	2.0	7.874	0.07771	89.7	75-125	7.211	1.03	25	
Zinc	57.2	3.9	7.874	65.39	-104	75-125	60.06	4.87	25	SO

The following samples were analyzed in this batch: 1405405-01B 1405405-02B 1405405-03B

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

Client: HRL Compliance Solutions, Inc
Work Order: 1405405
Project: Caerus Garden Gulch 1 PBV Removal 5.6.14

QC BATCH REPORT

Batch ID: **58428** Instrument ID **ICPMS2** Method: **SW6020A**

DUP Sample ID: **1405436-01CDUP** Units: **mg/L** Analysis Date: **5/12/2014 05:36 PM**
Client ID: Run ID: **ICPMS2_140512A** SeqNo: **2756829** Prep Date: **5/11/2014** DF: **20**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	8.558	10	0	0	0	0-0	9.802	0		J
Magnesium	11.67	4.0	0	0	0	0-0	12	2.82		
Sodium	575.6	4.0	0	0	0	0-0	570.4	0.908		

DUP Sample ID: **1405436-01CDUP** Units: **none** Analysis Date: **5/12/2014**
Client ID: Run ID: **SAR_140512A** SeqNo: **2757592** Prep Date: **5/11/2014** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sodium Adsorption Ratio	30.06	0.010	0	0	0		28.87	4.03	50	

The following samples were analyzed in this batch: 1405405-01C 1405405-02C 1405405-03C

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

Client: HRL Compliance Solutions, Inc
Work Order: 1405405
Project: Caerus Garden Gulch 1 PBV Removal 5.6.14

QC BATCH REPORT

Batch ID: **58396** Instrument ID **SVMS7** Method: **SW8270**

MBLK Sample ID: **SBLKS1-58396-58396** Units: **µg/Kg** Analysis Date: **5/9/2014 12:23 PM**
Client ID: Run ID: **SVMS7_140509A** SeqNo: **2753270** Prep Date: **5/8/2014** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	ND	6.7								
Acenaphthylene	ND	6.7								
Anthracene	ND	6.7								
Benzo(a)anthracene	ND	6.7								
Benzo(a)pyrene	ND	6.7								
Benzo(b)fluoranthene	ND	6.7								
Benzo(g,h,i)perylene	ND	6.7								
Benzo(k)fluoranthene	ND	6.7								
Chrysene	ND	6.7								
Dibenzo(a,h)anthracene	ND	6.7								
Fluoranthene	ND	6.7								
Fluorene	ND	6.7								
Indeno(1,2,3-cd)pyrene	ND	6.7								
Naphthalene	ND	6.7								
Pyrene	ND	6.7								
Surr: 2-Fluorobiphenyl	*1264*	0	*1667*	0	*75.9*	*12-100*	0			
Surr: 4-Terphenyl-d14	*1947*	0	*1667*	0	*117*	*25-137*	0			
Surr: Nitrobenzene-d5	*1078*	0	*1667*	0	*64.7*	*37-107*	0			

LCS Sample ID: **SLCSS1-58396-58396** Units: **µg/Kg** Analysis Date: **5/9/2014 12:02 PM**
Client ID: Run ID: **SVMS7_140509A** SeqNo: **2753269** Prep Date: **5/8/2014** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	429.3	6.7	666.7	0	64.4	45-110	0			
Acenaphthylene	476.7	6.7	666.7	0	71.5	45-105	0			
Anthracene	515.3	6.7	666.7	0	77.3	55-105	0			
Benzo(a)anthracene	587.7	6.7	666.7	0	88.1	50-110	0			
Benzo(a)pyrene	561.7	6.7	666.7	0	84.2	50-110	0			
Benzo(b)fluoranthene	585.7	6.7	666.7	0	87.8	45-115	0			
Benzo(g,h,i)perylene	543.7	6.7	666.7	0	81.5	40-125	0			
Benzo(k)fluoranthene	614	6.7	666.7	0	92.1	45-115	0			
Chrysene	587.3	6.7	666.7	0	88.1	55-110	0			
Dibenzo(a,h)anthracene	524.7	6.7	666.7	0	78.7	40-125	0			
Fluoranthene	522	6.7	666.7	0	78.3	55-115	0			
Fluorene	417	6.7	666.7	0	62.5	50-110	0			
Indeno(1,2,3-cd)pyrene	574.7	6.7	666.7	0	86.2	40-120	0			
Naphthalene	440.7	6.7	666.7	0	66.1	40-105	0			
Pyrene	683	6.7	666.7	0	102	45-125	0			
Surr: 2-Fluorobiphenyl	*1205*	0	*1667*	0	*72.3*	*12-100*	0			
Surr: 4-Terphenyl-d14	*2106*	0	*1667*	0	*126*	*25-137*	0			
Surr: Nitrobenzene-d5	*1164*	0	*1667*	0	*69.9*	*37-107*	0			

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

Client: HRL Compliance Solutions, Inc
Work Order: 1405405
Project: Caerus Garden Gulch 1 PBV Removal 5.6.14

QC BATCH REPORT

Batch ID: **58396** Instrument ID **SVMS7** Method: **SW8270**

MS Sample ID: **1405286-02B MS** Units: **µg/Kg** Analysis Date: **5/9/2014 10:29 PM**
Client ID: Run ID: **SVMS7_140509A** SeqNo: **2756064** Prep Date: **5/8/2014** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	717.1	13	1260	0	56.9	45-110	0			
Acenaphthylene	957.2	13	1260	0	75.9	45-105	0			
Anthracene	968.5	13	1260	0	76.8	55-105	0			
Benzo(a)anthracene	1100	13	1260	0	87.2	50-110	0			
Benzo(a)pyrene	1069	13	1260	0	84.8	50-110	0			
Benzo(b)fluoranthene	1045	13	1260	0	82.9	45-115	0			
Benzo(g,h,i)perylene	1129	13	1260	0	89.5	40-125	0			
Benzo(k)fluoranthene	1121	13	1260	0	88.9	45-115	0			
Chrysene	1082	13	1260	0	85.8	55-110	0			
Dibenzo(a,h)anthracene	1164	13	1260	0	92.4	40-125	0			
Fluoranthene	1057	13	1260	0	83.8	55-115	0			
Fluorene	888.5	13	1260	0	70.5	50-110	0			
Indeno(1,2,3-cd)pyrene	1229	13	1260	0	97.5	40-120	0			
Naphthalene	951.5	13	1260	0	75.5	40-105	0			
Pyrene	1146	13	1260	0	90.9	45-125	0			
Surr: 2-Fluorobiphenyl	*2655*	0	*3151*	0	*84.3*	*12-100*	0			
Surr: 4-Terphenyl-d14	*3680*	0	*3151*	0	*117*	*25-137*	0			
Surr: Nitrobenzene-d5	*3233*	0	*3151*	0	*103*	*37-107*	0			

MSD Sample ID: **1405286-02B MSD** Units: **µg/Kg** Analysis Date: **5/9/2014 10:50 PM**
Client ID: Run ID: **SVMS7_140509A** SeqNo: **2756066** Prep Date: **5/8/2014** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	814.9	13	1326	0	61.4	45-110	717.1	12.8	30	
Acenaphthylene	935	13	1326	0	70.5	45-105	957.2	2.35	30	
Anthracene	1042	13	1326	0	78.6	55-105	968.5	7.35	30	
Benzo(a)anthracene	1182	13	1326	0	89.1	50-110	1100	7.19	30	
Benzo(a)pyrene	1110	13	1326	0	83.7	50-110	1069	3.79	30	
Benzo(b)fluoranthene	1129	13	1326	0	85.1	45-115	1045	7.71	30	
Benzo(g,h,i)perylene	1209	13	1326	0	91.1	40-125	1129	6.87	30	
Benzo(k)fluoranthene	1134	13	1326	0	85.5	45-115	1121	1.14	30	
Chrysene	1154	13	1326	0	87	55-110	1082	6.49	30	
Dibenzo(a,h)anthracene	1153	13	1326	0	86.9	40-125	1164	0.98	30	
Fluoranthene	1013	13	1326	0	76.3	55-115	1057	4.27	30	
Fluorene	938.3	13	1326	0	70.7	50-110	888.5	5.45	30	
Indeno(1,2,3-cd)pyrene	1276	13	1326	0	96.2	40-120	1229	3.76	30	
Naphthalene	850.1	13	1326	0	64.1	40-105	951.5	11.3	30	
Pyrene	1261	13	1326	0	95	45-125	1146	9.5	30	
Surr: 2-Fluorobiphenyl	*2697*	0	*3315*	0	*81.3*	*12-100*	2655	*1.55*	*40*	
Surr: 4-Terphenyl-d14	*3973*	0	*3315*	0	*120*	*25-137*	3680	*7.67*	*40*	
Surr: Nitrobenzene-d5	*2848*	0	*3315*	0	*85.9*	*37-107*	3233	*12.7*	*40*	

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

Client: HRL Compliance Solutions, Inc
Work Order: 1405405
Project: Caerus Garden Gulch 1 PBV Removal 5.6.14

QC BATCH REPORT

Batch ID: **58396** Instrument ID **SVMS7** Method: **SW8270**

The following samples were analyzed in this batch:	1405405-01B	1405405-02B	1405405-03B

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

Client: HRL Compliance Solutions, Inc
Work Order: 1405405
Project: Caerus Garden Gulch 1 PBV Removal 5.6.14

QC BATCH REPORT

Batch ID: **58386** Instrument ID **VMS5** Method: **SW8260B**

MBLK Sample ID: **MBLK-58386-58386** Units: **µg/Kg** Analysis Date: **5/8/2014 11:43 AM**
Client ID: Run ID: **VMS5_140508A** SeqNo: **2751304** Prep Date: **5/8/2014** 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								
m,p-Xylene	ND	60								
o-Xylene	ND	30								
Toluene	ND	30								
Xylenes, Total	ND	90								
Surr: 1,2-Dichloroethane-d4	*1050*	0	*1000*	0	*105*	*70-130*	0			
Surr: 4-Bromofluorobenzene	*979.5*	0	*1000*	0	*98*	*70-130*	0			
Surr: Dibromofluoromethane	*1003*	0	*1000*	0	*100*	*70-130*	0			
Surr: Toluene-d8	*1012*	0	*1000*	0	*101*	*70-130*	0			

LCS Sample ID: **LCS-58386-58386** Units: **µg/Kg** Analysis Date: **5/8/2014 10:26 AM**
Client ID: Run ID: **VMS5_140508A** SeqNo: **2751303** Prep Date: **5/8/2014** 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	1032	30	1000	0	103	75-125	0			
m,p-Xylene	2070	60	2000	0	104	80-125	0			
o-Xylene	1048	30	1000	0	105	75-125	0			
Toluene	1022	30	1000	0	102	70-125	0			
Xylenes, Total	3118	90	3000	0	104	75-125	0			
Surr: 1,2-Dichloroethane-d4	*1022*	0	*1000*	0	*102*	*70-130*	0			
Surr: 4-Bromofluorobenzene	*1000*	0	*1000*	0	*100*	*70-130*	0			
Surr: Dibromofluoromethane	*1016*	0	*1000*	0	*102*	*70-130*	0			
Surr: Toluene-d8	*1006*	0	*1000*	0	*101*	*70-130*	0			

MS Sample ID: **1405314-23A MS** Units: **µg/Kg** Analysis Date: **5/10/2014 09:36 PM**
Client ID: Run ID: **VMS6_140509B** SeqNo: **2755833** Prep Date: **5/8/2014** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	962.5	30	1000	0	96.2	75-125	0			
Ethylbenzene	963.5	30	1000	0	96.4	75-125	0			
m,p-Xylene	1926	60	2000	0	96.3	80-125	0			
o-Xylene	979.5	30	1000	0	98	75-125	0			
Toluene	959.5	30	1000	0	96	70-125	0			
Xylenes, Total	2905	90	3000	0	96.8	75-125	0			
Surr: 1,2-Dichloroethane-d4	*976*	0	*1000*	0	*97.6*	*70-130*	0			
Surr: 4-Bromofluorobenzene	*997.5*	0	*1000*	0	*99.8*	*70-130*	0			
Surr: Dibromofluoromethane	*993*	0	*1000*	0	*99.3*	*70-130*	0			
Surr: Toluene-d8	*1003*	0	*1000*	0	*100*	*70-130*	0			

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

Client: HRL Compliance Solutions, Inc
Work Order: 1405405
Project: Caerus Garden Gulch 1 PBV Removal 5.6.14

QC BATCH REPORT

Batch ID: **58386** Instrument ID **VMS5** Method: **SW8260B**

MSD	Sample ID: **1405314-23A MSD**				Units: **µg/Kg**			Analysis Date: **5/10/2014 10:01 PM**		
Client ID:		Run ID: **VMS6_140509B**			SeqNo: **2755834**		Prep Date: **5/8/2014**		DF: **1**	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	912.5	30	1000	0	91.2	75-125	962.5	5.33	30	
Ethylbenzene	898.5	30	1000	0	89.8	75-125	963.5	6.98	30	
m,p-Xylene	1808	60	2000	0	90.4	80-125	1926	6.27	30	
o-Xylene	925	30	1000	0	92.5	75-125	979.5	5.72	30	
Toluene	888	30	1000	0	88.8	70-125	959.5	7.74	30	
Xylenes, Total	2734	90	3000	0	91.1	75-125	2905	6.08	30	
Surr: 1,2-Dichloroethane-d4	*994.5*	0	*1000*	0	*99.4*	*70-130*	976	*1.88*	*30*	
Surr: 4-Bromofluorobenzene	*1006*	0	*1000*	0	*101*	*70-130*	997.5	*0.898*	*30*	
Surr: Dibromofluoromethane	*1006*	0	*1000*	0	*101*	*70-130*	993	*1.3*	*30*	
Surr: Toluene-d8	*984.5*	0	*1000*	0	*98.4*	*70-130*	1003	*1.86*	*30*	

The following samples were analyzed in this batch: 1405405-01A 1405405-02A 1405405-03A

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

Client: HRL Compliance Solutions, Inc
Work Order: 1405405
Project: Caerus Garden Gulch 1 PBV Removal 5.6.14

QC BATCH REPORT

Batch ID: **58425** Instrument ID **WETCHEM** Method: **SW7196A**

MBLK Sample ID: **MBLK-58425-58425** Units: **mg/Kg** Analysis Date: **5/9/2014 08:30 AM**
Client ID: Run ID: **WETCHEM_140509A** SeqNo: **2752954** Prep Date: **5/9/2014** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	ND	0.50								

LCS Sample ID: **LCS-58425-58425** Units: **mg/Kg** Analysis Date: **5/9/2014 08:30 AM**
Client ID: Run ID: **WETCHEM_140509A** SeqNo: **2752955** Prep Date: **5/9/2014** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	1.922	0.49	1.961	0	98	80-120	0			

MS Sample ID: **1405405-03BMS** Units: **mg/Kg** Analysis Date: **5/9/2014 08:30 AM**
Client ID: **East Wall, 18'** Run ID: **WETCHEM_140509A** SeqNo: **2752959** Prep Date: **5/9/2014** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	1.556	0.50	2	0.436	56	75-125	0			S

MS Sample ID: **1405405-03BMSI** Units: **mg/Kg** Analysis Date: **5/9/2014 08:30 AM**
Client ID: **East Wall, 18'** Run ID: **WETCHEM_140509A** SeqNo: **2752961** Prep Date: **5/9/2014** DF: **100**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	1314	50	1294	0.436	101	75-125	0			

MSD Sample ID: **1405405-03BMSD** Units: **mg/Kg** Analysis Date: **5/9/2014 08:30 AM**
Client ID: **East Wall, 18'** Run ID: **WETCHEM_140509A** SeqNo: **2752960** Prep Date: **5/9/2014** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	1.504	0.50	2	0.436	53.4	75-125	1.504	0	20	S

The following samples were analyzed in this batch: 1405405-01B 1405405-02B 1405405-03B

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

Client: HRL Compliance Solutions, Inc
Work Order: 1405405
Project: Caerus Garden Gulch 1 PBV Removal 5.6.14

QC BATCH REPORT

Batch ID: **58428** Instrument ID **WETCHEM** Method: **USDA H60 Method**

Dup Sample ID: **1405436-01C DUP** Units: **mmhos/cm @25°C** Analysis Date: **5/12/2014 09:00 AM**

Client ID: Run ID: **WETCHEM_140512B** SeqNo: **2754793** Prep Date: **5/11/2014** DF: **10**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Electrical Conductivity @ Saturation	3.23	0.050	0	0	0		3.02	6.72	50	

The following samples were analyzed in this batch: 1405405-01C 1405405-02C 1405405-03C

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

Client: HRL Compliance Solutions, Inc
Work Order: 1405405
Project: Caerus Garden Gulch 1 PBV Removal 5.6.14

QC BATCH REPORT

Batch ID: **58460** Instrument ID **WETCHEM** Method: **SW9045D**

LCS Sample ID: **LCS-58460-58460** Units: **s.u.** Analysis Date: **5/9/2014 04:00 PM**
Client ID: Run ID: **WETCHEM_140509G** SeqNo: **2753474** Prep Date: **5/9/2014** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	4.08	0	4	0	102	90-110	0			

DUP Sample ID: **1405320-01A DUP** Units: **s.u.** Analysis Date: **5/9/2014 04:00 PM**
Client ID: Run ID: **WETCHEM_140509G** SeqNo: **2753476** Prep Date: **5/9/2014** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	5.39	0	0	0	0	0-0	5.36	0.558	20	

DUP Sample ID: **1405433-01B DUP** Units: **s.u.** Analysis Date: **5/9/2014 04:00 PM**
Client ID: Run ID: **WETCHEM_140509G** SeqNo: **2753493** Prep Date: **5/9/2014** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	8.64	0	0	0	0	0-0	8.59	0.58	20	

The following samples were analyzed in this batch: 1405405-01B 1405405-02B 1405405-03B

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

Client: HRL Compliance Solutions, Inc
Work Order: 1405405
Project: Caerus Garden Gulch 1 PBV Removal 5.6.14

QC BATCH REPORT

Batch ID: **R140448** Instrument ID **MOIST** Method: **A2540 G**

MBLK Sample ID: **WBLKS-R140448** Units: **% of sample** Analysis Date: **5/8/2014 01:17 PM**
Client ID: Run ID: **MOIST_140508D** SeqNo: **2752953** 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-R140448** Units: **% of sample** Analysis Date: **5/8/2014 01:17 PM**
Client ID: Run ID: **MOIST_140508D** SeqNo: **2752952** 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: **1405363-02A DUP** Units: **% of sample** Analysis Date: **5/8/2014 01:17 PM**
Client ID: Run ID: **MOIST_140508D** SeqNo: **2752925** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	31.2	0.050	0	0	0	0-0	32.13	2.94	20	

DUP Sample ID: **1405366-10B DUP** Units: **% of sample** Analysis Date: **5/8/2014 01:17 PM**
Client ID: Run ID: **MOIST_140508D** SeqNo: **2752942** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	15.98	0.050	0	0	0	0-0	15.15	5.33	20	

The following samples were analyzed in this batch: 1405405-01B 1405405-02B

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

Client: HRL Compliance Solutions, Inc
Work Order: 1405405
Project: Caerus Garden Gulch 1 PBV Removal 5.6.14

QC BATCH REPORT

Batch ID: **R140450** Instrument ID **MOIST** Method: **A2540 G**

MBLK	Sample ID: **WBLKS-R140450**				Units: **% of sample**			Analysis Date: **5/8/2014 03:33 PM**		
Client ID:	Run ID: **MOIST_140508E**				SeqNo: **2752978**		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-R140450**				Units: **% of sample**			Analysis Date: **5/8/2014 03:33 PM**		
Client ID:	Run ID: **MOIST_140508E**				SeqNo: **2752977**		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: **1405405-03B DUP**				Units: **% of sample**			Analysis Date: **5/8/2014 03:33 PM**		
Client ID: **East Wall, 18'**	Run ID: **MOIST_140508E**				SeqNo: **2752976**		Prep Date:		DF: **1**	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	14.8	0.050	0	0	0	0-0	14.84	0.27	20	

The following samples were analyzed in this batch: 1405405-03B

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

ALS Laboratory Group

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

Chain-of-Custody

Form 202r8

WORKORDER # 1405405

PAGE 1 of 1

DISPOSAL (By Lab) or Return to Client

PROJECT NAME	CAERUS GARDEN GULCH 1 PBV REMOVAL	SAMPLER	Casey Richardson
PROJECT No.		SITE ID	
		EDD FORMAT	
		PURCHASE ORDER	
COMPANY NAME	HCSI	BILL TO COMPANY	Caerus Piceance LLC
SEND REPORT TO	MARK MUMBY	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	crichardson@hrlcomp.com	E-MAIL	gwinters@caerusoilandgas.com

DATE 5.7.14

TURNAROUND 24 HR

Lab ID	Field ID	Matrix	Sample Date	Sample Time	# Bottles	Pres.	QC	DRO	GRO	BTEX	TOTAL METALS - TABEL 910-1	SEMI VOLS - PAH	SAR	EC	pH
01	FOOTPRINT SOUTH, 37'	SOIL	5.6.14	950	3	8		X	X	X	X	X	X	X	X
02	SOUTH WALL, 18'	"	5-6-14	1137	4	8		X	X	X	X	X	X	X	X
03	EAST WALL, 18'		5.7.14	1105	3	8		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:

5.0C

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	5-7-14	1405
RECEIVED BY			5-7-14	1905
RELINQUISHED BY			5-7-14	1600
RECEIVED BY		J. RIBAR	5/8/14	1445
RELINQUISHED BY				
RECEIVED BY				

ALS Group USA, Corp

Sample Receipt Checklist

Client Name: **HRL** Date/Time Received: **08-May-14 14:45**

Work Order: **1405405** Received by: **JR**

Checklist completed by Joseph Ribar (eSignature) 08-May-14 (Date) Reviewed by: Ann Preston (eSignature) 09-May-14 (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 ☐	
Sample(s) received on ice?	Yes ☑	No ☐	
Temperature(s)/Thermometer(s):	5.0c		
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:	5/8/2014 2:51:59 PM		
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: (616) 399-6070
Sample Receiving
ALS Laboratory Group
3352 128th Avenue

Holland, MI 49424

Origin ID: GRRA

FedEx Express

Ship Date: 07MAY14
ActWgt: 52.0 LB
CAD: 2284940/INET3400

Dims: 24 X 15 X 15 IN

Delivery Address Bar Code

Ref # 050714-1
Invoice #
PO #
Dept #

Parachute

BILL SENDER

SHIP TO: (616) 399-6070

sample receiving
ALS Laboratory Group
3352 128TH AVE

HOLLAND, MI 49424

THU - 08 MAY 10:30A
PRIORITY OVERNIGHT

TRK# 7987 8883 2183

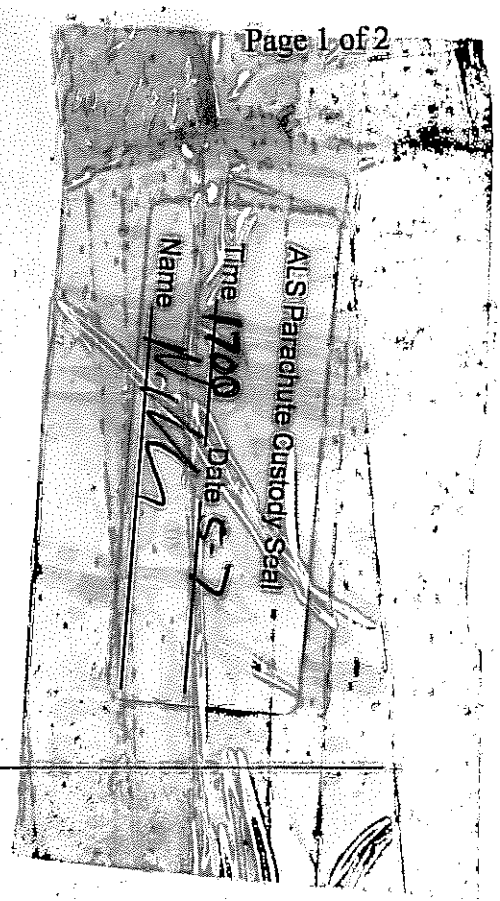
0201

49424
MI-US

68 GRRA

GRR

/templates/components/dotcom_label_contents/FoldInstr/en/Folding_instructions.html loading...
/templates/components/dotcom_label_contents/WarningsOriginalLabel/en/Folding_warning.html loading...
/templates/components/dotcom_label_contents/TnCDom/us/en/TC_dom.html loading...



508

03-Sep-2014

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

Re: **Caerus Garden Gulch 1 8.25.14** Work Order: **14081396**

Dear Casey,

ALS Environmental received 2 samples on 27-Aug-2014 09:30 AM for the analyses presented in the following report.

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

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

The total number of pages in this report is 21.

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: 03-Sep-14

Client: HRL Compliance Solutions, Inc
Project: Caerus Garden Gulch 1 8.25.14
Work Order: **14081396**

Work Order Sample Summary

Lab Samp ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
14081396-01	West Composite	Soil		8/25/2014 09:45	8/27/2014 09:30	☐
14081396-02	East Composite	Soil		8/25/2014 10:05	8/27/2014 09:30	☐

ALS Group USA, Corp

Date: 03-Sep-14

Client: HRL Compliance Solutions, Inc
Project: Caerus Garden Gulch 1 8.25.14
Work Order: 14081396

Case Narrative

Batch 62130 MS/MSD data for Metals is not related to this project's samples. No data requires qualification.

ALS Group USA, Corp

Date: 03-Sep-14

Client: HRL Compliance Solutions, Inc
Project: Caerus Garden Gulch 1 8.25.14
WorkOrder: **14081396**

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
TNTC	Too Numerous To Count
A	APHA Standard Methods
D	ASTM
E	EPA
SW	SW-846 Update III

Units Reported	Description
% of sample	Percent of Sample
°F	Degrees Fahrenheit
µg/Kg-dry	Micrograms per Kilogram Dry Weight
mg/Kg-dry	Milligrams per Kilogram Dry Weight
none	

ALS Group USA, Corp

Date: *03-Sep-14*

Client: HRL Compliance Solutions, Inc
Project: Caerus Garden Gulch 1 8.25.14 **Work Order:** 14081396
Sample ID: West Composite **Lab ID:** 14081396-01
Collection Date: 8/25/2014 09:45 AM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID			**SW8015M**		Prep: SW3541 / 8/29/14	Analyst: **IT**
DRO (C10-C28)	**540**		**4.8**	**mg/Kg-dry**	1	9/2/2014 07:37 PM
Surr: 4-Terphenyl-d14	*71.5*		*39-133*	*%REC*	1	9/2/2014 07:37 PM
GASOLINE RANGE ORGANICS BY GC-FID			**SW8015**		Prep: SW5035 / 8/29/14	Analyst: **IT**
GRO (C6-C10)	**1,800**		**2.9**	**mg/Kg-dry**	1	8/30/2014 11:40 AM
Surr: Toluene-d8	*133*		*50-150*	*%REC*	1	8/30/2014 11:40 AM
MERCURY BY CVAA			**SW7471**		Prep: SW7471 / 8/28/14	Analyst: **LR**
Mercury	**0.015**		**0.015**	**mg/Kg-dry**	1	8/28/2014 04:30 PM
METALS BY ICP-MS			**SW6020A**		Prep: SW3050B / 8/27/14	Analyst: **ML**
Arsenic	**7.8**		**1.9**	**mg/Kg-dry**	5	8/28/2014 02:02 AM
Barium	**280**		**1.9**	**mg/Kg-dry**	5	8/28/2014 02:02 AM
Cadmium	ND		0.75	mg/Kg-dry	5	8/28/2014 02:02 AM
Chromium	**8.5**		**1.9**	**mg/Kg-dry**	5	8/28/2014 02:02 AM
Lead	**11**		**1.9**	**mg/Kg-dry**	5	8/28/2014 02:02 AM
Selenium	**2.2**		**1.9**	**mg/Kg-dry**	5	8/28/2014 02:02 AM
Silver	ND		1.9	mg/Kg-dry	5	8/28/2014 02:02 AM
VOLATILE ORGANIC COMPOUNDS			**SW8260B**		Prep: SW5035 / 8/27/14	Analyst: **BG**
1,1,1-Trichloroethane	ND		35	µg/Kg-dry	1	8/31/2014 07:17 PM
1,1,2,2-Tetrachloroethane	ND		35	µg/Kg-dry	1	8/31/2014 07:17 PM
1,1,2-Trichloroethane	ND		35	µg/Kg-dry	1	8/31/2014 07:17 PM
1,1-Dichloroethane	ND		35	µg/Kg-dry	1	8/31/2014 07:17 PM
1,1-Dichloroethene	ND		35	µg/Kg-dry	1	8/31/2014 07:17 PM
1,2-Dichloroethane	ND		35	µg/Kg-dry	1	8/31/2014 07:17 PM
1,2-Dichloropropane	ND		35	µg/Kg-dry	1	8/31/2014 07:17 PM
2-Butanone	ND		230	µg/Kg-dry	1	8/31/2014 07:17 PM
2-Hexanone	ND		35	µg/Kg-dry	1	8/31/2014 07:17 PM
4-Methyl-2-pentanone	ND		35	µg/Kg-dry	1	8/31/2014 07:17 PM
Acetone	**430**		**120**	**µg/Kg-dry**	1	8/31/2014 07:17 PM
Benzene	**550**		**35**	**µg/Kg-dry**	1	8/31/2014 07:17 PM
Bromodichloromethane	ND		35	µg/Kg-dry	1	8/31/2014 07:17 PM
Bromoform	ND		35	µg/Kg-dry	1	8/31/2014 07:17 PM
Bromomethane	ND		88	µg/Kg-dry	1	8/31/2014 07:17 PM
Carbon disulfide	ND		35	µg/Kg-dry	1	8/31/2014 07:17 PM
Carbon tetrachloride	ND		35	µg/Kg-dry	1	8/31/2014 07:17 PM
Chlorobenzene	ND		35	µg/Kg-dry	1	8/31/2014 07:17 PM
Chloroethane	ND		120	µg/Kg-dry	1	8/31/2014 07:17 PM
Chloroform	ND		35	µg/Kg-dry	1	8/31/2014 07:17 PM
Chloromethane	ND		120	µg/Kg-dry	1	8/31/2014 07:17 PM

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

Client: HRL Compliance Solutions, Inc
Project: Caerus Garden Gulch 1 8.25.14 **Work Order:** 14081396
Sample ID: West Composite **Lab ID:** 14081396-01
Collection Date: 8/25/2014 09:45 AM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
cis-1,2-Dichloroethene	ND		35	µg/Kg-dry	1	8/31/2014 07:17 PM
cis-1,3-Dichloropropene	ND		35	µg/Kg-dry	1	8/31/2014 07:17 PM
Dibromochloromethane	ND		35	µg/Kg-dry	1	8/31/2014 07:17 PM
Ethylbenzene	**2,900**		**35**	**µg/Kg-dry**	1	8/31/2014 07:17 PM
m,p-Xylene	**86,000**		**700**	**µg/Kg-dry**	10	9/2/2014 05:50 PM
Methyl iodide	ND		88	µg/Kg-dry	1	8/31/2014 07:17 PM
Methylene chloride	ND		35	µg/Kg-dry	1	8/31/2014 07:17 PM
o-Xylene	**2,200**		**35**	**µg/Kg-dry**	1	8/31/2014 07:17 PM
Styrene	ND		35	µg/Kg-dry	1	8/31/2014 07:17 PM
Tetrachloroethene	ND		35	µg/Kg-dry	1	8/31/2014 07:17 PM
Toluene	**120**		**35**	**µg/Kg-dry**	1	8/31/2014 07:17 PM
trans-1,2-Dichloroethene	ND		35	µg/Kg-dry	1	8/31/2014 07:17 PM
trans-1,3-Dichloropropene	ND		35	µg/Kg-dry	1	8/31/2014 07:17 PM
trans-1,4-Dichloro-2-butene	ND		35	µg/Kg-dry	1	8/31/2014 07:17 PM
Trichloroethene	ND		35	µg/Kg-dry	1	8/31/2014 07:17 PM
Vinyl acetate	ND		35	µg/Kg-dry	1	8/31/2014 07:17 PM
Xylenes, Total	**89,000**		**1,100**	**µg/Kg-dry**	10	9/2/2014 05:50 PM
Surr: 1,2-Dichloroethane-d4	*95.0*		*70-130*	*%REC*	1	8/31/2014 07:17 PM
Surr: 1,2-Dichloroethane-d4	*95.4*		*70-130*	*%REC*	10	9/2/2014 05:50 PM
Surr: 4-Bromofluorobenzene	*102*		*70-130*	*%REC*	10	9/2/2014 05:50 PM
Surr: 4-Bromofluorobenzene	*96.8*		*70-130*	*%REC*	1	8/31/2014 07:17 PM
Surr: Dibromofluoromethane	*95.7*		*70-130*	*%REC*	1	8/31/2014 07:17 PM
Surr: Dibromofluoromethane	*97.2*		*70-130*	*%REC*	10	9/2/2014 05:50 PM
Surr: Toluene-d8	*118*		*70-130*	*%REC*	10	9/2/2014 05:50 PM
Surr: Toluene-d8	*119*		*70-130*	*%REC*	1	8/31/2014 07:17 PM
FLASHPOINT, OPEN-CUP			**D92**			Analyst: **RLF**
Flashpoint, Open-cup	**>200**			**°F**	1	9/2/2014 08:30 AM
PAINT FILTER (FREE LIQUIDS)			**SW9095**			Analyst: **KF**
Free Liquids	**Pass**			**none**	1	8/28/2014 05:07 PM
MOISTURE			**A2540 G**			Analyst: **JJG**
Moisture	**15**		**0.050**	**% of sample**	1	8/29/2014 10:41 AM

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

ALS Group USA, Corp

Date: *03-Sep-14*

Client: HRL Compliance Solutions, Inc
Project: Caerus Garden Gulch 1 8.25.14 **Work Order:** 14081396
Sample ID: East Composite **Lab ID:** 14081396-02
Collection Date: 8/25/2014 10:05 AM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID			**SW8015M**		Prep: SW3541 / 8/29/14	Analyst: **IT**
DRO (C10-C28)	**260**		**4.8**	**mg/Kg-dry**	1	9/2/2014 08:07 PM
Surr: 4-Terphenyl-d14	*63.3*		*39-133*	*%REC*	1	9/2/2014 08:07 PM
GASOLINE RANGE ORGANICS BY GC-FID			**SW8015**		Prep: SW5035 / 8/29/14	Analyst: **IT**
GRO (C6-C10)	**630**		**2.9**	**mg/Kg-dry**	1	8/30/2014 12:05 PM
Surr: Toluene-d8	*138*		*50-150*	*%REC*	1	8/30/2014 12:05 PM
MERCURY BY CVAA			**SW7471**		Prep: SW7471 / 8/28/14	Analyst: **LR**
Mercury	**0.018**		**0.017**	**mg/Kg-dry**	1	8/28/2014 04:33 PM
METALS BY ICP-MS			**SW6020A**		Prep: SW3050B / 8/27/14	Analyst: **ML**
Arsenic	**11**		**2.0**	**mg/Kg-dry**	5	8/28/2014 02:08 AM
Barium	**320**		**2.0**	**mg/Kg-dry**	5	8/28/2014 02:08 AM
Cadmium	ND		0.80	mg/Kg-dry	5	8/28/2014 02:08 AM
Chromium	**12**		**2.0**	**mg/Kg-dry**	5	8/28/2014 02:08 AM
Lead	**11**		**2.0**	**mg/Kg-dry**	5	8/28/2014 02:08 AM
Selenium	**2.3**		**2.0**	**mg/Kg-dry**	5	8/28/2014 02:08 AM
Silver	ND		2.0	mg/Kg-dry	5	8/28/2014 02:08 AM
VOLATILE ORGANIC COMPOUNDS			**SW8260B**		Prep: SW5035 / 8/27/14	Analyst: **AK**
1,1,1-Trichloroethane	ND		35	µg/Kg-dry	1	8/31/2014 04:27 PM
1,1,2,2-Tetrachloroethane	ND		35	µg/Kg-dry	1	8/31/2014 04:27 PM
1,1,2-Trichloroethane	ND		35	µg/Kg-dry	1	8/31/2014 04:27 PM
1,1-Dichloroethane	ND		35	µg/Kg-dry	1	8/31/2014 04:27 PM
1,1-Dichloroethene	ND		35	µg/Kg-dry	1	8/31/2014 04:27 PM
1,2-Dichloroethane	ND		35	µg/Kg-dry	1	8/31/2014 04:27 PM
1,2-Dichloropropane	ND		35	µg/Kg-dry	1	8/31/2014 04:27 PM
2-Butanone	ND		230	µg/Kg-dry	1	8/31/2014 04:27 PM
2-Hexanone	ND		35	µg/Kg-dry	1	8/31/2014 04:27 PM
4-Methyl-2-pentanone	ND		35	µg/Kg-dry	1	8/31/2014 04:27 PM
Acetone	ND		120	µg/Kg-dry	1	8/31/2014 04:27 PM
Benzene	**68**		**35**	**µg/Kg-dry**	1	8/31/2014 04:27 PM
Bromodichloromethane	ND		35	µg/Kg-dry	1	8/31/2014 04:27 PM
Bromoform	ND		35	µg/Kg-dry	1	8/31/2014 04:27 PM
Bromomethane	ND		88	µg/Kg-dry	1	8/31/2014 04:27 PM
Carbon disulfide	ND		35	µg/Kg-dry	1	8/31/2014 04:27 PM
Carbon tetrachloride	ND		35	µg/Kg-dry	1	8/31/2014 04:27 PM
Chlorobenzene	ND		35	µg/Kg-dry	1	8/31/2014 04:27 PM
Chloroethane	ND		120	µg/Kg-dry	1	8/31/2014 04:27 PM
Chloroform	ND		35	µg/Kg-dry	1	8/31/2014 04:27 PM
Chloromethane	ND		120	µg/Kg-dry	1	8/31/2014 04:27 PM

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

ALS Group USA, Corp

Date: *03-Sep-14*

Client: HRL Compliance Solutions, Inc
Project: Caerus Garden Gulch 1 8.25.14 **Work Order:** 14081396
Sample ID: East Composite **Lab ID:** 14081396-02
Collection Date: 8/25/2014 10:05 AM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
cis-1,2-Dichloroethene	ND		35	µg/Kg-dry	1	8/31/2014 04:27 PM
cis-1,3-Dichloropropene	ND		35	µg/Kg-dry	1	8/31/2014 04:27 PM
Dibromochloromethane	ND		35	µg/Kg-dry	1	8/31/2014 04:27 PM
Ethylbenzene	**870**		**35**	**µg/Kg-dry**	1	8/31/2014 04:27 PM
m,p-Xylene	**19,000**		**140**	**µg/Kg-dry**	2	9/2/2014 05:24 PM
Methyl iodide	ND		88	µg/Kg-dry	1	8/31/2014 04:27 PM
Methylene chloride	ND		35	µg/Kg-dry	1	8/31/2014 04:27 PM
o-Xylene	**200**		**35**	**µg/Kg-dry**	1	8/31/2014 04:27 PM
Styrene	ND		35	µg/Kg-dry	1	8/31/2014 04:27 PM
Tetrachloroethene	ND		35	µg/Kg-dry	1	8/31/2014 04:27 PM
Toluene	ND		35	µg/Kg-dry	1	8/31/2014 04:27 PM
trans-1,2-Dichloroethene	ND		35	µg/Kg-dry	1	8/31/2014 04:27 PM
trans-1,3-Dichloropropene	ND		35	µg/Kg-dry	1	8/31/2014 04:27 PM
trans-1,4-Dichloro-2-butene	ND		35	µg/Kg-dry	1	8/31/2014 04:27 PM
Trichloroethene	ND		35	µg/Kg-dry	1	8/31/2014 04:27 PM
Vinyl acetate	ND		35	µg/Kg-dry	1	8/31/2014 04:27 PM
Xylenes, Total	**20,000**		**210**	**µg/Kg-dry**	2	9/2/2014 05:24 PM
Surr: 1,2-Dichloroethane-d4	*97.4*		*70-130*	*%REC*	2	9/2/2014 05:24 PM
Surr: 1,2-Dichloroethane-d4	*83.4*		*70-130*	*%REC*	1	8/31/2014 04:27 PM
Surr: 4-Bromofluorobenzene	*98.4*		*70-130*	*%REC*	1	8/31/2014 04:27 PM
Surr: 4-Bromofluorobenzene	*95.9*		*70-130*	*%REC*	2	9/2/2014 05:24 PM
Surr: Dibromofluoromethane	*95.9*		*70-130*	*%REC*	2	9/2/2014 05:24 PM
Surr: Dibromofluoromethane	*89.2*		*70-130*	*%REC*	1	8/31/2014 04:27 PM
Surr: Toluene-d8	*104*		*70-130*	*%REC*	1	8/31/2014 04:27 PM
Surr: Toluene-d8	*119*		*70-130*	*%REC*	2	9/2/2014 05:24 PM
FLASHPOINT, OPEN-CUP			**D92**			Analyst: **RLF**
Flashpoint, Open-cup	**>200**			**°F**	1	9/2/2014 08:30 AM
PAINT FILTER (FREE LIQUIDS)			**SW9095**			Analyst: **KF**
Free Liquids	**Pass**			**none**	1	8/28/2014 05:07 PM
MOISTURE			**A2540 G**			Analyst: **JJG**
Moisture	**14**		**0.050**	**% of sample**	1	8/29/2014 11:19 AM

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

ALS Group USA, Corp

Date: 03-Sep-14

Client: HRL Compliance Solutions, Inc

Work Order: 14081396

Project: Caerus Garden Gulch 1 8.25.14

QC BATCH REPORT

Batch ID: **62206** Instrument ID **GC8** Method: **SW8015M**

MBLK Sample ID: **DBLKS1-62206-62206** Units: **mg/Kg** Analysis Date: **8/29/2014 06:03 PM**

Client ID: Run ID: **GC8_140829A** SeqNo: **2913138** Prep Date: **8/29/2014** 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	*1.07*	0	*1.667*	0	*64.2*	*39-133*	0			

LCS Sample ID: **DLCSS1-62206-62206** Units: **mg/Kg** Analysis Date: **8/29/2014 06:33 PM**

Client ID: Run ID: **GC8_140829A** SeqNo: **2913139** Prep Date: **8/29/2014** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	134.1	4.2	166.7	0	80.5	61-109	0			
Surr: 4-Terphenyl-d14	*1.156*	0	*1.667*	0	*69.4*	*39-133*	0			

MS Sample ID: **14081488-01B MS** Units: **mg/Kg** Analysis Date: **8/29/2014 07:03 PM**

Client ID: Run ID: **GC8_140829A** SeqNo: **2913140** Prep Date: **8/29/2014** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	276.2	8.2	329.5	34.68	73.3	48-110	0			
Surr: 4-Terphenyl-d14	*2.298*	0	*3.295*	0	*69.7*	*39-133*	0			

MSD Sample ID: **14081488-01B MSD** Units: **mg/Kg** Analysis Date: **8/29/2014 07:33 PM**

Client ID: Run ID: **GC8_140829A** SeqNo: **2913141** Prep Date: **8/29/2014** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	272.9	8.0	320.7	34.68	74.3	48-110	276.2	1.19	30	
Surr: 4-Terphenyl-d14	*2.32*	0	*3.207*	0	*72.3*	*39-133*	2.298	*0.956*	*30*	

The following samples were analyzed in this batch: 14081396-01A 14081396-02A

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

Client: HRL Compliance Solutions, Inc
Work Order: 14081396
Project: Caerus Garden Gulch 1 8.25.14

QC BATCH REPORT

Batch ID: **62231** Instrument ID **GC9** Method: **SW8015**

MBLK Sample ID: **MBLK-62231-62231** Units: **µg/Kg** Analysis Date: **8/30/2014 02:39 AM**
Client ID: Run ID: **GC9_140829A** SeqNo: **2913066** Prep Date: **8/29/2014** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	ND	2,500								
Surr: Toluene-d8	*5388*	0	*5000*	0	*108*	*50-150*	0			

LCS Sample ID: **LCS-62231-62231** Units: **µg/Kg** Analysis Date: **8/30/2014 02:14 AM**
Client ID: Run ID: **GC9_140829A** SeqNo: **2913065** Prep Date: **8/29/2014** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	450300	2,500	500000	0	90.1	70-130	0			
Surr: Toluene-d8	*5824*	0	*5000*	0	*116*	*50-150*	0			

MS Sample ID: **14081480-01A MS** Units: **µg/Kg** Analysis Date: **8/30/2014 03:29 AM**
Client ID: Run ID: **GC9_140829A** SeqNo: **2913068** Prep Date: **8/29/2014** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	456200	2,500	500000	0	91.2	70-130	0			
Surr: Toluene-d8	*5856*	0	*5000*	0	*117*	*50-150*	0			

MSD Sample ID: **14081480-01A MSD** Units: **µg/Kg** Analysis Date: **8/30/2014 03:54 AM**
Client ID: Run ID: **GC9_140829A** SeqNo: **2913069** Prep Date: **8/29/2014** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	443400	2,500	500000	0	88.7	70-130	456200	2.84	30	
Surr: Toluene-d8	*5066*	0	*5000*	0	*101*	*50-150*	5856	*14.5*	*30*	

The following samples were analyzed in this batch: 14081396-01A 14081396-02A

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

Client: HRL Compliance Solutions, Inc
Work Order: 14081396
Project: Caerus Garden Gulch 1 8.25.14

QC BATCH REPORT

Batch ID: **62110** Instrument ID **HG1** Method: **SW7471**

MBLK Sample ID: **MBLK-62110-62110** Units: **mg/Kg** Analysis Date: **8/28/2014 03:42 PM**
Client ID: Run ID: **HG1_140828A** SeqNo: **2909243** Prep Date: **8/28/2014** 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-62110-62110** Units: **mg/Kg** Analysis Date: **8/28/2014 03:44 PM**
Client ID: Run ID: **HG1_140828A** SeqNo: **2909244** Prep Date: **8/28/2014** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.1611	0.020	0.1665	0	96.7	80-120	0			

MS Sample ID: **14081302-01BMS** Units: **mg/Kg** Analysis Date: **8/28/2014 03:53 PM**
Client ID: Run ID: **HG1_140828A** SeqNo: **2909248** Prep Date: **8/28/2014** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.1154	0.013	0.1049	0.01727	93.5	75-125	0			

MSD Sample ID: **14081302-01BMSD** Units: **mg/Kg** Analysis Date: **8/28/2014 03:55 PM**
Client ID: Run ID: **HG1_140828A** SeqNo: **2909249** Prep Date: **8/28/2014** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.1277	0.012	0.1018	0.01727	108	75-125	0.1154	10.1	35	

The following samples were analyzed in this batch: 14081396-01A 14081396-02A

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

Client: HRL Compliance Solutions, Inc
Work Order: 14081396
Project: Caerus Garden Gulch 1 8.25.14

QC BATCH REPORT

Batch ID: **62130** Instrument ID **ICPMS1** Method: **SW6020A**

MBLK Sample ID: **MBLK-62130-62130** Units: **mg/Kg** Analysis Date: **8/27/2014 10:21 PM**
Client ID: Run ID: **ICPMS1_140827A** SeqNo: **2907579** Prep Date: **8/27/2014** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.04416	0.25								J
Barium	0.00955	0.25								J
Cadmium	ND	0.10								
Chromium	ND	0.25								
Lead	ND	0.25								
Selenium	ND	0.25								
Silver	ND	0.25								

LCS Sample ID: **LCS-62130-62130** Units: **mg/Kg** Analysis Date: **8/27/2014 10:27 PM**
Client ID: Run ID: **ICPMS1_140827A** SeqNo: **2907580** Prep Date: **8/27/2014** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	4.45	0.25	5	0	89	80-120	0			
Barium	4.618	0.25	5	0	92.4	80-120	0			
Cadmium	4.591	0.10	5	0	91.8	80-120	0			
Chromium	4.506	0.25	5	0	90.1	80-120	0			
Lead	4.462	0.25	5	0	89.2	80-120	0			
Selenium	4.28	0.25	5	0	85.6	80-120	0			
Silver	4.378	0.25	5	0	87.6	80-120	0			

MS Sample ID: **14081393-02AMS** Units: **mg/Kg** Analysis Date: **8/28/2014 12:36 AM**
Client ID: Run ID: **ICPMS1_140827A** SeqNo: **2907601** Prep Date: **8/27/2014** DF: **5**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	9.227	1.8	7.153	2.822	89.5	75-125	0			
Barium	140.2	1.8	7.153	131.7	119	75-125	0			O
Cadmium	7.078	0.72	7.153	0.3342	94.3	75-125	0			
Chromium	18.28	1.8	7.153	8.778	133	75-125	0			S
Lead	18.87	1.8	7.153	12.32	91.6	75-125	0			
Selenium	7.493	1.8	7.153	1.939	77.6	75-125	0			
Silver	6.105	1.8	7.153	0.02237	85	75-125	0			

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

Client: HRL Compliance Solutions, Inc
Work Order: 14081396
Project: Caerus Garden Gulch 1 8.25.14

QC BATCH REPORT

Batch ID: **62130** Instrument ID **ICPMS1** Method: **SW6020A**

MSD Sample ID: **14081393-02AMSD** Units: **mg/Kg** Analysis Date: **8/28/2014 01:07 AM**
Client ID: Run ID: **ICPMS1_140827A** SeqNo: **2907604** Prep Date: **8/27/2014** DF: **5**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	9.122	1.8	7.082	2.822	89	75-125	9.227	1.15	25	
Barium	138.1	1.8	7.082	131.7	90.5	75-125	140.2	1.51	25	O
Cadmium	7.079	0.71	7.082	0.3342	95.2	75-125	7.078	0.00909	25	
Chromium	17.73	1.8	7.082	8.778	126	75-125	18.28	3.07	25	S
Lead	19.37	1.8	7.082	12.32	99.6	75-125	18.87	2.63	25	
Selenium	7.592	1.8	7.082	1.939	79.8	75-125	7.493	1.32	25	
Silver	6.19	1.8	7.082	0.02237	87.1	75-125	6.105	1.38	25	

The following samples were analyzed in this batch: 14081396-01A 14081396-02A

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

Client: HRL Compliance Solutions, Inc
Work Order: 14081396
Project: Caerus Garden Gulch 1 8.25.14

QC BATCH REPORT

Batch ID: **62131** Instrument ID **VMS5** Method: **SW8260B**

MBLK	Sample ID: **MBLK-62131-62131**				Units: **µg/Kg**		Analysis Date: **8/29/2014 04:29 AM**			
Client ID:		Run ID: **VMS5_140828A**			SeqNo: **2910788**		Prep Date: **8/27/2014**		DF: **1**	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	ND	30								
1,1,2,2-Tetrachloroethane	ND	30								
1,1,2-Trichloroethane	ND	30								
1,1-Dichloroethane	ND	30								
1,1-Dichloroethene	ND	30								
1,2-Dichloroethane	ND	30								
1,2-Dichloropropane	ND	30								
2-Butanone	ND	200								
2-Hexanone	ND	30								
4-Methyl-2-pentanone	ND	30								
Acetone	ND	100								
Benzene	ND	30								
Bromodichloromethane	ND	30								
Bromoform	ND	30								
Bromomethane	ND	75								
Carbon disulfide	ND	30								
Carbon tetrachloride	ND	30								
Chlorobenzene	ND	30								
Chloroethane	ND	100								
Chloroform	ND	30								
Chloromethane	234.5	100								
cis-1,2-Dichloroethene	ND	30								
cis-1,3-Dichloropropene	ND	30								
Dibromochloromethane	ND	30								
Ethylbenzene	ND	30								
m,p-Xylene	ND	60								
Methyl iodide	ND	75								
Methylene chloride	135.5	30								
o-Xylene	ND	30								
Styrene	ND	30								
Tetrachloroethene	ND	30								
Toluene	ND	30								
trans-1,2-Dichloroethene	ND	30								
trans-1,3-Dichloropropene	ND	30								
trans-1,4-Dichloro-2-butene	ND	30								
Trichloroethene	ND	30								
Vinyl acetate	ND	30								
Xylenes, Total	ND	90								
Surr: 1,2-Dichloroethane-d4	*1029*	0	*1000*	0	*103*	*70-130*	0			
Surr: 4-Bromofluorobenzene	*982*	0	*1000*	0	*98.2*	*70-130*	0			
Surr: Dibromofluoromethane	*1006*	0	*1000*	0	*101*	*70-130*	0			
Surr: Toluene-d8	*1012*	0	*1000*	0	*101*	*70-130*	0			

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

Client: HRL Compliance Solutions, Inc
Work Order: 14081396
Project: Caerus Garden Gulch 1 8.25.14

QC BATCH REPORT

Batch ID: **62131** Instrument ID **VMS5** Method: **SW8260B**

LCS Sample ID: **LCS-62131-62131** Units: **µg/Kg** Analysis Date: **8/29/2014 02:23 AM**
Client ID: Run ID: **VMS5_140828A** SeqNo: **2910786** Prep Date: **8/27/2014** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	1081	30	1000	0	108	70-135	0			
1,1,2,2-Tetrachloroethane	1144	30	1000	0	114	55-130	0			
1,1,2-Trichloroethane	1116	30	1000	0	112	60-125	0			
1,1-Dichloroethane	1090	30	1000	0	109	75-125	0			
1,1-Dichloroethene	1063	30	1000	0	106	65-135	0			
1,2-Dichloroethane	1088	30	1000	0	109	70-135	0			
1,2-Dichloropropane	1094	30	1000	0	109	70-120	0			
2-Butanone	1191	200	1000	0	119	30-160	0			
2-Hexanone	1266	30	1000	0	127	45-145	0			
4-Methyl-2-pentanone	1592	30	1000	0	159	96-168	0			
Acetone	1125	100	1000	0	112	20-160	0			
Benzene	1078	30	1000	0	108	75-125	0			
Bromodichloromethane	1130	30	1000	0	113	70-130	0			
Bromoform	1042	30	1000	0	104	55-135	0			
Bromomethane	1180	75	1000	0	118	30-160	0			
Carbon disulfide	1012	30	1000	0	101	45-160	0			
Carbon tetrachloride	1084	30	1000	0	108	65-135	0			
Chlorobenzene	1107	30	1000	0	111	75-125	0			
Chloroethane	916	100	1000	0	91.6	40-155	0			
Chloroform	1073	30	1000	0	107	70-125	0			
Chloromethane	938	100	1000	0	93.8	50-130	0			B
cis-1,2-Dichloroethene	1080	30	1000	0	108	65-125	0			
cis-1,3-Dichloropropene	1170	30	1000	0	117	70-125	0			
Dibromochloromethane	1008	30	1000	0	101	65-135	0			
Ethylbenzene	1114	30	1000	0	111	75-125	0			
m,p-Xylene	2223	60	2000	0	111	80-125	0			
Methyl iodide	994	75	1000	0	99.4	64-145	0			
Methylene chloride	1095	30	1000	0	110	55-145	0			B
o-Xylene	1134	30	1000	0	113	75-125	0			
Styrene	1170	30	1000	0	117	75-125	0			
Tetrachloroethene	1088	30	1000	0	109	64-140	0			
Toluene	1086	30	1000	0	109	70-125	0			
trans-1,2-Dichloroethene	1104	30	1000	0	110	65-135	0			
trans-1,3-Dichloropropene	1184	30	1000	0	118	65-125	0			
trans-1,4-Dichloro-2-butene	942.5	30	1000	0	94.2	62-112	0			
Trichloroethene	1099	30	1000	0	110	75-125	0			
Xylenes, Total	3358	90	3000	0	112	75-125	0			
Surr: 1,2-Dichloroethane-d4	*998.5*	0	*1000*	0	*99.8*	*70-130*	0			
Surr: 4-Bromofluorobenzene	*991.5*	0	*1000*	0	*99.2*	*70-130*	0			
Surr: Dibromofluoromethane	*1009*	0	*1000*	0	*101*	*70-130*	0			
Surr: Toluene-d8	*1010*	0	*1000*	0	*101*	*70-130*	0			

The following samples were analyzed in this batch: 14081396-01A 14081396-02A

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

Client: HRL Compliance Solutions, Inc
Work Order: 14081396
Project: Caerus Garden Gulch 1 8.25.14

QC BATCH REPORT

Batch ID: **R147285** Instrument ID **MOIST** Method: **A2540 G**

MBLK Sample ID: **WBLKS-R147285** Units: **% of sample** Analysis Date: **8/29/2014 10:41 AM**
Client ID: Run ID: **MOIST_140829B** SeqNo: **2911327** 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-R147285** Units: **% of sample** Analysis Date: **8/29/2014 10:41 AM**
Client ID: Run ID: **MOIST_140829B** SeqNo: **2911323** 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: **14081406-22BDUP** Units: **% of sample** Analysis Date: **8/29/2014 10:41 AM**
Client ID: Run ID: **MOIST_140829B** SeqNo: **2911310** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	20.18	0.050	0	0	0	0-0	20.19	0.0495	20	

DUP Sample ID: **14081406-32ADUP** Units: **% of sample** Analysis Date: **8/29/2014 10:41 AM**
Client ID: Run ID: **MOIST_140829B** SeqNo: **2911321** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	13.95	0.050	0	0	0	0-0	14.96	6.99	20	

The following samples were analyzed in this batch: 14081396-01A

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

Client: HRL Compliance Solutions, Inc
Work Order: 14081396
Project: Caerus Garden Gulch 1 8.25.14

QC BATCH REPORT

Batch ID: **R147297** Instrument ID **MOIST** Method: **A2540 G**

MBLK Sample ID: **WBLKS-R147297** Units: **% of sample** Analysis Date: **8/29/2014 11:19 AM**
Client ID: Run ID: **MOIST_140829C** SeqNo: **2911654** 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-R147297** Units: **% of sample** Analysis Date: **8/29/2014 11:19 AM**
Client ID: Run ID: **MOIST_140829C** SeqNo: **2911650** 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: **14081311-08ADUP** Units: **% of sample** Analysis Date: **8/29/2014 11:19 AM**
Client ID: Run ID: **MOIST_140829C** SeqNo: **2911631** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	4.52	0.050	0	0	0	0-0	4.14	8.78	20	

DUP Sample ID: **14081396-02A DUP** Units: **% of sample** Analysis Date: **8/29/2014 11:19 AM**
Client ID: **East Composite** Run ID: **MOIST_140829C** SeqNo: **2911648** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	14.76	0.050	0	0	0	0-0	14.4	2.47	20	

The following samples were analyzed in this batch: 14081396-02A

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

Client: HRL Compliance Solutions, Inc
Work Order: 14081396
Project: Caerus Garden Gulch 1 8.25.14

QC BATCH REPORT

Batch ID: **R147393** Instrument ID **WETCHEM** Method: **D92**

LCS	Sample ID: **LCS-R147393-R147393**				Units: **°F**		Analysis Date: **9/2/2014 08:30 AM**			
Client ID:		Run ID: **WETCHEM_140902L**			SeqNo: **2913890**		Prep Date:		DF: **1**	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Flashpoint, Open-cup	80	0	81	0	98.8	97-103	0			

The following samples were analyzed in this batch: 14081396-01A 14081396-02A

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

ALS Laboratory Group

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

Chain-of-Custody

Form 282r8

WORKORDER # 14081396

PAGE 1 of 1

DISPOSAL By Lab or Return to Client

PROJECT NAME	CAERUS GARDEN GULCH 1	SAMPLER	Casey Richardson
PROJECT No.		SITE ID	SPOILS STOCKPILE
		EDD FORMAT	
		PURCHASE ORDER	
COMPANY NAME	HCSI	BILL TO COMPANY	Caerus Piceance LLC
SEND REPORT TO	Casey Richardson	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	crichardson@hrlcomp.com	E-MAIL	ewinters@caerusoilandgas.com

DATE 8-25-14

TURNAROUND 5 DAY

Lab ID	Field ID	Matrix	Sample Date	Sample Time	# Bottles	Pres.	QC	RCRA 8 Metals	Full List VOCs	DRO	GRO	PAH - See Comments	Ignitability	Paint Filter	BTEX
1	WEST COMPOSITE	SOIL	8-25-14	945	2	8		X	X	X	X	X	X	X	X
2	EAST COMPOSITE	1	1	1005	1	1		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:	QC PACKAGE (check below)	
1.8C	x	LEVEL II (Standard QC)
		LEVEL III (Std QC + forms)
Run PAH & DRO/GRO are above 5000 mg/kg IF		LEVEL IV (Std QC + forms + raw data)
5 POINT COMPOSITE SAMPLES		

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	8-25-14	1200
RECEIVED BY			8/25/14	1200
RELINQUISHED BY			8/25/14	1200
RECEIVED BY		Diane F. Shea	8/27/14	0930
RELINQUISHED BY				
RECEIVED BY				

ALS Group USA, Corp

Sample Receipt Checklist

Client Name: **HRL** Date/Time Received: **27-Aug-14 09:30**

Work Order: **14081396** Received by: **DS**

Checklist completed by Diane Shaw eSignature 27-Aug-14 Date Reviewed by: Ann Preston eSignature 27-Aug-14 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 ☐	
Sample(s) received on ice?	Yes ☑	No ☐	
Temperature(s)/Thermometer(s):	1.8 c		
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:	8/27/2014 11:28:13 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: (616) 399-6070
Sample Receiving
ALS Laboratory Group
3352 128th Avenue

Holland, MI 49424

Origin ID: HLMA

FedEx Express

Ship Date: 25AUG14
ActWgt: 40.0 LB
CAD: 2284840/NET3550

Dims: 24 X 15 X 15 IN

Delivery Address Bar Code

Ref # 082514-1
Invoice #
PO #
Dept #

Parachute

SHIP TO: (616) 399-6070 BILL SENDER

sample receiving
ALS Laboratory Group
3352 128TH AVE

HOLLAND, MI 49424

4 of 4

TUE - 26 AUG 10:30A
PRIORITY OVERNIGHT

MPS# 7709 4045 1164

Mstr# 7709 4045 0591

49424
MI-US

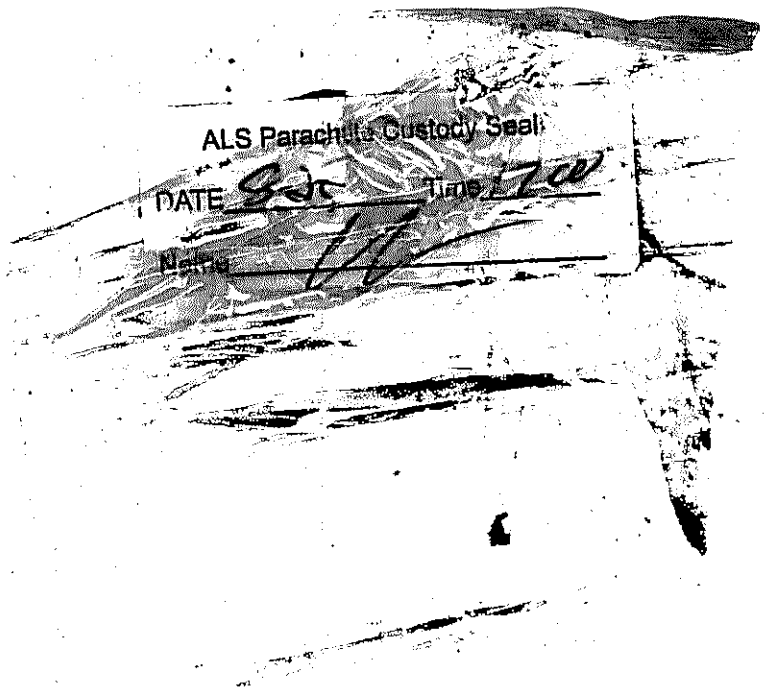
68 HLMA

GRR

822G1EC726AC9

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.



24-Aug-2015

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

Re: **Caerus Garden Gulch 1 Soil Stockpile** Work Order: **15081030**

Dear Casey,

ALS Environmental received 3 samples on 19-Aug-2015 09:50 PM 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 27.

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

Sincerely,

Electronically approved by: Les Arnold

Les Arnold
Senior 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: 24-Aug-15

Client: HRL Compliance Solutions, Inc
Project: Caerus Garden Gulch 1 Soil Stockpile
Work Order: **15081030**

Work Order Sample Summary

Lab Samp ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
15081030-01	West End of Stockpile	Soil		8/18/2015 10:45	8/19/2015 21:50	☐
15081030-02	Middle of Stockpile	Soil		8/18/2015 10:30	8/19/2015 21:50	☐
15081030-03	East End of Stockpile	Soil		8/18/2015 10:15	8/19/2015 21:50	☐

Client: HRL Compliance Solutions, Inc
Project: Caerus Garden Gulch 1 Soil Stockpile
WorkOrder: **15081030**

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
X	Analyte was detected in the Method Blank between the MDL and PQL, sample results may exhibit background or reagent contamination at the observed level.

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
TNTC	Too Numerous To Count
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: 24-Aug-15

Client: HRL Compliance Solutions, Inc
Project: Caerus Garden Gulch 1 Soil Stockpile
Work Order: 15081030

Case Narrative

Samples for the above noted Work Order were received on 08/19/2015. The attached "Sample Receipt Checklist" documents the status of custody seals, container integrity, preservation, and temperature compliance.

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

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

Sample Receiving:
No deviations or anomalies were noted.

Volatile Organics:
No deviations or anomalies were noted.

Extractable Organics:
No deviations or anomalies were noted.

Metals:
No deviations or anomalies were noted.

Wet Chemistry:
No deviations or anomalies were noted.

ALS Group USA, Corp

Date: *24-Aug-15*

Client: HRL Compliance Solutions, Inc
Project: Caerus Garden Gulch 1 Soil Stockpile
Work Order: 15081030
Sample ID: West End of Stockpile
Lab ID: 15081030-01
Collection Date: 8/18/2015 10:45 AM
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID			**SW8015M**		Prep: SW3541 / 8/20/15	Analyst: **IT**
DRO (C10-C28)	**100**		**5.0**	**mg/Kg-dry**	1	8/20/2015 06:45 PM
Surr: 4-Terphenyl-d14	*58.7*		*39-133*	*%REC*	1	8/20/2015 06:45 PM
GASOLINE RANGE ORGANICS BY GC-FID			**SW8015D**		Prep: SW5035 / 8/20/15	Analyst: **IT**
GRO (C6-C10)	**220**		**3.1**	**mg/Kg-dry**	1	8/20/2015 09:17 PM
Surr: Toluene-d8	*96.4*		*50-150*	*%REC*	1	8/20/2015 09:17 PM
MERCURY BY CVAA			**SW7471B**		Prep: SW7471 / 8/20/15	Analyst: **LR**
Mercury	**0.026**		**0.016**	**mg/Kg-dry**	1	8/20/2015 07:35 PM
METALS ANALYSIS BY ICP			**SW846 6010C**		Prep: SW3050B / 8/20/15	Analyst: **JEC**
Arsenic	**12**		**0.43**	**mg/Kg-dry**	1	8/21/2015 12:09 PM
Barium	**290**		**0.43**	**mg/Kg-dry**	1	8/21/2015 12:09 PM
Cadmium	ND		0.86	mg/Kg-dry	1	8/21/2015 12:09 PM
Chromium	**11**		**0.43**	**mg/Kg-dry**	1	8/21/2015 12:09 PM
Copper	**21**		**0.86**	**mg/Kg-dry**	1	8/21/2015 12:09 PM
Lead	**8.0**		**0.43**	**mg/Kg-dry**	1	8/21/2015 12:09 PM
Nickel	**31**		**0.43**	**mg/Kg-dry**	1	8/21/2015 12:09 PM
Selenium	ND		0.86	mg/Kg-dry	1	8/21/2015 12:09 PM
Silver	ND		0.43	mg/Kg-dry	1	8/21/2015 12:09 PM
Zinc	**61**		**0.86**	**mg/Kg-dry**	1	8/21/2015 12:09 PM
SOLUBLE CATIONS FOR SAR			**SW846 6010C**		Prep: USDA Method 20B / 8/24/15	Analyst: **JEC**
Calcium	**390**		**5.0**	**mg/L**	10	8/24/2015 02:17 PM
Magnesium	**190**		**2.0**	**mg/L**	10	8/24/2015 02:17 PM
Sodium	**940**		**2.0**	**mg/L**	10	8/24/2015 02:17 PM
SODIUM ADSORPTION RATIO			**USDA H60 METHO**		Prep: USDA Method 20B / 8/24/15	Analyst: **JEC**
Sodium Adsorption Ratio	**9.8**		**0.010**	**none**	1	8/24/2015
SEMI-VOLATILE ORGANIC COMPOUNDS			**SW846 8270D**		Prep: SW3541 / 8/20/15	Analyst: **RM**
Acenaphthene	ND		0.0079	mg/Kg-dry	1	8/21/2015 05:30 AM
Anthracene	ND		0.0079	mg/Kg-dry	1	8/21/2015 05:30 AM
Benzo(a)anthracene	ND		0.0079	mg/Kg-dry	1	8/21/2015 05:30 AM
Benzo(a)pyrene	ND		0.0079	mg/Kg-dry	1	8/21/2015 05:30 AM
Benzo(b)fluoranthene	ND		0.0079	mg/Kg-dry	1	8/21/2015 05:30 AM
Benzo(k)fluoranthene	ND		0.0079	mg/Kg-dry	1	8/21/2015 05:30 AM
Chrysene	ND		0.0079	mg/Kg-dry	1	8/21/2015 05:30 AM
Dibenzo(a,h)anthracene	ND		0.0079	mg/Kg-dry	1	8/21/2015 05:30 AM
Fluoranthene	ND		0.0079	mg/Kg-dry	1	8/21/2015 05:30 AM

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

ALS Group USA, Corp

Date: *24-Aug-15*

Client: HRL Compliance Solutions, Inc
Project: Caerus Garden Gulch 1 Soil Stockpile
Work Order: 15081030
Sample ID: West End of Stockpile
Lab ID: 15081030-01
Collection Date: 8/18/2015 10:45 AM
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Indeno(1,2,3-cd)pyrene	ND		0.0079	mg/Kg-dry	1	8/21/2015 05:30 AM
Naphthalene	**0.018**		**0.0079**	**mg/Kg-dry**	1	8/21/2015 05:30 AM
Pyrene	ND		0.0079	mg/Kg-dry	1	8/21/2015 05:30 AM
Surr: 2-Fluorobiphenyl	*62.6*		*12-100*	*%REC*	1	8/21/2015 05:30 AM
Surr: 4-Terphenyl-d14	*79.9*		*25-137*	*%REC*	1	8/21/2015 05:30 AM
Surr: Nitrobenzene-d5	*70.4*		*37-107*	*%REC*	1	8/21/2015 05:30 AM
VOLATILE ORGANIC COMPOUNDS			**SW8260B**		Prep: SW5035 / 8/20/15	Analyst: **BG**
Benzene	ND		0.037	mg/Kg-dry	1	8/20/2015 10:00 PM
Surr: 1,2-Dichloroethane-d4	*96.3*		*70-130*	*%REC*	1	8/20/2015 10:00 PM
Surr: 4-Bromofluorobenzene	*112*		*70-130*	*%REC*	1	8/20/2015 10:00 PM
Surr: Dibromofluoromethane	*96.2*		*70-130*	*%REC*	1	8/20/2015 10:00 PM
Surr: Toluene-d8	*100*		*70-130*	*%REC*	1	8/20/2015 10:00 PM
ELECTRICAL CONDUCTIVITY (SAR)			**USDA H60 METHO**		Prep: USDA Method 20B / 8/24/15	Analyst: **JJG**
Electrical Conductivity @ Saturation	**10**		**0.050**	**mmhos/cm @2**	10	8/24/2015 02:15 PM
CHROMIUM, TRIVALENT			**CALCULATION**			Analyst: **MB**
Chromium, Trivalent	**11**		**0.61**	**mg/Kg-dry**	1	8/24/2015 11:00 AM
CHROMIUM, HEXAVALENT			**SW7196A**		Prep: SW3060A / 8/20/15	Analyst: **MB**
Chromium, Hexavalent	ND		1.1	mg/Kg-dry	1	8/21/2015 03:00 PM
MOISTURE			**E160.3M**			Analyst: **EVB**
Moisture	**18**		**0.050**	**% of sample**	1	8/20/2015 08:40 AM
PH			**SW9045D**		Prep: EXTRACT / 8/24/15	Analyst: **ED**
pH	**8.6**			**s.u.**	1	8/24/2015 01:15 PM

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

ALS Group USA, Corp

Date: *24-Aug-15*

Client: HRL Compliance Solutions, Inc
Project: Caerus Garden Gulch 1 Soil Stockpile
Work Order: 15081030
Sample ID: Middle of Stockpile
Lab ID: 15081030-02
Collection Date: 8/18/2015 10:30 AM
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID			**SW8015M**		Prep: SW3541 / 8/20/15	Analyst: **IT**
DRO (C10-C28)	**63**		**4.9**	**mg/Kg-dry**	1	8/20/2015 08:15 PM
Surr: 4-Terphenyl-d14	*59.4*		*39-133*	*%REC*	1	8/20/2015 08:15 PM
GASOLINE RANGE ORGANICS BY GC-FID			**SW8015D**		Prep: SW5035 / 8/20/15	Analyst: **IT**
GRO (C6-C10)	**110**		**3.0**	**mg/Kg-dry**	1	8/20/2015 10:05 PM
Surr: Toluene-d8	*98.1*		*50-150*	*%REC*	1	8/20/2015 10:05 PM
MERCURY BY CVAA			**SW7471B**		Prep: SW7471 / 8/20/15	Analyst: **LR**
Mercury	**0.022**		**0.016**	**mg/Kg-dry**	1	8/20/2015 07:37 PM
METALS ANALYSIS BY ICP			**SW846 6010C**		Prep: SW3050B / 8/20/15	Analyst: **JEC**
Arsenic	**10**		**0.46**	**mg/Kg-dry**	1	8/21/2015 12:15 PM
Barium	**250**		**0.46**	**mg/Kg-dry**	1	8/21/2015 12:15 PM
Cadmium	ND		0.92	mg/Kg-dry	1	8/21/2015 12:15 PM
Chromium	**10**		**0.46**	**mg/Kg-dry**	1	8/21/2015 12:15 PM
Copper	**21**		**0.92**	**mg/Kg-dry**	1	8/21/2015 12:15 PM
Lead	**8.2**		**0.46**	**mg/Kg-dry**	1	8/21/2015 12:15 PM
Nickel	**31**		**0.46**	**mg/Kg-dry**	1	8/21/2015 12:15 PM
Selenium	ND		0.92	mg/Kg-dry	1	8/21/2015 12:15 PM
Silver	ND		0.46	mg/Kg-dry	1	8/21/2015 12:15 PM
Zinc	**65**		**0.92**	**mg/Kg-dry**	1	8/21/2015 12:15 PM
SOLUBLE CATIONS FOR SAR			**SW846 6010C**		Prep: USDA Method 20B / 8/24/15	Analyst: **JEC**
Calcium	**460**		**5.0**	**mg/L**	10	8/24/2015 02:23 PM
Magnesium	**220**		**2.0**	**mg/L**	10	8/24/2015 02:23 PM
Sodium	**1,100**		**2.0**	**mg/L**	10	8/24/2015 02:23 PM
SODIUM ADSORPTION RATIO			**USDA H60 METHO**		Prep: USDA Method 20B / 8/24/15	Analyst: **JEC**
Sodium Adsorption Ratio	**11**		**0.010**	**none**	1	8/24/2015
SEMI-VOLATILE ORGANIC COMPOUNDS			**SW846 8270D**		Prep: SW3541 / 8/20/15	Analyst: **RM**
Acenaphthene	ND		0.0078	mg/Kg-dry	1	8/21/2015 05:49 AM
Anthracene	ND		0.0078	mg/Kg-dry	1	8/21/2015 05:49 AM
Benzo(a)anthracene	ND		0.0078	mg/Kg-dry	1	8/21/2015 05:49 AM
Benzo(a)pyrene	ND		0.0078	mg/Kg-dry	1	8/21/2015 05:49 AM
Benzo(b)fluoranthene	ND		0.0078	mg/Kg-dry	1	8/21/2015 05:49 AM
Benzo(k)fluoranthene	ND		0.0078	mg/Kg-dry	1	8/21/2015 05:49 AM
Chrysene	ND		0.0078	mg/Kg-dry	1	8/21/2015 05:49 AM
Dibenzo(a,h)anthracene	ND		0.0078	mg/Kg-dry	1	8/21/2015 05:49 AM
Fluoranthene	ND		0.0078	mg/Kg-dry	1	8/21/2015 05:49 AM

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

ALS Group USA, Corp

Date: *24-Aug-15*

Client: HRL Compliance Solutions, Inc
Project: Caerus Garden Gulch 1 Soil Stockpile
Work Order: 15081030
Sample ID: Middle of Stockpile
Lab ID: 15081030-02
Collection Date: 8/18/2015 10:30 AM
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Indeno(1,2,3-cd)pyrene	ND		0.0078	mg/Kg-dry	1	8/21/2015 05:49 AM
Naphthalene	**0.014**		**0.0078**	**mg/Kg-dry**	1	8/21/2015 05:49 AM
Pyrene	ND		0.0078	mg/Kg-dry	1	8/21/2015 05:49 AM
Surr: 2-Fluorobiphenyl	*56.9*		*12-100*	*%REC*	1	8/21/2015 05:49 AM
Surr: 4-Terphenyl-d14	*73.9*		*25-137*	*%REC*	1	8/21/2015 05:49 AM
Surr: Nitrobenzene-d5	*64.7*		*37-107*	*%REC*	1	8/21/2015 05:49 AM
VOLATILE ORGANIC COMPOUNDS			**SW8260B**		Prep: SW5035 / 8/20/15	Analyst: **BG**
Benzene	ND		0.036	mg/Kg-dry	1	8/20/2015 10:25 PM
Surr: 1,2-Dichloroethane-d4	*99.2*		*70-130*	*%REC*	1	8/20/2015 10:25 PM
Surr: 4-Bromofluorobenzene	*107*		*70-130*	*%REC*	1	8/20/2015 10:25 PM
Surr: Dibromofluoromethane	*97.4*		*70-130*	*%REC*	1	8/20/2015 10:25 PM
Surr: Toluene-d8	*99.5*		*70-130*	*%REC*	1	8/20/2015 10:25 PM
ELECTRICAL CONDUCTIVITY (SAR)			**USDA H60 METHO**		Prep: USDA Method 20B / 8/24/15	Analyst: **JJG**
Electrical Conductivity @ Saturation	**10**		**0.050**	**mmhos/cm @2**	10	8/24/2015 02:15 PM
CHROMIUM, TRIVALENT			**CALCULATION**			Analyst: **MB**
Chromium, Trivalent	**10**		**0.60**	**mg/Kg-dry**	1	8/24/2015 11:00 AM
CHROMIUM, HEXAVALENT			**SW7196A**		Prep: SW3060A / 8/20/15	Analyst: **MB**
Chromium, Hexavalent	ND		1.2	mg/Kg-dry	1	8/21/2015 03:00 PM
MOISTURE			**E160.3M**			Analyst: **EVB**
Moisture	**16**		**0.050**	**% of sample**	1	8/20/2015 08:40 AM
PH			**SW9045D**		Prep: EXTRACT / 8/24/15	Analyst: **ED**
pH	**8.7**			**s.u.**	1	8/24/2015 01:15 PM

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

ALS Group USA, Corp

Date: *24-Aug-15*

Client: HRL Compliance Solutions, Inc
Project: Caerus Garden Gulch 1 Soil Stockpile
Work Order: 15081030
Sample ID: East End of Stockpile
Lab ID: 15081030-03
Collection Date: 8/18/2015 10:15 AM
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID			**SW8015M**		Prep: SW3541 / 8/20/15	Analyst: **IT**
DRO (C10-C28)	**160**		**4.8**	**mg/Kg-dry**	1	8/20/2015 08:45 PM
Surr: 4-Terphenyl-d14	*59.6*		*39-133*	*%REC*	1	8/20/2015 08:45 PM
GASOLINE RANGE ORGANICS BY GC-FID			**SW8015D**		Prep: SW5035 / 8/20/15	Analyst: **IT**
GRO (C6-C10)	**48**		**3.0**	**mg/Kg-dry**	1	8/20/2015 10:29 PM
Surr: Toluene-d8	*98.0*		*50-150*	*%REC*	1	8/20/2015 10:29 PM
MERCURY BY CVAA			**SW7471B**		Prep: SW7471 / 8/20/15	Analyst: **LR**
Mercury	**0.021**		**0.017**	**mg/Kg-dry**	1	8/20/2015 07:40 PM
METALS ANALYSIS BY ICP			**SW846 6010C**		Prep: SW3050B / 8/20/15	Analyst: **JEC**
Arsenic	**13**		**0.39**	**mg/Kg-dry**	1	8/21/2015 12:20 PM
Barium	**260**		**0.39**	**mg/Kg-dry**	1	8/21/2015 12:20 PM
Cadmium	ND		0.79	mg/Kg-dry	1	8/21/2015 12:20 PM
Chromium	**11**		**0.39**	**mg/Kg-dry**	1	8/21/2015 12:20 PM
Copper	**21**		**0.79**	**mg/Kg-dry**	1	8/21/2015 12:20 PM
Lead	**8.1**		**0.39**	**mg/Kg-dry**	1	8/21/2015 12:20 PM
Nickel	**33**		**0.39**	**mg/Kg-dry**	1	8/21/2015 12:20 PM
Selenium	ND		0.79	mg/Kg-dry	1	8/21/2015 12:20 PM
Silver	ND		0.39	mg/Kg-dry	1	8/21/2015 12:20 PM
Zinc	**61**		**0.79**	**mg/Kg-dry**	1	8/21/2015 12:20 PM
SOLUBLE CATIONS FOR SAR			**SW846 6010C**		Prep: USDA Method 20B / 8/24/15	Analyst: **JEC**
Calcium	**390**		**5.0**	**mg/L**	10	8/24/2015 02:34 PM
Magnesium	**240**		**2.0**	**mg/L**	10	8/24/2015 02:34 PM
Sodium	**1,100**		**2.0**	**mg/L**	10	8/24/2015 02:34 PM
SODIUM ADSORPTION RATIO			**USDA H60 METHO**		Prep: USDA Method 20B / 8/24/15	Analyst: **JEC**
Sodium Adsorption Ratio	**10**		**0.010**	**none**	1	8/24/2015
SEMI-VOLATILE ORGANIC COMPOUNDS			**SW846 8270D**		Prep: SW3541 / 8/20/15	Analyst: **RM**
Acenaphthene	ND		0.0077	mg/Kg-dry	1	8/21/2015 06:09 AM
Anthracene	ND		0.0077	mg/Kg-dry	1	8/21/2015 06:09 AM
Benzo(a)anthracene	**0.0081**		**0.0077**	**mg/Kg-dry**	1	8/21/2015 06:09 AM
Benzo(a)pyrene	ND		0.0077	mg/Kg-dry	1	8/21/2015 06:09 AM
Benzo(b)fluoranthene	ND		0.0077	mg/Kg-dry	1	8/21/2015 06:09 AM
Benzo(k)fluoranthene	ND		0.0077	mg/Kg-dry	1	8/21/2015 06:09 AM
Chrysene	ND		0.0077	mg/Kg-dry	1	8/21/2015 06:09 AM
Dibenzo(a,h)anthracene	ND		0.0077	mg/Kg-dry	1	8/21/2015 06:09 AM
Fluoranthene	**0.0081**		**0.0077**	**mg/Kg-dry**	1	8/21/2015 06:09 AM

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

ALS Group USA, Corp

Date: *24-Aug-15*

Client: HRL Compliance Solutions, Inc
Project: Caerus Garden Gulch 1 Soil Stockpile
Work Order: 15081030
Sample ID: East End of Stockpile
Lab ID: 15081030-03
Collection Date: 8/18/2015 10:15 AM
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Indeno(1,2,3-cd)pyrene	ND		0.0077	mg/Kg-dry	1	8/21/2015 06:09 AM
Naphthalene	**0.017**		**0.0077**	**mg/Kg-dry**	1	8/21/2015 06:09 AM
Pyrene	**0.0093**		**0.0077**	**mg/Kg-dry**	1	8/21/2015 06:09 AM
Surr: 2-Fluorobiphenyl	*64.0*		*12-100*	*%REC*	1	8/21/2015 06:09 AM
Surr: 4-Terphenyl-d14	*83.5*		*25-137*	*%REC*	1	8/21/2015 06:09 AM
Surr: Nitrobenzene-d5	*70.0*		*37-107*	*%REC*	1	8/21/2015 06:09 AM
VOLATILE ORGANIC COMPOUNDS			**SW8260B**		Prep: SW5035 / 8/20/15	Analyst: **BG**
Benzene	ND		0.036	mg/Kg-dry	1	8/20/2015 10:50 PM
Surr: 1,2-Dichloroethane-d4	*99.4*		*70-130*	*%REC*	1	8/20/2015 10:50 PM
Surr: 4-Bromofluorobenzene	*97.0*		*70-130*	*%REC*	1	8/20/2015 10:50 PM
Surr: Dibromofluoromethane	*97.8*		*70-130*	*%REC*	1	8/20/2015 10:50 PM
Surr: Toluene-d8	*100*		*70-130*	*%REC*	1	8/20/2015 10:50 PM
ELECTRICAL CONDUCTIVITY (SAR)			**USDA H60 METHO**		Prep: USDA Method 20B / 8/24/15	Analyst: **JJG**
Electrical Conductivity @ Saturation	**12**		**0.050**	**mmhos/cm @2**	10	8/24/2015 02:15 PM
CHROMIUM, TRIVALENT			**CALCULATION**			Analyst: **MB**
Chromium, Trivalent	**11**		**0.59**	**mg/Kg-dry**	1	8/24/2015 11:00 AM
CHROMIUM, HEXAVALENT			**SW7196A**		Prep: SW3060A / 8/20/15	Analyst: **MB**
Chromium, Hexavalent	ND		1.2	mg/Kg-dry	1	8/21/2015 03:00 PM
MOISTURE			**E160.3M**			Analyst: **EVB**
Moisture	**16**		**0.050**	**% of sample**	1	8/20/2015 08:40 AM
PH			**SW9045D**		Prep: EXTRACT / 8/24/15	Analyst: **ED**
pH	**8.4**			**s.u.**	1	8/24/2015 01:15 PM

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

Batch ID: **75051** Instrument ID **GC8** Method: **SW8015M**

MBLK Sample ID: **DBLKS1-75051-75051** Units: **mg/Kg** Analysis Date: **8/20/2015 04:45 PM**

Client ID: Run ID: **GC8_150820A** SeqNo: **3426468** Prep Date: **8/20/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	ND	5.0								
Surr: 4-Terphenyl-d14	*1.098*	0	*2*	0	*54.9*	*39-133*	0			

LCS Sample ID: **DLCSS1-75051-75051** Units: **mg/Kg** Analysis Date: **8/20/2015 05:15 PM**

Client ID: Run ID: **GC8_150820A** SeqNo: **3426469** Prep Date: **8/20/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	185.8	5.0	200	0	92.9	61-109	0			
Surr: 4-Terphenyl-d14	*1.212*	0	*2*	0	*60.6*	*39-133*	0			

MS Sample ID: **15081030-01B MS** Units: **mg/Kg** Analysis Date: **8/20/2015 05:45 PM**

Client ID: **West End of Stockpile** Run ID: **GC8_150820A** SeqNo: **3426470** Prep Date: **8/20/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	199.7	4.1	162.6	84.64	70.7	48-110	0			
Surr: 4-Terphenyl-d14	*0.9826*	0	*1.626*	0	*60.4*	*39-133*	0			

MSD Sample ID: **15081030-01B MSD** Units: **mg/Kg** Analysis Date: **8/20/2015 06:15 PM**

Client ID: **West End of Stockpile** Run ID: **GC8_150820A** SeqNo: **3426471** Prep Date: **8/20/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	211.9	4.1	163.1	84.64	78	48-110	199.7	5.95	30	
Surr: 4-Terphenyl-d14	*0.9884*	0	*1.631*	0	*60.6*	*39-133*	0.9826	*0.58*	*30*	

The following samples were analyzed in this batch:

15081030-01B	15081030-02B	15081030-03B

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

Client: HRL Compliance Solutions, Inc
Work Order: 15081030
Project: Caerus Garden Gulch 1 Soil Stockpile

QC BATCH REPORT

Batch ID: **75052** Instrument ID **GC10** Method: **SW8015D**

MBLK Sample ID: **MBLK-75052-75052** Units: **µg/Kg** Analysis Date: **8/20/2015 07:40 PM**
Client ID: Run ID: **GC10_150820A** SeqNo: **3426573** Prep Date: **8/20/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	ND	2,500								
Surr: Toluene-d8	*4782*	0	*5000*	0	*95.6*	*50-150*	0			

MBLK Sample ID: **MBLK-75052-75052** Units: **µg/Kg** Analysis Date: **8/20/2015 04:55 PM**
Client ID: Run ID: **GC9_150820A** SeqNo: **3427218** Prep Date: **8/20/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	ND	2,500								

LCS Sample ID: **LCS-75052-75052** Units: **µg/Kg** Analysis Date: **8/20/2015 07:16 PM**
Client ID: Run ID: **GC10_150820A** SeqNo: **3426572** Prep Date: **8/20/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	532100	2,500	500000	0	106	70-130	0			
Surr: Toluene-d8	*4736*	0	*5000*	0	*94.7*	*50-150*	0			

LCS Sample ID: **LCS-75052-75052** Units: **µg/Kg** Analysis Date: **8/20/2015 04:30 PM**
Client ID: Run ID: **GC9_150820A** SeqNo: **3427216** Prep Date: **8/20/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	555900	2,500	500000	0	111	80-120	0			

MS Sample ID: **15081030-01A MS** Units: **µg/Kg** Analysis Date: **8/20/2015 10:54 PM**
Client ID: **West End of Stockpile** Run ID: **GC10_150820A** SeqNo: **3426580** Prep Date: **8/20/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	718000	2,500	500000	176900	108	70-130	0			
Surr: Toluene-d8	*4842*	0	*5000*	0	*96.8*	*50-150*	0			

MSD Sample ID: **15081030-01A MSD** Units: **µg/Kg** Analysis Date: **8/20/2015 11:18 PM**
Client ID: **West End of Stockpile** Run ID: **GC10_150820A** SeqNo: **3426581** Prep Date: **8/20/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	701900	2,500	500000	176900	105	70-130	718000	2.27	30	
Surr: Toluene-d8	*4844*	0	*5000*	0	*96.9*	*50-150*	4842	*0.0206*	*30*	

The following samples were analyzed in this batch:

15081030-01A	15081030-02A	15081030-03A

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

Client: HRL Compliance Solutions, Inc
Work Order: 15081030
Project: Caerus Garden Gulch 1 Soil Stockpile

QC BATCH REPORT

Batch ID: **75057** Instrument ID **HG1** Method: **SW7471B**

MBLK Sample ID: **MBLK-75057-75057** Units: **mg/Kg** Analysis Date: **8/20/2015 07:13 PM**
Client ID: Run ID: **HG1_150820A** SeqNo: **3426694** Prep Date: **8/20/2015** 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-75057-75057** Units: **mg/Kg** Analysis Date: **8/20/2015 07:16 PM**
Client ID: Run ID: **HG1_150820A** SeqNo: **3426696** Prep Date: **8/20/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.1907	0.020	0.1665	0	115	80-120	0			

MS Sample ID: **1508953-03AMS** Units: **mg/Kg** Analysis Date: **8/20/2015 08:07 PM**
Client ID: Run ID: **HG1_150820A** SeqNo: **3426733** Prep Date: **8/20/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.1986	0.013	0.1092	0.09607	93.9	75-125	0			

MSD Sample ID: **1508953-03AMSD** Units: **mg/Kg** Analysis Date: **8/20/2015 08:10 PM**
Client ID: Run ID: **HG1_150820A** SeqNo: **3426735** Prep Date: **8/20/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.2396	0.013	0.1046	0.09607	137	75-125	0.1986	18.7	35	SE

The following samples were analyzed in this batch:

15081030-01B	15081030-02B	15081030-03B

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

Client: HRL Compliance Solutions, Inc
Work Order: 15081030
Project: Caerus Garden Gulch 1 Soil Stockpile

QC BATCH REPORT

Batch ID: **75062** Instrument ID **ICP2** Method: **SW846 6010C**

MBLK Sample ID: **MBLK-75062-75062** Units: **mg/Kg** Analysis Date: **8/21/2015 09:01 AM**
Client ID: Run ID: **ICP2_150821A** SeqNo: **3426798** Prep Date: **8/20/2015** 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	0.50								
Chromium	0.01461	0.25								J
Copper	ND	0.50								
Lead	ND	0.25								
Nickel	ND	0.25								
Selenium	ND	0.50								
Silver	ND	0.25								
Zinc	ND	0.50								

LCS Sample ID: **LCS-75062-75062** Units: **mg/Kg** Analysis Date: **8/21/2015 09:07 AM**
Client ID: Run ID: **ICP2_150821A** SeqNo: **3426799** Prep Date: **8/20/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	4.849	0.25	5	0	97	80-120	0			
Barium	4.878	0.25	5	0	97.6	80-120	0			
Cadmium	4.55	0.50	5	0	91	80-120	0			
Chromium	5.129	0.25	5	0	103	80-120	0			
Copper	4.928	0.50	5	0	98.6	80-120	0			
Lead	5.002	0.25	5	0	100	80-120	0			
Nickel	5.055	0.25	5	0	101	80-120	0			
Selenium	4.944	0.50	5	0	98.9	80-120	0			
Silver	4.807	0.25	5	0	96.1	80-120	0			
Zinc	4.534	0.50	5	0	90.7	80-120	0			

MS Sample ID: **15081041-04AMS** Units: **mg/Kg** Analysis Date: **8/21/2015 09:53 AM**
Client ID: Run ID: **ICP2_150821A** SeqNo: **3426807** Prep Date: **8/20/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	22.9	0.37	7.396	14.14	119	75-125	0			
Barium	30.46	0.37	7.396	19.19	152	75-125	0			S
Cadmium	7.163	0.74	7.396	0.01627	96.6	75-125	0			
Chromium	24.05	0.37	7.396	12.26	159	75-125	0			S
Copper	67.11	0.74	7.396	51.86	206	75-125	0			SO
Lead	26.16	0.37	7.396	14.63	156	75-125	0			S
Nickel	68.53	0.37	7.396	56.96	156	75-125	0			SO
Selenium	9.44	0.74	7.396	1.493	107	75-125	0			
Silver	7.866	0.37	7.396	-0.01271	107	75-125	0			
Zinc	31.28	0.74	7.396	19.51	159	75-125	0			S

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

Client: HRL Compliance Solutions, Inc
Work Order: 15081030
Project: Caerus Garden Gulch 1 Soil Stockpile

QC BATCH REPORT

Batch ID: **75062** Instrument ID **ICP2** Method: **SW846 6010C**

MSD Sample ID: **15081041-04AMSD** Units: **mg/Kg** Analysis Date: **8/21/2015 10:21 AM**
Client ID: Run ID: **ICP2_150821A** SeqNo: **3426812** Prep Date: **8/20/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	22.85	0.37	7.321	14.14	119	75-125	22.9	0.224	20	
Barium	29.07	0.37	7.321	19.19	135	75-125	30.46	4.65	20	S
Cadmium	7.02	0.73	7.321	0.01627	95.7	75-125	7.163	2.02	20	
Chromium	23.56	0.37	7.321	12.26	154	75-125	24.05	2.08	20	S
Copper	67.47	0.73	7.321	51.86	213	75-125	67.11	0.537	20	SO
Lead	28.08	0.37	7.321	14.63	184	75-125	26.16	7.07	20	S
Nickel	68.98	0.37	7.321	56.96	164	75-125	68.53	0.659	20	SO
Selenium	8.976	0.73	7.321	1.493	102	75-125	9.44	5.05	20	
Silver	7.77	0.37	7.321	-0.01271	106	75-125	7.866	1.23	20	
Zinc	32.6	0.73	7.321	19.51	179	75-125	31.28	4.15	20	S

The following samples were analyzed in this batch: 15081030-01B 15081030-02B 15081030-03B

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

Client: HRL Compliance Solutions, Inc
Work Order: 15081030
Project: Caerus Garden Gulch 1 Soil Stockpile

QC BATCH REPORT

Batch ID: **75099** Instrument ID **ICP2** Method: **SW846 6010C**

DUP Sample ID: **15081030-02CDUP** Units: **mg/L** Analysis Date: **8/24/2015 02:28 PM**
Client ID: **Middle of Stockpile** Run ID: **ICP2_150824A** SeqNo: **3429366** Prep Date: **8/24/2015** DF: **10**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	480.8	5.0	0	0	0	0-0	464.8	3.4		
Magnesium	236.5	2.0	0	0	0	0-0	220.8	6.87		
Sodium	1208	2.0	0	0	0	0-0	1133	6.39		

DUP Sample ID: **15081030-02CDUP** Units: **none** Analysis Date: **8/24/2015**
Client ID: **Middle of Stockpile** Run ID: **SAR_150824A** SeqNo: **3429432** Prep Date: **8/24/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sodium Adsorption Ratio	11.27	0.010	0	0	0		10.84	3.92	50	

The following samples were analyzed in this batch: 15081030-01C 15081030-02C 15081030-03C

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

Client: HRL Compliance Solutions, Inc
Work Order: 15081030
Project: Caerus Garden Gulch 1 Soil Stockpile

QC BATCH REPORT

Batch ID: **75050** Instrument ID **SVMS8** Method: **SW846 8270D**

MBLK Sample ID: **SBLKS1-75050-75050** Units: **µg/Kg** Analysis Date: **8/20/2015 05:44 PM**
Client ID: Run ID: **SVMS8_150820A** SeqNo: **3426932** Prep Date: **8/20/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	4	6.7								J
Anthracene	ND	6.7								
Benzo(a)anthracene	ND	6.7								
Benzo(a)pyrene	ND	6.7								
Benzo(b)fluoranthene	ND	6.7								
Benzo(k)fluoranthene	ND	6.7								
Chrysene	ND	6.7								
Dibenzo(a,h)anthracene	ND	6.7								
Fluoranthene	ND	6.7								
Indeno(1,2,3-cd)pyrene	ND	6.7								
Naphthalene	ND	6.7								
Pyrene	ND	6.7								
Surr: 2-Fluorobiphenyl	*878*	0	*1667*	0	*52.7*	*12-100*	0			
Surr: 4-Terphenyl-d14	*1246*	0	*1667*	0	*74.7*	*25-137*	0			
Surr: Nitrobenzene-d5	*917*	0	*1667*	0	*55*	*37-107*	0			

LCS Sample ID: **SLCSS1-75050-75050** Units: **µg/Kg** Analysis Date: **8/20/2015 06:04 PM**
Client ID: Run ID: **SVMS8_150820A** SeqNo: **3426933** Prep Date: **8/20/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	507	6.7	666.7	0	76	45-110	0			
Anthracene	610	6.7	666.7	0	91.5	55-105	0			
Benzo(a)anthracene	613.3	6.7	666.7	0	92	50-110	0			
Benzo(a)pyrene	621.7	6.7	666.7	0	93.2	50-110	0			
Benzo(b)fluoranthene	650	6.7	666.7	0	97.5	45-115	0			
Benzo(k)fluoranthene	655	6.7	666.7	0	98.2	45-115	0			
Chrysene	621	6.7	666.7	0	93.1	55-110	0			
Dibenzo(a,h)anthracene	542.7	6.7	666.7	0	81.4	40-125	0			
Fluoranthene	642.3	6.7	666.7	0	96.3	55-115	0			
Indeno(1,2,3-cd)pyrene	549.7	6.7	666.7	0	82.4	40-120	0			
Naphthalene	462	6.7	666.7	0	69.3	40-105	0			
Pyrene	639.7	6.7	666.7	0	95.9	45-125	0			
Surr: 2-Fluorobiphenyl	*1091*	0	*1667*	0	*65.4*	*12-100*	0			
Surr: 4-Terphenyl-d14	*1394*	0	*1667*	0	*83.6*	*25-137*	0			
Surr: Nitrobenzene-d5	*1169*	0	*1667*	0	*70.2*	*37-107*	0			

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

Client: HRL Compliance Solutions, Inc
Work Order: 15081030
Project: Caerus Garden Gulch 1 Soil Stockpile

QC BATCH REPORT

Batch ID: **75050** Instrument ID **SVMS8** Method: **SW846 8270D**

MS Sample ID: **1508996-02B MS** Units: **µg/Kg** Analysis Date: **8/20/2015 08:08 PM**
Client ID: Run ID: **SVMS8_150820A** SeqNo: **3426934** Prep Date: **8/20/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	874.5	13	1260	10.86	68.5	45-110	0			
Anthracene	1050	13	1260	0	83.3	55-105	0			
Benzo(a)anthracene	1019	13	1260	13.41	79.8	50-110	0			
Benzo(a)pyrene	1041	13	1260	0	82.6	50-110	0			
Benzo(b)fluoranthene	1069	13	1260	0	84.8	45-115	0			
Benzo(k)fluoranthene	1078	13	1260	0	85.5	45-115	0			
Chrysene	1037	13	1260	12.77	81.3	55-110	0			
Dibenzo(a,h)anthracene	846.8	13	1260	0	67.2	40-125	0			
Fluoranthene	1101	13	1260	11.5	86.4	55-115	0			
Indeno(1,2,3-cd)pyrene	885.8	13	1260	0	70.3	40-120	0			
Naphthalene	826	13	1260	0	65.5	40-105	0			
Pyrene	1045	13	1260	14.05	81.8	45-125	0			
Surr: 2-Fluorobiphenyl	*1979*	0	*3150*	0	*62.8*	*12-100*	0			
Surr: 4-Terphenyl-d14	*2298*	0	*3150*	0	*72.9*	*25-137*	0			
Surr: Nitrobenzene-d5	*2184*	0	*3150*	0	*69.3*	*37-107*	0			

MSD Sample ID: **1508996-02B MSD** Units: **µg/Kg** Analysis Date: **8/20/2015 08:28 PM**
Client ID: Run ID: **SVMS8_150820A** SeqNo: **3426935** Prep Date: **8/20/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	873.6	13	1257	10.86	68.6	45-110	874.5	0.101	30	
Anthracene	1046	13	1257	0	83.2	55-105	1050	0.426	30	
Benzo(a)anthracene	1031	13	1257	13.41	80.9	50-110	1019	1.17	30	
Benzo(a)pyrene	1055	13	1257	0	83.9	50-110	1041	1.32	30	
Benzo(b)fluoranthene	1091	13	1257	0	86.8	45-115	1069	2.03	30	
Benzo(k)fluoranthene	1083	13	1257	0	86.1	45-115	1078	0.453	30	
Chrysene	1035	13	1257	12.77	81.3	55-110	1037	0.245	30	
Dibenzo(a,h)anthracene	856	13	1257	0	68.1	40-125	846.8	1.08	30	
Fluoranthene	1110	13	1257	11.5	87.4	55-115	1101	0.836	30	
Indeno(1,2,3-cd)pyrene	875.5	13	1257	0	69.6	40-120	885.8	1.17	30	
Naphthalene	835.3	13	1257	0	66.4	40-105	826	1.12	30	
Pyrene	1043	13	1257	14.05	81.8	45-125	1045	0.185	30	
Surr: 2-Fluorobiphenyl	*1936*	0	*3143*	0	*61.6*	*12-100*	1979	*2.17*	*40*	
Surr: 4-Terphenyl-d14	*2282*	0	*3143*	0	*72.6*	*25-137*	2298	*0.685*	*40*	
Surr: Nitrobenzene-d5	*2168*	0	*3143*	0	*69*	*37-107*	2184	*0.737*	*40*	

The following samples were analyzed in this batch: 15081030-01B 15081030-02B 15081030-03B

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

Client: HRL Compliance Solutions, Inc
Work Order: 15081030
Project: Caerus Garden Gulch 1 Soil Stockpile

QC BATCH REPORT

Batch ID: **75049** Instrument ID **VMS5** Method: **SW8260B**

MBLK Sample ID: **MBLK-75049-75049** Units: **µg/Kg** Analysis Date: **8/20/2015 03:12 PM**
Client ID: Run ID: **VMS5_150820A** SeqNo: **3426688** Prep Date: **8/20/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	30								
Surr: 1,2-Dichloroethane-d4	*1008*	0	*1000*	0	*101*	*70-130*	0			
Surr: 4-Bromofluorobenzene	*988.5*	0	*1000*	0	*98.8*	*70-130*	0			
Surr: Dibromofluoromethane	*1004*	0	*1000*	0	*100*	*70-130*	0			
Surr: Toluene-d8	*1020*	0	*1000*	0	*102*	*70-130*	0			

LCS Sample ID: **LCS-75049-75049** Units: **µg/Kg** Analysis Date: **8/20/2015 01:55 PM**
Client ID: Run ID: **VMS5_150820A** SeqNo: **3426687** Prep Date: **8/20/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	993	30	1000	0	99.3	75-125	0			
Surr: 1,2-Dichloroethane-d4	*963.5*	0	*1000*	0	*96.4*	*70-130*	0			
Surr: 4-Bromofluorobenzene	*995.5*	0	*1000*	0	*99.6*	*70-130*	0			
Surr: Dibromofluoromethane	*999.5*	0	*1000*	0	*100*	*70-130*	0			
Surr: Toluene-d8	*1004*	0	*1000*	0	*100*	*70-130*	0			

MS Sample ID: **15081030-01A MS** Units: **µg/Kg** Analysis Date: **8/20/2015 11:41 PM**
Client ID: **West End of Stockpile** Run ID: **VMS5_150820A** SeqNo: **3426784** Prep Date: **8/20/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	973	30	1000	0	97.3	75-125	0			
Surr: 1,2-Dichloroethane-d4	*983*	0	*1000*	0	*98.3*	*70-130*	0			
Surr: 4-Bromofluorobenzene	*1031*	0	*1000*	0	*103*	*70-130*	0			
Surr: Dibromofluoromethane	*971.5*	0	*1000*	0	*97.2*	*70-130*	0			
Surr: Toluene-d8	*1010*	0	*1000*	0	*101*	*70-130*	0			

MSD Sample ID: **15081030-01A MSD** Units: **µg/Kg** Analysis Date: **8/21/2015 12:07 PM**
Client ID: **West End of Stockpile** Run ID: **VMS5_150820A** SeqNo: **3426785** Prep Date: **8/20/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	1011	30	1000	0	101	75-125	973	3.83	30	
Surr: 1,2-Dichloroethane-d4	*982.5*	0	*1000*	0	*98.2*	*70-130*	983	*0.0509*	*30*	
Surr: 4-Bromofluorobenzene	*1009*	0	*1000*	0	*101*	*70-130*	1031	*2.16*	*30*	
Surr: Dibromofluoromethane	*959*	0	*1000*	0	*95.9*	*70-130*	971.5	*1.3*	*30*	
Surr: Toluene-d8	*993*	0	*1000*	0	*99.3*	*70-130*	1010	*1.7*	*30*	

The following samples were analyzed in this batch:

15081030-01A	15081030-02A	15081030-03A

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

Client: HRL Compliance Solutions, Inc
Work Order: 15081030
Project: Caerus Garden Gulch 1 Soil Stockpile

QC BATCH REPORT

Batch ID: **75099** Instrument ID **WETCHEM** Method: **USDA H60 Metho**

DUP Sample ID: **15081030-02C DUP** Units: **mmhos/cm @25°** Analysis Date: **8/24/2015 02:15 PM**
Client ID: **Middle of Stockpile** Run ID: **WETCHEM_150824G** SeqNo: **3429231** Prep Date: **8/24/2015** DF: **10**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Electrical Conductivity @ Saturation	11.45	0.050	0	0	0		10.48	8.85	50	

The following samples were analyzed in this batch: 15081030-01C, 15081030-02C, 15081030-03C

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

Client: HRL Compliance Solutions, Inc
Work Order: 15081030
Project: Caerus Garden Gulch 1 Soil Stockpile

QC BATCH REPORT

Batch ID: **75107** Instrument ID **WETCHEM** Method: **SW7196A**

MBLK Sample ID: **MBLK-75107-75107** Units: **mg/Kg** Analysis Date: **8/21/2015 03:00 PM**
Client ID: Run ID: **WETCHEM_150821H** SeqNo: **3427785** Prep Date: **8/20/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	ND	1.0								

LCS Sample ID: **LCS-75107-75107** Units: **mg/Kg** Analysis Date: **8/21/2015 03:00 PM**
Client ID: Run ID: **WETCHEM_150821H** SeqNo: **3427784** Prep Date: **8/20/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	5.2	1.0	5	0	104	80-120	0			

MS Sample ID: **1508869-05A MS** Units: **mg/Kg** Analysis Date: **8/21/2015 03:00 PM**
Client ID: Run ID: **WETCHEM_150821H** SeqNo: **3427780** Prep Date: **8/20/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	2.336	0.93	4.673	0.181	46.1	75-125	0			S

MS Sample ID: **1508869-05A MSI** Units: **mg/Kg** Analysis Date: **8/21/2015 03:00 PM**
Client ID: Run ID: **WETCHEM_150821H** SeqNo: **3427782** Prep Date: **8/20/2015** DF: **100**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	2422	98	2587	0.181	93.6	75-125	0			

MSD Sample ID: **1508869-05A MSD** Units: **mg/Kg** Analysis Date: **8/21/2015 03:00 PM**
Client ID: Run ID: **WETCHEM_150821H** SeqNo: **3427781** Prep Date: **8/20/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	3.366	0.99	4.95	0.181	64.3	75-125	2.336	36.1	20	SR

The following samples were analyzed in this batch:

15081030-01B	15081030-02B	15081030-03B

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

Client: HRL Compliance Solutions, Inc
Work Order: 15081030
Project: Caerus Garden Gulch 1 Soil Stockpile

QC BATCH REPORT

Batch ID: **75166** Instrument ID **WETCHEM** Method: **SW9045D**

LCS Sample ID: **LCS-75166-75166** Units: **s.u.** Analysis Date: **8/24/2015 01:15 PM**
Client ID: Run ID: **WETCHEM_150824I** SeqNo: **3429444** Prep Date: **8/24/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	3.97	0	4	0	99.2	90-110	0			

DUP Sample ID: **15081016-01A DUP** Units: **s.u.** Analysis Date: **8/24/2015 01:15 PM**
Client ID: Run ID: **WETCHEM_150824I** SeqNo: **3429447** Prep Date: **8/24/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	8.18	0	0	0	0	0-0	8.02	1.98	20	

DUP Sample ID: **15081117-01A DUP** Units: **s.u.** Analysis Date: **8/24/2015 01:15 PM**
Client ID: Run ID: **WETCHEM_150824I** SeqNo: **3429457** Prep Date: **8/24/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	8.25	0	0	0	0	0-0	8.23	0.243	20	

The following samples were analyzed in this batch:

15081030-01B	15081030-02B	15081030-03B

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

Client: HRL Compliance Solutions, Inc
Work Order: 15081030
Project: Caerus Garden Gulch 1 Soil Stockpile

QC BATCH REPORT

Batch ID: **R170085** Instrument ID **MOIST** Method: **E160.3M**

MBLK Sample ID: **WBLKS-R170085** Units: **% of sample** Analysis Date: **8/20/2015 08:40 AM**
Client ID: Run ID: **MOIST_150820B** SeqNo: **3426878** 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-R170085** Units: **% of sample** Analysis Date: **8/20/2015 08:40 AM**
Client ID: Run ID: **MOIST_150820B** SeqNo: **3426876** 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: **15081043-01A DUP** Units: **% of sample** Analysis Date: **8/20/2015 08:40 AM**
Client ID: Run ID: **MOIST_150820B** SeqNo: **3426840** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	5.87	0.050	0	0	0		6.24	6.11	20	

DUP Sample ID: **1508996-03B DUP** Units: **% of sample** Analysis Date: **8/20/2015 08:40 AM**
Client ID: Run ID: **MOIST_150820B** SeqNo: **3426851** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	34.77	0.050	0	0	0		35.53	2.16	20	

The following samples were analyzed in this batch:

15081030-01B	15081030-02B	15081030-03B

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 282r8

WORKORDER # 1S081030

		SAMPLER	Reed Wold	DATE	8/18/2015
PROJECT NAME	Caerus Garden Gulch 1 Soil Stockpile	SITE ID	Garden Gulch 1	TURNAROUND	5 day
PROJECT No.		EDD FORMAT			
		PURCHASE ORDER			
COMPANY NAME	HRL Compliance	BILL TO COMPANY	Caerus Piceance, LLC		
SEND REPORT TO	Casey Richardson Jake Janicek	INVOICE ATTN TO	Jake Janicek		
ADDRESS	2385 F 1/2 Rd	ADDRESS	120 N. Railroad, 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	Crichardson@hrlcomp.com Rwold@hrlcomp.com JJanicek@caerusoilandgas.com	E-MAIL	Invoices@caerusoilandgas.com JJanicek@caerusoilandgas.com		

PAGE 1 of 1

DISPOSAL (By Lab) or Return to Client

Lab ID	Field ID	Matrix	Sample Date	Sample Time	# Bottles	Pres.	QC	Benzene/GRO	DRO/PAH/Metals (Table 910-1)	SAR/EC/pH
1	West End of stockpile	SO	8/18/2015	10:45	3	8		X	X	X
2	Middle of stockpile	SO	8/18/2015	10:30	3	8		X	X	X
3	East End of stockpile	SO	8/18/2015	10:15	3	8		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: 2.4°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	Reed Wold	Reed Wold	8/18/2015	12:40
RECEIVED BY	M	W.M	8-18-15	1:28
RELINQUISHED BY				
RECEIVED BY				
RELINQUISHED BY				
RECEIVED BY				

FedEx Ship Manager - Print Your Label(s)

8/18/2015

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

SHIP DATE: 18AUG15
ACTWGT: 30.00 LB
CAD: 2264840/INET3670
DIMS: 21x12x12 IN

BILL SENDER

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

HOLLAND MI 49424
(616) 399-6070 REF: 081815-1
INV:
PO: PARACHUTE DEPT:

539J1/FECA3100

FedEx Express

REL# 3785346

WED - 19 AUG 10:30A
PRIORITY OVERNIGHT

2 of 2
MPS# 0263 7743 1279 9957
Mstr# 7743 1279 9876

0201

49424
GRR

XX HLMA

MI-US

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.

ALS Group USA, Corp

Sample Receipt Checklist

Client Name: **HRL** Date/Time Received: **19-Aug-15 21:50**

Work Order: **15081030** Received by: **LA**

Checklist completed by Diane Shaw (eSignature) 20-Aug-15 (Date) Reviewed by: Lee Arnold (eSignature) 20-Aug-15 (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 ☐	
Sample(s) received on ice?	Yes ☑	No ☐	
Temperature(s)/Thermometer(s):	2.6/2.6 c	SR2	
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:	8/20/2015 8:34:02 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:

30-Jul-2013

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

Re: **Caerus Chevron 41-8D 13-199 7/22/13** Work Order: **1307799**

Dear Herman,

ALS Environmental received 3 samples on 23-Jul-2013 10:00 AM for the analyses presented in the following report.

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

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

The total number of pages in this report is 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

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: 30-Jul-13

Client: HRL Compliance Solutions
Project: Caerus Chevron 41-8D 13-199 7/22/13
Work Order: **1307799**

Work Order Sample Summary

Lab Samp ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
1307799-01	BKGD 1	Soil		7/22/2013 13:45	7/23/2013 10:00	☐
1307799-02	BKGD 2	Soil		7/22/2013 13:35	7/23/2013 10:00	☐
1307799-03	BKGD 3	Soil		7/22/2013 13:30	7/23/2013 10:00	☐

ALS Group USA, Corp

Date: 30-Jul-13

Client: HRL Compliance Solutions
Project: Caerus Chevron 41-8D 13-199 7/22/13
WorkOrder: **1307799**

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: *30-Jul-13*

Client: HRL Compliance Solutions
Project: Caerus Chevron 41-8D 13-199 7/22/13 **Work Order:** 1307799
Sample ID: BKGD 1 **Lab ID:** 1307799-01
Collection Date: 7/22/2013 01:45 PM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			**SW6020A**		Prep Date: **7/25/2013**	Analyst: **ML**
Arsenic	**39**		**9.2**	**mg/Kg-dry**	5	7/27/2013 02:20 AM
SOLUBLE CATIONS FOR SAR			**SW6020A**		Prep Date: **7/25/2013**	Analyst: **RH**
Calcium	**81**		**10**	**mg/L**	20	7/26/2013 03:49 PM
Magnesium	**28**		**4.0**	**mg/L**	20	7/26/2013 03:49 PM
Sodium	**120**		**4.0**	**mg/L**	20	7/26/2013 03:49 PM
SODIUM ADSORPTION RATIO			**USDA H60 METHO**		Prep Date: **7/25/2013**	Analyst: **RH**
Sodium Adsorption Ratio	**2.8**		**0.010**	**none**	1	7/26/2013
ELECTRICAL CONDUCTIVITY (SAR)			**USDA H60 METHO**		Prep Date: **7/25/2013**	Analyst: **JB**
Electrical Conductivity @ Saturation	**1.2**		**0.050**	**mmhos/cm @25**	10	7/25/2013 03:10 PM
MOISTURE			**A2540 G**			Analyst: **BD**
Moisture	**82**		**0.050**	**% of sample**	1	7/23/2013 12:40 PM
PH			**SW9045D**		Prep Date: **7/23/2013**	Analyst: **JB**
pH	**9.1**			**s.u.**	1	7/23/2013 11:00 AM

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

ALS Group USA, Corp

Date: *30-Jul-13*

Client: HRL Compliance Solutions
Project: Caerus Chevron 41-8D 13-199 7/22/13 **Work Order:** 1307799
Sample ID: BKGD 2 **Lab ID:** 1307799-02
Collection Date: 7/22/2013 01:35 PM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			**SW6020A**		Prep Date: **7/25/2013**	Analyst: **ML**
Arsenic	**8.3**		**2.0**	**mg/Kg-dry**	5	7/27/2013 02:44 AM
MOISTURE			**A2540 G**			Analyst: **BD**
Moisture	**7.3**		**0.050**	**% of sample**	1	7/23/2013

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

ALS Group USA, Corp

Date: *30-Jul-13*

Client: HRL Compliance Solutions
Project: Caerus Chevron 41-8D 13-199 7/22/13 **Work Order:** 1307799
Sample ID: BKGD 3 **Lab ID:** 1307799-03
Collection Date: 7/22/2013 01:30 PM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			**SW6020A**		Prep Date: **7/25/2013**	Analyst: **ML**
Arsenic	**8.6**		**1.8**	**mg/Kg-dry**	5	7/27/2013 02:50 AM
MOISTURE			**A2540 G**			Analyst: **BD**
Moisture	**5.2**		**0.050**	**% of sample**	1	7/23/2013

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

QC BATCH REPORT

Batch ID: **50013** Instrument ID **ICPMS1** Method: **SW6020A**

MBLK Sample ID: **MBLK-50013-50013** Units: **mg/Kg** Analysis Date: **7/26/2013 02:01 PM**

Client ID: Run ID: **ICPMS1_130726A** SeqNo: **2392468** Prep Date: **7/25/2013** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.03916	0.25								J

LCS Sample ID: **LCS-50013-50013** Units: **mg/Kg** Analysis Date: **7/26/2013 02:07 PM**

Client ID: Run ID: **ICPMS1_130726A** SeqNo: **2392469** Prep Date: **7/25/2013** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	4.799	0.25	5	0	96	80-120	0			

MS Sample ID: **1307769-02BMS** Units: **mg/Kg** Analysis Date: **7/26/2013 02:19 PM**

Client ID: Run ID: **ICPMS1_130726A** SeqNo: **2392471** Prep Date: **7/25/2013** DF: **5**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	12.8	1.9	7.418	5.276	101	75-125	0			

MSD Sample ID: **1307769-02BMSD** Units: **mg/Kg** Analysis Date: **7/26/2013 02:25 PM**

Client ID: Run ID: **ICPMS1_130726A** SeqNo: **2392472** Prep Date: **7/25/2013** DF: **5**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	13.82	1.9	7.645	5.276	112	75-125	12.8	7.68	25	

The following samples were analyzed in this batch: 1307799-01A 1307799-02A 1307799-03A

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

Client: HRL Compliance Solutions
Work Order: 1307799
Project: Caerus Chevron 41-8D 13-199 7/22/13

QC BATCH REPORT

Batch ID: **49915** Instrument ID **WETCHEM** Method: **USDA H60 Method**

DUP Sample ID: **1307634-01B DUP** Units: **mmhos/cm @25°C** Analysis Date: **7/25/2013 03:10 PM**
Client ID: Run ID: **WETCHEM_130725J** SeqNo: **2390794** Prep Date: **7/25/2013** DF: **10**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Electrical Conductivity @ Saturation	1.583	0.050	0	0	0		1.847	15.4	50	

The following samples were analyzed in this batch: 1307799-01B

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

Client: HRL Compliance Solutions
Work Order: 1307799
Project: Caerus Chevron 41-8D 13-199 7/22/13

QC BATCH REPORT

Batch ID: **49934** Instrument ID **WETCHEM** Method: **SW9045D**

LCS Sample ID: **LCS-49934-49934** Units: **s.u.** Analysis Date: **7/23/2013 11:00 AM**
Client ID: Run ID: **WETCHEM_130723L** SeqNo: **2388161** Prep Date: **7/23/2013** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	4.53	0	4.4	0	103	90-110	0			

DUP Sample ID: **1307798-01B DUP** Units: **s.u.** Analysis Date: **7/23/2013 11:00 AM**
Client ID: Run ID: **WETCHEM_130723L** SeqNo: **2388163** Prep Date: **7/23/2013** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	9.13	0	0	0	0	0-0	9.13	0	20	

The following samples were analyzed in this batch: 1307799-01A

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

Client: HRL Compliance Solutions
Work Order: 1307799
Project: Caerus Chevron 41-8D 13-199 7/22/13

QC BATCH REPORT

Batch ID: **R124049** Instrument ID **MOIST** Method: **A2540 G**

MBLK Sample ID: **WBLKS-R124049** Units: **% of sample** Analysis Date: **7/23/2013 12:40 PM**
Client ID: Run ID: **MOIST_130723A** SeqNo: **2388372** 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-R124049** Units: **% of sample** Analysis Date: **7/23/2013 12:40 PM**
Client ID: Run ID: **MOIST_130723A** SeqNo: **2388371** 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: **1307776-06A DUP** Units: **% of sample** Analysis Date: **7/23/2013 12:40 PM**
Client ID: Run ID: **MOIST_130723A** SeqNo: **2388357** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	48.63	0.050	0	0	0	0-0	49.35	1.47	20	

DUP Sample ID: **1307798-01B DUP** Units: **% of sample** Analysis Date: **7/23/2013 12:40 PM**
Client ID: Run ID: **MOIST_130723A** SeqNo: **2388365** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	19.99	0.050	0	0	0	0-0	20.28	1.44	20	

The following samples were analyzed in this batch: 1307799-01A

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

Client: HRL Compliance Solutions
Work Order: 1307799
Project: Caerus Chevron 41-8D 13-199 7/22/13

QC BATCH REPORT

Batch ID: **R124058** Instrument ID **MOIST** Method: **A2540 G**

MBLK Sample ID: **WBLKS-R124058** Units: **% of sample** Analysis Date: **7/23/2013**
Client ID: Run ID: **MOIST_130723C** SeqNo: **2388576** 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-R124058** Units: **% of sample** Analysis Date: **7/23/2013**
Client ID: Run ID: **MOIST_130723C** SeqNo: **2388574** 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: **1307794-01B DUP** Units: **% of sample** Analysis Date: **7/23/2013**
Client ID: Run ID: **MOIST_130723C** SeqNo: **2388528** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	15.1	0.050	0	0	0	0-0	15.45	2.29	20	

DUP Sample ID: **1307801-04A DUP** Units: **% of sample** Analysis Date: **7/23/2013**
Client ID: Run ID: **MOIST_130723C** SeqNo: **2388551** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	32.26	0.050	0	0	0	0-0	31.81	1.4	20	

The following samples were analyzed in this batch: 1307799-02A 1307799-03A

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 # 1307799

PAGE 1 of 1

PROJECT NAME	CAERUS CHEVRON 41-8D	SAMPLER	Casey Richardson	DATE	7-22-13
PROJECT No.	13-199	SITE ID		TURNAROUND	5 DAY
		EDD FORMAT		DISPOSAL	~~By Lab~~ or Return to Client
COMPANY NAME	HCSI	PURCHASE ORDER			
SEND REPORT TO	Herman Lucero	BILL TO COMPANY	PDC Energy		
ADDRESS	2385 F 1/2 Road	INVOICE ATTN TO	Ed Winters		
CITY / STATE / ZIP	Grand Junction, CO. 81505	ADDRESS	120 Railroad Ave. Suite D		
PHONE	970-243-3271	CITY / STATE / ZIP	Parachute, CO 81635		
FAX	970-243-3280	PHONE	970-285-9606		
E-MAIL	hlucero@hrlcomp.com	FAX			
		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	7-22-13	1345	2	8		X	X
2	BKGD 2	SOIL	7-22-13	1335	1	8			X
3	BKGD 3	SOIL	7-22-13	1330	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: 5.0C

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	7-22-13	1625
RECEIVED BY		Colby Koerner	7/22/13	1625
RELINQUISHED BY		Colby Koerner	7/22/13	1625
RECEIVED BY	Fed Ex			
RELINQUISHED BY				
RECEIVED BY		Diane F Shea	7/23/13	1000

ALS Group USA, Corp

Sample Receipt Checklist

Client Name: **HRL** Date/Time Received: **23-Jul-13 10:00**

Work Order: **1307799** Received by: **DS**

Checklist completed by Diane Shaw (eSignature) 23-Jul-13 (Date) Reviewed by: Ann Preston (eSignature) 28-Jul-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):	5.0 c		
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:	7/23/2013 10:56:26 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

J13111302120326

Ship Date: 22JUL13
ActWgt: 80.0 LB
CAD: 103923490/INET3370

Dims: 25 X 14 X 15 IN

Delivery Address Bar Code

Ref # 1001-072213-3
Invoice #
PO #
Dept #

SHIP TO: (616) 399-6070 BILL RECIPIENT

Sample recieving
ALS Holland
3352 128TH AVE

HOLLAND, MI 49424

TUE - 23 JUL 3:00P
STANDARD OVERNIGHT

TRK# 0201 **7962 8879 8431**

XX GRRA

49424
MI-US
GRR

518G1/AA04/93AB

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.