

State of Colorado
Oil and Gas Conservation Commission

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



Project: 9369
Location: 116721
Location: 312956
Document #: 2210470
Date: 11/18/2015

SITE INVESTIGATION AND REMEDIATION WORKPLAN

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

CAUSE OF CONDITION BEING INVESTIGATED AND REMEDIATED

☐ Spill or Release ☐ Plug & Abandon ☐ Central Facility Closure ☐ Site/Facility Closure ☒ Other (describe): Non-Permitted Pit Closure

OGCC Employee:
☐ Spill ☐ Complaint
☐ Inspection ☐ NOAV
Tracking No:

OGCC Operator Number: 6720

Name of Operator: Robert L. Bayless

Address: 2700 N. Farmington Ave. Building F, Suite 1

City: Farmington

State: NM Zip: 87401

Contact Name and Telephone:

John Thomas

No: 505-326-2659

Fax:

API Number: 05-081-06379

County: Moffat

Facility Name: Alta Martin 1-33

Facility Number: 312956 / 116721

Well Name:

Well Number:

Location: (QtrQtr, Sec, Twp, Rng, Meridian): NWSW, Sec 33, T10N, R93W, 6th PM

Latitude: 40.779173 Longitude: -107.845510

TECHNICAL CONDITIONS

Type of Waste Causing Impact (crude oil, condensate, produced water, etc): None Known

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

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

Soil type, if not previously identified on Form 2A or Federal Surface Use Plan: Berlake-Maysprings Complex, 3-12% Slope

Potential receptors (water wells within 1/4 mi, surface waters, etc.): Un-named drainage lies approximately 1,490 feet to the east

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

Impacted Media (check):

☐

Soils

☐

Vegetation

☐

Groundwater

☐

Surface Water

Extent of Impact:

No impacts observed

How Determined:

Analytical testing

REMEDIAL WORKPLAN

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

See attached report

Describe how source is to be removed:

See attached report

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

See attached report



Tracking Number: _____
Name of Operator: Bayless
OGCC Operator No: 6720
Received Date: 11/18/15
Well Name & No: Martin / AHA 1
Facility Name & No: 312956 / 116721

Page 2
REMEDIATION WORKPLAN (Cont.)

OGCC Employee: _____

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

See attached report

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

See attached report

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

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

See attached report

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

See attached report

IMPLEMENTATION SCHEDULE

Date Site Investigation Began: <u>Sept 28, 2015</u>	Date Site Investigation Completed: <u>Sept 28, 2015</u>	Date Remediation Plan Submitted: <u>N/A</u>
Remediation Start Date: <u>N/A</u>	Anticipated Completion Date: <u>N/A</u>	Actual Completion Date: <u>N/A</u>

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

Print Name: John D Thomas Signed: [Signature]

Title: Production & Asset Manager Date: 11/18/2015

OGCC Approved: [Signature] Title: EPS Date: 11/25/15

***ROBERT L. BAYLESS PRODUCER
GREAT DIVIDE FIELD
NOTICE OF COMPLETION REPORT FOR
ALTA MARTIN 1-33 PIT***

Prepared For:



2700 Farmington Avenue
Building F, Suite 1
Farmington, New Mexico 87401

Prepared By:



HRL COMPLIANCE SOLUTIONS, INC.
Environmental Consultants

2385 F ½ RD
Grand Junction, CO81505
Phone: 970-243-3271
Fax: 970-243-3280

TABLE OF CONTENTS

Introduction.....	1
Evacuation of Pit Contents.....	1
Background Sampling.....	1
Evaluation of Pit Soils	1
Backfill Material	2
Exceptions to COGCC Table 910-1.....	2
Analytical Data Management.....	2

LIST OF TABLES

Table 1: Pit Bottom and Walls Analytical Results

Table 2: Background Analytical Results

LIST OF FIGURES

Figure 1: GIS Map of Sample Locations

Figure 2: Photograph of Pit

LIST OF APPENDICES

Appendix 1: Pit Bottom Raw Analytical Data

Appendix 2: Pit Side Wall Raw Analytical Data

Appendix 3: Background Raw Analytical Data

Introduction

The purpose of this Form 27 Site Investigation & Remediation report – for the closure of the Alta Martin 1-33 large surface pit; hereinafter referred to as Alta Martin Pit – is to provide detailed information and result analysis as requested by Kris Neidel on October 8, 2015. This report will provide the documentation necessary to demonstrate a comprehensive and diligent investigation of the pit and adjacent environment which was obtained as described and in accordance with all appropriate county, state and federal rules and regulations.

The subject Form 27 is being submitted to satisfy pit closure requirements as outlined in the COGCC 905 & 909.c series rules, as well as “Action Required” requirements set forth in the initial COGCC inspection dated December 8, 2014 (Doc# 673401516) and follow up COGCC inspection conducted on June 1, 2015 (Doc# 673402143).

Evacuation of Pit Contents

No contents were present within the pit requiring removal and disposal as the pit has not been used in the past 5+ years.

Background Sampling

Three (3) grab samples were collected from the upgradient, undisturbed soil surrounding the pad. All three samples were analyzed for arsenic, as well as an additional analysis at one location which included inorganic parameters listed in COGCC Table 910-1. Refer to Table 2 and Appendix 3 for background sampling results.

Evaluation of Pit Soils

Soils on the pit side walls and bottom were evaluated for evidence of staining and possibly impacts. Because of the layout of the pit construction, the pit was divided into a five (5) quadrants in order to accurately characterize the pit as a whole by investigating individual quadrants. The five quadrants were named by their geographical direction in relation to the pit bottom and are defined in Figure 1.

For each quadrant, soils were visually inspected for impacts. No staining or noticeable odors were observed that would indicate that the soils contained hydrocarbon impacts. Due to no evidence of impacts, confirmation samples were collected and submitted to ALS Laboratories in Holland, Michigan for COGCC Table 910-1. As discussed with Mr. Neidel on October 8 2015, a reduced COGCC Table 910-1 for the side walls was approved, removing metals, and inorganic (SAR/EC/pH) analysis. It was discussed that the pit bottom analysis will contain the full COGCC Table 910-1, providing the metals and inorganic concentrations, which will be representative of any metal concentrations on the side walls. Results are provided in Table 1, as well as raw analytical data provided in Appendix 1 and 2.

- Confirmation samples were collected in accordance with Rule 905.b.(4), from all three walls at a position that was centered vertically and horizontally. These samples were collected for confirmation of compliance of COGCC Rule 910 for hydrocarbon

concentrations. One additional grab sample was collected from the base of the pit, which included the low point of the base to be analyzed for full COGCC Table 910-1, to demonstrate compliance in accordance with Rule 905.b.(1).

- A Trimble Geo XT 2011 was used to satisfy requirements as outlined in COGCC Rule 215 for collecting GPS locations of each confirmation sample location from the pit walls and pit bottom.

Backfill Material

Material utilized to backfill the pit will be the original excavated soil from construction of the pit.

- The soil will be placed in 2-3 foot lifts and will not be compacted beyond the point of making an impenetrable layer but sufficient to suppose subsequent operations and prevent subsidence.
- The pit will be reclaimed in accordance with the COGCC 1000 Series Rule in addition to all SUA/COA's per the land owner.

Exceptions to COGCC Table 910-1

The only exceedances with regards to COGCC Table 910-1 were within the arsenic and inorganic analysis. Bayless is requesting that an allowance for arsenic be considered as it is relative to background arsenic levels. Any concern to inorganic concentrations will be covered with 3ft of native material as outlined in the COGCC Frequently Asked Questions, Item #32.

Analytical Data Management

Refer to Appendix 1 for the raw analytical analysis for samples collected along the pit bottom and side walls, which are also presented in Table 1. Table 2 includes background sample results with raw analytical data available in Appendix 3.

FIGURES

FIGURE 1: SAMPLE LOCATION MAP

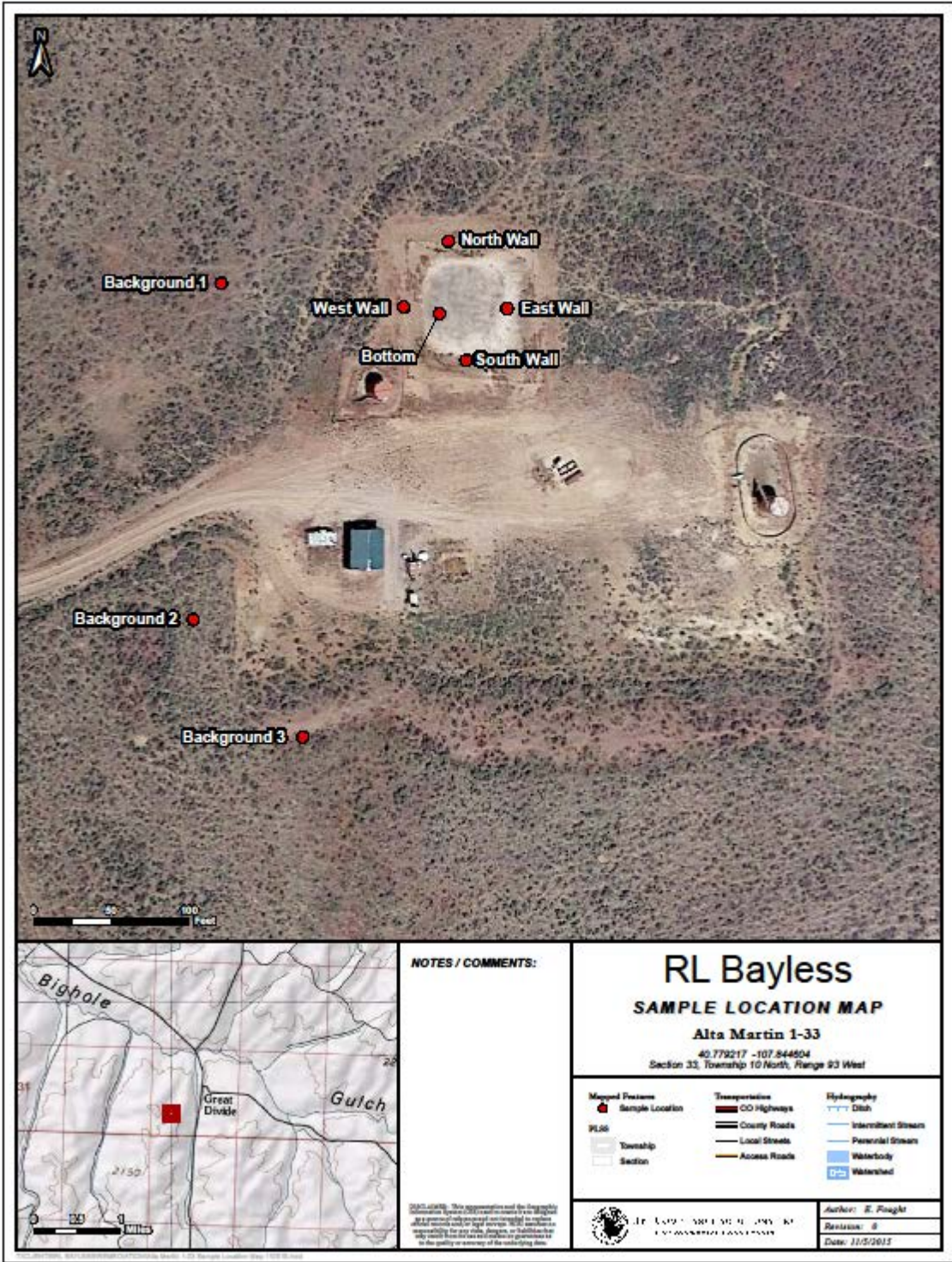


FIGURE 2: PIT IMAGE



Visual representation of the large pit. Liquids present were from precipitation events earlier in the week.

TABLES

TABLE 1: PIT BOTTOM AND SIDE WALL ANALYTICAL RESULTS

Pit Confirmation Data	North Wall	East Wall	South Wall	West Wall	Pit Bottom
TEPH (DRO)	19	18	110	50	44
TVPH (GRO)	ND	ND	ND	ND	ND
BENZENE	ND	ND	ND	ND	ND
TOLUENE	ND	ND	ND	ND	0.092
ETHYLBENZENE	ND	ND	ND	ND	ND
XYLENE TOTAL	ND	ND	ND	ND	0.13
ACENAPHTHENE	ND	ND	ND	ND	ND
ANTHRACENE	ND	ND	ND	ND	ND
BENZO(A)ANTHRACENE	ND	ND	ND	ND	ND
BENZO(A)PYRENE	ND	ND	ND	ND	ND
BENZO(B)FLUORANTHENE	ND	ND	ND	ND	ND
BENZO(G,H,I)PERYLENE	ND	ND	ND	ND	ND
BENZO(K)FLUORANTHENE	ND	ND	ND	ND	ND
CHRYSENE (mg/kg)	ND	ND	ND	ND	ND
DIBENZO(A,H)ANTHRACENE	ND	ND	ND	ND	ND
FLUORANTHENE	ND	ND	ND	ND	ND
FLUORENE	ND	ND	ND	ND	ND
INDENO(1,2,3-CD)PYRENE	ND	ND	ND	ND	ND
NAPHTHALENE	ND	ND	0.011	ND	0.011
PYRENE	ND	ND	ND	ND	0.0072
ARSENIC	-	-			2.2
BARIUM	-	-			170
CADMIUM	-	-			ND
CHROMIUM	-	-			11
CHROMIUM (III)	-	-			11
CHROMIUM (IV)	-	-			ND
COPPER	-	-			7.5
LEAD	-	-			6.4
MERCURY	-	-			ND
NICKEL	-	-			12
SELENIUM	-	-			0.54
SILVER	-	-			ND
ZINC	-	-			37
ELECTRICAL CONDUCTIVITY (EC) (mmho/cm)					6.5
pH					9.5
SODIUM ADSORPTION RATIO (SAR)					66

Readings above state limits are highlighted in yellow

Note: all results are in, mg/kg = milligram per kilogram, unless noted otherwise

ND = Non Detect

- = Not Sampled

TABLE 2: BACKGROUND ANALYTICAL RESULTS

Sample ID	Arsenic (mg/kg)	Conductivity(mmho/cm)	pH (s.u.)	Sodium Adsorbion Ratio
BKGD 1	1.8	0.52	6.4	0.098
BKGD 2	1.9	N/A	N/A	N/A
BKGD 3	2.0	N/A	N/A	N/A

Results above state limits are highlighted in yellow

APPENDIX 1: PIT BOTTOM CONFIRMATION RAW DATA



07-Oct-2015

Kris Rowe
HRL Compliance Solutions, Inc
2385 F 1/2 Road
Grand Junction, CO 81505

Re: **R.L. Bayless - Alta Martin 1-33 - Pit Closure**

Work Order: **15091739**

Dear Kris,

ALS Environmental received 1 sample on 30-Sep-2015 09:00 AM for the analyses presented in the following report.

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

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

The total number of pages in this report is 24.

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

Sincerely,

A handwritten signature in black ink that reads "Les Arnold".

Electronically approved by: Les Arnold

Les Arnold
Senior Project Manager



Certificate No: MN 532786

Report of Laboratory Analysis

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

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

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

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

Client: HRL Compliance Solutions, Inc
Project: R.L. Bayless - Alta Martin 1-33 - Pit Closure
Work Order: 15091739

Work Order Sample Summary

<u>Lab Samp ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Tag Number</u>	<u>Collection Date</u>	<u>Date Received</u>	<u>Hold</u>
15091739-01	Large Pit Bottom @ 1ft	Soil		9/28/2015 15:41	9/30/2015 09:00	<input type="checkbox"/>

Client: HRL Compliance Solutions, Inc
Project: R.L. Bayless - Alta Martin 1-33 - Pit Closure
Work Order: 15091739

Case Narrative

Samples for the above noted Work Order were received on 09/30/2015. The attached "Sample Receipt Checklist" documents the status of custody seals, container integrity, preservation, and temperature compliance.

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

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

Sample Receiving:

No deviations or anomalies were noted.

Volatile Organics:

No deviations or anomalies were noted.

Extractable Organics:

No deviations or anomalies were noted.

Metals:

No deviations or anomalies were noted.

Wet Chemistry:

No deviations or anomalies were noted.

ALS Group USA, Corp

Date: 07-Oct-15

Client: HRL Compliance Solutions, Inc
Project: R.L. Bayless - Alta Martin 1-33 - Pit Closure
Sample ID: Large Pit Bottom @ 1ft
Collection Date: 9/28/2015 03:41 PM

Work Order: 15091739
Lab ID: 15091739-01
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
DRO (C10-C28)	44		SW8015M		Prep: SW3541 / 10/2/15	Analyst: IT
<i>Surr: 4-Terphenyl-d14</i>	67.5		4.1	mg/Kg	1	10/2/2015 09:10 PM
			39-133	%REC	1	10/2/2015 09:10 PM
GASOLINE RANGE ORGANICS BY GC-FID						
GRO (C6-C10)	ND		SW8015D		Prep: SW5035 / 9/30/15	Analyst: IT
<i>Surr: Toluene-d8</i>	93.5		2.5	mg/Kg	1	9/30/2015 10:35 PM
			50-150	%REC	1	9/30/2015 10:35 PM
MERCURY BY CVAA						
Mercury	ND		SW7471B		Prep: SW7471 / 10/5/15	Analyst: LR
			0.014	mg/Kg	1	10/6/2015 02:23 PM
METALS ANALYSIS BY ICP						
Arsenic	2.2		SW846 6010C		Prep: SW3050B / 10/1/15	Analyst: RH
Barium	170		0.35	mg/Kg	1	10/2/2015 04:30 PM
Cadmium	ND		0.35	mg/Kg	1	10/2/2015 04:30 PM
Chromium	11		0.28	mg/Kg	1	10/2/2015 04:30 PM
Copper	7.5		0.35	mg/Kg	1	10/2/2015 04:30 PM
Lead	6.4		0.35	mg/Kg	1	10/2/2015 04:30 PM
Nickel	12		0.35	mg/Kg	1	10/2/2015 04:30 PM
Selenium	0.54		0.35	mg/Kg	1	10/5/2015 10:56 AM
Silver	ND		0.35	mg/Kg	1	10/2/2015 04:30 PM
Zinc	37		0.71	mg/Kg	1	10/2/2015 04:30 PM
SOLUBLE CATIONS FOR SAR						
Calcium	13		SW846 6010C		Prep: USDA Method 20B / 10/5/15	Analyst: JEC
Magnesium	5.2		5.0	mg/L	10	10/5/2015 01:00 PM
Sodium	1,100		2.0	mg/L	10	10/5/2015 01:00 PM
			2.0	mg/L	10	10/5/2015 01:00 PM
SODIUM ADSORPTION RATIO						
Sodium Adsorption Ratio	66		USDA H60 METHO		Prep: USDA Method 20B / 10/5/15	Analyst: JEC
			0.010	none	1	10/5/2015
SEMI-VOLATILE ORGANIC COMPOUNDS						
Acenaphthene	ND		SW846 8270D		Prep: SW3541 / 10/2/15	Analyst: RM
Acenaphthylene	ND		0.0066	mg/Kg	1	10/6/2015 03:45 AM
Anthracene	ND		0.0066	mg/Kg	1	10/6/2015 03:45 AM
Benzo(a)anthracene	ND		0.0066	mg/Kg	1	10/6/2015 03:45 AM
Benzo(a)pyrene	ND		0.0066	mg/Kg	1	10/6/2015 03:45 AM
Benzo(b)fluoranthene	ND		0.0066	mg/Kg	1	10/6/2015 03:45 AM
Benzo(g,h,i)perylene	ND		0.0066	mg/Kg	1	10/6/2015 03:45 AM
Benzo(k)fluoranthene	ND		0.0066	mg/Kg	1	10/6/2015 03:45 AM
Chrysene	ND		0.0066	mg/Kg	1	10/6/2015 03:45 AM

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

ALS Group USA, Corp

Date: 07-Oct-15

Client: HRL Compliance Solutions, Inc
Project: R.L. Bayless - Alta Martin 1-33 - Pit Closure
Sample ID: Large Pit Bottom @ 1ft
Collection Date: 9/28/2015 03:41 PM

Work Order: 15091739
Lab ID: 15091739-01
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Dibenzo(a,h)anthracene	ND		0.0066	mg/Kg	1	10/6/2015 03:45 AM
Fluoranthene	ND		0.0066	mg/Kg	1	10/6/2015 03:45 AM
Fluorene	ND		0.0066	mg/Kg	1	10/6/2015 03:45 AM
Indeno(1,2,3-cd)pyrene	ND		0.0066	mg/Kg	1	10/6/2015 03:45 AM
Naphthalene	0.011		0.0066	mg/Kg	1	10/6/2015 03:45 AM
Pyrene	0.0072		0.0066	mg/Kg	1	10/6/2015 03:45 AM
Surr: 2-Fluorobiphenyl	38.6		12-100	%REC	1	10/6/2015 03:45 AM
Surr: 4-Terphenyl-d14	46.5		25-137	%REC	1	10/6/2015 03:45 AM
Surr: Nitrobenzene-d5	42.5		37-107	%REC	1	10/6/2015 03:45 AM
VOLATILE ORGANIC COMPOUNDS			SW8260B		Prep: SW5035 / 9/30/15	Analyst: BG
Benzene	ND		0.030	mg/Kg	1	10/6/2015 03:51 AM
Ethylbenzene	ND		0.030	mg/Kg	1	10/6/2015 03:51 AM
m,p-Xylene	0.10		0.060	mg/Kg	1	10/6/2015 03:51 AM
o-Xylene	ND		0.030	mg/Kg	1	10/6/2015 03:51 AM
Toluene	0.092		0.030	mg/Kg	1	10/6/2015 03:51 AM
Xylenes, Total	0.13		0.090	mg/Kg	1	10/6/2015 03:51 AM
Surr: 1,2-Dichloroethane-d4	110		70-130	%REC	1	10/6/2015 03:51 AM
Surr: 4-Bromofluorobenzene	95.2		70-130	%REC	1	10/6/2015 03:51 AM
Surr: Dibromofluoromethane	99.2		70-130	%REC	1	10/6/2015 03:51 AM
Surr: Toluene-d8	108		70-130	%REC	1	10/6/2015 03:51 AM
ELECTRICAL CONDUCTIVITY (SAR)			USDA H60 METHO		Prep: USDA Method 20B / 10/5/15	Analyst: JB
Electrical Conductivity @ Saturation	6.5		0.050	mmhos/cm @2	10	10/5/2015 04:30 PM
CHROMIUM, TRIVALENT			CALCULATION			Analyst: MB
Chromium, Trivalent	11		0.50	mg/Kg	1	10/6/2015 02:25 PM
CHROMIUM, HEXAVALENT			SW7196A		Prep: SW3060A / 10/2/15	Analyst: MB
Chromium, Hexavalent	ND		1.0	mg/Kg	1	10/6/2015 09:00 AM
PH			SW9045D		Prep: EXTRACT / 10/2/15	Analyst: JB
pH	9.5		s.u.		1	10/2/2015 02:00 PM

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

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

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

<u>Units Reported</u>	<u>Description</u>
mg/Kg	Milligrams per Kilogram
mg/L	Milligrams per Liter
mmhos/cm @25°C	Millimhos-Centimeter at 25 Degrees Celcius
none	
s.u.	Standard Units

Client: HRL Compliance Solutions, Inc

Work Order: 15091739

Project: R.L. Bayless - Alta Martin 1-33 - Pit Closure

QC BATCH REPORT

Batch ID: **76877**

Instrument ID **GC8**

Method: **SW8015M**

MBLK		Sample ID: DBLKS1-76877-76877				Units: mg/Kg		Analysis Date: 10/2/2015 06:11 PM		
Client ID:		Run ID: GC8_151002A				SeqNo: 3489054		Prep Date: 10/2/2015		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								
<i>Surr: 4-Terphenyl-d14</i>	1.451	0	2	0	72.6	39-133	0			

LCS		Sample ID: DLCSS1-76877-76877				Units: mg/Kg		Analysis Date: 10/2/2015 06:41 PM		
Client ID:		Run ID: GC8_151002A				SeqNo: 3489056		Prep Date: 10/2/2015		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

DRO (C10-C28)	186.7	5.0	200	0	93.3	61-109	0			
<i>Surr: 4-Terphenyl-d14</i>	1.278	0	2	0	63.9	39-133	0			

MS		Sample ID: 15091541-03C MS				Units: mg/Kg		Analysis Date: 10/2/2015 07:11 PM		
Client ID:		Run ID: GC8_151002A				SeqNo: 3489058		Prep Date: 10/2/2015		DF: 10
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

DRO (C10-C28)	280	41	165.9	139.6	84.6	48-110	0			
<i>Surr: 4-Terphenyl-d14</i>	1.54	0	1.659	0	92.8	39-133	0			

MSD		Sample ID: 15091541-03C MSD				Units: mg/Kg		Analysis Date: 10/2/2015 07:40 PM		
Client ID:		Run ID: GC8_151002A				SeqNo: 3489059		Prep Date: 10/2/2015		DF: 10
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

DRO (C10-C28)	239.5	41	162.9	139.6	61.3	48-110	280	15.6	30	
<i>Surr: 4-Terphenyl-d14</i>	1.078	0	1.629	0	66.2	39-133	1.54	35.3	30	R

The following samples were analyzed in this batch:

15091739-01A

Client: HRL Compliance Solutions, Inc
Work Order: 15091739
Project: R.L. Bayless - Alta Martin 1-33 - Pit Closure

QC BATCH REPORT

Batch ID: **76790** Instrument ID **GC9** Method: **SW8015D**

MBLK		Sample ID: MBLK-76790-76790				Units: µg/Kg		Analysis Date: 9/30/2015 10:11 PM		
Client ID:		Run ID: GC9_150930A				SeqNo: 3485789		Prep Date: 9/30/2015		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	4670	0	5000	0	93.4	50-150	0			

LCS		Sample ID: LCS-76790-76790				Units: µg/Kg		Analysis Date: 9/30/2015 09:21 PM		
Client ID:		Run ID: GC9_150930A				SeqNo: 3485788		Prep Date: 9/30/2015		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

GRO (C6-C10)	531100	2,500	500000	0	106	70-130	0			
Surr: Toluene-d8	5196	0	5000	0	104	50-150	0			

MS		Sample ID: 15091739-01A MS				Units: µg/Kg		Analysis Date: 10/1/2015 01:31 AM		
Client ID: Large Pit Bottom @ 1ft		Run ID: GC9_150930A				SeqNo: 3485795		Prep Date: 9/30/2015		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

GRO (C6-C10)	625400	2,500	500000	0	125	70-130	0			
Surr: Toluene-d8	5201	0	5000	0	104	50-150	0			

MSD		Sample ID: 15091739-01A MSD				Units: µg/Kg		Analysis Date: 10/1/2015 01:56 AM		
Client ID: Large Pit Bottom @ 1ft		Run ID: GC9_150930A				SeqNo: 3485796		Prep Date: 9/30/2015		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

GRO (C6-C10)	579000	2,500	500000	0	116	70-130	625400	7.71	30	
Surr: Toluene-d8	5150	0	5000	0	103	50-150	5201	0.985	30	

The following samples were analyzed in this batch:

15091739-01A

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

Client: HRL Compliance Solutions, Inc
Work Order: 15091739
Project: R.L. Bayless - Alta Martin 1-33 - Pit Closure

QC BATCH REPORT

Batch ID: **76899** Instrument ID **HG1** Method: **SW7471B**

MBLK		Sample ID: MBLK-76899-76899				Units: mg/Kg		Analysis Date: 10/6/2015 02:16 PM		
Client ID:		Run ID: HG1_151006A				SeqNo: 3493364		Prep Date: 10/5/2015		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-76899-76899				Units: mg/Kg		Analysis Date: 10/6/2015 02:19 PM		
Client ID:		Run ID: HG1_151006A				SeqNo: 3493365		Prep Date: 10/5/2015		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.1775 0.020 0.1665 0 107 80-120 0

MS		Sample ID: 15091741-01AMS				Units: mg/Kg		Analysis Date: 10/6/2015 02:28 PM		
Client ID:		Run ID: HG1_151006A				SeqNo: 3493372		Prep Date: 10/5/2015		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.138 0.013 0.1068 0.02337 107 75-125 0

MSD		Sample ID: 15091741-01AMSD				Units: mg/Kg		Analysis Date: 10/6/2015 02:31 PM		
Client ID:		Run ID: HG1_151006A				SeqNo: 3493373		Prep Date: 10/5/2015		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.1374 0.013 0.1103 0.02337 103 75-125 0.138 0.4 35

The following samples were analyzed in this batch:

15091739-01A

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

Client: HRL Compliance Solutions, Inc
Work Order: 15091739
Project: R.L. Bayless - Alta Martin 1-33 - Pit Closure

QC BATCH REPORT

Batch ID: **76771** Instrument ID **SAR** Method: **USDA H60 Metho**

DUP				Sample ID: 15091651-04ADUP				Units: none			Analysis Date: 10/5/2015			
Client ID:				Run ID: SAR_151005A				SeqNo: 3490918			Prep Date: 10/5/2015		DF: 1	
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual			
Sodium Adsorption Ratio		0.05216	0.010	0	0	0		0.04793	8.45	50				

The following samples were analyzed in this batch:

15091739-01B

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

Client: HRL Compliance Solutions, Inc
Work Order: 15091739
Project: R.L. Bayless - Alta Martin 1-33 - Pit Closure

QC BATCH REPORT

Batch ID: **76842** Instrument ID **ICP2** Method: **SW846 6010C**

MBLK		Sample ID: MBLK-76842-76842				Units: mg/Kg		Analysis Date: 10/2/2015 03:24 PM		
Client ID:		Run ID: ICP2_151002A				SeqNo: 3489842		Prep Date: 10/1/2015		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	0.02488	0.25								J
Copper	ND	0.50								
Lead	ND	0.25								
Nickel	ND	0.25								
Selenium	ND	0.50								
Silver	0.03494	0.25								J
Zinc	ND	0.50								

LCS		Sample ID: LCS-76842-76842				Units: mg/Kg		Analysis Date: 10/2/2015 03:30 PM		
Client ID:		Run ID: ICP2_151002A				SeqNo: 3489843		Prep Date: 10/1/2015		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	4.817	0.25	5	0	96.3	80-120	0			
Barium	4.648	0.25	5	0	93	80-120	0			
Cadmium	4.861	0.50	5	0	97.2	80-120	0			
Chromium	5.155	0.25	5	0	103	80-120	0			
Copper	4.99	0.50	5	0	99.8	80-120	0			
Lead	4.999	0.25	5	0	100	80-120	0			
Nickel	5.084	0.25	5	0	102	80-120	0			
Selenium	5.096	0.50	5	0	102	80-120	0			
Silver	5.099	0.25	5	0	102	80-120	0			
Zinc	4.935	0.50	5	0	98.7	80-120	0			

MS		Sample ID: 15091737-02AMS				Units: mg/Kg		Analysis Date: 10/2/2015 03:46 PM		
Client ID:		Run ID: ICP2_151002A				SeqNo: 3489846		Prep Date: 10/1/2015		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	9.767	0.37	7.474	1.778	107	75-125	0			
Barium	92	0.37	7.474	76.57	206	75-125	0			SO
Cadmium	7.373	0.75	7.474	0.02708	98.3	75-125	0			
Chromium	16.71	0.37	7.474	7.863	118	75-125	0			
Copper	15.53	0.75	7.474	8.259	97.3	75-125	0			
Lead	12.9	0.37	7.474	5.355	101	75-125	0			
Nickel	15.9	0.37	7.474	7.892	107	75-125	0			
Selenium	8.543	0.75	7.474	0.5261	107	75-125	0			
Silver	7.539	0.37	7.474	-0.1688	103	75-125	0			
Zinc	31.99	0.75	7.474	21.79	136	75-125	0			S

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

Client: HRL Compliance Solutions, Inc
Work Order: 15091739
Project: R.L. Bayless - Alta Martin 1-33 - Pit Closure

QC BATCH REPORT

Batch ID: **76842** Instrument ID **ICP2** Method: **SW846 6010C**

MSD		Sample ID: 15091737-02AMSD				Units: mg/Kg		Analysis Date: 10/2/2015 03:51 PM		
Client ID:		Run ID: ICP2_151002A				SeqNo: 3489847		Prep Date: 10/1/2015		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	9.497	0.38	7.564	1.778	102	75-125	9.767	2.8	20	
Barium	92.44	0.38	7.564	76.57	210	75-125	92	0.478	20	SO
Cadmium	7.514	0.76	7.564	0.02708	99	75-125	7.373	1.9	20	
Chromium	16.74	0.38	7.564	7.863	117	75-125	16.71	0.148	20	
Copper	15.76	0.76	7.564	8.259	99.2	75-125	15.53	1.45	20	
Lead	12.61	0.38	7.564	5.355	95.9	75-125	12.9	2.26	20	
Nickel	15.9	0.38	7.564	7.892	106	75-125	15.9	0.0139	20	
Selenium	8.342	0.76	7.564	0.5261	103	75-125	8.543	2.37	20	
Silver	7.733	0.38	7.564	-0.1688	104	75-125	7.539	2.53	20	
Zinc	31.54	0.76	7.564	21.79	129	75-125	31.99	1.4	20	S

The following samples were analyzed in this batch:

15091739-01A

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

Client: HRL Compliance Solutions, Inc
Work Order: 15091739
Project: R.L. Bayless - Alta Martin 1-33 - Pit Closure

QC BATCH REPORT

Batch ID: **76884** Instrument ID **SVMS4** Method: **SW846 8270D**

MBLK		Sample ID: SBLKS1-76884-76884				Units: µg/Kg		Analysis Date: 10/2/2015 08:11 PM		
Client ID:		Run ID: SVMS4_151002A				SeqNo: 3490666		Prep Date: 10/2/2015		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								
<i>Surr: 2-Fluorobiphenyl</i>	1393	0	1667	0	83.6	12-100	0			
<i>Surr: 4-Terphenyl-d14</i>	1723	0	1667	0	103	25-137	0			
<i>Surr: Nitrobenzene-d5</i>	1310	0	1667	0	78.6	37-107	0			

LCS		Sample ID: SLCSS1-76884-76884				Units: µg/Kg		Analysis Date: 10/2/2015 08:37 PM		
Client ID:		Run ID: SVMS4_151002A				SeqNo: 3490667		Prep Date: 10/2/2015		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	600.7	6.7	666.7	0	90.1	45-110	0			
Acenaphthylene	606	6.7	666.7	0	90.9	45-105	0			
Anthracene	700	6.7	666.7	0	105	55-105	0			
Benzo(a)anthracene	652.7	6.7	666.7	0	97.9	50-110	0			
Benzo(a)pyrene	687	6.7	666.7	0	103	50-110	0			
Benzo(b)fluoranthene	687.7	6.7	666.7	0	103	45-115	0			
Benzo(g,h,i)perylene	753.7	6.7	666.7	0	113	40-125	0			
Benzo(k)fluoranthene	684.3	6.7	666.7	0	103	45-115	0			
Chrysene	684.7	6.7	666.7	0	103	55-110	0			
Dibenzo(a,h)anthracene	683.3	6.7	666.7	0	102	40-125	0			
Fluoranthene	703	6.7	666.7	0	105	55-115	0			
Fluorene	633	6.7	666.7	0	94.9	50-110	0			
Indeno(1,2,3-cd)pyrene	746	6.7	666.7	0	112	40-120	0			
Naphthalene	592	6.7	666.7	0	88.8	40-105	0			
Pyrene	769.3	6.7	666.7	0	115	45-125	0			
<i>Surr: 2-Fluorobiphenyl</i>	1559	0	1667	0	93.6	12-100	0			
<i>Surr: 4-Terphenyl-d14</i>	1677	0	1667	0	101	25-137	0			
<i>Surr: Nitrobenzene-d5</i>	1503	0	1667	0	90.2	37-107	0			

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

Client: HRL Compliance Solutions, Inc
Work Order: 15091739
Project: R.L. Bayless - Alta Martin 1-33 - Pit Closure

QC BATCH REPORT

Batch ID: **76884** Instrument ID **SVMS4** Method: **SW846 8270D**

MS				Sample ID: 1510111-02B MS			Units: µg/Kg		Analysis Date: 10/2/2015 11:25 PM	
Client ID:		Run ID: SVMS4_151002A			SeqNo: 3490671		Prep Date: 10/2/2015		DF: 5	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	630.3	33	665.3	53.88	86.6	45-110	0			
Acenaphthylene	627	33	665.3	57.15	85.7	45-105	0			
Anthracene	715.1	33	665.3	84.91	94.7	55-105	0			
Benzo(a)anthracene	706.8	33	665.3	135.5	85.9	50-110	0			
Benzo(a)pyrene	794.9	33	665.3	161.7	95.2	50-110	0			
Benzo(b)fluoranthene	781.6	33	665.3	182.9	90	45-115	0			
Benzo(g,h,i)perylene	663.6	33	665.3	111	83.1	40-125	0			
Benzo(k)fluoranthene	670.2	33	665.3	63.68	91.2	45-115	0			
Chrysene	681.9	33	665.3	171.5	76.7	55-110	0			
Dibenzo(a,h)anthracene	562.1	33	665.3	0	84.5	40-125	0			
Fluoranthene	856.5	33	665.3	238.4	92.9	55-115	0			
Fluorene	653.6	33	665.3	35.92	92.8	50-110	0			
Indeno(1,2,3-cd)pyrene	725.1	33	665.3	97.97	94.3	40-120	0			
Naphthalene	475.6	33	665.3	27.76	67.3	40-105	0			
Pyrene	949.6	33	665.3	313.5	95.6	45-125	0			
Surr: 2-Fluorobiphenyl	1334	0	1663	0	80.2	12-100	0			
Surr: 4-Terphenyl-d14	1452	0	1663	0	87.3	25-137	0			
Surr: Nitrobenzene-d5	1279	0	1663	0	76.9	37-107	0			

MSD				Sample ID: 1510111-02B MSD			Units: µg/Kg		Analysis Date: 10/2/2015 11:51 PM	
Client ID:		Run ID: SVMS4_151002A			SeqNo: 3490672		Prep Date: 10/2/2015		DF: 5	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	578.1	33	658.9	53.88	79.6	45-110	630.3	8.64	30	
Acenaphthylene	556.7	33	658.9	57.15	75.8	45-105	627	11.9	30	
Anthracene	691.8	33	658.9	84.91	92.1	55-105	715.1	3.32	30	
Benzo(a)anthracene	665.4	33	658.9	135.5	80.4	50-110	706.8	6.03	30	
Benzo(a)pyrene	757.7	33	658.9	161.7	90.5	50-110	794.9	4.8	30	
Benzo(b)fluoranthene	731.3	33	658.9	182.9	83.2	45-115	781.6	6.65	30	
Benzo(g,h,i)perylene	637.4	33	658.9	111	79.9	40-125	663.6	4.02	30	
Benzo(k)fluoranthene	642.4	33	658.9	63.68	87.8	45-115	670.2	4.24	30	
Chrysene	665.4	33	658.9	171.5	75	55-110	681.9	2.44	30	
Dibenzo(a,h)anthracene	536.9	33	658.9	0	81.5	40-125	562.1	4.58	30	
Fluoranthene	872.9	33	658.9	238.4	96.3	55-115	856.5	1.9	30	
Fluorene	591.3	33	658.9	35.92	84.3	50-110	653.6	10	30	
Indeno(1,2,3-cd)pyrene	688.5	33	658.9	97.97	89.6	40-120	725.1	5.18	30	
Naphthalene	416.7	33	658.9	27.76	59	40-105	475.6	13.2	30	
Pyrene	940.5	33	658.9	313.5	95.2	45-125	949.6	0.967	30	
Surr: 2-Fluorobiphenyl	1128	0	1647	0	68.5	12-100	1334	16.7	40	
Surr: 4-Terphenyl-d14	1357	0	1647	0	82.4	25-137	1452	6.74	40	
Surr: Nitrobenzene-d5	1141	0	1647	0	69.3	37-107	1279	11.4	40	

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

Client: HRL Compliance Solutions, Inc
Work Order: 15091739
Project: R.L. Bayless - Alta Martin 1-33 - Pit Closure

QC BATCH REPORT

Batch ID: **76884** Instrument ID **SVMS4** Method: **SW846 8270D**

The following samples were analyzed in this batch:

15091739- 01A

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

Client: HRL Compliance Solutions, Inc
Work Order: 15091739
Project: R.L. Bayless - Alta Martin 1-33 - Pit Closure

QC BATCH REPORT

Batch ID: **76791** Instrument ID **VMS6** Method: **SW8260B**

MBLK Sample ID: MBLK-76791-76791				Units: µg/Kg		Analysis Date: 10/1/2015 12:06 PM				
Client ID:		Run ID: VMS6_151001A		SeqNo: 3487317		Prep Date: 9/30/2015		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	1066	0	1000	0	107	70-130	0			
Surr: 4-Bromofluorobenzene	959.5	0	1000	0	96	70-130	0			
Surr: Dibromofluoromethane	1026	0	1000	0	103	70-130	0			
Surr: Toluene-d8	1027	0	1000	0	103	70-130	0			

LCS Sample ID: LCS-76791-76791				Units: µg/Kg		Analysis Date: 10/1/2015 10:47 AM				
Client ID:		Run ID: VMS6_151001A		SeqNo: 3487316		Prep Date: 9/30/2015		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	1022	30	1000	0	102	75-125	0			
Ethylbenzene	937	30	1000	0	93.7	75-125	0			
m,p-Xylene	1888	60	2000	0	94.4	80-125	0			
o-Xylene	901.5	30	1000	0	90.2	75-125	0			
Toluene	976	30	1000	0	97.6	70-125	0			
Xylenes, Total	2789	90	3000	0	93	75-125	0			
Surr: 1,2-Dichloroethane-d4	1032	0	1000	0	103	70-130	0			
Surr: 4-Bromofluorobenzene	1010	0	1000	0	101	70-130	0			
Surr: Dibromofluoromethane	987	0	1000	0	98.7	70-130	0			
Surr: Toluene-d8	983	0	1000	0	98.3	70-130	0			

MS Sample ID: 15091739-01A MS				Units: µg/Kg		Analysis Date: 10/6/2015 06:53 AM				
Client ID: Large Pit Bottom @ 1ft		Run ID: VMS6_151005A		SeqNo: 3492326		Prep Date: 9/30/2015		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	787	30	1000	0	78.7	75-125	0			
Ethylbenzene	899	30	1000	18	88.1	75-125	0			
m,p-Xylene	1900	60	2000	104	89.8	80-125	0			
o-Xylene	889.5	30	1000	25.5	86.4	75-125	0			
Toluene	959	30	1000	92	86.7	70-125	0			
Xylenes, Total	2790	90	3000	126	88.8	75-125	0			
Surr: 1,2-Dichloroethane-d4	1084	0	1000	0	108	70-130	0			
Surr: 4-Bromofluorobenzene	981.5	0	1000	0	98.2	70-130	0			
Surr: Dibromofluoromethane	1030	0	1000	0	103	70-130	0			
Surr: Toluene-d8	1093	0	1000	0	109	70-130	0			

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

Client: HRL Compliance Solutions, Inc
Work Order: 15091739
Project: R.L. Bayless - Alta Martin 1-33 - Pit Closure

QC BATCH REPORT

Batch ID: **76791** Instrument ID **VMS6** Method: **SW8260B**

MSD				Sample ID: 15091739-01A MSD			Units: µg/Kg		Analysis Date: 10/6/2015 07:19 AM	
Client ID: Large Pit Bottom @ 1ft				Run ID: VMS6_151005A			SeqNo: 3492327		Prep Date: 9/30/2015	
									DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	806.5	30	1000	0	80.6	75-125	787	2.45	30	
Ethylbenzene	913.5	30	1000	18	89.6	75-125	899	1.6	30	
m,p-Xylene	1908	60	2000	104	90.2	80-125	1900	0.394	30	
o-Xylene	883	30	1000	25.5	85.8	75-125	889.5	0.733	30	
Toluene	937	30	1000	92	84.5	70-125	959	2.32	30	
Xylenes, Total	2791	90	3000	126	88.8	75-125	2790	0.0358	30	
Surr: 1,2-Dichloroethane-d4	1112	0	1000	0	111	70-130	1084	2.6	30	
Surr: 4-Bromofluorobenzene	975	0	1000	0	97.5	70-130	981.5	0.664	30	
Surr: Dibromofluoromethane	1042	0	1000	0	104	70-130	1030	1.25	30	
Surr: Toluene-d8	1098	0	1000	0	110	70-130	1093	0.502	30	

The following samples were analyzed in this batch:

15091739-01A

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

Client: HRL Compliance Solutions, Inc
Work Order: 15091739
Project: R.L. Bayless - Alta Martin 1-33 - Pit Closure

QC BATCH REPORT

Batch ID: **76771** Instrument ID **WETCHEM** Method: **USDA H60 Metho**

DUP		Sample ID: 15091651-04A DUP				Units: mmhos/cm @25°		Analysis Date: 10/5/2015 04:30 PM		
Client ID:		Run ID: WETCHEM_151005M				SeqNo: 3491316		Prep Date: 10/5/2015		DF: 10
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Electrical Conductivity @ Saturation	0.311	0.050	0	0	0		0.305	1.95	50	

The following samples were analyzed in this batch:

15091739-01B

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

Client: HRL Compliance Solutions, Inc
Work Order: 15091739
Project: R.L. Bayless - Alta Martin 1-33 - Pit Closure

QC BATCH REPORT

Batch ID: **76888** Instrument ID **WETCHEM** Method: **SW9045D**

LCS				Sample ID: LCS-76888-76888				Units: s.u.			Analysis Date: 10/2/2015 02:00 PM		
Client ID:				Run ID: WETCHEM_151002L				SeqNo: 3488690		Prep Date: 10/2/2015		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: 1510067-07B DUP				Units: s.u.			Analysis Date: 10/2/2015 02:00 PM			
Client ID:				Run ID: WETCHEM_151002L				SeqNo: 3488703			Prep Date: 10/2/2015		DF: 1	
Analyte				Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	

pH 8.24 0 0 0 0 0-0 8.26 0.242 20

DUP				Sample ID: 1510089-01A DUP				Units: s.u.			Analysis Date: 10/2/2015 02:00 PM		
Client ID:				Run ID: WETCHEM_151002L				SeqNo: 3488708		Prep Date: 10/2/2015		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual			

pH 6.84 0 0 0 0 0-0 6.92 1.16 20

The following samples were analyzed in this batch:

15091739-01A

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

Client: HRL Compliance Solutions, Inc
Work Order: 15091739
Project: R.L. Bayless - Alta Martin 1-33 - Pit Closure

QC BATCH REPORT

Batch ID: **76925** Instrument ID **WETCHEM** Method: **SW7196A**

MBLK		Sample ID: MBLK-76925-76925				Units: mg/Kg		Analysis Date: 10/6/2015 09:00 AM		
Client ID:		Run ID: WETCHEM_151006J		SeqNo: 3492862		Prep Date: 10/2/2015		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-76925-76925				Units: mg/Kg		Analysis Date: 10/6/2015 09:00 AM		
Client ID:		Run ID: WETCHEM_151006J		SeqNo: 3492861		Prep Date: 10/2/2015		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 4.55 1.0 5 0 91 80-120 0

MS		Sample ID: 15091677-05B MSI				Units: mg/Kg		Analysis Date: 10/6/2015 09:00 AM		
Client ID:		Run ID: WETCHEM_151006J		SeqNo: 3492850		Prep Date: 10/2/2015		DF: 100		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 1754 100 1804 0 97.2 75-125 0

MS		Sample ID: 15091677-05BMS				Units: mg/Kg		Analysis Date: 10/6/2015 09:00 AM		
Client ID:		Run ID: WETCHEM_151006J		SeqNo: 3492852		Prep Date: 10/2/2015		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 1.158 1.1 5.263 0 22 75-125 0 S

MSD		Sample ID: 15091677-05BMSD				Units: mg/Kg		Analysis Date: 10/6/2015 09:00 AM		
Client ID:		Run ID: WETCHEM_151006J		SeqNo: 3492853		Prep Date: 10/2/2015		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 1.241 0.93 4.63 0 26.8 75-125 1.158 6.91 20 S

The following samples were analyzed in this batch:

15091739-01A

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



ALS Laboratory Group

3352 128th Avenue, Holland, MI 49424
TF: (616) 399-6070 FX: (616) 399-6185

Chain-of-Custody

Form 2828

WORKORDER
#

15091739

PROJECT NAME		SAMPLER		Jordan Carlo		DATE		9/28/2015		PAGE		1 of 1	
PROJECT No.		SITE ID		Alta Martin 1-33		TURNAROUND		Standard (5-day)		DISPOSAL		By Lab or Return to Client	
COMPANY NAME		BILL TO COMPANY		HRL Compliance Solutions, Inc.		DRO							
SEND REPORT TO		INVOICE ATTN TO		Missy Derosé, Kim Cass, Staci Knob		GRO							
ADDRESS		ADDRESS		2385 F1/2 Road		BTEX							
CITY/STATE/ZIP		CITY/STATE/ZIP		Grand Junction, CO 81505		910-1 Metals*							
PHONE		PHONE		970-243-3271		Semi Vols - PAH*							
FAX		FAX				SAR/EC/pH							
E-MAIL		E-MAIL		krowe@hrlcomp.com, jcarlo@hrlcomp.com		Arsenic							
E-MAIL		E-MAIL		mderose@hrlcomp.com, kcass@hrlcomp.com, sknob@hrlcomp.com									
Lab ID	Field ID	Matrix	Sample Date	Sample Time	# Bottles	Pres.	QC						
	Production Pit Bottom @ 1 ft	S	9/28/2015	15:41	2	8		X	X	X	X	X	X
	Large* (per K. Rowe)												

*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)
<p>* Please see attached analytical table (COGCC Table 910-1)</p> <p>2.0°C</p>	LEVEL II (Standard QC)
	LEVEL III (Std QC + forms)
	LEVEL IV (Std QC + forms + new 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
<i>Jordan Carlo</i>	Jordan Carlo	9/29/2015	10:00
<i>[Signature]</i>	<i>[Signature]</i>	9/24/15	1700
<i>[Signature]</i>	<i>[Signature]</i>	9/29/15	1200
<i>[Signature]</i>	<i>[Signature]</i>	9/30/15	900
RELINQUISHED BY			
RECEIVED BY			
RELINQUISHED BY			
RECEIVED BY			
RELINQUISHED BY			
RECEIVED BY			

**Table 910-1
CONCENTRATION LEVELS¹**

Contaminant of Concern	Concentrations
Organic Compounds in Soil	
TPH (total volatile and extractable petroleum hydrocarbons)	500 mg/kg
Benzene	0.17 mg/kg ²
Toluene	85 mg/kg ²
Ethylbenzene	100 mg/kg ²
Xylenes (total)	175 mg/kg ²
Acenaphthene	1,000 mg/kg ²
Anthracene	1,000 mg/kg ²
Benz(a)anthracene	0.22 mg/kg ²
Benzo(b)fluoranthene	0.22 mg/kg ²
Benzo(k)fluoranthene	2.2 mg/kg ²
Benzo(a)pyrene	0.022 mg/kg ²
Chrysene	22 mg/kg ²
Dibenzo(a,h)anthracene	0.022 mg/kg ²
Fluoranthene	1,000 mg/kg ²
Fluorene	1,000 mg/kg ²
Indeno(1,2,3,c,d)pyrene	0.22 mg/kg ²
Naphthalene	23 mg/kg ²
Pyrene	1,000 mg/kg ²
Organic Compounds in Ground Water	
Benzene	5 µg/l ³
Toluene	560 to 1,000 µg/l ³
Ethylbenzene	700 µg/l ³
Xylenes (Total)	1,400 to 10,000 µg/l ^{3,4}
Inorganics in Soils	
Electrical Conductivity (EC)	<4 mmhos/cm or 2x background
Sodium Adsorption Ratio (SAR)	<12 ⁵
pH	6-9
Inorganics in Ground Water	
Total Dissolved Solids (TDS)	<1.25 x background ³
Chlorides	<1.25 x background ³
Sulfates	<1.25 x background ³
Metals in Soils	
Arsenic	0.39 mg/kg ²
Barium (LDNR True Total Barium)	15,000 mg/kg ²
Boron (Hot Water Soluble)	2 mg/l ³
Cadmium	70 mg/kg ^{3,6}
Chromium (III)	120,000 mg/kg ²
Chromium (VI)	23 mg/kg ^{2,8}
Copper	3,100 mg/kg ²
Lead (inorganic)	400 mg/kg ²
Mercury	23 mg/kg ²
Nickel (soluble salts)	1,600 mg/kg ^{2,8}
Selenium	390 mg/kg ^{2,8}
Silver	390 mg/kg ²
Zinc	23,000 mg/kg ^{2,8}
Liquid Hydrocarbons in Soils and Ground Water	
Liquid hydrocarbons including condensate and oil	Below detection level

ORIGIN ID: RILA (816) 298-1033
 NICK MARTINEZ
 ALS ENVIRONMENTAL PARACHUTE
 PARACHUTE SERVICE CENTER
 127 EAST 1ST ST
 PARACHUTE, CO 81635
 UNITED STATES US

SHIP DATE: 29SEP15
 ACTWGT: 56.00 LB
 CAD: 226484071123870
 DIMS: 14x26x15 IN
 BILL NUMBER

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

HOLLAND MI 49424

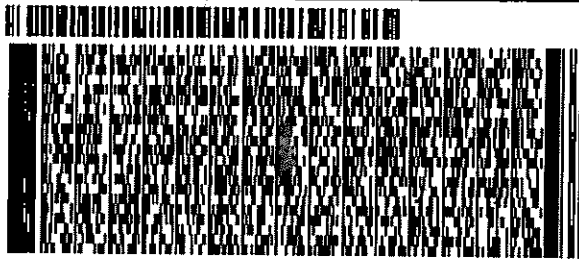
(816) 398-6070

REF: 092915-4

INV:

PO: PARACHUTE

DEPT:



FedEx
Express



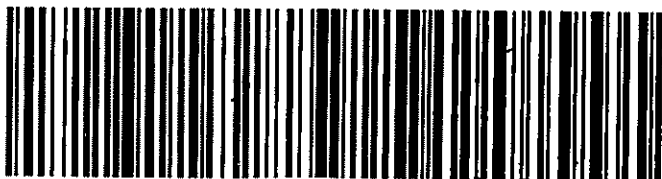
REL#
3785346

1 of 3
 TRK# 7746 2588 3786
 0201
 ## MASTER ##

XX HLMA

WED - 30 SEP 10:30A
PRIORITY OVERNIGHT

49424
GRR
 MI-US



539.0297073100

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 according to the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for in additional billing charges, along with the bag Use of this system constitutes your agreement will not be responsible for any claim in excess of information, unless you declare a higher value found in the current FedEx Service Guide applicable to the greater of \$100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of sales, income interest, profit, attorney's fees, costs, and the extraordinary value is \$1,000, e.g. jewelry, precious metals, valuable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

ALS Parachute Custody Seal

Time 1:00 PM Date 9/29/15

Name [Signature]

Shipping purposes is fraudulent and could result in loss, damage, delay, non-delivery, misdelivery, or actual loss and file a timely claim. Limitations on loss, including intrinsic value of the package, loss 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 sales, income interest, profit, attorney's fees, costs, and the extraordinary value is \$1,000, e.g. jewelry, precious metals, valuable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

Sample Receipt Checklist

Client Name: **HRL**

Date/Time Received: **30-Sep-15 09:00**

Work Order: **15091739**

Received by: **KRW**

Checklist completed by Keith Wurenga
eSignature

30-Sep-15
Date

Reviewed by: Lee Arnold
eSignature

30-Sep-15
Date

Matrices: **Soil**

Carrier name: **FedEx**

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature in compliance?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample(s) received on ice?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Temperature(s)/Thermometer(s):	<u>2.0/2.0 C</u> <u>SR2</u>		
Cooler(s)/Kit(s):	<u></u>		
Date/Time sample(s) sent to storage:	<u>9/30/2015 1:06:35 PM</u>		
Water - VOA vials have zero headspace?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input checked="" type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
pH adjusted?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
pH adjusted by:	<u>-</u>		

Login Notes:

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:

Comments:

CorrectiveAction:

APPENDIX 2: PIT SIDE WALL RAW ANALYTICAL DATA



05-Nov-2015

Kris Rowe
HRL Compliance Solutions, Inc
2385 F 1/2 Road
Grand Junction, CO 81505

Re: **R.L. Bayless - Alta Martin 1-33 - Large Pit**

Work Order: **1510640**

Dear Kris,

ALS Environmental received 4 samples on 09-Oct-2015 10:15 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 18.

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

Sincerely,

A handwritten signature in black ink that reads "Les Arnold".

Electronically approved by: Chad Whelton

Les Arnold
Senior Project Manager



Certificate No: MN 532786

Report of Laboratory Analysis

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

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

Environmental 

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

Client: HRL Compliance Solutions, Inc
Project: R.L. Bayless - Alta Martin 1-33 - Large Pit
Work Order: 1510640

Work Order Sample Summary

<u>Lab Samp ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Tag Number</u>	<u>Collection Date</u>	<u>Date Received</u>	<u>Hold</u>
1510640-01	North Wall	Soil		9/28/2015 15:24	10/9/2015 10:15	<input type="checkbox"/>
1510640-02	East Wall	Soil		9/28/2015 15:30	10/9/2015 10:15	<input type="checkbox"/>
1510640-03	West Wall	Soil		9/28/2015 15:40	10/9/2015 10:15	<input type="checkbox"/>
1510640-04	South Wall	Soil		9/28/2015 15:35	10/9/2015 10:15	<input type="checkbox"/>

Client: HRL Compliance Solutions, Inc
Project: R.L. Bayless - Alta Martin 1-33 - Large Pit
Work Order: 1510640

Case Narrative

The attached "Sample Receipt Checklist" documents the date of receipt, 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.

NO DEVIATIONS OR ANOMALIES WERE NOTED.

Client: HRL Compliance Solutions, Inc
Project: R.L. Bayless - Alta Martin 1-33 - Large Pit
WorkOrder: 1510640

QUALIFIERS, ACRONYMS, UNITS

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

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

<u>Units Reported</u>	<u>Description</u>
% of sample	Percent of Sample
mg/Kg-dry	Milligrams per Kilogram Dry Weight

ALS Group USA, Corp

Date: 05-Nov-15

Client: HRL Compliance Solutions, Inc
Project: R.L. Bayless - Alta Martin 1-33 - Large Pit
Sample ID: North Wall
Collection Date: 9/28/2015 03:24 PM

Work Order: 1510640
Lab ID: 1510640-01
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID			SW8015M			Analyst: IT
DRO (C10-C28)	19		4.3	mg/Kg-dry	1	10/12/2015 07:16 PM
Surr: 4-Terphenyl-d14	80.4		39-133	%REC	1	10/12/2015 07:16 PM
GASOLINE RANGE ORGANICS BY GC-FID			SW8015D		Prep: SW5035 / 10/12/15	Analyst: IT
GRO (C6-C10)	ND		2.6	mg/Kg-dry	1	10/12/2015 05:22 PM
Surr: Toluene-d8	99.8		50-150	%REC	1	10/12/2015 05:22 PM
SEMI-VOLATILE ORGANIC COMPOUNDS			SW846 8270D		Prep: SW3541 / 10/11/15	Analyst: RS
Acenaphthene	ND		0.0069	mg/Kg-dry	1	10/13/2015 06:21 AM
Anthracene	ND		0.0069	mg/Kg-dry	1	10/13/2015 06:21 AM
Benzo(a)anthracene	ND		0.0069	mg/Kg-dry	1	10/13/2015 06:21 AM
Benzo(a)pyrene	ND		0.0069	mg/Kg-dry	1	10/13/2015 06:21 AM
Benzo(b)fluoranthene	ND		0.0069	mg/Kg-dry	1	10/13/2015 06:21 AM
Benzo(k)fluoranthene	ND		0.0069	mg/Kg-dry	1	10/13/2015 06:21 AM
Chrysene	ND		0.0069	mg/Kg-dry	1	10/13/2015 06:21 AM
Dibenzo(a,h)anthracene	ND		0.0069	mg/Kg-dry	1	10/13/2015 06:21 AM
Fluoranthene	ND		0.0069	mg/Kg-dry	1	10/13/2015 06:21 AM
Fluorene	ND		0.0069	mg/Kg-dry	1	10/13/2015 06:21 AM
Indeno(1,2,3-cd)pyrene	ND		0.0069	mg/Kg-dry	1	10/13/2015 06:21 AM
Naphthalene	ND		0.0069	mg/Kg-dry	1	10/13/2015 06:21 AM
Pyrene	ND		0.0069	mg/Kg-dry	1	10/13/2015 06:21 AM
Surr: 2-Fluorobiphenyl	69.1		12-100	%REC	1	10/13/2015 06:21 AM
Surr: 4-Terphenyl-d14	79.2		25-137	%REC	1	10/13/2015 06:21 AM
Surr: Nitrobenzene-d5	70.3		37-107	%REC	1	10/13/2015 06:21 AM
VOLATILE ORGANIC COMPOUNDS			SW8260B		Prep: SW5035 / 10/12/15	Analyst: LSY
Benzene	ND		0.032	mg/Kg-dry	1	10/12/2015 02:25 PM
Ethylbenzene	ND		0.032	mg/Kg-dry	1	10/12/2015 02:25 PM
m,p-Xylene	ND		0.063	mg/Kg-dry	1	10/12/2015 02:25 PM
o-Xylene	ND		0.032	mg/Kg-dry	1	10/12/2015 02:25 PM
Toluene	ND		0.032	mg/Kg-dry	1	10/12/2015 02:25 PM
Xylenes, Total	ND		0.095	mg/Kg-dry	1	10/12/2015 02:25 PM
Surr: 1,2-Dichloroethane-d4	110		70-130	%REC	1	10/12/2015 02:25 PM
Surr: 4-Bromofluorobenzene	97.0		70-130	%REC	1	10/12/2015 02:25 PM
Surr: Dibromofluoromethane	114		70-130	%REC	1	10/12/2015 02:25 PM
Surr: Toluene-d8	93.3		70-130	%REC	1	10/12/2015 02:25 PM
MOISTURE			E160.3M			Analyst: TM
Moisture	5.3		0.050	% of sample	1	10/12/2015 02:20 PM

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

ALS Group USA, Corp

Date: 05-Nov-15

Client: HRL Compliance Solutions, Inc
Project: R.L. Bayless - Alta Martin 1-33 - Large Pit
Sample ID: East Wall
Collection Date: 9/28/2015 03:30 PM

Work Order: 1510640
Lab ID: 1510640-02
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
			SW8015M			Analyst: IT
DRO (C10-C28)	18		4.6	mg/Kg-dry	1	10/12/2015 07:46 PM
Surr: 4-Terphenyl-d14	68.0		39-133	%REC	1	10/12/2015 07:46 PM
GASOLINE RANGE ORGANICS BY GC-FID						
			SW8015D		Prep: SW5035 / 10/12/15	Analyst: IT
GRO (C6-C10)	ND		2.8	mg/Kg-dry	1	10/12/2015 05:48 PM
Surr: Toluene-d8	106		50-150	%REC	1	10/12/2015 05:48 PM
SEMI-VOLATILE ORGANIC COMPOUNDS						
			SW846 8270D		Prep: SW3541 / 10/11/15	Analyst: RS
Acenaphthene	ND		0.0073	mg/Kg-dry	1	10/13/2015 06:44 AM
Anthracene	ND		0.0073	mg/Kg-dry	1	10/13/2015 06:44 AM
Benzo(a)anthracene	ND		0.0073	mg/Kg-dry	1	10/13/2015 06:44 AM
Benzo(a)pyrene	ND		0.0073	mg/Kg-dry	1	10/13/2015 06:44 AM
Benzo(b)fluoranthene	ND		0.0073	mg/Kg-dry	1	10/13/2015 06:44 AM
Benzo(k)fluoranthene	ND		0.0073	mg/Kg-dry	1	10/13/2015 06:44 AM
Chrysene	ND		0.0073	mg/Kg-dry	1	10/13/2015 06:44 AM
Dibenzo(a,h)anthracene	ND		0.0073	mg/Kg-dry	1	10/13/2015 06:44 AM
Fluoranthene	ND		0.0073	mg/Kg-dry	1	10/13/2015 06:44 AM
Fluorene	ND		0.0073	mg/Kg-dry	1	10/13/2015 06:44 AM
Indeno(1,2,3-cd)pyrene	ND		0.0073	mg/Kg-dry	1	10/13/2015 06:44 AM
Naphthalene	ND		0.0073	mg/Kg-dry	1	10/13/2015 06:44 AM
Pyrene	ND		0.0073	mg/Kg-dry	1	10/13/2015 06:44 AM
Surr: 2-Fluorobiphenyl	58.8		12-100	%REC	1	10/13/2015 06:44 AM
Surr: 4-Terphenyl-d14	73.8		25-137	%REC	1	10/13/2015 06:44 AM
Surr: Nitrobenzene-d5	53.8		37-107	%REC	1	10/13/2015 06:44 AM
VOLATILE ORGANIC COMPOUNDS						
			SW8260B		Prep: SW5035 / 10/12/15	Analyst: LSY
Benzene	ND		0.034	mg/Kg-dry	1	10/12/2015 02:50 PM
Ethylbenzene	ND		0.034	mg/Kg-dry	1	10/12/2015 02:50 PM
m,p-Xylene	ND		0.067	mg/Kg-dry	1	10/12/2015 02:50 PM
o-Xylene	ND		0.034	mg/Kg-dry	1	10/12/2015 02:50 PM
Toluene	ND		0.034	mg/Kg-dry	1	10/12/2015 02:50 PM
Xylenes, Total	ND		0.10	mg/Kg-dry	1	10/12/2015 02:50 PM
Surr: 1,2-Dichloroethane-d4	109		70-130	%REC	1	10/12/2015 02:50 PM
Surr: 4-Bromofluorobenzene	96.9		70-130	%REC	1	10/12/2015 02:50 PM
Surr: Dibromofluoromethane	111		70-130	%REC	1	10/12/2015 02:50 PM
Surr: Toluene-d8	95.1		70-130	%REC	1	10/12/2015 02:50 PM
MOISTURE						
			E160.3M			Analyst: TM
Moisture	11		0.050	% of sample	1	10/12/2015 02:20 PM

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

ALS Group USA, Corp

Date: 05-Nov-15

Client: HRL Compliance Solutions, Inc
Project: R.L. Bayless - Alta Martin 1-33 - Large Pit
Sample ID: West Wall
Collection Date: 9/28/2015 03:40 PM

Work Order: 1510640
Lab ID: 1510640-03
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
			SW8015M			Analyst: IT
DRO (C10-C28)	50		4.5	mg/Kg-dry	1	10/12/2015 08:16 PM
Surr: 4-Terphenyl-d14	72.3		39-133	%REC	1	10/12/2015 08:16 PM
GASOLINE RANGE ORGANICS BY GC-FID						
			SW8015D		Prep: SW5035 / 10/12/15	Analyst: IT
GRO (C6-C10)	ND		2.7	mg/Kg-dry	1	10/12/2015 06:13 PM
Surr: Toluene-d8	105		50-150	%REC	1	10/12/2015 06:13 PM
SEMI-VOLATILE ORGANIC COMPOUNDS						
			SW846 8270D		Prep: SW3541 / 10/11/15	Analyst: RS
Acenaphthene	ND		0.0072	mg/Kg-dry	1	10/13/2015 07:07 AM
Anthracene	ND		0.0072	mg/Kg-dry	1	10/13/2015 07:07 AM
Benzo(a)anthracene	ND		0.0072	mg/Kg-dry	1	10/13/2015 07:07 AM
Benzo(a)pyrene	ND		0.0072	mg/Kg-dry	1	10/13/2015 07:07 AM
Benzo(b)fluoranthene	ND		0.0072	mg/Kg-dry	1	10/13/2015 07:07 AM
Benzo(k)fluoranthene	ND		0.0072	mg/Kg-dry	1	10/13/2015 07:07 AM
Chrysene	ND		0.0072	mg/Kg-dry	1	10/13/2015 07:07 AM
Dibenzo(a,h)anthracene	ND		0.0072	mg/Kg-dry	1	10/13/2015 07:07 AM
Fluoranthene	ND		0.0072	mg/Kg-dry	1	10/13/2015 07:07 AM
Fluorene	ND		0.0072	mg/Kg-dry	1	10/13/2015 07:07 AM
Indeno(1,2,3-cd)pyrene	ND		0.0072	mg/Kg-dry	1	10/13/2015 07:07 AM
Naphthalene	ND		0.0072	mg/Kg-dry	1	10/13/2015 07:07 AM
Pyrene	ND		0.0072	mg/Kg-dry	1	10/13/2015 07:07 AM
Surr: 2-Fluorobiphenyl	79.8		12-100	%REC	1	10/13/2015 07:07 AM
Surr: 4-Terphenyl-d14	89.7		25-137	%REC	1	10/13/2015 07:07 AM
Surr: Nitrobenzene-d5	72.8		37-107	%REC	1	10/13/2015 07:07 AM
VOLATILE ORGANIC COMPOUNDS						
			SW8260B		Prep: SW5035 / 10/12/15	Analyst: LSY
Benzene	ND		0.032	mg/Kg-dry	1	10/12/2015 03:16 PM
Ethylbenzene	ND		0.032	mg/Kg-dry	1	10/12/2015 03:16 PM
m,p-Xylene	ND		0.065	mg/Kg-dry	1	10/12/2015 03:16 PM
o-Xylene	ND		0.032	mg/Kg-dry	1	10/12/2015 03:16 PM
Toluene	ND		0.032	mg/Kg-dry	1	10/12/2015 03:16 PM
Xylenes, Total	ND		0.097	mg/Kg-dry	1	10/12/2015 03:16 PM
Surr: 1,2-Dichloroethane-d4	110		70-130	%REC	1	10/12/2015 03:16 PM
Surr: 4-Bromofluorobenzene	93.8		70-130	%REC	1	10/12/2015 03:16 PM
Surr: Dibromofluoromethane	111		70-130	%REC	1	10/12/2015 03:16 PM
Surr: Toluene-d8	94.4		70-130	%REC	1	10/12/2015 03:16 PM
MOISTURE						
			E160.3M			Analyst: TM
Moisture	7.6		0.050	% of sample	1	10/12/2015 02:20 PM

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

ALS Group USA, Corp

Date: 05-Nov-15

Client: HRL Compliance Solutions, Inc
Project: R.L. Bayless - Alta Martin 1-33 - Large Pit
Sample ID: South Wall
Collection Date: 9/28/2015 03:35 PM

Work Order: 1510640
Lab ID: 1510640-04
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID			SW8015M			Analyst: IT
DRO (C10-C28)	110		4.4	mg/Kg-dry	1	10/12/2015 08:46 PM
Surr: 4-Terphenyl-d14	62.2		39-133	%REC	1	10/12/2015 08:46 PM
GASOLINE RANGE ORGANICS BY GC-FID			SW8015D		Prep: SW5035 / 10/12/15	Analyst: IT
GRO (C6-C10)	ND		2.7	mg/Kg-dry	1	10/12/2015 06:38 PM
Surr: Toluene-d8	106		50-150	%REC	1	10/12/2015 06:38 PM
SEMI-VOLATILE ORGANIC COMPOUNDS			SW846 8270D		Prep: SW3541 / 10/11/15	Analyst: RS
Acenaphthene	ND		0.0070	mg/Kg-dry	1	10/13/2015 07:30 AM
Anthracene	ND		0.0070	mg/Kg-dry	1	10/13/2015 07:30 AM
Benzo(a)anthracene	ND		0.0070	mg/Kg-dry	1	10/13/2015 07:30 AM
Benzo(a)pyrene	ND		0.0070	mg/Kg-dry	1	10/13/2015 07:30 AM
Benzo(b)fluoranthene	ND		0.0070	mg/Kg-dry	1	10/13/2015 07:30 AM
Benzo(k)fluoranthene	ND		0.0070	mg/Kg-dry	1	10/13/2015 07:30 AM
Chrysene	ND		0.0070	mg/Kg-dry	1	10/13/2015 07:30 AM
Dibenzo(a,h)anthracene	ND		0.0070	mg/Kg-dry	1	10/13/2015 07:30 AM
Fluoranthene	ND		0.0070	mg/Kg-dry	1	10/13/2015 07:30 AM
Fluorene	ND		0.0070	mg/Kg-dry	1	10/13/2015 07:30 AM
Indeno(1,2,3-cd)pyrene	ND		0.0070	mg/Kg-dry	1	10/13/2015 07:30 AM
Naphthalene	0.011		0.0070	mg/Kg-dry	1	10/13/2015 07:30 AM
Pyrene	ND		0.0070	mg/Kg-dry	1	10/13/2015 07:30 AM
Surr: 2-Fluorobiphenyl	69.0		12-100	%REC	1	10/13/2015 07:30 AM
Surr: 4-Terphenyl-d14	71.1		25-137	%REC	1	10/13/2015 07:30 AM
Surr: Nitrobenzene-d5	58.0		37-107	%REC	1	10/13/2015 07:30 AM
VOLATILE ORGANIC COMPOUNDS			SW8260B		Prep: SW5035 / 10/12/15	Analyst: LSY
Benzene	ND		0.032	mg/Kg-dry	1	10/12/2015 03:42 PM
Ethylbenzene	ND		0.032	mg/Kg-dry	1	10/12/2015 03:42 PM
m,p-Xylene	ND		0.064	mg/Kg-dry	1	10/12/2015 03:42 PM
o-Xylene	ND		0.032	mg/Kg-dry	1	10/12/2015 03:42 PM
Toluene	ND		0.032	mg/Kg-dry	1	10/12/2015 03:42 PM
Xylenes, Total	ND		0.096	mg/Kg-dry	1	10/12/2015 03:42 PM
Surr: 1,2-Dichloroethane-d4	112		70-130	%REC	1	10/12/2015 03:42 PM
Surr: 4-Bromofluorobenzene	96.0		70-130	%REC	1	10/12/2015 03:42 PM
Surr: Dibromofluoromethane	113		70-130	%REC	1	10/12/2015 03:42 PM
Surr: Toluene-d8	93.9		70-130	%REC	1	10/12/2015 03:42 PM
MOISTURE			E160.3M			Analyst: TM
Moisture	6.5		0.050	% of sample	1	10/12/2015 02:20 PM

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

ALS Group USA, Corp

Date: 05-Nov-15

Client: HRL Compliance Solutions, Inc

Work Order: 1510640

Project: R.L. Bayless - Alta Martin 1-33 - Large Pit

QC BATCH REPORT

Batch ID: **77268a**

Instrument ID **GC8**

Method: **SW8015M**

MBLK		Sample ID: DBLKS1-77268-77268a				Units: mg/Kg		Analysis Date: 10/12/2015 11:47 A		
Client ID:		Run ID: GC8_151012A				SeqNo: 3504123		Prep Date: 10/11/2015		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								
<i>Surr: 4-Terphenyl-d14</i>	1.502	0	2	0	75.1	39-133	0			

LCS		Sample ID: DLCSS1-77268-77268a				Units: mg/Kg		Analysis Date: 10/12/2015 12:17 PM		
Client ID:		Run ID: GC8_151012A				SeqNo: 3504127		Prep Date: 10/11/2015		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

DRO (C10-C28)	205.9	5.0	200	0	103	61-109	0			
<i>Surr: 4-Terphenyl-d14</i>	1.252	0	2	0	62.6	39-133	0			

MS		Sample ID: 1510628-01A MS				Units: mg/Kg		Analysis Date: 10/12/2015 12:47 PM		
Client ID:		Run ID: GC8_151012A				SeqNo: 3504130		Prep Date: 10/11/2015		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

DRO (C10-C28)	431.1	4.1	165.7	255.4	106	48-110	0			
<i>Surr: 4-Terphenyl-d14</i>	2.575	0	1.657	0	155	39-133	0			S

MSD		Sample ID: 1510628-01A MSD				Units: mg/Kg		Analysis Date: 10/12/2015 01:16 PM		
Client ID:		Run ID: GC8_151012A				SeqNo: 3504133		Prep Date: 10/11/2015		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

DRO (C10-C28)	416.6	4.1	164	255.4	98.3	48-110	431.1	3.42	30	
<i>Surr: 4-Terphenyl-d14</i>	2.391	0	1.64	0	146	39-133	2.575	7.41	30	S

The following samples were analyzed in this batch:

1510640-01B	1510640-02B	1510640-03B
1510640-04B		

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

Client: HRL Compliance Solutions, Inc
Work Order: 1510640
Project: R.L. Bayless - Alta Martin 1-33 - Large Pit

QC BATCH REPORT

Batch ID: **77301** Instrument ID **GC9** Method: **SW8015D**

MBLK		Sample ID: MBLK-77301-77301				Units: µg/Kg		Analysis Date: 10/12/2015 01:10 PM		
Client ID:		Run ID: GC9_151012A				SeqNo: 3505623		Prep Date: 10/12/2015		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	4421	0	5000	0	88.4	50-150	0			

MBLK		Sample ID: MBLK-77301-77301				Units: µg/Kg		Analysis Date: 10/13/2015 12:55 PM		
Client ID:		Run ID: GC9_151013A				SeqNo: 3506359		Prep Date: 10/12/2015		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-77301-77301				Units: µg/Kg		Analysis Date: 10/12/2015 12:45 PM		
Client ID:		Run ID: GC9_151012A				SeqNo: 3505621		Prep Date: 10/12/2015		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	578400	2,500	500000	0	116	70-130	0			
Surr: Toluene-d8	5516	0	5000	0	110	50-150	0			

LCS		Sample ID: LCS-77301-77301				Units: µg/Kg		Analysis Date: 10/13/2015 12:29 PM		
Client ID:		Run ID: GC9_151013A				SeqNo: 3506357		Prep Date: 10/12/2015		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	11810	2,500	10000	0	118	80-120	0			

LCSD		Sample ID: LCSD-77301-77301				Units: µg/Kg		Analysis Date: 10/13/2015 01:48 PM		
Client ID:		Run ID: GC9_151013A				SeqNo: 3506361		Prep Date: 10/12/2015		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	11500	2,500	10000	0	115	80-120	11810	2.68	20	

MS		Sample ID: 1510709-01A MS				Units: µg/Kg		Analysis Date: 10/12/2015 04:07 PM		
Client ID:		Run ID: GC9_151012A				SeqNo: 3505637		Prep Date: 10/12/2015		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	521400	2,500	500000	0	104	70-130	0			
Surr: Toluene-d8	5228	0	5000	0	105	50-150	0			

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

Client: HRL Compliance Solutions, Inc
Work Order: 1510640
Project: R.L. Bayless - Alta Martin 1-33 - Large Pit

QC BATCH REPORT

Batch ID: **77301** Instrument ID **GC9** Method: **SW8015D**

MSD		Sample ID: 1510709-01A MSD				Units: µg/Kg		Analysis Date: 10/12/2015 04:32 PM		
Client ID:		Run ID: GC9_151012A				SeqNo: 3505639		Prep Date: 10/12/2015		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	500500	2,500	500000	0	100	70-130	521400	4.1	30	
<i>Surr: Toluene-d8</i>	<i>5112</i>	<i>0</i>	<i>5000</i>	<i>0</i>	<i>102</i>	<i>50-150</i>	<i>5228</i>	<i>2.25</i>	<i>30</i>	

The following samples were analyzed in this batch:

1510640-01A	1510640-02A	1510640-03A
1510640-04A		

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

Client: HRL Compliance Solutions, Inc
Work Order: 1510640
Project: R.L. Bayless - Alta Martin 1-33 - Large Pit

QC BATCH REPORT

Batch ID: **77267** Instrument ID **SVMS5** Method: **SW846 8270D**

MBLK				Sample ID: SBLKS1-77267-77267			Units: µg/Kg		Analysis Date: 10/11/2015 05:23 PM	
Client ID:				Run ID: SVMS5_151011A			SeqNo: 3503888		Prep Date: 10/11/2015	
									DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	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(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	1261	0	1667	0	75.7	12-100	0			
Surr: 4-Terphenyl-d14	1685	0	1667	0	101	25-137	0			
Surr: Nitrobenzene-d5	1226	0	1667	0	73.6	37-107	0			

LCS				Sample ID: SLCSS1-77267-77267			Units: µg/Kg		Analysis Date: 10/11/2015 05:47 PM	
Client ID:				Run ID: SVMS5_151011A			SeqNo: 3503892		Prep Date: 10/11/2015	
									DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	629.3	6.7	666.7	0	94.4	45-110	0			
Anthracene	667.3	6.7	666.7	0	100	55-105	0			
Benzo(a)anthracene	674	6.7	666.7	0	101	50-110	0			
Benzo(a)pyrene	666	6.7	666.7	0	99.9	50-110	0			
Benzo(b)fluoranthene	690	6.7	666.7	0	103	45-115	0			
Benzo(k)fluoranthene	701	6.7	666.7	0	105	45-115	0			
Chrysene	675.7	6.7	666.7	0	101	55-110	0			
Dibenzo(a,h)anthracene	632.3	6.7	666.7	0	94.8	40-125	0			
Fluoranthene	642.3	6.7	666.7	0	96.3	55-115	0			
Fluorene	652	6.7	666.7	0	97.8	50-110	0			
Indeno(1,2,3-cd)pyrene	615.7	6.7	666.7	0	92.3	40-120	0			
Naphthalene	584	6.7	666.7	0	87.6	40-105	0			
Pyrene	688.7	6.7	666.7	0	103	45-125	0			
Surr: 2-Fluorobiphenyl	1573	0	1667	0	94.4	12-100	0			
Surr: 4-Terphenyl-d14	1695	0	1667	0	102	25-137	0			
Surr: Nitrobenzene-d5	1540	0	1667	0	92.4	37-107	0			

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

Client: HRL Compliance Solutions, Inc
Work Order: 1510640
Project: R.L. Bayless - Alta Martin 1-33 - Large Pit

QC BATCH REPORT

Batch ID: **77267** Instrument ID **SVMS5** Method: **SW846 8270D**

MS				Sample ID: 1510628-01A MS			Units: µg/Kg		Analysis Date: 10/11/2015 08:40 PM		
Client ID:			Run ID: SVMS5_151011A			SeqNo: 3503894		Prep Date: 10/11/2015		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Acenaphthene	632.3	6.5	654.6	0	96.6	45-110	0				
Anthracene	655.9	6.5	654.6	0	100	55-105	0				
Benzo(a)anthracene	645.4	6.5	654.6	0	98.6	50-110	0				
Benzo(a)pyrene	643.5	6.5	654.6	0	98.3	50-110	0				
Benzo(b)fluoranthene	652.3	6.5	654.6	0	99.6	45-115	0				
Benzo(k)fluoranthene	630.4	6.5	654.6	0	96.3	45-115	0				
Chrysene	633	6.5	654.6	0	96.7	55-110	0				
Dibenzo(a,h)anthracene	612	6.5	654.6	0	93.5	40-125	0				
Fluoranthene	622.5	6.5	654.6	0	95.1	55-115	0				
Fluorene	679.8	6.5	654.6	0	104	50-110	0				
Indeno(1,2,3-cd)pyrene	637.2	6.5	654.6	0	97.3	40-120	0				
Naphthalene	707.9	6.5	654.6	140.6	86.7	40-105	0				
Pyrene	665.1	6.5	654.6	0	102	45-125	0				
Surr: 2-Fluorobiphenyl	1475	0	1636	0	90.1	12-100	0				
Surr: 4-Terphenyl-d14	1597	0	1636	0	97.6	25-137	0				
Surr: Nitrobenzene-d5	1419	0	1636	0	86.7	37-107	0				

MSD				Sample ID: 1510628-01A MSD			Units: µg/Kg		Analysis Date: 10/11/2015 09:04 PM	
Client ID:			Run ID: SVMS5_151011A		SeqNo: 3503895		Prep Date: 10/11/2015		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	549.3	6.5	649.3	0	84.6	45-110	632.3	14.1	30	
Anthracene	566.5	6.5	649.3	0	87.2	55-105	655.9	14.6	30	
Benzo(a)anthracene	576.5	6.5	649.3	0	88.8	50-110	645.4	11.3	30	
Benzo(a)pyrene	569.7	6.5	649.3	0	87.7	50-110	643.5	12.2	30	
Benzo(b)fluoranthene	564.2	6.5	649.3	0	86.9	45-115	652.3	14.5	30	
Benzo(k)fluoranthene	566.5	6.5	649.3	0	87.2	45-115	630.4	10.7	30	
Chrysene	561	6.5	649.3	0	86.4	55-110	633	12.1	30	
Dibenzo(a,h)anthracene	547.7	6.5	649.3	0	84.3	40-125	612	11.1	30	
Fluoranthene	553.5	6.5	649.3	0	85.2	55-115	622.5	11.7	30	
Fluorene	576.2	6.5	649.3	0	88.7	50-110	679.8	16.5	30	
Indeno(1,2,3-cd)pyrene	586.6	6.5	649.3	0	90.3	40-120	637.2	8.27	30	
Naphthalene	547	6.5	649.3	140.6	62.6	40-105	707.9	25.6	30	
Pyrene	583.4	6.5	649.3	0	89.8	45-125	665.1	13.1	30	
Surr: 2-Fluorobiphenyl	1308	0	1623	0	80.6	12-100	1475	12	40	
Surr: 4-Terphenyl-d14	1380	0	1623	0	85	25-137	1597	14.5	40	
Surr: Nitrobenzene-d5	1159	0	1623	0	71.4	37-107	1419	20.2	40	

The following samples were analyzed in this batch:

1510640-01B	1510640-02B	1510640-03B
1510640-04B		

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

Client: HRL Compliance Solutions, Inc
Work Order: 1510640
Project: R.L. Bayless - Alta Martin 1-33 - Large Pit

QC BATCH REPORT

Batch ID: **77300** Instrument ID **VMS9** Method: **SW8260B**

MBLK				Sample ID: MBLK-77300-77300				Units: µg/Kg			Analysis Date: 10/12/2015 01:59 PM		
Client ID:			Run ID: VMS9_151012A				SeqNo: 3504885		Prep Date: 10/12/2015		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	1084	0	1000	0	108	70-130	0						
Surr: 4-Bromofluorobenzene	1004	0	1000	0	100	70-130	0						
Surr: Dibromofluoromethane	1133	0	1000	0	113	70-130	0						
Surr: Toluene-d8	940	0	1000	0	94	70-130	0						

LCS		Sample ID: LCS-77300-77300				Units: µg/Kg		Analysis Date: 10/12/2015 11:50 A		
Client ID:		Run ID: VMS9_151012A			SeqNo: 3504883		Prep Date: 10/12/2015		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	1071	30	1000	0	107	75-125	0			
Ethylbenzene	1096	30	1000	0	110	75-125	0			
m,p-Xylene	2030	60	2000	0	101	80-125	0			
o-Xylene	959.5	30	1000	0	96	75-125	0			
Toluene	1092	30	1000	0	109	70-125	0			
Xylenes, Total	2989	90	3000	0	99.6	75-125	0			
Surr: 1,2-Dichloroethane-d4	1054	0	1000	0	105	70-130	0			
Surr: 4-Bromofluorobenzene	1054	0	1000	0	105	70-130	0			
Surr: Dibromofluoromethane	1132	0	1000	0	113	70-130	0			
Surr: Toluene-d8	1021	0	1000	0	102	70-130	0			

MS				Sample ID: 1510709-01A MS			Units: µg/Kg		Analysis Date: 10/12/2015 10:14 PM		
Client ID:			Run ID: VMS8_151012A			SeqNo: 3504687		Prep Date: 10/12/2015		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	1086	30	1000	0	109	75-125	0				
Ethylbenzene	991.5	30	1000	0	99.2	75-125	0				
m,p-Xylene	1972	60	2000	0	98.6	80-125	0				
o-Xylene	959.5	30	1000	0	96	75-125	0				
Toluene	1040	30	1000	0	104	70-125	0				
Xylenes, Total	2932	90	3000	0	97.7	75-125	0				
Surr: 1,2-Dichloroethane-d4	1006	0	1000	0	101	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	1001	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: 1510640
Project: R.L. Bayless - Alta Martin 1-33 - Large Pit

QC BATCH REPORT

Batch ID: **77300** Instrument ID **VMS9** Method: **SW8260B**

MSD				Sample ID: 1510709-01A MSD			Units: µg/Kg		Analysis Date: 10/12/2015 10:39 PM	
Client ID:				Run ID: VMS8_151012A			SeqNo: 3504690		Prep Date: 10/12/2015	
									DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	985.5	30	1000	0	98.6	75-125	1086	9.75	30	
Ethylbenzene	1038	30	1000	0	104	75-125	991.5	4.53	30	
m,p-Xylene	1967	60	2000	0	98.4	80-125	1972	0.279	30	
o-Xylene	955	30	1000	0	95.5	75-125	959.5	0.47	30	
Toluene	916.5	30	1000	0	91.6	70-125	1040	12.6	30	
Xylenes, Total	2922	90	3000	0	97.4	75-125	2932	0.342	30	
Surr: 1,2-Dichloroethane-d4	960.5	0	1000	0	96	70-130	1006	4.58	30	
Surr: 4-Bromofluorobenzene	1036	0	1000	0	104	70-130	979.5	5.61	30	
Surr: Dibromofluoromethane	968.5	0	1000	0	96.8	70-130	1003	3.5	30	
Surr: Toluene-d8	944	0	1000	0	94.4	70-130	1001	5.86	30	

The following samples were analyzed in this batch:

1510640-01A	1510640-02A	1510640-03A
1510640-04A		

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

Client: HRL Compliance Solutions, Inc
Work Order: 1510640
Project: R.L. Bayless - Alta Martin 1-33 - Large Pit

QC BATCH REPORT

Batch ID: **R173656** Instrument ID **MOIST** Method: **E160.3M**

MBLK				Sample ID: WBLKS-R173656				Units: % of sample			Analysis Date: 10/12/2015 02:20 PM			
Client ID:				Run ID: MOIST_151012A				SeqNo: 3505652			Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual				
Moisture	0.03	0.050								J				

LCS				Sample ID: LCS-R173656				Units: % of sample			Analysis Date: 10/12/2015 02:20 PM			
Client ID:				Run ID: MOIST_151012A				SeqNo: 3505650			Prep Date:		DF: 1	
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual			
Moisture		99.99	0.050	100	0	100	99.5-100.5	0						

DUP				Sample ID: 1510219-01A DUP				Units: % of sample			Analysis Date: 10/12/2015 02:20 PM			
Client ID:				Run ID: MOIST_151012A				SeqNo: 3505620			Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual				
Moisture	1.33	0.050	0	0	0		1.33	0	20					

DUP				Sample ID: 1510640-01B DUP				Units: % of sample			Analysis Date: 10/12/2015 02:20 PM		
Client ID: North Wall				Run ID: MOIST_151012A				SeqNo: 3505642		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual			
Moisture	5.38	0.050	0	0	0		5.33	0.934	20				

The following samples were analyzed in this batch:

1510640-01B	1510640-02B	1510640-03B
1510640-04B		

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



ALS Laboratory Group

3352 128th Avenue, Holland, MI 49424
 TP: (616) 399-6070 FX: (616) 399-6185

Chain-of-Custody

Form 292r0

WORKORDER #

1510640

PAGE

1 of 1

DISPOSAL

By Lab or Return to Client

PROJECT NAME R.L. Bayless - Alta Martin 1-33 - Blow Down Pit

SAMPLER Jordan Carlo

DATE 10/8/2015

SITE ID Alta Martin 1-33

TURNAROUND

Standard (5-day)

PROJECT No.

EDD FORMAT

PURCHASE ORDER

COMPANY NAME HRL Compliance Solutions, Inc.

BILL TO COMPANY HRL Compliance Solutions, Inc.

SEND REPORT TO HRL - Kris Rowe, Jordan Carlo

INVOICE ATTN TO Missy Derosé, Kim Cass, Staci Knob

ADDRESS 2385 F 1/2 Road

ADDRESS 2385 F1/2 Road

CITY / STATE / ZIP Grand Junction, CO, 81505

CITY / STATE / ZIP Grand Junction, CO 81505

PHONE 970-243-3271

PHONE 970-243-3271

FAX 970-243-3280

FAX

E-MAIL krowe@hrlcomp.com, jcarlo@hrlcomp.com

E-MAIL mderose@hrlcomp.com,
kcass@hrlcomp.com,
sknob@hrlcomp.com

DRO GRO BTEX Semi Vols - PAH*

Lab ID

Field ID

Matrix

Sample Date

Sample Time

Bottles

Pres.

QC

1

North Wall

S

9/28/2015

1524

2

8

X

X

X

X

2

East Wall

S

9/28/2015

1530

2

8

X

X

X

X

3

West Wall

S

9/28/2015

1540

2

8

X

X

X

X

4

South Wall

S

9/28/2015

1535

2

8

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 see attached analytical table (COGCC Table 910-1)

QC PACKAGE (check below)

LEVEL II (Standard QC)

LEVEL III (Std QC + forms)

LEVEL IV (Std QC + forms + raw data)

4.8°C

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

Kris Rowe

10/8/2015

15:00

RECEIVED BY

W. W.

10-8-15

15:00

RELINQUISHED BY

W. W.

10-8-15

16:25

RECEIVED BY

W. W.

10/9

10:15

RELINQUISHED BY

RECEIVED BY

Sample Receipt Checklist

Client Name: **HRL**

Date/Time Received: **09-Oct-15 10:15**

Work Order: **1510640**

Received by: **KRW**

Checklist completed by Keith Wurenga
eSignature

09-Oct-15
Date

Reviewed by: Lee Arnold
eSignature

09-Oct-15
Date

Matrices: **Soil**

Carrier name: **FedEx**

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature in compliance?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample(s) received on ice?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Temperature(s)/Thermometer(s):	<u>4.8/4.8 C</u>		<u>SR2</u>
Cooler(s)/Kit(s):	<u></u>		
Date/Time sample(s) sent to storage:	<u>10/9/2015 3:39:40 PM</u>		
Water - VOA vials have zero headspace?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input checked="" type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
pH adjusted?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
pH adjusted by:	<u>-</u>		

Login Notes:

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:

Comments:

CorrectiveAction:

APPENDIX 3: BACKGROUND RAW ANALYTICAL DATA

ALS Group USA, Corp

Date: 08-Oct-15

Client: HRL Compliance Solutions, Inc
Project: R.L. Bayless - Alta Martin 1-33 - Pit Closure
Sample ID: Background 1
Collection Date: 9/28/2015 03:50 PM

Work Order: 15091737
Lab ID: 15091737-02
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS ANALYSIS BY ICP						
Arsenic	1.8		SW846 6010C 0.39	mg/Kg-dry	Prep: SW3050B / 10/1/15 1	Analyst: RH 10/2/2015 03:40 PM
SOLUBLE CATIONS FOR SAR						
Calcium	68		SW846 6010C 5.0	mg/L	Prep: USDA Method 20B / 10/5/15 10	Analyst: JEC 10/5/2015 12:54 PM
Magnesium	15		2.0	mg/L	10	10/5/2015 12:54 PM
Sodium	3.4		2.0	mg/L	10	10/5/2015 12:54 PM
SODIUM ADSORPTION RATIO						
Sodium Adsorption Ratio	0.098		USDA H60 METHO 0.010	none	Prep: USDA Method 20B / 10/5/15 1	Analyst: JEC 10/5/2015
ELECTRICAL CONDUCTIVITY (SAR)						
Electrical Conductivity @ Saturation	0.52		USDA H60 METHO 0.050	mmhos/cm @2	Prep: USDA Method 20B / 10/5/15 10	Analyst: JB 10/5/2015 04:30 PM
MOISTURE						
Moisture	3.7		E160.3M 0.050	% of sample	1	Analyst: EVB 10/1/2015 09:10 PM
PH						
pH	6.4		SW9045D	s.u.	Prep: EXTRACT / 10/2/15 1	Analyst: JB 10/2/2015 02:00 PM

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

ALS Group USA, Corp**Date:** 08-Oct-15

Client: HRL Compliance Solutions, Inc
Project: R.L. Bayless - Alta Martin 1-33 - Pit Closure
Sample ID: Background 2
Collection Date: 9/28/2015 03:55 PM

Work Order: 15091737
Lab ID: 15091737-03
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<hr/>						
METALS ANALYSIS BY ICP			SW846 6010C		Prep: SW3050B / 10/1/15	Analyst: RH
Arsenic	1.9		0.34	mg/Kg-dry	1	10/2/2015 03:57 PM
MOISTURE			E160.3M			Analyst: EVB
Moisture	5.3		0.050	% of sample	1	10/1/2015 09:10 PM

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

ALS Group USA, Corp

Date: 08-Oct-15

Client: HRL Compliance Solutions, Inc
Project: R.L. Bayless - Alta Martin 1-33 - Pit Closure
Sample ID: Background 3
Collection Date: 9/28/2015 04:00 PM

Work Order: 15091737
Lab ID: 15091737-04
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<hr/>						
METALS ANALYSIS BY ICP			SW846 6010C		Prep: SW3050B / 10/1/15	Analyst: RH
Arsenic	2.0		0.41	mg/Kg-dry	1	10/2/2015 04:24 PM
MOISTURE			E160.3M			Analyst: EVB
Moisture	7.8		0.050	% of sample	1	10/1/2015 09:10 PM

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