



October 27, 2015

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

Re: TR 24-28-597 Spill Closure Request

Dear Mr. Spencer,

Attached is the laboratory report and the sample location map for soil samples collected from the excavated area and nearby non-impacted native soil in order to close the spill that occurred at the TR 24-28-597 on September 29, 2015.

- One grab sample was collected from the excavated area and was analyzed for the 910-1 list of constituents.
- Three grab samples were collected from nearby non-impacted, native soil to establish the background concentrations for arsenic. In accordance with the COGCC Rule 910.b.(3)E. one grab sample was analyzed for inorganics to establish background soil conditions.

As the attached lab reports indicate, all constituents of concern listed in the COGCC Table 910-1 are in compliance with the cleanup requirements. The excavated material was taken to the Parachute Centralized E&P WMF for disposal. The impacted area will be covered with 3' of clean soil during the interim reclamation of the pad.

Based on these results, WPX respectfully requests closure of this incident.

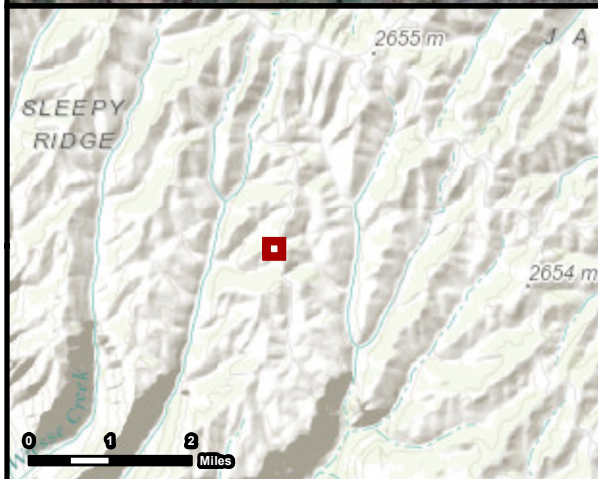
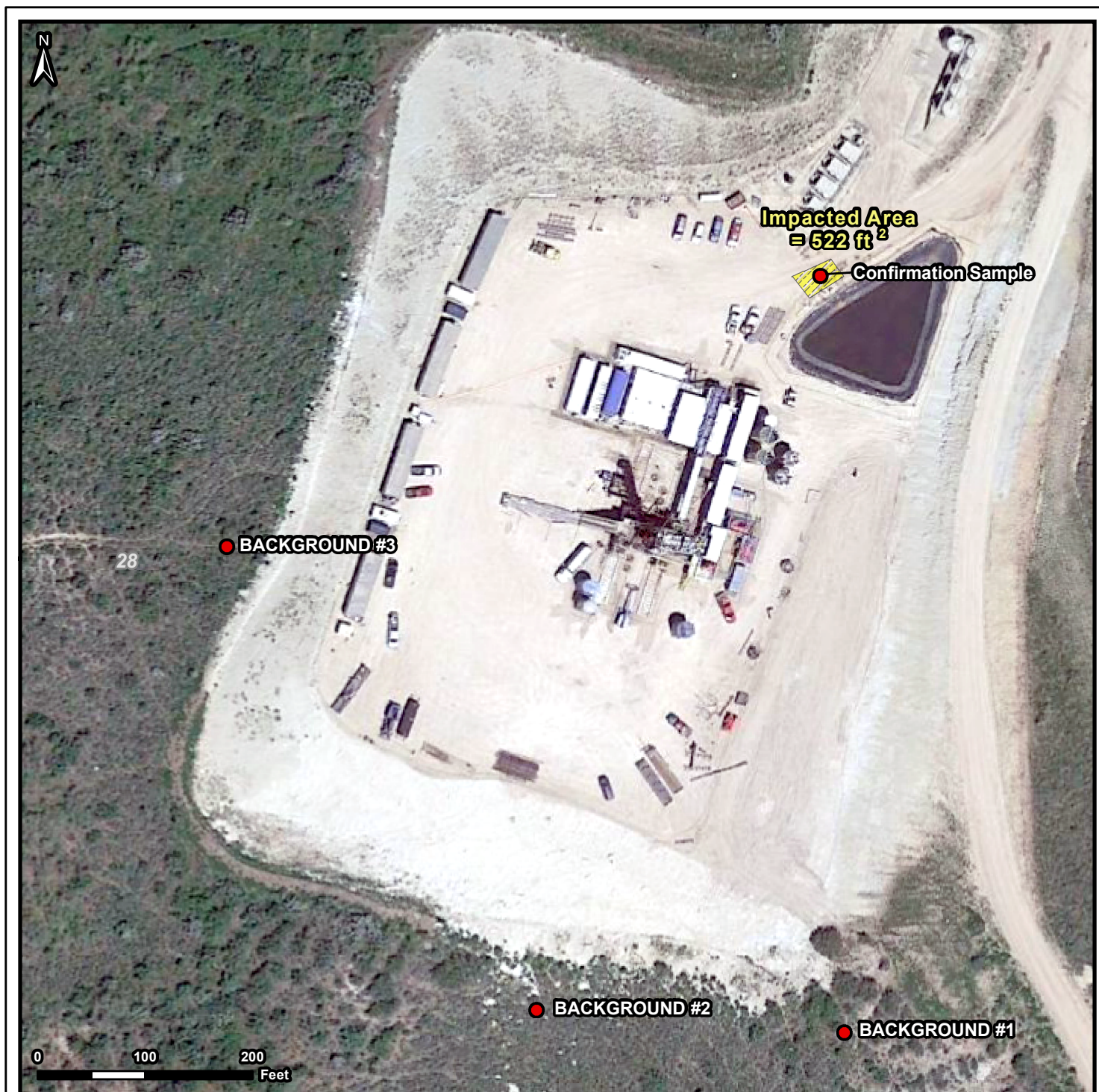
Please do not hesitate to contact me at (970) 683-2295 should you have any questions or concerns regarding this information.

Sincerely,

Karolina Blaney
Environmental Specialist

Attachments (2)

- Sampling Location Map
- Laboratory Reports



NOTES / COMMENTS:

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



Sample Location Map

TR 24-28-597

39.57972 -108.28512
Section 28, Township 5 South, Range 97 West

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



HRL COMPLIANCE SOLUTIONS, INC.
Environmental Consultants

Author: E. Fought
Revision: 0
Date: 10/26/2015

Contaminant of Concern ↓	COGCC standards	Location →	Confirmation	TR 24-28-597-B-1	TR 24-28-597-B-2	TR 24-28-597-B-3
		Date Sampled →	9/30/2015	8/28/2015	8/28/2015	8/28/2015
Organic Compounds in Soil						
TPH	500	mg/kg	85			
DRO		mg/kg	85			
GRO		mg/kg	ND			
Benzene	0.17	mg/kg	ND			
Toluene	85	mg/kg	0.038			
Ethylbenzene	100	mg/kg	ND			
Xylenes (Total)	175	mg/kg	ND			
Acenaphthene	1,000	mg/kg	ND			
Anthracene	1,000	mg/kg	ND			
Benzo(A)anthracene	0.22	mg/kg	ND			
Benzo(B)fluoranthene	0.22	mg/kg	ND			
Benzo(K)fluoranthene	2.2	mg/kg	ND			
Benzo(A)pyrene	0.022	mg/kg	ND			
Chrysene	22	mg/kg	ND			
Dibenzo(A,H)anthracene	0.022	mg/kg	ND			
Fluoranthene	1,000	mg/kg	ND			
Fluorene	1,000	mg/kg	ND			
Indeno(1,2,3-cd)pyrene	0.22	mg/kg	ND			
Naphthalene	23	mg/kg	0.02			
Pyrene	1,000	mg/kg	ND			
Inorganics in Soil						
EC	<4 or 2 x background	mmhos/cm	5			0.78
SAR	<12		4			0.074
pH	6-9		7.9			6.5
Metals in Soil						
Arsenic	0.39	mg/kg	9	9.1	9.1	9.2
Barium total	15,000	mg/kg	560			
Cadmium	70	mg/kg	ND			
Chromium (III)	120,000	mg/kg	28			
Chromium (VI)	23	mg/kg	ND			
Copper	3,100	mg/kg	21			
Lead	400	mg/kg	12			
Mercury	23	mg/kg	0.026			
Nickel	1,600	mg/kg	30			
Selenium	390	mg/kg	1.3			
Silver	390	mg/kg	ND			
Zinc	23,000	mg/kg	62			



08-Oct-2015

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

Re: **TR 24-28-597 Pit Sludge Spill**

Work Order: **1510042**

Dear Mark,

ALS Environmental received 1 sample on 01-Oct-2015 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 24.

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

Sincerely,

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

Electronically approved by: Les Arnold

Les Arnold
Senior Project Manager



Certificate No: MN 532786

Report of Laboratory Analysis

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

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

Environmental The ALS logo, a small blue triangle with a yellow flame-like shape inside.

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

Client: HRL Compliance Solutions, Inc
Project: TR 24-28-597 Pit Sludge Spill
Work Order: 1510042

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>
1510042-01	Impacted Area	Soil		9/30/2015 10:40	10/1/2015 09:30	<input type="checkbox"/>

Client: HRL Compliance Solutions, Inc
Project: TR 24-28-597 Pit Sludge Spill
Work Order: 1510042

Case Narrative

Samples for the above noted Work Order were received on 10/01/2015. 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: 08-Oct-15

Client: HRL Compliance Solutions, Inc
Project: TR 24-28-597 Pit Sludge Spill
Sample ID: Impacted Area
Collection Date: 9/30/2015 10:40 AM

Work Order: 1510042
Lab ID: 1510042-01
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
DRO (C10-C28)	85		SW8015M		Prep: SW3541 / 10/5/15	Analyst: IT
<i>Surr: 4-Terphenyl-d14</i>	68.1		4.7	mg/Kg-dry	1	10/6/2015 07:32 AM
			39-133	%REC	1	10/6/2015 07:32 AM
GASOLINE RANGE ORGANICS BY GC-FID						
GRO (C6-C10)	ND		SW8015D		Prep: SW5035 / 10/1/15	Analyst: IT
<i>Surr: Toluene-d8</i>	106		2.8	mg/Kg-dry	1	10/3/2015 06:36 PM
			50-150	%REC	1	10/3/2015 06:36 PM
MERCURY BY CVAA						
Mercury	0.026		SW7471B		Prep: SW7471 / 10/6/15	Analyst: LR
			0.015	mg/Kg-dry	1	10/6/2015 07:30 PM
METALS ANALYSIS BY ICP						
Arsenic	9.0		SW846 6010C		Prep: SW3050B / 10/2/15	Analyst: RH
Barium	560		0.38	mg/Kg-dry	1	10/2/2015 02:33 PM
Cadmium	ND		0.38	mg/Kg-dry	1	10/2/2015 02:33 PM
Chromium	28		0.30	mg/Kg-dry	1	10/2/2015 02:33 PM
Copper	21	B	0.38	mg/Kg-dry	1	10/2/2015 02:33 PM
Lead	12		0.38	mg/Kg-dry	1	10/2/2015 02:33 PM
Nickel	30		0.38	mg/Kg-dry	1	10/2/2015 02:33 PM
Selenium	1.3		0.38	mg/Kg-dry	1	10/5/2015 10:19 AM
Silver	ND		0.38	mg/Kg-dry	1	10/2/2015 02:33 PM
Zinc	62	B	0.75	mg/Kg-dry	1	10/2/2015 02:33 PM
SOLUBLE CATIONS FOR SAR						
			SW846 6010C		Prep: USDA Method 20B / 10/5/15	Analyst: JEC
Calcium	420		5.0	mg/L	10	10/5/2015 01:22 PM
Magnesium	58		2.0	mg/L	10	10/5/2015 01:22 PM
Sodium	330		2.0	mg/L	10	10/5/2015 01:22 PM
SODIUM ADSORPTION RATIO						
			USDA H60 METHO		Prep: USDA Method 20B / 10/5/15	Analyst: JEC
Sodium Adsorption Ratio	4.0		0.010	none	1	10/5/2015
SEMI-VOLATILE ORGANIC COMPOUNDS						
			SW846 8270D		Prep: SW3541 / 10/5/15	Analyst: RS
Acenaphthene	ND		0.0074	mg/Kg-dry	1	10/6/2015 03:11 PM
Acenaphthylene	ND		0.0074	mg/Kg-dry	1	10/6/2015 03:11 PM
Anthracene	ND		0.0074	mg/Kg-dry	1	10/6/2015 03:11 PM
Benzo(a)anthracene	ND		0.0074	mg/Kg-dry	1	10/6/2015 03:11 PM
Benzo(a)pyrene	ND		0.0074	mg/Kg-dry	1	10/6/2015 03:11 PM
Benzo(b)fluoranthene	ND		0.0074	mg/Kg-dry	1	10/6/2015 03:11 PM
Benzo(g,h,i)perylene	ND		0.0074	mg/Kg-dry	1	10/6/2015 03:11 PM
Benzo(k)fluoranthene	ND		0.0074	mg/Kg-dry	1	10/6/2015 03:11 PM
Chrysene	ND		0.0074	mg/Kg-dry	1	10/6/2015 03:11 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: TR 24-28-597 Pit Sludge Spill
Sample ID: Impacted Area
Collection Date: 9/30/2015 10:40 AM

Work Order: 1510042
Lab ID: 1510042-01
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Dibenzo(a,h)anthracene	ND		0.0074	mg/Kg-dry	1	10/6/2015 03:11 PM
Fluoranthene	ND		0.0074	mg/Kg-dry	1	10/6/2015 03:11 PM
Fluorene	ND		0.0074	mg/Kg-dry	1	10/6/2015 03:11 PM
Indeno(1,2,3-cd)pyrene	ND		0.0074	mg/Kg-dry	1	10/6/2015 03:11 PM
Naphthalene	0.020		0.0074	mg/Kg-dry	1	10/6/2015 03:11 PM
Pyrene	ND		0.0074	mg/Kg-dry	1	10/6/2015 03:11 PM
Surr: 2-Fluorobiphenyl	66.9		12-100	%REC	1	10/6/2015 03:11 PM
Surr: 4-Terphenyl-d14	79.8		25-137	%REC	1	10/6/2015 03:11 PM
Surr: Nitrobenzene-d5	52.2		37-107	%REC	1	10/6/2015 03:11 PM
VOLATILE ORGANIC COMPOUNDS			SW8260B	Prep: SW5035 / 10/1/15		Analyst: BG
Benzene	ND		0.034	mg/Kg-dry	1	10/8/2015 08:56 AM
Ethylbenzene	ND		0.034	mg/Kg-dry	1	10/8/2015 08:56 AM
m,p-Xylene	0.071		0.068	mg/Kg-dry	1	10/8/2015 08:56 AM
o-Xylene	ND		0.034	mg/Kg-dry	1	10/8/2015 08:56 AM
Toluene	0.038		0.034	mg/Kg-dry	1	10/8/2015 08:56 AM
Xylenes, Total	ND		0.10	mg/Kg-dry	1	10/8/2015 08:56 AM
Surr: 1,2-Dichloroethane-d4	109		70-130	%REC	1	10/8/2015 08:56 AM
Surr: 4-Bromofluorobenzene	99.3		70-130	%REC	1	10/8/2015 08:56 AM
Surr: Dibromofluoromethane	97.0		70-130	%REC	1	10/8/2015 08:56 AM
Surr: Toluene-d8	101		70-130	%REC	1	10/8/2015 08:56 AM
ELECTRICAL CONDUCTIVITY (SAR)			USDA H60 METHO	Prep: USDA Method 20B / 10/5/15		Analyst: JB
Electrical Conductivity @ Saturation	5.0		0.050	mmhos/cm @2	10	10/5/2015 04:30 PM
CHROMIUM, TRIVALENT			CALCULATION			Analyst: JJG
Chromium, Trivalent	28		0.57	mg/Kg-dry	1	10/8/2015 08:45 AM
CHROMIUM, HEXAVALENT			SW7196A	Prep: SW3060A / 10/2/15		Analyst: MB
Chromium, Hexavalent	ND		1.2	mg/Kg-dry	1	10/6/2015 09:00 AM
MOISTURE			E160.3M			Analyst: EVB
Moisture	12		0.050	% of sample	1	10/5/2015 03:00 PM
PH			SW9045D	Prep: EXTRACT / 10/2/15		Analyst: JB
pH	7.9		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>
% 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: 08-Oct-15

Client: HRL Compliance Solutions, Inc
Work Order: 1510042
Project: TR 24-28-597 Pit Sludge Spill

QC BATCH REPORT

Batch ID: **76949** Instrument ID **GC8** Method: **SW8015M**

MBLK		Sample ID: DBLKS1-76949-76949				Units: mg/Kg		Analysis Date: 10/5/2015 07:35 PM		
Client ID:		Run ID: GC8_151005A				SeqNo: 3492079		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

DRO (C10-C28) ND 5.0
Surr: 4-Terphenyl-d14 1.37 0 2 0 68.5 39-133 0

LCS		Sample ID: DLCSS1-76949-76949				Units: mg/Kg		Analysis Date: 10/5/2015 08:05 PM		
Client ID:		Run ID: GC8_151005A				SeqNo: 3492080		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

DRO (C10-C28) 177.9 5.0 200 0 89 61-109 0
Surr: 4-Terphenyl-d14 1.228 0 2 0 61.4 39-133 0

MS		Sample ID: 1510231-01B MS				Units: mg/Kg		Analysis Date: 10/5/2015 08:35 PM		
Client ID:		Run ID: GC8_151005A				SeqNo: 3492081		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

DRO (C10-C28) 174.8 4.1 165.5 25.15 90.4 48-110 0
Surr: 4-Terphenyl-d14 1.244 0 1.655 0 75.1 39-133 0

MSD		Sample ID: 1510231-01B MSD				Units: mg/Kg		Analysis Date: 10/5/2015 09:05 PM		
Client ID:		Run ID: GC8_151005A				SeqNo: 3492082		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

DRO (C10-C28) 152.4 4.2 166.6 25.15 76.4 48-110 174.8 13.7 30
Surr: 4-Terphenyl-d14 1.084 0 1.666 0 65.1 39-133 1.244 13.7 30

The following samples were analyzed in this batch: 1510042-01B

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

Client: HRL Compliance Solutions, Inc
Work Order: 1510042
Project: TR 24-28-597 Pit Sludge Spill

QC BATCH REPORT

Batch ID: **76837** Instrument ID **GC9** Method: **SW8015D**

MBLK		Sample ID: MBLK-76837-76837				Units: µg/Kg		Analysis Date: 10/1/2015 02:38 PM		
Client ID:		Run ID: GC9_151001A				SeqNo: 3486588		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
GRO (C6-C10)	ND	2,500								
Surr: Toluene-d8	4370	0	5000	0	87.4	50-150	0			

LCS		Sample ID: LCS-76837-76837				Units: µg/Kg		Analysis Date: 10/1/2015 01:39 PM		
Client ID:		Run ID: GC9_151001A				SeqNo: 3486586		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
GRO (C6-C10)	545800	2,500	500000	0	109	70-130	0			
Surr: Toluene-d8	5274	0	5000	0	105	50-150	0			

MS		Sample ID: 1510021-01A MS				Units: µg/Kg		Analysis Date: 10/1/2015 06:51 PM		
Client ID:		Run ID: GC9_151001A				SeqNo: 3487893		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
GRO (C6-C10)	553600	2,500	500000	0	111	70-130	0			
Surr: Toluene-d8	5406	0	5000	0	108	50-150	0			

MSD		Sample ID: 1510021-01A MSD				Units: µg/Kg		Analysis Date: 10/1/2015 07:16 PM		
Client ID:		Run ID: GC9_151001A				SeqNo: 3487895		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
GRO (C6-C10)	514600	2,500	500000	0	103	70-130	553600	7.29	30	
Surr: Toluene-d8	5041	0	5000	0	101	50-150	5406	7	30	

The following samples were analyzed in this batch: 1510042-01A

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

Client: HRL Compliance Solutions, Inc
Work Order: 1510042
Project: TR 24-28-597 Pit Sludge Spill

QC BATCH REPORT

Batch ID: **77042** Instrument ID **HG1** Method: **SW7471B**

MBLK		Sample ID: MBLK-77042-77042				Units: mg/Kg		Analysis Date: 10/6/2015 07:25 PM		
Client ID:		Run ID: HG1_151006A				SeqNo: 3494497		Prep Date: 10/6/2015		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-77042-77042				Units: mg/Kg		Analysis Date: 10/6/2015 07:27 PM		
Client ID:		Run ID: HG1_151006A				SeqNo: 3494498		Prep Date: 10/6/2015		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.1883 0.020 0.1665 0 113 80-120 0

MS		Sample ID: 1510067-07BMS				Units: mg/Kg		Analysis Date: 10/6/2015 07:46 PM		
Client ID:		Run ID: HG1_151006A				SeqNo: 3494506		Prep Date: 10/6/2015		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.1338 0.013 0.1053 0.01416 114 75-125 0

MSD		Sample ID: 1510067-07BMSD				Units: mg/Kg		Analysis Date: 10/6/2015 07:49 PM		
Client ID:		Run ID: HG1_151006A				SeqNo: 3494507		Prep Date: 10/6/2015		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.1286 0.012 0.1036 0.01416 110 75-125 0.1338 3.96 35

The following samples were analyzed in this batch:

1510042-01B

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

Client: HRL Compliance Solutions, Inc
Work Order: 1510042
Project: TR 24-28-597 Pit Sludge Spill

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:

1510042-01C

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

Client: HRL Compliance Solutions, Inc
Work Order: 1510042
Project: TR 24-28-597 Pit Sludge Spill

QC BATCH REPORT

Batch ID: **76871** Instrument ID **ICP2** Method: **SW846 6010C**

MBLK		Sample ID: MBLK-76871-76871				Units: mg/Kg		Analysis Date: 10/2/2015 12:59 PM		
Client ID:		Run ID: ICP2_151002A				SeqNo: 3488441		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
Arsenic	ND	0.25								
Barium	ND	0.25								
Cadmium	ND	0.50								
Chromium	0.214	0.25								J
Lead	0.03604	0.25								J
Nickel	0.1139	0.25								J
Selenium	ND	0.50								
Silver	0.05826	0.25								J

MBLK		Sample ID: MBLK-76871-76871				Units: mg/Kg		Analysis Date: 10/2/2015 03:19 PM		
Client ID:		Run ID: ICP2_151002A				SeqNo: 3489841		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
Copper	0.6625	0.50								
Zinc	2.112	0.50								

LCS		Sample ID: LCS-76871-76871				Units: mg/Kg		Analysis Date: 10/2/2015 01:04 PM		
Client ID:		Run ID: ICP2_151002A				SeqNo: 3488442		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
Arsenic	4.891	0.25	5	0	97.8	80-120	0			
Barium	4.921	0.25	5	0	98.4	80-120	0			
Cadmium	4.893	0.50	5	0	97.9	80-120	0			
Chromium	5.222	0.25	5	0	104	80-120	0			
Copper	5.213	0.50	5	0	104	80-120	0			B
Lead	5.073	0.25	5	0	101	80-120	0			
Nickel	5.164	0.25	5	0	103	80-120	0			
Selenium	5.27	0.50	5	0	105	80-120	0			
Silver	5.131	0.25	5	0	103	80-120	0			
Zinc	4.968	0.50	5	0	99.4	80-120	0			B

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

Client: HRL Compliance Solutions, Inc
Work Order: 1510042
Project: TR 24-28-597 Pit Sludge Spill

QC BATCH REPORT

Batch ID: **76871** Instrument ID **ICP2** Method: **SW846 6010C**

MS		Sample ID: 1510068-01BMS				Units: mg/Kg		Analysis Date: 10/2/2015 01:31 PM		
Client ID:		Run ID: ICP2_151002A				SeqNo: 3488447		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
Arsenic	9.094	0.38	7.53	0.9894	108	75-125	0			
Barium	17.09	0.38	7.53	8.775	110	75-125	0			
Cadmium	7.598	0.75	7.53	-0.0999	102	75-125	0			
Chromium	11.1	0.38	7.53	2.357	116	75-125	0			
Copper	10.54	0.75	7.53	3.855	88.7	75-125	0			B
Lead	10.15	0.38	7.53	2.428	103	75-125	0			
Nickel	11.13	0.38	7.53	3.987	94.9	75-125	0			
Selenium	8.044	0.75	7.53	0.2015	104	75-125	0			
Silver	7.939	0.38	7.53	-0.0696	106	75-125	0			
Zinc	17.01	0.75	7.53	8.52	113	75-125	0			B

MSD		Sample ID: 1510068-01BMSD				Units: mg/Kg		Analysis Date: 10/2/2015 01:36 PM		
Client ID:		Run ID: ICP2_151002A				SeqNo: 3488448		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
Arsenic	8.591	0.38	7.519	0.9894	101	75-125	9.094	5.7	20	
Barium	16.38	0.38	7.519	8.775	101	75-125	17.09	4.24	20	
Cadmium	7.086	0.75	7.519	-0.0999	95.6	75-125	7.598	6.97	20	
Chromium	10.83	0.38	7.519	2.357	113	75-125	11.1	2.5	20	
Copper	10.87	0.75	7.519	3.855	93.3	75-125	10.54	3.13	20	B
Lead	11.39	0.38	7.519	2.428	119	75-125	10.15	11.4	20	
Nickel	10.85	0.38	7.519	3.987	91.3	75-125	11.13	2.55	20	
Selenium	7.969	0.75	7.519	0.2015	103	75-125	8.044	0.94	20	
Silver	7.462	0.38	7.519	-0.0696	100	75-125	7.939	6.19	20	
Zinc	17.02	0.75	7.519	8.52	113	75-125	17.01	0.0671	20	B

The following samples were analyzed in this batch:

1510042-01B

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

Client: HRL Compliance Solutions, Inc
Work Order: 1510042
Project: TR 24-28-597 Pit Sludge Spill

QC BATCH REPORT

Batch ID: **76948** Instrument ID **SVMS5** Method: **SW846 8270D**

MBLK		Sample ID: SBLKS1-76948-76948				Units: µg/Kg		Analysis Date: 10/6/2015 07:54 AM		
Client ID:		Run ID: SVMS5_151006A				SeqNo: 3492254		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
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	1238	0	1667	0	74.3	12-100	0			
Surr: 4-Terphenyl-d14	1508	0	1667	0	90.5	25-137	0			
Surr: Nitrobenzene-d5	1259	0	1667	0	75.5	37-107	0			

LCS		Sample ID: SLCSS1-76948-76948				Units: µg/Kg		Analysis Date: 10/6/2015 08:17 AM		
Client ID:		Run ID: SVMS5_151006A				SeqNo: 3492255		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
Acenaphthene	599.7	6.7	666.7	0	89.9	45-110	0			
Acenaphthylene	608.7	6.7	666.7	0	91.3	45-105	0			
Anthracene	624	6.7	666.7	0	93.6	55-105	0			
Benzo(a)anthracene	629.7	6.7	666.7	0	94.4	50-110	0			
Benzo(a)pyrene	612	6.7	666.7	0	91.8	50-110	0			
Benzo(b)fluoranthene	623.7	6.7	666.7	0	93.5	45-115	0			
Benzo(g,h,i)perylene	554.3	6.7	666.7	0	83.1	40-125	0			
Benzo(k)fluoranthene	647	6.7	666.7	0	97	45-115	0			
Chrysene	613.3	6.7	666.7	0	92	55-110	0			
Dibenzo(a,h)anthracene	565.7	6.7	666.7	0	84.8	40-125	0			
Fluoranthene	592.3	6.7	666.7	0	88.8	55-115	0			
Fluorene	586	6.7	666.7	0	87.9	50-110	0			
Indeno(1,2,3-cd)pyrene	530.7	6.7	666.7	0	79.6	40-120	0			
Naphthalene	568.7	6.7	666.7	0	85.3	40-105	0			
Pyrene	658.3	6.7	666.7	0	98.7	45-125	0			
Surr: 2-Fluorobiphenyl	1416	0	1667	0	84.9	12-100	0			
Surr: 4-Terphenyl-d14	1574	0	1667	0	94.4	25-137	0			
Surr: Nitrobenzene-d5	1477	0	1667	0	88.6	37-107	0			

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

Client: HRL Compliance Solutions, Inc
Work Order: 1510042
Project: TR 24-28-597 Pit Sludge Spill

QC BATCH REPORT

Batch ID: **76948** Instrument ID **SVMS5** Method: **SW846 8270D**

MS				Sample ID: 1510067-07B MS			Units: µg/Kg		Analysis Date: 10/6/2015 08:39 AM	
Client ID:				Run ID: SVMS5_151006A			SeqNo: 3492256		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
Acenaphthene	577.2	6.6	659	0	87.6	45-110	0			
Acenaphthylene	584.2	6.6	659	0	88.6	45-105	0			
Anthracene	635.2	6.6	659	0	96.4	55-105	0			
Benzo(a)anthracene	626.7	6.6	659	0	95.1	50-110	0			
Benzo(a)pyrene	622.7	6.6	659	0	94.5	50-110	0			
Benzo(b)fluoranthene	646.8	6.6	659	0	98.1	45-115	0			
Benzo(g,h,i)perylene	577.2	6.6	659	0	87.6	40-125	0			
Benzo(k)fluoranthene	644.5	6.6	659	0	97.8	45-115	0			
Chrysene	608.2	6.6	659	0	92.3	55-110	0			
Dibenzo(a,h)anthracene	586.5	6.6	659	0	89	40-125	0			
Fluoranthene	611.5	6.6	659	0	92.8	55-115	0			
Fluorene	597.3	6.6	659	0	90.6	50-110	0			
Indeno(1,2,3-cd)pyrene	561.1	6.6	659	0	85.1	40-120	0			
Naphthalene	525.8	6.6	659	15.28	77.5	40-105	0			
Pyrene	668.8	6.6	659	0	101	45-125	0			
Surr: 2-Fluorobiphenyl	1299	0	1647	0	78.8	12-100	0			
Surr: 4-Terphenyl-d14	1545	0	1647	0	93.8	25-137	0			
Surr: Nitrobenzene-d5	1275	0	1647	0	77.4	37-107	0			

MSD				Sample ID: 1510067-07B MSD			Units: µg/Kg		Analysis Date: 10/6/2015 09:02 AM	
Client ID:				Run ID: SVMS5_151006A			SeqNo: 3492257		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
Acenaphthene	525.1	6.5	650.7	0	80.7	45-110	577.2	9.47	30	
Acenaphthylene	532.9	6.5	650.7	0	81.9	45-105	584.2	9.18	30	
Anthracene	585.3	6.5	650.7	0	89.9	55-105	635.2	8.19	30	
Benzo(a)anthracene	543.9	6.5	650.7	0	83.6	50-110	626.7	14.1	30	
Benzo(a)pyrene	555.3	6.5	650.7	0	85.3	50-110	622.7	11.4	30	
Benzo(b)fluoranthene	566.4	6.5	650.7	0	87	45-115	646.8	13.3	30	
Benzo(g,h,i)perylene	516.9	6.5	650.7	0	79.4	40-125	577.2	11	30	
Benzo(k)fluoranthene	565.1	6.5	650.7	0	86.8	45-115	644.5	13.1	30	
Chrysene	534.2	6.5	650.7	0	82.1	55-110	608.2	13	30	
Dibenzo(a,h)anthracene	524.1	6.5	650.7	0	80.5	40-125	586.5	11.2	30	
Fluoranthene	555.3	6.5	650.7	0	85.3	55-115	611.5	9.63	30	
Fluorene	559.2	6.5	650.7	0	85.9	50-110	597.3	6.59	30	
Indeno(1,2,3-cd)pyrene	492.2	6.5	650.7	0	75.6	40-120	561.1	13.1	30	
Naphthalene	428.4	6.5	650.7	15.28	63.5	40-105	525.8	20.4	30	
Pyrene	585.6	6.5	650.7	0	90	45-125	668.8	13.3	30	
Surr: 2-Fluorobiphenyl	1133	0	1627	0	69.7	12-100	1299	13.6	40	
Surr: 4-Terphenyl-d14	1365	0	1627	0	83.9	25-137	1545	12.4	40	
Surr: Nitrobenzene-d5	1073	0	1627	0	66	37-107	1275	17.2	40	

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

Client: HRL Compliance Solutions, Inc
Work Order: 1510042
Project: TR 24-28-597 Pit Sludge Spill

QC BATCH REPORT

Batch ID: **76948** Instrument ID **SVMS5** Method: **SW846 8270D**

The following samples were analyzed in this batch:

1510042-01B

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

Client: HRL Compliance Solutions, Inc
Work Order: 1510042
Project: TR 24-28-597 Pit Sludge Spill

QC BATCH REPORT

Batch ID: **76854** Instrument ID **VMS7** Method: **SW8260B**

MBLK		Sample ID: MBLK-76854-76854				Units: µg/Kg		Analysis Date: 10/1/2015 04:40 PM		
Client ID:		Run ID: VMS7_151001A				SeqNo: 3487264		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
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	1021	0	1000	0	102	70-130	0			
Surr: 4-Bromofluorobenzene	989	0	1000	0	98.9	70-130	0			
Surr: Dibromofluoromethane	1002	0	1000	0	100	70-130	0			
Surr: Toluene-d8	972	0	1000	0	97.2	70-130	0			

LCS		Sample ID: LCS-76854-76854				Units: µg/Kg		Analysis Date: 10/1/2015 02:58 PM		
Client ID:		Run ID: VMS7_151001A				SeqNo: 3487263		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
Benzene	1080	30	1000	0	108	75-125	0			
Ethylbenzene	1044	30	1000	0	104	75-125	0			
m,p-Xylene	2075	60	2000	0	104	80-125	0			
o-Xylene	1012	30	1000	0	101	75-125	0			
Toluene	1006	30	1000	0	101	70-125	0			
Xylenes, Total	3088	90	3000	0	103	75-125	0			
Surr: 1,2-Dichloroethane-d4	1025	0	1000	0	102	70-130	0			
Surr: 4-Bromofluorobenzene	994	0	1000	0	99.4	70-130	0			
Surr: Dibromofluoromethane	1005	0	1000	0	100	70-130	0			
Surr: Toluene-d8	960	0	1000	0	96	70-130	0			

MS		Sample ID: 1510041-04B MS				Units: µg/Kg		Analysis Date: 10/8/2015 11:32 AM		
Client ID:		Run ID: VMS6_151007A				SeqNo: 3497659		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
Benzene	1060	30	1000	0	106	75-125	0			
Ethylbenzene	1017	30	1000	0	102	75-125	0			
m,p-Xylene	2106	60	2000	0	105	80-125	0			
o-Xylene	998	30	1000	0	99.8	75-125	0			
Toluene	1016	30	1000	0	102	70-125	0			
Xylenes, Total	3104	90	3000	0	103	75-125	0			
Surr: 1,2-Dichloroethane-d4	1075	0	1000	0	108	70-130	0			
Surr: 4-Bromofluorobenzene	1028	0	1000	0	103	70-130	0			
Surr: Dibromofluoromethane	1008	0	1000	0	101	70-130	0			
Surr: Toluene-d8	1006	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: 1510042
Project: TR 24-28-597 Pit Sludge Spill

QC BATCH REPORT

Batch ID: **76854** Instrument ID **VMS7** Method: **SW8260B**

MSD				Sample ID: 1510041-04B MSD			Units: µg/Kg		Analysis Date: 10/8/2015 11:58 AM		
Client ID:			Run ID: VMS6_151007A			SeqNo: 3497660		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	
Benzene	1104	30	1000	0	110	75-125	1060	4.11	30		
Ethylbenzene	1073	30	1000	0	107	75-125	1017	5.36	30		
m,p-Xylene	2229	60	2000	0	111	80-125	2106	5.65	30		
o-Xylene	1048	30	1000	0	105	75-125	998	4.89	30		
Toluene	1058	30	1000	0	106	70-125	1016	4	30		
Xylenes, Total	3277	90	3000	0	109	75-125	3104	5.41	30		
Surr: 1,2-Dichloroethane-d4	1081	0	1000	0	108	70-130	1075	0.557	30		
Surr: 4-Bromofluorobenzene	1042	0	1000	0	104	70-130	1028	1.4	30		
Surr: Dibromofluoromethane	1019	0	1000	0	102	70-130	1008	1.04	30		
Surr: Toluene-d8	1002	0	1000	0	100	70-130	1006	0.349	30		

The following samples were analyzed in this batch: 1510042-01A

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

Client: HRL Compliance Solutions, Inc
Work Order: 1510042
Project: TR 24-28-597 Pit Sludge Spill

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:

1510042-01C

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

Client: HRL Compliance Solutions, Inc
Work Order: 1510042
Project: TR 24-28-597 Pit Sludge Spill

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			
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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	
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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	
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The following samples were analyzed in this batch:

1510042-01B

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

Client: HRL Compliance Solutions, Inc
Work Order: 1510042
Project: TR 24-28-597 Pit Sludge Spill

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:

1510042-01B

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

Client: HRL Compliance Solutions, Inc
Work Order: 1510042
Project: TR 24-28-597 Pit Sludge Spill

QC BATCH REPORT

Batch ID: **R173090** Instrument ID **MOIST** Method: **E160.3M**

MBLK		Sample ID: WBLKS-R173090				Units: % of sample		Analysis Date: 10/5/2015 03:00 PM		
Client ID:		Run ID: MOIST_151005A				SeqNo: 3491966		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-R173090				Units: % of sample		Analysis Date: 10/5/2015 03:00 PM		
Client ID:		Run ID: MOIST_151005A				SeqNo: 3491963		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: 1510067-06B DUP				Units: % of sample		Analysis Date: 10/5/2015 03:00 PM		
Client ID:		Run ID: MOIST_151005A				SeqNo: 3491922		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 18.71 0.050 0 0 0 18.73 0.107 20

DUP		Sample ID: 1510231-01B DUP				Units: % of sample		Analysis Date: 10/5/2015 03:00 PM		
Client ID:		Run ID: MOIST_151005A				SeqNo: 3491941		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 10.62 0.050 0 0 0 10.47 1.42 20

The following samples were analyzed in this batch:

1510042-01B

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

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: 30SEP15
 ACTWGT: 80.00 LB
 CAD: 2284840/NET3870
 DIMS: 24x15x15 IN
 BILL SENDER

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

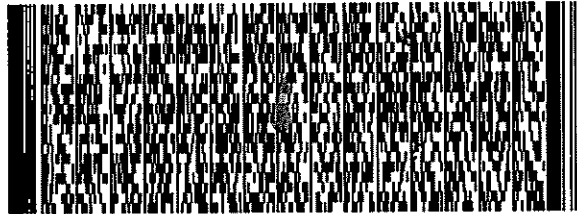
HOLLAND MI 49424

(616) 398-8070

REF: 093015-1

PO: PARACHUTE

DEPT:



FedEx
Express



REL#
3785348

1 of 2

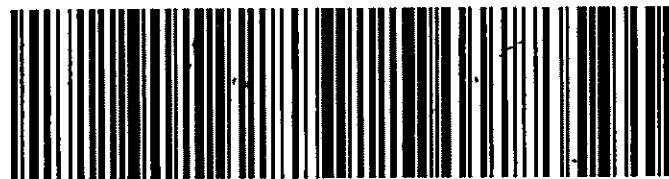
TRK# 7746 3709 7247

MASTER

XX HLMA

MI-US

49424
GRR



THU - 01 OCT 10:30A
PRIORITY OVERNIGHT

539,297,073100

After printing this label:

1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
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ALS Parachute Custody Seal

Time / Date 9-30-15

Name

Signature

Guide, available on fedex.com. FedEx is and file a timely claim. Limitations on the intrinsic value of the package, loss of contents, consequential, or special is stated in our Service Guide. Written

Sample Receipt Checklist

Client Name: HRL

Date/Time Received: 01-Oct-15 09:30

Work Order: 1510042

Received by: KRW

Checklist completed by Keith Wurenga
eSignature

01-Oct-15
Date

Reviewed by: Lee Arnold
eSignature

01-Oct-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: 10/1/2015 12:44:00 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:



14-Sep-2015

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

Re: **TR 24-28**

Work Order: **1509031**

Dear Mark,

ALS Environmental received 4 samples on 01-Sep-2015 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 30.

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 

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

Client: HRL Compliance Solutions, Inc
Project: TR 24-28
Work Order: 1509031

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>
1509031-01	Confirmation	Soil		8/28/2015 13:45	9/1/2015 10:00	<input type="checkbox"/>
1509031-02	BKGD 1	Soil		8/28/2015 13:47	9/1/2015 10:00	<input type="checkbox"/>
1509031-03	BKGD 2	Soil		8/28/2015 13:49	9/1/2015 10:00	<input type="checkbox"/>
1509031-04	BKGD 3	Soil		8/28/2015 13:51	9/1/2015 10:00	<input type="checkbox"/>

Client: HRL Compliance Solutions, Inc
Project: TR 24-28
Work Order: 1509031

Case Narrative

Samples for the above noted Work Order were received on 09/01/2015. 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: 14-Sep-15

Client: HRL Compliance Solutions, Inc

Project: TR 24-28

Work Order: 1509031

Sample ID: Confirmation

Lab ID: 1509031-01

Collection Date: 8/28/2015 01:45 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID			SW8015M		Analyst: IT	
DRO (C10-C28)	98		4.7	mg/Kg-dry	1	9/3/2015 06:57 PM
Surr: 4-Terphenyl-d14	68.9		39-133	%REC	1	9/3/2015 06:57 PM
GASOLINE RANGE ORGANICS BY GC-FID			SW8015D		Prep: SW5035 / 9/1/15	Analyst: IT
GRO (C6-C10)	ND		2.9	mg/Kg-dry	1	9/2/2015 03:59 AM
Surr: Toluene-d8	95.1		50-150	%REC	1	9/2/2015 03:59 AM
MERCURY BY CVAA			SW7471B		Prep: SW7471 / 9/3/15	Analyst: LR
Mercury	0.037		0.015	mg/Kg-dry	1	9/3/2015 03:54 PM
METALS ANALYSIS BY ICP			SW846 6010C		Prep: SW3050B / 9/1/15	Analyst: JEC
Arsenic	14		0.38	mg/Kg-dry	1	9/3/2015 04:47 PM
Barium	570		0.38	mg/Kg-dry	1	9/3/2015 04:47 PM
Cadmium	ND		0.31	mg/Kg-dry	1	9/3/2015 04:47 PM
Chromium	24		0.38	mg/Kg-dry	1	9/3/2015 04:47 PM
Copper	24		0.38	mg/Kg-dry	1	9/3/2015 04:47 PM
Lead	7.0		0.38	mg/Kg-dry	1	9/3/2015 04:47 PM
Nickel	41		0.38	mg/Kg-dry	1	9/3/2015 04:47 PM
Selenium	ND		0.77	mg/Kg-dry	2	9/4/2015 10:08 AM
Silver	ND		0.38	mg/Kg-dry	1	9/3/2015 04:47 PM
Zinc	41		0.77	mg/Kg-dry	1	9/3/2015 04:47 PM
SOLUBLE CATIONS FOR SAR			SW846 6010C		Prep: USDA Method 20B / 9/3/15	Analyst: JEC
Calcium	460		5.0	mg/L	10	9/3/2015 12:32 PM
Magnesium	98		2.0	mg/L	10	9/3/2015 12:32 PM
Sodium	1,800		2.0	mg/L	10	9/3/2015 12:32 PM
SODIUM ADSORPTION RATIO			USDA H60 METHO		Prep: USDA Method 20B / 9/3/15	Analyst: JEC
Sodium Adsorption Ratio	20		0.010	none	1	9/3/2015
SEMI-VOLATILE ORGANIC COMPOUNDS			SW846 8270D		Prep: SW3550 / 9/11/15	Analyst: RS
Acenaphthene	ND		7.6	µg/Kg-dry	1	9/12/2015 04:23 AM
Acenaphthylene	ND		7.6	µg/Kg-dry	1	9/12/2015 04:23 AM
Anthracene	ND		7.6	µg/Kg-dry	1	9/12/2015 04:23 AM
Benzo(a)anthracene	ND		7.6	µg/Kg-dry	1	9/12/2015 04:23 AM
Benzo(a)pyrene	ND		7.6	µg/Kg-dry	1	9/12/2015 04:23 AM
Benzo(b)fluoranthene	ND		7.6	µg/Kg-dry	1	9/12/2015 04:23 AM
Benzo(g,h,i)perylene	ND		7.6	µg/Kg-dry	1	9/12/2015 04:23 AM
Benzo(k)fluoranthene	ND		7.6	µg/Kg-dry	1	9/12/2015 04:23 AM
Chrysene	ND		7.6	µg/Kg-dry	1	9/12/2015 04:23 AM

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

ALS Group USA, Corp**Date:** 14-Sep-15**Client:** HRL Compliance Solutions, Inc**Project:** TR 24-28**Work Order:** 1509031**Sample ID:** BKGD 1**Lab ID:** 1509031-02**Collection Date:** 8/28/2015 01:47 PM**Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<hr/>						
METALS ANALYSIS BY ICP			SW846 6010C		Prep: SW3050B / 9/1/15	Analyst: JEC
Arsenic	9.1		0.42	mg/Kg-dry	1	9/3/2015 04:53 PM
MOISTURE			E160.3M			Analyst: TM
Moisture	11		0.050	% of sample	1	9/4/2015 10:33 AM

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

ALS Group USA, Corp

Date: 14-Sep-15

Client: HRL Compliance Solutions, Inc

Project: TR 24-28

Work Order: 1509031

Sample ID: BKGD 2

Lab ID: 1509031-03

Collection Date: 8/28/2015 01:49 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS ANALYSIS BY ICP						
Arsenic	9.1		SW846 6010C 0.43	mg/Kg-dry	Prep: SW3050B / 9/1/15 1	Analyst: JEC 9/3/2015 04:59 PM
MOISTURE						
Moisture	12		E160.3M 0.050	% of sample	1	Analyst: TM 9/4/2015 10:33 AM

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

ALS Group USA, Corp

Date: 14-Sep-15

Client: HRL Compliance Solutions, Inc
 Project: TR 24-28
 Sample ID: BKGD 3
 Collection Date: 8/28/2015 01:51 PM

Work Order: 1509031
 Lab ID: 1509031-04
 Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS ANALYSIS BY ICP			SW846 6010C		Prep: SW3050B / 9/1/15	Analyst: JEC
Arsenic	9.2		0.44	mg/Kg-dry	1	9/3/2015 05:05 PM
SOLUBLE CATIONS FOR SAR			SW846 6010C		Prep: USDA Method 20B / 9/3/15	Analyst: JEC
Calcium	110		5.0	mg/L	10	9/3/2015 12:38 PM
Magnesium	24		2.0	mg/L	10	9/3/2015 12:38 PM
Sodium	3.3		2.0	mg/L	10	9/3/2015 05:34 PM
SODIUM ADSORPTION RATIO			USDA H60 METHO		Prep: USDA Method 20B / 9/3/15	Analyst: JEC
Sodium Adsorption Ratio	0.074		0.010	none	1	9/3/2015
ELECTRICAL CONDUCTIVITY (SAR)			USDA H60 METHO		Prep: USDA Method 20B / 9/3/15	Analyst: JB
Electrical Conductivity @ Saturation	0.78		0.050	mmhos/cm @2	10	9/3/2015 01:00 PM
MOISTURE			E160.3M			Analyst: TM
Moisture	11		0.050	% of sample	1	9/4/2015 10:33 AM
PH			SW9045D		Prep: EXTRACT / 9/2/15	Analyst: KF
pH	6.5			s.u.	1	9/2/2015 06:09 PM

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

Client: HRL Compliance Solutions, Inc
Project: TR 24-28
WorkOrder: 1509031

**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
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: 14-Sep-15

Client: HRL Compliance Solutions, Inc
Work Order: 1509031
Project: TR 24-28

QC BATCH REPORT

Batch ID: **75599c** Instrument ID **GC8** Method: **SW8015M**

MBLK		Sample ID: DBLKS1-75599-75599c				Units: mg/Kg		Analysis Date: 9/3/2015 04:28 PM		
Client ID:		Run ID: GC8_150903A				SeqNo: 3445671		Prep Date: 9/3/2015		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	1.386	0	2	0	69.3	39-133		0		

LCS		Sample ID: DLCSS1-75599-75599c				Units: mg/Kg		Analysis Date: 9/3/2015 04:58 PM		
Client ID:		Run ID: GC8_150903A				SeqNo: 3445672		Prep Date: 9/3/2015		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

DRO (C10-C28)	178.9	5.0	200	0	89.5	61-109		0		
Surr: 4-Terphenyl-d14	1.345	0	2	0	67.2	39-133		0		

MS		Sample ID: 1509099-01B MS				Units: mg/Kg		Analysis Date: 9/3/2015 05:28 PM		
Client ID:		Run ID: GC8_150903A				SeqNo: 3445673		Prep Date: 9/3/2015		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

DRO (C10-C28)	168.5	4.1	162.2	42.72	77.5	48-110		0		
Surr: 4-Terphenyl-d14	1.159	0	1.622	0	71.5	39-133		0		

MSD		Sample ID: 1509099-01B MSD				Units: mg/Kg		Analysis Date: 9/3/2015 05:57 PM		
Client ID:		Run ID: GC8_150903A				SeqNo: 3445674		Prep Date: 9/3/2015		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

DRO (C10-C28)	169.7	4.1	162.9	42.72	78	48-110	168.5	0.751	30	
Surr: 4-Terphenyl-d14	1.101	0	1.629	0	67.6	39-133	1.159	5.18	30	

The following samples were analyzed in this batch: 1509031-01B

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

Client: HRL Compliance Solutions, Inc
 Work Order: 1509031
 Project: TR 24-28

QC BATCH REPORT

Batch ID: **75505** Instrument ID **GC9** Method: **SW8015D**

MBLK		Sample ID: MBLK-75505-75505				Units: µg/Kg		Analysis Date: 9/1/2015 09:29 PM		
Client ID:		Run ID: GC9_150901A				SeqNo: 3441680		Prep Date: 9/1/2015		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	4932	0	5000	0	98.6	50-150	0			

LCS		Sample ID: LCS-75505-75505				Units: µg/Kg		Analysis Date: 9/1/2015 09:04 PM		
Client ID:		Run ID: GC9_150901A				SeqNo: 3441679		Prep Date: 9/1/2015		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	519800	2,500	500000	0	104	70-130	0			
Surr: Toluene-d8	5153	0	5000	0	103	50-150	0			

MS		Sample ID: 1509004-14A MS				Units: µg/Kg		Analysis Date: 9/2/2015 01:55 AM		
Client ID:		Run ID: GC9_150901A				SeqNo: 3441687		Prep Date: 9/1/2015		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	1288000	2,500	500000	618600	134	70-130	0			S
Surr: Toluene-d8	5569	0	5000	0	111	50-150	0			

MSD		Sample ID: 1509004-14A MSD				Units: µg/Kg		Analysis Date: 9/2/2015 02:20 AM		
Client ID:		Run ID: GC9_150901A				SeqNo: 3441688		Prep Date: 9/1/2015		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	1256000	2,500	500000	618600	127	70-130	1288000	2.56	30	
Surr: Toluene-d8	5560	0	5000	0	111	50-150	5569	0.162	30	

The following samples were analyzed in this batch: 1509031-01A

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

Client: HRL Compliance Solutions, Inc
Work Order: 1509031
Project: TR 24-28

QC BATCH REPORT

Batch ID: **75544** Instrument ID **HG1** Method: **SW7471B**

MBLK		Sample ID: MBLK-75544-75544				Units: mg/Kg		Analysis Date: 9/3/2015 03:16 PM		
Client ID:		Run ID: HG1_150903A				SeqNo: 3444668		Prep Date: 9/3/2015		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-75544-75544				Units: mg/Kg		Analysis Date: 9/3/2015 03:19 PM		
Client ID:		Run ID: HG1_150903A				SeqNo: 3444669		Prep Date: 9/3/2015		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.1789 0.020 0.1665 0 107 80-120 0

MS		Sample ID: 1509014-04BMS				Units: mg/Kg		Analysis Date: 9/3/2015 03:23 PM		
Client ID:		Run ID: HG1_150903A				SeqNo: 3444671		Prep Date: 9/3/2015		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.1083 0.012 0.103 -0.0005705 106 75-125 0

MSD		Sample ID: 1509014-04BMSD				Units: mg/Kg		Analysis Date: 9/3/2015 03:25 PM		
Client ID:		Run ID: HG1_150903A				SeqNo: 3444672		Prep Date: 9/3/2015		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.1088 0.012 0.1019 -0.0005705 107 75-125 0.1083 0.486 35

The following samples were analyzed in this batch:

1509031-01B

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

Client: HRL Compliance Solutions, Inc
Work Order: 1509031
Project: TR 24-28

QC BATCH REPORT

Batch ID: **75506** Instrument ID **ICP2** Method: **SW846 6010C**

MBLK		Sample ID: MBLK-75506-75506				Units: mg/Kg		Analysis Date: 9/2/2015 09:30 AM		
Client ID:		Run ID: ICP2_150902A				SeqNo: 3442275		Prep Date: 9/1/2015		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	0.01157	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-75506-75506				Units: mg/Kg		Analysis Date: 9/2/2015 09:36 AM		
Client ID:		Run ID: ICP2_150902A				SeqNo: 3442276		Prep Date: 9/1/2015		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	4.723	0.25	5	0	94.5	80-120	0			
Barium	4.879	0.25	5	0	97.6	80-120	0			
Cadmium	4.449	0.50	5	0	89	80-120	0			
Chromium	5.197	0.25	5	0	104	80-120	0			
Copper	4.954	0.50	5	0	99.1	80-120	0			
Lead	4.943	0.25	5	0	98.9	80-120	0			
Nickel	5.117	0.25	5	0	102	80-120	0			
Selenium	4.972	0.50	5	0	99.4	80-120	0			
Silver	4.748	0.25	5	0	95	80-120	0			
Zinc	4.41	0.50	5	0	88.2	80-120	0			

MS		Sample ID: 1509010-02AMS				Units: mg/Kg		Analysis Date: 9/2/2015 10:04 AM		
Client ID:		Run ID: ICP2_150902A				SeqNo: 3442281		Prep Date: 9/1/2015		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	24.63	0.38	7.692	13.95	139	75-125	0			S
Barium	216.2	0.38	7.692	269.8	-696	75-125	0			SO
Cadmium	10.56	0.77	7.692	3.851	87.3	75-125	0			
Chromium	262.3	0.38	7.692	333.5	-926	75-125	0			SO
Copper	201.7	0.77	7.692	298.7	-1260	75-125	0			SO
Lead	530.4	0.38	7.692	393.9	1770	75-125	0			SO
Nickel	62.12	0.38	7.692	48.97	171	75-125	0			SO
Selenium	11.95	0.77	7.692	2.949	117	75-125	0			
Silver	7.84	0.38	7.692	0.2654	98.5	75-125	0			
Zinc	1749	0.77	7.692	1099	8440	75-125	0			SEO

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

Client: HRL Compliance Solutions, Inc
Work Order: 1509031
Project: TR 24-28

QC BATCH REPORT

Batch ID: **75506** Instrument ID **ICP2** Method: **SW846 6010C**

MSD		Sample ID: 1509010-02AMSD				Units: mg/Kg		Analysis Date: 9/2/2015 10:10 AM		
Client ID:		Run ID: ICP2_150902A				SeqNo: 3442282		Prep Date: 9/1/2015		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	21.47	0.39	7.704	13.95	97.7	75-125	24.63	13.7	20	
Barium	250.6	0.39	7.704	269.8	-249	75-125	216.2	14.7	20	SO
Cadmium	10.74	0.77	7.704	3.851	89.4	75-125	10.56	1.62	20	
Chromium	213.9	0.39	7.704	333.5	-1550	75-125	262.3	20.3	20	SRO
Copper	249.4	0.77	7.704	298.7	-640	75-125	201.7	21.1	20	SRO
Lead	476.5	0.39	7.704	393.9	1070	75-125	530.4	10.7	20	SO
Nickel	63.93	0.39	7.704	48.97	194	75-125	62.12	2.87	20	SO
Selenium	10.36	0.77	7.704	2.949	96.2	75-125	11.95	14.2	20	
Silver	7.631	0.39	7.704	0.2654	95.6	75-125	7.84	2.71	20	
Zinc	952	0.77	7.704	1099	-1910	75-125	1749	59	20	SREO

The following samples were analyzed in this batch:

1509031-01B
 1509031-04A

1509031-02A

1509031-03A

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

Client: HRL Compliance Solutions, Inc
Work Order: 1509031
Project: TR 24-28

QC BATCH REPORT

Batch ID: **75533** Instrument ID **ICP2** Method: **SW846 6010C**

DUP		Sample ID: 1509031-04BDUP				Units: mg/L		Analysis Date: 9/3/2015 12:43 PM		
Client ID: BKGD 3		Run ID: ICP2_150903A				SeqNo: 3444366		Prep Date: 9/3/2015		DF: 10
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	109.2	5.0	0	0	0	0-0	108.5	0.585		
Magnesium	24.61	2.0	0	0	0	0-0	24.34	1.11		

DUP		Sample ID: 1509031-04BDUP				Units: mg/L		Analysis Date: 9/3/2015 05:39 PM		
Client ID: BKGD 3		Run ID: ICP2_150903B				SeqNo: 3444960		Prep Date: 9/3/2015		DF: 10
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sodium	3.423	2.0	0	0	0	0-0	3.293	3.86		

DUP		Sample ID: 1509031-04BDUP				Units: none		Analysis Date: 9/3/2015		
Client ID: BKGD 3		Run ID: SAR_150903A				SeqNo: 3444983		Prep Date: 9/3/2015		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sodium Adsorption Ratio	0.07702	0.010	0	0	0		0.07438	3.5	50	

The following samples were analyzed in this batch:

1509031-01C 1509031-04B

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

Client: HRL Compliance Solutions, Inc
Work Order: 1509031
Project: TR 24-28

QC BATCH REPORT

Batch ID: **75593** Instrument ID **SVMS4** Method: **SW846 8270D**

MBLK		Sample ID: SBLKS1-75593-75593				Units: µg/Kg		Analysis Date: 9/3/2015 05:29 PM		
Client ID:		Run ID: SVMS4_150903A				SeqNo: 3445761		Prep Date: 9/3/2015		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>	1318	0	1667	0	79.1	12-100	0			
<i>Surr: 4-Terphenyl-d14</i>	1538	0	1667	0	92.3	25-137	0			
<i>Surr: Nitrobenzene-d5</i>	1354	0	1667	0	81.2	37-107	0			

LCS		Sample ID: SLCSS1-75593-75593				Units: µg/Kg		Analysis Date: 9/3/2015 05:55 PM		
Client ID:		Run ID: SVMS4_150903A				SeqNo: 3445762		Prep Date: 9/3/2015		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	594.3	6.7	666.7	0	89.1	45-110	0			
Acenaphthylene	594	6.7	666.7	0	89.1	45-105	0			
Anthracene	628.7	6.7	666.7	0	94.3	55-105	0			
Benzo(a)anthracene	677	6.7	666.7	0	102	50-110	0			
Benzo(a)pyrene	681.7	6.7	666.7	0	102	50-110	0			
Benzo(b)fluoranthene	677.3	6.7	666.7	0	102	45-115	0			
Benzo(g,h,i)perylene	724.3	6.7	666.7	0	109	40-125	0			
Benzo(k)fluoranthene	703.3	6.7	666.7	0	105	45-115	0			
Chrysene	693.7	6.7	666.7	0	104	55-110	0			
Dibenzo(a,h)anthracene	697.3	6.7	666.7	0	105	40-125	0			
Fluoranthene	643	6.7	666.7	0	96.4	55-115	0			
Fluorene	589	6.7	666.7	0	88.3	50-110	0			
Indeno(1,2,3-cd)pyrene	673.7	6.7	666.7	0	101	40-120	0			
Naphthalene	569.7	6.7	666.7	0	85.4	40-105	0			
Pyrene	740.3	6.7	666.7	0	111	45-125	0			
<i>Surr: 2-Fluorobiphenyl</i>	1453	0	1667	0	87.2	12-100	0			
<i>Surr: 4-Terphenyl-d14</i>	1632	0	1667	0	97.9	25-137	0			
<i>Surr: Nitrobenzene-d5</i>	1442	0	1667	0	86.5	37-107	0			

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

Client: HRL Compliance Solutions, Inc
Work Order: 1509031
Project: TR 24-28

QC BATCH REPORT

Batch ID: **75593** Instrument ID **SVMS4** Method: **SW846 8270D**

MS				Sample ID: 1509062-02B MS			Units: µg/Kg		Analysis Date: 9/3/2015 06:20 PM	
Client ID:				Run ID: SVMS4_150903A			SeqNo: 3445763		Prep Date: 9/3/2015	
									DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	540.2	6.6	664	0	81.3	45-110	0			
Acenaphthylene	527.2	6.6	664	0	79.4	45-105	0			
Anthracene	580	6.6	664	0	87.3	55-105	0			
Benzo(a)anthracene	589.3	6.6	664	0	88.7	50-110	0			
Benzo(a)pyrene	580.3	6.6	664	0	87.4	50-110	0			
Benzo(b)fluoranthene	581.7	6.6	664	0	87.6	45-115	0			
Benzo(g,h,i)perylene	532.2	6.6	664	0	80.1	40-125	0			
Benzo(k)fluoranthene	586	6.6	664	0	88.2	45-115	0			
Chrysene	598.6	6.6	664	0	90.1	55-110	0			
Dibenzo(a,h)anthracene	519.9	6.6	664	0	78.3	40-125	0			
Fluoranthene	627.8	6.6	664	6.157	93.6	55-115	0			
Fluorene	562.4	6.6	664	0	84.7	50-110	0			
Indeno(1,2,3-cd)pyrene	529.2	6.6	664	0	79.7	40-120	0			
Naphthalene	516.6	6.6	664	0	77.8	40-105	0			
Pyrene	540.8	6.6	664	6.482	80.5	45-125	0			
Surr: 2-Fluorobiphenyl	1189	0	1660	0	71.6	12-100	0			
Surr: 4-Terphenyl-d14	1229	0	1660	0	74.1	25-137	0			
Surr: Nitrobenzene-d5	1260	0	1660	0	75.9	37-107	0			

MSD				Sample ID: 1509062-02B MSD			Units: µg/Kg		Analysis Date: 9/3/2015 06:46 PM	
Client ID:				Run ID: SVMS4_150903A			SeqNo: 3445764		Prep Date: 9/3/2015	
									DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	540.4	6.6	658.6	0	82	45-110	540.2	0.0368	30	
Acenaphthylene	546.3	6.6	658.6	0	82.9	45-105	527.2	3.55	30	
Anthracene	607.2	6.6	658.6	0	92.2	55-105	580	4.58	30	
Benzo(a)anthracene	614.8	6.6	658.6	0	93.3	50-110	589.3	4.23	30	
Benzo(a)pyrene	634.5	6.6	658.6	0	96.3	50-110	580.3	8.92	30	
Benzo(b)fluoranthene	643.7	6.6	658.6	0	97.7	45-115	581.7	10.1	30	
Benzo(g,h,i)perylene	575.6	6.6	658.6	0	87.4	40-125	532.2	7.84	30	
Benzo(k)fluoranthene	637.5	6.6	658.6	0	96.8	45-115	586	8.42	30	
Chrysene	628.9	6.6	658.6	0	95.5	55-110	598.6	4.94	30	
Dibenzo(a,h)anthracene	560.8	6.6	658.6	0	85.1	40-125	519.9	7.56	30	
Fluoranthene	639.1	6.6	658.6	6.157	96.1	55-115	627.8	1.79	30	
Fluorene	568.7	6.6	658.6	0	86.3	50-110	562.4	1.11	30	
Indeno(1,2,3-cd)pyrene	592.7	6.6	658.6	0	90	40-120	529.2	11.3	30	
Naphthalene	499.9	6.6	658.6	0	75.9	40-105	516.6	3.29	30	
Pyrene	615.8	6.6	658.6	6.482	92.5	45-125	540.8	13	30	
Surr: 2-Fluorobiphenyl	1247	0	1646	0	75.7	12-100	1189	4.8	40	
Surr: 4-Terphenyl-d14	1334	0	1646	0	81	25-137	1229	8.18	40	
Surr: Nitrobenzene-d5	1252	0	1646	0	76	37-107	1260	0.688	40	

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

Client: HRL Compliance Solutions, Inc
Work Order: 1509031
Project: TR 24-28

QC BATCH REPORT

Batch ID: **75593** Instrument ID **SVMS4** Method: **SW846 8270D**

The following samples were analyzed in this batch:

1509031-01B

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

Client: HRL Compliance Solutions, Inc
Work Order: 1509031
Project: TR 24-28

QC BATCH REPORT

Batch ID: **75963** Instrument ID **SVMS5** Method: **SW846 8270D**

MBLK				Sample ID: SBLKS1-75963-75963			Units: µg/Kg		Analysis Date: 9/11/2015 07:41 PM	
Client ID:				Run ID: SVMS5_150911A			SeqNo: 3456088		Prep Date: 9/11/2015	
									DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	ND	6.7								
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>	964	0	1667	0	57.8	12-100	0			
<i>Surr: 4-Terphenyl-d14</i>	1415	0	1667	0	84.9	25-137	0			
<i>Surr: Nitrobenzene-d5</i>	927.3	0	1667	0	55.6	37-107	0			

LCS				Sample ID: SLCSS1-75963-75963			Units: µg/Kg		Analysis Date: 9/11/2015 08:03 PM	
Client ID:				Run ID: SVMS5_150911A			SeqNo: 3456089		Prep Date: 9/11/2015	
									DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	505.7	6.7	666.7	0	75.8	45-110	0			
Acenaphthylene	552	6.7	666.7	0	82.8	45-105	0			
Anthracene	601.7	6.7	666.7	0	90.2	55-105	0			
Benzo(a)anthracene	589.3	6.7	666.7	0	88.4	50-110	0			
Benzo(a)pyrene	613.7	6.7	666.7	0	92	50-110	0			
Benzo(b)fluoranthene	615.3	6.7	666.7	0	92.3	45-115	0			
Benzo(g,h,i)perylene	499.7	6.7	666.7	0	74.9	40-125	0			
Benzo(k)fluoranthene	592	6.7	666.7	0	88.8	45-115	0			
Chrysene	585.7	6.7	666.7	0	87.8	55-110	0			
Dibenzo(a,h)anthracene	559	6.7	666.7	0	83.8	40-125	0			
Fluoranthene	591	6.7	666.7	0	88.6	55-115	0			
Fluorene	533.7	6.7	666.7	0	80	50-110	0			
Indeno(1,2,3-cd)pyrene	536	6.7	666.7	0	80.4	40-120	0			
Naphthalene	491.3	6.7	666.7	0	73.7	40-105	0			
Pyrene	669.7	6.7	666.7	0	100	45-125	0			
<i>Surr: 2-Fluorobiphenyl</i>	1218	0	1667	0	73.1	12-100	0			
<i>Surr: 4-Terphenyl-d14</i>	1492	0	1667	0	89.5	25-137	0			
<i>Surr: Nitrobenzene-d5</i>	1210	0	1667	0	72.6	37-107	0			

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

Client: HRL Compliance Solutions, Inc
Work Order: 1509031
Project: TR 24-28

QC BATCH REPORT

Batch ID: **75963** Instrument ID **SVMS5** Method: **SW846 8270D**

The following samples were analyzed in this batch:

1509031-01B

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

Client: HRL Compliance Solutions, Inc
Work Order: 1509031
Project: TR 24-28

QC BATCH REPORT

Batch ID: **75495** Instrument ID **VMS9** Method: **SW8260B**

MBLK				Sample ID: MBLK-75495-75495				Units: µg/Kg			Analysis Date: 9/1/2015 04:42 PM		
Client ID:			Run ID: VMS9_150901A				SeqNo: 3441867			Prep Date: 9/1/2015		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	987	0	1000	0	98.7	70-130	0						
Surr: 4-Bromofluorobenzene	950	0	1000	0	95	70-130	0						
Surr: Dibromofluoromethane	961	0	1000	0	96.1	70-130	0						
Surr: Toluene-d8	988	0	1000	0	98.8	70-130	0						

LCS				Sample ID: LCS-75495-75495			Units: µg/Kg		Analysis Date: 9/1/2015 02:59 PM		
Client ID:			Run ID: VMS9_150901A			SeqNo: 3441865		Prep Date: 9/1/2015		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	1024	30	1000	0	102	75-125	0				
Ethylbenzene	990.5	30	1000	0	99	75-125	0				
m,p-Xylene	1996	60	2000	0	99.8	80-125	0				
o-Xylene	962.5	30	1000	0	96.2	75-125	0				
Toluene	990	30	1000	0	99	70-125	0				
Xylenes, Total	2958	90	3000	0	98.6	75-125	0				
Surr: 1,2-Dichloroethane-d4	977	0	1000	0	97.7	70-130	0				
Surr: 4-Bromofluorobenzene	1046	0	1000	0	105	70-130	0				
Surr: Dibromofluoromethane	964	0	1000	0	96.4	70-130	0				
Surr: Toluene-d8	1006	0	1000	0	101	70-130	0				

MS				Sample ID: 1509031-01A MS				Units: µg/Kg		Analysis Date: 9/2/2015 06:32 PM	
Client ID: Confirmation			Run ID: VMS5_150902A			SeqNo: 3443819		Prep Date: 9/1/2015		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	1171	30	1000	0	117	75-125	0				
Ethylbenzene	1112	30	1000	17.5	109	75-125	0				
m,p-Xylene	2939	60	2000	566	119	80-125	0				
o-Xylene	1158	30	1000	70.5	109	75-125	0				
Toluene	1254	30	1000	122	113	70-125	0				
Xylenes, Total	4096	90	3000	640	115	75-125	0				
Surr: 1,2-Dichloroethane-d4	976.5	0	1000	0	97.6	70-130	0				
Surr: 4-Bromofluorobenzene	1042	0	1000	0	104	70-130	0				
Surr: Dibromofluoromethane	1004	0	1000	0	100	70-130	0				
Surr: Toluene-d8	939	0	1000	0	93.9	70-130	0				

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

Client: HRL Compliance Solutions, Inc
Work Order: 1509031
Project: TR 24-28

QC BATCH REPORT

Batch ID: **75495** Instrument ID **VMS9** Method: **SW8260B**

MSD				Sample ID: 1509031-01A MSD			Units: µg/Kg		Analysis Date: 9/2/2015 06:58 PM		
Client ID: Confirmation			Run ID: VMS5_150902A			SeqNo: 3443820		Prep Date: 9/1/2015		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	1151	30	1000	0	115	75-125	1171	1.72	30		
Ethylbenzene	1099	30	1000	17.5	108	75-125	1112	1.13	30		
m,p-Xylene	2924	60	2000	566	118	80-125	2939	0.529	30		
o-Xylene	1160	30	1000	70.5	109	75-125	1158	0.216	30		
Toluene	1228	30	1000	122	111	70-125	1254	2.1	30		
Xylenes, Total	4084	90	3000	640	115	75-125	4096	0.318	30		
Surr: 1,2-Dichloroethane-d4	953	0	1000	0	95.3	70-130	976.5	2.44	30		
Surr: 4-Bromofluorobenzene	1041	0	1000	0	104	70-130	1042	0.048	30		
Surr: Dibromofluoromethane	1017	0	1000	0	102	70-130	1004	1.24	30		
Surr: Toluene-d8	940	0	1000	0	94	70-130	939	0.106	30		

The following samples were analyzed in this batch: 1509031-01A

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

Client: HRL Compliance Solutions, Inc
Work Order: 1509031
Project: TR 24-28

QC BATCH REPORT

Batch ID: **75533** Instrument ID **WETCHEM** Method: **USDA H60 Metho**

DUP		Sample ID: 1509031-04B DUP				Units: mmhos/cm @25°		Analysis Date: 9/3/2015 01:00 PM		
Client ID: BKGD 3		Run ID: WETCHEM_150903B				SeqNo: 3444281		Prep Date: 9/3/2015		DF: 10
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Electrical Conductivity @ Saturation	0.771	0.050	0	0	0		0.775	0.517	50	

The following samples were analyzed in this batch:

1509031-01C	1509031-04B
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Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions, Inc
Work Order: 1509031
Project: TR 24-28

QC BATCH REPORT

Batch ID: **75557** Instrument ID **WETCHEM** Method: **SW9045D**

LCS		Sample ID: LCS-75557-75557					Units: s.u.		Analysis Date: 9/2/2015 06:09 PM		
Client ID:		Run ID: WETCHEM_150902X			SeqNo: 3443241		Prep Date: 9/2/2015		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	

pH	4.01	0	4	0	100	90-110	0			
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DUP		Sample ID: 1509013-01B DUP				Units: s.u.		Analysis Date: 9/2/2015 06:09 PM		
Client ID:		Run ID: WETCHEM_150902X				SeqNo: 3443244		Prep Date: 9/2/2015		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

pH	8.55	0	0	0	0	0-0	8.56	0.117	20	
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The following samples were analyzed in this batch:

1509031-01B	1509031-04A
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Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions, Inc
Work Order: 1509031
Project: TR 24-28

QC BATCH REPORT

Batch ID: **75684** Instrument ID **WETCHEM** Method: **SW7196A**

MBLK		Sample ID: MBLK-75684-75684				Units: mg/Kg		Analysis Date: 9/4/2015 01:00 PM		
Client ID:		Run ID: WETCHEM_150904I		SeqNo: 3446393		Prep Date: 9/3/2015		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-75684-75684				Units: mg/Kg		Analysis Date: 9/4/2015 01:00 PM		
Client ID:		Run ID: WETCHEM_150904I		SeqNo: 3446392		Prep Date: 9/3/2015		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 4.94 1.0 5 0 98.8 80-120 0

MS		Sample ID: 1509052-01A MS				Units: mg/Kg		Analysis Date: 9/4/2015 01:00 PM		
Client ID:		Run ID: WETCHEM_150904I		SeqNo: 3446382		Prep Date: 9/3/2015		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 1.602 0.93 4.63 0.7925 17.5 75-125 0 S

MS		Sample ID: 1509052-01A MSI				Units: mg/Kg		Analysis Date: 9/4/2015 01:00 PM		
Client ID:		Run ID: WETCHEM_150904I		SeqNo: 3446384		Prep Date: 9/3/2015		DF: 100		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 1839 95 1808 0.7925 102 75-125 0

MSD		Sample ID: 1509052-01A MSD				Units: mg/Kg		Analysis Date: 9/4/2015 01:00 PM		
Client ID:		Run ID: WETCHEM_150904I		SeqNo: 3446383		Prep Date: 9/3/2015		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 1.519 0.94 4.717 0.7925 15.4 75-125 1.602 5.32 20 S

The following samples were analyzed in this batch:

1509031-01B

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

Client: HRL Compliance Solutions, Inc
Work Order: 1509031
Project: TR 24-28

QC BATCH REPORT

Batch ID: **R171146** Instrument ID **MOIST** Method: **E160.3M**

MBLK		Sample ID: MB-R171146-R171146				Units: % of sample		Analysis Date: 9/4/2015 10:33 AM		
Client ID:		Run ID: MOIST_150904A				SeqNo: 3448236		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-R171146-R171146				Units: % of sample		Analysis Date: 9/4/2015 10:33 AM		
Client ID:		Run ID: MOIST_150904A				SeqNo: 3448237		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: 1509055-01C DUP				Units: % of sample		Analysis Date: 9/4/2015 10:33 AM		
Client ID:		Run ID: MOIST_150904A				SeqNo: 3448217		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 50.07 0.050 0 0 0 50 0.14 20

DUP		Sample ID: 1509108-01A DUP				Units: % of sample		Analysis Date: 9/4/2015 10:33 AM		
Client ID:		Run ID: MOIST_150904A				SeqNo: 3448219		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 6.74 0.050 0 0 0 6.07 10.5 20

The following samples were analyzed in this batch:

1509031-02A	1509031-03A	1509031-04A
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Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions, Inc
Work Order: 1509031
Project: TR 24-28

QC BATCH REPORT

Batch ID: **R171147** Instrument ID **MOIST** Method: **E160.3M**

MBLK		Sample ID: WBLKS-R171147				Units: % of sample		Analysis Date: 9/4/2015 01:34 PM		
Client ID:		Run ID: MOIST_150904B				SeqNo: 3447598		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-R171147				Units: % of sample		Analysis Date: 9/4/2015 01:34 PM		
Client ID:		Run ID: MOIST_150904B				SeqNo: 3447593		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: 15081474-01A DUP				Units: % of sample		Analysis Date: 9/4/2015 01:34 PM		
Client ID:		Run ID: MOIST_150904B				SeqNo: 3447568		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	10.43	0.050	0	0	0		10.49	0.574	20	

DUP		Sample ID: 1509168-01B DUP				Units: % of sample		Analysis Date: 9/4/2015 01:34 PM		
Client ID:		Run ID: MOIST_150904B				SeqNo: 3447579		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	19.1	0.050	0	0	0		18.76	1.8	20	

The following samples were analyzed in this batch:

1509031-01B

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



Chain-of-Custody

1509031

Form 2020

PAGE


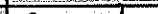




1 of 1

DISPOSAL

5. ☐ **Return to Client**

*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.

	SIGNATURE	PRINTED NAME	DATE	TIME
RELINQUISHED BY		Casey Richardson	8.31.15	1210
RECEIVED BY			8-31-15	1210
RELINQUISHED BY			8-31-15	1200
RECEIVED BY		KEITH WIERENIA	9/1/15	1200
RELINQUISHED BY				
RECEIVED BY				

Sample Receipt Checklist

Client Name: **HRL**

Date/Time Received: **01-Sep-15 10:00**

Work Order: **1509031**

Received by: **KRW**

Checklist completed by Keith Wurenga
eSignature

01-Sep-15
Date

Reviewed by: Lee Arnold
eSignature

01-Sep-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): 4.6/4.6 C SR2

Cooler(s)/Kit(s):

Date/Time sample(s) sent to storage: 9/1/2015 1:19:47 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: