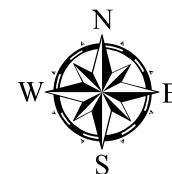


Legend

- Water Well
- Existing Road
- Existing Pad

Location Map
October 29, 2014



0 1,500 3,000 6,000
Feet



Analytical Results
PA 43-34

Contaminant of Concern ↓	COGCC standards	Location →	Landfarm Batch 1	Landfarm Batch 2	Landfarm Batch 2	Landfarm Batch 3	Landfarm Batch 4	Landfarm Batch 5	Landfarm Batch 6
		Date Sampled →	5/1/2014	5/20/2014	6/16/2014	7/1/2014	7/28/2014	8/7/2014	8/27/2014
Organic Compounds in Soil									
TPH	500	mg/kg	47	620.00	25	143	51	17	37
DRO		mg/kg	47	60	25	33	51	17	37
GRO		mg/kg	ND	560	ND	110	ND	ND	ND
Benzene	0.17	mg/kg	ND	ND		ND	ND	ND	ND
Toluene	85	mg/kg	ND	ND		ND	ND	ND	ND
Ethylbenzene	100	mg/kg	ND	ND		0.096	ND	ND	ND
Xylenes (Total)	175	mg/kg	ND	ND		3.70	ND	ND	ND
Acenaphthene	1,000	mg/kg	ND	ND		ND	ND	ND	ND
Anthracene	1,000	mg/kg	ND	ND		ND	ND	ND	ND
Benzo(A)anthracene	0.22	mg/kg	ND	0.015		ND	ND	ND	ND
Benzo(B)fluoranthene	0.22	mg/kg	ND	ND		ND	ND	ND	ND
Benzo(K)fluoranthene	2.2	mg/kg	ND	0.011		ND	ND	ND	ND
Benzo(A)pyrene	0.022	mg/kg	ND	ND		ND	ND	ND	ND
Chrysene	22	mg/kg	ND	0.083		ND	ND	ND	ND
Dibenzo(A,H)anthracene	0.022	mg/kg	ND	ND		ND	ND	ND	ND
Fluoranthene	1,000	mg/kg	ND	0.021		ND	ND	ND	ND
Fluorene	1,000	mg/kg	ND	ND		ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	0.22	mg/kg	ND	ND		ND	ND	ND	ND
Naphthalene	23	mg/kg	ND	0.025		ND	ND	ND	ND
Pyrene	1,000	mg/kg	ND	ND		ND	ND	ND	ND



08-May-2014

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

Re: **WPX PA 43-34 Condensate Spill 5.1.14**

Work Order: **1405097**

Dear Mark,

ALS Environmental received 1 sample on 02-May-2014 10:00 AM for the analyses presented in the following report.

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

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

The total number of pages in this report is 15.

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

Sincerely,

A handwritten signature in cursive script that reads "Ann Preston".

Electronically approved by: Ann Preston

Ann Preston
Project Manager



Certificate No: MN 532786

Report of Laboratory Analysis

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

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

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

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

Client: HRL Compliance Solutions, Inc
Project: WPX PA 43-34 Condensate Spill 5.1.14
Work Order: 1405097

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>
1405097-01	Batch 1	Soil		5/1/2014 12:40	5/2/2014 10:00	<input type="checkbox"/>

Client: HRL Compliance Solutions, Inc
Project: WPX PA 43-34 Condensate Spill 5.1.14
WorkOrder: 1405097

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

<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

ALS Group USA, Corp

Date: 08-May-14

Client: HRL Compliance Solutions, Inc
Project: WPX PA 43-34 Condensate Spill 5.1.14
Sample ID: Batch 1
Collection Date: 5/1/2014 12:40 PM

Work Order: 1405097
Lab ID: 1405097-01
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
			SW8015M		Prep: SW3541 / 5/5/14	Analyst: IT
DRO (C10-C28)	47		4.9	mg/Kg-dry	1	5/5/2014 10:38 PM
Surr: 4-Terphenyl-d14	83.0		39-133	%REC	1	5/5/2014 10:38 PM
GASOLINE RANGE ORGANICS BY GC-FID						
			SW8015		Prep: SW5035 / 5/2/14	Analyst: IT
GRO (C6-C10)	ND		2.9	mg/Kg-dry	1	5/2/2014 05:23 PM
Surr: Toluene-d8	103		50-150	%REC	1	5/2/2014 05:23 PM
SEMI-VOLATILE ORGANIC COMPOUNDS						
			SW8270		Prep: SW3541 / 5/5/14	Analyst: JG
Acenaphthene	ND		7.8	µg/Kg-dry	1	5/6/2014 05:39 PM
Acenaphthylene	ND		7.8	µg/Kg-dry	1	5/6/2014 05:39 PM
Anthracene	ND		7.8	µg/Kg-dry	1	5/6/2014 05:39 PM
Benzo(a)anthracene	ND		7.8	µg/Kg-dry	1	5/6/2014 05:39 PM
Benzo(a)pyrene	ND		7.8	µg/Kg-dry	1	5/6/2014 05:39 PM
Benzo(b)fluoranthene	ND		7.8	µg/Kg-dry	1	5/6/2014 05:39 PM
Benzo(g,h,i)perylene	ND		7.8	µg/Kg-dry	1	5/6/2014 05:39 PM
Benzo(k)fluoranthene	ND		7.8	µg/Kg-dry	1	5/6/2014 05:39 PM
Chrysene	ND		7.8	µg/Kg-dry	1	5/6/2014 05:39 PM
Dibenzo(a,h)anthracene	ND		7.8	µg/Kg-dry	1	5/6/2014 05:39 PM
Fluoranthene	ND		7.8	µg/Kg-dry	1	5/6/2014 05:39 PM
Fluorene	ND		7.8	µg/Kg-dry	1	5/6/2014 05:39 PM
Indeno(1,2,3-cd)pyrene	ND		7.8	µg/Kg-dry	1	5/6/2014 05:39 PM
Naphthalene	ND		7.8	µg/Kg-dry	1	5/6/2014 05:39 PM
Pyrene	ND		7.8	µg/Kg-dry	1	5/6/2014 05:39 PM
Surr: 2-Fluorobiphenyl	74.7		12-100	%REC	1	5/6/2014 05:39 PM
Surr: 4-Terphenyl-d14	132		25-137	%REC	1	5/6/2014 05:39 PM
Surr: Nitrobenzene-d5	61.7		37-107	%REC	1	5/6/2014 05:39 PM
VOLATILE ORGANIC COMPOUNDS						
			SW8260B		Prep: SW5035 / 5/2/14	Analyst: AK
Benzene	ND		35	µg/Kg-dry	1	5/6/2014 02:40 AM
Ethylbenzene	ND		35	µg/Kg-dry	1	5/6/2014 02:40 AM
m,p-Xylene	ND		70	µg/Kg-dry	1	5/6/2014 02:40 AM
o-Xylene	ND		35	µg/Kg-dry	1	5/6/2014 02:40 AM
Toluene	ND		35	µg/Kg-dry	1	5/6/2014 02:40 AM
Xylenes, Total	ND		110	µg/Kg-dry	1	5/6/2014 02:40 AM
Surr: 1,2-Dichloroethane-d4	99.8		70-130	%REC	1	5/6/2014 02:40 AM
Surr: 4-Bromofluorobenzene	101		70-130	%REC	1	5/6/2014 02:40 AM
Surr: Dibromofluoromethane	96.6		70-130	%REC	1	5/6/2014 02:40 AM
Surr: Toluene-d8	102		70-130	%REC	1	5/6/2014 02:40 AM
MOISTURE						
			A2540 G			Analyst: AT
Moisture	15		0.050	% of sample	1	5/2/2014 01:07 PM

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

Client: HRL Compliance Solutions, Inc
Work Order: 1405097
Project: WPX PA 43-34 Condensate Spill 5.1.14

QC BATCH REPORT

Batch ID: **58248** Instrument ID **GC8** Method: **SW8015M**

MBLK		Sample ID: DBLKS1-58248-58248				Units: mg/Kg		Analysis Date: 5/5/2014 08:08 PM		
Client ID:		Run ID: GC8_140505A				SeqNo: 2746282		Prep Date: 5/5/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	ND	4.2								
Surr: 4-Terphenyl-d14	1.455	0	1.667	0	87.3	39-133	0			

LCS		Sample ID: DLCSS1-58248-58248				Units: mg/Kg		Analysis Date: 5/5/2014 08:38 PM		
Client ID:		Run ID: GC8_140505A				SeqNo: 2746283		Prep Date: 5/5/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	139.3	4.2	166.7	0	83.6	61-109	0			
Surr: 4-Terphenyl-d14	1.317	0	1.667	0	79	39-133	0			

MS		Sample ID: 1405099-01B MS				Units: mg/Kg		Analysis Date: 5/5/2014 09:08 PM		
Client ID:		Run ID: GC8_140505A				SeqNo: 2746284		Prep Date: 5/5/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	1248	7.9	630.6	572.7	107	48-110	0			
Surr: 4-Terphenyl-d14	2.848	0	3.153	0	90.3	39-133	0			

MSD		Sample ID: 1405099-01B MSD				Units: mg/Kg		Analysis Date: 5/5/2014 09:38 PM		
Client ID:		Run ID: GC8_140505A				SeqNo: 2746285		Prep Date: 5/5/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	1190	8.3	662	572.7	93.2	48-110	1248	4.78	30	
Surr: 4-Terphenyl-d14	2.917	0	3.31	0	88.1	39-133	2.848	2.41	30	

The following samples were analyzed in this batch: 1405097-01B

Client: HRL Compliance Solutions, Inc
Work Order: 1405097
Project: WPX PA 43-34 Condensate Spill 5.1.14

QC BATCH REPORT

Batch ID: **58216** Instrument ID **GC9** Method: **SW8015**

MBLK		Sample ID: MBLK-58216-58216				Units: µg/Kg		Analysis Date: 5/2/2014 04:07 PM		
Client ID:		Run ID: GC9_140502A				SeqNo: 2744679		Prep Date: 5/2/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	ND	2,500								
<i>Surr: Toluene-d8</i>	4808	0	5000	0	96.2	50-150	0			

LCS		Sample ID: LCS-58216-58216				Units: µg/Kg		Analysis Date: 5/2/2014 02:50 PM		
Client ID:		Run ID: GC9_140502A				SeqNo: 2744677		Prep Date: 5/2/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	462100	2,500	500000	0	92.4	70-130	0			
<i>Surr: Toluene-d8</i>	5470	0	5000	0	109	50-150	0			

MS		Sample ID: 1405098-01A MS				Units: µg/Kg		Analysis Date: 5/2/2014 10:10 PM		
Client ID:		Run ID: GC9_140502A				SeqNo: 2744692		Prep Date: 5/2/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	652300	2,500	500000	39220	123	70-130	0			
<i>Surr: Toluene-d8</i>	5010	0	5000	0	100	50-150	0			

MSD		Sample ID: 1405098-01A MSD				Units: µg/Kg		Analysis Date: 5/2/2014 10:35 PM		
Client ID:		Run ID: GC9_140502A				SeqNo: 2744693		Prep Date: 5/2/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	644200	2,500	500000	39220	121	70-130	652300	1.26	30	
<i>Surr: Toluene-d8</i>	5576	0	5000	0	112	50-150	5010	10.7	30	

The following samples were analyzed in this batch:

1405097-01A

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

Client: HRL Compliance Solutions, Inc
Work Order: 1405097
Project: WPX PA 43-34 Condensate Spill 5.1.14

QC BATCH REPORT

Batch ID: **58247** Instrument ID **SVMS8** Method: **SW8270**

MBLK		Sample ID: SBLKS1-58247-58247				Units: µg/Kg		Analysis Date: 5/6/2014 03:36 PM		
Client ID:		Run ID: SVMS8_140506A				SeqNo: 2749752		Prep Date: 5/5/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	ND	6.7								
Acenaphthylene	ND	6.7								
Anthracene	ND	6.7								
Benzo(a)anthracene	ND	6.7								
Benzo(a)pyrene	ND	6.7								
Benzo(b)fluoranthene	ND	6.7								
Benzo(g,h,i)perylene	ND	6.7								
Benzo(k)fluoranthene	ND	6.7								
Chrysene	ND	6.7								
Dibenzo(a,h)anthracene	ND	6.7								
Fluoranthene	ND	6.7								
Fluorene	ND	6.7								
Indeno(1,2,3-cd)pyrene	ND	6.7								
Naphthalene	ND	6.7								
Pyrene	ND	6.7								
<i>Surr: 2-Fluorobiphenyl</i>	1323	0	1667	0	79.4	12-100	0			
<i>Surr: 4-Terphenyl-d14</i>	1922	0	1667	0	115	25-137	0			
<i>Surr: Nitrobenzene-d5</i>	1124	0	1667	0	67.5	37-107	0			

LCS		Sample ID: SLCSS1-58247-58247				Units: µg/Kg		Analysis Date: 5/6/2014 03:57 PM		
Client ID:		Run ID: SVMS8_140506A				SeqNo: 2749753		Prep Date: 5/5/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	484.3	6.7	666.7	0	72.6	45-110	0			
Acenaphthylene	507	6.7	666.7	0	76	45-105	0			
Anthracene	532	6.7	666.7	0	79.8	55-105	0			
Benzo(a)anthracene	598	6.7	666.7	0	89.7	50-110	0			
Benzo(a)pyrene	591	6.7	666.7	0	88.6	50-110	0			
Benzo(b)fluoranthene	610.3	6.7	666.7	0	91.5	45-115	0			
Benzo(g,h,i)perylene	515.3	6.7	666.7	0	77.3	40-125	0			
Benzo(k)fluoranthene	600.7	6.7	666.7	0	90.1	45-115	0			
Chrysene	590.7	6.7	666.7	0	88.6	55-110	0			
Dibenzo(a,h)anthracene	525.3	6.7	666.7	0	78.8	40-125	0			
Fluoranthene	572.3	6.7	666.7	0	85.8	55-115	0			
Fluorene	590	6.7	666.7	0	88.5	50-110	0			
Indeno(1,2,3-cd)pyrene	577.3	6.7	666.7	0	86.6	40-120	0			
Naphthalene	500.3	6.7	666.7	0	75	40-105	0			
Pyrene	604.7	6.7	666.7	0	90.7	45-125	0			
<i>Surr: 2-Fluorobiphenyl</i>	1375	0	1667	0	82.5	12-100	0			
<i>Surr: 4-Terphenyl-d14</i>	1928	0	1667	0	116	25-137	0			
<i>Surr: Nitrobenzene-d5</i>	1242	0	1667	0	74.5	37-107	0			

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

Client: HRL Compliance Solutions, Inc
Work Order: 1405097
Project: WPX PA 43-34 Condensate Spill 5.1.14

QC BATCH REPORT

Batch ID: **58247** Instrument ID **SVMS8** Method: **SW8270**

MS				Sample ID: 1405146-21D MS			Units: µg/Kg		Analysis Date: 5/6/2014 04:17 PM	
Client ID:		Run ID: SVMS8_140506A			SeqNo: 2749754		Prep Date: 5/5/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	940.7	13	1300	0	72.3	45-110	0			
Acenaphthylene	966.1	13	1300	39.75	71.2	45-105	0			
Anthracene	1133	13	1300	32.32	84.7	55-105	0			
Benzo(a)anthracene	1220	13	1300	98.57	86.2	50-110	0			
Benzo(a)pyrene	1232	13	1300	119.9	85.5	50-110	0			
Benzo(b)fluoranthene	1228	13	1300	139	83.8	45-115	0			
Benzo(g,h,i)perylene	1113	13	1300	86.62	78.9	40-125	0			
Benzo(k)fluoranthene	1211	13	1300	73.04	87.5	45-115	0			
Chrysene	1225	13	1300	80.8	88	55-110	0			
Dibenzo(a,h)anthracene	1099	13	1300	43.95	81.2	40-125	0			
Fluoranthene	1236	13	1300	133.5	84.8	55-115	0			
Fluorene	1183	13	1300	0	90.9	50-110	0			
Indeno(1,2,3-cd)pyrene	1251	13	1300	104.4	88.2	40-120	0			
Naphthalene	948.5	13	1300	0	72.9	40-105	0			
Pyrene	1284	13	1300	131.2	88.7	45-125	0			
Surr: 2-Fluorobiphenyl	2626	0	3251	0	80.8	12-100	0			
Surr: 4-Terphenyl-d14	4098	0	3251	0	126	25-137	0			
Surr: Nitrobenzene-d5	2378	0	3251	0	73.2	37-107	0			

MSD				Sample ID: 1405146-21D MSD			Units: µg/Kg		Analysis Date: 5/6/2014 04:37 PM	
Client ID:		Run ID: SVMS8_140506A			SeqNo: 2749755		Prep Date: 5/5/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	915.8	13	1274	0	71.9	45-110	940.7	2.68	30	
Acenaphthylene	951.5	13	1274	39.75	71.6	45-105	966.1	1.52	30	
Anthracene	1086	13	1274	32.32	82.7	55-105	1133	4.26	30	
Benzo(a)anthracene	1189	13	1274	98.57	85.6	50-110	1220	2.54	30	
Benzo(a)pyrene	1190	13	1274	119.9	84	50-110	1232	3.44	30	
Benzo(b)fluoranthene	1205	13	1274	139	83.7	45-115	1228	1.9	30	
Benzo(g,h,i)perylene	1105	13	1274	86.62	79.9	40-125	1113	0.724	30	
Benzo(k)fluoranthene	1145	13	1274	73.04	84.2	45-115	1211	5.61	30	
Chrysene	1201	13	1274	80.8	88	55-110	1225	2.01	30	
Dibenzo(a,h)anthracene	1077	13	1274	43.95	81.1	40-125	1099	2.06	30	
Fluoranthene	1155	13	1274	133.5	80.2	55-115	1236	6.8	30	
Fluorene	1145	13	1274	0	89.9	50-110	1183	3.22	30	
Indeno(1,2,3-cd)pyrene	1197	13	1274	104.4	85.7	40-120	1251	4.48	30	
Naphthalene	978.2	13	1274	0	76.8	40-105	948.5	3.08	30	
Pyrene	1234	13	1274	131.2	86.6	45-125	1284	3.95	30	
Surr: 2-Fluorobiphenyl	2657	0	3184	0	83.4	12-100	2626	1.18	40	
Surr: 4-Terphenyl-d14	3891	0	3184	0	122	25-137	4098	5.18	40	
Surr: Nitrobenzene-d5	2460	0	3184	0	77.3	37-107	2378	3.39	40	

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

Client: HRL Compliance Solutions, Inc
Work Order: 1405097
Project: WPX PA 43-34 Condensate Spill 5.1.14

QC BATCH REPORT

Batch ID: **58247** Instrument ID **SVMS8** Method: **SW8270**

The following samples were analyzed in this batch:

1405097-01B

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

Client: HRL Compliance Solutions, Inc
Work Order: 1405097
Project: WPX PA 43-34 Condensate Spill 5.1.14

QC BATCH REPORT

Batch ID: **58207** Instrument ID **VMS7** Method: **SW8260B**

MBLK				Sample ID: MBLK-58207-58207				Units: µg/Kg			Analysis Date: 5/2/2014 12:13 PM		
Client ID:			Run ID: VMS7_140502A				SeqNo: 2744074			Prep Date: 5/2/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual			
Benzene	ND	30											
Ethylbenzene	ND	30											
m,p-Xylene	ND	60											
o-Xylene	ND	30											
Toluene	ND	30											
Xylenes, Total	ND	90											
Surr: 1,2-Dichloroethane-d4	1000	0	1000	0	100	70-130		0					
Surr: 4-Bromofluorobenzene	1006	0	1000	0	101	70-130		0					
Surr: Dibromofluoromethane	982	0	1000	0	98.2	70-130		0					
Surr: Toluene-d8	1015	0	1000	0	102	70-130		0					

LCS				Sample ID: LCS-58207-58207			Units: µg/Kg		Analysis Date: 5/2/2014 10:33 AM		
Client ID:		Run ID: VMS7_140502A			SeqNo: 2744073		Prep Date: 5/2/2014		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	1004	30	1000	0	100	75-125	0				
Ethylbenzene	1009	30	1000	0	101	75-125	0				
m,p-Xylene	2010	60	2000	0	101	80-125	0				
o-Xylene	986	30	1000	0	98.6	75-125	0				
Toluene	1046	30	1000	0	105	70-125	0				
Xylenes, Total	2996	90	3000	0	99.9	75-125	0				
Surr: 1,2-Dichloroethane-d4	993.5	0	1000	0	99.4	70-130	0				
Surr: 4-Bromofluorobenzene	957	0	1000	0	95.7	70-130	0				
Surr: Dibromofluoromethane	1008	0	1000	0	101	70-130	0				
Surr: Toluene-d8	1047	0	1000	0	105	70-130	0				

MS					Sample ID: 1405098-01A MS			Units: µg/Kg		Analysis Date: 5/6/2014 08:01 AM	
Client ID:			Run ID: VMS8_140505B			SeqNo: 2746618		Prep Date: 5/2/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	1044	30	1000	0	104	75-125	0				
Ethylbenzene	939.5	30	1000	33	90.6	75-125	0				
m,p-Xylene	2556	60	2000	903	82.7	80-125	0				
o-Xylene	933.5	30	1000	51	88.2	75-125	0				
Toluene	930	30	1000	55	87.5	70-125	0				
Xylenes, Total	3490	90	3000	951	84.6	75-125	0				
Surr: 1,2-Dichloroethane-d4	1063	0	1000	0	106	70-130	0				
Surr: 4-Bromofluorobenzene	1037	0	1000	0	104	70-130	0				
Surr: Dibromofluoromethane	976	0	1000	0	97.6	70-130	0				
Surr: Toluene-d8	984.5	0	1000	0	98.4	70-130	0				

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

Client: HRL Compliance Solutions, Inc
Work Order: 1405097
Project: WPX PA 43-34 Condensate Spill 5.1.14

QC BATCH REPORT

Batch ID: **58207** Instrument ID **VMS7** Method: **SW8260B**

MSD				Sample ID: 1405098-01A MSD			Units: µg/Kg		Analysis Date: 5/6/2014 08:26 AM	
Client ID:				Run ID: VMS8_140505B			SeqNo: 2746621		Prep Date: 5/2/2014	
									DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	1061	30	1000	0	106	75-125	1044	1.62	30	
Ethylbenzene	948.5	30	1000	33	91.6	75-125	939.5	0.953	30	
m,p-Xylene	2598	60	2000	903	84.7	80-125	2556	1.59	30	
o-Xylene	948.5	30	1000	51	89.8	75-125	933.5	1.59	30	
Toluene	939.5	30	1000	55	88.4	70-125	930	1.02	30	
Xylenes, Total	3546	90	3000	951	86.5	75-125	3490	1.59	30	
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>1072</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>107</i>	<i>70-130</i>	<i>1063</i>	<i>0.89</i>	<i>30</i>	
<i>Surr: 4-Bromofluorobenzene</i>	<i>1002</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>100</i>	<i>70-130</i>	<i>1037</i>	<i>3.43</i>	<i>30</i>	
<i>Surr: Dibromofluoromethane</i>	<i>1005</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>100</i>	<i>70-130</i>	<i>976</i>	<i>2.93</i>	<i>30</i>	
<i>Surr: Toluene-d8</i>	<i>982</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>98.2</i>	<i>70-130</i>	<i>984.5</i>	<i>0.254</i>	<i>30</i>	

The following samples were analyzed in this batch: 1405097-01A

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

Client: HRL Compliance Solutions, Inc
Work Order: 1405097
Project: WPX PA 43-34 Condensate Spill 5.1.14

QC BATCH REPORT

Batch ID: **R140127** Instrument ID **MOIST** Method: **A2540 G**

MBLK				Sample ID: WBLKS-R140127				Units: % of sample			Analysis Date: 5/2/2014 01:07 PM			
Client ID:				Run ID: MOIST_140502A				SeqNo: 2744647			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-R140127				Units: % of sample		Analysis Date: 5/2/2014 01:07 PM		
Client ID:		Run ID: MOIST_140502A			SeqNo: 2744646		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: 1405096-03A DUP					Units: % of sample		Analysis Date: 5/2/2014 01:07 PM		
Client ID:		Run ID: MOIST_140502A			SeqNo: 2744639		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Moisture	12.16	0.050	0	0	0	0-0	12.6	3.55	20		

DUP		Sample ID: 1405099-01B DUP					Units: % of sample		Analysis Date: 5/2/2014 01:07 PM		
Client ID:		Run ID: MOIST_140502A			SeqNo: 2744643		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Moisture	12.49	0.050	0	0	0	0-0	12.64	1.19	20		

The following samples were analyzed in this batch:

1405097-01B

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



ALS Laboratory Group

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

Chain-of-Custody

Form 202r6

WORKORDER #

1405097

PAGE

1 of 1

DISPOSAL

By Lab or Return to Client

PROJECT NAME

WPX PA 4334

SAMPLER

Reed Wold

SITE ID

PA 43-34

DATE

5/1/14

TURNAROUND

Standard

PROJECT No.

Condensate Spill

EDD FORMAT

PURCHASE ORDER

COMPANY NAME

HRL Compliance

BILL TO COMPANY

WPX Energy

SEND REPORT TO

Mark Mumby

INVOICE ATTN TO

Karoline Blangy

ADDRESS

2385 F 1/2 Rd

ADDRESS

CITY / STATE / ZIP

Grand Junction, CO 81508

CITY / STATE / ZIP

PHONE

970-243-3271

PHONE

FAX

970-243-3280

FAX

E-MAIL

mmumby@hrlcomp.com
rwold@hrlcomp.com

E-MAIL

Lab ID

Field ID

Matrix

Sample Date

Sample Time

Bottles

Pres.

QC

1

Batch 1

SO

5/1/14

12:40

2

8

XX

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

For metals or anions, please detail analytes below.

Comments:

3.2°C

QC PACKAGE (check below)

X

LEVEL II (Standard QC)

LEVEL III (Std QC + forms)

LEVEL IV (Std QC + forms + raw data)

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

SIGNATURE

PRINTED NAME

DATE

TIME

RELINQUISHED BY

RECEIVED BY

RELINQUISHED BY

RECEIVED BY

RELINQUISHED BY

RECEIVED BY

Reed Wold

Reed Wold

N. Martinez

Diane F. Shan

Reed Wold

N. Martinez

Diane F. Shan

5/1/14

5-1-14

5-1-14

5/2/14

2:00

2:00

2:10

1000

Sample Receipt Checklist

Client Name: **HRL**

Date/Time Received: **02-May-14 10:00**

Work Order: **1405097**

Received by: **DS**

Checklist completed by Diane Shaw 02-May-14
eSignature Date

Reviewed by: Ann Preston 06-May-14
eSignature Date

Matrices: **Soil**

Carrier name: **FedEx**

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature in compliance?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample(s) received on ice?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Temperature(s)/Thermometer(s):	<u>3.2 c</u>		
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:	<u>5/2/2014 11:45:15 AM</u>		
Water - VOA vials have zero headspace?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input checked="" type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
pH adjusted?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
pH adjusted by:			

Login Notes:

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:

Comments:

CorrectiveAction:

From: (616) 390-0970
Sample Receiving
ALS Laboratory Group
3352 128th Avenue
Holland, MI 49424

Origin ID: GRRR



Ship Date: 01MAY14
Actual Wgt: 78.0 LB
CAD: 22848409NET3400

Dim: 14 X 28 X 15 IN

Delivery Address Bar Code



Ref # 050114-1
Invoice #
PO # Parachute
Dept #

SHIP TO: (616) 390-0970
sample receiving
ALS Laboratory Group
3352 128TH AVE
HOLLAND, MI 49424

BILL BENDER

FRI - 02 MAY AA
STANDARD OVERNIGHT

TRK# 7987 2801 0523

6201

49424

MI-LR

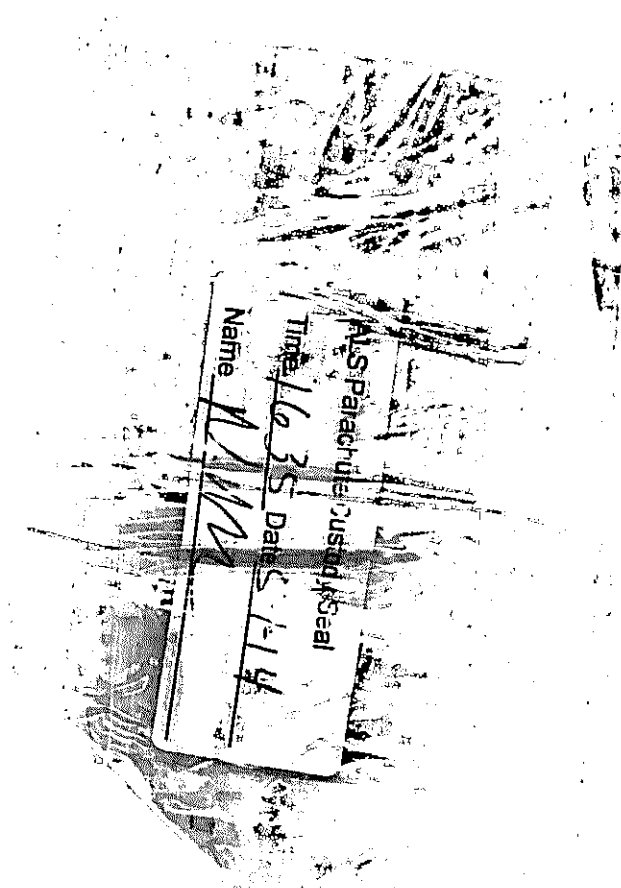
GRR

68 GRRR



0201M1009700

/templates/components/dotcom_label_contents/FoldInstructions/Folding_instructions.html loading...
/templates/components/dotcom_label_contents/WarningsOriginalLabel/en/Folding_warning.html loading...
/templates/components/dotcom_label_contents/TnCDomAus/en/TC_dom.html loading...





30-May-2014

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

Re: **WPX PA 43-34 Batch 2 5.20.14**

Work Order: **14051128**

Dear Mark,

ALS Environmental received 1 sample on 22-May-2014 09:30 AM for the analyses presented in the following report.

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

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

The total number of pages in this report is 23.

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

Sincerely,

A handwritten signature in cursive script that reads "Ann Preston".

Electronically approved by: Ann Preston

Ann Preston
Project Manager



Certificate No: MN 532786

Report of Laboratory Analysis

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

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

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

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

Client: HRL Compliance Solutions, Inc
Project: WPX PA 43-34 Batch 2 5.20.14
Work Order: 14051128

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>
14051128-01	Batch 2	Soil		5/20/2014 13:00	5/22/2014 09:30	<input type="checkbox"/>

Client: HRL Compliance Solutions, Inc
Project: WPX PA 43-34 Batch 2 5.20.14
Work Order: 14051128

Case Narrative

Batch 58934 MS/MSD data for Metals is not related to this project's samples. No data requires qualification.

Batch 58945 MS/MSD data for Hexavalent Chromium is not related to this project's samples. No data requires qualification.

<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

<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: 30-May-14

Client: HRL Compliance Solutions, Inc
Project: WPX PA 43-34 Batch 2 5.20.14
Sample ID: Batch 2
Collection Date: 5/20/2014 01:00 PM

Work Order: 14051128
Lab ID: 14051128-01
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
			SW8015M		Prep: SW3541 / 5/27/14	Analyst: IT
DRO (C10-C28)	60		4.7	mg/Kg-dry	1	5/28/2014 12:10 PM
Surr: 4-Terphenyl-d14	90.7		39-133	%REC	1	5/28/2014 12:10 PM
GASOLINE RANGE ORGANICS BY GC-FID						
			SW8015		Prep: SW5035 / 5/22/14	Analyst: IT
GRO (C6-C10)	560		2.9	mg/Kg-dry	1	5/29/2014 12:17 PM
Surr: Toluene-d8	115		50-150	%REC	1	5/29/2014 12:17 PM
MERCURY BY CVAA						
			SW7471		Prep: SW7471 / 5/23/14	Analyst: LR
Mercury	0.032		0.015	mg/Kg-dry	1	5/23/2014 09:29 PM
METALS BY ICP-MS						
			SW6020A		Prep: SW3050B / 5/22/14	Analyst: ML
Arsenic	18		2.1	mg/Kg-dry	5	5/24/2014 03:53 AM
Barium	550		8.5	mg/Kg-dry	5	5/24/2014 03:53 AM
Cadmium	ND		0.85	mg/Kg-dry	5	5/24/2014 03:53 AM
Chromium	11		2.1	mg/Kg-dry	5	5/24/2014 03:53 AM
Copper	15		2.1	mg/Kg-dry	5	5/24/2014 03:53 AM
Lead	16		2.1	mg/Kg-dry	5	5/24/2014 03:53 AM
Nickel	16		2.1	mg/Kg-dry	5	5/24/2014 03:53 AM
Selenium	ND		2.1	mg/Kg-dry	5	5/24/2014 03:53 AM
Silver	ND		2.1	mg/Kg-dry	5	5/24/2014 03:53 AM
Zinc	50		4.2	mg/Kg-dry	5	5/26/2014 09:42 PM
SOLUBLE CATIONS FOR SAR						
			SW6020A		Prep: USDA Method 20B / 5/27/14	Analyst: RH
Calcium	21		10	mg/L	20	5/28/2014 01:37 AM
Magnesium	12		4.0	mg/L	20	5/28/2014 01:37 AM
Sodium	490		4.0	mg/L	20	5/28/2014 01:37 AM
SODIUM ADSORPTION RATIO						
			USDA H60 METHO		Prep: USDA Method 20B / 5/27/14	Analyst: RH
Sodium Adsorption Ratio	21		0.010	none	1	5/27/2014
SEMI-VOLATILE ORGANIC COMPOUNDS						
			SW8270		Prep: SW3541 / 5/27/14	Analyst: RM
Acenaphthene	ND		7.5	µg/Kg-dry	1	5/28/2014 06:14 PM
Acenaphthylene	ND		7.5	µg/Kg-dry	1	5/28/2014 06:14 PM
Anthracene	ND		7.5	µg/Kg-dry	1	5/28/2014 06:14 PM
Benzo(a)anthracene	15		7.5	µg/Kg-dry	1	5/28/2014 06:14 PM
Benzo(a)pyrene	ND		7.5	µg/Kg-dry	1	5/28/2014 06:14 PM
Benzo(b)fluoranthene	11		7.5	µg/Kg-dry	1	5/28/2014 06:14 PM
Benzo(g,h,i)perylene	ND		7.5	µg/Kg-dry	1	5/28/2014 06:14 PM
Benzo(k)fluoranthene	ND		7.5	µg/Kg-dry	1	5/28/2014 06:14 PM
Chrysene	8.3		7.5	µg/Kg-dry	1	5/28/2014 06:14 PM

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

ALS Group USA, Corp

Date: 30-May-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 43-34 Batch 2 5.20.14

Sample ID: Batch 2

Collection Date: 5/20/2014 01:00 PM

Work Order: 14051128

Lab ID: 14051128-01

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Dibenzo(a,h)anthracene	ND		7.5	µg/Kg-dry	1	5/28/2014 06:14 PM
Fluoranthene	21		7.5	µg/Kg-dry	1	5/28/2014 06:14 PM
Fluorene	ND		7.5	µg/Kg-dry	1	5/28/2014 06:14 PM
Indeno(1,2,3-cd)pyrene	ND		7.5	µg/Kg-dry	1	5/28/2014 06:14 PM
Naphthalene	25		7.5	µg/Kg-dry	1	5/28/2014 06:14 PM
Pyrene	18		7.5	µg/Kg-dry	1	5/28/2014 06:14 PM
Surr: 2-Fluorobiphenyl	60.2		12-100	%REC	1	5/28/2014 06:14 PM
Surr: 4-Terphenyl-d14	88.9		25-137	%REC	1	5/28/2014 06:14 PM
Surr: Nitrobenzene-d5	65.8		37-107	%REC	1	5/28/2014 06:14 PM
VOLATILE ORGANIC COMPOUNDS			SW8260B	Prep: SW5035 / 5/22/14		Analyst: RS
Benzene	ND		35	µg/Kg-dry	1	5/29/2014 04:17 AM
Ethylbenzene	360		35	µg/Kg-dry	1	5/29/2014 04:17 AM
m,p-Xylene	6,900		70	µg/Kg-dry	1	5/29/2014 04:17 AM
o-Xylene	430		35	µg/Kg-dry	1	5/29/2014 04:17 AM
Toluene	ND		35	µg/Kg-dry	1	5/29/2014 04:17 AM
Xylenes, Total	7,300		100	µg/Kg-dry	1	5/29/2014 04:17 AM
Surr: 1,2-Dichloroethane-d4	96.0		70-130	%REC	1	5/29/2014 04:17 AM
Surr: 4-Bromofluorobenzene	97.5		70-130	%REC	1	5/29/2014 04:17 AM
Surr: Dibromofluoromethane	96.5		70-130	%REC	1	5/29/2014 04:17 AM
Surr: Toluene-d8	124		70-130	%REC	1	5/29/2014 04:17 AM
ELECTRICAL CONDUCTIVITY (SAR)			USDA H60 METHO	Prep: USDA Method 20B / 5/27/14		Analyst: JB
Electrical Conductivity @ Saturation	2.7		0.25	mmhos/cm @25	50	5/28/2014 12:15 PM
CHROMIUM, TRIVALENT			CALCULATION			Analyst: JJG
Chromium, Trivalent	11		0.58	mg/Kg-dry	1	5/27/2014 08:01 AM
CHROMIUM, HEXAVALENT			SW7196A	Prep: SW3060A / 5/23/14		Analyst: JI
Chromium, Hexavalent	ND		0.58	mg/Kg-dry	1	5/23/2014 12:00 PM
MOISTURE			A2540 G			Analyst: AT
Moisture	14		0.050	% of sample	1	5/22/2014 04:52 PM
PH			SW9045D	Prep: EXTRACT / 5/23/14		Analyst: AT
pH	8.8			s.u.	1	5/23/2014 03:00 PM

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

Client: HRL Compliance Solutions, Inc
Work Order: 14051128
Project: WPX PA 43-34 Batch 2 5.20.14

QC BATCH REPORT

Batch ID: **59015** Instrument ID **GC8** Method: **SW8015M**

MBLK		Sample ID: DBLKS1-59015-59015				Units: mg/Kg		Analysis Date: 5/27/2014 09:40 PM		
Client ID:		Run ID: GC8_140527A				SeqNo: 2782274		Prep Date: 5/27/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	ND	4.2								
Surr: 4-Terphenyl-d14	1.688	0	1.667	0	101	39-133	0			

LCS		Sample ID: DLCSS1-59015-59015				Units: mg/Kg		Analysis Date: 5/27/2014 10:10 PM		
Client ID:		Run ID: GC8_140527A				SeqNo: 2782275		Prep Date: 5/27/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	143	4.2	166.7	0	85.8	61-109	0			
Surr: 4-Terphenyl-d14	1.37	0	1.667	0	82.2	39-133	0			

MS		Sample ID: 14051288-01B MS				Units: mg/Kg		Analysis Date: 5/27/2014 10:40 PM		
Client ID:		Run ID: GC8_140527A				SeqNo: 2782276		Prep Date: 5/27/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	300.8	8.0	319.8	30.4	84.5	48-110	0			
Surr: 4-Terphenyl-d14	3.026	0	3.198	0	94.6	39-133	0			

MSD		Sample ID: 14051288-01B MSD				Units: mg/Kg		Analysis Date: 5/27/2014 11:10 PM		
Client ID:		Run ID: GC8_140527A				SeqNo: 2782277		Prep Date: 5/27/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	265.6	7.9	314	30.4	74.9	48-110	300.8	12.4	30	
Surr: 4-Terphenyl-d14	2.707	0	3.14	0	86.2	39-133	3.026	11.1	30	

The following samples were analyzed in this batch:

14051128-01B

Client: HRL Compliance Solutions, Inc
 Work Order: 14051128
 Project: WPX PA 43-34 Batch 2 5.20.14

QC BATCH REPORT

Batch ID: **58905** Instrument ID **GC9** Method: **SW8015**

MBLK		Sample ID: MBLK-58905-58905				Units: µg/Kg		Analysis Date: 5/22/2014 05:19 PM		
Client ID:		Run ID: GC9_140522A				SeqNo: 2776313		Prep Date: 5/22/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	ND	2,500								
Surr: Toluene-d8	5004	0	5000	0	100	50-150	0			

LCS		Sample ID: LCS-58905-58905				Units: µg/Kg		Analysis Date: 5/22/2014 04:03 PM		
Client ID:		Run ID: GC9_140522A				SeqNo: 2776312		Prep Date: 5/22/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	517200	2,500	500000	0	103	70-130	0			
Surr: Toluene-d8	6152	0	5000	0	123	50-150	0			

MS		Sample ID: 14051082-01A MS				Units: µg/Kg		Analysis Date: 5/22/2014 09:59 PM		
Client ID:		Run ID: GC9_140522A				SeqNo: 2779863		Prep Date: 5/22/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	514200	2,500	500000	0	103	70-130	0			
Surr: Toluene-d8	5673	0	5000	0	113	50-150	0			

MSD		Sample ID: 14051082-01A MSD				Units: µg/Kg		Analysis Date: 5/22/2014 10:25 PM		
Client ID:		Run ID: GC9_140522A				SeqNo: 2779864		Prep Date: 5/22/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	495900	2,500	500000	0	99.2	70-130	514200	3.62	30	
Surr: Toluene-d8	5144	0	5000	0	103	50-150	5673	9.78	30	

The following samples were analyzed in this batch:

14051128-01A

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

Client: HRL Compliance Solutions, Inc
Work Order: 14051128
Project: WPX PA 43-34 Batch 2 5.20.14

QC BATCH REPORT

Batch ID: **58991** Instrument ID **HG1** Method: **SW7471**

MBLK		Sample ID: MBLK-58991-58991					Units: mg/Kg		Analysis Date: 5/23/2014 08:29 PM		
Client ID:			Run ID: HG1_140523A			SeqNo: 2778446		Prep Date: 5/23/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	

Mercury 0.002167 0.020 J

LCS		Sample ID: LCS-58991-58991					Units: mg/Kg		Analysis Date: 5/23/2014 08:31 PM		
Client ID:			Run ID: HG1_140523A			SeqNo: 2778448		Prep Date: 5/23/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	

Mercury 0.1805 0.020 0.1665 0 108 80-120 0

MS		Sample ID: 1405981-01BMS					Units: mg/Kg		Analysis Date: 5/23/2014 09:34 PM		
Client ID:			Run ID: HG1_140523A			SeqNo: 2778483		Prep Date: 5/23/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	

Mercury 0.1351 0.013 0.1085 0.01922 107 75-125 0

MSD		Sample ID: 1405981-01BMSD				Units: mg/Kg		Analysis Date: 5/23/2014 09:36 PM		
Client ID:		Run ID: HG1_140523A			SeqNo: 2778484		Prep Date: 5/23/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.1285 0.013 0.1084 0.01922 101 75-125 0.1351 5.01 35

The following samples were analyzed in this batch:

14051128-01B

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

Client: HRL Compliance Solutions, Inc
Work Order: 14051128
Project: WPX PA 43-34 Batch 2 5.20.14

QC BATCH REPORT

Batch ID: **58934** Instrument ID **ICPMS1** Method: **SW6020A**

MBLK		Sample ID: MBLK-58934-58934				Units: mg/Kg		Analysis Date: 5/24/2014 01:01 AM		
Client ID:		Run ID: ICPMS1_140523A				SeqNo: 2778963		Prep Date: 5/22/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	ND	0.25								
Cadmium	ND	0.10								
Chromium	ND	0.25								
Copper	ND	0.25								
Lead	ND	0.25								
Nickel	ND	0.25								
Selenium	ND	0.25								
Silver	ND	0.25								
Zinc	0.02773	0.50								J

MBLK		Sample ID: MBLK-58934-58934				Units: mg/Kg		Analysis Date: 5/25/2014 12:08 AM		
Client ID:		Run ID: ICPMS1_140524A				SeqNo: 2779617		Prep Date: 5/22/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Barium	0.1674	0.25								J

LCS		Sample ID: LCS-58934-58934				Units: mg/Kg		Analysis Date: 5/24/2014 01:08 AM		
Client ID:		Run ID: ICPMS1_140523A				SeqNo: 2778964		Prep Date: 5/22/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	4.298	0.25	5	0	86	80-120	0			
Barium	5.05	0.25	5	0	101	80-120	0			B
Cadmium	4.58	0.10	5	0	91.6	80-120	0			
Chromium	5.04	0.25	5	0	101	80-120	0			
Copper	5.045	0.25	5	0	101	80-120	0			
Lead	4.854	0.25	5	0	97.1	80-120	0			
Nickel	5.05	0.25	5	0	101	80-120	0			
Selenium	4.074	0.25	5	0	81.5	80-120	0			
Silver	4.996	0.25	5	0	99.9	80-120	0			
Zinc	4.15	0.50	5	0	83	80-120	0			

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

Client: HRL Compliance Solutions, Inc
Work Order: 14051128
Project: WPX PA 43-34 Batch 2 5.20.14

QC BATCH REPORT

Batch ID: **58934** Instrument ID **ICPMS1** Method: **SW6020A**

MS				Sample ID: 14051131-01AMS			Units: mg/Kg		Analysis Date: 5/24/2014 04:17 AM		
Client ID:			Run ID: ICPMS1_140523A			SeqNo: 2778992		Prep Date: 5/22/2014		DF: 5	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Arsenic	11.67	1.8	7.112	5.756	83.2	75-125	0				
Barium	362.4	1.8	7.112	410.3	-673	75-125	0			BSO	
Cadmium	7.429	0.71	7.112	0.8057	93.1	75-125	0				
Chromium	19.16	1.8	7.112	10.6	120	75-125	0				
Copper	19.84	1.8	7.112	13.8	85	75-125	0				
Lead	28.97	1.8	7.112	23.21	80.9	75-125	0				
Nickel	17.65	1.8	7.112	11.21	90.6	75-125	0				
Selenium	8.08	1.8	7.112	1.994	85.6	75-125	0				
Silver	6.476	1.8	7.112	0.06483	90.1	75-125	0				

MS				Sample ID: 14051131-01AMS				Units: mg/Kg			Analysis Date: 5/26/2014 09:54 PM		
Client ID:			Run ID: ICPMS1_140526A				SeqNo: 2781092		Prep Date: 5/22/2014		DF: 5		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual			
Zinc	78.38	3.6	7.112	77.28	15.5	75-125	0			SO			

MSD				Sample ID: 14051131-01AMSD			Units: mg/Kg		Analysis Date: 5/24/2014 04:23 AM		
Client ID:			Run ID: ICPMS1_140523A			SeqNo: 2778993		Prep Date: 5/22/2014		DF: 5	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Arsenic	13.14	1.8	7.174	5.756	103	75-125	11.67	11.8	25		
Barium	373	1.8	7.174	410.3	-519	75-125	362.4	2.9	25	BSO	
Cadmium	7.837	0.72	7.174	0.8057	98	75-125	7.429	5.35	25		
Chromium	20.22	1.8	7.174	10.6	134	75-125	19.16	5.37	25	S	
Copper	20.45	1.8	7.174	13.8	92.7	75-125	19.84	3	25		
Lead	30.62	1.8	7.174	23.21	103	75-125	28.97	5.54	25		
Nickel	18.63	1.8	7.174	11.21	104	75-125	17.65	5.42	25		
Selenium	9.024	1.8	7.174	1.994	98	75-125	8.08	11	25		
Silver	6.775	1.8	7.174	0.06483	93.5	75-125	6.476	4.52	25		

MSD		Sample ID: 14051131-01AMSD					Units: mg/Kg		Analysis Date: 5/26/2014 11:37 PM		
Client ID:		Run ID: ICPMS1_140526A			SeqNo: 2781108		Prep Date: 5/22/2014		DF: 5		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Zinc	85.08	3.6	7.174	77.28	109	75-125	78.38	8.2	25	O	

The following samples were analyzed in this batch:

14051128-01B

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

Client: HRL Compliance Solutions, Inc
Work Order: 14051128
Project: WPX PA 43-34 Batch 2 5.20.14

QC BATCH REPORT

Batch ID: **58939** Instrument ID **ICPMS2** Method: **SW6020A**

DUP		Sample ID: 14051131-03BDUP				Units: mg/L		Analysis Date: 5/28/2014 02:01 AM		
Client ID:		Run ID: ICPMS2_140527A				SeqNo: 2782400		Prep Date: 5/27/2014		DF: 20
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	44.9	10	0	0	0	0-0	46.9	4.36		
Magnesium	11.67	4.0	0	0	0	0-0	12.4	6.02		
Sodium	47.98	4.0	0	0	0	0-0	57.48	18		

DUP		Sample ID: 14051131-03BDUP				Units: none		Analysis Date: 5/27/2014		
Client ID:		Run ID: SAR_140527A				SeqNo: 2782921		Prep Date: 5/27/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sodium Adsorption Ratio	1.65	0.010	0	0	0		1.929	15.6	50	

The following samples were analyzed in this batch:

14051128-01C

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

Client: HRL Compliance Solutions, Inc
Work Order: 14051128
Project: WPX PA 43-34 Batch 2 5.20.14

QC BATCH REPORT

Batch ID: **59014** Instrument ID **SVMS8** Method: **SW8270**

MBLK		Sample ID: SBLKS1-59014-59014				Units: µg/Kg		Analysis Date: 5/28/2014 10:42 AM		
Client ID:		Run ID: SVMS8_140528A				SeqNo: 2783941		Prep Date: 5/27/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	ND	6.7								
Acenaphthylene	ND	6.7								
Anthracene	ND	6.7								
Benzo(a)anthracene	ND	6.7								
Benzo(a)pyrene	ND	6.7								
Benzo(b)fluoranthene	ND	6.7								
Benzo(g,h,i)perylene	ND	6.7								
Benzo(k)fluoranthene	ND	6.7								
Chrysene	ND	6.7								
Dibenzo(a,h)anthracene	ND	6.7								
Fluoranthene	ND	6.7								
Fluorene	ND	6.7								
Indeno(1,2,3-cd)pyrene	ND	6.7								
Naphthalene	ND	6.7								
Pyrene	ND	6.7								
<i>Surr: 2-Fluorobiphenyl</i>	1295	0	1667	0	77.7	12-100	0			
<i>Surr: 4-Terphenyl-d14</i>	1727	0	1667	0	104	25-137	0			
<i>Surr: Nitrobenzene-d5</i>	1369	0	1667	0	82.2	37-107	0			

LCS		Sample ID: SLCSS1-59014-59014				Units: µg/Kg		Analysis Date: 5/28/2014 11:03 AM		
Client ID:		Run ID: SVMS8_140528A				SeqNo: 2783942		Prep Date: 5/27/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	546.7	6.7	666.7	0	82	45-110	0			
Acenaphthylene	540.3	6.7	666.7	0	81	45-105	0			
Anthracene	597.3	6.7	666.7	0	89.6	55-105	0			
Benzo(a)anthracene	612	6.7	666.7	0	91.8	50-110	0			
Benzo(a)pyrene	650.3	6.7	666.7	0	97.5	50-110	0			
Benzo(b)fluoranthene	627	6.7	666.7	0	94	45-115	0			
Benzo(g,h,i)perylene	572	6.7	666.7	0	85.8	40-125	0			
Benzo(k)fluoranthene	611.3	6.7	666.7	0	91.7	45-115	0			
Chrysene	601.3	6.7	666.7	0	90.2	55-110	0			
Dibenzo(a,h)anthracene	581.3	6.7	666.7	0	87.2	40-125	0			
Fluoranthene	608.7	6.7	666.7	0	91.3	55-115	0			
Fluorene	540.7	6.7	666.7	0	81.1	50-110	0			
Indeno(1,2,3-cd)pyrene	617.3	6.7	666.7	0	92.6	40-120	0			
Naphthalene	514.7	6.7	666.7	0	77.2	40-105	0			
Pyrene	617.3	6.7	666.7	0	92.6	45-125	0			
<i>Surr: 2-Fluorobiphenyl</i>	1281	0	1667	0	76.8	12-100	0			
<i>Surr: 4-Terphenyl-d14</i>	1701	0	1667	0	102	25-137	0			
<i>Surr: Nitrobenzene-d5</i>	1474	0	1667	0	88.4	37-107	0			

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

Client: HRL Compliance Solutions, Inc
Work Order: 14051128
Project: WPX PA 43-34 Batch 2 5.20.14

QC BATCH REPORT

Batch ID: **59014** Instrument ID **SVMS8** Method: **SW8270**

MS				Sample ID: 14051221-01A MS			Units: µg/Kg		Analysis Date: 5/28/2014 12:53 PM		
Client ID:			Run ID: SVMS8_140528A			SeqNo: 2783945		Prep Date: 5/27/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Acenaphthene	1062	13	1272	0	83.5	45-110	0				
Acenaphthylene	1050	13	1272	0	82.5	45-105	0				
Anthracene	1166	13	1272	0	91.7	55-105	0				
Benzo(a)anthracene	1219	13	1272	10.53	95.1	50-110	0				
Benzo(a)pyrene	1265	13	1272	9.218	98.7	50-110	0				
Benzo(b)fluoranthene	1192	13	1272	10.21	92.9	45-115	0				
Benzo(g,h,i)perylene	1214	13	1272	8.889	94.7	40-125	0				
Benzo(k)fluoranthene	1236	13	1272	4.938	96.8	45-115	0				
Chrysene	1187	13	1272	6.584	92.8	55-110	0				
Dibenzo(a,h)anthracene	1188	13	1272	0	93.4	40-125	0				
Fluoranthene	1169	13	1272	13.17	90.9	55-115	0				
Fluorene	1035	13	1272	0	81.4	50-110	0				
Indeno(1,2,3-cd)pyrene	1244	13	1272	8.889	97.1	40-120	0				
Naphthalene	977.2	13	1272	0	76.8	40-105	0				
Pyrene	1252	13	1272	12.84	97.4	45-125	0				
Surr: 2-Fluorobiphenyl	2482	0	3179	0	78.1	12-100	0				
Surr: 4-Terphenyl-d14	3399	0	3179	0	107	25-137	0				
Surr: Nitrobenzene-d5	2748	0	3179	0	86.4	37-107	0				

MSD				Sample ID: 14051221-01A MSD			Units: µg/Kg		Analysis Date: 5/28/2014 01:13 PM		
Client ID:			Run ID: SVMS8_140528A			SeqNo: 2783946		Prep Date: 5/27/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Acenaphthene	1083	13	1295	0	83.6	45-110	1062	1.95	30		
Acenaphthylene	1070	13	1295	0	82.6	45-105	1050	1.96	30		
Anthracene	1164	13	1295	0	89.8	55-105	1166	0.203	30		
Benzo(a)anthracene	1228	13	1295	10.53	94	50-110	1219	0.681	30		
Benzo(a)pyrene	1278	13	1295	9.218	98	50-110	1265	1.08	30		
Benzo(b)fluoranthene	1231	13	1295	10.21	94.3	45-115	1192	3.27	30		
Benzo(g,h,i)perylene	1222	13	1295	8.889	93.7	40-125	1214	0.676	30		
Benzo(k)fluoranthene	1208	13	1295	4.938	92.9	45-115	1236	2.31	30		
Chrysene	1178	13	1295	6.584	90.4	55-110	1187	0.769	30		
Dibenzo(a,h)anthracene	1276	13	1295	0	98.5	40-125	1188	7.1	30		
Fluoranthene	1173	13	1295	13.17	89.5	55-115	1169	0.355	30		
Fluorene	1074	13	1295	0	82.9	50-110	1035	3.72	30		
Indeno(1,2,3-cd)pyrene	1260	13	1295	8.889	96.6	40-120	1244	1.27	30		
Naphthalene	986.9	13	1295	0	76.2	40-105	977.2	0.986	30		
Pyrene	1256	13	1295	12.84	96	45-125	1252	0.3	30		
Surr: 2-Fluorobiphenyl	2573	0	3238	0	79.5	12-100	2482	3.59	40		
Surr: 4-Terphenyl-d14	3422	0	3238	0	106	25-137	3399	0.688	40		
Surr: Nitrobenzene-d5	2831	0	3238	0	87.4	37-107	2748	2.99	40		

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

Client: HRL Compliance Solutions, Inc
Work Order: 14051128
Project: WPX PA 43-34 Batch 2 5.20.14

QC BATCH REPORT

Batch ID: **59014** Instrument ID **SVMS8** Method: **SW8270**

The following samples were analyzed in this batch:

14051128- 01B

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

Client: HRL Compliance Solutions, Inc
 Work Order: 14051128
 Project: WPX PA 43-34 Batch 2 5.20.14

QC BATCH REPORT

Batch ID: **58904** Instrument ID **VMS6** Method: **SW8260B**

MBLK		Sample ID: MBLK-58904-58904				Units: µg/Kg		Analysis Date: 5/22/2014 03:54 PM		
Client ID:		Run ID: VMS6_140522A				SeqNo: 2777015		Prep Date: 5/22/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	30								
Ethylbenzene	ND	30								
m,p-Xylene	ND	60								
o-Xylene	ND	30								
Toluene	ND	30								
Xylenes, Total	ND	90								
Surr: 1,2-Dichloroethane-d4	1048	0	1000	0	105	70-130	0			
Surr: 4-Bromofluorobenzene	995.5	0	1000	0	99.6	70-130	0			
Surr: Dibromofluoromethane	929	0	1000	0	92.9	70-130	0			
Surr: Toluene-d8	992	0	1000	0	99.2	70-130	0			

LCS		Sample ID: LCS-58904-58904				Units: µg/Kg		Analysis Date: 5/22/2014 02:36 PM		
Client ID:		Run ID: VMS6_140522A				SeqNo: 2777014		Prep Date: 5/22/2014		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	1030	30	1000	0	103	75-125	0			
m,p-Xylene	2038	60	2000	0	102	80-125	0			
o-Xylene	1003	30	1000	0	100	75-125	0			
Toluene	992	30	1000	0	99.2	70-125	0			
Xylenes, Total	3041	90	3000	0	101	75-125	0			
Surr: 1,2-Dichloroethane-d4	1018	0	1000	0	102	70-130	0			
Surr: 4-Bromofluorobenzene	1016	0	1000	0	102	70-130	0			
Surr: Dibromofluoromethane	1012	0	1000	0	101	70-130	0			
Surr: Toluene-d8	1004	0	1000	0	100	70-130	0			

The following samples were analyzed in this batch:

14051128-01A

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

Client: HRL Compliance Solutions, Inc
Work Order: 14051128
Project: WPX PA 43-34 Batch 2 5.20.14

QC BATCH REPORT

Batch ID: **58939** Instrument ID **WETCHEM** Method: **USDA H60 Method**

Dup	Sample ID: 14051131-03B DUP					Units: mmhos/cm @25°C		Analysis Date: 5/28/2014 12:15 PM		
Client ID:	Run ID: WETCHEM_140528B				SeqNo: 2782946		Prep Date: 5/27/2014		DF: 10	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Electrical Conductivity @ Saturation	0.564	0.050	0	0	0		0.606	7.18	50	

The following samples were analyzed in this batch:

14051128-01C

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

Client: HRL Compliance Solutions, Inc
Work Order: 14051128
Project: WPX PA 43-34 Batch 2 5.20.14

QC BATCH REPORT

Batch ID: **58945** Instrument ID **WETCHEM** Method: **SW7196A**

MBLK		Sample ID: MBLK-58945-58945				Units: mg/Kg		Analysis Date: 5/23/2014 12:00 PM		
Client ID:		Run ID: WETCHEM_140523A				SeqNo: 2777166		Prep Date: 5/23/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent ND 0.50

LCS		Sample ID: LCS-58945-58945				Units: mg/Kg		Analysis Date: 5/23/2014 12:00 PM		
Client ID:		Run ID: WETCHEM_140523A				SeqNo: 2777167		Prep Date: 5/23/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 1.701 0.50 1.992 0 85.4 80-120 0

MS		Sample ID: 14051124-01BMS				Units: mg/Kg		Analysis Date: 5/23/2014 12:00 PM		
Client ID:		Run ID: WETCHEM_140523A				SeqNo: 2777174		Prep Date: 5/23/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 1.808 0.50 2 0.336 73.6 75-125 0 S

MS		Sample ID: 14051124-01BMSI				Units: mg/Kg		Analysis Date: 5/23/2014 12:00 PM		
Client ID:		Run ID: WETCHEM_140523A				SeqNo: 2777176		Prep Date: 5/23/2014		DF: 100
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 882 50 1043 0.336 84.5 75-125 0

MSD		Sample ID: 14051124-01BMSD				Units: mg/Kg		Analysis Date: 5/23/2014 12:00 PM		
Client ID:		Run ID: WETCHEM_140523A				SeqNo: 2777175		Prep Date: 5/23/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 1.756 0.50 2 0.336 71 75-125 1.808 2.92 20 S

The following samples were analyzed in this batch:

14051128-01B

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

Client: HRL Compliance Solutions, Inc
Work Order: 14051128
Project: WPX PA 43-34 Batch 2 5.20.14

QC BATCH REPORT

Batch ID: **58981** Instrument ID **WETCHEM** Method: **SW9045D**

LCS				Sample ID: LCS-58981-58981				Units: s.u.		Analysis Date: 5/23/2014 03:00 PM			
Client ID:				Run ID: WETCHEM_140523L				SeqNo: 2778211		Prep Date: 5/23/2014		DF: 1	
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual		
pH		4	0	4	0	100	90-110	0					

DUP				Sample ID: 14051124-01B DUP				Units: s.u.			Analysis Date: 5/23/2014 03:00 PM		
Client ID:				Run ID: WETCHEM_140523L				SeqNo: 2778213		Prep Date: 5/23/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual			
pH	8.03	0	0	0	0	0-0	7.95	1	20				

The following samples were analyzed in this batch:

14051128-01B

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

Client: HRL Compliance Solutions, Inc
Work Order: 14051128
Project: WPX PA 43-34 Batch 2 5.20.14

QC BATCH REPORT

Batch ID: **R141309** Instrument ID **MOIST** Method: **A2540 G**

MBLK		Sample ID: WBLKS-R141309					Units: % of sample		Analysis Date: 5/22/2014 04:52 PM		
Client ID:			Run ID: MOIST_140522C			SeqNo: 2776941		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-R141309					Units: % of sample		Analysis Date: 5/22/2014 04:52 PM		
Client ID:			Run ID: MOIST_140522C			SeqNo: 2776940		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: 14051122-03B DUP				Units: % of sample			Analysis Date: 5/22/2014 04:52 PM			
Client ID:				Run ID: MOIST_140522C				SeqNo: 2776923			Prep Date:		DF: 1	
Analyte				Result		PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 2.23 0.050 0 0 0 0-0 2.21 0.901 20

DUP				Sample ID: 14051122-10B DUP				Units: % of sample			Analysis Date: 5/22/2014 04:52 PM			
Client ID:				Run ID: MOIST_140522C				SeqNo: 2776932			Prep Date:		DF: 1	
Analyte				Result		PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 3.07 0.050 0 0 0 0-0 2.67 13.9 20

The following samples were analyzed in this batch:

14051128-01B

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



Chain-of-Custody

14051128

Form 202r0

PAGE

1 of 1





DISPOSAL

☒ By Lab or ☐ 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.

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

	SIGNATURE	PRINTED NAME	DATE	TIME
RELINQUISHED BY		Reed, W. R.	5/21/14	4:00
RECEIVED BY		N. M. Mc	5-21-14	4:00
RELINQUISHED BY		N. M. Mc	5-21-14	4:00
RECEIVED BY		Kevin W. Hernandez	5/22/14	0930
RELINQUISHED BY				
RECEIVED BY				

Sample Receipt Checklist

Client Name: **HRL**

Date/Time Received: **22-May-14 09:30**

Work Order: **14051128**

Received by: **KRW**

Checklist completed by Keith Wurenga 22-May-14
eSignature Date

Reviewed by: Ann Preston 22-May-14
eSignature Date

Matrices: **Soil**

Carrier name: **FedEx**

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes <input 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 type="checkbox"/>	No <input checked="" 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>2.4 C</u>		
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:	<u>5/22/2014 12:20:17 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:			

Login Notes:

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:

Comments:

CorrectiveAction:

From: (616) 399-6070
 Sample Receiving
 ALS Laboratory Group
 3352 128th Avenue
 Holland, MI 49424

Origin ID: GRRR



Ship Date: 21MAY14
 ActWgt: 72.0 LB
 CAD: 2264840NET3498

Dims: 24 X 15 X 15 IN

SHIP TO: (616) 399-6070
 sample receiving
 ALS Laboratory Group
 3352 128TH AVE

HOLLAND, MI 49424

BILL SENDER

Delivery Address Bar Code



Ref # 052114-2
 Invoice #
 PO # Parachute
 Dept #

THU - 22 MAY 10:30A
 PRIORITY OVERNIGHT

TRK# 7700 5970 9173
 9291

68 GRRR

49424
 MI-US
 GRR



0220162039F220

After printing this label:

1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.

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



20-Jun-2014

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

Re: **WPX PA 43-34 Batch 2 6.16.14**

Work Order: **1406850**

Dear Mark,

ALS Environmental received 1 sample on 17-Jun-2014 09:30 AM for the analyses presented in the following report.

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

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

The total number of pages in this report is 10.

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

Sincerely,

A handwritten signature in cursive script that reads "Ann Preston".

Electronically approved by: Ann Preston

Ann Preston
Project Manager



Certificate No: MN 532786

Report of Laboratory Analysis

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

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

Environmental 

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

Client: HRL Compliance Solutions, Inc
Project: WPX PA 43-34 Batch 2 6.16.14
Work Order: 1406850

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>
1406850-01	Batch 2	Soil		6/16/2014 12:50	6/17/2014 09:30	<input type="checkbox"/>

Client: HRL Compliance Solutions, Inc
Project: WPX PA 43-34 Batch 2 6.16.14
WorkOrder: 1406850

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

<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:** 20-Jun-14**Client:** HRL Compliance Solutions, Inc**Project:** WPX PA 43-34 Batch 2 6.16.14**Sample ID:** Batch 2**Collection Date:** 6/16/2014 12:50 PM**Work Order:** 1406850**Lab ID:** 1406850-01**Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
DRO (C10-C28)	25		SW8015M		Prep: SW3541 / 6/18/14	Analyst: IT
<i>Surr: 4-Terphenyl-d14</i>	<i>73.8</i>		<i>39-133</i>	<i>mg/Kg-dry</i>	<i>1</i>	6/19/2014 08:45 PM
				<i>%REC</i>	<i>1</i>	6/19/2014 08:45 PM
GASOLINE RANGE ORGANICS BY GC-FID						
GRO (C6-C10)	ND		SW8015		Prep: SW5035 / 6/17/14	Analyst: IT
<i>Surr: Toluene-d8</i>	<i>107</i>		<i>50-150</i>	<i>mg/Kg-dry</i>	<i>1</i>	6/18/2014 12:38 PM
				<i>%REC</i>	<i>1</i>	6/18/2014 12:38 PM
MOISTURE						
Moisture	6.7		A2540 G			Analyst: TM
			0.050	% of sample	1	6/18/2014 01:57 PM

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

ALS Group USA, Corp

Date: 20-Jun-14

Client: HRL Compliance Solutions, Inc
Work Order: 1406850
Project: WPX PA 43-34 Batch 2 6.16.14

QC BATCH REPORT

Batch ID: **59807** Instrument ID **GC8** Method: **SW8015M**

MBLK		Sample ID: DBLKS1-59807-59807				Units: mg/Kg		Analysis Date: 6/19/2014 03:16 PM		
Client ID:		Run ID: GC8_140619B				SeqNo: 2817149		Prep Date: 6/18/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	ND	4.2								
Surr: 4-Terphenyl-d14	1.485	0	1.667	0	89.1	39-133	0			

LCS		Sample ID: DLCSS1-59807-59807				Units: mg/Kg		Analysis Date: 6/19/2014 03:46 PM		
Client ID:		Run ID: GC8_140619B				SeqNo: 2817151		Prep Date: 6/18/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	130.2	4.2	166.7	0	78.1	61-109	0			
Surr: 4-Terphenyl-d14	1.426	0	1.667	0	85.6	39-133	0			

MS		Sample ID: 1406837-01B MS				Units: mg/Kg		Analysis Date: 6/19/2014 04:16 PM		
Client ID:		Run ID: GC8_140619B				SeqNo: 2817153		Prep Date: 6/18/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	218.5	7.8	314	11.14	66	48-110	0			
Surr: 4-Terphenyl-d14	2.246	0	3.14	0	71.5	39-133	0			

MSD		Sample ID: 1406837-01B MSD				Units: mg/Kg		Analysis Date: 6/19/2014 04:46 PM		
Client ID:		Run ID: GC8_140619B				SeqNo: 2817154		Prep Date: 6/18/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	233.4	8.1	322.2	11.14	69	48-110	218.5	6.62	30	
Surr: 4-Terphenyl-d14	2.506	0	3.222	0	77.8	39-133	2.246	10.9	30	

The following samples were analyzed in this batch: 1406850-01A

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

Client: HRL Compliance Solutions, Inc
 Work Order: 1406850
 Project: WPX PA 43-34 Batch 2 6.16.14

QC BATCH REPORT

Batch ID: **59782** Instrument ID **GC9** Method: **SW8015**

MBLK		Sample ID: MBLK-59782-59782				Units: µg/Kg		Analysis Date: 6/17/2014 10:25 PM		
Client ID:		Run ID: GC9_140617A				SeqNo: 2813683		Prep Date: 6/17/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	ND	2,500								
Surr: Toluene-d8	4836	0	5000	0	96.7	50-150	0			

LCS		Sample ID: LCS-59782-59782				Units: µg/Kg		Analysis Date: 6/17/2014 09:59 PM		
Client ID:		Run ID: GC9_140617A				SeqNo: 2813682		Prep Date: 6/17/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	457600	2,500	500000	0	91.5	70-130	0			
Surr: Toluene-d8	5361	0	5000	0	107	50-150	0			

MS		Sample ID: 1406818-01A MS				Units: µg/Kg		Analysis Date: 6/17/2014 10:50 PM		
Client ID:		Run ID: GC9_140617A				SeqNo: 2813685		Prep Date: 6/17/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	475600	2,500	500000	0	95.1	70-130	0			
Surr: Toluene-d8	5800	0	5000	0	116	50-150	0			

MSD		Sample ID: 1406818-01A MSD				Units: µg/Kg		Analysis Date: 6/17/2014 11:16 PM		
Client ID:		Run ID: GC9_140617A				SeqNo: 2813686		Prep Date: 6/17/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	472400	2,500	500000	0	94.5	70-130	475600	0.678	30	
Surr: Toluene-d8	5913	0	5000	0	118	50-150	5800	1.93	30	

The following samples were analyzed in this batch:

1406850-01A

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

Client: HRL Compliance Solutions, Inc
Work Order: 1406850
Project: WPX PA 43-34 Batch 2 6.16.14

QC BATCH REPORT

Batch ID: **R142970** Instrument ID **MOIST** Method: **A2540 G**

MBLK		Sample ID: WBLKS-R142970					Units: % of sample		Analysis Date: 6/18/2014 01:57 PM		
Client ID:			Run ID: MOIST_140618B			SeqNo: 2815628		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-R142970					Units: % of sample		Analysis Date: 6/18/2014 01:57 PM		
Client ID:			Run ID: MOIST_140618B			SeqNo: 2815627		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: 1406851-01A DUP					Units: % of sample		Analysis Date: 6/18/2014 01:57 PM		
Client ID:			Run ID: MOIST_140618B			SeqNo: 2815610		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	

Moisture 12.63 0.050 0 0 0 0-0 12.67 0.316 20

DUP				Sample ID: 1406923-01B DUP				Units: % of sample			Analysis Date: 6/18/2014 01:57 PM			
Client ID:				Run ID: MOIST_140618B				SeqNo: 2815624			Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual				

Moisture 8.1 0.050 0 0 0 0-0 7.68 5.32 20

The following samples were analyzed in this batch:

1406850-01A

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



ALS Laboratory Group

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

Chain-of-Custody

Form 202r8

WORKORDER #

1406850

PAGE

1 of 1

DISPOSAL

By Lab or Return to Client

PROJECT NAME WPX PA43-34 Batch 2

SAMPLER Reed Wold

SITE ID PA 43-34

DATE

6/16/14

TURNAROUND

5 Day

PROJECT No.

EDD FORMAT

PURCHASE ORDER

COMPANY NAME HRL Compliance

BILL TO COMPANY WPX

SEND REPORT TO Mark Mumby

INVOICE ATTN TO Karolina Blaney

ADDRESS 2385 F 1/2 Rd

ADDRESS 1058 Co Rd 215

CITY/STATE/ZIP Grand Junction, CO 81506

CITY/STATE/ZIP Parachute CO 81635

PHONE 970-243-3271

PHONE 970-683-2295

FAX 970-243-3280

FAX

E-MAIL mmumby@hrlcomp.com
rwold@hrlcomp.com

E-MAIL Karolina.blaney@wpxenergy.com

Lab ID

Field ID

Matrix

Sample Date

Sample Time

Bottles

Pres.

QC

1

Batch 2

SO

6/16/14

12:50

1

8

X

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

For metals or anions, please detail analytes below.

Comments:

0.8%

QC PACKAGE (check below)

X LEVEL II (Standard QC)
LEVEL III (Std QC + forms)
LEVEL IV (Std QC + forms + raw data)

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

SIGNATURE

PRINTED NAME

DATE

TIME

RELINQUISHED BY

Reed Wold

Reed Wold

6/16/14

1:40

RECEIVED BY

Wold

Wold

6/16/14

1:40

RELINQUISHED BY

Mon

Mon

6/16/14

1:40

RECEIVED BY

Diane F. Shea

Diane F. Shea

6/17/14

0930

RELINQUISHED BY

RECEIVED BY

Sample Receipt Checklist

Client Name: HRL

Date/Time Received: 17-Jun-14 09:30

Work Order: 1406850

Received by: DS

Checklist completed by Diane Shaw 17-Jun-14
eSignature Date

Reviewed by: Ann Preston 17-Jun-14
eSignature Date

Matrices: Soil

Carrier name: FedEx

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature in compliance?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample(s) received on ice?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Temperature(s)/Thermometer(s):	<u>0.8 c</u>		
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:	<u>6/17/2014 1:09:11 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:			

Login Notes:

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:

Comments:

CorrectiveAction:

From: (979) 285-5783
 Mark Martinez
 ALS Environmental
 127 E. 1st Street
 PARACHUTE, CO 81435

Origin ID: RLA



Ship Date: 16JUN14
 ActWgt: 42.0 LB
 CAD: 2254840NET3480

Dim: 24 X 15 X 15 IN

Delivery Address Bar Code



Ref # 061814-1
 Invoice #
 PO # Parachute
 Dept #

SHIP TO: (916) 339-4478
 sample receiving
 ALS Laboratory Group
 3352 128TH AVE

BILL SENDER

HOLLAND, MI 49424

TUE - 17 JUN 10:30A
 PRIORITY OVERNIGHT

TRK# 7703 2099 2619
 EPN1

49424
 NLUS
 GRR

XX GRR



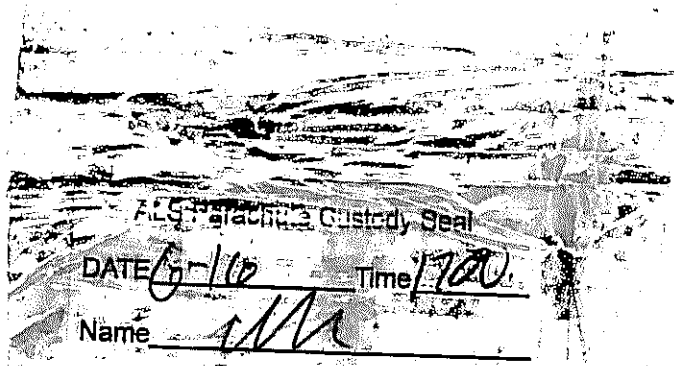
527254854WZ0

After printing this label:

1. Use the "Print" button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.

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





10-Jul-2014

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

Re: **WPX PA 43-34 Batch 3 7.1.14**

Work Order: **1407248**

Dear Mark,

ALS Environmental received 1 sample on 03-Jul-2014 10:30 PM for the analyses presented in the following report.

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

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

The total number of pages in this report is 24.

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

Sincerely,

A handwritten signature in cursive script that reads "Ann Preston".

Electronically approved by: Ann Preston

Ann Preston
Project Manager



Certificate No: MN 532786

Report of Laboratory Analysis

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

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

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

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

Client: HRL Compliance Solutions, Inc
Project: WPX PA 43-34 Batch 3 7.1.14
Work Order: 1407248

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>
1407248-01	Batch 3	Soil		7/1/2014 09:50	7/3/2014 22:30	<input type="checkbox"/>

Client: HRL Compliance Solutions, Inc
Project: WPX PA 43-34 Batch 3 7.1.14
Work Order: 1407248

Case Narrative

Batch 60337 sample 1407248-01 had one high surrogate recovery due to matrix interference. Toluene was ND in the sample. No data requires qualification. The MS/MSD data for BTEX is not related to this project's samples. No data requires qualification.

Batch 60340 MS/MSD data for Metals is not related to this project's samples. No data requires qualification.

Batch R144000 duplicate data for % Moisture is not related to this project's samples. No data requires qualification.

<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

<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: 10-Jul-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 43-34 Batch 3 7.1.14

Sample ID: Batch 3

Collection Date: 7/1/2014 09:50 AM

Work Order: 1407248

Lab ID: 1407248-01

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
DRO (C10-C28)	33		SW8015M		Prep: SW3541 / 7/7/14	Analyst: IT
<i>Surr: 4-Terphenyl-d14</i>	70.2		4.7	mg/Kg-dry	1	7/8/2014 05:27 AM
			39-133	%REC	1	7/8/2014 05:27 AM
GASOLINE RANGE ORGANICS BY GC-FID						
GRO (C6-C10)	110		SW8015		Prep: SW5035 / 7/7/14	Analyst: IT
<i>Surr: Toluene-d8</i>	104		2.9	mg/Kg-dry	1	7/7/2014 05:44 PM
			50-150	%REC	1	7/7/2014 05:44 PM
MERCURY BY CVAA						
Mercury	0.027		SW7471		Prep: SW7471 / 7/8/14	Analyst: LR
			0.019	mg/Kg-dry	1	7/8/2014 06:08 PM
METALS BY ICP-MS						
Arsenic	7.9		SW6020A		Prep: SW3050B / 7/7/14	Analyst: ML
Barium	660		2.2	mg/Kg-dry	5	7/8/2014 04:51 AM
Cadmium	ND		2.2	mg/Kg-dry	5	7/8/2014 04:51 AM
Chromium	9.7		0.89	mg/Kg-dry	5	7/8/2014 04:51 AM
Copper	12		2.2	mg/Kg-dry	5	7/8/2014 04:51 AM
Lead	14		2.2	mg/Kg-dry	5	7/8/2014 04:51 AM
Nickel	14		2.2	mg/Kg-dry	5	7/8/2014 04:51 AM
Selenium	ND		2.2	mg/Kg-dry	5	7/8/2014 04:51 AM
Silver	ND		2.2	mg/Kg-dry	5	7/8/2014 04:51 AM
Zinc	50		4.4	mg/Kg-dry	5	7/8/2014 04:51 AM
SOLUBLE CATIONS FOR SAR						
			SW6020A		Prep: USDA Method 20B / 7/9/14	Analyst: ML
Calcium	29		10	mg/L	20	7/9/2014 04:16 PM
Magnesium	11		4.0	mg/L	20	7/9/2014 04:16 PM
Sodium	510		4.0	mg/L	20	7/9/2014 04:16 PM
SODIUM ADSORPTION RATIO						
			USDA H60 METHO		Prep: USDA Method 20B / 7/9/14	Analyst: ML
Sodium Adsorption Ratio	20		0.010	none	1	7/9/2014
SEMI-VOLATILE ORGANIC COMPOUNDS						
			SW8270		Prep: SW3541 / 7/7/14	Analyst: RM
Acenaphthene	ND		7.5	µg/Kg-dry	1	7/8/2014 04:25 PM
Acenaphthylene	ND		7.5	µg/Kg-dry	1	7/8/2014 04:25 PM
Anthracene	ND		7.5	µg/Kg-dry	1	7/8/2014 04:25 PM
Benzo(a)anthracene	ND		7.5	µg/Kg-dry	1	7/8/2014 04:25 PM
Benzo(a)pyrene	ND		7.5	µg/Kg-dry	1	7/8/2014 04:25 PM
Benzo(b)fluoranthene	ND		7.5	µg/Kg-dry	1	7/8/2014 04:25 PM
Benzo(g,h,i)perylene	ND		7.5	µg/Kg-dry	1	7/8/2014 04:25 PM
Benzo(k)fluoranthene	ND		7.5	µg/Kg-dry	1	7/8/2014 04:25 PM
Chrysene	ND		7.5	µg/Kg-dry	1	7/8/2014 04:25 PM

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

ALS Group USA, Corp

Date: 10-Jul-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 43-34 Batch 3 7.1.14

Sample ID: Batch 3

Collection Date: 7/1/2014 09:50 AM

Work Order: 1407248

Lab ID: 1407248-01

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Dibenzo(a,h)anthracene	ND		7.5	µg/Kg-dry	1	7/8/2014 04:25 PM
Fluoranthene	ND		7.5	µg/Kg-dry	1	7/8/2014 04:25 PM
Fluorene	ND		7.5	µg/Kg-dry	1	7/8/2014 04:25 PM
Indeno(1,2,3-cd)pyrene	ND		7.5	µg/Kg-dry	1	7/8/2014 04:25 PM
Naphthalene	ND		7.5	µg/Kg-dry	1	7/8/2014 04:25 PM
Pyrene	ND		7.5	µg/Kg-dry	1	7/8/2014 04:25 PM
Surr: 2-Fluorobiphenyl	62.9		12-100	%REC	1	7/8/2014 04:25 PM
Surr: 4-Terphenyl-d14	100		25-137	%REC	1	7/8/2014 04:25 PM
Surr: Nitrobenzene-d5	68.3		37-107	%REC	1	7/8/2014 04:25 PM
VOLATILE ORGANIC COMPOUNDS			SW8260B	Prep: SW5035 / 7/7/14	Analyst: RS	
Benzene	ND		35	µg/Kg-dry	1	7/8/2014 04:04 PM
Ethylbenzene	96		35	µg/Kg-dry	1	7/8/2014 04:04 PM
m,p-Xylene	3,500		69	µg/Kg-dry	1	7/8/2014 04:04 PM
o-Xylene	230		35	µg/Kg-dry	1	7/8/2014 04:04 PM
Toluene	ND		35	µg/Kg-dry	1	7/8/2014 04:04 PM
Xylenes, Total	3,700		100	µg/Kg-dry	1	7/8/2014 04:04 PM
Surr: 1,2-Dichloroethane-d4	104		70-130	%REC	1	7/8/2014 04:04 PM
Surr: 4-Bromofluorobenzene	101		70-130	%REC	1	7/8/2014 04:04 PM
Surr: Dibromofluoromethane	97.0		70-130	%REC	1	7/8/2014 04:04 PM
Surr: Toluene-d8	138	S	70-130	%REC	1	7/8/2014 04:04 PM
ELECTRICAL CONDUCTIVITY (SAR)			USDA H60 METHO	Prep: USDA Method 20B / 7/9/14	Analyst: JB	
Electrical Conductivity @ Saturation	3.2		0.12	mmhos/cm @25	25	7/10/2014 10:15 AM
CHROMIUM, TRIVALENT			CALCULATION	Analyst: JJG		
Chromium, Trivalent	9.4		0.58	mg/Kg-dry	1	7/9/2014 10:25 AM
CHROMIUM, HEXAVALENT			SW7196A	Prep: SW3060A / 7/7/14	Analyst: JI	
Chromium, Hexavalent	ND		0.58	mg/Kg-dry	1	7/8/2014 03:00 PM
MOISTURE			A2540 G	Analyst: TM		
Moisture	14		0.050	% of sample	1	7/7/2014 03:40 PM
PH			SW9045D	Prep: EXTRACT / 7/8/14	Analyst: AT	
pH	8.6		s.u.		1	7/8/2014 05:01 PM

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

Client: HRL Compliance Solutions, Inc
Work Order: 1407248
Project: WPX PA 43-34 Batch 3 7.1.14

QC BATCH REPORT

Batch ID: **60326** Instrument ID **GC8** Method: **SW8015M**

MBLK		Sample ID: DBLKS1-60326-60326				Units: mg/Kg		Analysis Date: 7/7/2014 05:26 PM		
Client ID:		Run ID: GC8_140707A				SeqNo: 2839235		Prep Date: 7/7/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	ND	5.0								
Surr: 4-Terphenyl-d14	1.848	0	2	0	92.4	39-133		0		

LCS		Sample ID: DLCSS1-60326-60326				Units: mg/Kg		Analysis Date: 7/7/2014 05:56 PM		
Client ID:		Run ID: GC8_140707A				SeqNo: 2839236		Prep Date: 7/7/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	161.9	5.0	200	0	81	61-109		0		
Surr: 4-Terphenyl-d14	1.719	0	2	0	85.9	39-133		0		

MS		Sample ID: 1407051-35A MS				Units: mg/Kg		Analysis Date: 7/7/2014 06:26 PM		
Client ID:		Run ID: GC8_140707A				SeqNo: 2839237		Prep Date: 7/7/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	250.3	7.9	316.4	0	79.1	48-110		0		
Surr: 4-Terphenyl-d14	3.022	0	3.164	0	95.5	39-133		0		

MSD		Sample ID: 1407051-35A MSD				Units: mg/Kg		Analysis Date: 7/7/2014 06:56 PM		
Client ID:		Run ID: GC8_140707A				SeqNo: 2839238		Prep Date: 7/7/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	246.4	8.3	332.1	0	74.2	48-110	250.3	1.6	30	
Surr: 4-Terphenyl-d14	2.712	0	3.321	0	81.7	39-133	3.022	10.8	30	

The following samples were analyzed in this batch: 1407248-01B

Client: HRL Compliance Solutions, Inc
Work Order: 1407248
Project: WPX PA 43-34 Batch 3 7.1.14

QC BATCH REPORT

Batch ID: **60339** Instrument ID **GC9** Method: **SW8015**

MBLK		Sample ID: MBLK-60339-60339				Units: µg/Kg		Analysis Date: 7/7/2014 03:09 PM		
Client ID:		Run ID: GC9_140707A				SeqNo: 2839863		Prep Date: 7/7/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	ND	2,500								
<i>Surr: Toluene-d8</i>	<i>5504</i>	<i>0</i>	<i>5000</i>	<i>0</i>	<i>110</i>	<i>50-150</i>	<i>0</i>			

LCS		Sample ID: LCS-60339-60339				Units: µg/Kg		Analysis Date: 7/7/2014 02:44 PM		
Client ID:		Run ID: GC9_140707A				SeqNo: 2839862		Prep Date: 7/7/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	382500	2,500	500000	0	76.5	70-130	0			
<i>Surr: Toluene-d8</i>	<i>4717</i>	<i>0</i>	<i>5000</i>	<i>0</i>	<i>94.3</i>	<i>50-150</i>	<i>0</i>			

MS		Sample ID: 1407242-01A MS				Units: µg/Kg		Analysis Date: 7/7/2014 04:01 PM		
Client ID:		Run ID: GC9_140707A				SeqNo: 2839865		Prep Date: 7/7/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	467500	2,500	500000	0	93.5	70-130	0			
<i>Surr: Toluene-d8</i>	<i>5501</i>	<i>0</i>	<i>5000</i>	<i>0</i>	<i>110</i>	<i>50-150</i>	<i>0</i>			

MSD		Sample ID: 1407242-01A MSD				Units: µg/Kg		Analysis Date: 7/7/2014 04:27 PM		
Client ID:		Run ID: GC9_140707A				SeqNo: 2839866		Prep Date: 7/7/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	519500	2,500	500000	0	104	70-130	467500	10.5	30	
<i>Surr: Toluene-d8</i>	<i>5041</i>	<i>0</i>	<i>5000</i>	<i>0</i>	<i>101</i>	<i>50-150</i>	<i>5501</i>	<i>8.73</i>	<i>30</i>	

The following samples were analyzed in this batch:

1407248-01A

Client: HRL Compliance Solutions, Inc
Work Order: 1407248
Project: WPX PA 43-34 Batch 3 7.1.14

QC BATCH REPORT

Batch ID: **60382** Instrument ID **HG1** Method: **SW7471**

MBLK		Sample ID: MBLK-60382-60382				Units: mg/Kg		Analysis Date: 7/8/2014 05:50 PM		
Client ID:		Run ID: HG1_140708A				SeqNo: 2840538		Prep Date: 7/8/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury ND 0.020

LCS		Sample ID: LCS-60382-60382				Units: mg/Kg		Analysis Date: 7/8/2014 05:53 PM		
Client ID:		Run ID: HG1_140708A				SeqNo: 2840539		Prep Date: 7/8/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.1728 0.020 0.1665 0 104 80-120 0

MS		Sample ID: 1407217-02BMS				Units: mg/Kg		Analysis Date: 7/8/2014 05:59 PM		
Client ID:		Run ID: HG1_140708A				SeqNo: 2840542		Prep Date: 7/8/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.1337 0.014 0.1192 0.001949 111 75-125 0

MSD		Sample ID: 1407217-02BMSD				Units: mg/Kg		Analysis Date: 7/8/2014 06:02 PM		
Client ID:		Run ID: HG1_140708A				SeqNo: 2840543		Prep Date: 7/8/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.1412 0.015 0.1224 0.001949 114 75-125 0.1337 5.47 35

The following samples were analyzed in this batch:

1407248-01B

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

Client: HRL Compliance Solutions, Inc
Work Order: 1407248
Project: WPX PA 43-34 Batch 3 7.1.14

QC BATCH REPORT

Batch ID: **60340** Instrument ID **ICPMS1** Method: **SW6020A**

Sample ID: MBLK-60340-60340				Units: mg/Kg			Analysis Date: 7/8/2014 01:26 AM			
Client ID:		Run ID: ICPMS1_140707A			SeqNo: 2839474		Prep Date: 7/7/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	ND	0.25								
Barium	0.0393	0.25								J
Cadmium	ND	0.10								
Chromium	ND	0.25								
Copper	ND	0.25								
Lead	0.003143	0.25								J
Nickel	0.04072	0.25								J
Selenium	ND	0.25								
Silver	ND	0.25								
Zinc	0.2468	0.50								J

LCS				Sample ID: LCS-60340-60340			Units: mg/Kg		Analysis Date: 7/8/2014 01:32 AM		
Client ID:			Run ID: ICPMS1_140707A			SeqNo: 2839475		Prep Date: 7/7/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Arsenic	4.5	0.25	5	0	90	80-120	0				
Barium	4.804	0.25	5	0	96.1	80-120	0				
Cadmium	4.665	0.10	5	0	93.3	80-120	0				
Chromium	4.788	0.25	5	0	95.8	80-120	0				
Copper	4.65	0.25	5	0	93	80-120	0				
Lead	4.681	0.25	5	0	93.6	80-120	0				
Nickel	4.786	0.25	5	0	95.7	80-120	0				
Selenium	4.606	0.25	5	0	92.1	80-120	0				
Silver	4.729	0.25	5	0	94.6	80-120	0				
Zinc	4.566	0.50	5	0	91.3	80-120	0				

MS				Sample ID: 1407217-02BMS			Units: mg/Kg		Analysis Date: 7/8/2014 06:31 PM		
Client ID:			Run ID: ICPMS1_140708A			SeqNo: 2840751		Prep Date: 7/7/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Arsenic	6.289	0.34	6.849	0.4185	85.7	75-125		0			
Barium	8.075	0.34	6.849	1.319	98.6	75-125		0			
Cadmium	6.323	0.14	6.849	0.0769	91.2	75-125		0			
Chromium	8.24	0.34	6.849	2.459	84.4	75-125		0			
Copper	7.329	0.34	6.849	1.563	84.2	75-125		0			
Lead	7.233	0.34	6.849	1.144	88.9	75-125		0			
Nickel	11.92	0.34	6.849	6.36	81.2	75-125		0			
Selenium	6.518	0.34	6.849	0.1757	92.6	75-125		0			
Silver	6.229	0.34	6.849	0.007971	90.8	75-125		0			
Zinc	29.84	0.68	6.849	24.96	71.2	75-125		0		S	

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

Client: HRL Compliance Solutions, Inc
Work Order: 1407248
Project: WPX PA 43-34 Batch 3 7.1.14

QC BATCH REPORT

Batch ID: **60340** Instrument ID **ICPMS1** Method: **SW6020A**

MSD		Sample ID: 1407217-02BMSD				Units: mg/Kg		Analysis Date: 7/8/2014 06:37 PM		
Client ID:		Run ID: ICPMS1_140708A				SeqNo: 2840752		Prep Date: 7/7/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	6.589	0.35	6.916	0.4185	89.2	75-125	6.289	4.65	25	
Barium	8.534	0.35	6.916	1.319	104	75-125	8.075	5.52	25	
Cadmium	6.58	0.14	6.916	0.0769	94	75-125	6.323	3.97	25	
Chromium	9.108	0.35	6.916	2.459	96.1	75-125	8.24	10	25	
Copper	7.725	0.35	6.916	1.563	89.1	75-125	7.329	5.26	25	
Lead	7.663	0.35	6.916	1.144	94.3	75-125	7.233	5.77	25	
Nickel	12.51	0.35	6.916	6.36	88.9	75-125	11.92	4.85	25	
Selenium	6.643	0.35	6.916	0.1757	93.5	75-125	6.518	1.89	25	
Silver	6.432	0.35	6.916	0.007971	92.9	75-125	6.229	3.21	25	
Zinc	29.65	0.69	6.916	24.96	67.8	75-125	29.84	0.633	25	S

The following samples were analyzed in this batch: 1407248-01B

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

Client: HRL Compliance Solutions, Inc
Work Order: 1407248
Project: WPX PA 43-34 Batch 3 7.1.14

QC BATCH REPORT

Batch ID: **60348** Instrument ID **ICPMS2** Method: **SW6020A**

DUP		Sample ID: 1407242-01CDUP				Units: mg/L		Analysis Date: 7/9/2014 03:45 PM		
Client ID:		Run ID: ICPMS2_140709A				SeqNo: 2842312		Prep Date: 7/9/2014		DF: 20
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	12.21	10	0	0	0	0-0	12.03	1.5		
Magnesium	22.04	4.0	0	0	0	0-0	23.42	6.07		
Sodium	652.8	4.0	0	0	0	0-0	680.2	4.11		

DUP		Sample ID: 1407242-01CDUP				Units: none		Analysis Date: 7/9/2014		
Client ID:		Run ID: SAR_140709A				SeqNo: 2843069		Prep Date: 7/9/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sodium Adsorption Ratio	25.8	0.010	0	0	0		26.32	2	50	

The following samples were analyzed in this batch: | 1407248-01C |

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

Client: HRL Compliance Solutions, Inc
Work Order: 1407248
Project: WPX PA 43-34 Batch 3 7.1.14

QC BATCH REPORT

Batch ID: **60325** Instrument ID **SVMS8** Method: **SW8270**

MBLK		Sample ID: SBLKS1-60325-60325				Units: µg/Kg		Analysis Date: 7/8/2014 11:51 AM		
Client ID:		Run ID: SVMS8_140708A				SeqNo: 2840501		Prep Date: 7/7/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	ND	6.7								
Acenaphthylene	ND	6.7								
Anthracene	ND	6.7								
Benzo(a)anthracene	ND	6.7								
Benzo(a)pyrene	ND	6.7								
Benzo(b)fluoranthene	ND	6.7								
Benzo(g,h,i)perylene	ND	6.7								
Benzo(k)fluoranthene	ND	6.7								
Chrysene	ND	6.7								
Dibenzo(a,h)anthracene	ND	6.7								
Fluoranthene	ND	6.7								
Fluorene	ND	6.7								
Indeno(1,2,3-cd)pyrene	ND	6.7								
Naphthalene	ND	6.7								
Pyrene	ND	6.7								
<i>Surr: 2-Fluorobiphenyl</i>	1058	0	1667	0	63.5	12-100	0			
<i>Surr: 4-Terphenyl-d14</i>	1646	0	1667	0	98.8	25-137	0			
<i>Surr: Nitrobenzene-d5</i>	1128	0	1667	0	67.7	37-107	0			

LCS		Sample ID: SLCSS1-60325-60325				Units: µg/Kg		Analysis Date: 7/8/2014 12:12 PM		
Client ID:		Run ID: SVMS8_140708A				SeqNo: 2840502		Prep Date: 7/7/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	497	6.7	666.7	0	74.5	45-110	0			
Acenaphthylene	540.7	6.7	666.7	0	81.1	45-105	0			
Anthracene	566.3	6.7	666.7	0	84.9	55-105	0			
Benzo(a)anthracene	572.7	6.7	666.7	0	85.9	50-110	0			
Benzo(a)pyrene	628.7	6.7	666.7	0	94.3	50-110	0			
Benzo(b)fluoranthene	662	6.7	666.7	0	99.3	45-115	0			
Benzo(g,h,i)perylene	432.3	6.7	666.7	0	64.8	40-125	0			
Benzo(k)fluoranthene	589.3	6.7	666.7	0	88.4	45-115	0			
Chrysene	552.3	6.7	666.7	0	82.8	55-110	0			
Dibenzo(a,h)anthracene	503	6.7	666.7	0	75.4	40-125	0			
Fluoranthene	603.3	6.7	666.7	0	90.5	55-115	0			
Fluorene	533.7	6.7	666.7	0	80	50-110	0			
Indeno(1,2,3-cd)pyrene	527	6.7	666.7	0	79	40-120	0			
Naphthalene	463.7	6.7	666.7	0	69.5	40-105	0			
Pyrene	665.7	6.7	666.7	0	99.8	45-125	0			
<i>Surr: 2-Fluorobiphenyl</i>	1138	0	1667	0	68.3	12-100	0			
<i>Surr: 4-Terphenyl-d14</i>	1789	0	1667	0	107	25-137	0			
<i>Surr: Nitrobenzene-d5</i>	1294	0	1667	0	77.6	37-107	0			

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

Client: HRL Compliance Solutions, Inc
 Work Order: 1407248
 Project: WPX PA 43-34 Batch 3 7.1.14

QC BATCH REPORT

Batch ID: 60325 Instrument ID SVMS8 Method: SW8270

MS				Sample ID: 1407221-01A MS			Units: µg/Kg		Analysis Date: 7/8/2014 03:04 PM		
Client ID:		Run ID: SVMS8_140708A			SeqNo: 2840503		Prep Date: 7/7/2014		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Acenaphthene	865.1	13	1251	0	69.1	45-110	0				
Acenaphthylene	988.9	13	1251	0	79	45-105	0				
Anthracene	983.9	13	1251	11.57	77.7	55-105	0				
Benzo(a)anthracene	990.2	13	1251	0	79.1	50-110	0				
Benzo(a)pyrene	1098	13	1251	0	87.8	50-110	0				
Benzo(b)fluoranthene	1030	13	1251	0	82.3	45-115	0				
Benzo(g,h,i)perylene	968.9	13	1251	0	77.4	40-125	0				
Benzo(k)fluoranthene	939.5	13	1251	0	75.1	45-115	0				
Chrysene	923.9	13	1251	0	73.8	55-110	0				
Dibenzo(a,h)anthracene	1135	13	1251	0	90.7	40-125	0				
Fluoranthene	946.4	13	1251	16.53	74.3	55-115	0				
Fluorene	959.5	13	1251	0	76.7	50-110	0				
Indeno(1,2,3-cd)pyrene	1205	13	1251	0	96.3	40-120	0				
Naphthalene	720.6	13	1251	0	57.6	40-105	0				
Pyrene	1136	13	1251	5.619	90.3	45-125	0				
Surr: 2-Fluorobiphenyl	2052	0	3128	0	65.6	12-100	0				
Surr: 4-Terphenyl-d14	3289	0	3128	0	105	25-137	0				
Surr: Nitrobenzene-d5	2085	0	3128	0	66.7	37-107	0				

MSD				Sample ID: 1407221-01A MSD			Units: µg/Kg		Analysis Date: 7/8/2014 03:24 PM		
Client ID:			Run ID: SVMS8_140708A			SeqNo: 2840504		Prep Date: 7/7/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Acenaphthene	874.3	13	1257	0	69.5	45-110	865.1	1.06	30		
Acenaphthylene	1003	13	1257	0	79.8	45-105	988.9	1.43	30		
Anthracene	917.7	13	1257	11.57	72.1	55-105	983.9	6.97	30		
Benzo(a)anthracene	810.8	13	1257	0	64.5	50-110	990.2	19.9	30		
Benzo(a)pyrene	893.1	13	1257	0	71	50-110	1098	20.6	30		
Benzo(b)fluoranthene	832.8	13	1257	0	66.2	45-115	1030	21.2	30		
Benzo(g,h,i)perylene	805.2	13	1257	0	64	40-125	968.9	18.5	30		
Benzo(k)fluoranthene	770	13	1257	0	61.2	45-115	939.5	19.8	30		
Chrysene	757.4	13	1257	0	60.2	55-110	923.9	19.8	30		
Dibenzo(a,h)anthracene	895.7	13	1257	0	71.2	40-125	1135	23.5	30		
Fluoranthene	803.9	13	1257	16.53	62.6	55-115	946.4	16.3	30		
Fluorene	964.2	13	1257	0	76.7	50-110	959.5	0.483	30		
Indeno(1,2,3-cd)pyrene	1021	13	1257	0	81.2	40-120	1205	16.5	30		
Naphthalene	747.3	13	1257	0	59.4	40-105	720.6	3.64	30		
Pyrene	937.8	13	1257	5.619	74.1	45-125	1136	19.1	30		
Surr: 2-Fluorobiphenyl	2086	0	3143	0	66.4	12-100	2052	1.66	40		
Surr: 4-Terphenyl-d14	3106	0	3143	0	98.8	25-137	3289	5.71	40		
Surr: Nitrobenzene-d5	2132	0	3143	0	67.8	37-107	2085	2.24	40		

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

Client: HRL Compliance Solutions, Inc
Work Order: 1407248
Project: WPX PA 43-34 Batch 3 7.1.14

QC BATCH REPORT

Batch ID: **60325** Instrument ID **SVMS8** Method: **SW8270**

The following samples were analyzed in this batch:

1407248-01B

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

Client: HRL Compliance Solutions, Inc
Work Order: 1407248
Project: WPX PA 43-34 Batch 3 7.1.14

QC BATCH REPORT

Batch ID: **60337** Instrument ID **VMS8** Method: **SW8260B**

MBLK				Sample ID: MBLK-60337-60337				Units: µg/Kg			Analysis Date: 7/7/2014 01:34 PM			
Client ID:				Run ID: VMS8_140707A				SeqNo: 2839687			Prep Date: 7/7/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual				
Benzene	ND	30												
Ethylbenzene	ND	30												
m,p-Xylene	ND	60												
o-Xylene	ND	30												
Toluene	ND	30												
Xylenes, Total	ND	90												
Surr: 1,2-Dichloroethane-d4	1041	0	1000	0	104	70-130		0						
Surr: 4-Bromofluorobenzene	981.5	0	1000	0	98.2	70-130		0						
Surr: Dibromofluoromethane	990	0	1000	0	99	70-130		0						
Surr: Toluene-d8	1002	0	1000	0	100	70-130		0						

LCS				Sample ID: LCS-60337-60337			Units: µg/Kg		Analysis Date: 7/7/2014 11:07 AM		
Client ID:		Run ID: VMS8_140707A			SeqNo: 2839686		Prep Date: 7/7/2014		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	994.5	30	1000	0	99.4	75-125	0				
Ethylbenzene	1047	30	1000	0	105	75-125	0				
m,p-Xylene	2071	60	2000	0	104	80-125	0				
o-Xylene	1023	30	1000	0	102	75-125	0				
Toluene	993	30	1000	0	99.3	70-125	0				
Xylenes, Total	3094	90	3000	0	103	75-125	0				
Surr: 1,2-Dichloroethane-d4	1042	0	1000	0	104	70-130	0				
Surr: 4-Bromofluorobenzene	993	0	1000	0	99.3	70-130	0				
Surr: Dibromofluoromethane	995	0	1000	0	99.5	70-130	0				
Surr: Toluene-d8	987	0	1000	0	98.7	70-130	0				

MS					Sample ID: 1407254-02A MS			Units: µg/Kg		Analysis Date: 7/10/2014 12:21 PM	
Client ID:			Run ID: VMS9_140709A			SeqNo: 2842522		Prep Date: 7/7/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	924.5	30	1000	16.5	90.8	75-125	0				
Ethylbenzene	785.5	30	1000	48.5	73.7	75-125	0			S	
m,p-Xylene	1595	60	2000	78	75.8	80-125	0			S	
o-Xylene	822	30	1000	0	82.2	75-125	0				
Toluene	893.5	30	1000	0	89.4	70-125	0				
Xylenes, Total	2417	90	3000	78	78	75-125	0				
Surr: 1,2-Dichloroethane-d4	1026	0	1000	0	103	70-130	0				
Surr: 4-Bromofluorobenzene	1074	0	1000	0	107	70-130	0				
Surr: Dibromofluoromethane	1030	0	1000	0	103	70-130	0				
Surr: Toluene-d8	1044	0	1000	0	104	70-130	0				

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

Client: HRL Compliance Solutions, Inc
Work Order: 1407248
Project: WPX PA 43-34 Batch 3 7.1.14

QC BATCH REPORT

Batch ID: **60337** Instrument ID **VMS8** Method: **SW8260B**

MSD				Sample ID: 1407254-02A MSD				Units: µg/Kg		Analysis Date: 7/10/2014 12:45 PM	
Client ID:			Run ID: VMS9_140709A			SeqNo: 2842523		Prep Date: 7/7/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	908	30	1000	16.5	89.2	75-125	924.5	1.8	30		
Ethylbenzene	770	30	1000	48.5	72.2	75-125	785.5	1.99	30	S	
m,p-Xylene	1574	60	2000	78	74.8	80-125	1595	1.29	30	S	
o-Xylene	804.5	30	1000	0	80.4	75-125	822	2.15	30		
Toluene	876.5	30	1000	0	87.6	70-125	893.5	1.92	30		
Xylenes, Total	2379	90	3000	78	76.7	75-125	2417	1.58	30		
Surr: 1,2-Dichloroethane-d4	1027	0	1000	0	103	70-130	1026	0.0487	30		
Surr: 4-Bromofluorobenzene	1052	0	1000	0	105	70-130	1074	2.07	30		
Surr: Dibromofluoromethane	1024	0	1000	0	102	70-130	1030	0.487	30		
Surr: Toluene-d8	1038	0	1000	0	104	70-130	1044	0.625	30		

The following samples were analyzed in this batch: 1407248-01A

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

Client: HRL Compliance Solutions, Inc
Work Order: 1407248
Project: WPX PA 43-34 Batch 3 7.1.14

QC BATCH REPORT

Batch ID: **60348** Instrument ID **WETCHEM** Method: **USDA H60 Method**

DUP		Sample ID: 1407242-01C DUP				Units: mmhos/cm @25°C		Analysis Date: 7/10/2014 10:15 AM		
Client ID:		Run ID: WETCHEM_140710A				SeqNo: 2842676		Prep Date: 7/9/2014		DF: 10
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Electrical Conductivity @ Saturation	3.91	0.050	0	0	0		3.77	3.65	50	

The following samples were analyzed in this batch:

1407248-01C

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

Client: HRL Compliance Solutions, Inc
Work Order: 1407248
Project: WPX PA 43-34 Batch 3 7.1.14

QC BATCH REPORT

Batch ID: **60366** Instrument ID **WETCHEM** Method: **SW9045D**

LCS		Sample ID: LCS-60366-60366					Units: s.u.		Analysis Date: 7/8/2014 05:01 PM		
Client ID:			Run ID: WETCHEM_140708P			SeqNo: 2840457		Prep Date: 7/8/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	

pH	3.94	0	4	0	98.5	90-110	0			
----	------	---	---	---	------	--------	---	--	--	--

DUP		Sample ID: 1407249-01B DUP					Units: s.u.		Analysis Date: 7/8/2014 05:01 PM		
Client ID:		Run ID: WETCHEM_140708P					SeqNo: 2840459		Prep Date: 7/8/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	

pH	7.83	0	0	0	0	0-0	7.89	0.763	20	
----	------	---	---	---	---	-----	------	-------	----	--

DUP		Sample ID: 1407254-09C DUP					Units: s.u.		Analysis Date: 7/8/2014 05:01 PM		
Client ID:		Run ID: WETCHEM_140708P			SeqNo: 2840469		Prep Date: 7/8/2014		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	

pH	7.08	0	0	0	0	0-0	7.17	1.26	20	
----	------	---	---	---	---	-----	------	------	----	--

The following samples were analyzed in this batch:

1407248-01B

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

Client: HRL Compliance Solutions, Inc
Work Order: 1407248
Project: WPX PA 43-34 Batch 3 7.1.14

QC BATCH REPORT

Batch ID: **60378** Instrument ID **WETCHEM** Method: **SW7196A**

MBLK		Sample ID: MBLK-60378-60378				Units: mg/Kg		Analysis Date: 7/8/2014 03:00 PM		
Client ID:		Run ID: WETCHEM_140708H				SeqNo: 2840260		Prep Date: 7/7/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent ND 0.50

LCS		Sample ID: LCS-60378-60378				Units: mg/Kg		Analysis Date: 7/8/2014 03:00 PM		
Client ID:		Run ID: WETCHEM_140708H				SeqNo: 2840261		Prep Date: 7/7/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 1.924 0.50 2 0 96.2 80-120 0

MS		Sample ID: 1407266-07B MS				Units: mg/Kg		Analysis Date: 7/8/2014 03:00 PM		
Client ID:		Run ID: WETCHEM_140708H				SeqNo: 2840275		Prep Date: 7/7/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 1.795 0.49 1.969 0 91.2 75-125 0

MS		Sample ID: 1407266-07B MSI				Units: mg/Kg		Analysis Date: 7/8/2014 03:00 PM		
Client ID:		Run ID: WETCHEM_140708H				SeqNo: 2840277		Prep Date: 7/7/2014		DF: 100
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 1112 50 1481 0 75.1 75-125 0

MSD		Sample ID: 1407266-07B MSD				Units: mg/Kg		Analysis Date: 7/8/2014 03:00 PM		
Client ID:		Run ID: WETCHEM_140708H				SeqNo: 2840276		Prep Date: 7/7/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 1.85 0.49 1.976 0 93.6 75-125 1.795 2.99 20

The following samples were analyzed in this batch:

1407248-01B

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

Client: HRL Compliance Solutions, Inc
Work Order: 1407248
Project: WPX PA 43-34 Batch 3 7.1.14

QC BATCH REPORT

Batch ID: **R144000** Instrument ID **MOIST** Method: **A2540 G**

MBLK		Sample ID: WBLKS-R144000				Units: % of sample			Analysis Date: 7/7/2014 03:40 PM		
Client ID:		Run ID: MOIST_140707D				SeqNo: 2839607			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-R144000				Units: % of sample			Analysis Date: 7/7/2014 03:40 PM		
Client ID:		Run ID: MOIST_140707D				SeqNo: 2839606			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: 14061448-03A DUP				Units: % of sample			Analysis Date: 7/7/2014 03:40 PM		
Client ID:		Run ID: MOIST_140707D				SeqNo: 2839582			Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	

Moisture 14.52 0.050 0 0 0 0-0 14.68 1.1 20 H

DUP		Sample ID: 1407266-01A DUP				Units: % of sample			Analysis Date: 7/7/2014 03:40 PM		
Client ID:		Run ID: MOIST_140707D				SeqNo: 2839602			Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	

Moisture 2.57 0.050 0 0 0 0-0 2.54 1.17 20

The following samples were analyzed in this batch:

1407248-01B

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

Sample Receipt Checklist

Client Name: **HRL**

Date/Time Received: **03-Jul-14 22:30**

Work Order: **1407248**

Received by: **KRW**

Checklist completed by Keith Wurenga
eSignature

03-Jul-14
Date

Reviewed by: Chad Whelton
eSignature

07-Jul-14
Date

Matrices: **Soil**

Carrier name: **FedEx**

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature in compliance?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Sample(s) received on ice?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Temperature(s)/Thermometer(s):	<u>2.4 C</u>		
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:	<u>7/7/2014 9:08:53 AM</u>		
Water - VOA vials have zero headspace?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input checked="" type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
pH adjusted?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
pH adjusted by:			

Login Notes:

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:

Comments:

CorrectiveAction:

From: (816) 399-8070
 Sample Receiving
 ALS Laboratory Group
 3352 128th Avenue

Holland, MI 49424

Origin ID: GRRR



J14101 402070206

BILL SENDER

SHIP TO: (816) 399-8070
 sample receiving
 ALS Laboratory Group
 3352 128TH AVE

HOLLAND, MI 49424

Ship Date: 02 JUL 14
 ActWgt: 79.91 LB
 CAD: 2264840/NET3490

Dims: 14 X 26 X 15 IN

Delivery Address Bar Code



Ref # 070214-1
 Invoice #
 PO # Parachute
 Dept #

3 of 3

THU - 03 JUL 10:30A
 PRIORITY OVERNIGHT

MPB# 7704 9894 0736

0263

Mstr# 7704 9894 0986

0261

68 GRRR

49424

MI-US

GRR



52202ED4F720

After printing this label:

1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.

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



04-Aug-2014

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

Re: **WPX PA 43-34 Batch 4 7.28.14**

Work Order: **14071464**

Dear Mark,

ALS Environmental received 1 sample on 29-Jul-2014 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 23.

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

Sincerely,

A handwritten signature in cursive script that reads "Ann Preston".

Electronically approved by: Ann Preston

Ann Preston
Project Manager



Certificate No: MN 532786

Report of Laboratory Analysis

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

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

Environmental 

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

Client: HRL Compliance Solutions, Inc
Project: WPX PA 43-34 Batch 4 7.28.14
Work Order: 14071464

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>
14071464-01	Batch 4	Soil		7/28/2014 14:15	7/29/2014 09:00	<input type="checkbox"/>

ALS Group USA, Corp

Date: 04-Aug-14

Client: HRL Compliance Solutions, Inc
Project: WPX PA 43-34 Batch 4 7.28.14
Work Order: 14071464

Case Narrative

Batch 61131 sample 14071464-01 reporting limits for Metals were elevated due to dilution for high concentrations of non-target analytes. The MS/MSD data for Metals is not related to this project's samples. No data requires qualification.

<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

<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: 04-Aug-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 43-34 Batch 4 7.28.14

Sample ID: Batch 4

Collection Date: 7/28/2014 02:15 PM

Work Order: 14071464

Lab ID: 14071464-01

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
DRO (C10-C28)	51		SW8015M		Prep: SW3541 / 7/30/14	Analyst: IT
<i>Surr: 4-Terphenyl-d14</i>	<i>84.1</i>		<i>39-133</i>	<i>%REC</i>	<i>1</i>	<i>8/1/2014 12:50 PM</i>
GASOLINE RANGE ORGANICS BY GC-FID						
GRO (C6-C10)	ND		SW8015		Prep: SW5035 / 7/29/14	Analyst: IT
<i>Surr: Toluene-d8</i>	<i>114</i>		<i>50-150</i>	<i>%REC</i>	<i>1</i>	<i>7/29/2014 09:14 PM</i>
MERCURY BY CVAA						
Mercury	0.026		SW7471		Prep: SW7471 / 7/30/14	Analyst: LR
			0.015	mg/Kg-dry	1	7/31/2014 11:26 AM
METALS BY ICP-MS						
Arsenic	8.1		SW6020A		Prep: SW3050B / 7/30/14	Analyst: ML
Barium	550		2.2	mg/Kg-dry	5	7/31/2014 01:24 AM
Cadmium	0.93		2.2	mg/Kg-dry	5	7/31/2014 01:24 AM
Chromium	11		0.88	mg/Kg-dry	5	7/31/2014 01:24 AM
Copper	11		2.2	mg/Kg-dry	5	7/31/2014 01:24 AM
Lead	14		2.2	mg/Kg-dry	5	7/31/2014 01:24 AM
Nickel	14		2.2	mg/Kg-dry	5	7/31/2014 01:24 AM
Selenium	ND		2.2	mg/Kg-dry	5	7/31/2014 01:24 AM
Silver	ND		2.2	mg/Kg-dry	5	7/31/2014 01:24 AM
Zinc	49		4.4	mg/Kg-dry	5	7/31/2014 01:24 AM
SOLUBLE CATIONS FOR SAR						
			SW6020A		Prep: USDA Method 20B / 8/1/14	Analyst: RH
Calcium	58		10	mg/L	20	8/2/2014 07:16 AM
Magnesium	55		4.0	mg/L	20	8/2/2014 07:16 AM
Sodium	1,800		4.0	mg/L	20	8/2/2014 07:16 AM
SODIUM ADSORPTION RATIO						
			USDA H60 METHOD		Prep: USDA Method 20B / 8/1/14	Analyst: RH
Sodium Adsorption Ratio	40		0.010	none	1	8/1/2014
SEMI-VOLATILE ORGANIC COMPOUNDS						
			SW846 8270D		Prep: SW3541 / 7/30/14	Analyst: RM
Acenaphthene	ND		7.3	µg/Kg-dry	1	7/30/2014 11:39 PM
Acenaphthylene	ND		7.3	µg/Kg-dry	1	7/30/2014 11:39 PM
Anthracene	ND		7.3	µg/Kg-dry	1	7/30/2014 11:39 PM
Benzo(a)anthracene	ND		7.3	µg/Kg-dry	1	7/30/2014 11:39 PM
Benzo(a)pyrene	ND		7.3	µg/Kg-dry	1	7/30/2014 11:39 PM
Benzo(b)fluoranthene	ND		7.3	µg/Kg-dry	1	7/30/2014 11:39 PM
Benzo(g,h,i)perylene	ND		7.3	µg/Kg-dry	1	7/30/2014 11:39 PM
Benzo(k)fluoranthene	ND		7.3	µg/Kg-dry	1	7/30/2014 11:39 PM
Chrysene	ND		7.3	µg/Kg-dry	1	7/30/2014 11:39 PM

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

ALS Group USA, Corp

Date: 04-Aug-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 43-34 Batch 4 7.28.14

Sample ID: Batch 4

Collection Date: 7/28/2014 02:15 PM

Work Order: 14071464

Lab ID: 14071464-01

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Dibenzo(a,h)anthracene	ND		7.3	µg/Kg-dry	1	7/30/2014 11:39 PM
Fluoranthene	ND		7.3	µg/Kg-dry	1	7/30/2014 11:39 PM
Fluorene	ND		7.3	µg/Kg-dry	1	7/30/2014 11:39 PM
Indeno(1,2,3-cd)pyrene	ND		7.3	µg/Kg-dry	1	7/30/2014 11:39 PM
Naphthalene	ND		7.3	µg/Kg-dry	1	7/30/2014 11:39 PM
Pyrene	8.1		7.3	µg/Kg-dry	1	7/30/2014 11:39 PM
Surr: 2-Fluorobiphenyl	65.5		12-100	%REC	1	7/30/2014 11:39 PM
Surr: 4-Terphenyl-d14	116		25-137	%REC	1	7/30/2014 11:39 PM
Surr: Nitrobenzene-d5	56.3		37-107	%REC	1	7/30/2014 11:39 PM
VOLATILE ORGANIC COMPOUNDS			SW8260B	Prep: SW5035 / 7/29/14		Analyst: RS
Benzene	ND		34	µg/Kg-dry	1	7/30/2014 12:06 PM
Ethylbenzene	ND		34	µg/Kg-dry	1	7/30/2014 12:06 PM
m,p-Xylene	ND		68	µg/Kg-dry	1	7/30/2014 12:06 PM
o-Xylene	ND		34	µg/Kg-dry	1	7/30/2014 12:06 PM
Toluene	ND		34	µg/Kg-dry	1	7/30/2014 12:06 PM
Xylenes, Total	ND		100	µg/Kg-dry	1	7/30/2014 12:06 PM
Surr: 1,2-Dichloroethane-d4	103		70-130	%REC	1	7/30/2014 12:06 PM
Surr: 4-Bromofluorobenzene	95.8		70-130	%REC	1	7/30/2014 12:06 PM
Surr: Dibromofluoromethane	98.2		70-130	%REC	1	7/30/2014 12:06 PM
Surr: Toluene-d8	103		70-130	%REC	1	7/30/2014 12:06 PM
ELECTRICAL CONDUCTIVITY (SAR)			USDA H60 METHOD	Prep: USDA Method 20B / 8/1/14		Analyst: JB
Electrical Conductivity @ Saturation	7.3		0.12	mmhos/cm @25	25	8/1/2014 04:00 PM
CHROMIUM, TRIVALENT			CALCULATION			Analyst: EE
Chromium, Trivalent	10		0.57	mg/Kg-dry	1	7/31/2014 04:15 PM
CHROMIUM, HEXAVALENT			SW7196A	Prep: SW3060A / 7/30/14		Analyst: EE
Chromium, Hexavalent	ND		0.54	mg/Kg-dry	1	7/31/2014 03:00 PM
MOISTURE			A2540 G			Analyst: TM
Moisture	12		0.050	% of sample	1	7/30/2014 10:05 AM
PH			SW9045D	Prep: EXTRACT / 7/31/14		Analyst: TM
pH	10		s.u.		1	7/31/2014 02:00 PM

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

Client: HRL Compliance Solutions, Inc
Work Order: 14071464
Project: WPX PA 43-34 Batch 4 7.28.14

QC BATCH REPORT

Batch ID: **61115** Instrument ID **GC8** Method: **SW8015M**

MBLK		Sample ID: DBLKS1-61115-61115				Units: mg/Kg		Analysis Date: 8/1/2014 10:19 AM		
Client ID:		Run ID: GC8_140801A				SeqNo: 2873267		Prep Date: 7/30/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	ND	5.0								
Surr: 4-Terphenyl-d14	2.152	0	2	0	108	39-133	0			

LCS		Sample ID: DLCSS1-61115-61115				Units: mg/Kg		Analysis Date: 8/1/2014 10:49 AM		
Client ID:		Run ID: GC8_140801A				SeqNo: 2873268		Prep Date: 7/30/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	189.2	5.0	200	0	94.6	61-109	0			
Surr: 4-Terphenyl-d14	1.816	0	2	0	90.8	39-133	0			

MS		Sample ID: 14071463-01B MS				Units: mg/Kg		Analysis Date: 8/1/2014 11:19 AM		
Client ID:		Run ID: GC8_140801A				SeqNo: 2873269		Prep Date: 7/30/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	353.9	8.3	331.1	92.6	78.9	48-110	0			
Surr: 4-Terphenyl-d14	3.048	0	3.311	0	92.1	39-133	0			

MSD		Sample ID: 14071463-01B MSD				Units: mg/Kg		Analysis Date: 8/1/2014 11:50 AM		
Client ID:		Run ID: GC8_140801A				SeqNo: 2873270		Prep Date: 7/30/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	329.3	7.8	313.8	92.6	75.4	48-110	353.9	7.2	30	
Surr: 4-Terphenyl-d14	2.931	0	3.138	0	93.4	39-133	3.048	3.93	30	

The following samples were analyzed in this batch: | 14071464-01B |

Client: HRL Compliance Solutions, Inc
 Work Order: 14071464
 Project: WPX PA 43-34 Batch 4 7.28.14

QC BATCH REPORT

Batch ID: **61107** Instrument ID **GC9** Method: **SW8015**

MBLK		Sample ID: MBLK-61107-61107				Units: µg/Kg		Analysis Date: 7/29/2014 08:23 PM		
Client ID:		Run ID: GC9_140729A				SeqNo: 2871883		Prep Date: 7/29/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	ND	2,500								
Surr: Toluene-d8	4548	0	5000	0	91	50-150	0			

LCS		Sample ID: LCS-61107-61107				Units: µg/Kg		Analysis Date: 7/29/2014 07:57 PM		
Client ID:		Run ID: GC9_140729A				SeqNo: 2871882		Prep Date: 7/29/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	511200	2,500	500000	0	102	70-130	0			
Surr: Toluene-d8	4302	0	5000	0	86	50-150	0			

MS		Sample ID: 14071463-01A MS				Units: µg/Kg		Analysis Date: 7/29/2014 09:39 PM		
Client ID:		Run ID: GC9_140729A				SeqNo: 2871886		Prep Date: 7/29/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	616800	2,500	500000	0	123	70-130	0			
Surr: Toluene-d8	5166	0	5000	0	103	50-150	0			

MSD		Sample ID: 14071463-01A MSD				Units: µg/Kg		Analysis Date: 7/29/2014 10:05 PM		
Client ID:		Run ID: GC9_140729A				SeqNo: 2871887		Prep Date: 7/29/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	542400	2,500	500000	0	108	70-130	616800	12.8	30	
Surr: Toluene-d8	4869	0	5000	0	97.4	50-150	5166	5.92	30	

The following samples were analyzed in this batch:

14071464-01A

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

Client: HRL Compliance Solutions, Inc
Work Order: 14071464
Project: WPX PA 43-34 Batch 4 7.28.14

QC BATCH REPORT

Batch ID: **61135** Instrument ID **HG1** Method: **SW7471**

MBLK		Sample ID: MBLK-61135-61135				Units: mg/Kg		Analysis Date: 7/30/2014 03:52 PM		
Client ID:		Run ID: HG1_140730A				SeqNo: 2869669		Prep Date: 7/30/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury ND 0.020

LCS		Sample ID: LCS-61135-61135				Units: mg/Kg		Analysis Date: 7/30/2014 03:54 PM		
Client ID:		Run ID: HG1_140730A				SeqNo: 2869670		Prep Date: 7/30/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.1833 0.020 0.1665 0 110 80-120 0

MS		Sample ID: 1407987-10CMS				Units: mg/Kg		Analysis Date: 7/30/2014 04:19 PM		
Client ID:		Run ID: HG1_140730A				SeqNo: 2869724		Prep Date: 7/30/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.1528 0.014 0.1194 0.01122 119 75-125 0

MSD		Sample ID: 1407987-10CMSD				Units: mg/Kg		Analysis Date: 7/30/2014 04:21 PM		
Client ID:		Run ID: HG1_140730A				SeqNo: 2869725		Prep Date: 7/30/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.1437 0.014 0.1142 0.01122 116 75-125 0.1528 6.17 35

The following samples were analyzed in this batch:

14071464-01B

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

Client: HRL Compliance Solutions, Inc
Work Order: 14071464
Project: WPX PA 43-34 Batch 4 7.28.14

QC BATCH REPORT

Batch ID: **61131** Instrument ID **ICPMS1** Method: **SW6020A**

MBLK		Sample ID: MBLK-61131-61131				Units: mg/Kg		Analysis Date: 7/30/2014 09:37 PM		
Client ID:		Run ID: ICPMS1_140730A				SeqNo: 2870301		Prep Date: 7/30/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	ND	0.25								
Barium	ND	0.25								
Cadmium	ND	0.10								
Chromium	ND	0.25								
Copper	ND	0.25								
Lead	ND	0.25								
Nickel	ND	0.25								
Selenium	ND	0.25								
Silver	ND	0.25								
Zinc	0.3258	0.50								J

LCS		Sample ID: LCS-61131-61131				Units: mg/Kg		Analysis Date: 7/30/2014 09:44 PM		
Client ID:		Run ID: ICPMS1_140730A				SeqNo: 2870302		Prep Date: 7/30/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	4.414	0.25	5	0	88.3	80-120	0			
Barium	4.534	0.25	5	0	90.7	80-120	0			
Cadmium	4.506	0.10	5	0	90.1	80-120	0			
Chromium	4.572	0.25	5	0	91.4	80-120	0			
Copper	4.419	0.25	5	0	88.4	80-120	0			
Nickel	4.59	0.25	5	0	91.8	80-120	0			
Selenium	4.409	0.25	5	0	88.2	80-120	0			
Silver	4.52	0.25	5	0	90.4	80-120	0			
Zinc	4.372	0.50	5	0	87.4	80-120	0			

LCS		Sample ID: LCS-61131-61131				Units: mg/Kg		Analysis Date: 7/31/2014 12:50 PM		
Client ID:		Run ID: ICPMS1_140731A				SeqNo: 2870881		Prep Date: 7/30/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Lead	4.592	0.25	5	0	91.8	80-120	0			

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

Client: HRL Compliance Solutions, Inc
Work Order: 14071464
Project: WPX PA 43-34 Batch 4 7.28.14

QC BATCH REPORT

Batch ID: **61131** Instrument ID **ICPMS1** Method: **SW6020A**

MS				Sample ID: 14071429-01AMS			Units:mg/Kg		Analysis Date: 7/31/2014 12:46 AM		
Client ID:			Run ID: ICPMS1_140730A			SeqNo:2870329		Prep Date: 7/30/2014		DF: 5	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Arsenic	32.38	1.7	6.897	25.72	96.6	75-125	0				
Barium	43.83	1.7	6.897	34.91	129	75-125	0			SO	
Cadmium	6.876	0.69	6.897	0.2042	96.7	75-125	0				
Chromium	12.95	1.7	6.897	4.201	127	75-125	0			S	
Copper	17.82	1.7	6.897	10.8	102	75-125	0				
Lead	200.5	1.7	6.897	230.2	-432	75-125	0			SO	
Nickel	11.07	1.7	6.897	3.033	117	75-125	0				
Selenium	6.79	1.7	6.897	0.4444	92	75-125	0				
Silver	6.479	1.7	6.897	0.02885	93.5	75-125	0				
Zinc	35.17	3.4	6.897	25.58	139	75-125	0			S	

MSD				Sample ID: 14071429-01AMSD			Units:mg/Kg		Analysis Date: 7/31/2014 12:54 AM		
Client ID:			Run ID: ICPMS1_140730A			SeqNo:2870330		Prep Date: 7/30/2014		DF: 5	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Arsenic	30.55	1.7	6.964	25.72	69.4	75-125	32.38	5.82	25	S	
Barium	43.45	1.7	6.964	34.91	123	75-125	43.83	0.856	25	O	
Cadmium	6.985	0.70	6.964	0.2042	97.4	75-125	6.876	1.57	25		
Chromium	12.39	1.7	6.964	4.201	118	75-125	12.95	4.47	25		
Copper	17.63	1.7	6.964	10.8	98.1	75-125	17.82	1.08	25		
Lead	214.8	1.7	6.964	230.2	-222	75-125	200.5	6.89	25	SO	
Nickel	10.37	1.7	6.964	3.033	105	75-125	11.07	6.56	25		
Selenium	7.302	1.7	6.964	0.4444	98.5	75-125	6.79	7.27	25		
Silver	6.678	1.7	6.964	0.02885	95.5	75-125	6.479	3.02	25		
Zinc	34.76	3.5	6.964	25.58	132	75-125	35.17	1.19	25	S	

The following samples were analyzed in this batch:

14071464-01B

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

Client: HRL Compliance Solutions, Inc
Work Order: 14071464
Project: WPX PA 43-34 Batch 4 7.28.14

QC BATCH REPORT

Batch ID: **61150** Instrument ID **ICPMS1** Method: **SW6020A**

DUP		Sample ID: 14071463-01CDUP				Units: mg/L		Analysis Date: 8/2/2014 07:10 AM		
Client ID:		Run ID: ICPMS1_140801A				SeqNo: 2874416		Prep Date: 8/1/2014		DF: 20
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	38.42	10	0	0	0	0-0	41.12	6.79		
Magnesium	15.37	4.0	0	0	0	0-0	13.11	15.8		
Sodium	673	4.0	0	0	0	0-0	741.8	9.73		

DUP		Sample ID: 14071463-01CDUP				Units: none		Analysis Date: 8/1/2014		
Client ID:		Run ID: SAR_140801A				SeqNo: 2874642		Prep Date: 8/1/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sodium Adsorption Ratio	23.21	0.010	0	0	0		25.79	10.5	50	

The following samples were analyzed in this batch:

14071464-01C

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

Client: HRL Compliance Solutions, Inc
Work Order: 14071464
Project: WPX PA 43-34 Batch 4 7.28.14

QC BATCH REPORT

Batch ID: **61116** Instrument ID **SVMS6** Method: **SW846 8270D**

MBLK		Sample ID: SBLKS1-61116-61116				Units: µg/Kg		Analysis Date: 7/30/2014 07:05 PM		
Client ID:		Run ID: SVMS6_140730A				SeqNo: 2871142		Prep Date: 7/30/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	ND	6.7								
Acenaphthylene	ND	6.7								
Anthracene	ND	6.7								
Benzo(a)anthracene	ND	6.7								
Benzo(a)pyrene	ND	6.7								
Benzo(b)fluoranthene	ND	6.7								
Benzo(g,h,i)perylene	ND	6.7								
Benzo(k)fluoranthene	ND	6.7								
Chrysene	ND	6.7								
Dibenzo(a,h)anthracene	ND	6.7								
Fluoranthene	ND	6.7								
Fluorene	ND	6.7								
Indeno(1,2,3-cd)pyrene	ND	6.7								
Naphthalene	ND	6.7								
Pyrene	ND	6.7								
<i>Surr: 2-Fluorobiphenyl</i>	1095	0	1667	0	65.7	12-100	0			
<i>Surr: 4-Terphenyl-d14</i>	1890	0	1667	0	113	25-137	0			
<i>Surr: Nitrobenzene-d5</i>	981.3	0	1667	0	58.9	37-107	0			

LCS		Sample ID: SLCSS1-61116-61116				Units: µg/Kg		Analysis Date: 7/30/2014 07:26 PM		
Client ID:		Run ID: SVMS6_140730A				SeqNo: 2871143		Prep Date: 7/30/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	502	6.7	666.7	0	75.3	45-110	0			
Acenaphthylene	529.7	6.7	666.7	0	79.4	45-105	0			
Anthracene	565.7	6.7	666.7	0	84.8	55-105	0			
Benzo(a)anthracene	571.7	6.7	666.7	0	85.7	50-110	0			
Benzo(a)pyrene	642.7	6.7	666.7	0	96.4	50-110	0			
Benzo(b)fluoranthene	631	6.7	666.7	0	94.6	45-115	0			
Benzo(g,h,i)perylene	551.7	6.7	666.7	0	82.7	40-125	0			
Benzo(k)fluoranthene	659	6.7	666.7	0	98.8	45-115	0			
Chrysene	617.7	6.7	666.7	0	92.6	55-110	0			
Dibenzo(a,h)anthracene	673	6.7	666.7	0	101	40-125	0			
Fluoranthene	605	6.7	666.7	0	90.7	55-115	0			
Fluorene	535	6.7	666.7	0	80.2	50-110	0			
Indeno(1,2,3-cd)pyrene	547	6.7	666.7	0	82	40-120	0			
Naphthalene	489	6.7	666.7	0	73.3	40-105	0			
Pyrene	616.7	6.7	666.7	0	92.5	45-125	0			
<i>Surr: 2-Fluorobiphenyl</i>	1258	0	1667	0	75.5	12-100	0			
<i>Surr: 4-Terphenyl-d14</i>	1733	0	1667	0	104	25-137	0			
<i>Surr: Nitrobenzene-d5</i>	1158	0	1667	0	69.5	37-107	0			

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

Client: HRL Compliance Solutions, Inc
Work Order: 14071464
Project: WPX PA 43-34 Batch 4 7.28.14

QC BATCH REPORT

Batch ID: **61116** Instrument ID **SVMS6** Method: **SW846 8270D**

MS				Sample ID: 14071414-07B MS			Units: µg/Kg		Analysis Date: 7/30/2014 08:56 PM	
Client ID:		Run ID: SVMS6_140730A			SeqNo: 2871146		Prep Date: 7/30/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	1026	13	1292	0	79.4	45-110	0			
Acenaphthylene	1071	13	1292	0	82.9	45-105	0			
Anthracene	1175	13	1292	0	90.9	55-105	0			
Benzo(a)anthracene	1115	13	1292	13.37	85.3	50-110	0			
Benzo(a)pyrene	1266	13	1292	0	98	50-110	0			
Benzo(b)fluoranthene	1248	13	1292	0	96.6	45-115	0			
Benzo(g,h,i)perylene	1298	13	1292	0	100	40-125	0			
Benzo(k)fluoranthene	1208	13	1292	0	93.5	45-115	0			
Chrysene	1152	13	1292	0	89.1	55-110	0			
Dibenzo(a,h)anthracene	1297	13	1292	0	100	40-125	0			
Fluoranthene	1112	13	1292	0	86.1	55-115	0			
Fluorene	1025	13	1292	0	79.3	50-110	0			
Indeno(1,2,3-cd)pyrene	1259	13	1292	0	97.4	40-120	0			
Naphthalene	960.3	13	1292	0	74.3	40-105	0			
Pyrene	1128	13	1292	0	87.3	45-125	0			
Surr: 2-Fluorobiphenyl	2650	0	3229	0	82.1	12-100	0			
Surr: 4-Terphenyl-d14	3018	0	3229	0	93.5	25-137	0			
Surr: Nitrobenzene-d5	2326	0	3229	0	72	37-107	0			

MSD				Sample ID: 14071414-07B MSD			Units: µg/Kg		Analysis Date: 7/30/2014 09:16 PM	
Client ID:		Run ID: SVMS6_140730A			SeqNo: 2871147		Prep Date: 7/30/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	1016	13	1280	0	79.4	45-110	1026	1	30	
Acenaphthylene	1037	13	1280	0	81	45-105	1071	3.2	30	
Anthracene	1191	13	1280	0	93	55-105	1175	1.34	30	
Benzo(a)anthracene	1138	13	1280	13.37	87.9	50-110	1115	1.97	30	
Benzo(a)pyrene	1302	13	1280	0	102	50-110	1266	2.77	30	
Benzo(b)fluoranthene	1248	13	1280	0	97.5	45-115	1248	0.0401	30	
Benzo(g,h,i)perylene	1414	13	1280	0	110	40-125	1298	8.54	30	
Benzo(k)fluoranthene	1251	13	1280	0	97.8	45-115	1208	3.5	30	
Chrysene	1186	13	1280	0	92.7	55-110	1152	2.97	30	
Dibenzo(a,h)anthracene	1386	13	1280	0	108	40-125	1297	6.58	30	
Fluoranthene	1180	13	1280	0	92.2	55-115	1112	5.96	30	
Fluorene	1040	13	1280	0	81.2	50-110	1025	1.43	30	
Indeno(1,2,3-cd)pyrene	1342	13	1280	0	105	40-120	1259	6.38	30	
Naphthalene	895.7	13	1280	0	70	40-105	960.3	6.96	30	
Pyrene	1145	13	1280	0	89.5	45-125	1128	1.49	30	
Surr: 2-Fluorobiphenyl	2485	0	3199	0	77.7	12-100	2650	6.45	40	
Surr: 4-Terphenyl-d14	3125	0	3199	0	97.7	25-137	3018	3.5	40	
Surr: Nitrobenzene-d5	2158	0	3199	0	67.5	37-107	2326	7.5	40	

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

Client: HRL Compliance Solutions, Inc
Work Order: 14071464
Project: WPX PA 43-34 Batch 4 7.28.14

QC BATCH REPORT

Batch ID: **61116** Instrument ID **SVMS6** Method: **SW846 8270D**

The following samples were analyzed in this batch:

14071464-01B

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

Client: HRL Compliance Solutions, Inc
Work Order: 14071464
Project: WPX PA 43-34 Batch 4 7.28.14

QC BATCH REPORT

Batch ID: **61088** Instrument ID **VMS5** Method: **SW8260B**

MBLK		Sample ID: MBLK-61088-61088				Units: µg/Kg		Analysis Date: 7/29/2014 03:46 PM		
Client ID:		Run ID: VMS5_140729A				SeqNo: 2868536		Prep Date: 7/29/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	30								
Ethylbenzene	ND	30								
m,p-Xylene	ND	60								
o-Xylene	ND	30								
Toluene	ND	30								
Xylenes, Total	ND	90								
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>1038</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>104</i>	<i>70-130</i>	<i>0</i>			
<i>Surr: 4-Bromofluorobenzene</i>	<i>960</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>96</i>	<i>70-130</i>	<i>0</i>			
<i>Surr: Dibromofluoromethane</i>	<i>1020</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>102</i>	<i>70-130</i>	<i>0</i>			
<i>Surr: Toluene-d8</i>	<i>1034</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>103</i>	<i>70-130</i>	<i>0</i>			

LCS		Sample ID: LCS-61088-61088				Units: µg/Kg		Analysis Date: 7/29/2014 02:30 PM		
Client ID:		Run ID: VMS5_140729A				SeqNo: 2868535		Prep Date: 7/29/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	929	30	1000	0	92.9	75-125	0			
Ethylbenzene	1002	30	1000	0	100	75-125	0			
m,p-Xylene	2032	60	2000	0	102	80-125	0			
o-Xylene	1012	30	1000	0	101	75-125	0			
Toluene	969.5	30	1000	0	97	70-125	0			
Xylenes, Total	3044	90	3000	0	101	75-125	0			
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>999.5</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>100</i>	<i>70-130</i>	<i>0</i>			
<i>Surr: 4-Bromofluorobenzene</i>	<i>992.5</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>99.2</i>	<i>70-130</i>	<i>0</i>			
<i>Surr: Dibromofluoromethane</i>	<i>1016</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>102</i>	<i>70-130</i>	<i>0</i>			
<i>Surr: Toluene-d8</i>	<i>1047</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>105</i>	<i>70-130</i>	<i>0</i>			

The following samples were analyzed in this batch:

14071464-01A

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

Client: HRL Compliance Solutions, Inc
Work Order: 14071464
Project: WPX PA 43-34 Batch 4 7.28.14

QC BATCH REPORT

Batch ID: **61150** Instrument ID **WETCHEM** Method: **USDA H60 Method**

DUP		Sample ID: 14071463-01C DUP				Units: mmhos/cm @25°C		Analysis Date: 8/1/2014 04:00 PM		
Client ID:		Run ID: WETCHEM_140801Q				SeqNo: 2873510		Prep Date: 8/1/2014		DF: 10
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Electrical Conductivity @ Saturation	4.4	0.050	0	0	0		4.38	0.456	50	

The following samples were analyzed in this batch:

14071464-01C

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

Client: HRL Compliance Solutions, Inc
Work Order: 14071464
Project: WPX PA 43-34 Batch 4 7.28.14

QC BATCH REPORT

Batch ID: **61165** Instrument ID **WETCHEM** Method: **SW9045D**

LCS					Sample ID: LCS-61165-61165					Units:s.u.			Analysis Date: 7/31/2014 02:00 PM				
Client ID:					Run ID: WETCHEM_140731D					SeqNo:2870767			Prep Date: 7/31/2014			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				

DUP					Sample ID: 14071366-02A DUP					Units:s.u.			Analysis Date: 7/31/2014 02:00 PM				
Client ID:					Run ID: WETCHEM_140731D					SeqNo:2870769			Prep Date: 7/31/2014			DF: 1	
Analyte					Result		PQL	SPK Val	SPK Ref Value	%REC		Control Limit	RPD Ref Value		%RPD	RPD Limit	Qual
pH					8.74		0	0	0	0		0-0	8.78		0.457	20	

DUP				Sample ID: 14071562-01B DUP				Units: s.u.		Analysis Date: 7/31/2014 02:00 PM													
Client ID:				Run ID: WETCHEM_140731D				SeqNo: 2870789		Prep Date: 7/31/2014		DF: 1											
Analyte				Result		PQL		SPK Val		SPK Ref Value		%REC		Control Limit		RPD Ref Value		%RPD		RPD Limit		Qual	
pH				7.39		0		0		0		0		0-0		7.46		0.943		20			

The following samples were analyzed in this batch:

14071464-01B

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

Client: HRL Compliance Solutions, Inc
Work Order: 14071464
Project: WPX PA 43-34 Batch 4 7.28.14

QC BATCH REPORT

Batch ID: **61187** Instrument ID **WETCHEM** Method: **SW7196A**

MBLK		Sample ID: MBLK-61187-61187				Units: mg/Kg		Analysis Date: 7/31/2014 03:00 PM		
Client ID:		Run ID: WETCHEM_140731I				SeqNo: 2871308		Prep Date: 7/30/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent ND 0.50

LCS		Sample ID: LCS-61187-61187				Units: mg/Kg		Analysis Date: 7/31/2014 03:00 PM		
Client ID:		Run ID: WETCHEM_140731I				SeqNo: 2871309		Prep Date: 7/30/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 1.868 0.50 2 0 93.4 80-120 0

MS		Sample ID: 14071488-02B MS				Units: mg/Kg		Analysis Date: 7/31/2014 03:00 PM		
Client ID:		Run ID: WETCHEM_140731I				SeqNo: 2871318		Prep Date: 7/30/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 1.912 0.50 1.992 0.1548 88.2 75-125 0

MS		Sample ID: 14071488-02B MS High				Units: mg/Kg		Analysis Date: 7/31/2014 03:00 PM		
Client ID:		Run ID: WETCHEM_140731I				SeqNo: 2871319		Prep Date: 7/30/2014		DF: 5
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 39.6 2.5 40 0.1548 98.6 75-125 0

MS		Sample ID: 14071488-02B MSI				Units: mg/Kg		Analysis Date: 7/31/2014 03:00 PM		
Client ID:		Run ID: WETCHEM_140731I				SeqNo: 2871321		Prep Date: 7/30/2014		DF: 100
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 1321 50 1437 0.1548 92 75-125 0

MSD		Sample ID: 14071488-02B MSD				Units: mg/Kg		Analysis Date: 7/31/2014 03:00 PM		
Client ID:		Run ID: WETCHEM_140731I				SeqNo: 2871320		Prep Date: 7/30/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 2.254 0.50 1.984 0.1548 106 75-125 1.912 16.4 20

The following samples were analyzed in this batch:

14071464-01B

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

Client: HRL Compliance Solutions, Inc
Work Order: 14071464
Project: WPX PA 43-34 Batch 4 7.28.14

QC BATCH REPORT

Batch ID: **R145437** Instrument ID **MOIST** Method: **A2540 G**

MBLK		Sample ID: WBLKS-R145437				Units: % of sample		Analysis Date: 7/30/2014 10:05 AM		
Client ID:		Run ID: MOIST_140730A				SeqNo: 2870476		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-R145437				Units: % of sample		Analysis Date: 7/30/2014 10:05 AM		
Client ID:		Run ID: MOIST_140730A				SeqNo: 2870475		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: 14071463-01B DUP				Units: % of sample		Analysis Date: 7/30/2014 10:05 AM		
Client ID:		Run ID: MOIST_140730A				SeqNo: 2870466		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 11.28 0.050 0 0 0 0-0 11.41 1.15 20

DUP		Sample ID: 14071464-01B DUP				Units: % of sample		Analysis Date: 7/30/2014 10:05 AM		
Client ID: Batch 4		Run ID: MOIST_140730A				SeqNo: 2870468		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 12 0.050 0 0 0 0-0 11.57 3.65 20

The following samples were analyzed in this batch:

14071464-01B

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



ALS Laboratory Group

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

Chain-of-Custody

Form 282r8

WORKORDER #

14071463

PAGE

1 of 1

DISPOSAL

By Lab or Return to Client

PROJECT NAME

WPX SR 311-7 Batch 3

SAMPLER

Reed Wold

SITE ID

SR 311-7

DATE

7/28/14

TURNAROUND

3 Day

PROJECT No.

EDD FORMAT

PURCHASE ORDER

COMPANY NAME

HRL Compliance

BILL TO COMPANY

WPX

SEND REPORT TO

Mark Mumby

INVOICE ATTN TO

Karolina Blaney

ADDRESS

2385 F 1/2 Rd

ADDRESS

1058 Co Rd 215

CITY / STATE / ZIP

Grand Junction, CO 81506

CITY / STATE / ZIP

Parachute CO 81635

PHONE

970-243-3271

PHONE

970-683-2295

FAX

970-243-3280

FAX

E-MAIL

mmumby@hrlcomp.com
rwold@hrlcomp.com

E-MAIL

Karolina.blaney@wpxenenergy.com

Lab ID

Field ID

Matrix

Sample Date

Sample Time

Bottles

Pres.

QC

1

Batch 3

SO

7/28/14 1:40

3

8

X X X

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

For metals or anions, please detail analytes below.

Comments:

4,4'c

QC PACKAGE (check below)

X LEVEL II (Standard QC)

LEVEL III (Std QC + forms)

LEVEL IV (Std QC + forms + raw data)

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

SIGNATURE

PRINTED NAME

DATE

TIME

RELINQUISHED BY

Reed Wold

7/28/14

2:30

RECEIVED BY

7-28-14

2:30

RELINQUISHED BY

7-28-14

3:20

RECEIVED BY

Diane F. Shaw

7/29/14

0900

RELINQUISHED BY

RECEIVED BY

Sample Receipt Checklist

Client Name: **HRL**

Date/Time Received: **29-Jul-14 09:00**

Work Order: **14071464**

Received by: **DS**

Checklist completed by Diane Shaw
eSignature

29-Jul-14
Date

Reviewed by: Ann Preston
eSignature

30-Jul-14
Date

Matrices: **Soil**

Carrier name: **FedEx**

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature in compliance?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample(s) received on ice?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Temperature(s)/Thermometer(s):	<u>4.4 c</u>		
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:	<u>7/29/2014 2:11:16 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:			

Login Notes:

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:

Comments:

CorrectiveAction:

From: (816) 399-8070
 Neil Martinez
 ALS Environmental
 127 E. 1st Street

Origin ID: GRRR



Ship Date: 26 JUL 14
 ActWgt: 44.0 LB
 CAD: 2264846/NET3530

Dim: 14 X 28 X 15 IN

PARACHUTE, MI 49424

SHIP TO: (816) 399-8070
 sample receiving
 ALS Laboratory Group
 3352 128TH AVE

HOLLAND, MI 49424

BILL BENDER

Delivery Address Bar Code



Ref # 072814-1
 Invoice #
 PO # Parachute
 Dept #

2 of 2

TUE - 29 JUL 10:30A
 PRIORITY OVERNIGHT

MPN 7707 0841 1180

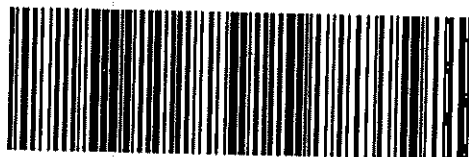
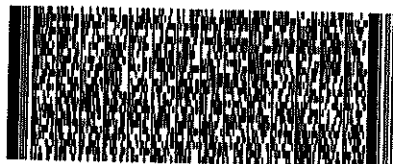
6293

Metri# 7707 0841 1262

6291

68 GRRR

49424
 001-US
 GRR



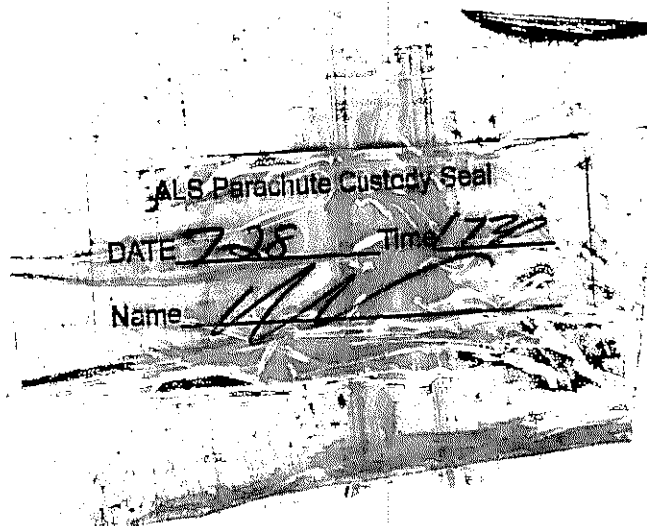
5232804FAC3

After printing this label:

1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.

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





13-Aug-2014

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

Re: **WPX PA 43-34 Batch 5 8.7.14**

Work Order: **1408372**

Dear Mark,

ALS Environmental received 1 sample on 08-Aug-2014 09:30 AM for the analyses presented in the following report.

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

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

The total number of pages in this report is 23.

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

Sincerely,

A handwritten signature in cursive script that reads "Ann Preston".

Electronically approved by: Ann Preston

Ann Preston
Project Manager



Certificate No: MN 532786

Report of Laboratory Analysis

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

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

Environmental 

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

Client: HRL Compliance Solutions, Inc
Project: WPX PA 43-34 Batch 5 8.7.14
Work Order: 1408372

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>
1408372-01	Batch 5	Soil		8/7/2014 14:00	8/8/2014 09:30	<input type="checkbox"/>

ALS Group USA, Corp

Date: 13-Aug-14

Client: HRL Compliance Solutions, Inc
Project: WPX PA 43-34 Batch 5 8.7.14
Work Order: 1408372

Case Narrative

Batch 61460 MS/MSD data for DRO is not related to this project's samples. No data requires qualification.

Batch 61480 MS/MSD data for Metals is not related to this project's samples. No data requires qualification.

<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

<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: 13-Aug-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 43-34 Batch 5 8.7.14

Sample ID: Batch 5

Collection Date: 8/7/2014 02:00 PM

Work Order: 1408372

Lab ID: 1408372-01

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
DRO (C10-C28)	17		SW8015M		Prep: SW3541 / 8/8/14	Analyst: IT
<i>Surr: 4-Terphenyl-d14</i>	61.6		4.7	mg/Kg-dry	1	8/9/2014 04:30 AM
			39-133	%REC	1	8/9/2014 04:30 AM
GASOLINE RANGE ORGANICS BY GC-FID						
GRO (C6-C10)	ND		SW8015		Prep: SW5035 / 8/8/14	Analyst: IT
<i>Surr: Toluene-d8</i>	114		2.9	mg/Kg-dry	1	8/8/2014 08:35 PM
			50-150	%REC	1	8/8/2014 08:35 PM
MERCURY BY CVAA						
Mercury	0.028		SW7471		Prep: SW7471 / 8/11/14	Analyst: LR
			0.019	mg/Kg-dry	1	8/11/2014 07:09 PM
METALS BY ICP-MS						
Arsenic	7.4		SW6020A		Prep: SW3050B / 8/8/14	Analyst: ML
Barium	2,100		2.2	mg/Kg-dry	5	8/9/2014 08:49 PM
Cadmium	ND		22	mg/Kg-dry	50	8/11/2014 05:06 AM
Chromium	10		0.89	mg/Kg-dry	5	8/9/2014 08:49 PM
Copper	13		2.2	mg/Kg-dry	5	8/9/2014 08:49 PM
Lead	15		2.2	mg/Kg-dry	5	8/9/2014 08:49 PM
Nickel	14		2.2	mg/Kg-dry	5	8/9/2014 08:49 PM
Selenium	2.7		2.2	mg/Kg-dry	5	8/9/2014 08:49 PM
Silver	ND		2.2	mg/Kg-dry	5	8/9/2014 08:49 PM
Zinc	59		4.4	mg/Kg-dry	5	8/9/2014 08:49 PM
SOLUBLE CATIONS FOR SAR						
			SW6020A		Prep: USDA Method 20B / 8/12/14	Analyst: RH
Calcium	100		10	mg/L	20	8/13/2014 02:14 PM
Magnesium	40		4.0	mg/L	20	8/13/2014 02:14 PM
Sodium	680		4.0	mg/L	20	8/13/2014 02:14 PM
SODIUM ADSORPTION RATIO						
			USDA H60 METHOD		Prep: USDA Method 20B / 8/12/14	Analyst: RH
Sodium Adsorption Ratio	14		0.010	none	1	8/13/2014
SEMI-VOLATILE ORGANIC COMPOUNDS						
			SW846 8270D		Prep: SW3541 / 8/8/14	Analyst: RM
Acenaphthene	ND		7.5	µg/Kg-dry	1	8/11/2014 11:34 PM
Acenaphthylene	ND		7.5	µg/Kg-dry	1	8/11/2014 11:34 PM
Anthracene	ND		7.5	µg/Kg-dry	1	8/11/2014 11:34 PM
Benzo(a)anthracene	ND		7.5	µg/Kg-dry	1	8/11/2014 11:34 PM
Benzo(a)pyrene	ND		7.5	µg/Kg-dry	1	8/11/2014 11:34 PM
Benzo(b)fluoranthene	ND		7.5	µg/Kg-dry	1	8/11/2014 11:34 PM
Benzo(g,h,i)perylene	ND		7.5	µg/Kg-dry	1	8/11/2014 11:34 PM
Benzo(k)fluoranthene	ND		7.5	µg/Kg-dry	1	8/11/2014 11:34 PM
Chrysene	ND		7.5	µg/Kg-dry	1	8/11/2014 11:34 PM

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

ALS Group USA, Corp

Date: 13-Aug-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 43-34 Batch 5 8.7.14

Sample ID: Batch 5

Collection Date: 8/7/2014 02:00 PM

Work Order: 1408372

Lab ID: 1408372-01

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Dibenzo(a,h)anthracene	ND		7.5	µg/Kg-dry	1	8/11/2014 11:34 PM
Fluoranthene	ND		7.5	µg/Kg-dry	1	8/11/2014 11:34 PM
Fluorene	ND		7.5	µg/Kg-dry	1	8/11/2014 11:34 PM
Indeno(1,2,3-cd)pyrene	ND		7.5	µg/Kg-dry	1	8/11/2014 11:34 PM
Naphthalene	ND		7.5	µg/Kg-dry	1	8/11/2014 11:34 PM
Pyrene	ND		7.5	µg/Kg-dry	1	8/11/2014 11:34 PM
Surr: 2-Fluorobiphenyl	52.1		12-100	%REC	1	8/11/2014 11:34 PM
Surr: 4-Terphenyl-d14	88.6		25-137	%REC	1	8/11/2014 11:34 PM
Surr: Nitrobenzene-d5	48.4		37-107	%REC	1	8/11/2014 11:34 PM
VOLATILE ORGANIC COMPOUNDS			SW8260B	Prep: SW5035 / 8/8/14		Analyst: RS
Benzene	ND		35	µg/Kg-dry	1	8/9/2014 04:51 PM
Ethylbenzene	ND		35	µg/Kg-dry	1	8/9/2014 04:51 PM
m,p-Xylene	ND		69	µg/Kg-dry	1	8/9/2014 04:51 PM
o-Xylene	ND		35	µg/Kg-dry	1	8/9/2014 04:51 PM
Toluene	ND		35	µg/Kg-dry	1	8/9/2014 04:51 PM
Xylenes, Total	ND		100	µg/Kg-dry	1	8/9/2014 04:51 PM
Surr: 1,2-Dichloroethane-d4	95.1		70-130	%REC	1	8/9/2014 04:51 PM
Surr: 4-Bromofluorobenzene	101		70-130	%REC	1	8/9/2014 04:51 PM
Surr: Dibromofluoromethane	90.0		70-130	%REC	1	8/9/2014 04:51 PM
Surr: Toluene-d8	98.2		70-130	%REC	1	8/9/2014 04:51 PM
ELECTRICAL CONDUCTIVITY (SAR)			USDA H60 METHOD	Prep: USDA Method 20B / 8/12/14		Analyst: JB
Electrical Conductivity @ Saturation	4.2		0.050	mmhos/cm @25	10	8/12/2014 12:00 PM
CHROMIUM, TRIVALENT			CALCULATION			Analyst: EE
Chromium, Trivalent	10		0.58	mg/Kg-dry	1	8/11/2014 02:25 PM
CHROMIUM, HEXAVALENT			SW7196A	Prep: SW3060A / 8/11/14		Analyst: JI
Chromium, Hexavalent	ND		0.54	mg/Kg-dry	1	8/11/2014 01:30 PM
MOISTURE			A2540 G			Analyst: AT
Moisture	13		0.050	% of sample	1	8/8/2014 04:57 PM
PH			SW9045D	Prep: EXTRACT / 8/11/14		Analyst: TM
pH	8.5			s.u.	1	8/11/2014 11:45 AM

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

ALS Group USA, Corp

Date: 13-Aug-14

Client: HRL Compliance Solutions, Inc
Work Order: 1408372
Project: WPX PA 43-34 Batch 5 8.7.14

QC BATCH REPORT

Batch ID: **61460** Instrument ID **GC8** Method: **SW8015M**

MBLK		Sample ID: DBLKS1-61460-61460				Units: mg/Kg		Analysis Date: 8/8/2014 10:07 PM		
Client ID:		Run ID: GC8_140808B				SeqNo: 2883943		Prep Date: 8/8/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	ND	4.2								
Surr: 4-Terphenyl-d14	1.21	0	1.667	0	72.6	39-133	0			

LCS		Sample ID: DLCSS1-61460-61460				Units: mg/Kg		Analysis Date: 8/8/2014 10:33 PM		
Client ID:		Run ID: GC8_140808B				SeqNo: 2883944		Prep Date: 8/8/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	127.2	4.2	166.7	0	76.3	61-109	0			
Surr: 4-Terphenyl-d14	1.106	0	1.667	0	66.4	39-133	0			

MS		Sample ID: 1408177-02B MS				Units: mg/Kg		Analysis Date: 8/8/2014 10:58 PM		
Client ID:		Run ID: GC8_140808B				SeqNo: 2883945		Prep Date: 8/8/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	225.3	8.0	319.8	225	0.105	48-110	0			S
Surr: 4-Terphenyl-d14	2.061	0	3.198	0	64.5	39-133	0			

MSD		Sample ID: 1408177-02B MSD				Units: mg/Kg		Analysis Date: 8/8/2014 11:24 PM		
Client ID:		Run ID: GC8_140808B				SeqNo: 2883946		Prep Date: 8/8/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	464.5	7.9	314.9	225	76	48-110	225.3	69.3	30	R
Surr: 4-Terphenyl-d14	2.109	0	3.149	0	67	39-133	2.061	2.31	30	

The following samples were analyzed in this batch: | 1408372-01B |

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

Client: HRL Compliance Solutions, Inc
Work Order: 1408372
Project: WPX PA 43-34 Batch 5 8.7.14

QC BATCH REPORT

Batch ID: **61502** Instrument ID **GC9** Method: **SW8015**

MBLK				Sample ID: MBLK-61502-61502				Units: µg/Kg			Analysis Date: 8/8/2014 03:29 PM										
Client ID:				Run ID: GC9_140808A				SeqNo:2884018			Prep Date: 8/8/2014		DF: 1								
Analyte				Result		PQL		SPK Val		SPK Ref Value		Control Limit		RPD Ref Value		%RPD		RPD Limit		Qual	
GRO (C6-C10)				ND		2,500															
Surr: Toluene-d8				5034		0		5000		0		101		50-150		0					

LCS		Sample ID: LCS-61502-61502				Units: µg/Kg		Analysis Date: 8/8/2014 03:04 PM		
Client ID:		Run ID: GC9_140808A			SeqNo:2884017		Prep Date: 8/8/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	513100	2,500	500000	0	103	70-130	0			
Surr: Toluene-d8	4390	0	5000	0	87.8	50-150	0			

MS				Sample ID: 1408368-01A MS			Units: µg/Kg		Analysis Date: 8/8/2014 06:01 PM		
Client ID:			Run ID: GC9_140808A		SeqNo:2884021		Prep Date: 8/8/2014		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
GRO (C6-C10)	420900	2,500	500000	0	84.2	70-130	0				
Surr: Toluene-d8	3694	0	5000	0	73.9	50-150	0				

MSD				Sample ID: 1408368-01A MSD		Units: µg/Kg		Analysis Date: 8/8/2014 06:27 PM		
Client ID:			Run ID: GC9_140808A		SeqNo:2884022		Prep Date: 8/8/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	526000	2,500	500000	0	105	70-130	420900	22.2	30	
Surr: Toluene-d8	4442	0	5000	0	88.8	50-150	3694	18.4	30	

The following samples were analyzed in this batch:

1408372-01A

Client: HRL Compliance Solutions, Inc
Work Order: 1408372
Project: WPX PA 43-34 Batch 5 8.7.14

QC BATCH REPORT

Batch ID: **61511** Instrument ID **HG1** Method: **SW7471**

Sample ID: MBLK-61511-61511				Units: mg/Kg			Analysis Date: 8/11/2014 05:58 PM				
Client ID:			Run ID: HG1_140811A			SeqNo: 2884854		Prep Date: 8/11/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Mercury	0.00125	0.020								J	

LCS				Sample ID: LCS-61511-61511				Units:mg/Kg			Analysis Date: 8/11/2014 06:00 PM			
Client ID:				Run ID: HG1_140811A				SeqNo:2884866			Prep Date: 8/11/2014		DF: 1	
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual			
Mercury		0.1889	0.020	0.1665	0	113	80-120	0						

MS	Sample ID: 1408171-02AMS					Units:mg/Kg		Analysis Date: 8/11/2014 06:05 PM		
	Client ID:		Run ID: HG1_140811A			SeqNo:2884868		Prep Date: 8/11/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.1225	0.012	0.1029	0.001342	118	75-125	0			

MSD				Sample ID: 1408171-02AMSD				Units:mg/Kg			Analysis Date: 8/11/2014 06:07 PM			
Client ID:				Run ID: HG1_140811A				SeqNo:2884870			Prep Date: 8/11/2014		DF: 1	
Analyte				Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Mercury				0.1248	0.013	0.1053	0.001342	117	75-125	0.1225	1.87	35		

The following samples were analyzed in this batch:

1408372-01B

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

Client: HRL Compliance Solutions, Inc
Work Order: 1408372
Project: WPX PA 43-34 Batch 5 8.7.14

QC BATCH REPORT

Batch ID: **61480** Instrument ID **ICPMS1** Method: **SW6020A**

MBLK				Sample ID: MBLK-61480-61480				Units:mg/Kg		Analysis Date: 8/11/2014 03:09 AM	
Client ID:			Run ID: ICPMS1_140810A			SeqNo:2883583		Prep Date: 8/8/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Arsenic	0.03906	0.25								J	
Barium	ND	0.25									
Cadmium	ND	0.10									
Chromium	ND	0.25									
Copper	ND	0.25									
Lead	ND	0.25									
Nickel	ND	0.25									
Selenium	ND	0.25									
Silver	ND	0.25									
Zinc	0.03435	0.50								J	

LCS				Sample ID: LCS-61480-61480				Units:mg/Kg			Analysis Date: 8/11/2014 03:15 AM			
Client ID:				Run ID: ICPMS1_140810A				SeqNo:2883584			Prep Date: 8/8/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual				
Arsenic	4.612	0.25	5	0	92.2	80-120	0							
Barium	4.853	0.25	5	0	97.1	80-120	0							
Cadmium	4.829	0.10	5	0	96.6	80-120	0							
Chromium	5.035	0.25	5	0	101	80-120	0							
Copper	4.783	0.25	5	0	95.7	80-120	0							
Lead	4.801	0.25	5	0	96	80-120	0							
Nickel	4.857	0.25	5	0	97.1	80-120	0							
Selenium	4.73	0.25	5	0	94.6	80-120	0							
Silver	4.885	0.25	5	0	97.7	80-120	0							
Zinc	4.898	0.50	5	0	98	80-120	0							

MS					Sample ID: 1408253-09AMS		Units:mg/Kg		Analysis Date: 8/11/2014 03:27 AM		
Client ID:			Run ID: ICPMS1_140810A			SeqNo:2883586		Prep Date: 8/8/2014		DF: 4	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Arsenic	8.414	1.4	6.897	2.695	82.9	75-125	0				
Barium	17.69	1.4	6.897	10.25	108	75-125	0				
Cadmium	6.712	0.55	6.897	0.2966	93	75-125	0				
Chromium	10.46	1.4	6.897	2.885	110	75-125	0				
Copper	10.51	1.4	6.897	4.32	89.7	75-125	0				
Lead	21.96	1.4	6.897	16.86	73.9	75-125	0			S	
Nickel	8.764	1.4	6.897	2.036	97.6	75-125	0				
Selenium	6.703	1.4	6.897	0.789	85.8	75-125	0				
Silver	6.37	1.4	6.897	0.03289	91.9	75-125	0				
Zinc	49.71	2.8	6.897	42.13	110	75-125	0			O	

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

Client: HRL Compliance Solutions, Inc
Work Order: 1408372
Project: WPX PA 43-34 Batch 5 8.7.14

QC BATCH REPORT

Batch ID: **61480** Instrument ID **ICPMS1** Method: **SW6020A**

MSD				Sample ID: 1408253-09AMSD				Units: mg/Kg		Analysis Date: 8/9/2014 06:32 PM	
Client ID:				Run ID: ICPMS1_140808A				SeqNo: 2883049		Prep Date: 8/8/2014	
										DF: 4	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Arsenic	9.843	1.4	6.993	3.16	95.6	75-125	9.112	7.72	25		
Barium	20.83	1.4	6.993	11.21	138	75-125	19.92	4.46	25	S	
Cadmium	7.801	0.56	6.993	0.2947	107	75-125	7.098	9.44	25		
Chromium	12.3	1.4	6.993	2.663	138	75-125	9.807	22.6	25	S	
Copper	12.64	1.4	6.993	4.508	116	75-125	10.44	19.1	25		
Lead	26.81	1.4	6.993	18.09	125	75-125	23.64	12.6	25		
Nickel	10.53	1.4	6.993	1.921	123	75-125	8.579	20.5	25		
Selenium	8.05	1.4	6.993	0.4882	108	75-125	7.101	12.5	25		
Silver	7.315	1.4	6.993	0.03289	104	75-125	6.64	9.67	25		
Zinc	61.09	2.8	6.993	41.32	283	75-125	47.97	24.1	25	SO	

MSD				Sample ID: 1408253-09AMSD				Units: mg/Kg		Analysis Date: 8/11/2014 03:34 AM	
Client ID:				Run ID: ICPMS1_140810A				SeqNo: 2883587		Prep Date: 8/8/2014	
										DF: 4	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Arsenic	9.116	1.4	6.993	2.695	91.8	75-125	8.414	8.01	25		
Barium	18.43	1.4	6.993	10.25	117	75-125	17.69	4.11	25		
Cadmium	7.021	0.56	6.993	0.2966	96.2	75-125	6.712	4.5	25		
Chromium	10.79	1.4	6.993	2.885	113	75-125	10.46	3.19	25		
Copper	10.91	1.4	6.993	4.32	94.2	75-125	10.51	3.75	25		
Lead	24.65	1.4	6.993	16.86	111	75-125	21.96	11.6	25		
Nickel	8.94	1.4	6.993	2.036	98.7	75-125	8.764	1.99	25		
Selenium	7.136	1.4	6.993	0.789	90.8	75-125	6.703	6.25	25		
Silver	6.526	1.4	6.993	0.03289	92.8	75-125	6.37	2.42	25		
Zinc	52.87	2.8	6.993	42.13	153	75-125	49.71	6.15	25	SO	

The following samples were analyzed in this batch:

1408372-01B

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

Client: HRL Compliance Solutions, Inc
Work Order: 1408372
Project: WPX PA 43-34 Batch 5 8.7.14

QC BATCH REPORT

Batch ID: **61504** Instrument ID **ICPMS2** Method: **SW6020A**

DUP		Sample ID: 1408368-03CDUP				Units: mg/L		Analysis Date: 8/13/2014 01:49 PM		
Client ID:		Run ID: ICPMS2_140813A				SeqNo: 2888216		Prep Date: 8/12/2014		DF: 20
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	587.6	10	0	0	0	0-0	576	1.99		
Magnesium	184.5	4.0	0	0	0	0-0	176	4.75		
Sodium	2316	4.0	0	0	0	0-0	2190	5.59		

DUP		Sample ID: 1408368-03CDUP				Units: none		Analysis Date: 8/13/2014		
Client ID:		Run ID: SAR_140813A				SeqNo: 2888258		Prep Date: 8/12/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sodium Adsorption Ratio	21.36	0.010	0	0	0		20.49	4.13	50	

The following samples were analyzed in this batch: | 1408372-01C |

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

Client: HRL Compliance Solutions, Inc
Work Order: 1408372
Project: WPX PA 43-34 Batch 5 8.7.14

QC BATCH REPORT

Batch ID: **61482** Instrument ID **SVMS8** Method: **SW846 8270D**

MBLK		Sample ID: SBLKS1-61482-61482				Units: µg/Kg		Analysis Date: 8/11/2014 03:46 PM		
Client ID:		Run ID: SVMS8_140811B				SeqNo: 2885978		Prep Date: 8/8/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	ND	6.7								
Acenaphthylene	ND	6.7								
Anthracene	ND	6.7								
Benzo(a)anthracene	ND	6.7								
Benzo(a)pyrene	ND	6.7								
Benzo(b)fluoranthene	ND	6.7								
Benzo(g,h,i)perylene	ND	6.7								
Benzo(k)fluoranthene	ND	6.7								
Chrysene	ND	6.7								
Dibenzo(a,h)anthracene	ND	6.7								
Fluoranthene	ND	6.7								
Fluorene	ND	6.7								
Indeno(1,2,3-cd)pyrene	ND	6.7								
Naphthalene	ND	6.7								
Pyrene	ND	6.7								
<i>Surr: 2-Fluorobiphenyl</i>	1050	0	1667	0	63	12-100	0			
<i>Surr: 4-Terphenyl-d14</i>	1718	0	1667	0	103	25-137	0			
<i>Surr: Nitrobenzene-d5</i>	1026	0	1667	0	61.6	37-107	0			

LCS		Sample ID: SLCSS1-61482-61482				Units: µg/Kg		Analysis Date: 8/11/2014 04:06 PM		
Client ID:		Run ID: SVMS8_140811B				SeqNo: 2885979		Prep Date: 8/8/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	419.3	6.7	666.7	0	62.9	45-110	0			
Acenaphthylene	438.7	6.7	666.7	0	65.8	45-105	0			
Anthracene	522	6.7	666.7	0	78.3	55-105	0			
Benzo(a)anthracene	495.3	6.7	666.7	0	74.3	50-110	0			
Benzo(a)pyrene	575.3	6.7	666.7	0	86.3	50-110	0			
Benzo(b)fluoranthene	582.7	6.7	666.7	0	87.4	45-115	0			
Benzo(g,h,i)perylene	459	6.7	666.7	0	68.8	40-125	0			
Benzo(k)fluoranthene	551.7	6.7	666.7	0	82.7	45-115	0			
Chrysene	477.7	6.7	666.7	0	71.6	55-110	0			
Dibenzo(a,h)anthracene	483.3	6.7	666.7	0	72.5	40-125	0			
Fluoranthene	503.7	6.7	666.7	0	75.5	55-115	0			
Fluorene	474	6.7	666.7	0	71.1	50-110	0			
Indeno(1,2,3-cd)pyrene	554	6.7	666.7	0	83.1	40-120	0			
Naphthalene	395.3	6.7	666.7	0	59.3	40-105	0			
Pyrene	615.3	6.7	666.7	0	92.3	45-125	0			
<i>Surr: 2-Fluorobiphenyl</i>	1043	0	1667	0	62.6	12-100	0			
<i>Surr: 4-Terphenyl-d14</i>	1550	0	1667	0	93	25-137	0			
<i>Surr: Nitrobenzene-d5</i>	973.3	0	1667	0	58.4	37-107	0			

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

Client: HRL Compliance Solutions, Inc
Work Order: 1408372
Project: WPX PA 43-34 Batch 5 8.7.14

QC BATCH REPORT

Batch ID: **61482** Instrument ID **SVMS8** Method: **SW846 8270D**

MS				Sample ID: 1408368-04B MS			Units: µg/Kg		Analysis Date: 8/11/2014 08:55 PM	
Client ID:		Run ID: SVMS8_140811B			SeqNo: 2885991		Prep Date: 8/8/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	730.2	13	1251	0	58.3	45-110	0			
Acenaphthylene	797.1	13	1251	0	63.7	45-105	0			
Anthracene	957.3	13	1251	0	76.5	55-105	0			
Benzo(a)anthracene	937.2	13	1251	0	74.9	50-110	0			
Benzo(a)pyrene	1085	13	1251	0	86.7	50-110	0			
Benzo(b)fluoranthene	1048	13	1251	0	83.7	45-115	0			
Benzo(g,h,i)perylene	954.8	13	1251	0	76.3	40-125	0			
Benzo(k)fluoranthene	951.6	13	1251	0	76	45-115	0			
Chrysene	896.6	13	1251	0	71.6	55-110	0			
Dibenzo(a,h)anthracene	1030	13	1251	0	82.3	40-125	0			
Fluoranthene	897.8	13	1251	0	71.7	55-115	0			
Fluorene	851.5	13	1251	0	68	50-110	0			
Indeno(1,2,3-cd)pyrene	1129	13	1251	0	90.2	40-120	0			
Naphthalene	725.8	13	1251	0	58	40-105	0			
Pyrene	1106	13	1251	0	88.3	45-125	0			
Surr: 2-Fluorobiphenyl	1902	0	3128	0	60.8	12-100	0			
Surr: 4-Terphenyl-d14	2715	0	3128	0	86.8	25-137	0			
Surr: Nitrobenzene-d5	1874	0	3128	0	59.9	37-107	0			

MSD				Sample ID: 1408368-04B MSD			Units: µg/Kg		Analysis Date: 8/11/2014 09:15 PM	
Client ID:		Run ID: SVMS8_140811B			SeqNo: 2885992		Prep Date: 8/8/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	778.4	13	1330	0	58.5	45-110	730.2	6.4	30	
Acenaphthylene	855.5	13	1330	0	64.3	45-105	797.1	7.07	30	
Anthracene	1034	13	1330	0	77.8	55-105	957.3	7.74	30	
Benzo(a)anthracene	1012	13	1330	0	76.1	50-110	937.2	7.65	30	
Benzo(a)pyrene	1166	13	1330	0	87.7	50-110	1085	7.2	30	
Benzo(b)fluoranthene	1125	13	1330	0	84.6	45-115	1048	7.07	30	
Benzo(g,h,i)perylene	1032	13	1330	0	77.6	40-125	954.8	7.81	30	
Benzo(k)fluoranthene	1006	13	1330	0	75.6	45-115	951.6	5.53	30	
Chrysene	978.5	13	1330	0	73.6	55-110	896.6	8.74	30	
Dibenzo(a,h)anthracene	1105	13	1330	0	83.1	40-125	1030	7.03	30	
Fluoranthene	929.3	13	1330	0	69.9	55-115	897.8	3.45	30	
Fluorene	906.7	13	1330	0	68.2	50-110	851.5	6.28	30	
Indeno(1,2,3-cd)pyrene	1216	13	1330	0	91.4	40-120	1129	7.43	30	
Naphthalene	810.3	13	1330	0	60.9	40-105	725.8	11	30	
Pyrene	1250	13	1330	0	94	45-125	1106	12.2	30	
Surr: 2-Fluorobiphenyl	2129	0	3324	0	64	12-100	1902	11.2	40	
Surr: 4-Terphenyl-d14	3043	0	3324	0	91.5	25-137	2715	11.4	40	
Surr: Nitrobenzene-d5	2100	0	3324	0	63.2	37-107	1874	11.4	40	

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

Client: HRL Compliance Solutions, Inc
Work Order: 1408372
Project: WPX PA 43-34 Batch 5 8.7.14

QC BATCH REPORT

Batch ID: **61482** Instrument ID **SVMS8** Method: **SW846 8270D**

The following samples were analyzed in this batch:

1408372-01B

Client: HRL Compliance Solutions, Inc
Work Order: 1408372
Project: WPX PA 43-34 Batch 5 8.7.14

QC BATCH REPORT

Batch ID: **61462** Instrument ID **VMS8** Method: **SW8260B**

MBLK				Sample ID: MBLK-61462-61462				Units: µg/Kg			Analysis Date: 8/8/2014 09:31 PM			
Client ID:				Run ID: VMS8_140808A				SeqNo:2883685			Prep Date: 8/8/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual				
Benzene	ND	30												
Ethylbenzene	ND	30												
m,p-Xylene	ND	60												
o-Xylene	ND	30												
Toluene	ND	30												
Xylenes, Total	ND	90												
Surr: 1,2-Dichloroethane-d4	972	0	1000	0	97.2	70-130	0							
Surr: 4-Bromofluorobenzene	971	0	1000	0	97.1	70-130	0							
Surr: Dibromofluoromethane	954	0	1000	0	95.4	70-130	0							
Surr: Toluene-d8	988.5	0	1000	0	98.8	70-130	0							

LCS				Sample ID: LCS-61462-61462				Units: µg/Kg			Analysis Date: 8/8/2014 07:53 PM			
Client ID:				Run ID: VMS8_140808A				SeqNo:2883684			Prep Date: 8/8/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual				
Benzene	866	30	1000	0	86.6	75-125	0							
Ethylbenzene	875.5	30	1000	0	87.6	75-125	0							
m,p-Xylene	1721	60	2000	0	86	80-125	0							
o-Xylene	879.5	30	1000	0	88	75-125	0							
Toluene	865	30	1000	0	86.5	70-125	0							
Xylenes, Total	2600	90	3000	0	86.7	75-125	0							
Surr: 1,2-Dichloroethane-d4	969.5	0	1000	0	97	70-130	0							
Surr: 4-Bromofluorobenzene	996	0	1000	0	99.6	70-130	0							
Surr: Dibromofluoromethane	994.5	0	1000	0	99.4	70-130	0							
Surr: Toluene-d8	1010	0	1000	0	101	70-130	0							

The following samples were analyzed in this batch:

1408372-01A

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

Client: HRL Compliance Solutions, Inc
Work Order: 1408372
Project: WPX PA 43-34 Batch 5 8.7.14

QC BATCH REPORT

Batch ID: **61504** Instrument ID **WETCHEM** Method: **USDA H60 Method**

DUP		Sample ID: 1408368-03C DUP				Units: mmhos/cm @25°C		Analysis Date: 8/12/2014 12:00 PM		
Client ID:		Run ID: WETCHEM_140812C				SeqNo: 2885781		Prep Date: 8/12/2014		DF: 10
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Electrical Conductivity @ Saturation	16	0.050	0	0	0		15.62	2.4	50	

The following samples were analyzed in this batch:

1408372-01C

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

Client: HRL Compliance Solutions, Inc
Work Order: 1408372
Project: WPX PA 43-34 Batch 5 8.7.14

QC BATCH REPORT

Batch ID: **61532** Instrument ID **WETCHEM** Method: **SW9045D**

LCS				Sample ID: LCS-61532-61532				Units:s.u.		Analysis Date: 8/11/2014 11:45 AM													
Client ID:				Run ID: WETCHEM_140811G				SeqNo:2884164		Prep Date: 8/11/2014		DF: 1											
Analyte				Result		PQL		SPK Val		SPK Ref Value		%REC		Control Limit		RPD Ref Value		%RPD		RPD Limit		Qual	

pH	3.92	0	4	0	98	90-110	0			
----	------	---	---	---	----	--------	---	--	--	--

DUP				Sample ID: 1408368-03B DUP				Units: s.u.		Analysis Date: 8/11/2014 11:45 AM			
Client ID:				Run ID: WETCHEM_140811G				SeqNo: 2884174		Prep Date: 8/11/2014		DF: 1	
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual		

pH	7.97	0	0	0	0	0-0	8.04	0.874	20	
----	------	---	---	---	---	-----	------	-------	----	--

DUP				Sample ID: 1408368-05B DUP				Units: s.u.		Analysis Date: 8/11/2014 11:45 AM			
Client ID:				Run ID: WETCHEM_140811G				SeqNo: 2884177		Prep Date: 8/11/2014		DF: 1	
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual		

pH	7.89	0	0	0	0	0-0	7.88	0.127	20	
----	------	---	---	---	---	-----	------	-------	----	--

The following samples were analyzed in this batch:

1408372-01B

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

Client: HRL Compliance Solutions, Inc
Work Order: 1408372
Project: WPX PA 43-34 Batch 5 8.7.14

QC BATCH REPORT

Batch ID: **61553** Instrument ID **WETCHEM** Method: **SW7196A**

MBLK		Sample ID: MBLK-61553-61553				Units: mg/Kg		Analysis Date: 8/11/2014 01:30 PM		
Client ID:		Run ID: WETCHEM_140811H				SeqNo: 2884251		Prep Date: 8/11/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent ND 0.49

LCS		Sample ID: LCS-61553-61553				Units: mg/Kg		Analysis Date: 8/11/2014 01:30 PM		
Client ID:		Run ID: WETCHEM_140811H				SeqNo: 2884252		Prep Date: 8/11/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 1.868 0.50 2 0 93.4 80-120 0

MS		Sample ID: 1408299-01BMS				Units: mg/Kg		Analysis Date: 8/11/2014 01:30 PM		
Client ID:		Run ID: WETCHEM_140811H				SeqNo: 2884254		Prep Date: 8/11/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 1.92 0.50 2 0 96 75-125 0

MS		Sample ID: 1408299-01BMSI				Units: mg/Kg		Analysis Date: 8/11/2014 01:30 PM		
Client ID:		Run ID: WETCHEM_140811H				SeqNo: 2884256		Prep Date: 8/11/2014		DF: 100
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 1266 49 1559 0 81.2 75-125 0

MSD		Sample ID: 1408299-01BMSD				Units: mg/Kg		Analysis Date: 8/11/2014 01:30 PM		
Client ID:		Run ID: WETCHEM_140811H				SeqNo: 2884255		Prep Date: 8/11/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 1.912 0.50 1.992 0 96 75-125 1.92 0.399 20

The following samples were analyzed in this batch:

1408372-01B

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

Client: HRL Compliance Solutions, Inc
Work Order: 1408372
Project: WPX PA 43-34 Batch 5 8.7.14

QC BATCH REPORT

Batch ID: **R145987** Instrument ID **MOIST** Method: **A2540 G**

MBLK		Sample ID: WBLKS-R145987				Units: % of sample		Analysis Date: 8/8/2014 04:57 PM		
Client ID:		Run ID: MOIST_140808B				SeqNo: 2882692		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-R145987				Units: % of sample		Analysis Date: 8/8/2014 04:57 PM		
Client ID:		Run ID: MOIST_140808B				SeqNo: 2882691		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: 1408371-07B DUP				Units: % of sample		Analysis Date: 8/8/2014 04:57 PM		
Client ID:		Run ID: MOIST_140808B				SeqNo: 2882684		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 5.03 0.050 0 0 0 0-0 5.03 0 20

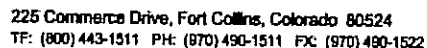
DUP		Sample ID: 1408371-08B DUP				Units: % of sample		Analysis Date: 8/8/2014 04:57 PM		
Client ID:		Run ID: MOIST_140808B				SeqNo: 2882686		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 11.37 0.050 0 0 0 0-0 10.27 10.2 20

The following samples were analyzed in this batch:

1408372-01B

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



1408372

Form 202r0

*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	<i>Reed WLD</i>	<i>Reed WLD</i>	8/7/14	2:45
RECEIVED BY	<i>W.M.</i>	<i>W.M.</i>	8-7-14	2:45
RELINQUISHED BY	<i>W.M.</i>	<i>W.M.</i>	8-7-14	2:50
RECEIVED BY	<i>Diane F. Shen</i>	<i>Diane F. Shen</i>	8/8/14	0930
RELINQUISHED BY				
RECEIVED BY				

Sample Receipt Checklist

Client Name: **HRL**

Date/Time Received: **08-Aug-14 09:30**

Work Order: **1408372**

Received by: **DS**

Checklist completed by <u>Diane Shaw</u>	08-Aug-14	Reviewed by: <u>Ann Preston</u>	10-Aug-14
eSignature	Date	eSignature	Date

Matrices: **Soil**

Carrier name: **FedEx**

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature in compliance?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample(s) received on ice?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Temperature(s)/Thermometer(s):	<u>3.8 c</u>		
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:	<u>8/8/2014 12:11:39 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:			

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

CorrectiveAction:

From: (616) 399-6070
 Nick Martinez
 ALS Environmental
 127 E. 1st Street
 PARACHUTE, MI 49424

Origin ID: HLMA



Ship Date: 07AUG14
 ActWgt: 52.0 LB
 CAD: 2264840/NET3550

Dim: 14 X 26 X 15 IN

SHIP TO: (616) 399-6070
 sample receiving
 ALS Laboratory Group
 3352 128TH AVE

BILL SENDER

HOLLAND, MI 49424

Delivery Address Bar Code



Ref # 080714-1
 Invoice #
 PO # Parachute
 Dept #

2 of 3

FRI - 08 AUG 10:30A
 PRIORITY OVERNIGHT

MPSP 7707 8925 5711

0262

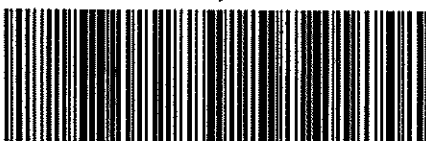
Mstr# 7707 8925 5608

0261

49424

MI-US

GRR

68 HLMA

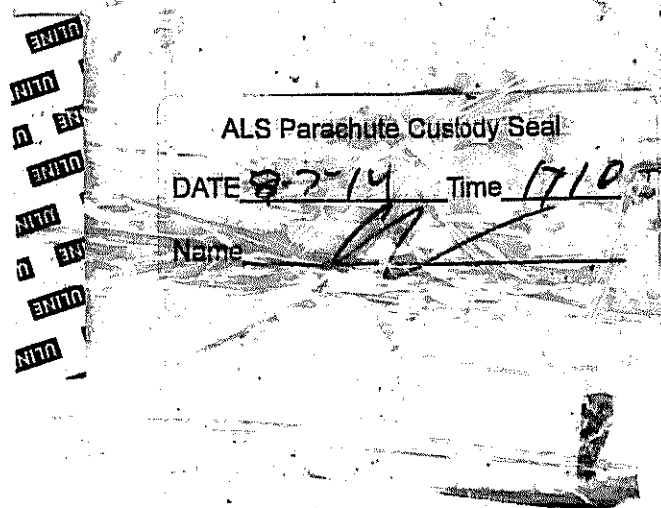
522GUECF2BAC9

After printing this label:

1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.

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





04-Sep-2014

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

Re: **WPX PA 43-34 Batch 6 8.27.14**

Work Order: **14081484**

Dear Mark,

ALS Environmental received 1 sample on 28-Aug-2014 09:30 AM for the analyses presented in the following report.

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

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

The total number of pages in this report is 22.

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

Sincerely,

A handwritten signature in cursive script that reads "Ann Preston".

Electronically approved by: Ann Preston

Ann Preston
Project Manager



Certificate No: MN 532786

Report of Laboratory Analysis

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

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

Environmental 

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

Client: HRL Compliance Solutions, Inc
Project: WPX PA 43-34 Batch 6 8.27.14
Work Order: 14081484

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>
14081484-01	Batch 6	Soil		8/27/2014 09:30	8/28/2014 09:30	<input type="checkbox"/>

<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

<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: 04-Sep-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 43-34 Batch 6 8.27.14

Sample ID: Batch 6

Collection Date: 8/27/2014 09:30 AM

Work Order: 14081484

Lab ID: 14081484-01

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
DRO (C10-C28)	37		SW8015M		Prep: SW3541 / 8/29/14	Analyst: IT
			4.7	mg/Kg-dry	1	9/2/2014 09:38 PM
Surr: 4-Terphenyl-d14	62.9		39-133	%REC	1	9/2/2014 09:38 PM
GASOLINE RANGE ORGANICS BY GC-FID						
GRO (C6-C10)	ND		SW8015		Prep: SW5035 / 8/28/14	Analyst: IT
			2.9	mg/Kg-dry	1	8/30/2014 05:10 AM
Surr: Toluene-d8	120		50-150	%REC	1	8/30/2014 05:10 AM
MERCURY BY CVAA						
Mercury	0.028		SW7471		Prep: SW7471 / 9/2/14	Analyst: LR
			0.017	mg/Kg-dry	1	9/2/2014 04:16 PM
SOLUBLE CATIONS FOR SAR						
			SW846 6010C		Prep: USDA Method 20B / 9/3/14	Analyst: JEJ
Calcium	250		5.0	mg/L	10	9/3/2014 12:23 PM
Magnesium	81		2.0	mg/L	10	9/3/2014 12:23 PM
Sodium	380		2.0	mg/L	10	9/3/2014 12:23 PM
METALS BY ICP-MS						
			SW6020A		Prep: SW3050B / 8/29/14	Analyst: ML
Arsenic	6.3		2.3	mg/Kg-dry	5	8/29/2014 07:18 PM
Barium	1,200		23	mg/Kg-dry	50	9/2/2014 02:58 PM
Cadmium	ND		0.92	mg/Kg-dry	5	8/29/2014 07:18 PM
Chromium	9.2		2.3	mg/Kg-dry	5	8/29/2014 07:18 PM
Copper	11		2.3	mg/Kg-dry	5	8/29/2014 07:18 PM
Lead	13		2.3	mg/Kg-dry	5	8/29/2014 07:18 PM
Nickel	12		2.3	mg/Kg-dry	5	8/29/2014 07:18 PM
Selenium	ND		2.3	mg/Kg-dry	5	8/29/2014 07:18 PM
Silver	ND		2.3	mg/Kg-dry	5	8/29/2014 07:18 PM
Zinc	47		4.6	mg/Kg-dry	5	8/29/2014 07:18 PM
SODIUM ADSORPTION RATIO						
			USDA H60 METHOD		Prep: USDA Method 20B / 9/3/14	Analyst: JEJ
Sodium Adsorption Ratio	5.4		0.010	none	1	9/3/2014
SEMI-VOLATILE ORGANIC COMPOUNDS						
			SW846 8270D		Prep: SW3541 / 8/29/14	Analyst: MK
Acenaphthene	ND		7.6	µg/Kg-dry	1	9/1/2014 04:23 AM
Acenaphthylene	ND		7.6	µg/Kg-dry	1	9/1/2014 04:23 AM
Anthracene	ND		7.6	µg/Kg-dry	1	9/1/2014 04:23 AM
Benzo(a)anthracene	ND		7.6	µg/Kg-dry	1	9/1/2014 04:23 AM
Benzo(a)pyrene	ND		7.6	µg/Kg-dry	1	9/1/2014 04:23 AM
Benzo(b)fluoranthene	ND		7.6	µg/Kg-dry	1	9/1/2014 04:23 AM
Benzo(g,h,i)perylene	ND		7.6	µg/Kg-dry	1	9/1/2014 04:23 AM
Benzo(k)fluoranthene	ND		7.6	µg/Kg-dry	1	9/1/2014 04:23 AM
Chrysene	ND		7.6	µg/Kg-dry	1	9/1/2014 04:23 AM

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

ALS Group USA, Corp

Date: 04-Sep-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 43-34 Batch 6 8.27.14

Sample ID: Batch 6

Collection Date: 8/27/2014 09:30 AM

Work Order: 14081484

Lab ID: 14081484-01

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Dibenzo(a,h)anthracene	ND		7.6	µg/Kg-dry	1	9/1/2014 04:23 AM
Fluoranthene	ND		7.6	µg/Kg-dry	1	9/1/2014 04:23 AM
Fluorene	ND		7.6	µg/Kg-dry	1	9/1/2014 04:23 AM
Indeno(1,2,3-cd)pyrene	ND		7.6	µg/Kg-dry	1	9/1/2014 04:23 AM
Naphthalene	ND		7.6	µg/Kg-dry	1	9/1/2014 04:23 AM
Pyrene	ND		7.6	µg/Kg-dry	1	9/1/2014 04:23 AM
Surr: 2-Fluorobiphenyl	70.2		12-100	%REC	1	9/1/2014 04:23 AM
Surr: 4-Terphenyl-d14	107		25-137	%REC	1	9/1/2014 04:23 AM
Surr: Nitrobenzene-d5	63.2		37-107	%REC	1	9/1/2014 04:23 AM
VOLATILE ORGANIC COMPOUNDS			SW8260B	Prep: SW5035 / 8/28/14		Analyst: AK
Benzene	ND		35	µg/Kg-dry	1	8/31/2014 08:50 AM
Ethylbenzene	ND		35	µg/Kg-dry	1	8/31/2014 08:50 AM
m,p-Xylene	ND		70	µg/Kg-dry	1	8/31/2014 08:50 AM
o-Xylene	ND		35	µg/Kg-dry	1	8/31/2014 08:50 AM
Toluene	ND		35	µg/Kg-dry	1	8/31/2014 08:50 AM
Xylenes, Total	ND		100	µg/Kg-dry	1	8/31/2014 08:50 AM
Surr: 1,2-Dichloroethane-d4	101		70-130	%REC	1	8/31/2014 08:50 AM
Surr: 4-Bromofluorobenzene	101		70-130	%REC	1	8/31/2014 08:50 AM
Surr: Dibromofluoromethane	93.3		70-130	%REC	1	8/31/2014 08:50 AM
Surr: Toluene-d8	98.4		70-130	%REC	1	8/31/2014 08:50 AM
ELECTRICAL CONDUCTIVITY (SAR)			USDA H60 METHOD	Prep: USDA Method 20B / 9/3/14		Analyst: JB
Electrical Conductivity @ Saturation	3.9		0.050	mmhos/cm @25	10	9/3/2014 10:50 AM
CHROMIUM, TRIVALENT			CALCULATION			Analyst: MB
Chromium, Trivalent	9.0		0.58	mg/Kg-dry	1	9/4/2014 09:50 AM
CHROMIUM, HEXAVALENT			SW7196A	Prep: SW3060A / 9/2/14		Analyst: MB
Chromium, Hexavalent	ND		0.57	mg/Kg-dry	1	9/3/2014 03:10 PM
MOISTURE			A2540 G			Analyst: JJG
Moisture	14		0.050	% of sample	1	8/29/2014 02:01 PM
PH			SW9045D	Prep: EXTRACT / 9/2/14		Analyst: JB
pH	8.5			s.u.	1	9/2/2014 01:30 PM

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

Client: HRL Compliance Solutions, Inc
Work Order: 14081484
Project: WPX PA 43-34 Batch 6 8.27.14

QC BATCH REPORT

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

MBLK		Sample ID: DBLKS1-62206-62206				Units: mg/Kg		Analysis Date: 8/29/2014 06:03 PM		
Client ID:		Run ID: GC8_140829A				SeqNo: 2913138		Prep Date: 8/29/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	ND	4.2								
Surr: 4-Terphenyl-d14	1.07	0	1.667	0	64.2	39-133	0			

LCS		Sample ID: DLCSS1-62206-62206				Units: mg/Kg		Analysis Date: 8/29/2014 06:33 PM		
Client ID:		Run ID: GC8_140829A				SeqNo: 2913139		Prep Date: 8/29/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	134.1	4.2	166.7	0	80.5	61-109	0			
Surr: 4-Terphenyl-d14	1.156	0	1.667	0	69.4	39-133	0			

MS		Sample ID: 14081488-01B MS				Units: mg/Kg		Analysis Date: 8/29/2014 07:03 PM		
Client ID:		Run ID: GC8_140829A				SeqNo: 2913140		Prep Date: 8/29/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	276.2	8.2	329.5	34.68	73.3	48-110	0			
Surr: 4-Terphenyl-d14	2.298	0	3.295	0	69.7	39-133	0			

MSD		Sample ID: 14081488-01B MSD				Units: mg/Kg		Analysis Date: 8/29/2014 07:33 PM		
Client ID:		Run ID: GC8_140829A				SeqNo: 2913141		Prep Date: 8/29/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	272.9	8.0	320.7	34.68	74.3	48-110	276.2	1.19	30	
Surr: 4-Terphenyl-d14	2.32	0	3.207	0	72.3	39-133	2.298	0.956	30	

The following samples were analyzed in this batch: | 14081484-01B |

Client: HRL Compliance Solutions, Inc
Work Order: 14081484
Project: WPX PA 43-34 Batch 6 8.27.14

QC BATCH REPORT

Batch ID: **62161** Instrument ID **GC9** Method: **SW8015**

MBLK		Sample ID: MBLK-62161-62161				Units: µg/Kg		Analysis Date: 8/28/2014 02:35 PM		
Client ID:		Run ID: GC9_140828A				SeqNo: 2908940		Prep Date: 8/28/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	ND	2,500								
<i>Surr: Toluene-d8</i>	4781	0	5000	0	95.6	50-150	0			

LCS		Sample ID: LCS-62161-62161				Units: µg/Kg		Analysis Date: 8/28/2014 02:09 PM		
Client ID:		Run ID: GC9_140828A				SeqNo: 2908939		Prep Date: 8/28/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	536400	2,500	500000	0	107	70-130	0			
<i>Surr: Toluene-d8</i>	5945	0	5000	0	119	50-150	0			

MS		Sample ID: 14081237-01A MS				Units: µg/Kg		Analysis Date: 8/29/2014 02:46 AM		
Client ID:		Run ID: GC9_140828A				SeqNo: 2909212		Prep Date: 8/28/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	532200	2,500	500000	0	106	70-130	0			
<i>Surr: Toluene-d8</i>	6074	0	5000	0	121	50-150	0			

MSD		Sample ID: 14081237-01A MSD				Units: µg/Kg		Analysis Date: 8/29/2014 03:11 AM		
Client ID:		Run ID: GC9_140828A				SeqNo: 2909214		Prep Date: 8/28/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	487100	2,500	500000	0	97.4	70-130	532200	8.86	30	
<i>Surr: Toluene-d8</i>	5918	0	5000	0	118	50-150	6074	2.6	30	

The following samples were analyzed in this batch:

14081484-01A

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

Client: HRL Compliance Solutions, Inc
Work Order: 14081484
Project: WPX PA 43-34 Batch 6 8.27.14

QC BATCH REPORT

Batch ID: **62252** Instrument ID **HG1** Method: **SW7471**

MBLK				Sample ID: MBLK-62252-62252				Units: mg/Kg			Analysis Date: 9/2/2014 04:05 PM												
Client ID:				Run ID: HG1_140902A				SeqNo: 2914185			Prep Date: 9/2/2014		DF: 1										
Analyte				Result		PQL		SPK Val		SPK Ref Value		%REC		Control Limit		RPD Ref Value		%RPD		RPD Limit		Qual	

Mercury ND 0.020

LCS				Sample ID: LCS-62252-62252				Units:mg/Kg			Analysis Date: 9/2/2014 04:07 PM		
Client ID:				Run ID: HG1_140902A				SeqNo:2914186		Prep Date: 9/2/2014		DF: 1	
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual		

Mercury 0.1605 0.020 0.1665 0 96.4 80-120 0

MS				Sample ID: 14081580-05BMS				Units:mg/Kg			Analysis Date: 9/2/2014 04:44 PM												
Client ID:				Run ID: HG1_140902A				SeqNo:2914210		Prep Date: 9/2/2014		DF: 1											
Analyte				Result		PQL		SPK Val		SPK Ref Value		%REC		Control Limit		RPD Ref Value		%RPD		RPD Limit		Qual	

Mercury 0.1144 0.013 0.1048 0.006092 103 75-125 0

MSD				Sample ID: 14081580-05BMSD				Units:mg/Kg			Analysis Date: 9/2/2014 04:47 PM		
Client ID:				Run ID: HG1_140902A				SeqNo:2914211		Prep Date: 9/2/2014		DF: 1	
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual		

Mercury 0.1144 0.012 0.1027 0.006092 105 75-125 0.1144 0.0112 35

The following samples were analyzed in this batch:

14081484-01B

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

Client: HRL Compliance Solutions, Inc
Work Order: 14081484
Project: WPX PA 43-34 Batch 6 8.27.14

QC BATCH REPORT

Batch ID: **62189** Instrument ID **SAR** Method: **USDA H60 Method**

DUP				Sample ID: 14081480-01CDUP				Units: none			Analysis Date: 9/3/2014			
Client ID:				Run ID: SAR_140903A				SeqNo: 2915545			Prep Date: 9/3/2014		DF: 1	
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual			
Sodium Adsorption Ratio		4.708	0.010	0	0	0		4.64	1.47	50				

The following samples were analyzed in this batch:

14081484-01C

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

Client: HRL Compliance Solutions, Inc
Work Order: 14081484
Project: WPX PA 43-34 Batch 6 8.27.14

QC BATCH REPORT

Batch ID: **62215** Instrument ID **ICPMS1** Method: **SW6020A**

MBLK				Sample ID: MBLK-62215-62215				Units:mg/Kg		Analysis Date: 8/29/2014 04:58 PM	
Client ID:			Run ID: ICPMS1_140829A			SeqNo:2912798		Prep Date: 8/29/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Arsenic	ND	0.25									
Barium	ND	0.25									
Cadmium	ND	0.10									
Chromium	ND	0.25									
Copper	ND	0.25									
Lead	ND	0.25									
Nickel	ND	0.25									
Selenium	ND	0.25									
Silver	ND	0.25									
Zinc	0.0755	0.50								J	

LCS				Sample ID: LCS-62215-62215				Units:mg/Kg			Analysis Date: 8/29/2014 05:05 PM			
Client ID:				Run ID: ICPMS1_140829A				SeqNo:2912799			Prep Date: 8/29/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual				
Arsenic	4.47	0.25	5	0	89.4	80-120	0							
Barium	4.514	0.25	5	0	90.3	80-120	0							
Cadmium	4.539	0.10	5	0	90.8	80-120	0							
Chromium	4.674	0.25	5	0	93.5	80-120	0							
Copper	4.541	0.25	5	0	90.8	80-120	0							
Lead	4.416	0.25	5	0	88.3	80-120	0							
Nickel	4.682	0.25	5	0	93.6	80-120	0							
Selenium	4.436	0.25	5	0	88.7	80-120	0							
Silver	4.452	0.25	5	0	89	80-120	0							
Zinc	4.666	0.50	5	0	93.3	80-120	0							

MS					Sample ID: 14081493-05BMS			Units:mg/Kg		Analysis Date: 8/29/2014 07:48 PM		
Client ID:			Run ID: ICPMS1_140829A			SeqNo:2912847		Prep Date: 8/29/2014		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual		
Arsenic	7.17	0.37	7.44	0.5493	89	75-125		0				
Barium	15.21	0.37	7.44	6.565	116	75-125		0				
Cadmium	6.769	0.15	7.44	0.02481	90.6	75-125		0				
Chromium	9.42	0.37	7.44	1.978	100	75-125		0				
Copper	7.783	0.37	7.44	0.9567	91.7	75-125		0				
Lead	7.932	0.37	7.44	1.457	87	75-125		0				
Nickel	9.115	0.37	7.44	1.857	97.5	75-125		0				
Selenium	6.579	0.37	7.44	0.2993	84.4	75-125		0				
Silver	6.416	0.37	7.44	0.002176	86.2	75-125		0				
Zinc	17.15	0.74	7.44	8.543	116	75-125		0				

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

Client: HRL Compliance Solutions, Inc
Work Order: 14081484
Project: WPX PA 43-34 Batch 6 8.27.14

QC BATCH REPORT

Batch ID: **62215** Instrument ID **ICPMS1** Method: **SW6020A**

MSD		Sample ID: 14081493-05BMSD				Units: mg/Kg		Analysis Date: 8/29/2014 08:13 PM		
Client ID:		Run ID: ICPMS1_140829A				SeqNo: 2912855		Prep Date: 8/29/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	6.955	0.37	7.375	0.5493	86.9	75-125	7.17	3.05	25	
Barium	14.91	0.37	7.375	6.565	113	75-125	15.21	1.97	25	
Cadmium	6.587	0.15	7.375	0.02481	89	75-125	6.769	2.73	25	
Chromium	9.58	0.37	7.375	1.978	103	75-125	9.42	1.68	25	
Copper	7.574	0.37	7.375	0.9567	89.7	75-125	7.783	2.72	25	
Lead	7.662	0.37	7.375	1.457	84.1	75-125	7.932	3.45	25	
Nickel	8.945	0.37	7.375	1.857	96.1	75-125	9.115	1.87	25	
Selenium	6.508	0.37	7.375	0.2993	84.2	75-125	6.579	1.08	25	
Silver	6.333	0.37	7.375	0.002176	85.8	75-125	6.416	1.31	25	
Zinc	16.18	0.74	7.375	8.543	104	75-125	17.15	5.82	25	

The following samples were analyzed in this batch: 14081484-01B

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

Client: HRL Compliance Solutions, Inc
Work Order: 14081484
Project: WPX PA 43-34 Batch 6 8.27.14

QC BATCH REPORT

Batch ID: **62205** Instrument ID **SVMS4** Method: **SW846 8270D**

MBLK		Sample ID: SBLKS1-62205-62205				Units: µg/Kg		Analysis Date: 8/31/2014 11:21 AM		
Client ID:		Run ID: SVMS4_140831A				SeqNo: 2912500		Prep Date: 8/29/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
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>	1269	0	1667	0	76.1	12-100	0			
<i>Surr: 4-Terphenyl-d14</i>	1566	0	1667	0	94	25-137	0			
<i>Surr: Nitrobenzene-d5</i>	934.3	0	1667	0	56.1	37-107	0			

LCS		Sample ID: SLCSS1-62205-62205				Units: µg/Kg		Analysis Date: 8/31/2014 11:45 AM		
Client ID:		Run ID: SVMS4_140831A				SeqNo: 2912501		Prep Date: 8/29/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	494	6.7	666.7	0	74.1	45-110	0			
Acenaphthylene	512.3	6.7	666.7	0	76.8	45-105	0			
Anthracene	553	6.7	666.7	0	82.9	55-105	0			
Benzo(a)anthracene	550.3	6.7	666.7	0	82.5	50-110	0			
Benzo(a)pyrene	576.3	6.7	666.7	0	86.4	50-110	0			
Benzo(b)fluoranthene	599.3	6.7	666.7	0	89.9	45-115	0			
Benzo(g,h,i)perylene	616	6.7	666.7	0	92.4	40-125	0			
Benzo(k)fluoranthene	574.3	6.7	666.7	0	86.1	45-115	0			
Chrysene	562	6.7	666.7	0	84.3	55-110	0			
Dibenzo(a,h)anthracene	643.3	6.7	666.7	0	96.5	40-125	0			
Fluoranthene	518.7	6.7	666.7	0	77.8	55-115	0			
Fluorene	547.7	6.7	666.7	0	82.1	50-110	0			
Indeno(1,2,3-cd)pyrene	720.7	6.7	666.7	0	108	40-120	0			
Naphthalene	521	6.7	666.7	0	78.1	40-105	0			
Pyrene	584.7	6.7	666.7	0	87.7	45-125	0			
<i>Surr: 2-Fluorobiphenyl</i>	1287	0	1667	0	77.2	12-100	0			
<i>Surr: 4-Terphenyl-d14</i>	1508	0	1667	0	90.5	25-137	0			
<i>Surr: Nitrobenzene-d5</i>	1019	0	1667	0	61.1	37-107	0			

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

Client: HRL Compliance Solutions, Inc
Work Order: 14081484
Project: WPX PA 43-34 Batch 6 8.27.14

QC BATCH REPORT

Batch ID: **62205** Instrument ID **SVMS4** Method: **SW846 8270D**

MS				Sample ID: 14081335-02A MS			Units: µg/Kg		Analysis Date: 8/31/2014 01:36 PM	
Client ID:		Run ID: SVMS4_140831A			SeqNo: 2912502		Prep Date: 8/29/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	971.4	13	1301	0	74.6	45-110	0			
Acenaphthylene	972.7	13	1301	0	74.7	45-105	0			
Anthracene	1139	13	1301	0	87.5	55-105	0			
Benzo(a)anthracene	1160	13	1301	91.12	82.1	50-110	0			
Benzo(a)pyrene	1234	13	1301	0	94.8	50-110	0			
Benzo(b)fluoranthene	1282	13	1301	0	98.5	45-115	0			
Benzo(g,h,i)perylene	1371	13	1301	0	105	40-125	0			
Benzo(k)fluoranthene	1176	13	1301	0	90.4	45-115	0			
Chrysene	1180	13	1301	0	90.6	55-110	0			
Dibenzo(a,h)anthracene	1380	13	1301	0	106	40-125	0			
Fluoranthene	1079	13	1301	0	82.9	55-115	0			
Fluorene	1098	13	1301	0	84.3	50-110	0			
Indeno(1,2,3-cd)pyrene	1571	13	1301	117.4	112	40-120	0			
Naphthalene	905.7	13	1301	0	69.6	40-105	0			
Pyrene	1235	13	1301	0	94.9	45-125	0			
Surr: 2-Fluorobiphenyl	2560	0	3253	0	78.7	12-100	0			
Surr: 4-Terphenyl-d14	3229	0	3253	0	99.3	25-137	0			
Surr: Nitrobenzene-d5	1986	0	3253	0	61.1	37-107	0			

MSD				Sample ID: 14081335-02A MSD			Units: µg/Kg		Analysis Date: 8/31/2014 02:00 PM	
Client ID:		Run ID: SVMS4_140831A			SeqNo: 2912503		Prep Date: 8/29/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	944.7	13	1296	0	72.9	45-110	971.4	2.79	30	
Acenaphthylene	934.3	13	1296	0	72.1	45-105	972.7	4.03	30	
Anthracene	1127	13	1296	0	87	55-105	1139	1.05	30	
Benzo(a)anthracene	1122	13	1296	91.12	79.5	50-110	1160	3.38	30	
Benzo(a)pyrene	1201	13	1296	0	92.7	50-110	1234	2.71	30	
Benzo(b)fluoranthene	1223	13	1296	0	94.3	45-115	1282	4.78	30	
Benzo(g,h,i)perylene	1293	13	1296	0	99.7	40-125	1371	5.88	30	
Benzo(k)fluoranthene	1160	13	1296	0	89.5	45-115	1176	1.42	30	
Chrysene	1111	13	1296	0	85.7	55-110	1180	5.98	30	
Dibenzo(a,h)anthracene	1317	13	1296	0	102	40-125	1380	4.66	30	
Fluoranthene	1080	13	1296	0	83.3	55-115	1079	0.119	30	
Fluorene	1092	13	1296	0	84.3	50-110	1098	0.481	30	
Indeno(1,2,3-cd)pyrene	1491	13	1296	117.4	106	40-120	1571	5.21	30	
Naphthalene	929.1	13	1296	0	71.7	40-105	905.7	2.55	30	
Pyrene	1182	13	1296	0	91.2	45-125	1235	4.34	30	
Surr: 2-Fluorobiphenyl	2438	0	3240	0	75.3	12-100	2560	4.89	40	
Surr: 4-Terphenyl-d14	3104	0	3240	0	95.8	25-137	3229	3.97	40	
Surr: Nitrobenzene-d5	1864	0	3240	0	57.5	37-107	1986	6.36	40	

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

Client: HRL Compliance Solutions, Inc
Work Order: 14081484
Project: WPX PA 43-34 Batch 6 8.27.14

QC BATCH REPORT

Batch ID: **62205** Instrument ID **SVMS4** Method: **SW846 8270D**

The following samples were analyzed in this batch:

14081484-01B

Client: HRL Compliance Solutions, Inc
Work Order: 14081484
Project: WPX PA 43-34 Batch 6 8.27.14

QC BATCH REPORT

Batch ID: **62190** Instrument ID **VMS8** Method: **SW8260B**

MBLK				Sample ID: MBLK-62190-62190				Units: µg/Kg			Analysis Date: 8/29/2014 04:47 AM		
Client ID:			Run ID: VMS8_140828A			SeqNo: 2910455			Prep Date: 8/28/2014		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual			
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	999	0	1000	0	99.9	70-130		0					
Surr: 4-Bromofluorobenzene	972	0	1000	0	97.2	70-130		0					
Surr: Dibromofluoromethane	972.5	0	1000	0	97.2	70-130		0					
Surr: Toluene-d8	984.5	0	1000	0	98.4	70-130		0					

LCS				Sample ID: LCS-62190-62190			Units: µg/Kg		Analysis Date: 8/29/2014 02:45 AM		
Client ID:			Run ID: VMS8_140828A			SeqNo: 2910453		Prep Date: 8/28/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	1046	30	1000	0	105	75-125	0				
Ethylbenzene	1074	30	1000	0	107	75-125	0				
m,p-Xylene	2144	60	2000	0	107	80-125	0				
o-Xylene	1051	30	1000	0	105	75-125	0				
Toluene	1038	30	1000	0	104	70-125	0				
Xylenes, Total	3195	90	3000	0	106	75-125	0				
Surr: 1,2-Dichloroethane-d4	993	0	1000	0	99.3	70-130	0				
Surr: 4-Bromofluorobenzene	1022	0	1000	0	102	70-130	0				
Surr: Dibromofluoromethane	1010	0	1000	0	101	70-130	0				
Surr: Toluene-d8	1003	0	1000	0	100	70-130	0				

The following samples were analyzed in this batch:

14081484-01A

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

Client: HRL Compliance Solutions, Inc
Work Order: 14081484
Project: WPX PA 43-34 Batch 6 8.27.14

QC BATCH REPORT

Batch ID: **62189** Instrument ID **WETCHEM** Method: **USDA H60 Method**

DUP		Sample ID: 14081480-01C DUP				Units: mmhos/cm @25°C		Analysis Date: 9/3/2014 10:50 AM		
Client ID:		Run ID: WETCHEM_140903B				SeqNo: 2915140		Prep Date: 9/3/2014		DF: 10
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Electrical Conductivity @ Saturation	4.9	0.050	0	0	0		4.59	6.53	50	

The following samples were analyzed in this batch:

14081484-01C

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

Client: HRL Compliance Solutions, Inc
Work Order: 14081484
Project: WPX PA 43-34 Batch 6 8.27.14

QC BATCH REPORT

Batch ID: **62294** Instrument ID **WETCHEM** Method: **SW9045D**

LCS					Sample ID: LCS-62294-62294					Units:s.u.			Analysis Date: 9/2/2014 01:30 PM				
Client ID:					Run ID: WETCHEM_140902D					SeqNo: 2913501			Prep Date: 9/2/2014			DF: 1	
Analyte					Result		PQL	SPK Val	SPK Ref Value	%REC		Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
pH					4		0	4	0	100		90-110	0				

DUP				Sample ID: 14081489-01B DUP				Units: s.u.			Analysis Date: 9/2/2014 01:30 PM		
Client ID:				Run ID: WETCHEM_140902D				SeqNo: 2913507		Prep Date: 9/2/2014		DF: 1	
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual		
pH		9.21	0	0	0	0	0-0	9.19	0.217	20			

The following samples were analyzed in this batch:

14081484-01B

Client: HRL Compliance Solutions, Inc
Work Order: 14081484
Project: WPX PA 43-34 Batch 6 8.27.14

QC BATCH REPORT

Batch ID: **62296** Instrument ID **WETCHEM** Method: **SW7196A**

MBLK		Sample ID: MBLK-62296-62296				Units: mg/Kg		Analysis Date: 9/3/2014 03:10 PM		
Client ID:		Run ID: WETCHEM_140903K				SeqNo: 2916006		Prep Date: 9/2/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent ND 0.50

LCS		Sample ID: LCS-62296-62296				Units: mg/Kg		Analysis Date: 9/3/2014 03:10 PM		
Client ID:		Run ID: WETCHEM_140903K				SeqNo: 2916005		Prep Date: 9/2/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

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

MS		Sample ID: 14081376-65A MS				Units: mg/Kg		Analysis Date: 9/3/2014 03:10 PM		
Client ID:		Run ID: WETCHEM_140903K				SeqNo: 2915990		Prep Date: 9/2/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 3.912 0.50 1.992 2.405 75.7 75-125 0

MS		Sample ID: 14081376-65A MSI				Units: mg/Kg		Analysis Date: 9/3/2014 03:10 PM		
Client ID:		Run ID: WETCHEM_140903K				SeqNo: 2915992		Prep Date: 9/2/2014		DF: 100
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 950 49 994.5 2.405 95.3 75-125 0

MSD		Sample ID: 14081376-65A MSD				Units: mg/Kg		Analysis Date: 9/3/2014 03:10 PM		
Client ID:		Run ID: WETCHEM_140903K				SeqNo: 2915991		Prep Date: 9/2/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 4.765 0.50 1.992 2.405 118 75-125 3.912 19.7 20

The following samples were analyzed in this batch:

14081484-01B

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

Client: HRL Compliance Solutions, Inc
Work Order: 14081484
Project: WPX PA 43-34 Batch 6 8.27.14

QC BATCH REPORT

Batch ID: **R147301** Instrument ID **MOIST** Method: **A2540 G**

MBLK		Sample ID: WBLKS-R147301				Units: % of sample		Analysis Date: 8/29/2014 02:01 PM		
Client ID:		Run ID: MOIST_140829G				SeqNo: 2911715		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-R147301				Units: % of sample		Analysis Date: 8/29/2014 02:01 PM		
Client ID:		Run ID: MOIST_140829G				SeqNo: 2911711		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: 14081306-17BDUP				Units: % of sample		Analysis Date: 8/29/2014 02:01 PM		
Client ID:		Run ID: MOIST_140829G				SeqNo: 2911689		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 14.79 0.050 0 0 0 0-0 14.88 0.607 20

DUP		Sample ID: 14081395-01ADUP				Units: % of sample		Analysis Date: 8/29/2014 02:01 PM		
Client ID:		Run ID: MOIST_140829G				SeqNo: 2911701		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 14.21 0.050 0 0 0 0-0 12.9 9.66 20

The following samples were analyzed in this batch:

14081484-01B

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



Chain-of-Custody

14081484

Form 202r0

PAGE

1 of 1

DISPOSAL

By Lab or 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.

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	<i>[Signature]</i>	<i>[Signature]</i>	8/27/14	1200
RECEIVED BY	<i>[Signature]</i>	<i>[Signature]</i>	8-27	1240
RELINQUISHED BY	<i>[Signature]</i>	<i>[Signature]</i>	8-27	1300
RECEIVED BY	<i>[Signature]</i>	KERRY WIERENKA	8/28/14	0830
RELINQUISHED BY				
RECEIVED BY				

Sample Receipt Checklist

Client Name: **HRL**

Date/Time Received: **28-Aug-14 09:30**

Work Order: **14081484**

Received by: **KRW**

Checklist completed by <u>Keith Wurenga</u>	28-Aug-14	Reviewed by: <u>Ann Preston</u>	28-Aug-14
eSignature	Date	eSignature	Date

Matrices: **Soil**

Carrier name: **FedEx**

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature in compliance?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample(s) received on ice?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Temperature(s)/Thermometer(s):	<u>4.2 C</u>		
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:	<u>8/28/2014 1:45:36 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:			

Login Notes:

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:

Comments:

CorrectiveAction:

From: (816) 399-8070
 Nick Martinez
 ALS Environmental
 127 E. 1st Street
 PARACHUTE, MI 49424

Origin ID: HLMA



Ship Date: 27AUG14
 ActWgt: 64.0 LB
 CAD: 22648404NET3550

Dims: 24 X 15 X 15 IN

SHP TO: (816) 399-8070
 sample receiving
 ALS Laboratory Group
 3352 128TH AVE
 HOLLAND, MI 49424

BILL SENDER

Delivery Address Bar Code



Ref # 082714-2
 Invoice #
 PO # Parachute
 Dept #

2 of 3

THU - 28 AUG 10:30A
 PRIORITY OVERNIGHT

MP# 7709 7048 4375

0261

Matr# 7709 7048 4103

0261

49424

MI-US

GRR

68 HLMA

522GUECF2BAC3

After printing this label:

1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.

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

