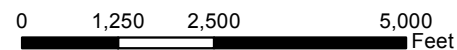


Legend

- Material Destination
- Current Material Location
- Existing Road
- Existing Pad

Land Farm Material Relocation Map April 13, 2015



Analytical Results

Contaminant of Concern ↓	COGCC standards	Location →	RWF 531-13 Batch 1	RWF 531-13 Batch 1	RWF 531-13 Batch 2	RWF 531-13 Batch 3	RWF 531-13 Batch 3
		Date Sampled	4/22/2014	7/9/2014	8/13/2014	9/19/2014	2/4/2014
Organic Compounds in Soil							
TPH	500	mg/kg	2,400	194	110	779	196
DRO		mg/kg	1,300	110	110	750	180
GRO		mg/kg	1100	84	ND	29	16
Benzene	0.17	mg/kg	ND		ND	ND	
Toluene	85	mg/kg	1.60		ND	ND	
Ethylbenzene	100	mg/kg	1.40		ND	ND	
Xylenes (Total)	175	mg/kg	26.00		ND	0.32	
Acenaphthene	1,000	mg/kg	0.35		ND	ND	
Anthracene	1,000	mg/kg	ND		ND	0.07	
Benzo(A)anthracene	0.22	mg/kg	ND		0.02	0.009	
Benzo(B)fluoranthene	0.22	mg/kg	ND		ND	0.017	
Benzo(K)fluoranthene	2.2	mg/kg	ND		ND	ND	
Benzo(A)pyrene	0.022	mg/kg	ND		ND	ND	
Chrysene	22	mg/kg	ND		ND	0.012	
Dibenzo(A,H)anthracene	0.022	mg/kg	ND		ND	ND	
Fluoranthene	1,000	mg/kg	ND		ND	0.0088	
Fluorene	1,000	mg/kg	0.42		0.011	0.11	
Indeno(1,2,3-cd)pyrene	0.22	mg/kg	ND		ND	ND	
Naphthalene	23	mg/kg	0.32		0.024	0.15	
Pyrene	1,000	mg/kg	ND		ND	0.017	
Inorganics in Soil							
EC	<4 or 2 x background	mmhos/cm	4.5		5.7	4	
SAR	<12		22		33	27	
pH	6-9		9.1		8.1	9	
Metals in Soil							
Arsenic	0.39	mg/kg	4.3		6.9	5.1	
Barium total	15,000	mg/kg	670		5600	310	
Cadmium	70	mg/kg	0.94		ND	ND	
Chromium (III)	120,000	mg/kg	10		14	11	
Chromium (VI)	23	mg/kg	ND		0.55	ND	
Copper	3,100	mg/kg	12		20	15	
Lead	400	mg/kg	15		12	29	
Mercury	23	mg/kg	0.027		0.042	0.035	
Nickel	1,600	mg/kg	15		15	16	
Selenium	390	mg/kg	2.3		2.3	3	
Silver	390	mg/kg	ND		ND	ND	
Zinc	23,000	mg/kg	55		57	62	



01-May-2014

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

Re: **WPX RWF 531-13 Landfarm Batch 1 4.22.14**

Work Order: **14041172**

Dear Mark,

ALS Environmental received 1 sample on 23-Apr-2014 10:00 AM for the analyses presented in the following report.

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

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

The total number of pages in this report is 27.

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 RWF 531-13 Landfarm Batch 1 4.22.14
Work Order: 14041172

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>
14041172-01	Batch 1	Soil		4/22/2014 13:30	4/23/2014 10:00	<input type="checkbox"/>

Client: HRL Compliance Solutions, Inc
Project: WPX RWF 531-13 Landfarm Batch 1 4.22.14
Work Order: 14041172

Case Narrative

Batch 57954 MS/MSD data for Hexavalent Chromium is not related to this project's samples. No data requires qualification.

Batch 57975 sample 14041172-01 was run at a dilution for BTEX.

Batch 57977 sample 14041172-01 DRO surrogate recovery was high due to matrix interference. No data requires qualification.

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

Batch 58134 sample 14041172-01 was run at a dilution due to matrix interference.

<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: 01-May-14

Client: HRL Compliance Solutions, Inc
Project: WPX RWF 531-13 Landfarm Batch 1 4.22.14
Sample ID: Batch 1
Collection Date: 4/22/2014 01:30 PM

Work Order: 14041172
Lab ID: 14041172-01
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
			SW8015M		Prep: SW3541 / 4/25/14	Analyst: IT
DRO (C10-C28)	1,300		4.5	mg/Kg-dry	1	4/28/2014 01:57 PM
Surr: 4-Terphenyl-d14	606	S	39-133	%REC	1	4/28/2014 01:57 PM
GASOLINE RANGE ORGANICS BY GC-FID						
			SW8015		Prep: SW5035 / 4/25/14	Analyst: IT
GRO (C6-C10)	1,100		2.7	mg/Kg-dry	1	4/25/2014 05:55 PM
Surr: Toluene-d8	120		50-150	%REC	1	4/25/2014 05:55 PM
MERCURY BY CVAA						
			SW7471		Prep: SW7471 / 4/29/14	Analyst: LR
Mercury	0.027		0.016	mg/Kg-dry	1	4/29/2014 03:28 PM
METALS BY ICP-MS						
			SW6020A		Prep: SW3050B / 4/29/14	Analyst: ML
Arsenic	4.3		1.9	mg/Kg-dry	5	4/30/2014 12:59 AM
Barium	670		1.9	mg/Kg-dry	5	4/30/2014 12:59 AM
Cadmium	0.94		0.76	mg/Kg-dry	5	4/30/2014 12:59 AM
Chromium	11		1.9	mg/Kg-dry	5	4/30/2014 12:59 AM
Copper	12		1.9	mg/Kg-dry	5	4/30/2014 12:59 AM
Lead	15		1.9	mg/Kg-dry	5	4/30/2014 12:59 AM
Nickel	15		1.9	mg/Kg-dry	5	4/30/2014 12:59 AM
Selenium	2.3		1.9	mg/Kg-dry	5	4/30/2014 12:59 AM
Silver	ND		1.9	mg/Kg-dry	5	4/30/2014 12:59 AM
Zinc	55		3.8	mg/Kg-dry	5	4/30/2014 12:59 AM
SOLUBLE CATIONS FOR SAR						
			SW6020A		Prep: USDA Method 20B / 4/28/14	Analyst: RH
Calcium	48		10	mg/L	20	4/30/2014 07:18 AM
Magnesium	27		4.0	mg/L	20	4/30/2014 07:18 AM
Sodium	790		4.0	mg/L	20	4/30/2014 07:18 AM
SODIUM ADSORPTION RATIO						
			USDA H60 METHO		Prep: USDA Method 20B / 4/28/14	Analyst: RH
Sodium Adsorption Ratio	22		0.010	none	1	4/29/2014
SEMI-VOLATILE ORGANIC COMPOUNDS						
			SW8270		Prep: SW3541 / 4/30/14	Analyst: HL
Acenaphthene	350		71	µg/Kg-dry	10	5/1/2014 11:57 AM
Acenaphthylene	ND		71	µg/Kg-dry	10	5/1/2014 11:57 AM
Anthracene	ND		71	µg/Kg-dry	10	5/1/2014 11:57 AM
Benzo(a)anthracene	ND		71	µg/Kg-dry	10	5/1/2014 11:57 AM
Benzo(a)pyrene	ND		71	µg/Kg-dry	10	5/1/2014 11:57 AM
Benzo(b)fluoranthene	ND		71	µg/Kg-dry	10	5/1/2014 11:57 AM
Benzo(g,h,i)perylene	ND		71	µg/Kg-dry	10	5/1/2014 11:57 AM
Benzo(k)fluoranthene	ND		71	µg/Kg-dry	10	5/1/2014 11:57 AM
Chrysene	ND		71	µg/Kg-dry	10	5/1/2014 11:57 AM

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

ALS Group USA, Corp

Date: 01-May-14

Client: HRL Compliance Solutions, Inc
Project: WPX RWF 531-13 Landfarm Batch 1 4.22.14
Sample ID: Batch 1
Collection Date: 4/22/2014 01:30 PM

Work Order: 14041172
Lab ID: 14041172-01
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Dibenzo(a,h)anthracene	ND		71	µg/Kg-dry	10	5/1/2014 11:57 AM
Fluoranthene	ND		71	µg/Kg-dry	10	5/1/2014 11:57 AM
Fluorene	420		71	µg/Kg-dry	10	5/1/2014 11:57 AM
Indeno(1,2,3-cd)pyrene	ND		71	µg/Kg-dry	10	5/1/2014 11:57 AM
Naphthalene	320		71	µg/Kg-dry	10	5/1/2014 11:57 AM
Pyrene	ND		71	µg/Kg-dry	10	5/1/2014 11:57 AM
Surr: 2-Fluorobiphenyl	74.0		12-100	%REC	10	5/1/2014 11:57 AM
Surr: 4-Terphenyl-d14	83.4		25-137	%REC	10	5/1/2014 11:57 AM
Surr: Nitrobenzene-d5	81.0		37-107	%REC	10	5/1/2014 11:57 AM
VOLATILE ORGANIC COMPOUNDS			SW8260B	Prep: SW5035 / 4/25/14		Analyst: BG
Benzene	ND		330	µg/Kg-dry	10	4/29/2014 09:28 PM
Ethylbenzene	1,400		330	µg/Kg-dry	10	4/29/2014 09:28 PM
m,p-Xylene	20,000		660	µg/Kg-dry	10	4/29/2014 09:28 PM
o-Xylene	6,100		330	µg/Kg-dry	10	4/29/2014 09:28 PM
Toluene	1,600		330	µg/Kg-dry	10	4/29/2014 09:28 PM
Xylenes, Total	26,000		980	µg/Kg-dry	10	4/29/2014 09:28 PM
Surr: 1,2-Dichloroethane-d4	95.7		70-130	%REC	10	4/29/2014 09:28 PM
Surr: 4-Bromofluorobenzene	86.4		70-130	%REC	10	4/29/2014 09:28 PM
Surr: Dibromofluoromethane	99.0		70-130	%REC	10	4/29/2014 09:28 PM
Surr: Toluene-d8	99.5		70-130	%REC	10	4/29/2014 09:28 PM
ELECTRICAL CONDUCTIVITY (SAR)			USDA H60 METHO	Prep: USDA Method 20B / 4/28/14		Analyst: JB
Electrical Conductivity @ Saturation	4.5		0.050	mmhos/cm @25	10	4/29/2014 03:40 PM
CHROMIUM, TRIVALENT			CALCULATION			Analyst: JJG
Chromium, Trivalent	10		0.55	mg/Kg-dry	1	4/30/2014 04:26 PM
CHROMIUM, HEXAVALENT			SW7196A	Prep: SW3060A / 4/25/14		Analyst: JI
Chromium, Hexavalent	ND		0.54	mg/Kg-dry	1	4/25/2014 12:00 PM
MOISTURE			A2540 G			Analyst: AT
Moisture	8.6		0.050	% of sample	1	4/23/2014 04:12 PM
PH			SW9045D	Prep: EXTRACT / 4/24/14		Analyst: AT
pH	9.1			s.u.	1	4/24/2014 10:37 AM

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

Client: HRL Compliance Solutions, Inc

Work Order: 14041172

Project: WPX RWF 531-13 Landfarm Batch 1 4.22.14

QC BATCH REPORT

Batch ID: 57977

Instrument ID GC8

Method: SW8015M

MBLK		Sample ID: DBLKS1-57977-57977				Units: mg/Kg		Analysis Date: 4/28/2014 09:27 AM		
Client ID:		Run ID: GC8_140428A				SeqNo: 2734258		Prep Date: 4/25/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	ND	4.2								
Surr: 4-Terphenyl-d14	1.326	0	1.667	0	79.5	39-133	0			

LCS		Sample ID: DLCSS1-57977-57977				Units: mg/Kg		Analysis Date: 4/28/2014 09:57 AM		
Client ID:		Run ID: GC8_140428A				SeqNo: 2734259		Prep Date: 4/25/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	122.1	4.2	166.7	0	73.3	61-109	0			
Surr: 4-Terphenyl-d14	1.374	0	1.667	0	82.5	39-133	0			

MS		Sample ID: 14041170-01B MS				Units: mg/Kg		Analysis Date: 4/28/2014 10:27 AM		
Client ID:		Run ID: GC8_140428A				SeqNo: 2734261		Prep Date: 4/25/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	552.2	8.1	324.7	320.4	71.4	48-110	0			
Surr: 4-Terphenyl-d14	2.67	0	3.247	0	82.2	39-133	0			

MSD		Sample ID: 14041170-01B MSD				Units: mg/Kg		Analysis Date: 4/28/2014 10:57 AM		
Client ID:		Run ID: GC8_140428A				SeqNo: 2734263		Prep Date: 4/25/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	553.8	8.3	331.9	320.4	70.3	48-110	552.2	0.301	30	
Surr: 4-Terphenyl-d14	3.173	0	3.319	0	95.6	39-133	2.67	17.2	30	

The following samples were analyzed in this batch:

14041172-01B

Client: HRL Compliance Solutions, Inc
Work Order: 14041172
Project: WPX RWF 531-13 Landfarm Batch 1 4.22.14

QC BATCH REPORT

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

MBLK		Sample ID: MBLK-57976-57976				Units: µg/Kg		Analysis Date: 4/25/2014 05:03 PM		
Client ID:		Run ID: GC9_140425A				SeqNo: 2733471		Prep Date: 4/25/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	ND	2,500								
<i>Surr: Toluene-d8</i>	4866	0	5000	0	97.3	50-150	0			

LCS		Sample ID: LCS-57976-57976				Units: µg/Kg		Analysis Date: 4/25/2014 03:47 PM		
Client ID:		Run ID: GC9_140425A				SeqNo: 2733470		Prep Date: 4/25/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	437100	2,500	500000	0	87.4	70-130	0			
<i>Surr: Toluene-d8</i>	4430	0	5000	0	88.6	50-150	0			

MS		Sample ID: 14041170-01A MS				Units: µg/Kg		Analysis Date: 4/26/2014 12:23 PM		
Client ID:		Run ID: GC9_140425A				SeqNo: 2733486		Prep Date: 4/25/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	506900	2,500	500000	0	101	70-130	0			
<i>Surr: Toluene-d8</i>	4826	0	5000	0	96.5	50-150	0			

MSD		Sample ID: 14041170-01A MSD				Units: µg/Kg		Analysis Date: 4/26/2014 12:49 PM		
Client ID:		Run ID: GC9_140425A				SeqNo: 2733487		Prep Date: 4/25/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	493100	2,500	500000	0	98.6	70-130	506900	2.76	30	
<i>Surr: Toluene-d8</i>	4780	0	5000	0	95.6	50-150	4826	0.979	30	

The following samples were analyzed in this batch:

14041172-01A

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

Client: HRL Compliance Solutions, Inc
Work Order: 14041172
Project: WPX RWF 531-13 Landfarm Batch 1 4.22.14

QC BATCH REPORT

Batch ID: **58050** Instrument ID **HG1** Method: **SW7471**

MBLK		Sample ID: MBLK-58050-58050					Units: mg/Kg		Analysis Date: 4/29/2014 02:42 PM		
Client ID:			Run ID: HG1_140429A			SeqNo: 2736814		Prep Date: 4/29/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	

Mercury ND 0.020

LCS		Sample ID: LCS-58050-58050					Units: mg/Kg		Analysis Date: 4/29/2014 02:44 PM		
Client ID:			Run ID: HG1_140429A			SeqNo: 2736815		Prep Date: 4/29/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	

Mercury 0.1861 0.020 0.1665 0 112 80-120 0

MS		Sample ID: 14041173-01BMS					Units: mg/Kg		Analysis Date: 4/29/2014 03:33 PM		
Client ID:			Run ID: HG1_140429A			SeqNo: 2736841		Prep Date: 4/29/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	

Mercury 0.1353 0.013 0.1097 0.01353 111 75-125 0

MSD		Sample ID: 14041173-01BMSD					Units: mg/Kg		Analysis Date: 4/29/2014 03:35 PM		
Client ID:			Run ID: HG1_140429A			SeqNo: 2736842		Prep Date: 4/29/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	

Mercury 0.1396 0.013 0.1092 0.01353 115 75-125 0.1353 3.11 35

The following samples were analyzed in this batch:

14041172-01B

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

Client: HRL Compliance Solutions, Inc
Work Order: 14041172
Project: WPX RWF 531-13 Landfarm Batch 1 4.22.14

QC BATCH REPORT

Batch ID: **57961** Instrument ID **ICPMS2** Method: **SW6020A**

DUP		Sample ID: 14041168-01BDUP				Units: mg/L		Analysis Date: 4/30/2014 07:06 AM		
Client ID:		Run ID: ICPMS2_140429A				SeqNo: 2737519		Prep Date: 4/28/2014		DF: 20
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	75.62	10	0	0	0	0-0	77.06	1.89		
Magnesium	5.736	4.0	0	0	0	0-0	6.102	6.18		
Sodium	10.3	4.0	0	0	0	0-0	10.05	2.4		

DUP		Sample ID: 14041168-01BDUP				Units: none		Analysis Date: 4/29/2014		
Client ID:		Run ID: SAR_140429B				SeqNo: 2737880		Prep Date: 4/28/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sodium Adsorption Ratio	0.3077	0.010	0	0	0		0.2966	3.68	50	

The following samples were analyzed in this batch:

14041172-01C

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

Client: HRL Compliance Solutions, Inc
Work Order: 14041172
Project: WPX RWF 531-13 Landfarm Batch 1 4.22.14

QC BATCH REPORT

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

MBLK		Sample ID: MBLK-58070-58070				Units: mg/Kg		Analysis Date: 4/29/2014 10:44 PM		
Client ID:		Run ID: ICPMS1_140429A				SeqNo: 2737236		Prep Date: 4/29/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	ND	0.25								
Barium	ND	0.25								
Cadmium	ND	0.10								
Chromium	ND	0.25								
Copper	ND	0.25								
Lead	ND	0.25								
Nickel	ND	0.25								
Selenium	ND	0.25								
Silver	ND	0.25								
Zinc	0.03112	0.50								J

LCS		Sample ID: LCS-58070-58070				Units: mg/Kg		Analysis Date: 4/29/2014 10:50 PM		
Client ID:		Run ID: ICPMS1_140429A				SeqNo: 2737237		Prep Date: 4/29/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	4.471	0.25	5	0	89.4	80-120	0			
Barium	4.77	0.25	5	0	95.4	80-120	0			
Cadmium	4.588	0.10	5	0	91.8	80-120	0			
Chromium	4.666	0.25	5	0	93.3	80-120	0			
Copper	4.572	0.25	5	0	91.4	80-120	0			
Lead	4.83	0.25	5	0	96.6	80-120	0			
Nickel	4.642	0.25	5	0	92.8	80-120	0			
Selenium	4.045	0.25	5	0	80.9	80-120	0			
Silver	4.448	0.25	5	0	89	80-120	0			
Zinc	4.096	0.50	5	0	81.9	80-120	0			

MS		Sample ID: 14041170-01BMS				Units: mg/Kg		Analysis Date: 4/29/2014 11:31 PM		
Client ID:		Run ID: ICPMS1_140429A				SeqNo: 2737245		Prep Date: 4/29/2014		DF: 5
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	13.17	2.0	8.183	4.179	110	75-125	0			
Barium	336.9	2.0	8.183	346.6	-118	75-125	0			SO
Cadmium	7.958	0.82	8.183	0.1982	94.8	75-125	0			
Chromium	32.82	2.0	8.183	24.07	107	75-125	0			
Copper	18.69	2.0	8.183	10.25	103	75-125	0			
Lead	20.95	2.0	8.183	11.03	121	75-125	0			
Nickel	21.88	2.0	8.183	13.64	101	75-125	0			
Selenium	9.251	2.0	8.183	1.75	91.7	75-125	0			
Silver	6.862	2.0	8.183	0.05732	83.1	75-125	0			
Zinc	49.8	4.1	8.183	39.01	132	75-125	0			SO

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

Client: HRL Compliance Solutions, Inc
Work Order: 14041172
Project: WPX RWF 531-13 Landfarm Batch 1 4.22.14

QC BATCH REPORT

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

MSD		Sample ID: 14041170-01BMSD				Units: mg/Kg		Analysis Date: 4/29/2014 11:37 PM		
Client ID:		Run ID: ICPMS1_140429A				SeqNo: 2737258		Prep Date: 4/29/2014		DF: 5
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	12.46	2.1	8.21	4.179	101	75-125	13.17	5.56	25	
Barium	373	2.1	8.21	346.6	322	75-125	336.9	10.2	25	SO
Cadmium	7.976	0.82	8.21	0.1982	94.7	75-125	7.958	0.225	25	
Chromium	32.14	2.1	8.21	24.07	98.2	75-125	32.82	2.09	25	
Copper	17.41	2.1	8.21	10.25	87.2	75-125	18.69	7.07	25	
Lead	19.25	2.1	8.21	11.03	100	75-125	20.95	8.46	25	
Nickel	21.33	2.1	8.21	13.64	93.7	75-125	21.88	2.54	25	
Selenium	8.76	2.1	8.21	1.75	85.4	75-125	9.251	5.45	25	
Silver	6.925	2.1	8.21	0.05732	83.7	75-125	6.862	0.922	25	
Zinc	46.14	4.1	8.21	39.01	86.8	75-125	49.8	7.62	25	O

The following samples were analyzed in this batch:

14041172-01B

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

Client: HRL Compliance Solutions, Inc
Work Order: 14041172
Project: WPX RWF 531-13 Landfarm Batch 1 4.22.14

QC BATCH REPORT

Batch ID: **57974** Instrument ID **SVMS7** Method: **SW8270**

MBLK		Sample ID: SBLKS1-57974-57974				Units: µg/Kg		Analysis Date: 4/28/2014 04:40 PM		
Client ID:		Run ID: SVMS7_140428A				SeqNo: 2736350		Prep Date: 4/25/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	ND	6.7								
Acenaphthylene	ND	6.7								
Anthracene	ND	6.7								
Benzo(a)anthracene	24	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	29.67	6.7								
Fluorene	ND	6.7								
Indeno(1,2,3-cd)pyrene	ND	6.7								
Naphthalene	ND	6.7								
Pyrene	26.67	6.7								
<i>Surr: 2-Fluorobiphenyl</i>	1330	0	1667	0	79.8	12-100	0			
<i>Surr: 4-Terphenyl-d14</i>	1804	0	1667	0	108	25-137	0			
<i>Surr: Nitrobenzene-d5</i>	1119	0	1667	0	67.1	37-107	0			

LCS		Sample ID: SLCSS1-57974-57974				Units: µg/Kg		Analysis Date: 4/28/2014 04:16 PM		
Client ID:		Run ID: SVMS7_140428A				SeqNo: 2736349		Prep Date: 4/25/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	472.7	6.7	666.7	0	70.9	45-110	0			
Acenaphthylene	490.7	6.7	666.7	0	73.6	45-105	0			
Anthracene	549.3	6.7	666.7	0	82.4	55-105	0			
Benzo(a)anthracene	573.7	6.7	666.7	0	86	50-110	0			B
Benzo(a)pyrene	598	6.7	666.7	0	89.7	50-110	0			
Benzo(b)fluoranthene	614	6.7	666.7	0	92.1	45-115	0			
Benzo(g,h,i)perylene	541	6.7	666.7	0	81.1	40-125	0			
Benzo(k)fluoranthene	613.7	6.7	666.7	0	92	45-115	0			
Chrysene	584	6.7	666.7	0	87.6	55-110	0			
Dibenzo(a,h)anthracene	524.3	6.7	666.7	0	78.6	40-125	0			
Fluoranthene	531	6.7	666.7	0	79.6	55-115	0			B
Fluorene	522	6.7	666.7	0	78.3	50-110	0			
Indeno(1,2,3-cd)pyrene	557	6.7	666.7	0	83.5	40-120	0			
Naphthalene	498	6.7	666.7	0	74.7	40-105	0			
Pyrene	643.7	6.7	666.7	0	96.5	45-125	0			B
<i>Surr: 2-Fluorobiphenyl</i>	1287	0	1667	0	77.2	12-100	0			
<i>Surr: 4-Terphenyl-d14</i>	1897	0	1667	0	114	25-137	0			
<i>Surr: Nitrobenzene-d5</i>	1243	0	1667	0	74.6	37-107	0			

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

Client: HRL Compliance Solutions, Inc
Work Order: 14041172
Project: WPX RWF 531-13 Landfarm Batch 1 4.22.14

QC BATCH REPORT

Batch ID: **57974** Instrument ID **SVMS7** Method: **SW8270**

MS				Sample ID: 14041170-01B MS			Units: µg/Kg		Analysis Date: 4/29/2014 01:50 PM		
Client ID:			Run ID: SVMS4_140429A			SeqNo: 2737799		Prep Date: 4/25/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Acenaphthene	1084	13	1300	0	83.3	45-110	0				
Acenaphthylene	1056	13	1300	0	81.2	45-105	0				
Anthracene	1149	13	1300	4.289	88.1	55-105	0				
Benzo(a)anthracene	1112	13	1300	0	85.5	50-110	0			B	
Benzo(a)pyrene	1256	13	1300	0	96.6	50-110	0				
Benzo(b)fluoranthene	1250	13	1300	0	96.1	45-115	0				
Benzo(g,h,i)perylene	1009	13	1300	0	77.6	40-125	0				
Benzo(k)fluoranthene	1251	13	1300	0	96.2	45-115	0				
Chrysene	1213	13	1300	13.53	92.3	55-110	0				
Dibenzo(a,h)anthracene	1047	13	1300	0	80.5	40-125	0				
Fluoranthene	1233	13	1300	14.19	93.8	55-115	0			B	
Fluorene	1095	13	1300	7.259	83.6	50-110	0				
Indeno(1,2,3-cd)pyrene	1025	13	1300	0	78.8	40-120	0				
Naphthalene	912.8	13	1300	0	70.2	40-105	0				
Pyrene	1156	13	1300	21.45	87.2	45-125	0			B	
Surr: 2-Fluorobiphenyl	2705	0	3251	0	83.2	12-100	0				
Surr: 4-Terphenyl-d14	3078	0	3251	0	94.7	25-137	0				
Surr: Nitrobenzene-d5	2430	0	3251	0	74.8	37-107	0				

MSD				Sample ID: 14041170-01B MSD			Units: µg/Kg		Analysis Date: 4/29/2014 02:24 PM		
Client ID:			Run ID: SVMS4_140429A			SeqNo: 2737800		Prep Date: 4/25/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Acenaphthene	1051	13	1286	0	81.7	45-110	1084	3.1	30		
Acenaphthylene	1053	13	1286	0	81.9	45-105	1056	0.302	30		
Anthracene	1227	13	1286	4.289	95.1	55-105	1149	6.57	30		
Benzo(a)anthracene	1173	13	1286	0	91.2	50-110	1112	5.41	30	B	
Benzo(a)pyrene	1341	13	1286	0	104	50-110	1256	6.57	30		
Benzo(b)fluoranthene	1310	13	1286	0	102	45-115	1250	4.71	30		
Benzo(g,h,i)perylene	1076	13	1286	0	83.7	40-125	1009	6.47	30		
Benzo(k)fluoranthene	1326	13	1286	0	103	45-115	1251	5.77	30		
Chrysene	1278	13	1286	13.53	98.3	55-110	1213	5.18	30		
Dibenzo(a,h)anthracene	1127	13	1286	0	87.6	40-125	1047	7.29	30		
Fluoranthene	1341	13	1286	14.19	103	55-115	1233	8.35	30	B	
Fluorene	1101	13	1286	7.259	85.1	50-110	1095	0.608	30		
Indeno(1,2,3-cd)pyrene	1103	13	1286	0	85.8	40-120	1025	7.41	30		
Naphthalene	781.9	13	1286	0	60.8	40-105	912.8	15.4	30		
Pyrene	1308	13	1286	21.45	100	45-125	1156	12.3	30	B	
Surr: 2-Fluorobiphenyl	2465	0	3215	0	76.7	12-100	2705	9.3	40		
Surr: 4-Terphenyl-d14	3306	0	3215	0	103	25-137	3078	7.14	40		
Surr: Nitrobenzene-d5	1953	0	3215	0	60.8	37-107	2430	21.7	40		

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

Client: HRL Compliance Solutions, Inc
Work Order: 14041172
Project: WPX RWF 531-13 Landfarm Batch 1 4.22.14

QC BATCH REPORT

Batch ID: **57974** Instrument ID **SVMS7** Method: **SW8270**

The following samples were analyzed in this batch:

14041172- 01B

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

Client: HRL Compliance Solutions, Inc
Work Order: 14041172
Project: WPX RWF 531-13 Landfarm Batch 1 4.22.14

QC BATCH REPORT

Batch ID: **58134** Instrument ID **SVMS7** Method: **SW8270**

MBLK		Sample ID: SBLKS1-58134-58134				Units: µg/Kg		Analysis Date: 5/1/2014 10:40 AM		
Client ID:		Run ID: SVMS7_140501A				SeqNo: 2740589		Prep Date: 4/30/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
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>	1205	0	1667	0	72.3	12-100	0			
<i>Surr: 4-Terphenyl-d14</i>	1864	0	1667	0	112	25-137	0			
<i>Surr: Nitrobenzene-d5</i>	1061	0	1667	0	63.7	37-107	0			

LCS		Sample ID: SLCSS1-58134-58134				Units: µg/Kg		Analysis Date: 5/1/2014 10:17 AM		
Client ID:		Run ID: SVMS7_140501A				SeqNo: 2740588		Prep Date: 4/30/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	432.3	6.7	666.7	0	64.8	45-110	0			
Acenaphthylene	516	6.7	666.7	0	77.4	45-105	0			
Anthracene	523.3	6.7	666.7	0	78.5	55-105	0			
Benzo(a)anthracene	564.7	6.7	666.7	0	84.7	50-110	0			
Benzo(a)pyrene	580.3	6.7	666.7	0	87	50-110	0			
Benzo(b)fluoranthene	563.7	6.7	666.7	0	84.5	45-115	0			
Benzo(g,h,i)perylene	594.7	6.7	666.7	0	89.2	40-125	0			
Benzo(k)fluoranthene	583.3	6.7	666.7	0	87.5	45-115	0			
Chrysene	568	6.7	666.7	0	85.2	55-110	0			
Dibenzo(a,h)anthracene	550	6.7	666.7	0	82.5	40-125	0			
Fluoranthene	524	6.7	666.7	0	78.6	55-115	0			
Fluorene	469.7	6.7	666.7	0	70.4	50-110	0			
Indeno(1,2,3-cd)pyrene	595.7	6.7	666.7	0	89.3	40-120	0			
Naphthalene	488	6.7	666.7	0	73.2	40-105	0			
Pyrene	623.7	6.7	666.7	0	93.5	45-125	0			
<i>Surr: 2-Fluorobiphenyl</i>	1268	0	1667	0	76.1	12-100	0			
<i>Surr: 4-Terphenyl-d14</i>	1898	0	1667	0	114	25-137	0			
<i>Surr: Nitrobenzene-d5</i>	1232	0	1667	0	73.9	37-107	0			

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

Client: HRL Compliance Solutions, Inc
Work Order: 14041172
Project: WPX RWF 531-13 Landfarm Batch 1 4.22.14

QC BATCH REPORT

Batch ID: **58134** Instrument ID **SVMS7** Method: **SW8270**

MS				Sample ID: 14041172-01B MS			Units: µg/Kg		Analysis Date: 5/1/2014 01:26 PM	
Client ID: Batch 1				Run ID: SVMS7_140501A			SeqNo: 2740591		Prep Date: 4/30/2014	
							DF: 10			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	1317	130	1266	319.7	78.8	45-110	0			
Acenaphthylene	854.8	130	1266	0	67.5	45-105	0			
Anthracene	1159	130	1266	0	91.5	55-105	0			
Benzo(a)anthracene	1108	130	1266	0	87.5	50-110	0			
Benzo(a)pyrene	848.5	130	1266	0	67	50-110	0			
Benzo(b)fluoranthene	1178	130	1266	0	93	45-115	0			
Benzo(g,h,i)perylene	943.5	130	1266	0	74.5	40-125	0			
Benzo(k)fluoranthene	930.8	130	1266	0	73.5	45-115	0			
Chrysene	975.1	130	1266	0	77	55-110	0			
Dibenzo(a,h)anthracene	956.1	130	1266	0	75.5	40-125	0			
Fluoranthene	1057	130	1266	0	83.5	55-115	0			
Fluorene	1513	130	1266	388.2	88.8	50-110	0			
Indeno(1,2,3-cd)pyrene	1032	130	1266	0	81.5	40-120	0			
Naphthalene	1165	130	1266	293.6	68.8	40-105	0			
Pyrene	835.8	130	1266	0	66	45-125	0			
Surr: 2-Fluorobiphenyl	2482	0	3166	0	78.4	12-100	0			
Surr: 4-Terphenyl-d14	2716	0	3166	0	85.8	25-137	0			
Surr: Nitrobenzene-d5	2653	0	3166	0	83.8	37-107	0			

MSD				Sample ID: 14041172-01B MSD			Units: µg/Kg		Analysis Date: 5/1/2014 01:49 PM	
Client ID: Batch 1				Run ID: SVMS7_140501A			SeqNo: 2740592		Prep Date: 4/30/2014	
							DF: 10			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	1235	130	1273	319.7	71.9	45-110	1317	6.43	30	
Acenaphthylene	802.1	130	1273	0	63	45-105	854.8	6.36	30	
Anthracene	1139	130	1273	0	89.5	55-105	1159	1.68	30	
Benzo(a)anthracene	1216	130	1273	0	95.5	50-110	1108	9.28	30	
Benzo(a)pyrene	878.5	130	1273	0	69	50-110	848.5	3.47	30	
Benzo(b)fluoranthene	1076	130	1273	0	84.5	45-115	1178	9.05	30	
Benzo(g,h,i)perylene	993.1	130	1273	0	78	40-125	943.5	5.12	30	
Benzo(k)fluoranthene	1025	130	1273	0	80.5	45-115	930.8	9.62	30	
Chrysene	903.9	130	1273	0	71	55-110	975.1	7.58	30	
Dibenzo(a,h)anthracene	833.9	130	1273	0	65.5	40-125	956.1	13.7	30	
Fluoranthene	1050	130	1273	0	82.5	55-115	1057	0.672	30	
Fluorene	1496	130	1273	388.2	87	50-110	1513	1.15	30	
Indeno(1,2,3-cd)pyrene	923	130	1273	0	72.5	40-120	1032	11.2	30	
Naphthalene	1528	130	1273	293.6	96.9	40-105	1165	26.9	30	
Pyrene	993.1	130	1273	0	78	45-125	835.8	17.2	30	
Surr: 2-Fluorobiphenyl	2279	0	3183	0	71.6	12-100	2482	8.53	40	
Surr: 4-Terphenyl-d14	2680	0	3183	0	84.2	25-137	2716	1.35	40	
Surr: Nitrobenzene-d5	2814	0	3183	0	88.4	37-107	2653	5.88	40	

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

Client: HRL Compliance Solutions, Inc
Work Order: 14041172
Project: WPX RWF 531-13 Landfarm Batch 1 4.22.14

QC BATCH REPORT

Batch ID: **58134** Instrument ID **SVMS7** Method: **SW8270**

The following samples were analyzed in this batch:

14041172- 01B

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

Client: HRL Compliance Solutions, Inc
Work Order: 14041172
Project: WPX RWF 531-13 Landfarm Batch 1 4.22.14

QC BATCH REPORT

Batch ID: **57975** Instrument ID **VMS6** Method: **SW8260B**

Sample ID: MBLK-57975-57975				Units: µg/Kg			Analysis Date: 4/25/2014 03:04 PM			
Client ID:		Run ID: VMS6_140425A			SeqNo: 2732082		Prep Date: 4/25/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	30								
Ethylbenzene	ND	30								
m,p-Xylene	ND	60								
o-Xylene	ND	30								
Toluene	ND	30								
Xylenes, Total	ND	90								
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>1008</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>101</i>	<i>70-130</i>		<i>0</i>		
<i>Surr: 4-Bromofluorobenzene</i>	<i>989.5</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>99</i>	<i>70-130</i>		<i>0</i>		
<i>Surr: Dibromofluoromethane</i>	<i>895</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>89.5</i>	<i>70-130</i>		<i>0</i>		
<i>Surr: Toluene-d8</i>	<i>955.5</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>95.6</i>	<i>70-130</i>		<i>0</i>		

LCS				Sample ID: LCS-57975-57975			Units: µg/Kg		Analysis Date: 4/25/2014 01:21 PM		
Client ID:			Run ID: VMS6_140425A			SeqNo: 2732081		Prep Date: 4/25/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	927.5	30	1000	0	92.8	75-125	0				
Ethylbenzene	910.5	30	1000	0	91	75-125	0				
m,p-Xylene	1856	60	2000	0	92.8	80-125	0				
o-Xylene	931.5	30	1000	0	93.2	75-125	0				
Toluene	891.5	30	1000	0	89.2	70-125	0				
Xylenes, Total	2788	90	3000	0	92.9	75-125	0				
Surr: 1,2-Dichloroethane-d4	977.5	0	1000	0	97.8	70-130	0				
Surr: 4-Bromofluorobenzene	983.5	0	1000	0	98.4	70-130	0				
Surr: Dibromofluoromethane	1024	0	1000	0	102	70-130	0				
Surr: Toluene-d8	972	0	1000	0	97.2	70-130	0				

MS				Sample ID: 14041189-01A MS				Units: µg/Kg		Analysis Date: 4/29/2014 09:20 AM	
Client ID:			Run ID: VMS8_140428B			SeqNo: 2736140		Prep Date: 4/25/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	910.5	30	1000	0	91	75-125	0				
Ethylbenzene	906	30	1000	0	90.6	75-125	0				
m,p-Xylene	1770	60	2000	0	88.5	80-125	0				
o-Xylene	901	30	1000	0	90.1	75-125	0				
Toluene	907	30	1000	0	90.7	70-125	0				
Xylenes, Total	2671	90	3000	0	89	75-125	0				
Surr: 1,2-Dichloroethane-d4	997	0	1000	0	99.7	70-130	0				
Surr: 4-Bromofluorobenzene	992	0	1000	0	99.2	70-130	0				
Surr: Dibromofluoromethane	1005	0	1000	0	100	70-130	0				
Surr: Toluene-d8	1005	0	1000	0	100	70-130	0				

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

Client: HRL Compliance Solutions, Inc
Work Order: 14041172
Project: WPX RWF 531-13 Landfarm Batch 1 4.22.14

QC BATCH REPORT

Batch ID: **57975** Instrument ID **VMS6** Method: **SW8260B**

MSD				Sample ID: 14041189-01A MSD				Units: µg/Kg		Analysis Date: 4/29/2014 09:44 AM	
Client ID:			Run ID: VMS8_140428B			SeqNo: 2736141		Prep Date: 4/25/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	890	30	1000	0	89	75-125	910.5	2.28	30		
Ethylbenzene	899.5	30	1000	0	90	75-125	906	0.72	30		
m,p-Xylene	1777	60	2000	0	88.8	80-125	1770	0.395	30		
o-Xylene	892.5	30	1000	0	89.2	75-125	901	0.948	30		
Toluene	893.5	30	1000	0	89.4	70-125	907	1.5	30		
Xylenes, Total	2670	90	3000	0	89	75-125	2671	0.0562	30		
Surr: 1,2-Dichloroethane-d4	988.5	0	1000	0	98.8	70-130	997	0.856	30		
Surr: 4-Bromofluorobenzene	1000	0	1000	0	100	70-130	992	0.803	30		
Surr: Dibromofluoromethane	981.5	0	1000	0	98.2	70-130	1005	2.37	30		
Surr: Toluene-d8	1005	0	1000	0	100	70-130	1005	0	30		

The following samples were analyzed in this batch:

14041172-01A

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

Client: HRL Compliance Solutions, Inc
Work Order: 14041172
Project: WPX RWF 531-13 Landfarm Batch 1 4.22.14

QC BATCH REPORT

Batch ID: **57924** Instrument ID **WETCHEM** Method: **SW9045D**

LCS		Sample ID: LCS-57924-57924					Units: s.u.		Analysis Date: 4/24/2014 10:37 AM		
Client ID:			Run ID: WETCHEM_140424B			SeqNo: 2728570		Prep Date: 4/24/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	

pH 3.95 0 4 0 98.8 90-110 0

DUP				Sample ID: 14041143-01B DUP				Units: s.u.			Analysis Date: 4/24/2014 10:37 AM			
Client ID:				Run ID: WETCHEM_140424B				SeqNo: 2728572			Prep Date: 4/24/2014		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 7.8 1.15 20

DUP				Sample ID: 14041145-05B DUP				Units: s.u.			Analysis Date: 4/24/2014 10:37 AM			
Client ID:				Run ID: WETCHEM_140424B				SeqNo: 2728582			Prep Date: 4/24/2014		DF: 1	
Analyte				Result		PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

pH 7.93 0 0 0 0 0-0 7.86 0.887 20

The following samples were analyzed in this batch:

14041172-01B

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

Client: HRL Compliance Solutions, Inc
Work Order: 14041172
Project: WPX RWF 531-13 Landfarm Batch 1 4.22.14

QC BATCH REPORT

Batch ID: **57954** Instrument ID **WETCHEM** Method: **SW7196A**

MBLK		Sample ID: MBLK-57954-57954				Units: mg/Kg		Analysis Date: 4/25/2014 12:00 PM		
Client ID:		Run ID: WETCHEM_140425G				SeqNo: 2730505		Prep Date: 4/25/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent ND 0.51

LCS		Sample ID: LCS-57954-57954				Units: mg/Kg		Analysis Date: 4/25/2014 12:00 PM		
Client ID:		Run ID: WETCHEM_140425G				SeqNo: 2730506		Prep Date: 4/25/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 1.98 0.49 1.969 0 101 80-120 0

MS		Sample ID: 14041170-01BMS				Units: mg/Kg		Analysis Date: 4/25/2014 12:00 PM		
Client ID:		Run ID: WETCHEM_140425G				SeqNo: 2730519		Prep Date: 4/25/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 0.9633 0.51 2.041 0 47.2 75-125 0 S

MS		Sample ID: 14041170-01BMSI				Units: mg/Kg		Analysis Date: 4/25/2014 12:00 PM		
Client ID:		Run ID: WETCHEM_140425G				SeqNo: 2730521		Prep Date: 4/25/2014		DF: 100
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 500.8 50 1229 0 40.7 75-125 0 S

MSD		Sample ID: 14041170-01BMSD				Units: mg/Kg		Analysis Date: 4/25/2014 12:00 PM		
Client ID:		Run ID: WETCHEM_140425G				SeqNo: 2730520		Prep Date: 4/25/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 0.9516 0.50 2.016 0 47.2 75-125 0.9633 1.22 20 S

The following samples were analyzed in this batch:

14041172-01B

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

Client: HRL Compliance Solutions, Inc
Work Order: 14041172
Project: WPX RWF 531-13 Landfarm Batch 1 4.22.14

QC BATCH REPORT

Batch ID: **57961** Instrument ID **WETCHEM** Method: **USDA H60 Method**

DUP		Sample ID: 14041168-01B DUP				Units: mmhos/cm @25°C		Analysis Date: 4/29/2014 03:40 PM		
Client ID:		Run ID: WETCHEM_140429M				SeqNo: 2736506		Prep Date: 4/28/2014		DF: 10
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Electrical Conductivity @ Saturation	0.423	0.050	0	0	0		0.465	9.46	50	

The following samples were analyzed in this batch:

14041172-01C

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

Client: HRL Compliance Solutions, Inc
Work Order: 14041172
Project: WPX RWF 531-13 Landfarm Batch 1 4.22.14

QC BATCH REPORT

Batch ID: **R139500** Instrument ID **MOIST** Method: **A2540 G**

MBLK		Sample ID: WBLKS-R139500				Units: % of sample		Analysis Date: 4/23/2014 04:12 PM		
Client ID:		Run ID: MOIST_140423B				SeqNo: 2728516		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-R139500				Units: % of sample		Analysis Date: 4/23/2014 04:12 PM		
Client ID:		Run ID: MOIST_140423B				SeqNo: 2728515		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: 14041140-09A DUP				Units: % of sample		Analysis Date: 4/23/2014 04:12 PM		
Client ID:		Run ID: MOIST_140423B				SeqNo: 2728501		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 22 0.050 0 0 0 0-0 22.37 1.67 20

DUP		Sample ID: 14041168-03A DUP				Units: % of sample		Analysis Date: 4/23/2014 04:12 PM		
Client ID:		Run ID: MOIST_140423B				SeqNo: 2728509		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 13.12 0.050 0 0 0 0-0 12.86 2 20

The following samples were analyzed in this batch:

14041172-01B

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

Chain-of-Custody

Form 202-8

WORKORDER
#

14041172

PAGE

1 of 1

DISPOSAL

By Lab or Return to Client

[illegible]

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

For metals or anions, please detail analytes below.

Comments:

5.02

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	<i>[Signature]</i>	<i>[Signature]</i>	4/22/14	2:15
RECEIVED BY	<i>[Signature]</i>	<i>[Signature]</i>	4-22	2:15
RELINQUISHED BY	<i>[Signature]</i>	<i>[Signature]</i>	4/22	1600
RECEIVED BY	<i>[Signature]</i>	Diara F. Shen	4/23/14	1000
RELINQUISHED BY				
RECEIVED BY				

Sample Receipt Checklist

Client Name: **HRL**

Date/Time Received: **23-Apr-14 10:00**

Work Order: **14041172**

Received by: **DS**

Checklist completed by Diane Shaw 23-Apr-14
eSignature Date

Reviewed by: Ann Preston 24-Apr-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>5.0 c</u>		
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:	<u>4/23/2014 4:03:53 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:



15-Jul-2014

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

Re: **WPX RWF 531-13 Batch 1 7.9.14**

Work Order: **1407549**

Dear Mark,

ALS Environmental received 1 sample on 11-Jul-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 11.

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 RWF 531-13 Batch 1 7.9.14
Work Order: 1407549

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>
1407549-01	Batch 1	Soil		7/9/2014 13:45	7/11/2014 09:30	<input type="checkbox"/>

ALS Group USA, Corp

Date: 15-Jul-14

Client: HRL Compliance Solutions, Inc
Project: WPX RWF 531-13 Batch 1 7.9.14
Work Order: 1407549

Case Narrative

Batch 60515 MS/MSD data for GRO is not related to this project's samples. No data requires qualification.

Client: HRL Compliance Solutions, Inc
Project: WPX RWF 531-13 Batch 1 7.9.14
WorkOrder: 1407549

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:** 15-Jul-14

Client: HRL Compliance Solutions, Inc
Project: WPX RWF 531-13 Batch 1 7.9.14
Sample ID: Batch 1
Collection Date: 7/9/2014 01:45 PM

Work Order: 1407549
Lab ID: 1407549-01
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
DRO (C10-C28)	110		SW8015M		Prep: SW3541 / 7/14/14	Analyst: IT
<i>Surr: 4-Terphenyl-d14</i>	<i>84.7</i>		<i>39-133</i>	<i>mg/Kg-dry</i>	<i>1</i>	7/15/2014 03:21 PM
				<i>%REC</i>	<i>1</i>	7/15/2014 03:21 PM
GASOLINE RANGE ORGANICS BY GC-FID						
GRO (C6-C10)	84		SW8015		Prep: SW5035 / 7/11/14	Analyst: IT
<i>Surr: Toluene-d8</i>	<i>126</i>		<i>50-150</i>	<i>mg/Kg-dry</i>	<i>1</i>	7/14/2014 03:37 PM
				<i>%REC</i>	<i>1</i>	7/14/2014 03:37 PM
MOISTURE						
Moisture	14		A2540 G			Analyst: TM
			0.050	% of sample	1	7/11/2014 04:14 PM

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

ALS Group USA, Corp

Date: 15-Jul-14

Client: HRL Compliance Solutions, Inc
Work Order: 1407549
Project: WPX RWF 531-13 Batch 1 7.9.14

QC BATCH REPORT

Batch ID: **60543** Instrument ID **GC8** Method: **SW8015M**

MBLK		Sample ID: DBLKS1-60543-60543				Units: mg/Kg		Analysis Date: 7/15/2014 12:33 PM		
Client ID:		Run ID: GC8_140715B				SeqNo: 2849163		Prep Date: 7/14/2014		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	1.539	0	1.667	0	92.4	39-133	0			

LCS		Sample ID: DLCSS1-60543-60543				Units: mg/Kg		Analysis Date: 7/15/2014 01:03 PM		
Client ID:		Run ID: GC8_140715B				SeqNo: 2849166		Prep Date: 7/14/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	128.8	4.2	166.7	0	77.3	61-109	0			
Surr: 4-Terphenyl-d14	1.362	0	1.667	0	81.7	39-133	0			

MS		Sample ID: 1407456-10B MS				Units: mg/Kg		Analysis Date: 7/15/2014 01:33 PM		
Client ID:		Run ID: GC8_140715B				SeqNo: 2849167		Prep Date: 7/14/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	285.9	7.9	316.5	34.56	79.4	48-110	0			
Surr: 4-Terphenyl-d14	3.073	0	3.165	0	97.1	39-133	0			

MSD		Sample ID: 1407456-10B MSD				Units: mg/Kg		Analysis Date: 7/15/2014 02:03 PM		
Client ID:		Run ID: GC8_140715B				SeqNo: 2849169		Prep Date: 7/14/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	275.2	8.1	324.7	34.56	74.1	48-110	285.9	3.81	30	
Surr: 4-Terphenyl-d14	3.034	0	3.247	0	93.4	39-133	3.073	1.29	30	

The following samples were analyzed in this batch: 1407549-01A

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

Client: HRL Compliance Solutions, Inc
Work Order: 1407549
Project: WPX RWF 531-13 Batch 1 7.9.14

QC BATCH REPORT

Batch ID: **60515** Instrument ID **GC9** Method: **SW8015**

MBLK		Sample ID: MBLK-60515-60515				Units: µg/Kg		Analysis Date: 7/14/2014 01:30 PM		
Client ID:		Run ID: GC9_140714A				SeqNo: 2847030		Prep Date: 7/11/2014		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>	4435	0	5000	0	88.7	50-150	0			

LCS		Sample ID: LCS-60515-60515				Units: µg/Kg		Analysis Date: 7/14/2014 01:04 PM		
Client ID:		Run ID: GC9_140714A				SeqNo: 2847029		Prep Date: 7/11/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	552500	2,500	500000	0	111	70-130	0			
<i>Surr: Toluene-d8</i>	4926	0	5000	0	98.5	50-150	0			

MS		Sample ID: 1407548-01A MS				Units: µg/Kg		Analysis Date: 7/14/2014 04:02 PM		
Client ID:		Run ID: GC9_140714A				SeqNo: 2847307		Prep Date: 7/11/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	1145000	2,500	1000000	166900	97.8	70-130	0			
<i>Surr: Toluene-d8</i>	49840	0	5000	0	997	50-150	0			S

MSD		Sample ID: 1407548-01A MSD				Units: µg/Kg		Analysis Date: 7/14/2014 04:28 PM		
Client ID:		Run ID: GC9_140714A				SeqNo: 2847308		Prep Date: 7/11/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	1269000	2,500	1000000	166900	110	70-130	1145000	10.3	30	
<i>Surr: Toluene-d8</i>	50150	0	5000	0	1000	50-150	49840	0.608	30	S

The following samples were analyzed in this batch:

1407549-01A

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

Client: HRL Compliance Solutions, Inc
Work Order: 1407549
Project: WPX RWF 531-13 Batch 1 7.9.14

QC BATCH REPORT

Batch ID: **R144369** Instrument ID **MOIST** Method: **A2540 G**

MBLK		Sample ID: WBLKS-R144369				Units: % of sample		Analysis Date: 7/11/2014 04:14 PM		
Client ID:		Run ID: MOIST_140711B				SeqNo: 2847236		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-R144369				Units: % of sample		Analysis Date: 7/11/2014 04:14 PM		
Client ID:		Run ID: MOIST_140711B				SeqNo: 2847235		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: 1407489-01A DUP				Units: % of sample		Analysis Date: 7/11/2014 04:14 PM		
Client ID:		Run ID: MOIST_140711B				SeqNo: 2847222		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 7.06 0.050 0 0 0 0-0 7.25 2.66 20

DUP		Sample ID: 1407542-01A DUP				Units: % of sample		Analysis Date: 7/11/2014 04:14 PM		
Client ID:		Run ID: MOIST_140711B				SeqNo: 2847225		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 33.5 0.050 0 0 0 0-0 33.51 0.0298 20

The following samples were analyzed in this batch:

1407549-01A

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



1407540

Form 2021

	SIGNATURE	PRINTED NAME	DATE	TIME
RELINQUISHED BY	<i>Reed W. L.</i>	<i>Reed W. L.</i>	7/9/14	2:00
RECEIVED BY	<i>W/L</i>	<i>W/L</i>	7-9-14	3:00
RELINQUISHED BY	<i>W/L</i>	<i>W/L</i>	7-9-14	3:10
RECEIVED BY	<i>D. F. Sheen</i>	<i>Diane F. Sheen</i>	7/11/14	0930
RELINQUISHED BY				
RECEIVED BY				

Sample Receipt Checklist

Client Name: **HRL**

Date/Time Received: **11-Jul-14 09:30**

Work Order: **1407549**

Received by: **DS**

Checklist completed by <u><i>Diane Shaw</i></u>	11-Jul-14	Reviewed by: <u><i>Ann Preston</i></u>	14-Jul-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>4.8 c</u>		
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:	<u>7/11/2014 10:41:37 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: (979) 285-5783
Nick Martinez
ALS Environmental
127 E. 1st Street

PARACHUTE, CO 81635

Origin ID: RILA



Ship Date: 09 JUL 14
ActWgt: 64.0 LB
CAD: 2264840/NET3489

Dim: 24 X 15 X 15 IN

SHIP TO: (816) 399-6070
sample receiving
ALS Laboratory Group
3352 128TH AVE

BILL SENDER

HOLLAND, MI 49424

Delivery Address Bar Code



Ref # 070914-1
Invoice #
PO # Parachute
Dept #

THU - 10 JUL 10:30A
PRIORITY OVERNIGHT

TRK# 7705 6058 7490
0281

49424
MI-US
GRR

XX GRRA



522G2ED4F720

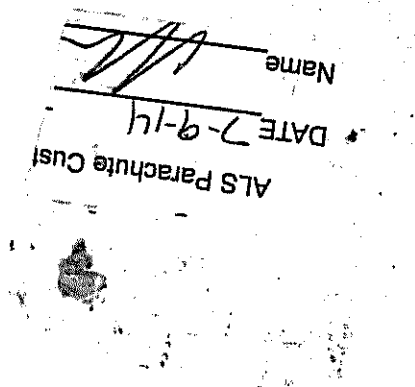
After printing this label:

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

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

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

4.87c





19-Aug-2014

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

Re: **WPX RWF 531-13 Batch 2 8.13.14**

Work Order: **1408671**

Dear Mark,

ALS Environmental received 1 sample on 14-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 RWF 531-13 Batch 2 8.13.14
Work Order: 1408671

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>
1408671-01	Batch 2	Soil		8/13/2014 12:45	8/14/2014 09:30	<input type="checkbox"/>

ALS Group USA, Corp

Date: 19-Aug-14

Client: HRL Compliance Solutions, Inc
Project: WPX RWF 531-13 Batch 2 8.13.14
Work Order: 1408671

Case Narrative

Batch 61699 MS/MSD data for Hexavalent Chromium is not related to this project's samples. No data requires qualification.

Batch 61722 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: 19-Aug-14

Client: HRL Compliance Solutions, Inc
Project: WPX RWF 531-13 Batch 2 8.13.14
Sample ID: Batch 2
Collection Date: 8/13/2014 12:45 PM

Work Order: 1408671
Lab ID: 1408671-01
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
DRO (C10-C28)	110		SW8015M		Prep: SW3541 / 8/14/14	Analyst: IT
Surr: 4-Terphenyl-d14	98.6		4.9	mg/Kg-dry	1	8/14/2014 11:39 PM
			39-133	%REC	1	8/14/2014 11:39 PM
GASOLINE RANGE ORGANICS BY GC-FID						
GRO (C6-C10)	ND		SW8015		Prep: SW5035 / 8/14/14	Analyst: IT
Surr: Toluene-d8	113		3.0	mg/Kg-dry	1	8/15/2014 03:46 PM
			50-150	%REC	1	8/15/2014 03:46 PM
MERCURY BY CVAA						
Mercury	0.042		SW7471		Prep: SW7471 / 8/15/14	Analyst: JEJ
			0.016	mg/Kg-dry	1	8/15/2014 11:56 AM
METALS BY ICP-MS						
Arsenic	6.9		SW6020A		Prep: SW3050B / 8/15/14	Analyst: RH
Barium	5,600		2.0	mg/Kg-dry	5	8/15/2014 11:29 PM
Cadmium	ND		200	mg/Kg-dry	500	8/18/2014 02:17 PM
Chromium	15		0.79	mg/Kg-dry	5	8/15/2014 11:29 PM
Copper	20		2.0	mg/Kg-dry	5	8/15/2014 11:29 PM
Lead	12		2.0	mg/Kg-dry	5	8/15/2014 11:29 PM
Nickel	15		2.0	mg/Kg-dry	5	8/15/2014 11:29 PM
Selenium	2.3		2.0	mg/Kg-dry	5	8/15/2014 11:29 PM
Silver	ND		2.0	mg/Kg-dry	5	8/15/2014 11:29 PM
Zinc	57		3.9	mg/Kg-dry	5	8/15/2014 11:29 PM
SOLUBLE CATIONS FOR SAR						
			SW6020A		Prep: USDA Method 20B / 8/18/14	Analyst: ML
Calcium	37		10	mg/L	20	8/18/2014 03:18 PM
Magnesium	17		4.0	mg/L	20	8/18/2014 03:18 PM
Sodium	960		4.0	mg/L	20	8/18/2014 03:18 PM
SODIUM ADSORPTION RATIO						
			USDA H60 METHOD		Prep: USDA Method 20B / 8/18/14	Analyst: ML
Sodium Adsorption Ratio	33		0.010	none	1	8/18/2014
SEMI-VOLATILE ORGANIC COMPOUNDS						
			SW846 8270D		Prep: SW3541 / 8/14/14	Analyst: RM
Acenaphthene	ND		7.9	µg/Kg-dry	1	8/18/2014 12:12 PM
Acenaphthylene	ND		7.9	µg/Kg-dry	1	8/18/2014 12:12 PM
Anthracene	ND		7.9	µg/Kg-dry	1	8/18/2014 12:12 PM
Benzo(a)anthracene	20		7.9	µg/Kg-dry	1	8/18/2014 12:12 PM
Benzo(a)pyrene	ND		7.9	µg/Kg-dry	1	8/18/2014 12:12 PM
Benzo(b)fluoranthene	ND		7.9	µg/Kg-dry	1	8/18/2014 12:12 PM
Benzo(g,h,i)perylene	ND		7.9	µg/Kg-dry	1	8/18/2014 12:12 PM
Benzo(k)fluoranthene	ND		7.9	µg/Kg-dry	1	8/18/2014 12:12 PM
Chrysene	ND		7.9	µg/Kg-dry	1	8/18/2014 12:12 PM

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

ALS Group USA, Corp

Date: 19-Aug-14

Client: HRL Compliance Solutions, Inc
Project: WPX RWF 531-13 Batch 2 8.13.14
Sample ID: Batch 2
Collection Date: 8/13/2014 12:45 PM

Work Order: 1408671
Lab ID: 1408671-01
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Dibenzo(a,h)anthracene	ND		7.9	µg/Kg-dry	1	8/18/2014 12:12 PM
Fluoranthene	ND		7.9	µg/Kg-dry	1	8/18/2014 12:12 PM
Fluorene	11		7.9	µg/Kg-dry	1	8/18/2014 12:12 PM
Indeno(1,2,3-cd)pyrene	ND		7.9	µg/Kg-dry	1	8/18/2014 12:12 PM
Naphthalene	24		7.9	µg/Kg-dry	1	8/18/2014 12:12 PM
Pyrene	ND		7.9	µg/Kg-dry	1	8/18/2014 12:12 PM
Surr: 2-Fluorobiphenyl	61.6		12-100	%REC	1	8/18/2014 12:12 PM
Surr: 4-Terphenyl-d14	93.5		25-137	%REC	1	8/18/2014 12:12 PM
Surr: Nitrobenzene-d5	57.1		37-107	%REC	1	8/18/2014 12:12 PM
VOLATILE ORGANIC COMPOUNDS			SW8260B	Prep: SW5035 / 8/14/14		Analyst: RS
Benzene	ND		36	µg/Kg-dry	1	8/15/2014 02:24 AM
Ethylbenzene	ND		36	µg/Kg-dry	1	8/15/2014 02:24 AM
m,p-Xylene	ND		71	µg/Kg-dry	1	8/15/2014 02:24 AM
o-Xylene	ND		36	µg/Kg-dry	1	8/15/2014 02:24 AM
Toluene	ND		36	µg/Kg-dry	1	8/15/2014 02:24 AM
Xylenes, Total	ND		110	µg/Kg-dry	1	8/15/2014 02:24 AM
Surr: 1,2-Dichloroethane-d4	96.4		70-130	%REC	1	8/15/2014 02:24 AM
Surr: 4-Bromofluorobenzene	103		70-130	%REC	1	8/15/2014 02:24 AM
Surr: Dibromofluoromethane	96.6		70-130	%REC	1	8/15/2014 02:24 AM
Surr: Toluene-d8	97.9		70-130	%REC	1	8/15/2014 02:24 AM
ELECTRICAL CONDUCTIVITY (SAR)			USDA H60 METHOD	Prep: USDA Method 20B / 8/18/14		Analyst: JB
Electrical Conductivity @ Saturation	5.7		0.050	mmhos/cm @25	10	8/18/2014 05:00 PM
CHROMIUM, TRIVALENT			CALCULATION			Analyst: JJG
Chromium, Trivalent	14		0.59	mg/Kg-dry	1	8/19/2014 07:41 AM
CHROMIUM, HEXAVALENT			SW7196A	Prep: SW3060A / 8/14/14		Analyst: EE
Chromium, Hexavalent	0.55		0.54	mg/Kg-dry	1	8/15/2014 03:00 PM
MOISTURE			A2540 G			Analyst: TM
Moisture	16		0.050	% of sample	1	8/14/2014 04:43 PM
PH			SW9045D	Prep: EXTRACT / 8/14/14		Analyst: TM
pH	8.1			s.u.	1	8/14/2014 03:34 PM

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

ALS Group USA, Corp

Date: 19-Aug-14

Client: HRL Compliance Solutions, Inc

Work Order: 1408671

Project: WPX RWF 531-13 Batch 2 8.13.14

QC BATCH REPORT

Batch ID: **61670**

Instrument ID **GC8**

Method: **SW8015M**

MBLK		Sample ID: DBLKS1-61670-61670				Units: mg/Kg		Analysis Date: 8/14/2014 05:08 PM		
Client ID:		Run ID: GC8_140814A				SeqNo: 2890555		Prep Date: 8/14/2014		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	1.271	0	1.667	0	76.3	39-133	0			

LCS		Sample ID: DLCSS1-61670-61670				Units: mg/Kg		Analysis Date: 8/14/2014 05:38 PM		
Client ID:		Run ID: GC8_140814A				SeqNo: 2890556		Prep Date: 8/14/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	130.5	4.2	166.7	0	78.3	61-109	0			
Surr: 4-Terphenyl-d14	1.202	0	1.667	0	72.1	39-133	0			

MS		Sample ID: 1408600-01B MS				Units: mg/Kg		Analysis Date: 8/14/2014 06:08 PM		
Client ID:		Run ID: GC8_140814A				SeqNo: 2890557		Prep Date: 8/14/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	248.4	8.0	320.9	35.34	66.4	48-110	0			
Surr: 4-Terphenyl-d14	2.094	0	3.209	0	65.2	39-133	0			

MSD		Sample ID: 1408600-01B MSD				Units: mg/Kg		Analysis Date: 8/14/2014 06:38 PM		
Client ID:		Run ID: GC8_140814A				SeqNo: 2890558		Prep Date: 8/14/2014		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	8.3	330.3	35.34	71.9	48-110	248.4	9.39	30	
Surr: 4-Terphenyl-d14	2.29	0	3.303	0	69.3	39-133	2.094	8.95	30	

The following samples were analyzed in this batch: 1408671-01B

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

Client: HRL Compliance Solutions, Inc
Work Order: 1408671
Project: WPX RWF 531-13 Batch 2 8.13.14

QC BATCH REPORT

Batch ID: **61673** Instrument ID **GC9** Method: **SW8015**

MBLK		Sample ID: MBLK-61673-61673				Units: µg/Kg		Analysis Date: 8/15/2014 01:14 PM		
Client ID:		Run ID: GC9_140815A				SeqNo: 2891700		Prep Date: 8/14/2014		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>	4747	0	5000	0	94.9	50-150	0			

LCS		Sample ID: LCS-61673-61673				Units: µg/Kg		Analysis Date: 8/15/2014 12:48 PM		
Client ID:		Run ID: GC9_140815A				SeqNo: 2891699		Prep Date: 8/14/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	465300	2,500	500000	0	93.1	70-130	0			
<i>Surr: Toluene-d8</i>	5278	0	5000	0	106	50-150	0			

MS		Sample ID: 1408576-01A MS				Units: µg/Kg		Analysis Date: 8/15/2014 04:12 PM		
Client ID:		Run ID: GC9_140815A				SeqNo: 2892452		Prep Date: 8/14/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	492900	2,500	500000	0	98.6	70-130	0			
<i>Surr: Toluene-d8</i>	4916	0	5000	0	98.3	50-150	0			

MSD		Sample ID: 1408576-01A MSD				Units: µg/Kg		Analysis Date: 8/15/2014 04:37 PM		
Client ID:		Run ID: GC9_140815A				SeqNo: 2892453		Prep Date: 8/14/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	442200	2,500	500000	0	88.4	70-130	492900	10.9	30	
<i>Surr: Toluene-d8</i>	5076	0	5000	0	102	50-150	4916	3.19	30	

The following samples were analyzed in this batch:

1408671-01A

Client: HRL Compliance Solutions, Inc
Work Order: 1408671
Project: WPX RWF 531-13 Batch 2 8.13.14

QC BATCH REPORT

Batch ID: **61680** Instrument ID **HG1** Method: **SW7471**

MBLK				Sample ID: MBLK-61680-61680				Units: mg/Kg			Analysis Date: 8/15/2014 11:47 AM												
Client ID:				Run ID: HG1_140815A				SeqNo: 2891072			Prep Date: 8/15/2014		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-61680-61680				Units:mg/Kg		Analysis Date: 8/15/2014 11:49 AM		
Client ID:			Run ID: HG1_140815A		SeqNo:2891073		Prep Date: 8/15/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.1782 0.020 0.1665 0 107 80-120 0

MS		Sample ID: 1408704-08CMS				Units:mg/Kg		Analysis Date: 8/15/2014 12:05 PM		
Client ID:		Run ID:		HG1_140815A		SeqNo:2891085		Prep Date: 8/15/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.16 0.017 0.1423 0.03067 90.9 75-125 0

MSD				Sample ID: 1408704-08CMSD				Units:mg/Kg			Analysis Date: 8/15/2014 12:07 PM		
Client ID:				Run ID: HG1_140815A				SeqNo:2891086		Prep Date: 8/15/2014		DF: 1	
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual		

Mercury 0.1582 0.017 0.1405 0.03067 90.7 75-125 0.16 1.14 35

The following samples were analyzed in this batch:

1408671-01B

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

Client: HRL Compliance Solutions, Inc
Work Order: 1408671
Project: WPX RWF 531-13 Batch 2 8.13.14

QC BATCH REPORT

Batch ID: **61722** Instrument ID **ICPMS1** Method: **SW6020A**

Sample ID: MBLK-61722-61722				Units:mg/Kg			Analysis Date: 8/15/2014 11:11 PM			
Client ID:		Run ID: ICPMS1_140815A			SeqNo:2892552		Prep Date: 8/15/2014		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	0.01126	0.25								J
Cadmium	0.001688	0.10								J
Chromium	ND	0.25								
Copper	ND	0.25								
Lead	0.004962	0.25								J
Nickel	ND	0.25								
Selenium	0.04556	0.25								J
Silver	0.001932	0.25								J
Zinc	0.04192	0.50								J

LCS				Sample ID: LCS-61722-61722			Units:mg/Kg		Analysis Date: 8/15/2014 11:17 PM		
Client ID:			Run ID: ICPMS1_140815A			SeqNo:2892553		Prep Date: 8/15/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Arsenic	4.602	0.25	5	0	92	80-120	0				
Barium	4.712	0.25	5	0	94.2	80-120	0				
Cadmium	4.708	0.10	5	0	94.2	80-120	0				
Chromium	5.09	0.25	5	0	102	80-120	0				
Copper	4.992	0.25	5	0	99.8	80-120	0				
Lead	4.7	0.25	5	0	94	80-120	0				
Nickel	5.15	0.25	5	0	103	80-120	0				
Selenium	4.614	0.25	5	0	92.3	80-120	0				
Silver	4.94	0.25	5	0	98.8	80-120	0				
Zinc	5.03	0.50	5	0	101	80-120	0				

MS					Sample ID: 1408704-11CMS		Units:mg/Kg		Analysis Date: 8/16/2014 12:30 AM		
Client ID:			Run ID: ICPMS1_140815A			SeqNo:2892569		Prep Date: 8/15/2014		DF: 4	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Arsenic	15.82	1.5	7.353	5.962	134	75-125	0			S	
Barium	68.71	1.5	7.353	38.06	417	75-125	0			SO	
Cadmium	7.385	0.59	7.353	0.1525	98.4	75-125	0				
Chromium	28.99	1.5	7.353	17.44	157	75-125	0			S	
Copper	23.74	1.5	7.353	19.73	54.5	75-125	0			S	
Lead	18.26	1.5	7.353	8.935	127	75-125	0			S	
Nickel	39.79	1.5	7.353	25.3	197	75-125	0			S	
Selenium	8.1	1.5	7.353	1.707	86.9	75-125	0				
Silver	6.656	1.5	7.353	0.05821	89.7	75-125	0				
Zinc	56.68	2.9	7.353	40.91	214	75-125	0			SO	

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

Client: HRL Compliance Solutions, Inc
Work Order: 1408671
Project: WPX RWF 531-13 Batch 2 8.13.14

QC BATCH REPORT

Batch ID: **61722** Instrument ID **ICPMS1** Method: **SW6020A**

MSD		Sample ID: 1408704-11CMSD				Units: mg/Kg		Analysis Date: 8/16/2014 12:37 AM		
Client ID:		Run ID: ICPMS1_140815A				SeqNo: 2892571		Prep Date: 8/15/2014		DF: 4
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	13.81	1.5	7.321	5.962	107	75-125	15.82	13.5	25	
Barium	70.69	1.5	7.321	38.06	446	75-125	68.71	2.84	25	SO
Cadmium	7.572	0.59	7.321	0.1525	101	75-125	7.385	2.5	25	
Chromium	30.6	1.5	7.321	17.44	180	75-125	28.99	5.42	25	S
Copper	29.24	1.5	7.321	19.73	130	75-125	23.74	20.8	25	S
Lead	17.73	1.5	7.321	8.935	120	75-125	18.26	2.92	25	
Nickel	37.63	1.5	7.321	25.3	168	75-125	39.79	5.6	25	S
Selenium	8.679	1.5	7.321	1.707	95.2	75-125	8.1	6.91	25	
Silver	6.846	1.5	7.321	0.05821	92.7	75-125	6.656	2.82	25	
Zinc	51.51	2.9	7.321	40.91	145	75-125	56.68	9.55	25	SO

The following samples were analyzed in this batch: 1408671-01B

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

Client: HRL Compliance Solutions, Inc
Work Order: 1408671
Project: WPX RWF 531-13 Batch 2 8.13.14

QC BATCH REPORT

Batch ID: **61726** Instrument ID **ICPMS1** Method: **SW6020A**

DUP		Sample ID: 1408706-01C DUP				Units: mg/L		Analysis Date: 8/18/2014 03:31 PM		
Client ID:		Run ID: ICPMS1_140818A				SeqNo: 2893978		Prep Date: 8/18/2014		DF: 20
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	314.6	10	0	0	0	0-0	359.2	13.2		
Magnesium	27.9	4.0	0	0	0	0-0	31.66	12.6		
Sodium	1818	4.0	0	0	0	0-0	2100	14.4		

DUP		Sample ID: 1408706-01C DUP				Units: none		Analysis Date: 8/18/2014		
Client ID:		Run ID: SAR_140818A				SeqNo: 2894605		Prep Date: 8/18/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sodium Adsorption Ratio	26.36	0.010	0	0	0		28.51	7.85	50	

The following samples were analyzed in this batch: | 1408671-01C |

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

Client: HRL Compliance Solutions, Inc
Work Order: 1408671
Project: WPX RWF 531-13 Batch 2 8.13.14

QC BATCH REPORT

Batch ID: **61669** Instrument ID **SVMS8** Method: **SW846 8270D**

MBLK		Sample ID: SBLKS1-61669-61669				Units: µg/Kg		Analysis Date: 8/15/2014 10:20 AM		
Client ID:		Run ID: SVMS8_140815A				SeqNo: 2894431		Prep Date: 8/14/2014		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>	1171	0	1667	0	70.2	12-100	0			
<i>Surr: 4-Terphenyl-d14</i>	1685	0	1667	0	101	25-137	0			
<i>Surr: Nitrobenzene-d5</i>	1108	0	1667	0	66.5	37-107	0			

LCS		Sample ID: SLCSS1-61669-61669				Units: µg/Kg		Analysis Date: 8/15/2014 09:47 AM		
Client ID:		Run ID: SVMS8_140815A				SeqNo: 2894430		Prep Date: 8/14/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	480.3	6.7	666.7	0	72	45-110	0			
Acenaphthylene	493	6.7	666.7	0	73.9	45-105	0			
Anthracene	573	6.7	666.7	0	85.9	55-105	0			
Benzo(a)anthracene	544.3	6.7	666.7	0	81.6	50-110	0			
Benzo(a)pyrene	613.7	6.7	666.7	0	92	50-110	0			
Benzo(b)fluoranthene	649.7	6.7	666.7	0	97.4	45-115	0			
Benzo(g,h,i)perylene	534	6.7	666.7	0	80.1	40-125	0			
Benzo(k)fluoranthene	621.7	6.7	666.7	0	93.2	45-115	0			
Chrysene	579.7	6.7	666.7	0	86.9	55-110	0			
Dibenzo(a,h)anthracene	527.7	6.7	666.7	0	79.1	40-125	0			
Fluoranthene	567	6.7	666.7	0	85	55-115	0			
Fluorene	521.3	6.7	666.7	0	78.2	50-110	0			
Indeno(1,2,3-cd)pyrene	552.3	6.7	666.7	0	82.8	40-120	0			
Naphthalene	479	6.7	666.7	0	71.8	40-105	0			
Pyrene	690	6.7	666.7	0	103	45-125	0			
<i>Surr: 2-Fluorobiphenyl</i>	1204	0	1667	0	72.3	12-100	0			
<i>Surr: 4-Terphenyl-d14</i>	1747	0	1667	0	105	25-137	0			
<i>Surr: Nitrobenzene-d5</i>	1241	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: 1408671
Project: WPX RWF 531-13 Batch 2 8.13.14

QC BATCH REPORT

Batch ID: **61669** Instrument ID **SVMS8** Method: **SW846 8270D**

MS				Sample ID: 1408600-01B MS			Units: µg/Kg		Analysis Date: 8/15/2014 12:47 PM	
Client ID:		Run ID: SVMS8_140815A			SeqNo: 2894437		Prep Date: 8/14/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	914.5	13	1294	0	70.7	45-110	0			
Acenaphthylene	958.5	13	1294	0	74.1	45-105	0			
Anthracene	1129	13	1294	0	87.3	55-105	0			
Benzo(a)anthracene	1097	13	1294	0	84.8	50-110	0			
Benzo(a)pyrene	1231	13	1294	0	95.2	50-110	0			
Benzo(b)fluoranthene	1226	13	1294	0	94.7	45-115	0			
Benzo(g,h,i)perylene	1092	13	1294	0	84.4	40-125	0			
Benzo(k)fluoranthene	1142	13	1294	0	88.2	45-115	0			
Chrysene	1074	13	1294	0	83	55-110	0			
Dibenzo(a,h)anthracene	1114	13	1294	0	86.1	40-125	0			
Fluoranthene	1082	13	1294	0	83.6	55-115	0			
Fluorene	990.2	13	1294	0	76.5	50-110	0			
Indeno(1,2,3-cd)pyrene	1220	13	1294	0	94.3	40-120	0			
Naphthalene	889.3	13	1294	0	68.7	40-105	0			
Pyrene	1323	13	1294	0	102	45-125	0			
Surr: 2-Fluorobiphenyl	2348	0	3234	0	72.6	12-100	0			
Surr: 4-Terphenyl-d14	3200	0	3234	0	99	25-137	0			
Surr: Nitrobenzene-d5	2334	0	3234	0	72.2	37-107	0			

MSD				Sample ID: 1408600-01B MSD			Units: µg/Kg		Analysis Date: 8/15/2014 01:07 PM	
Client ID:		Run ID: SVMS8_140815A			SeqNo: 2894438		Prep Date: 8/14/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	981.7	13	1333	0	73.6	45-110	914.5	7.09	30	
Acenaphthylene	1032	13	1333	0	77.4	45-105	958.5	7.43	30	
Anthracene	1205	13	1333	0	90.4	55-105	1129	6.49	30	
Benzo(a)anthracene	1169	13	1333	0	87.7	50-110	1097	6.37	30	
Benzo(a)pyrene	1294	13	1333	0	97.1	50-110	1231	4.98	30	
Benzo(b)fluoranthene	1276	13	1333	0	95.7	45-115	1226	4	30	
Benzo(g,h,i)perylene	1162	13	1333	0	87.2	40-125	1092	6.21	30	
Benzo(k)fluoranthene	1220	13	1333	0	91.5	45-115	1142	6.68	30	
Chrysene	1141	13	1333	0	85.6	55-110	1074	6.03	30	
Dibenzo(a,h)anthracene	1189	13	1333	0	89.2	40-125	1114	6.48	30	
Fluoranthene	1142	13	1333	0	85.7	55-115	1082	5.43	30	
Fluorene	1089	13	1333	0	81.7	50-110	990.2	9.51	30	
Indeno(1,2,3-cd)pyrene	1304	13	1333	0	97.8	40-120	1220	6.65	30	
Naphthalene	975.7	13	1333	0	73.2	40-105	889.3	9.27	30	
Pyrene	1414	13	1333	0	106	45-125	1323	6.65	30	
Surr: 2-Fluorobiphenyl	2526	0	3333	0	75.8	12-100	2348	7.29	40	
Surr: 4-Terphenyl-d14	3466	0	3333	0	104	25-137	3200	7.99	40	
Surr: Nitrobenzene-d5	2587	0	3333	0	77.6	37-107	2334	10.3	40	

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

Client: HRL Compliance Solutions, Inc
Work Order: 1408671
Project: WPX RWF 531-13 Batch 2 8.13.14

QC BATCH REPORT

Batch ID: **61669** Instrument ID **SVMS8** Method: **SW846 8270D**

The following samples were analyzed in this batch:

1408671-01B

Client: HRL Compliance Solutions, Inc
Work Order: 1408671
Project: WPX RWF 531-13 Batch 2 8.13.14

QC BATCH REPORT

Batch ID: **61668** Instrument ID **VMS5** Method: **SW8260B**

MBLK		Sample ID: MBLK-61668-61668				Units: µg/Kg		Analysis Date: 8/14/2014 02:05 PM		
Client ID:		Run ID: VMS5_140814A				SeqNo: 2889855		Prep Date: 8/14/2014		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>1027</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>103</i>	<i>70-130</i>	<i>0</i>			
<i>Surr: 4-Bromofluorobenzene</i>	<i>977.5</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>97.8</i>	<i>70-130</i>	<i>0</i>			
<i>Surr: Dibromofluoromethane</i>	<i>979.5</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>98</i>	<i>70-130</i>	<i>0</i>			
<i>Surr: Toluene-d8</i>	<i>1000</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>100</i>	<i>70-130</i>	<i>0</i>			

LCS		Sample ID: LCS-61668-61668				Units: µg/Kg		Analysis Date: 8/14/2014 12:49 PM		
Client ID:		Run ID: VMS5_140814A				SeqNo: 2889854		Prep Date: 8/14/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	996.5	30	1000	0	99.6	75-125	0			
Ethylbenzene	1004	30	1000	0	100	75-125	0			
m,p-Xylene	2022	60	2000	0	101	80-125	0			
o-Xylene	1002	30	1000	0	100	75-125	0			
Toluene	980	30	1000	0	98	70-125	0			
Xylenes, Total	3025	90	3000	0	101	75-125	0			
<i>Surr: 1,2-Dichloroethane-d4</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: 4-Bromofluorobenzene</i>	<i>1017</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>102</i>	<i>70-130</i>	<i>0</i>			
<i>Surr: Dibromofluoromethane</i>	<i>996.5</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>99.6</i>	<i>70-130</i>	<i>0</i>			
<i>Surr: Toluene-d8</i>	<i>1009</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>101</i>	<i>70-130</i>	<i>0</i>			

The following samples were analyzed in this batch:

1408671-01A

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

Client: HRL Compliance Solutions, Inc
Work Order: 1408671
Project: WPX RWF 531-13 Batch 2 8.13.14

QC BATCH REPORT

Batch ID: **61674** Instrument ID **WETCHEM** Method: **SW9045D**

LCS				Sample ID: LCS-61674-61674				Units:s.u.		Analysis Date: 8/14/2014 03:34 PM													
Client ID:				Run ID: WETCHEM_140814H				SeqNo:2889696		Prep Date: 8/14/2014		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: 1408600-01B DUP				Units: s.u.		Analysis Date: 8/14/2014 03:34 PM			
Client ID:				Run ID: WETCHEM_140814H				SeqNo: 2889702		Prep Date: 8/14/2014		DF: 1	
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual		

pH 8.85 0 0 0 0 0-0 8.82 0.34 20

DUP				Sample ID: 1408634-25D DUP				Units: s.u.		Analysis Date: 8/14/2014 03:34 PM			
Client ID:				Run ID: WETCHEM_140814H				SeqNo:2889705		Prep Date: 8/14/2014		DF: 1	
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual		

pH 10.98 0 0 0 0 0-0 11.06 0.726 20

The following samples were analyzed in this batch:

1408671-01B

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

Client: HRL Compliance Solutions, Inc
Work Order: 1408671
Project: WPX RWF 531-13 Batch 2 8.13.14

QC BATCH REPORT

Batch ID: **61699** Instrument ID **WETCHEM** Method: **SW7196A**

MBLK		Sample ID: MBLK-61699-61699				Units: mg/Kg		Analysis Date: 8/15/2014 03:00 PM		
Client ID:		Run ID: WETCHEM_140815K				SeqNo: 2891862		Prep Date: 8/14/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	0.204	0.50								J

LCS		Sample ID: LCS-61699-61699				Units: mg/Kg		Analysis Date: 8/15/2014 03:00 PM		
Client ID:		Run ID: WETCHEM_140815K				SeqNo: 2891863		Prep Date: 8/14/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	2.072	0.50	2	0	104	80-120	0			

MS		Sample ID: 1408600-01B MS				Units: mg/Kg		Analysis Date: 8/15/2014 03:00 PM		
Client ID:		Run ID: WETCHEM_140815K				SeqNo: 2891866		Prep Date: 8/14/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	0.5534	0.49	1.976	0.4385	5.81	75-125	0			S

MS		Sample ID: 1408600-01B MSI				Units: mg/Kg		Analysis Date: 8/15/2014 03:00 PM		
Client ID:		Run ID: WETCHEM_140815K				SeqNo: 2891868		Prep Date: 8/14/2014		DF: 100
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	1483	49	1603	0.4385	92.5	75-125	0			

MSD		Sample ID: 1408600-01B MSD				Units: mg/Kg		Analysis Date: 8/15/2014 03:00 PM		
Client ID:		Run ID: WETCHEM_140815K				SeqNo: 2891867		Prep Date: 8/14/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	0.5534	0.49	1.976	0.4385	5.81	75-125	0.5534	0	20	S

The following samples were analyzed in this batch:

1408671-01B

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

Client: HRL Compliance Solutions, Inc
Work Order: 1408671
Project: WPX RWF 531-13 Batch 2 8.13.14

QC BATCH REPORT

Batch ID: **61726** Instrument ID **WETCHEM** Method: **USDA H60 Method**

DUP		Sample ID: 1408706-01C DUP				Units: mmhos/cm @25°C		Analysis Date: 8/18/2014 05:00 PM		
Client ID:		Run ID: WETCHEM_140818J				SeqNo: 2893662		Prep Date: 8/18/2014		DF: 10
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Electrical Conductivity @ Saturation	12.75	0.050	0	0	0		12.45	2.38	50	

The following samples were analyzed in this batch:

1408671-01C

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

Client: HRL Compliance Solutions, Inc
Work Order: 1408671
Project: WPX RWF 531-13 Batch 2 8.13.14

QC BATCH REPORT

Batch ID: **R146352** Instrument ID **MOIST** Method: **A2540 G**

MBLK		Sample ID: WBLKS-R146352				Units: % of sample		Analysis Date: 8/14/2014 04:43 PM		
Client ID:		Run ID: MOIST_140814A				SeqNo: 2890785		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-R146352				Units: % of sample		Analysis Date: 8/14/2014 04:43 PM		
Client ID:		Run ID: MOIST_140814A				SeqNo: 2890784		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: 1408628-01A DUP				Units: % of sample		Analysis Date: 8/14/2014 04:43 PM		
Client ID:		Run ID: MOIST_140814A				SeqNo: 2890761		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 78.49 0.050 0 0 0 0-0 78.71 0.28 20

DUP		Sample ID: 1408655-01A DUP				Units: % of sample		Analysis Date: 8/14/2014 04:43 PM		
Client ID:		Run ID: MOIST_140814A				SeqNo: 2890763		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 15.29 0.050 0 0 0 0-0 16.31 6.46 20

The following samples were analyzed in this batch:

1408671-01B

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



WORKORDER

1408671

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>Ray D. L.</i>	<i>Ray D. L.</i>	8/13/14	2:00
RECEIVED BY	<i>N.M.</i>	<i>N.M.</i>	8-13-14	2:01
RELINQUISHED BY	<i>N.M.</i>	<i>N.M.</i>	8-13-14	2:10
RECEIVED BY	<i>[Signature]</i>	<i>ETHEL HERNANDEZ</i>	8/14/14	0930
RELINQUISHED BY				
RECEIVED BY				

Sample Receipt Checklist

Client Name: **HRL**

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

Work Order: **1408671**

Received by: **KRW**

Checklist completed by <u>Keith Wurenga</u>	14-Aug-14	Reviewed by: <u>Ann Preston</u>	15-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>2.8 C</u>		
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:	<u>8/14/2014 10:56:48 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) 399-6070
 Not Mailed
 ALS Environmental
 127 E. 1st Street
 Holland, MI 49424

Origin ID: HLMA



Ship Date: 13AUG14
 Weight: 54.0 LB
 CAD: 22848489-ET3560

Dim: 14 X 20 X 19 IN

SHIP TO: (616) 399-6070
 sample receiving
 ALS Laboratory Group
 3352 128TH AVE
 HOLLAND, MI 49424

BILL SENDER

Delivery Address Bar Code



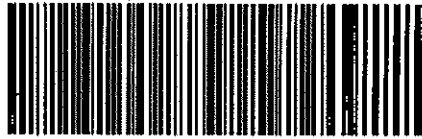
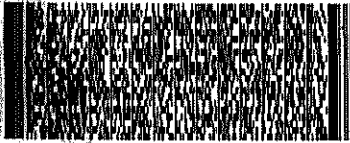
Ref # 001314-1
 Invoice #
 PO #
 Dept #

THU - 14 AUG 10:30A
 PRIORITY OVERNIGHT

TRK# 7708 3005 5140
 E2V1

68 HLMA

49424
 MI 48
 GRR



020100728403

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 to 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 loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, or 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, 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. If 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. For limits, see current FedEx Service Guide.

CUSTODY SEAL

Seal Broken By: _____
 Date: _____
 Name: _____
 Company: _____
 Time: 1:10 PM
 ALS Parachute

Notation of \$100 per item is a timely attorney's documented strict time

ALS Environmental
 3352 128th Avenue
 Holland, Michigan 49424
 Tel: +1 616 399 6070
 Fax: +1 616 399 6185

828
 12
 5

TRK# 7708 3005 5140



25-Sep-2014

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

Re: **WPX RWF 531-13 Batch 3 9.19.14**

Work Order: **14091025**

Dear Mark,

ALS Environmental received 1 sample on 20-Sep-2014 10:30 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 25.

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 inside.

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

Client: HRL Compliance Solutions, Inc
Project: WPX RWF 531-13 Batch 3 9.19.14
Work Order: 14091025

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>
14091025-01	Batch 3	Soil		9/19/2014 09:20	9/20/2014 10:30	<input type="checkbox"/>

Client: HRL Compliance Solutions, Inc
Project: WPX RWF 531-13 Batch 3 9.19.14
Work Order: 14091025

Case Narrative

Batch 63010 MS/MSD data for DRO is not related to this project's samples. No data requires qualification.

Batch 63022 sample Batch 3 MS/MSD recoveries for Barium and Zinc were outside of the control limits; however, the results in the parent sample were greater than 4x the spiked amount. No qualification is required for Barium and Zinc. The MS/MSD recoveries and the RPD for Lead were outside control limits. The corresponding result in the parent sample may be biased low for Lead. The MSD recovery for Copper was below control limits. The MS recovery and the RPD between the MS and MSD were in control. No qualification is required for Copper.

Batch 63103 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: 25-Sep-14

Client: HRL Compliance Solutions, Inc
Project: WPX RWF 531-13 Batch 3 9.19.14
Sample ID: Batch 3
Collection Date: 9/19/2014 09:20 AM

Work Order: 14091025
Lab ID: 14091025-01
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
			SW8015M		Prep: SW3541 / 9/22/14	Analyst: IT
DRO (C10-C28)	750		4.6	mg/Kg-dry	1	9/22/2014 11:19 PM
Surr: 4-Terphenyl-d14	118		39-133	%REC	1	9/22/2014 11:19 PM
GASOLINE RANGE ORGANICS BY GC-FID						
			SW8015		Prep: SW5035 / 9/22/14	Analyst: IT
GRO (C6-C10)	29		2.8	mg/Kg-dry	1	9/22/2014 02:15 PM
Surr: Toluene-d8	125		50-150	%REC	1	9/22/2014 02:15 PM
MERCURY BY CVAA						
			SW7471		Prep: SW7471 / 9/22/14	Analyst: LR
Mercury	0.035		0.016	mg/Kg-dry	1	9/22/2014 10:09 PM
SOLUBLE CATIONS FOR SAR						
			SW846 6010C		Prep: USDA Method 20B / 9/24/14	Analyst: JEC
Calcium	36		5.0	mg/L	10	9/24/2014 11:21 AM
Magnesium	13		2.0	mg/L	10	9/24/2014 11:21 AM
Sodium	750		2.0	mg/L	10	9/24/2014 11:21 AM
METALS BY ICP-MS						
			SW6020A		Prep: SW3050B / 9/22/14	Analyst: ML
Arsenic	5.1		2.2	mg/Kg-dry	5	9/22/2014 01:01 PM
Barium	310		2.2	mg/Kg-dry	5	9/22/2014 01:01 PM
Cadmium	ND		0.87	mg/Kg-dry	5	9/22/2014 01:01 PM
Chromium	11		2.2	mg/Kg-dry	5	9/22/2014 01:01 PM
Copper	15		2.2	mg/Kg-dry	5	9/22/2014 01:01 PM
Lead	29		2.2	mg/Kg-dry	5	9/22/2014 01:01 PM
Nickel	16		2.2	mg/Kg-dry	5	9/22/2014 01:01 PM
Selenium	3.0		2.2	mg/Kg-dry	5	9/22/2014 01:01 PM
Silver	ND		2.2	mg/Kg-dry	5	9/22/2014 01:01 PM
Zinc	62		4.3	mg/Kg-dry	5	9/22/2014 01:01 PM
SODIUM ADSORPTION RATIO						
			USDA H60 METHOD		Prep: USDA Method 20B / 9/24/14	Analyst: JEC
Sodium Adsorption Ratio	27		0.010	none	1	9/24/2014
SEMI-VOLATILE ORGANIC COMPOUNDS						
			SW846 8270D		Prep: SW3541 / 9/22/14	Analyst: JG
Acenaphthene	ND		7.3	µg/Kg-dry	1	9/23/2014 03:38 PM
Acenaphthylene	ND		7.3	µg/Kg-dry	1	9/23/2014 03:38 PM
Anthracene	70		7.3	µg/Kg-dry	1	9/23/2014 03:38 PM
Benzo(a)anthracene	9.9		7.3	µg/Kg-dry	1	9/23/2014 03:38 PM
Benzo(a)pyrene	ND		7.3	µg/Kg-dry	1	9/23/2014 03:38 PM
Benzo(b)fluoranthene	17		7.3	µg/Kg-dry	1	9/23/2014 03:38 PM
Benzo(g,h,i)perylene	ND		7.3	µg/Kg-dry	1	9/23/2014 03:38 PM
Benzo(k)fluoranthene	ND		7.3	µg/Kg-dry	1	9/23/2014 03:38 PM
Chrysene	12		7.3	µg/Kg-dry	1	9/23/2014 03:38 PM

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

ALS Group USA, Corp

Date: 25-Sep-14

Client: HRL Compliance Solutions, Inc
Project: WPX RWF 531-13 Batch 3 9.19.14
Sample ID: Batch 3
Collection Date: 9/19/2014 09:20 AM

Work Order: 14091025
Lab ID: 14091025-01
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Dibenzo(a,h)anthracene	ND		7.3	µg/Kg-dry	1	9/23/2014 03:38 PM
Fluoranthene	8.8		7.3	µg/Kg-dry	1	9/23/2014 03:38 PM
Fluorene	110		7.3	µg/Kg-dry	1	9/23/2014 03:38 PM
Indeno(1,2,3-cd)pyrene	ND		7.3	µg/Kg-dry	1	9/23/2014 03:38 PM
Naphthalene	150		7.3	µg/Kg-dry	1	9/23/2014 03:38 PM
Pyrene	17		7.3	µg/Kg-dry	1	9/23/2014 03:38 PM
Surr: 2-Fluorobiphenyl	79.1		12-100	%REC	1	9/23/2014 03:38 PM
Surr: 4-Terphenyl-d14	106		25-137	%REC	1	9/23/2014 03:38 PM
Surr: Nitrobenzene-d5	67.7		37-107	%REC	1	9/23/2014 03:38 PM
VOLATILE ORGANIC COMPOUNDS			SW8260B	Prep: SW5035 / 9/22/14		Analyst: BG
Benzene	ND		33	µg/Kg-dry	1	9/22/2014 04:25 PM
Ethylbenzene	ND		33	µg/Kg-dry	1	9/22/2014 04:25 PM
m,p-Xylene	170		67	µg/Kg-dry	1	9/22/2014 04:25 PM
o-Xylene	160		33	µg/Kg-dry	1	9/22/2014 04:25 PM
Toluene	ND		33	µg/Kg-dry	1	9/22/2014 04:25 PM
Xylenes, Total	320		100	µg/Kg-dry	1	9/22/2014 04:25 PM
Surr: 1,2-Dichloroethane-d4	99.5		70-130	%REC	1	9/22/2014 04:25 PM
Surr: 4-Bromofluorobenzene	96.6		70-130	%REC	1	9/22/2014 04:25 PM
Surr: Dibromofluoromethane	98.2		70-130	%REC	1	9/22/2014 04:25 PM
Surr: Toluene-d8	100		70-130	%REC	1	9/22/2014 04:25 PM
ELECTRICAL CONDUCTIVITY (SAR)			USDA H60 METHOD	Prep: USDA Method 20B / 9/24/14		Analyst: JB
Electrical Conductivity @ Saturation	4.0		0.050	mmhos/cm @25	10	9/24/2014 03:00 PM
CHROMIUM, TRIVALENT			CALCULATION			Analyst: JJG
Chromium, Trivalent	11		0.56	mg/Kg-dry	1	9/24/2014 03:56 PM
CHROMIUM, HEXAVALENT			SW7196A	Prep: SW3060A / 9/22/14		Analyst: MB
Chromium, Hexavalent	ND		0.55	mg/Kg-dry	1	9/24/2014 09:45 AM
MOISTURE			A2540 G			Analyst: RLM
Moisture	10		0.050	% of sample	1	9/22/2014 10:30 AM
PH			SW9045D	Prep: EXTRACT / 9/22/14		Analyst: JB
pH	9.0			s.u.	1	9/23/2014 08:45 AM

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

Client: HRL Compliance Solutions, Inc

QC BATCH REPORT

Work Order: 14091025

Project: WPX RWF 531-13 Batch 3 9.19.14

Batch ID: 63010

Instrument ID GC8

Method: SW8015M

MBLK		Sample ID: DBLKS1-63010-63010				Units: mg/Kg		Analysis Date: 9/22/2014 05:22 PM		
Client ID:		Run ID: GC8_140922A				SeqNo: 2947982		Prep Date: 9/22/2014		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	1.345	0	1.667	0	80.7	39-133	0			

LCS		Sample ID: DLCSS1-63010-63010				Units: mg/Kg		Analysis Date: 9/22/2014 05:49 PM		
Client ID:		Run ID: GC8_140922A				SeqNo: 2947985		Prep Date: 9/22/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	169.3	4.2	166.7	0	102	61-109	0			
Surr: 4-Terphenyl-d14	1.305	0	1.667	0	78.3	39-133	0			

MS		Sample ID: 14091000-03B MS				Units: mg/Kg		Analysis Date: 9/23/2014 10:42 AM		
Client ID:		Run ID: GC8_140923A				SeqNo: 2948157		Prep Date: 9/22/2014		DF: 10
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	8522	80	321.3	5668	888	48-110	0			SO
Surr: 4-Terphenyl-d14	7.738	0	3.213	0	241	39-133	0			S

MSD		Sample ID: 14091000-03B MSD				Units: mg/Kg		Analysis Date: 9/23/2014 11:10 AM		
Client ID:		Run ID: GC8_140923A				SeqNo: 2948160		Prep Date: 9/22/2014		DF: 10
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	9230	81	324.3	5668	1100	48-110	8522	7.98	30	SO
Surr: 4-Terphenyl-d14	3.1	0	3.243	0	95.6	39-133	7.738	85.6	30	R

The following samples were analyzed in this batch: 14091025-01B

Client: HRL Compliance Solutions, Inc
Work Order: 14091025
Project: WPX RWF 531-13 Batch 3 9.19.14

QC BATCH REPORT

Batch ID: **63020** Instrument ID **GC9** Method: **SW8015**

MBLK		Sample ID: MBLK-63020-63020				Units: µg/Kg		Analysis Date: 9/22/2014 01:24 PM		
Client ID:		Run ID: GC9_140922A				SeqNo: 2946717		Prep Date: 9/22/2014		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								
<i>Surr: Toluene-d8</i>	4742	0	5000	0	94.8	50-150	0			

LCS		Sample ID: LCS-63020-63020				Units: µg/Kg		Analysis Date: 9/22/2014 12:59 PM		
Client ID:		Run ID: GC9_140922A				SeqNo: 2946715		Prep Date: 9/22/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	534800	2,500	500000	0	107	70-130	0			
<i>Surr: Toluene-d8</i>	4522	0	5000	0	90.4	50-150	0			

MS		Sample ID: 1409892-01A MS				Units: µg/Kg		Analysis Date: 9/22/2014 04:23 PM		
Client ID:		Run ID: GC9_140922A				SeqNo: 2947635		Prep Date: 9/22/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	550800	2,500	500000	0	110	70-130	0			
<i>Surr: Toluene-d8</i>	4463	0	5000	0	89.3	50-150	0			

MSD		Sample ID: 1409892-01A MSD				Units: µg/Kg		Analysis Date: 9/22/2014 04:48 PM		
Client ID:		Run ID: GC9_140922A				SeqNo: 2947636		Prep Date: 9/22/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	525000	2,500	500000	0	105	70-130	550800	4.8	30	
<i>Surr: Toluene-d8</i>	4456	0	5000	0	89.1	50-150	4463	0.168	30	

The following samples were analyzed in this batch:

14091025-01A

Client: HRL Compliance Solutions, Inc
Work Order: 14091025
Project: WPX RWF 531-13 Batch 3 9.19.14

QC BATCH REPORT

Batch ID: **63045** Instrument ID **HG1** Method: **SW7471**

MBLK		Sample ID: MBLK-63045-63045				Units: mg/Kg		Analysis Date: 9/22/2014 10:04 PM		
Client ID:		Run ID: HG1_140922A				SeqNo: 2947250		Prep Date: 9/22/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.004667	0.020								J

LCS		Sample ID: LCS-63045-63045				Units: mg/Kg		Analysis Date: 9/22/2014 10:06 PM		
Client ID:		Run ID: HG1_140922A				SeqNo: 2947251		Prep Date: 9/22/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.1818	0.020	0.1665	0	109	80-120	0			

MS		Sample ID: 1409900-09BMS				Units: mg/Kg		Analysis Date: 9/22/2014 10:58 PM		
Client ID:		Run ID: HG1_140922A				SeqNo: 2947273		Prep Date: 9/22/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.1207	0.012	0.1023	0.01173	107	75-125	0			

MSD		Sample ID: 1409900-09BMSD				Units: mg/Kg		Analysis Date: 9/22/2014 11:00 PM		
Client ID:		Run ID: HG1_140922A				SeqNo: 2947274		Prep Date: 9/22/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.1227	0.012	0.1036	0.01173	107	75-125	0.1207	1.64	35	

The following samples were analyzed in this batch:

14091025-01B

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

Client: HRL Compliance Solutions, Inc
Work Order: 14091025
Project: WPX RWF 531-13 Batch 3 9.19.14

QC BATCH REPORT

Batch ID: **63077** Instrument ID **ICP2** Method: **SW846 6010C**

DUP		Sample ID: 14091026-01CDUP				Units: mg/L		Analysis Date: 9/24/2014 11:30 AM		
Client ID:		Run ID: ICP2_140924A				SeqNo: 2950218		Prep Date: 9/24/2014		DF: 10
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	302.6	5.0	0	0	0	0-0	0			
Magnesium	46.85	2.0	0	0	0	0-0	0			
Sodium	312.5	2.0	0	0	0	0-0	0			

The following samples were analyzed in this batch:

14091025-01C

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

Client: HRL Compliance Solutions, Inc
Work Order: 14091025
Project: WPX RWF 531-13 Batch 3 9.19.14

QC BATCH REPORT

Batch ID: **63022** Instrument ID **ICPMS1** Method: **SW6020A**

MBLK		Sample ID: MBLK-63022-63022				Units: mg/Kg		Analysis Date: 9/22/2014 12:43 PM		
Client ID:		Run ID: ICPMS1_140922A				SeqNo: 2946618		Prep Date: 9/22/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.03789	0.25								J
Barium	ND	0.25								
Cadmium	0.002467	0.10								J
Chromium	ND	0.25								
Copper	ND	0.25								
Lead	ND	0.25								
Nickel	ND	0.25								
Selenium	ND	0.25								
Silver	0.002411	0.25								J
Zinc	0.7365	0.50								

MBLK		Sample ID: MBLK-63022-63022				Units: mg/Kg		Analysis Date: 9/22/2014 04:56 PM		
Client ID:		Run ID: ICPMS1_140922A				SeqNo: 2946890		Prep Date: 9/22/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Zinc	0.139	0.50								J

LCS		Sample ID: LCS-63022-63022				Units: mg/Kg		Analysis Date: 9/22/2014 12:49 PM		
Client ID:		Run ID: ICPMS1_140922A				SeqNo: 2946619		Prep Date: 9/22/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	4.478	0.25	5	0	89.6	80-120	0			
Barium	4.658	0.25	5	0	93.2	80-120	0			
Cadmium	4.666	0.10	5	0	93.3	80-120	0			
Chromium	4.848	0.25	5	0	97	80-120	0			
Copper	4.852	0.25	5	0	97	80-120	0			
Lead	4.669	0.25	5	0	93.4	80-120	0			
Nickel	4.794	0.25	5	0	95.9	80-120	0			
Selenium	4.376	0.25	5	0	87.5	80-120	0			
Silver	4.719	0.25	5	0	94.4	80-120	0			
Zinc	4.777	0.50	5	0	95.5	80-120	0			

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

Client: HRL Compliance Solutions, Inc
Work Order: 14091025
Project: WPX RWF 531-13 Batch 3 9.19.14

QC BATCH REPORT

Batch ID: **63022** Instrument ID **ICPMS1** Method: **SW6020A**

MS				Sample ID: 14091025-01BMS			Units: mg/Kg		Analysis Date: 9/22/2014 01:15 PM	
Client ID: Batch 3				Run ID: ICPMS1_140922A			SeqNo: 2946622		Prep Date: 9/22/2014	
									DF: 5	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	12.11	1.9	7.68	4.559	98.3	75-125	0			
Barium	232.7	1.9	7.68	280.3	-619	75-125	0			SO
Cadmium	8.395	0.77	7.68	0.6763	100	75-125	0			
Chromium	19.54	1.9	7.68	10.18	122	75-125	0			
Copper	22.04	1.9	7.68	13.4	113	75-125	0			
Lead	30.38	1.9	7.68	26.5	50.5	75-125	0			S
Nickel	23.96	1.9	7.68	14.43	124	75-125	0			
Selenium	9.363	1.9	7.68	2.707	86.7	75-125	0			
Silver	7.385	1.9	7.68	0.08654	95	75-125	0			
Zinc	67.74	3.8	7.68	55.38	161	75-125	0			SO

MSD				Sample ID: 14091025-01BMSD			Units: mg/Kg		Analysis Date: 9/22/2014 01:21 PM	
Client ID: Batch 3				Run ID: ICPMS1_140922A			SeqNo: 2946623		Prep Date: 9/22/2014	
									DF: 5	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	10.85	1.9	7.764	4.559	81	75-125	12.11	11	25	
Barium	211.2	1.9	7.764	280.3	-889	75-125	232.7	9.69	25	SO
Cadmium	8.113	0.78	7.764	0.6763	95.8	75-125	8.395	3.41	25	
Chromium	17.97	1.9	7.764	10.18	100	75-125	19.54	8.35	25	
Copper	18.98	1.9	7.764	13.4	71.9	75-125	22.04	14.9	25	S
Lead	22.85	1.9	7.764	26.5	-47.1	75-125	30.38	28.3	25	SR
Nickel	21.15	1.9	7.764	14.43	86.4	75-125	23.96	12.5	25	
Selenium	9.049	1.9	7.764	2.707	81.7	75-125	9.363	3.41	25	
Silver	7.069	1.9	7.764	0.08654	89.9	75-125	7.385	4.37	25	
Zinc	59.98	3.9	7.764	55.38	59.2	75-125	67.74	12.2	25	SO

The following samples were analyzed in this batch:

14091025-01B

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

Client: HRL Compliance Solutions, Inc
Work Order: 14091025
Project: WPX RWF 531-13 Batch 3 9.19.14

QC BATCH REPORT

Batch ID: **63077** Instrument ID **SAR** Method: **USDA H60 Method**

Sample ID: 14091026-01CDUP					Units:none		Analysis Date: 9/24/2014			
Client ID:			Run ID: SAR_140924A		SeqNo:2950228		Prep Date: 9/24/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sodium Adsorption Ratio	4.415	0.010	0	0	0		4.213	4.67	50	

The following samples were analyzed in this batch:

14091025-01C

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

Client: HRL Compliance Solutions, Inc
Work Order: 14091025
Project: WPX RWF 531-13 Batch 3 9.19.14

QC BATCH REPORT

Batch ID: **63011** Instrument ID **SVMS5** Method: **SW846 8270D**

MBLK		Sample ID: SBLKS1-63011-63011				Units: µg/Kg		Analysis Date: 9/22/2014 07:08 PM		
Client ID:		Run ID: SVMS5_140922A				SeqNo: 2950572		Prep Date: 9/22/2014		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>	2086	0	1667	0	125	25-137	0			
<i>Surr: Nitrobenzene-d5</i>	1280	0	1667	0	76.8	37-107	0			

LCS		Sample ID: SLCSS1-63011-63011				Units: µg/Kg		Analysis Date: 9/22/2014 07:30 PM		
Client ID:		Run ID: SVMS5_140922A				SeqNo: 2950573		Prep Date: 9/22/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	508	6.7	666.7	0	76.2	45-110	0			
Acenaphthylene	540.7	6.7	666.7	0	81.1	45-105	0			
Anthracene	587.3	6.7	666.7	0	88.1	55-105	0			
Benzo(a)anthracene	556.7	6.7	666.7	0	83.5	50-110	0			
Benzo(a)pyrene	529	6.7	666.7	0	79.3	50-110	0			
Benzo(b)fluoranthene	545.7	6.7	666.7	0	81.8	45-115	0			
Benzo(g,h,i)perylene	580	6.7	666.7	0	87	40-125	0			
Benzo(k)fluoranthene	712.3	6.7	666.7	0	107	45-115	0			
Chrysene	678.7	6.7	666.7	0	102	55-110	0			
Dibenzo(a,h)anthracene	441	6.7	666.7	0	66.1	40-125	0			
Fluoranthene	589	6.7	666.7	0	88.3	55-115	0			
Fluorene	561.7	6.7	666.7	0	84.2	50-110	0			
Indeno(1,2,3-cd)pyrene	588	6.7	666.7	0	88.2	40-120	0			
Naphthalene	525.7	6.7	666.7	0	78.8	40-105	0			
Pyrene	726.7	6.7	666.7	0	109	45-125	0			
<i>Surr: 2-Fluorobiphenyl</i>	1319	0	1667	0	79.1	12-100	0			
<i>Surr: 4-Terphenyl-d14</i>	1947	0	1667	0	117	25-137	0			
<i>Surr: Nitrobenzene-d5</i>	1352	0	1667	0	81.1	37-107	0			

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

Client: HRL Compliance Solutions, Inc
Work Order: 14091025
Project: WPX RWF 531-13 Batch 3 9.19.14

QC BATCH REPORT

Batch ID: **63011** Instrument ID **SVMS5** Method: **SW846 8270D**

MS				Units: µg/Kg			Analysis Date: 9/23/2014 09:02 AM			
Client ID:		Run ID: SVMS5_140922A		SeqNo: 2950574		Prep Date: 9/22/2014		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	1013	13	1259	0	80.5	45-110	0			
Acenaphthylene	1087	13	1259	0	86.3	45-105	0			
Anthracene	1124	13	1259	0	89.3	55-105	0			
Benzo(a)anthracene	1102	13	1259	0	87.6	50-110	0			
Benzo(a)pyrene	1019	13	1259	0	81	50-110	0			
Benzo(b)fluoranthene	1094	13	1259	0	86.9	45-115	0			
Benzo(g,h,i)perylene	1132	13	1259	0	89.9	40-125	0			
Benzo(k)fluoranthene	1368	13	1259	0	109	45-115	0			
Chrysene	1299	13	1259	0	103	55-110	0			
Dibenzo(a,h)anthracene	886	13	1259	0	70.4	40-125	0			
Fluoranthene	1136	13	1259	0	90.3	55-115	0			
Fluorene	1081	13	1259	0	85.9	50-110	0			
Indeno(1,2,3-cd)pyrene	1159	13	1259	0	92.1	40-120	0			
Naphthalene	1049	13	1259	0	83.3	40-105	0			
Pyrene	1415	13	1259	0	112	45-125	0			
Surr: 2-Fluorobiphenyl	2659	0	3146	0	84.5	12-100	0			
Surr: 4-Terphenyl-d14	3838	0	3146	0	122	25-137	0			
Surr: Nitrobenzene-d5	2701	0	3146	0	85.9	37-107	0			

MSD				Units: µg/Kg			Analysis Date: 9/23/2014 09:24 AM			
Client ID:		Run ID: SVMS5_140922A		SeqNo: 2950575		Prep Date: 9/22/2014		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	1058	13	1313	0	80.5	45-110	1013	4.3	30	
Acenaphthylene	1119	13	1313	0	85.2	45-105	1087	2.96	30	
Anthracene	1184	13	1313	0	90.1	55-105	1124	5.13	30	
Benzo(a)anthracene	1139	13	1313	0	86.7	50-110	1102	3.27	30	
Benzo(a)pyrene	1054	13	1313	0	80.3	50-110	1019	3.37	30	
Benzo(b)fluoranthene	1156	13	1313	0	88	45-115	1094	5.5	30	
Benzo(g,h,i)perylene	1191	13	1313	0	90.7	40-125	1132	5.07	30	
Benzo(k)fluoranthene	1449	13	1313	0	110	45-115	1368	5.75	30	
Chrysene	1391	13	1313	0	106	55-110	1299	6.82	30	
Dibenzo(a,h)anthracene	921.7	13	1313	0	70.2	40-125	886	3.96	30	
Fluoranthene	1187	13	1313	0	90.4	55-115	1136	4.35	30	
Fluorene	1131	13	1313	0	86.1	50-110	1081	4.53	30	
Indeno(1,2,3-cd)pyrene	1215	13	1313	0	92.5	40-120	1159	4.67	30	
Naphthalene	1025	13	1313	0	78	40-105	1049	2.33	30	
Pyrene	1492	13	1313	0	114	45-125	1415	5.3	30	
Surr: 2-Fluorobiphenyl	2751	0	3283	0	83.8	12-100	2659	3.43	40	
Surr: 4-Terphenyl-d14	4024	0	3283	0	123	25-137	3838	4.73	40	
Surr: Nitrobenzene-d5	2860	0	3283	0	87.1	37-107	2701	5.7	40	

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

Client: HRL Compliance Solutions, Inc
Work Order: 14091025
Project: WPX RWF 531-13 Batch 3 9.19.14

QC BATCH REPORT

Batch ID: **63011** Instrument ID **SVMS5** Method: **SW846 8270D**

The following samples were analyzed in this batch:

14091025-01B

Client: HRL Compliance Solutions, Inc
Work Order: 14091025
Project: WPX RWF 531-13 Batch 3 9.19.14

QC BATCH REPORT

Batch ID: **63019** Instrument ID **VMS5** Method: **SW8260B**

MBLK				Sample ID: MBLK-63019-63019				Units: µg/Kg			Analysis Date: 9/22/2014 02:16 PM		
Client ID:			Run ID: VMS5_140922A				SeqNo:2947750			Prep Date: 9/22/2014		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	981.5	0	1000	0	98.2	70-130		0					
Surr: 4-Bromofluorobenzene	971.5	0	1000	0	97.2	70-130		0					
Surr: Dibromofluoromethane	1011	0	1000	0	101	70-130		0					
Surr: Toluene-d8	981	0	1000	0	98.1	70-130		0					

LCS				Sample ID: LCS-63019-63019			Units: µg/Kg		Analysis Date: 9/22/2014 12:59 PM		
Client ID:		Run ID: VMS5_140922A			SeqNo:2947748		Prep Date: 9/22/2014		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	1110	30	1000	0	111	75-125	0				
Ethylbenzene	1106	30	1000	0	111	75-125	0				
m,p-Xylene	2094	60	2000	0	105	80-125	0				
o-Xylene	1156	30	1000	0	116	75-125	0				
Toluene	1076	30	1000	0	108	70-125	0				
Xylenes, Total	3250	90	3000	0	108	75-125	0				
Surr: 1,2-Dichloroethane-d4	976.5	0	1000	0	97.6	70-130	0				
Surr: 4-Bromofluorobenzene	1010	0	1000	0	101	70-130	0				
Surr: Dibromofluoromethane	1009	0	1000	0	101	70-130	0				
Surr: Toluene-d8	991.5	0	1000	0	99.2	70-130	0				

MS				Sample ID: 1409932-01A MS				Units: µg/Kg		Analysis Date: 9/22/2014 09:59 PM	
Client ID:			Run ID: VMS5_140922A			SeqNo:2947785		Prep Date: 9/22/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	1034	30	1000	0	103	75-125	0				
Ethylbenzene	942	30	1000	0	94.2	75-125	0				
m,p-Xylene	1943	60	2000	0	97.2	80-125	0				
o-Xylene	958.5	30	1000	0	95.8	75-125	0				
Toluene	917	30	1000	0	91.7	70-125	0				
Xylenes, Total	2902	90	3000	0	96.7	75-125	0				
Surr: 1,2-Dichloroethane-d4	996	0	1000	0	99.6	70-130	0				
Surr: 4-Bromofluorobenzene	941.5	0	1000	0	94.2	70-130	0				
Surr: Dibromofluoromethane	1008	0	1000	0	101	70-130	0				
Surr: Toluene-d8	894.5	0	1000	0	89.4	70-130	0				

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

Client: HRL Compliance Solutions, Inc
Work Order: 14091025
Project: WPX RWF 531-13 Batch 3 9.19.14

QC BATCH REPORT

Batch ID: **63019** Instrument ID **VMS5** Method: **SW8260B**

MSD				Sample ID: 1409932-01A MSD			Units: µg/Kg		Analysis Date: 9/22/2014 10:25 PM	
Client ID:				Run ID: VMS5_140922A			SeqNo: 2947787		Prep Date: 9/22/2014	
									DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	996	30	1000	0	99.6	75-125	1034	3.74	30	
Ethylbenzene	1068	30	1000	0	107	75-125	942	12.5	30	
m,p-Xylene	2142	60	2000	0	107	80-125	1943	9.74	30	
o-Xylene	1062	30	1000	0	106	75-125	958.5	10.2	30	
Toluene	975.5	30	1000	0	97.6	70-125	917	6.18	30	
Xylenes, Total	3204	90	3000	0	107	75-125	2902	9.89	30	
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>970.5</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>97</i>	<i>70-130</i>	<i>996</i>	<i>2.59</i>	<i>30</i>	
<i>Surr: 4-Bromofluorobenzene</i>	<i>1023</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>102</i>	<i>70-130</i>	<i>941.5</i>	<i>8.3</i>	<i>30</i>	
<i>Surr: Dibromofluoromethane</i>	<i>972</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>97.2</i>	<i>70-130</i>	<i>1008</i>	<i>3.69</i>	<i>30</i>	
<i>Surr: Toluene-d8</i>	<i>950.5</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>95</i>	<i>70-130</i>	<i>894.5</i>	<i>6.07</i>	<i>30</i>	

The following samples were analyzed in this batch: 14091025-01A

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

Client: HRL Compliance Solutions, Inc
Work Order: 14091025
Project: WPX RWF 531-13 Batch 3 9.19.14

QC BATCH REPORT

Batch ID: **63074** Instrument ID **WETCHEM** Method: **SW9045D**

LCS					Sample ID: LCS-63074-63074					Units: s.u.			Analysis Date: 9/23/2014 08:45 AM		
Client ID:				Run ID: WETCHEM_140923A				SeqNo: 2947366			Prep Date: 9/22/2014			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: 14091025-01B DUP		Units:s.u.		Analysis Date: 9/23/2014 08:45 AM		
Client ID: Batch 3				Run ID: WETCHEM_140923A			SeqNo:2947368		Prep Date: 9/22/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
pH	9	0	0	0	0	0-0	9.02	0.222	20		

DUP					Sample ID: 1409946-01B DUP					Units:s.u.		Analysis Date: 9/23/2014 08:45 AM			
Client ID:					Run ID: WETCHEM_140923A					SeqNo:2947378		Prep Date: 9/22/2014		DF: 1	
Analyte					Result		PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH					8.23		0	0	0	0	0-0	8.24	0.121	20	

The following samples were analyzed in this batch:

14091025-01B

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

Client: HRL Compliance Solutions, Inc
Work Order: 14091025
Project: WPX RWF 531-13 Batch 3 9.19.14

QC BATCH REPORT

Batch ID: **63077** Instrument ID **WETCHEM** Method: **USDA H60 Method**

DUP		Sample ID: 14091026-01C DUP				Units: mmhos/cm @25°C		Analysis Date: 9/24/2014 03:00 PM		
Client ID:		Run ID: WETCHEM_140924I				SeqNo: 2950891		Prep Date: 9/24/2014		DF: 10
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Electrical Conductivity @ Saturation	3.78	0.050	0	0	0		3.33	12.7	50	

The following samples were analyzed in this batch:

14091025-01C

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

Client: HRL Compliance Solutions, Inc
Work Order: 14091025
Project: WPX RWF 531-13 Batch 3 9.19.14

QC BATCH REPORT

Batch ID: **63103** Instrument ID **WETCHEM** Method: **SW7196A**

MBLK		Sample ID: MBLK-63103-63103				Units: mg/Kg		Analysis Date: 9/24/2014 09:45 AM		
Client ID:		Run ID: WETCHEM_140924A				SeqNo: 2949896		Prep Date: 9/22/2014		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-63103-63103				Units: mg/Kg		Analysis Date: 9/24/2014 09:45 AM		
Client ID:		Run ID: WETCHEM_140924A				SeqNo: 2949895		Prep Date: 9/22/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 1.72 0.50 2 0 86 80-120 0

MS		Sample ID: 14091028-01B MS				Units: mg/Kg		Analysis Date: 9/24/2014 09:45 AM		
Client ID:		Run ID: WETCHEM_140924A				SeqNo: 2949890		Prep Date: 9/22/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 1.352 0.49 1.976 0.1151 62.6 75-125 0 S

MS		Sample ID: 14091028-01B MSI				Units: mg/Kg		Analysis Date: 9/24/2014 09:45 AM		
Client ID:		Run ID: WETCHEM_140924A				SeqNo: 2949892		Prep Date: 9/22/2014		DF: 100
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 1030 50 997.6 0.1151 103 75-125 0

MSD		Sample ID: 14091028-01B MSD				Units: mg/Kg		Analysis Date: 9/24/2014 09:45 AM		
Client ID:		Run ID: WETCHEM_140924A				SeqNo: 2949891		Prep Date: 9/22/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 1.72 0.50 2 0.1151 80.2 75-125 1.352 24 20 R

The following samples were analyzed in this batch:

14091025-01B

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

Client: HRL Compliance Solutions, Inc
Work Order: 14091025
Project: WPX RWF 531-13 Batch 3 9.19.14

QC BATCH REPORT

Batch ID: **R148707** Instrument ID **MOIST** Method: **A2540 G**

MBLK		Sample ID: WBLKS-R148707				Units: % of sample		Analysis Date: 9/22/2014 10:30 AM		
Client ID:		Run ID: MOIST_140922A				SeqNo: 2947929		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-R148707				Units: % of sample		Analysis Date: 9/22/2014 10:30 AM		
Client ID:		Run ID: MOIST_140922A				SeqNo: 2947928		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: 14091023-01B DUP				Units: % of sample		Analysis Date: 9/22/2014 10:30 AM		
Client ID:		Run ID: MOIST_140922A				SeqNo: 2947918		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 18.38 0.050 0 0 0 0-0 17.79 3.26 20

The following samples were analyzed in this batch:

14091025-01B

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 202r1

WORKORDER #

14091025

PAGE

1 of 1

DISPOSAL

By Lab or Return to Client

PROJECT NAME

WPX RWF 531-13

SAMPLER

Read Wold

SITE ID

RWF 531-13

DATE

9/19/14

TURNAROUND

3 Day

PROJECT No.

Batch 3

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 81508

CITY / STATE / ZIP

Parachute CO 81635

PHONE

970-243-3271

PHONE

970-683-2285

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

-01

Batch 3

SO

9/19/14

9:20

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:

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

Read Wold

Read Wold

9/19/14

12:20

RECEIVED BY

MM

MM

9/19/14

17:10

RELINQUISHED BY

MM

MM

9/19/14

12:50

RECEIVED BY

Joseph R

J. R. Carr

9/20/14

10:30

RELINQUISHED BY

RECEIVED BY

Sample Receipt Checklist

Client Name: **HRL**

Date/Time Received: **20-Sep-14 10:30**

Work Order: **14091025**

Received by: **JR**

Checklist completed by <u>Joseph Ribar</u>	20-Sep-14	Reviewed by: <u>Ann Preston</u>	22-Sep-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>3.4 C</u>		
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:	<u>9/20/2014 11:24:14 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) 399-6070
 Nick Martinez
 ALS Environmental
 127 E. 1st Street
 PARACHUTE, CO 81835

Origin ID: RLA



Ship Date: 19SEP14
 Act/Wgt: 75.0 LB
 CAD: 2284840/NET3550

Dims: 24 X 15 X 15 IN

SHIP TO: (816) 399-6070
 sample receiving
 ALS Laboratory Group
 3352 128TH AVE

BILL SENDER

HOLLAND, MI 49424

Delivery Address Bar Code



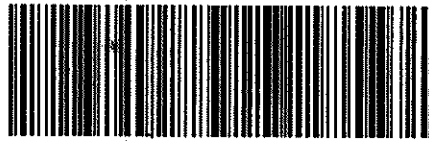
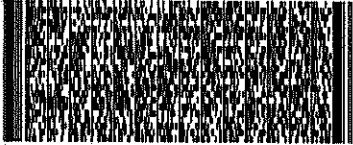
Ref # 091914-1
 Invoice #
 PO # Parachute
 Dept #

SATURDAY 12:00P
 PRIORITY OVERNIGHT

TRK# 7712 2235 7960
 8281

X0 HLMA

49424
 MI-LB
 GRR



52201CDB48AC3

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.



12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Ms. Karolina Blaney
WPX Energy
1058 County Road 215
Parachute, CO 81635

Report Summary

Monday February 09, 2015

Report Number: L747156

Samples Received: 02/05/15

Client Project: RWF 531-13

Description: RWF 531-13

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:

T. Alan Harvill , ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - 01157CA, CT - PH-0197,
FL - E87487, GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016,
NC - ENV375/DW21704/BIO041, ND - R-140, NJ - TN002, NJ NELAP - TN002,
SC - 84004, TN - 2006, VA - 460132, WV - 233, AZ - 0612,
MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032011-1,
TX - T104704245-11-3, OK - 9915, PA - 68-02979, IA Lab #364, EPA - TN002

Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.

This report may not be reproduced, except in full, without written approval from ESC Lab Sciences. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

February 09, 2015

Ms.Karolina Blaney
WPX Energy
1058 County Road 215
Parachute, CO 81635

Date Received : February 05, 2015
Description : RWF 531-13

Sample ID : RWF 531-13 BATCH 3

Collected By :
Collection Date : 02/04/15 12:00

ESC Sample # : L747156-01

Site ID : RWF 531-13 BATCH 3

Project # : RWF 531-13

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
TPH (GC/FID) Low Fraction	16.	10.	mg/kg	8015D/GRO	02/06/15	100
Surrogate Recovery (70-130)						
a,a,a-Trifluorotoluene(FID)	99.1		% Rec.	8015D/GRO	02/06/15	100
TPH (GC/FID) High Fraction	180	4.0	mg/kg	3546/DRO	02/06/15	1
Surrogate recovery(%)						
o-Terphenyl	59.5		% Rec.	3546/DRO	02/06/15	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 02/09/15 11:28 Printed: 02/09/15 12:07



YOUR LAB OF CHOICE

WPX Energy
Ms.Karolina Blaney
1058 County Road 215

Parachute, CO 81635

Quality Assurance Report
Level II

L747156

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

February 09, 2015

Analyte	Result	Laboratory Blank		Limit	Batch	Date Analyzed
		Units	% Rec			
TPH (GC/FID) High Fraction	< 4	mg/kg			WG768746	02/06/15 12:39
o-Terphenyl		% Rec.	83.30	50-150	WG768746	02/06/15 12:39
TPH (GC/FID) Low Fraction	< .1	mg/kg			WG768683	02/06/15 11:29
a,a,a-Trifluorotoluene(FID)		% Rec.	98.40	59-128	WG768683	02/06/15 11:29

Analyte	Units	Laboratory Control Sample		% Rec	Limit	Batch
		Known Val	Result			
TPH (GC/FID) High Fraction	mg/kg	60	55.2	92.1	50-150	WG768746
o-Terphenyl				83.30	50-150	WG768746
TPH (GC/FID) Low Fraction	mg/kg	5.5	5.37	97.7	63.5-137	WG768683
a,a,a-Trifluorotoluene(FID)				107.0	59-128	WG768683

Analyte	Units	Laboratory Control Sample Duplicate			Limit	RPD	Limit	Batch
		Result	Ref	%Rec				
TPH (GC/FID) High Fraction	mg/kg	53.1	55.2	88.0	50-150	4.04	20	WG768746
o-Terphenyl				75.40	50-150			WG768746
TPH (GC/FID) Low Fraction	mg/kg	4.90	5.37	89.0	63.5-137	9.17	20	WG768683
a,a,a-Trifluorotoluene(FID)				107.0	59-128			WG768683

Analyte	Units	Matrix Spike			% Rec	Limit	Ref Samp	Batch
		MS Res	Ref Res	TV				
TPH (GC/FID) Low Fraction	mg/kg	24.3	0.0724	5.5	88.0	28.5-138	L747026-01	WG768683
a,a,a-Trifluorotoluene(FID)					106.0	59-128		WG768683

Analyte	Units	Matrix Spike Duplicate			Limit	RPD	Limit	Ref Samp	Batch
		MSD	Ref	%Rec					
TPH (GC/FID) Low Fraction	mg/kg	25.0	24.3	90.6	28.5-138	2.78	23.6	L747026-01	WG768683
a,a,a-Trifluorotoluene(FID)				106.0	59-128				WG768683

Batch number /Run number / Sample number cross reference

WG768746: R3018659: L747156-01
WG768683: R3018728: L747156-01

* * Calculations are performed prior to rounding of reported values.
* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



YOUR LAB OF CHOICE

WPX Energy
Ms. Karolina Blaney
1058 County Road 215

Parachute, CO 81635

Quality Assurance Report
Level II

L747156

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

February 09, 2015

The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.