

Attachment A--Location Map  
Location: TR 31-3-597  
WPX Energy Rocky Mountain, LLC

**Legend**

- Sample Location
- Pit Footprint Post Excavation
- Pit Perimeter Post Excavation

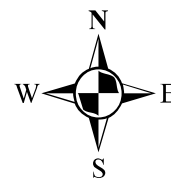
**PLSS**

- Township
- Section
- WPX Access Roads

**Hydrographic Features**

- Perennial Stream
- Intermittent Stream

0 25 50 100 Feet





17-Jun-2013

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

Re: **WPX TR 32-3-597 Pit Closure 6/7/13**

Work Order: **1306318**

Dear Kris,

ALS Environmental received 8 samples on 08-Jun-2013 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 33.

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 Group An ALS Limited Company

Environmental 

[www.alsglobal.com](http://www.alsglobal.com)

RIGHT SOLUTIONS RIGHT PARTNER

**Client:** HRL Compliance Solutions  
**Project:** WPX TR 32-3-597 Pit Closure 6/7/13  
**Work Order:** 1306318

**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>
1306318-01	North Wall (2 ft depth)	Soil		6/7/2013 09:25	6/8/2013 10:30	<input type="checkbox"/>
1306318-02	East Wall (1 ft depth)	Soil		6/7/2013 09:45	6/8/2013 10:30	<input type="checkbox"/>
1306318-03	West Wall (1 ft depth)	Soil		6/7/2013 10:00	6/8/2013 10:30	<input type="checkbox"/>
1306318-04	Pit Bottom (5 ft depth)	Soil		6/7/2013 10:30	6/8/2013 10:30	<input type="checkbox"/>
1306318-05	South Wall (1 ft depth)	Soil		6/7/2013 10:50	6/8/2013 10:30	<input type="checkbox"/>
1306318-06	BKGD 1	Soil		6/7/2013 12:05	6/8/2013 10:30	<input type="checkbox"/>
1306318-07	BKDG 2	Soil		6/7/2013 12:15	6/8/2013 10:30	<input type="checkbox"/>
1306318-08	BKGD 3	Soil		6/7/2013 12:25	6/8/2013 10:30	<input type="checkbox"/>

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**Client:** HRL Compliance Solutions  
**Project:** WPX TR 32-3-597 Pit Closure 6/7/13  
**Work Order:** 1306318

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**Case Narrative**

Batch 48950 MS/MSD data for Mercury is not related to this project's samples. No data requires qualification.

Batch 49015 sample Pit Bottom (5 ft depth) MS/MSD recoveries for Hexavalent Chromium were below control limits. The corresponding reporting limit in the parent sample may be biased low.

Batch 49037 MS/MSD data for Metals is not related to this project's samples. No data requires qualification.



**Client:** HRL Compliance Solutions  
**Project:** WPX TR 32-3-597 Pit Closure 6/7/13  
**WorkOrder:** 1306318

## **QUALIFIERS, ACRONYMS, UNITS**

<b><u>Qualifier</u></b>	<b><u>Description</u></b>
*	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 detected below quantitation 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

<b><u>Acronym</u></b>	<b><u>Description</u></b>
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
RPD	Relative Percent Difference
TDL	Target Detection Limit
A	APHA Standard Methods
D	ASTM
E	EPA
SW	SW-846 Update III

<b><u>Units Reported</u></b>	<b><u>Description</u></b>
% of sample	Percent of Sample
µg/Kg-dry	Micrograms per Kilogram Dry Weight
mg/Kg-dry	Milligrams per Kilogram Dry Weight
mmhos/cm @25°F	Microhms-Centimeter at 25 Degrees Fahrenheit
none	
s.u.	Standard Units

# ALS Group USA, Corp

Date: 17-Jun-13

Client: HRL Compliance Solutions

Project: WPX TR 32-3-597 Pit Closure 6/7/13

Sample ID: BKGD 1

Collection Date: 6/7/2013 12:05 PM

Work Order: 1306318

Lab ID: 1306318-06

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>METALS BY ICP-MS</b>			<b>SW6020A</b>		Prep Date: <b>6/12/2013</b>	Analyst: <b>RH</b>
Arsenic	5.3		2.0	mg/Kg-dry	5	6/12/2013 08:39 PM
<b>MOISTURE</b>			<b>A2540 G</b>			Analyst: <b>BD</b>
Moisture	10		0.050	% of sample	1	6/10/2013 01:30 PM

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

**ALS Group USA, Corp****Date:** 17-Jun-13**Client:** HRL Compliance Solutions**Project:** WPX TR 32-3-597 Pit Closure 6/7/13**Work Order:** 1306318**Sample ID:** BKDG 2**Lab ID:** 1306318-07**Collection Date:** 6/7/2013 12:15 PM**Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>METALS BY ICP-MS</b>			<b>SW6020A</b>		Prep Date: <b>6/12/2013</b>	Analyst: <b>RH</b>
Arsenic	4.7		1.9	mg/Kg-dry	5	6/12/2013 08:44 PM
<b>SOLUBLE CATIONS FOR SAR</b>			<b>SW6020A</b>		Prep Date: <b>6/11/2013</b>	Analyst: <b>ML</b>
Calcium	130		10	mg/L-dry	20	6/13/2013 07:33 PM
Magnesium	22		4.1	mg/L-dry	20	6/13/2013 07:33 PM
Sodium	15		4.1	mg/L-dry	20	6/14/2013 01:20 PM
<b>SODIUM ADSORPTION RATIO</b>			<b>USDA H60 METHO</b>		Prep Date: <b>6/11/2013</b>	Analyst: <b>ML</b>
Sodium Adsorption Ratio	0.31		0.010	none	1	6/14/2013
<b>ELECTRICAL CONDUCTIVITY (SAR)</b>			<b>USDA H60 METHO</b>		Prep Date: <b>6/11/2013</b>	Analyst: <b>JB</b>
Electrical Conductivity @ Saturation	0.89		0.025	mmhos/cm @2	5	6/14/2013 12:30 PM
<b>MOISTURE</b>			<b>A2540 G</b>			Analyst: <b>BD</b>
Moisture	3.4		0.050	% of sample	1	6/10/2013 01:30 PM
<b>PH</b>			<b>SW9045D</b>			Analyst: <b>JB</b>
pH	7.4			s.u.	1	6/10/2013 12:05 PM

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

# ALS Group USA, Corp

Date: 17-Jun-13

Client: HRL Compliance Solutions

Project: WPX TR 32-3-597 Pit Closure 6/7/13

Sample ID: BKGD 3

Collection Date: 6/7/2013 12:25 PM

Work Order: 1306318

Lab ID: 1306318-08

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>METALS BY ICP-MS</b>			<b>SW6020A</b>		Prep Date: <b>6/12/2013</b>	Analyst: <b>RH</b>
Arsenic	5.0		2.1	mg/Kg-dry	5	6/12/2013 08:49 PM
<b>MOISTURE</b>			<b>A2540 G</b>			Analyst: <b>BD</b>
Moisture	13		0.050	% of sample	1	6/10/2013 01:30 PM

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



# ALS Group USA, Corp

Date: 17-Jun-13

**Client:** HRL Compliance Solutions

**Work Order:** 1306318

**Project:** WPX TR 32-3-597 Pit Closure 6/7/13

## QC BATCH REPORT

Batch ID: **48969**

Instrument ID **GC8**

Method: **SW8015M**

<b>MBLK</b>	Sample ID: <b>DBLKS1-48969-48969</b>					Units: <b>mg/Kg</b>		Analysis Date: <b>6/11/2013 06:02 PM</b>		
Client ID:	Run ID: <b>GC8_130611A</b>				SeqNo: <b>2347067</b>		Prep Date: <b>6/11/2013</b>		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	ND	4.2								
<i>Surr: 4-Terphenyl-d14</i>	1.56	0	1.667	0	93.6	39-115	0			

<b>LCS</b>	Sample ID: <b>DLCSS1-48969-48969</b>					Units: <b>mg/Kg</b>		Analysis Date: <b>6/11/2013 06:32 PM</b>		
Client ID:	Run ID: <b>GC8_130611A</b>				SeqNo: <b>2347068</b>		Prep Date: <b>6/11/2013</b>		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	163.2	4.2	166.7	0	97.9	49-124	0			
<i>Surr: 4-Terphenyl-d14</i>	1.045	0	1.667	0	62.7	39-115	0			

<b>MS</b>	Sample ID: <b>1306244-02A MS</b>					Units: <b>mg/Kg</b>		Analysis Date: <b>6/11/2013 07:03 PM</b>		
Client ID:	Run ID: <b>GC8_130611A</b>				SeqNo: <b>2347069</b>		Prep Date: <b>6/11/2013</b>		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	297.7	8.1	325.6	93.12	62.8	49-130	0			
<i>Surr: 4-Terphenyl-d14</i>	1.5	0	3.256	0	46.1	39-115	0			

<b>MSD</b>	Sample ID: <b>1306244-02A MSD</b>					Units: <b>mg/Kg</b>		Analysis Date: <b>6/11/2013 07:33 PM</b>		
Client ID:	Run ID: <b>GC8_130611A</b>				SeqNo: <b>2347070</b>		Prep Date: <b>6/11/2013</b>		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	360.4	8.0	321	93.12	83.3	49-130	297.7	19	30	
<i>Surr: 4-Terphenyl-d14</i>	1.909	0	3.21	0	59.5	39-115	1.5	24	30	

The following samples were analyzed in this batch:

1306318-01B	1306318-02B	1306318-03B
1306318-04B	1306318-05B	

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

**Client:** HRL Compliance Solutions  
**Work Order:** 1306318  
**Project:** WPX TR 32-3-597 Pit Closure 6/7/13

## QC BATCH REPORT

Batch ID: **R122055**      Instrument ID **GC10**      Method: **SW8015**

<b>MBLK</b>		Sample ID: <b>GBLK2-130611-R122055</b>				Units: <b>µg/L</b>		Analysis Date: <b>6/11/2013 09:12 PM</b>		
Client ID:		Run ID: <b>GC10_130611B</b>				SeqNo: <b>2346664</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	ND	200								
<i>Surr: Toluene-d8</i>	<i>110</i>	<i>0</i>	<i>100</i>	<i>0</i>	<i>110</i>	<i>70-130</i>	<i>0</i>			

<b>LCS</b>		Sample ID: <b>GLCS2-130611-R122055</b>				Units: <b>µg/L</b>		Analysis Date: <b>6/11/2013 08:47 PM</b>		
Client ID:		Run ID: <b>GC10_130611B</b>				SeqNo: <b>2346663</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	7715	200	10000	0	77.2	70-130	0			
<i>Surr: Toluene-d8</i>	<i>113.3</i>	<i>0</i>	<i>100</i>	<i>0</i>	<i>113</i>	<i>70-130</i>	<i>0</i>			

<b>MS</b>		Sample ID: <b>1306322-01A MS</b>				Units: <b>µg/L</b>		Analysis Date: <b>6/12/2013 02:56 AM</b>		
Client ID:		Run ID: <b>GC10_130611B</b>				SeqNo: <b>2346668</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	7850	200	10000	0	78.5	70-130	0			
<i>Surr: Toluene-d8</i>	<i>110.2</i>	<i>0</i>	<i>100</i>	<i>0</i>	<i>110</i>	<i>70-130</i>	<i>0</i>			

<b>MSD</b>		Sample ID: <b>1306322-01A MSD</b>				Units: <b>µg/L</b>		Analysis Date: <b>6/12/2013 03:20 AM</b>		
Client ID:		Run ID: <b>GC10_130611B</b>				SeqNo: <b>2346670</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	7903	200	10000	0	79	70-130	7850	0.669	30	
<i>Surr: Toluene-d8</i>	<i>114.1</i>	<i>0</i>	<i>100</i>	<i>0</i>	<i>114</i>	<i>70-130</i>	<i>110.2</i>	<i>3.5</i>	<i>30</i>	

The following samples were analyzed in this batch:

1306318-01A	1306318-02A	1306318-03A
1306318-04A	1306318-05A	

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

**Client:** HRL Compliance Solutions  
**Work Order:** 1306318  
**Project:** WPX TR 32-3-597 Pit Closure 6/7/13

## QC BATCH REPORT

Batch ID: **48950**      Instrument ID **HG1**      Method: **SW7471**

<b>MBLK</b>		Sample ID: <b>MBLK-48950-48950</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>6/10/2013 05:16 PM</b>		
Client ID:		Run ID: <b>HG1_130610A</b>				SeqNo: <b>2345018</b>		Prep Date: <b>6/10/2013</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury      ND      0.020

<b>LCS</b>		Sample ID: <b>LCS-48950-48950</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>6/10/2013 05:18 PM</b>		
Client ID:		Run ID: <b>HG1_130610A</b>				SeqNo: <b>2345020</b>		Prep Date: <b>6/10/2013</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury      0.1774      0.020      0.1665      0      107      80-120      0

<b>MS</b>		Sample ID: <b>1306210-01BMS</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>6/10/2013 05:32 PM</b>		
Client ID:		Run ID: <b>HG1_130610A</b>				SeqNo: <b>2345032</b>		Prep Date: <b>6/10/2013</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury      0.1872      0.015      0.1246      0.028      128      75-125      0      S

<b>MSD</b>		Sample ID: <b>1306210-01BMSD</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>6/10/2013 05:34 PM</b>		
Client ID:		Run ID: <b>HG1_130610A</b>				SeqNo: <b>2345034</b>		Prep Date: <b>6/10/2013</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury      0.1539      0.014      0.1167      0.028      108      75-125      0.1872      19.6      35

The following samples were analyzed in this batch:

1306318-04B

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

**Client:** HRL Compliance Solutions  
**Work Order:** 1306318  
**Project:** WPX TR 32-3-597 Pit Closure 6/7/13

## QC BATCH REPORT

Batch ID: **48996** Instrument ID **ICPMS1** Method: **SW6020A (Dissolve)**

<b>DUP</b>		Sample ID: <b>1306318-07BDUP</b>				Units: <b>mg/L</b>		Analysis Date: <b>6/13/2013 07:39 PM</b>		
Client ID: <b>BKDG 2</b>		Run ID: <b>ICPMS1_130613A</b>				SeqNo: <b>2349084</b>		Prep Date: <b>6/11/2013</b>		DF: <b>20</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	115.8	10	0	0	0	0-0	124.1	6.9		
Magnesium	20.16	4.0	0	0	0	0-0	21.56	6.71		

<b>DUP</b>		Sample ID: <b>1306318-07BDUP</b>				Units: <b>mg/L</b>		Analysis Date: <b>6/14/2013 01:43 PM</b>		
Client ID: <b>BKDG 2</b>		Run ID: <b>ICPMS1_130614A</b>				SeqNo: <b>2349802</b>		Prep Date: <b>6/11/2013</b>		DF: <b>20</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sodium	8.49	4.0	0	0	0	0-0	14.15	50		

The following samples were analyzed in this batch:

1306318-04C 1306318-07B

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

**Client:** HRL Compliance Solutions  
**Work Order:** 1306318  
**Project:** WPX TR 32-3-597 Pit Closure 6/7/13

## QC BATCH REPORT

Batch ID: **49013**      Instrument ID **ICPMS2**      Method: **SW6020A**

<b>MBLK</b>		Sample ID: <b>MBLK-49013-49013</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>6/12/2013 02:12 PM</b>		
Client ID:		Run ID: <b>ICPMS2_130612A</b>				SeqNo: <b>2347327</b>		Prep Date: <b>6/12/2013</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Arsenic      ND      0.25

<b>LCS</b>		Sample ID: <b>LCS-49013-49013</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>6/12/2013 02:18 PM</b>		
Client ID:		Run ID: <b>ICPMS2_130612A</b>				SeqNo: <b>2347328</b>		Prep Date: <b>6/12/2013</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Arsenic      4.839      0.25      5      0      96.8      80-120      0

<b>MS</b>		Sample ID: <b>1306200-04AMS</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>6/12/2013 02:28 PM</b>		
Client ID:		Run ID: <b>ICPMS2_130612A</b>				SeqNo: <b>2347330</b>		Prep Date: <b>6/12/2013</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Arsenic      6.473      0.32      6.477      0.4821      92.5      75-125      0

<b>MSD</b>		Sample ID: <b>1306200-04AMSD</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>6/12/2013 02:33 PM</b>		
Client ID:		Run ID: <b>ICPMS2_130612A</b>				SeqNo: <b>2347331</b>		Prep Date: <b>6/12/2013</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Arsenic      6.398      0.32      6.353      0.4821      93.1      75-125      6.473      1.17      25

The following samples were analyzed in this batch:

1306318-06A	1306318-07A	1306318-08A
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**Note:** See Qualifiers Page for a list of Qualifiers and their explanation.

**Client:** HRL Compliance Solutions  
**Work Order:** 1306318  
**Project:** WPX TR 32-3-597 Pit Closure 6/7/13

## QC BATCH REPORT

Batch ID: **49037** Instrument ID **ICPMS2** Method: **SW6020A**

<b>MBLK</b>		Sample ID: <b>MBLK-49037-49037</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>6/13/2013 11:11 AM</b>		
Client ID:		Run ID: <b>ICPMS2_130613A</b>				SeqNo: <b>2348223</b>		Prep Date: <b>6/13/2013</b>		DF: <b>1</b>
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	0.1791	0.50								J

<b>LCS</b>		Sample ID: <b>LCS-49037-49037</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>6/13/2013 11:16 AM</b>		
Client ID:		Run ID: <b>ICPMS2_130613A</b>				SeqNo: <b>2348224</b>		Prep Date: <b>6/13/2013</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	4.975	0.25	5	0	99.5	80-120	0			
Barium	5.16	0.25	5	0	103	80-120	0			
Cadmium	5.12	0.10	5	0	102	80-120	0			
Chromium	5.055	0.25	5	0	101	80-120	0			
Copper	4.952	0.25	5	0	99	80-120	0			
Lead	5.09	0.25	5	0	102	80-120	0			
Nickel	4.968	0.25	5	0	99.4	80-120	0			
Selenium	4.888	0.25	5	0	97.8	80-120	0			
Silver	5.305	0.25	5	0	106	80-120	0			
Zinc	4.954	0.50	5	0	99.1	80-120	0			

<b>MS</b>		Sample ID: <b>1306289-09BMS</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>6/13/2013 11:59 AM</b>		
Client ID:		Run ID: <b>ICPMS2_130613A</b>				SeqNo: <b>2348230</b>		Prep Date: <b>6/13/2013</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	7.045	0.35	6.954	0.2577	97.6	75-125	0			
Barium	30.21	0.35	6.954	22.59	110	75-125	0			
Cadmium	7.274	0.14	6.954	0.00804	104	75-125	0			
Chromium	14.32	0.35	6.954	5.854	122	75-125	0			
Copper	11	0.35	6.954	4.77	89.6	75-125	0			
Lead	12.19	0.35	6.954	4.339	113	75-125	0			
Nickel	11.36	0.35	6.954	4.408	100	75-125	0			
Selenium	6.697	0.35	6.954	0.09077	95	75-125	0			
Silver	7.017	0.35	6.954	0.01249	101	75-125	0			
Zinc	23.69	0.70	6.954	15.93	112	75-125	0			

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

**Client:** HRL Compliance Solutions  
**Work Order:** 1306318  
**Project:** WPX TR 32-3-597 Pit Closure 6/7/13

## QC BATCH REPORT

Batch ID: **49037** Instrument ID **ICPMS2** Method: **SW6020A**

<b>MSD</b>		Sample ID: <b>1306289-09BMSD</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>6/13/2013 12:04 PM</b>		
Client ID:		Run ID: <b>ICPMS2_130613A</b>				SeqNo: <b>2348231</b>		Prep Date: <b>6/13/2013</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	7.482	0.36	7.174	0.2577	101	75-125	7.045	6.02	25	
Barium	38.73	0.36	7.174	22.59	225	75-125	30.21	24.7	25	S
Cadmium	7.446	0.14	7.174	0.00804	104	75-125	7.274	2.34	25	
Chromium	16.13	0.36	7.174	5.854	143	75-125	14.32	11.9	25	S
Copper	12.98	0.36	7.174	4.77	114	75-125	11	16.5	25	
Lead	14.59	0.36	7.174	4.339	143	75-125	12.19	17.9	25	S
Nickel	12.63	0.36	7.174	4.408	115	75-125	11.36	10.6	25	
Selenium	6.962	0.36	7.174	0.09077	95.8	75-125	6.697	3.88	25	
Silver	7.141	0.36	7.174	0.01249	99.4	75-125	7.017	1.75	25	
Zinc	28.49	0.72	7.174	15.93	175	75-125	23.69	18.4	25	S

The following samples were analyzed in this batch: | 1306318-04B |

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



**Client:** HRL Compliance Solutions  
**Work Order:** 1306318  
**Project:** WPX TR 32-3-597 Pit Closure 6/7/13

# QC BATCH REPORT

Batch ID: **48968**      Instrument ID **SVMS6**      Method: **SW8270**

<b>MBLK</b>		Sample ID: <b>SBLKS1-48968-48968</b>				Units: <b>µg/Kg</b>		Analysis Date: <b>6/12/2013 09:40 AM</b>		
Client ID:		Run ID: <b>SVMS6_130612A</b>				SeqNo: <b>2347244</b>		Prep Date: <b>6/11/2013</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	ND	30								
Acenaphthylene	ND	30								
Anthracene	ND	30								
Benzo(a)anthracene	ND	30								
Benzo(a)pyrene	ND	30								
Benzo(b)fluoranthene	ND	30								
Benzo(g,h,i)perylene	ND	30								
Benzo(k)fluoranthene	ND	30								
Chrysene	ND	30								
Dibenzo(a,h)anthracene	ND	30								
Fluoranthene	ND	30								
Fluorene	ND	30								
Indeno(1,2,3-cd)pyrene	ND	30								
Naphthalene	ND	30								
Pyrene	ND	30								
<i>Surr: 2-Fluorobiphenyl</i>	1296	0	1667	0	77.7	12-100	0			
<i>Surr: 4-Terphenyl-d14</i>	1840	0	1667	0	110	25-137	0			
<i>Surr: Nitrobenzene-d5</i>	1359	0	1667	0	81.6	37-107	0			

<b>LCS</b>		Sample ID: <b>SLCSS1-48968-48968</b>				Units: <b>µg/Kg</b>		Analysis Date: <b>6/12/2013 10:00 AM</b>		
Client ID:		Run ID: <b>SVMS6_130612A</b>				SeqNo: <b>2347245</b>		Prep Date: <b>6/11/2013</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	481.7	30	666.7	0	72.2	45-110	0			
Acenaphthylene	537.3	30	666.7	0	80.6	45-105	0			
Anthracene	562	30	666.7	0	84.3	55-105	0			
Benzo(a)anthracene	550.7	30	666.7	0	82.6	50-110	0			
Benzo(a)pyrene	564	30	666.7	0	84.6	50-110	0			
Benzo(b)fluoranthene	561.3	30	666.7	0	84.2	45-115	0			
Benzo(g,h,i)perylene	606.7	30	666.7	0	91	40-125	0			
Benzo(k)fluoranthene	542.3	30	666.7	0	81.3	45-115	0			
Chrysene	550	30	666.7	0	82.5	55-110	0			
Dibenzo(a,h)anthracene	633	30	666.7	0	94.9	40-125	0			
Fluoranthene	651	30	666.7	0	97.6	55-115	0			
Fluorene	546	30	666.7	0	81.9	50-110	0			
Indeno(1,2,3-cd)pyrene	621	30	666.7	0	93.1	40-120	0			
Naphthalene	511	30	666.7	0	76.6	40-105	0			
Pyrene	552.3	30	666.7	0	82.8	45-125	0			
<i>Surr: 2-Fluorobiphenyl</i>	1302	0	1667	0	78.1	12-100	0			
<i>Surr: 4-Terphenyl-d14</i>	1787	0	1667	0	107	25-137	0			
<i>Surr: Nitrobenzene-d5</i>	1382	0	1667	0	82.9	37-107	0			

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

**Client:** HRL Compliance Solutions  
**Work Order:** 1306318  
**Project:** WPX TR 32-3-597 Pit Closure 6/7/13

## QC BATCH REPORT

Batch ID: **48968**      Instrument ID **SVMS6**      Method: **SW8270**

MS				Sample ID: 1306289-01B MS				Units: µg/Kg			Analysis Date: 6/12/2013 01:05 PM			
Client ID:				Run ID: SVMS6_130612A				SeqNo: 2347246			Prep Date: 6/11/2013		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual				
Acenaphthene	893.6	56	1253	0	71.3	45-110	0							
Acenaphthylene	998.2	56	1253	0	79.6	45-105	0							
Anthracene	1026	56	1253	0	81.9	55-105	0							
Benzo(a)anthracene	1035	56	1253	0	82.5	50-110	0							
Benzo(a)pyrene	1030	56	1253	0	82.1	50-110	0							
Benzo(b)fluoranthene	1018	56	1253	0	81.2	45-115	0							
Benzo(g,h,i)perylene	1129	56	1253	0	90.1	40-125	0							
Benzo(k)fluoranthene	1012	56	1253	0	80.7	45-115	0							
Chrysene	1029	56	1253	0	82.1	55-110	0							
Dibenzo(a,h)anthracene	1152	56	1253	0	91.9	40-125	0							
Fluoranthene	1193	56	1253	0	95.2	55-115	0							
Fluorene	992.6	56	1253	0	79.2	50-110	0							
Indeno(1,2,3-cd)pyrene	1139	56	1253	0	90.9	40-120	0							
Naphthalene	946.2	56	1253	0	75.5	40-105	0							
Pyrene	1023	56	1253	0	81.6	45-125	0							
Surr: 2-Fluorobiphenyl	2338	0	3133	0	74.6	12-100	0							
Surr: 4-Terphenyl-d14	3209	0	3133	0	102	25-137	0							
Surr: Nitrobenzene-d5	2513	0	3133	0	80.2	37-107	0							

MSD				Sample ID: 1306289-01B MSD				Units: µg/Kg		Analysis Date: 6/12/2013 01:25 PM	
Client ID:			Run ID: SVMS6_130612A			SeqNo: 2347247		Prep Date: 6/11/2013		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Acenaphthene	969.2	58	1288	0	75.2	45-110	893.6	8.11	30		
Acenaphthylene	1079	58	1288	0	83.7	45-105	998.2	7.74	30		
Anthracene	1102	58	1288	0	85.6	55-105	1026	7.14	30		
Benzo(a)anthracene	1085	58	1288	0	84.2	50-110	1035	4.76	30		
Benzo(a)pyrene	1090	58	1288	0	84.6	50-110	1030	5.66	30		
Benzo(b)fluoranthene	1091	58	1288	0	84.7	45-115	1018	6.88	30		
Benzo(g,h,i)perylene	1188	58	1288	0	92.2	40-125	1129	5.08	30		
Benzo(k)fluoranthene	1069	58	1288	0	83	45-115	1012	5.47	30		
Chrysene	1082	58	1288	0	84	55-110	1029	5.07	30		
Dibenzo(a,h)anthracene	1208	58	1288	0	93.8	40-125	1152	4.77	30		
Fluoranthene	1305	58	1288	0	101	55-115	1193	8.93	30		
Fluorene	1070	58	1288	0	83	50-110	992.6	7.47	30		
Indeno(1,2,3-cd)pyrene	1191	58	1288	0	92.4	40-120	1139	4.42	30		
Naphthalene	1005	58	1288	0	78	40-105	946.2	6.04	30		
Pyrene	1059	58	1288	0	82.2	45-125	1023	3.4	30		
Surr: 2-Fluorobiphenyl	2531	0	3220	0	78.6	12-100	2338	7.94	40		
Surr: 4-Terphenyl-d14	3354	0	3220	0	104	25-137	3209	4.43	40		
Surr: Nitrobenzene-d5	2693	0	3220	0	83.6	37-107	2513	6.92	40		

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

**Client:** HRL Compliance Solutions  
**Work Order:** 1306318  
**Project:** WPX TR 32-3-597 Pit Closure 6/7/13

## QC BATCH REPORT

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Batch ID: **48968** Instrument ID **SVMS6** Method: **SW8270**

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**The following samples were analyzed in this batch:**

1306318-01B	1306318-02B	1306318-03B
1306318-04B	1306318-05B	

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

**Client:** HRL Compliance Solutions  
**Work Order:** 1306318  
**Project:** WPX TR 32-3-597 Pit Closure 6/7/13

# QC BATCH REPORT

Batch ID: **48976**      Instrument ID **VMS5**      Method: **SW8260**

<b>MBLK</b>		Sample ID: <b>MBLK-48976-48976</b>				Units: <b>µg/Kg</b>		Analysis Date: <b>6/11/2013 01:54 PM</b>		
Client ID:		Run ID: <b>VMS5_130611A</b>				SeqNo: <b>2346754</b>		Prep Date: <b>6/11/2013</b>		DF: <b>1</b>
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	931.5	0	1000	0	93.2	70-130	0			
Surr: 4-Bromofluorobenzene	981	0	1000	0	98.1	70-130	0			
Surr: Dibromofluoromethane	961.5	0	1000	0	96.2	70-130	0			
Surr: Toluene-d8	930.5	0	1000	0	93	70-130	0			

<b>LCS</b>		Sample ID: <b>LCS1-48976-48976</b>				Units: <b>µg/Kg</b>		Analysis Date: <b>6/11/2013 12:44 PM</b>		
Client ID:		Run ID: <b>VMS5_130611A</b>				SeqNo: <b>2346753</b>		Prep Date: <b>6/11/2013</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	933	30	1000	0	93.3	75-125	0			
Ethylbenzene	899.5	30	1000	0	90	75-125	0			
m,p-Xylene	1820	60	2000	0	91	80-125	0			
o-Xylene	907.5	30	1000	0	90.8	75-125	0			
Toluene	878	30	1000	0	87.8	70-125	0			
Xylenes, Total	2727	90	3000	0	90.9	75-125	0			
Surr: 1,2-Dichloroethane-d4	935	0	1000	0	93.5	70-130	0			
Surr: 4-Bromofluorobenzene	994	0	1000	0	99.4	70-130	0			
Surr: Dibromofluoromethane	979	0	1000	0	97.9	70-130	0			
Surr: Toluene-d8	929	0	1000	0	92.9	70-130	0			

<b>MS</b>		Sample ID: <b>1306318-03A MS</b>				Units: <b>µg/Kg</b>		Analysis Date: <b>6/11/2013 11:30 PM</b>		
Client ID: <b>West Wall (1 ft depth)</b>		Run ID: <b>VMS6_130611A</b>				SeqNo: <b>2346781</b>		Prep Date: <b>6/11/2013</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	993	30	1000	0	99.3	75-125	0			
Ethylbenzene	939	30	1000	0	93.9	75-125	0			
m,p-Xylene	1864	60	2000	0	93.2	80-125	0			
o-Xylene	955	30	1000	0	95.5	75-125	0			
Toluene	923.5	30	1000	0	92.4	70-125	0			
Xylenes, Total	2820	90	3000	0	94	75-125	0			
Surr: 1,2-Dichloroethane-d4	992.5	0	1000	0	99.2	70-130	0			
Surr: 4-Bromofluorobenzene	1010	0	1000	0	101	70-130	0			
Surr: Dibromofluoromethane	1000	0	1000	0	100	70-130	0			
Surr: Toluene-d8	984.5	0	1000	0	98.4	70-130	0			

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

**Client:** HRL Compliance Solutions  
**Work Order:** 1306318  
**Project:** WPX TR 32-3-597 Pit Closure 6/7/13

## QC BATCH REPORT

Batch ID: **48976**      Instrument ID **VMS5**      Method: **SW8260**

MSD				Sample ID: <b>1306318-03A MSD</b>			Units: <b>µg/Kg</b>		Analysis Date: <b>6/11/2013 11:54 PM</b>	
Client ID: <b>West Wall (1 ft depth)</b>				Run ID: <b>VMS6_130611A</b>			SeqNo: <b>2346782</b>		Prep Date: <b>6/11/2013</b>	
							DF: <b>1</b>			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	981.5	30	1000	0	98.2	75-125	993	1.16	30	
Ethylbenzene	913	30	1000	0	91.3	75-125	939	2.81	30	
m,p-Xylene	1809	60	2000	0	90.4	80-125	1864	3.02	30	
o-Xylene	922	30	1000	0	92.2	75-125	955	3.52	30	
Toluene	901.5	30	1000	0	90.2	70-125	923.5	2.41	30	
Xylenes, Total	2731	90	3000	0	91	75-125	2820	3.19	30	
Surr: 1,2-Dichloroethane-d4	1026	0	1000	0	103	70-130	992.5	3.27	30	
Surr: 4-Bromofluorobenzene	1016	0	1000	0	102	70-130	1010	0.691	30	
Surr: Dibromofluoromethane	1031	0	1000	0	103	70-130	1000	3.05	30	
Surr: Toluene-d8	997.5	0	1000	0	99.8	70-130	984.5	1.31	30	

The following samples were analyzed in this batch:

1306318-01A	1306318-02A	1306318-03A
1306318-04A	1306318-05A	

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

**Client:** HRL Compliance Solutions  
**Work Order:** 1306318  
**Project:** WPX TR 32-3-597 Pit Closure 6/7/13

## QC BATCH REPORT

Batch ID: **48996** Instrument ID **WETCHEM** Method: **USDA H60 Metho**

<b>DUP</b>		Sample ID: <b>1306318-07B DUP</b>				Units: <b>mmhos/cm @25°F</b>		Analysis Date: <b>6/14/2013 12:30 PM</b>		
Client ID: <b>BKDG 2</b>		Run ID: <b>WETCHEM_130614D</b>				SeqNo: <b>2349687</b>		Prep Date: <b>6/11/2013</b>		DF: <b>5</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Electrical Conductivity @ Saturatio	0.8845	0.025	0	0	0		0.892	0.844	50	

The following samples were analyzed in this batch:

1306318-04C	1306318-07B
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**Note:** See Qualifiers Page for a list of Qualifiers and their explanation.

**Client:** HRL Compliance Solutions  
**Work Order:** 1306318  
**Project:** WPX TR 32-3-597 Pit Closure 6/7/13

## QC BATCH REPORT

Batch ID: **49015**      Instrument ID **WETCHEM**      Method: **SW7196A**

<b>MBLK</b>		Sample ID: <b>MBLK-49015-49015</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>6/14/2013 11:00 AM</b>		
Client ID:		Run ID: <b>WETCHEM_130614A</b>				SeqNo: <b>2349551</b>		Prep Date: <b>6/11/2013</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent      ND      0.49

<b>LCS</b>		Sample ID: <b>LCS-49015-49015</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>6/14/2013 11:00 AM</b>		
Client ID:		Run ID: <b>WETCHEM_130614A</b>				SeqNo: <b>2349552</b>		Prep Date: <b>6/11/2013</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent      1.734      0.49      1.953      0      88.8      75-110      0

<b>MS</b>		Sample ID: <b>1306318-04B MS</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>6/14/2013 11:00 AM</b>		
Client ID: <b>Pit Bottom (5 ft depth)</b>		Run ID: <b>WETCHEM_130614A</b>				SeqNo: <b>2349554</b>		Prep Date: <b>6/11/2013</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent      1.152      0.49      1.953      0      59      60-130      0      S

<b>MSD</b>		Sample ID: <b>1306318-04B MSD</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>6/14/2013 11:00 AM</b>		
Client ID: <b>Pit Bottom (5 ft depth)</b>		Run ID: <b>WETCHEM_130614A</b>				SeqNo: <b>2349555</b>		Prep Date: <b>6/11/2013</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent      1.115      0.49      1.976      0      56.4      60-130      1.152      3.33      30      S

The following samples were analyzed in this batch:

1306318-04B

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



**Client:** HRL Compliance Solutions  
**Work Order:** 1306318  
**Project:** WPX TR 32-3-597 Pit Closure 6/7/13

## QC BATCH REPORT

Batch ID: **R121982** Instrument ID **WETCHEM** Method: **SW9045D**

<b>LCS</b>		Sample ID: <b>WLCSW1-130610-R121982</b>				Units: <b>s.u.</b>		Analysis Date: <b>6/10/2013 12:05 PM</b>		
Client ID:		Run ID: <b>WETCHEM_130610M</b>		SeqNo: <b>2344853</b>		Prep Date:		DF: <b>1</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

pH	4.41	0	4.4	0	100	90-110	0			
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<b>DUP</b>		Sample ID: <b>1306261-01A DUP</b>				Units: <b>s.u.</b>		Analysis Date: <b>6/10/2013 12:05 PM</b>		
Client ID:		Run ID: <b>WETCHEM_130610M</b>		SeqNo: <b>2344857</b>		Prep Date:		DF: <b>1</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

pH	7.69	0	0	0	0	0-0	7.69	0	20	
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<b>DUP</b>		Sample ID: <b>1306289-07B DUP</b>				Units: <b>s.u.</b>		Analysis Date: <b>6/10/2013 12:05 PM</b>		
Client ID:		Run ID: <b>WETCHEM_130610M</b>		SeqNo: <b>2344865</b>		Prep Date:		DF: <b>1</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

pH	6.5	0	0	0	0	0-0	6.5	0	20	
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The following samples were analyzed in this batch:

1306318-04B	1306318-07A
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**Note:** See Qualifiers Page for a list of Qualifiers and their explanation.

**Client:** HRL Compliance Solutions  
**Work Order:** 1306318  
**Project:** WPX TR 32-3-597 Pit Closure 6/7/13

## QC BATCH REPORT

Batch ID: **R122010** Instrument ID **MOIST** Method: **A2540 G**

MBLK	Sample ID: WBLKS-R122010					Units: % of sample			Analysis Date: 6/10/2013 02:50 PM		
Client ID:		Run ID: MOIST_130610D				SeqNo: 2345700		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-R122010					Units: % of sample		Analysis Date: 6/10/2013 02:50 PM		
Client ID:			Run ID: MOIST_130610D			SeqNo: 2345699		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: 1306321-23A DUP					Units: % of sample		Analysis Date: 6/10/2013 02:50 PM	
Client ID:			Run ID: MOIST_130610D			SeqNo: 2345686		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 16.67 0.050 0 0 0 0-0 16.38 1.75 20

DUP		Sample ID: 1306328-04B DUP				Units: % of sample		Analysis Date: 6/10/2013 02:50 PM		
Client ID:		Run ID: MOIST_130610D				SeqNo: 2345697		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 5.35 0.050 0 0 0 0-0 5.71 6.51 20

The following samples were analyzed in this batch:

1306318-04B

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

**Client:** HRL Compliance Solutions  
**Work Order:** 1306318  
**Project:** WPX TR 32-3-597 Pit Closure 6/7/13

## QC BATCH REPORT

Batch ID: **R122012**      Instrument ID **MOIST**      Method: **A2540 G**

<b>MBLK</b>	Sample ID: <b>WBLKS-R122012</b>					Units: % of sample		Analysis Date: <b>6/10/2013 01:30 PM</b>		
Client ID:	Run ID: <b>MOIST_130610E</b>				SeqNo: <b>2345750</b>		Prep Date:		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture      ND      0.050

<b>LCS</b>	Sample ID: <b>LCS-R122012</b>					Units: % of sample		Analysis Date: <b>6/10/2013 01:30 PM</b>		
Client ID:	Run ID: <b>MOIST_130610E</b>				SeqNo: <b>2345749</b>		Prep Date:		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture      99.99      0.050      100      0      100      99.5-100.5      0

<b>DUP</b>	Sample ID: <b>1306281-02B DUP</b>					Units: % of sample		Analysis Date: <b>6/10/2013 01:30 PM</b>		
Client ID:	Run ID: <b>MOIST_130610E</b>				SeqNo: <b>2345717</b>		Prep Date:		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture      12.65      0.050      0      0      0      0-0      13      2.73      20

<b>DUP</b>	Sample ID: <b>1306318-05B DUP</b>					Units: % of sample		Analysis Date: <b>6/10/2013 01:30 PM</b>		
Client ID: <b>South Wall (1 ft depth)</b>	Run ID: <b>MOIST_130610E</b>				SeqNo: <b>2345742</b>		Prep Date:		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture      18.32      0.050      0      0      0      0-0      18.45      0.707      20

The following samples were analyzed in this batch:

1306318-01B	1306318-02B	1306318-03B
1306318-05B	1306318-06A	1306318-07A
1306318-08A		

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



# ALS Laboratory Group

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

## Chain-of-Custody

Form 202r8

WORKORDER  
#

1306318

PROJECT NAME		WPX TR 32-3-597 Pit Closure		SAMPLER		Dan Pinegar		DATE		6/7/2013		PAGE		1 of 1	
PROJECT No.				SITE ID		TR 32-3-597 Well Pad		TURNAROUND		Std. 5 days		DISPOSAL		By Lab or Return to Client	
COMPANY NAME		HRL Compliance Solutions, Inc.		EDD FORMAT				BTX							
SEND REPORT TO		Kris Rowe		PURCHASE ORDER				GRO							
ADDRESS		2385 F 1/2 Rd.		BILL TO COMPANY		WPX		DRO							
CITY / STATE / ZIP		Grand Junction, CO. 81505		INVOICE ATTN TO		Karolina Blaney		PAH (Table 910.1)							
PHONE		970-243-3271		ADDRESS		1058 County Rd. 215		Metals (Table 910.1)							
FAX		970-243-3280		CITY / STATE / ZIP		Parachute CO, 81635		SAR, EC, PH							
E-MAIL		Krowe@hrlcomp.com		PHONE		970-285-9377		Arsenic							
				FAX											
				E-MAIL		Karolina.blaney@wp.com									
Lab ID	Field ID	Matrix	Sample Date	Sample Time	# Bottles	Pres.	QC								
1	North Wall (2 ft depth)	SOIL	6/7/2013	9:25 AM	3	8		X	X	X	X				
2	East Wall (1 ft depth)	SOIL	6/7/2013	9:45 AM	3	8		X	X	X	X				
3	West Wall (1 ft depth)	SOIL	6/7/2013	10:00 AM	3	8		X	X	X	X				
4	Pit Bottom (5 ft depth)	SOIL	6/7/2013	10:30 AM	3	8		X	X	X	X	X			
5	South Wall (1 ft depth)	SOIL	6/7/2013	10:50 AM	3	8		X	X	X	X				
6	BKGD 1	SOIL	6/7/2013	12:05 PM	1	8							X		
7	BKGD 2	SOIL	6/7/2013	12:15 PM	2	8							X	X	
8	BKGD 3	SOIL	6/7/2013	12:25 PM	1	8							X		

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

For metals or anions, please detail analytes below.

Comments:	QC PACKAGE (check below)
3.4°C	<input checked="" type="checkbox"/> LEVEL II (Standard QC)
	<input type="checkbox"/> LEVEL III (Std QC + forms)
	<input type="checkbox"/> LEVEL IV (Std QC + forms + raw data)
	<input type="checkbox"/>
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	Dan Pinegar	6/7/2013	5:00 PM
RECEIVED BY	Diane F. Shaw	6/8/13	1030
RELINQUISHED BY			
RECEIVED BY			
RELINQUISHED BY			
RECEIVED BY			

Sample Receipt Checklist

Client Name: HRL

Date/Time Received: 08-Jun-13 10:30

Work Order: 1306318

Received by: DS

Checklist completed by Diane Shaw 10-Jun-13  
eSignature Date

Reviewed by: Ann Preston 11-Jun-13  
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"/>	
Temperature(s)/Thermometer(s):	<u>3.4 c</u>		
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:	<u>6/10/2013 8:47:33 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:

**FedEx** Express **US Airbill**

8681 5794 6279

0200

Form  
ID No.

**FedEx Retrieval Copy**

**1 From**  
Date 6-7-13 Sender's FedEx Account Number 9999  
Sender's Name DAN PINOAR Phone 970-2433271  
Company HCOR  
Address 2305 F 1/2 Rd  
City GRAND JUNCTION State CO ZIP 81505

**2 Your Internal Billing Reference**

**3 To**  
Recipient's Name REC BUREAU Phone 616 3996070  
Company REC BUREAU  
Recipient's Address 3352 125th Ave  
We cannot deliver to P.O. box  
Address 111  
City 111



8681 5794 6279

**4a Express Package Service**

- ☒ **FedEx Priority Overnight** Next business morning \*\* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.  
☐ **FedEx Standard Overnight** Next business afternoon\* Saturday Delivery NOT available.  
☐ **FedEx 2Day** Second business day\*\* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.  
☐ **FedEx Express Saver** Third business day\* Saturday Delivery NOT available.  
☐ **FedEx First Overnight** Earliest next business morning delivery to select locations\* Saturday Delivery NOT available.

**4b Express Freight Service**

- ☐ **FedEx 1Day Freight\*** Next business day\*\* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.  
☐ **FedEx 2Day Freight** Second business day\*\* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.  
☐ **FedEx 3Day Freight** Third business day\*\* Saturday Delivery NOT available.

**5 Packaging**

- ☐ **FedEx Envelope\*** ☐ **FedEx Pak\*** Includes FedEx Small Pak, FedEx Large Pak, and FedEx Study Pak. ☐ **FedEx Box** ☐ **FedEx Tube** ☒ **Other**

**6 Special Handling**

- ☒ **SATURDAY Delivery** Not available for FedEx Standard Overnight, FedEx First Overnight, FedEx Express Saver, or FedEx 3Day Freight.  
☐ **HOLD Weekday at FedEx Location** Not available for FedEx First Overnight.  
☐ **HOLD Saturday at FedEx Location** Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

Does this shipment contain dangerous goods?  
One box must be checked.

- ☒ **No** ☐ **Yes** As per attached Shipper's Declaration. ☐ **Yes** Shipper's Declaration not required.  
☐ **Dry Ice** Dry Ice, 9, UN 1845 ☐ **Cargo Aircraft Only**

- 7 Payment Bill to:** Enter FedEx Acct. No. or Credit Card No. below. Obtain Recip. Acct. No.  
☐ **Sender** Acct. No. in Section 1 will be billed. ☒ **Recipient** ☐ **Third Party** ☐ **Credit Card** ☐ **Cash/Check**

**CUSTOMER SEAL**  
6901 San Leandro St. Oakland, CA 94608-2333-0425  
ENVIRONMENTAL SAMPLING SUPPLY  
Service Guide for details. Credit Card Auth.

Rev. Date 10/06/Part #158281-01/1994-2006 FedEx-PRINTED IN U.S.A. SRY