FORM
27
Rev 6/99

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State of Colorado
Oil and Gas Conservation Commission

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

FOR OGCC USE ONLY

OGCC Employee:

☐ Spill ☐ Complaint
☐ Inspection ☐ NOAV

Tracking No:

SITE INVESTIGATION AND REMEDIATION WORKPLAN

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

CAUSE OF CONDITION BEING INVESTIGATED AND REMEDIATED

☐ Spill or Release ☐ Plug & Abandon ☐ Central Facility Closure ☑ Site/Facility Closure ☐ Other (describe): Pit Closure

OGCC Operator Number: 96850
Name of Operator: WPX Energy Rocky Mountain LLC
Address: 1058 County Road 215
City: Parachute State: CO Zip: 81635

Contact Name and Telephone:
Karolina Blaney
No: 970-683-2295
Fax: 970-285-9573

API Number:
County: Garfield
Facility Name: PA 41-31 CCF
Facility Number: 414570
Well Name: PA 41-31
Well Number: N/A
Location: (QtrQtr, Sec, Twp, Rng, Meridian): SESE, Sec 31, T6S, R95W, 6th PM
Latitude: 39.476986 Longitude: -108.034985

TECHNICAL CONDITIONS

Type of Waste Causing Impact (crude oil, condensate, produced water, etc): Produced Water

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

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

Soil type, if not previously identified on Form 2A or Federal Surface Use Plan: Nilhill Channery Loam, 1 to 6 percent slopes

Potential receptors (water wells within 1/4 mi, surface waters, etc.): A dry un-named tributary to the Colorado River lies approximately 680 feet to the northeast

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

Impacted Media (check):	Extent of Impact:	How Determined:
☑ Soils	Please see and refer to Notice of Completion Report	Visual observations and field screening equipment (petroflag and PID)
☐ Vegetation	Remediation # 7365	
☐ Groundwater		
☐ Surface Water		

REMEDIATION WORKPLAN

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

See attached and refer to Notice of Completion Report Remediation # 7365

Describe how source is to be removed:

See attached and refer to Notice of Completion Report Remediation # 7365

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

See attached and refer to Notice of Completion Report Remediation # 7365

Submit Page 2 with Page 1

REM # 7365

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Page 2

State of Colorado
Oil and Gas Conservation Commission
1120 Lincoln Street, Suite 801, Denver, Colorado 80203
(303)894-2100 Fax:(303)894-2109

Tracking Number: _____
Name of Operator: WPX
OGCC Operator No: _____
Received Date: Pit # 414570
Well Name & No: PA 41-31 (No wells)
Facility Name & No: Location ID # 430401

REMEDIATION WORKPLAN (Cont.)

OGCC Employee:

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

See attached and refer to Notice of Completion Report Remediation # 7365

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

See attached and refer to Notice of Completion Report Remediation # 7365

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

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

See attached and refer to Notice of Completion Report Remediation # 7365

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

See attached and refer to Notice of Completion Report Remediation # 7365

IMPLEMENTATION SCHEDULE

Date Site Investigation Began: September 2012	Date Site Investigation Completed: September 2012	Date Remediation Plan Submitted: October 24, 2012
Remediation Start Date: August 8, 2012	Anticipated Completion Date: October 4, 2012	Actual Completion Date: October 4, 2012

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

Print Name: Karolina Blaney Signed: Karolina Blaney

Title: Environmental Specialist Date: 10/24/2012

OGCC Approved: Carlos Lujan Title: FOR Chris Canfield Date: 11/07/2012

WPX ENERGY ROCKY MOUNTAIN LLC

NORTH PARACHUTE FIELD

NOTICE OF COMPLETION REPORT FOR

PA 41-31 SPECIAL PURPOSE PIT REMEDIATION # 7365

Prepared For:

1058 County Road 215
P.O. Box 370
Parachute, Colorado 81635

Prepared By:

2385 F ½ Road
Grand Junction, CO 81505
Phone: 970-243-3271
Fax: 970-243-3280

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INTRODUCTION

The purpose of this Notice of Completion report – for the closure of the PA 41-31Special Purpose Pit (COGCC Facility ID number 414570; hereinafter referred to as PA 41-31) – is to provide detailed information and analytical results for the previously submitted and approved remediation number 7365, Colorado Oil and Gas Conservation Commission (COGCC) Site Investigation and Remediation Workplan, Form 27. This report will provide the documentation necessary to demonstrate a comprehensive and diligent investigation of the pit and adjacent environment which was obtained as described and in accordance with all appropriate county, state and federal rules and regulations.

The subject Form 27 was delivered via electronic email on October 9, 2012. Preliminary approval to proceed with closure of the subject pit was issued by the COGCC and obtained by WPX Energy Rocky Mountain, LLC (WPX) on October 11, 2012; at which time the aforementioned remediation number was issued. Closure activities began on August 8, 2012 and were concluded on October 4, 2012. Information included in this report includes but is not limited to; field screening results, laboratory analytical, subliner soil remediation, soil treatment, and liner disposal.

EVACUATION OF PIT CONTENTS

Produced water and free liquids were removed from the pit utilizing a vacuum truck. All pit fluids were transported to an approved disposal/evaporation facility or reused at another site for fracing operations.

BACKGROUND SAMPLING

Three grab samples were collected from the uphill undisturbed hillsides surrounding the pad. All three samples were analyzed for arsenic, as well as an additional analysis at one location which included inorganic parameters listed in COGCC Table 910-1. Refer to Table 4 and Appendix 3 for background sampling results.

PIT LINER INVESTIGATION AND INTEGRITY ASSESSMENT

The pit liner system, which contained two layers of 30 mm poly synthetic material, was present within the pit. A pit liner investigation was completed due to the initial intent was to upgrade the pit and liner system and a liner investigation was not warranted at that time.

PIT LINER REMOVAL

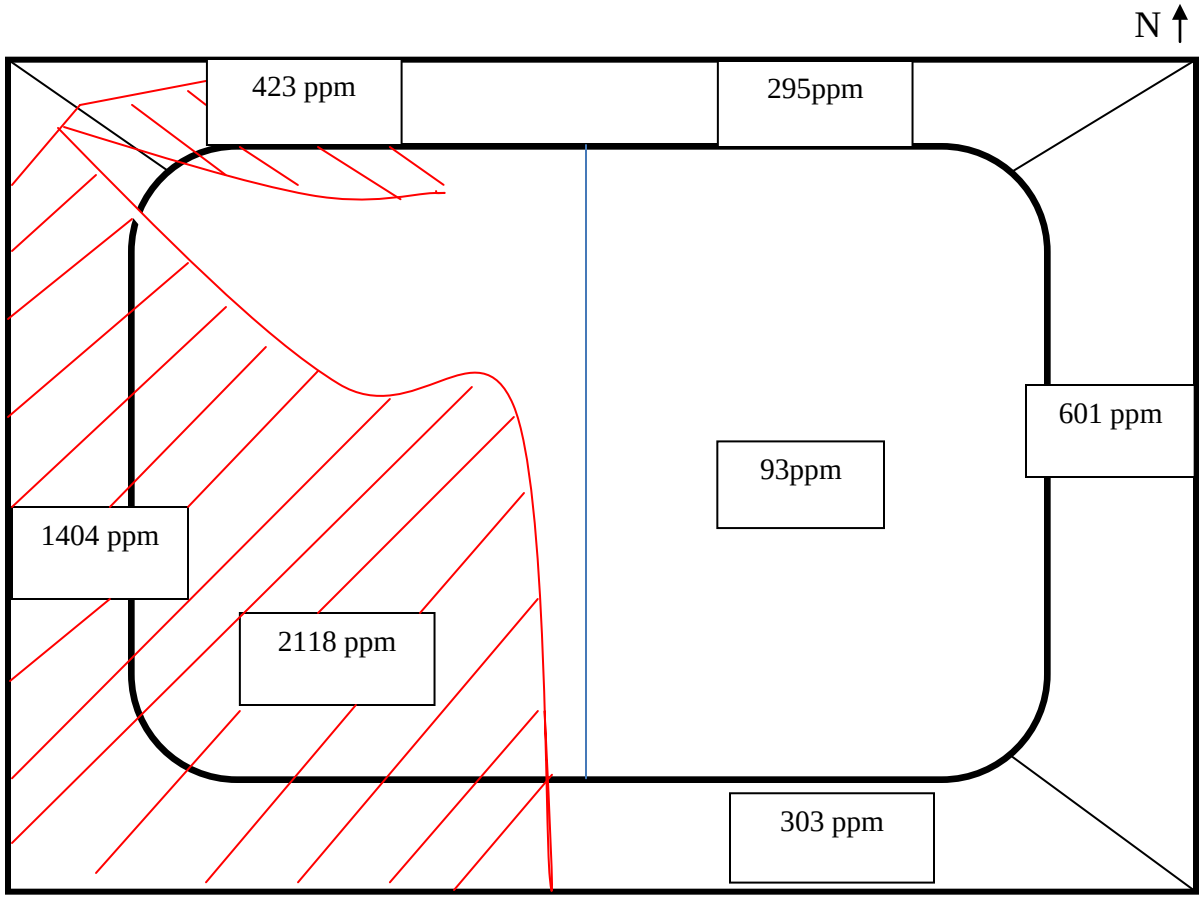
Once the pit liner was cleaned, the liner itself was removed from the pit. A track hoe was utilized to pull the liner off the ground surface and out of the pit. The liner material was moved to an earthen bermed containment cell where it was profiled and disposed of to ECDC Environmental LC in East Carbon, UT.

SUBLINER INVESTIGATION AND ACTIVITIES

After the liner was removed, the pit sub-soils were evaluated for evidence of contamination. In doing so, the pit was divided into a half (eastern and western) utilizing an eathern berm present in the center as the diving point. For each half, soils were visually inspected for impacts and field screened using a MiniRae Lite Photoionizing Detection Unit (PID) and a PetroFlag Hydrocarbon Detection Unit (PetroFlag) in order to determine any areas of impact. In addition, special consideration was paid to areas where holes

were observed through a more detailed investigation process utilizing both PID and PetroFlag field screening instruments. Figure 1 and Table 1 outlines the initial sub soil evaluation and field screening results.

FIGURE 1: INITIAL PID FIELD SCREENING RESULTS



Note: Results are presented in ppm = mg/kg
Red areas indicate staining present on the soil surface

TABLE 1: INITIAL PETROFLAG© FIELD SCREENING RESULTS

Sample ID	Result (0-6'')
Eastern Half - North Wall	295
Western Half – North Wall	423
South Wall	303
East Wall	601
West Wall	1404
Western Half - Pit Bottom	2118
Eastern Half - Pit Bottom	93

Note: All results are in mg/kg
Highlighted numbers indicate areas that warranted additional inspection and analysis

Based on the results from the field screening provided in Table 1 and Figure 1, as well as visual observations, it was determined that the soil on the western half pit bottom and adjacent three side walls contained hydrocarbon concentrations that exceeded constituents set forth in COGCC Table 910-1 standards and remediation activities were necessary.

REMEDIATION ACTIVITIES

Pit excavation activities began on October 2, 2012. Initially the western half pit bottom footprint and the impacted side walls were excavated to a depth of approximately 1 to 2 feet, where staining was not longer

visible. A trackhoe was utilized to excavate the contaminated soil from within the pit. The excavated material was transferred to the eastern side of the pit, and spread to a depth of approximately 12 inches.

After approximately 1 to 2 feet of excavation from the pit bottom and the three adjacent side walls, native soils were encountered. PID results indicated hydrocarbon levels below COGCC Table 910-1. Excavation stopped and confirmation samples were collected and analyzed for COGCC Table 910-1 and hydrocarbon concentrations.

- Confirmation samples were collected in accordance with Rule 905.b. (4), from all four walls at a position that was centered vertically and horizontally. These samples were collected for confirmation of compliance of COGCC Rule 910 for hydrocarbon concentrations; as well as verification of field screening analysis. Two (2) additional grab sample was collected from the base of the pit from each half (eastern and western), which included the low point of the base, to demonstrate compliance in accordance with Rule 905.b.(1).
- A Trimble Geo XT 2011 was used to satisfy requirements as outlined in COGCC Rule 215 for collecting GPS locations of each confirmation sample location from the pit walls and pit bottom.
- Visual inspection of the pit bottoms, field screening techniques, and sampling procedures were followed in accordance with WPX Pit Closure Plan (COGCC document #01175818).

SAMPLE ANALYSIS

Sampling was performed in accordance with WPX Pit Closure Plan, Phase IV, Task 2. See attached Tables 1 and 2 for summary of pit bottom and side wall analytical results.

BACKFILL MATERIAL

Material utilized to backfill the pit will be the original excavated soil from construction of the pit. The soil is currently stockpiled west of the pit.

EXCEPTIONS TO COGCC TABLE 910-1

The only exceedances with COGCC Table 910-1 are within the inorganic and arsenic samples. Refer to the Sundry Notice for consideration of background inorganic and arsenic concentrations in the immediate area of the subject facility. Refer to Appendix 5 for submitted Sundry Notice.

MANAGEMENT OF STOCKPILED MATERIAL

Excavated soils from within the pit was placed on the eastern half of the pit and amended with clean native soil from the surrounding pad. Amended soil will be used in the backfilling of the pit during closure and reclamation. Analytical results are presented in Table 5, with raw analytical results available in Appendix 4.

ANALYTICAL DATA MANAGEMENT

Refer to Appendix 1 and 2 for the raw analytical analysis for samples collected from both the western and eastern half pit bottoms and side walls. Tables 1 and 2 include all analytical results of samples collected within the pit, highlighting areas exceeding COGCC Table 910-1 concentrations. Appendix 3 includes the background samples raw analytical results and Table 4 has all background analytical results. Appendix 4 contains raw analytical data for the excavated soil as well as results outlined in Table 5.

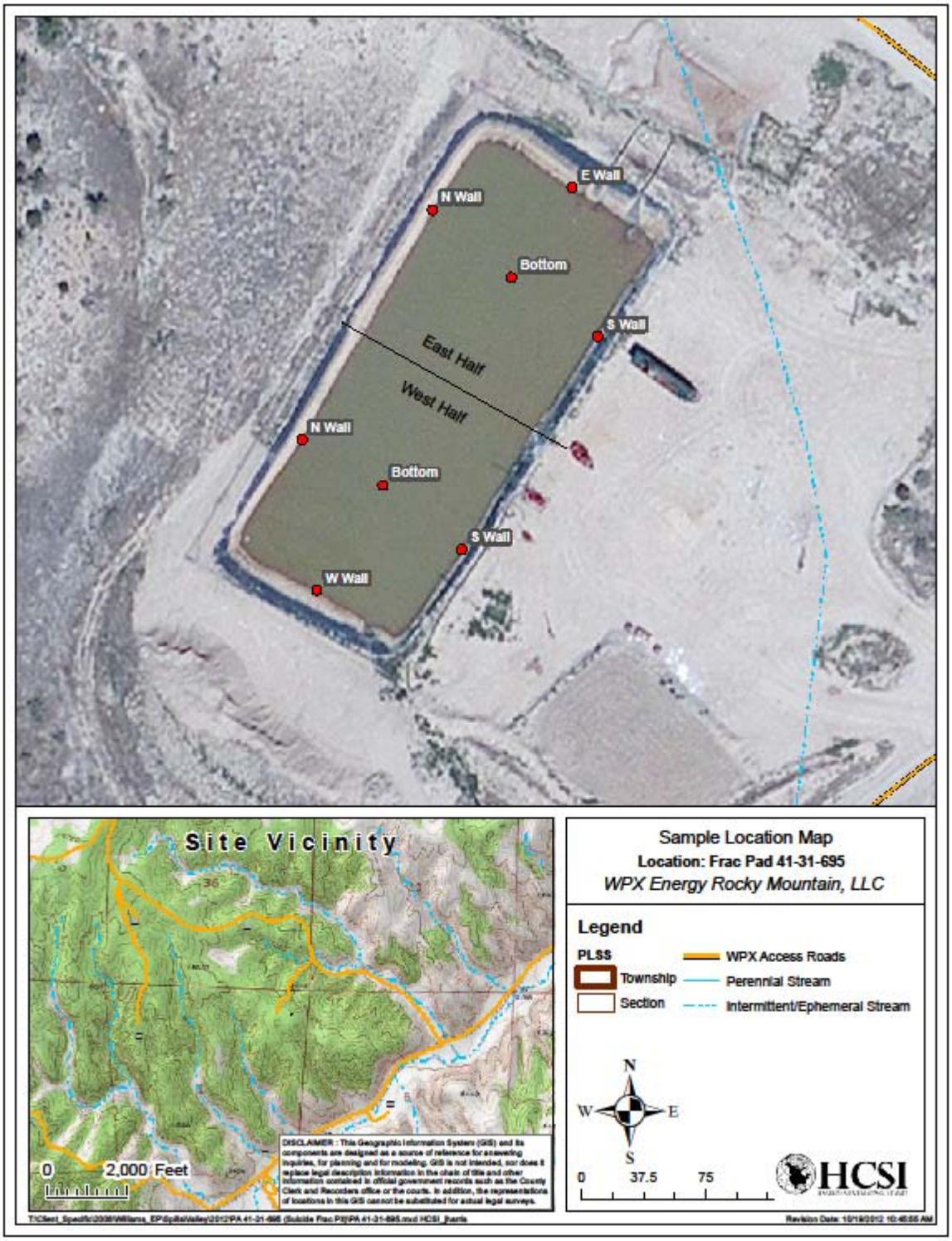
FIGURE 2: WESTERN HALF – INITIAL PIT INVESTIGATION

Visual representation of the western half of the pit facing northwest

FIGURE 3: EASTERN PIT HALF – INITIAL PIT INVESTIGATION

Visual representation of the eastern half of the pit facing northeast.

FIGURE 3: GIS MAP OF SAMPLE LOCATIONS



TABLES

Table 2: Eastern Half Pit Bottom and Sidewalls Analytical Results

Eastern Half	Sample Locations			
	North Wall	South Wall	East Wall	Pit Bottom
TEPH (DRO)	53	160	94	20
TVPH (GRO)	ND	ND	ND	ND
BENZENE	ND	ND	ND	ND
TOLUENE	ND	ND	ND	ND
ETHYLBENZENE	ND	ND	ND	ND
XYLENE TOTAL	ND	ND	ND	ND
ACENAPHTHENE	ND	ND	ND	ND
ANTHRACENE	ND	ND	ND	ND
BENZO(A)ANTRHACENE	ND	ND	ND	ND
BENZO(A)PYRENE	ND	ND	ND	ND
BENZO(B)FLUORANTHENE	ND	ND	ND	ND
BENZO(G,H,I)PERYLEN	ND	ND	ND	ND
BENZO(K)FLUORANTHENE	ND	ND	ND	ND
CHRYSENE (mg/kg)	ND	ND	ND	ND
DIBENZO(A,H)ANTHRANCENE	ND	ND	ND	ND
FLUORANTHENE	ND	ND	ND	ND
FLUORENE	ND	0.026	0.027	ND
INDENO(1,2,3-CD)PYRENE	ND	ND	ND	ND
NAPHTHALENE	ND	ND	ND	.018
PYRENE	ND	ND	ND	ND
ARSENIC	-	-	-	6.1
BARIUM	-	-	-	270
CADMIUM	-	-	-	0.60
CHROMIUM	-	-	-	9.2
CHROMIUM (III)	-	-	-	9.2
CHROMIUM (IV)	-	-	-	ND
COPPER	-	-	-	11
LEAD	-	-	-	11
MERCURY	-	-	-	0.022
NICKEL	-	-	-	14
SELENIUM	-	-	-	ND
SILVER	-	-	-	ND
ZINC	-	-	-	48
ELECTRICAL CONDUCTIVITY (EC) (mmho/cm)	-	-	-	11
pH	-	-	-	8.55
SODIUM ADSORPTION RATIO (SAR)	-	-	-	12
CALCIUM (mg/L)	-	-	-	520
MAGNESIUM (mg/L)	-	-	-	110
SODIUM (mg/L)	-	-	-	1,200

Readings above state limits are highlighted in yellow Note: all results are in, mg/kg = milligram per kilogram, unless noted otherwise. (-) represents analysis not conducted.

Table 3: Western Half pit Bottom and Sidewall Analytical Results

Western Half	Sample Locations				
	North Wall	South Wall	East Wall	West Wall	Pit Bottom
TEPH (DRO)	270	140	34	60	51
TVPH (GRO)	ND	ND	ND	ND	ND
BENZENE	ND	ND	ND	ND	ND
TOLUENE	ND	ND	ND	ND	ND
ETHYLBENZENE	ND	ND	ND	ND	ND
XYLENE TOTAL	ND	ND	ND	.440	ND
ACENAPHTHENE	ND	ND	ND	ND	ND
ANTHRACENE	ND	ND	ND	ND	ND
BENZO(A)ANTRHACENE	ND	ND	ND	ND	ND
BENZO(A)PYRENE	ND	ND	ND	ND	ND
BENZO(B)FLUORANTHENE	0.026	ND	ND	ND	ND
BENZO(G,H,I)PERYLEN	ND	ND	ND	ND	ND
BENZO(K)FLUORANTHENE	0.019	ND	ND	ND	ND
CHRYSENE (mg/kg)	0.023	ND	ND	ND	ND
DIBENZO(A,H)ANTHRANCENE	ND	ND	ND	ND	ND
FLUORANTHENE	ND	ND	ND	ND	ND
FLUORENE	0.025	0.054	ND	ND	ND
INDENO(1,2,3-CD)PYRENE	ND	ND	ND	ND	ND
NAPHTHALENE	ND	0.045	ND	.110	0.059
PYRENE	ND	0.019	ND	ND	ND
ARSENIC	7.7	5.0	7.3	21	7.3
BARIUM	260	3,000	230	870	380
CADMIUM	0.55	0.56	0.49	2.1	1.3
CHROMIUM	12	11	10	37	11
CHROMIUM (III)	12	11	10	37	11
CHROMIUM (IV)	ND	ND	ND	ND	ND
COPPER	12	13	10	39	12
LEAD	12	-13	12	41	13
MERCURY	0.035	0.068	0.026	0.11	0.035
NICKEL	14	15	14	45	15
SELENIUM	0.84	ND	0.96	ND	0.91
SILVER	ND	ND	ND	ND	ND
ZINC	49	51	42	170	52
ELECTRICAL CONDUCTIVITY (EC) (mmho/cm)	15	130	15	22	73
pH	8.47	7.86	8.38	8.18	8.17
SODIUM ADSORPTION RATIO (SAR)	11	110	15	36	99
CALCIUM (ppm)	1,100	4,100	650	3,100	1,500
MAGNESIUM (ppm)	410	88	430	110	120
SODIUM (ppm)	1,800	27,000	2,100	15,000	15,000

NOTE: RESULTS ARE PRESENTED IN MG/KG

TABLE 4: BACKGROUND ANALYTICAL RESULTS

	Arsenic (mg/kg)	Conductivity(mmho/cm)	pH (s.u.)	Sodium Adsorption Ratio
BKGD 1	6.1	-	-	-
BKGD 2	7.5	-	-	-
BKGD 3	6.5	2.5	8.60	0.72

NOTE: RESULTS ARE PRESENTED IN MG/KG
Readings above state limits are highlighted in yellow

Table 5: Excavated Soil Analytical Results

Landfarm Analytical	Sample Locations
	Landfarm
TEPH (DRO)	48
TVPH (GRO)	ND
BENZENE	ND
TOLUENE	0.048
ETHYLBENZENE	ND
XYLENE TOTAL	0.250
ACENAPHTHENE	ND
ANTHRACENE	ND
BENZO(A)ANTRHACENE	ND
BENZO(A)PYRENE	ND
BENZO(B)FLUORANTHENE	ND
BENZO(G,H,I)PERYLEN	ND
BENZO(K)FLUORANTHENE	ND
CHRYSENE (mg/kg)	ND
DIBENZO(A,H)ANTHRANCENE	ND
FLUORANTHENE	ND
FLUORENE	0.030
INDENO(1,2,3-CD)PYRENE	ND
NAPHTHALENE	0.062
PYRENE	ND
ARSENIC	6.8
BARIUM	830
CADMIUM	0.54
CHROMIUM	10
CHROMIUM (III)	10
CHROMIUM (IV)	ND
COPPER	11
LEAD	13
MERCURY	0.036
NICKEL	14
SELENIUM	1.4
SILVER	ND
ZINC	48
ELECTRICAL CONDUCTIVITY (EC) (mmho/cm)	23
pH	8.87
SODIUM ADSORPTION RATIO (SAR)	70

NOTE: RESULTS ARE PRESENTED IN MG/KG

APPENDIXES

APPENDIX 1: EASTERN HALF PIT BOTTOM AND WALL SAMPLING RAW ANALYTICAL RESULTS

06-Sep-2012

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

Re: **WPX Energy Suicide Frac Pit (East Half) 8/28/12** Work Order: **1208857**

Dear Kris,

ALS Environmental received 4 samples on 29-Aug-2012 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.

QC sample results for this data met 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,

Ann Preston

Electronically approved by: Ann Preston

Ann Preston
Project Manager

Certificate No: MN331938

ALS Group USA, Corp

Date: 06-Sep-12

Client: HRL Compliance Solutions
Project: WPX Energy Suicide Frac Pit (East Half) 8/28/12
Work Order: **1208857**

Work Order Sample Summary

Lab Samp ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
1208857-01	East Half - Pit Bottom	Soil		8/28/2012 10:00	8/29/2012 09:30	☐
1208857-02	East Half - North Wall	Soil		8/28/2012 11:00	8/29/2012 09:30	☐
1208857-03	East Half - South Wall	Soil		8/28/2012 10:30	8/29/2012 09:30	☐
1208857-04	East Half - East Wall	Soil		8/28/2012 09:30	8/29/2012 09:30	☐

ALS Group USA, Corp

Date: 06-Sep-12

Client: HRL Compliance Solutions
Project: WPX Energy Suicide Frac Pit (East Half) 8/28/12
Work Order: 1208857

Case Narrative

Batch 43252 MS/MSD data for Hexavalent Chromium is not related to this project's samples. No data requires qualification.

Batch 43287 MS/MSD data for Metals is not related to this project's samples. No data requires qualification.

ALS Group USA, Corp

Date: 06-Sep-12

Client: HRL Compliance Solutions
Project: WPX Energy Suicide Frac Pit (East Half) 8/28/12
WorkOrder: **1208857**

QUALIFIERS, ACRONYMS, UNITS

Qualifier	Description
*	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

Acronym	Description
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
SD	Serial Dilution
TDL	Target Detection Limit

Units Reported	Description
% of sample	Percent of Sample
µg/Kg-dry	Micrograms per Kilogram Dry Weight
mg/Kg-dry	Milligrams per Kilogram Dry Weight
µmhos/cm @25°	
none	
s.u.	Standard Units

ALS Group USA, Corp

Date: *06-Sep-12*

Client: HRL Compliance Solutions
Project: WPX Energy Suicide Frac Pit (East Half) 8/28/12 **Work Order:** 1208857
Sample ID: East Half - Pit Bottom **Lab ID:** 1208857-01
Collection Date: 8/28/2012 10:00 AM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID			**SW8015M**		Prep Date: **8/30/2012**	Analyst: **CW**
DRO (C10-C28)	**20**		**4.3**	**mg/Kg-dry**	1	8/31/2012 03:08 AM
Surr: 4-Terphenyl-d14	*76.7*		*39-115*	*%REC*	1	8/31/2012 03:08 AM
GASOLINE RANGE ORGANICS BY GC-FID			**SW8015**			Analyst: **CW**
GRO (C6-C10)	ND		2.6	mg/Kg-dry	50	8/30/2012 03:10 AM
Surr: Toluene-d8	*101*		*50-150*	*%REC*	50	8/30/2012 03:10 AM
MERCURY BY CVAA			**SW7471**		Prep Date: **9/4/2012**	Analyst: **LR**
Mercury	**0.022**		**0.018**	**mg/Kg-dry**	1	9/4/2012 01:59 PM
METALS BY ICP-MS			**SW6020A**		Prep Date: **9/4/2012**	Analyst: **RH**
Arsenic	**6.7**		**0.80**	**mg/Kg-dry**	2	9/5/2012 01:51 PM
Barium	**270**		**0.80**	**mg/Kg-dry**	2	9/5/2012 01:51 PM
Cadmium	**0.60**		**0.32**	**mg/Kg-dry**	2	9/5/2012 01:51 PM
Chromium	**9.2**		**0.80**	**mg/Kg-dry**	2	9/5/2012 01:51 PM
Copper	**11**		**0.80**	**mg/Kg-dry**	2	9/5/2012 01:51 PM
Lead	**11**		**0.80**	**mg/Kg-dry**	2	9/5/2012 01:51 PM
Nickel	**14**		**0.80**	**mg/Kg-dry**	2	9/5/2012 01:51 PM
Selenium	ND		0.80	mg/Kg-dry	2	9/5/2012 01:51 PM
Silver	ND		0.80	mg/Kg-dry	2	9/5/2012 01:51 PM
Zinc	**48**		**1.6**	**mg/Kg-dry**	2	9/5/2012 01:51 PM
SOLUBLE CATIONS FOR SAR			**SW6020A**		Prep Date: **8/31/2012**	Analyst: **RH**
Calcium	**520**		**5.2**	**mg/L-dry**	10	9/4/2012 08:27 PM
Magnesium	**110**		**2.1**	**mg/L-dry**	10	9/4/2012 08:27 PM
Sodium	**1,200**		**2.1**	**mg/L-dry**	10	9/4/2012 08:27 PM
SODIUM ADSORPTION RATIO			**USDA H60 METHO**		Prep Date: **8/31/2012**	Analyst: **CES**
Sodium Adsorption Ratio	**12**		**0.010**	**none**	1	9/5/2012
SEMI-VOLATILE ORGANIC COMPOUNDS			**SW8270**		Prep Date: **8/30/2012**	Analyst: **RM**
Acenaphthene	ND		16	µg/Kg-dry	1	8/31/2012 03:42 PM
Anthracene	ND		16	µg/Kg-dry	1	8/31/2012 03:42 PM
Benzo(a)anthracene	ND		18	µg/Kg-dry	1	8/31/2012 03:42 PM
Benzo(a)pyrene	ND		18	µg/Kg-dry	1	8/31/2012 03:42 PM
Benzo(b)fluoranthene	ND		19	µg/Kg-dry	1	8/31/2012 03:42 PM
Benzo(g,h,i)perylene	ND		29	µg/Kg-dry	1	8/31/2012 03:42 PM
Benzo(k)fluoranthene	ND		19	µg/Kg-dry	1	8/31/2012 03:42 PM
Chrysene	ND		16	µg/Kg-dry	1	8/31/2012 03:42 PM
Dibenzo(a,h)anthracene	ND		19	µg/Kg-dry	1	8/31/2012 03:42 PM
Fluoranthene	ND		16	µg/Kg-dry	1	8/31/2012 03:42 PM
Fluorene	ND		16	µg/Kg-dry	1	8/31/2012 03:42 PM

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

Client: HRL Compliance Solutions
Project: WPX Energy Suicide Frac Pit (East Half) 8/28/12 **Work Order:** 1208857
Sample ID: East Half - Pit Bottom **Lab ID:** 1208857-01
Collection Date: 8/28/2012 10:00 AM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Indeno(1,2,3-cd)pyrene	ND		21	µg/Kg-dry	1	8/31/2012 03:42 PM
Naphthalene	**18**		**16**	**µg/Kg-dry**	1	8/31/2012 03:42 PM
Pyrene	ND		16	µg/Kg-dry	1	8/31/2012 03:42 PM
Surr: 2-Fluorobiphenyl	*67.5*		*12-100*	*%REC*	1	8/31/2012 03:42 PM
Surr: 4-Terphenyl-d14	*81.7*		*25-137*	*%REC*	1	8/31/2012 03:42 PM
Surr: Nitrobenzene-d5	*65.0*		*37-107*	*%REC*	1	8/31/2012 03:42 PM
VOLATILE ORGANIC COMPOUNDS			**SW8260**		Prep Date: **8/29/2012**	Analyst: **BG**
Benzene	ND		31	µg/Kg-dry	1	8/29/2012 08:42 PM
Ethylbenzene	ND		31	µg/Kg-dry	1	8/29/2012 08:42 PM
m,p-Xylene	**86**		**63**	**µg/Kg-dry**	1	8/29/2012 08:42 PM
o-Xylene	ND		31	µg/Kg-dry	1	8/29/2012 08:42 PM
Toluene	ND		31	µg/Kg-dry	1	8/29/2012 08:42 PM
Xylenes, Total	ND		94	µg/Kg-dry	1	8/29/2012 08:42 PM
Surr: 1,2-Dichloroethane-d4	*108*		*70-130*	*%REC*	1	8/29/2012 08:42 PM
Surr: 4-Bromofluorobenzene	*106*		*70-130*	*%REC*	1	8/29/2012 08:42 PM
Surr: Dibromofluoromethane	*105*		*70-130*	*%REC*	1	8/29/2012 08:42 PM
Surr: Toluene-d8	*107*		*70-130*	*%REC*	1	8/29/2012 08:42 PM
ELECTRICAL CONDUCTIVITY (SAR)			**USDA H60 METHO**		Prep Date: **8/31/2012**	Analyst: **KV**
Electrical Conductivity @ Saturation	**11**		**0.050**	**mmhos/cm @25**	10	8/31/2012 02:50 PM
CHROMIUM, TRIVALENT			**CALCULATION**			Analyst: **JJG**
Chromium, Trivalent	**9.2**		**0.52**	**mg/Kg-dry**	1	9/5/2012 03:28 PM
CHROMIUM, HEXAVALENT			**SW7196A**		Prep Date: **8/30/2012**	Analyst: **MB**
Chromium, Hexavalent	ND		0.52	mg/Kg-dry	1	8/31/2012 02:10 PM
MOISTURE			**A2540 G**			Analyst: **JJG**
Moisture	**4.4**		**0.050**	**% of sample**	1	8/31/2012 03:45 PM
PH			**SW9045D**			Analyst: **JB**
pH	**8.55**			**s.u.**	1	8/29/2012 09:00 AM

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

ALS Group USA, Corp

Date: *06-Sep-12*

Client: HRL Compliance Solutions
Project: WPX Energy Suicide Frac Pit (East Half) 8/28/12 **Work Order:** 1208857
Sample ID: East Half - North Wall **Lab ID:** 1208857-02
Collection Date: 8/28/2012 11:00 AM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID			**SW8015M**		Prep Date: **8/30/2012**	Analyst: **CW**
DRO (C10-C28)	**53**		**4.5**	**mg/Kg-dry**	1	8/31/2012 03:36 AM
Surr: 4-Terphenyl-d14	*76.5*		*39-115*	*%REC*	1	8/31/2012 03:36 AM
GASOLINE RANGE ORGANICS BY GC-FID			**SW8015**			Analyst: **CW**
GRO (C6-C10)	ND		2.7	mg/Kg-dry	50	8/30/2012 03:35 AM
Surr: Toluene-d8	*97.9*		*50-150*	*%REC*	50	8/30/2012 03:35 AM
SEMI-VOLATILE ORGANIC COMPOUNDS			**SW8270**		Prep Date: **8/30/2012**	Analyst: **RM**
Acenaphthene	ND		16	µg/Kg-dry	1	8/31/2012 04:07 PM
Anthracene	ND		16	µg/Kg-dry	1	8/31/2012 04:07 PM
Benzo(a)anthracene	ND		19	µg/Kg-dry	1	8/31/2012 04:07 PM
Benzo(a)pyrene	ND		19	µg/Kg-dry	1	8/31/2012 04:07 PM
Benzo(b)fluoranthene	ND		20	µg/Kg-dry	1	8/31/2012 04:07 PM
Benzo(g,h,i)perylene	ND		30	µg/Kg-dry	1	8/31/2012 04:07 PM
Benzo(k)fluoranthene	ND		20	µg/Kg-dry	1	8/31/2012 04:07 PM
Chrysene	ND		16	µg/Kg-dry	1	8/31/2012 04:07 PM
Dibenzo(a,h)anthracene	ND		20	µg/Kg-dry	1	8/31/2012 04:07 PM
Fluoranthene	ND		16	µg/Kg-dry	1	8/31/2012 04:07 PM
Fluorene	ND		16	µg/Kg-dry	1	8/31/2012 04:07 PM
Indeno(1,2,3-cd)pyrene	ND		22	µg/Kg-dry	1	8/31/2012 04:07 PM
Naphthalene	ND		16	µg/Kg-dry	1	8/31/2012 04:07 PM
Pyrene	ND		16	µg/Kg-dry	1	8/31/2012 04:07 PM
Surr: 2-Fluorobiphenyl	*75.6*		*12-100*	*%REC*	1	8/31/2012 04:07 PM
Surr: 4-Terphenyl-d14	*86.0*		*25-137*	*%REC*	1	8/31/2012 04:07 PM
Surr: Nitrobenzene-d5	*68.6*		*37-107*	*%REC*	1	8/31/2012 04:07 PM
VOLATILE ORGANIC COMPOUNDS			**SW8260**		Prep Date: **8/29/2012**	Analyst: **BG**
Benzene	ND		33	µg/Kg-dry	1	8/29/2012 09:07 PM
Ethylbenzene	ND		33	µg/Kg-dry	1	8/29/2012 09:07 PM
m,p-Xylene	ND		66	µg/Kg-dry	1	8/29/2012 09:07 PM
o-Xylene	ND		33	µg/Kg-dry	1	8/29/2012 09:07 PM
Toluene	ND		33	µg/Kg-dry	1	8/29/2012 09:07 PM
Xylenes, Total	ND		99	µg/Kg-dry	1	8/29/2012 09:07 PM
Surr: 1,2-Dichloroethane-d4	*102*		*70-130*	*%REC*	1	8/29/2012 09:07 PM
Surr: 4-Bromofluorobenzene	*100*		*70-130*	*%REC*	1	8/29/2012 09:07 PM
Surr: Dibromofluoromethane	*97.6*		*70-130*	*%REC*	1	8/29/2012 09:07 PM
Surr: Toluene-d8	*102*		*70-130*	*%REC*	1	8/29/2012 09:07 PM
MOISTURE			**A2540 G**			Analyst: **JJG**
Moisture	**9.0**		**0.050**	**% of sample**	1	8/31/2012 03:45 PM

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

ALS Group USA, Corp

Date: *06-Sep-12*

Client: HRL Compliance Solutions
Project: WPX Energy Suicide Frac Pit (East Half) 8/28/12 **Work Order:** 1208857
Sample ID: East Half - South Wall **Lab ID:** 1208857-03
Collection Date: 8/28/2012 10:30 AM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID			**SW8015M**		Prep Date: **8/30/2012**	Analyst: **CW**
DRO (C10-C28)	**160**		**4.3**	**mg/Kg-dry**	1	8/31/2012 04:03 AM
Surr: 4-Terphenyl-d14	*81.5*		*39-115*	*%REC*	1	8/31/2012 04:03 AM
GASOLINE RANGE ORGANICS BY GC-FID			**SW8015**			Analyst: **CW**
GRO (C6-C10)	ND		2.6	mg/Kg-dry	50	8/30/2012 02:26 PM
Surr: Toluene-d8	*99.1*		*50-150*	*%REC*	50	8/30/2012 02:26 PM
SEMI-VOLATILE ORGANIC COMPOUNDS			**SW8270**		Prep Date: **8/30/2012**	Analyst: **RM**
Acenaphthene	ND		16	µg/Kg-dry	1	8/31/2012 04:33 PM
Anthracene	ND		16	µg/Kg-dry	1	8/31/2012 04:33 PM
Benzo(a)anthracene	ND		18	µg/Kg-dry	1	8/31/2012 04:33 PM
Benzo(a)pyrene	ND		18	µg/Kg-dry	1	8/31/2012 04:33 PM
Benzo(b)fluoranthene	ND		19	µg/Kg-dry	1	8/31/2012 04:33 PM
Benzo(g,h,i)perylene	ND		29	µg/Kg-dry	1	8/31/2012 04:33 PM
Benzo(k)fluoranthene	ND		19	µg/Kg-dry	1	8/31/2012 04:33 PM
Chrysene	ND		16	µg/Kg-dry	1	8/31/2012 04:33 PM
Dibenzo(a,h)anthracene	ND		19	µg/Kg-dry	1	8/31/2012 04:33 PM
Fluoranthene	ND		16	µg/Kg-dry	1	8/31/2012 04:33 PM
Fluorene	**26**		**16**	**µg/Kg-dry**	1	8/31/2012 04:33 PM
Indeno(1,2,3-cd)pyrene	ND		21	µg/Kg-dry	1	8/31/2012 04:33 PM
Naphthalene	ND		16	µg/Kg-dry	1	8/31/2012 04:33 PM
Pyrene	ND		16	µg/Kg-dry	1	8/31/2012 04:33 PM
Surr: 2-Fluorobiphenyl	*70.8*		*12-100*	*%REC*	1	8/31/2012 04:33 PM
Surr: 4-Terphenyl-d14	*86.1*		*25-137*	*%REC*	1	8/31/2012 04:33 PM
Surr: Nitrobenzene-d5	*61.5*		*37-107*	*%REC*	1	8/31/2012 04:33 PM
VOLATILE ORGANIC COMPOUNDS			**SW8260**		Prep Date: **8/29/2012**	Analyst: **BG**
Benzene	ND		32	µg/Kg-dry	1	8/29/2012 09:33 PM
Ethylbenzene	ND		32	µg/Kg-dry	1	8/29/2012 09:33 PM
m,p-Xylene	ND		63	µg/Kg-dry	1	8/29/2012 09:33 PM
o-Xylene	ND		32	µg/Kg-dry	1	8/29/2012 09:33 PM
Toluene	ND		32	µg/Kg-dry	1	8/29/2012 09:33 PM
Xylenes, Total	ND		95	µg/Kg-dry	1	8/29/2012 09:33 PM
Surr: 1,2-Dichloroethane-d4	*106*		*70-130*	*%REC*	1	8/29/2012 09:33 PM
Surr: 4-Bromofluorobenzene	*103*		*70-130*	*%REC*	1	8/29/2012 09:33 PM
Surr: Dibromofluoromethane	*102*		*70-130*	*%REC*	1	8/29/2012 09:33 PM
Surr: Toluene-d8	*104*		*70-130*	*%REC*	1	8/29/2012 09:33 PM
MOISTURE			**A2540 G**			Analyst: **JJG**
Moisture	**5.1**		**0.050**	**% of sample**	1	8/31/2012 03:45 PM

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

ALS Group USA, Corp

Date: *06-Sep-12*

Client: HRL Compliance Solutions
Project: WPX Energy Suicide Frac Pit (East Half) 8/28/12 **Work Order:** 1208857
Sample ID: East Half - East Wall **Lab ID:** 1208857-04
Collection Date: 8/28/2012 09:30 AM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID			**SW8015M**		Prep Date: **8/30/2012**	Analyst: **CW**
DRO (C10-C28)	**94**		**4.3**	**mg/Kg-dry**	1	8/31/2012 04:30 AM
Surr: 4-Terphenyl-d14	*75.6*		*39-115*	*%REC*	1	8/31/2012 04:30 AM
GASOLINE RANGE ORGANICS BY GC-FID			**SW8015**			Analyst: **CW**
GRO (C6-C10)	ND		2.6	mg/Kg-dry	50	8/30/2012 02:01 PM
Surr: Toluene-d8	*103*		*50-150*	*%REC*	50	8/30/2012 02:01 PM
SEMI-VOLATILE ORGANIC COMPOUNDS			**SW8270**		Prep Date: **8/30/2012**	Analyst: **RM**
Acenaphthene	ND		15	µg/Kg-dry	1	8/31/2012 04:58 PM
Anthracene	ND		15	µg/Kg-dry	1	8/31/2012 04:58 PM
Benzo(a)anthracene	ND		18	µg/Kg-dry	1	8/31/2012 04:58 PM
Benzo(a)pyrene	ND		18	µg/Kg-dry	1	8/31/2012 04:58 PM
Benzo(b)fluoranthene	ND		19	µg/Kg-dry	1	8/31/2012 04:58 PM
Benzo(g,h,i)perylene	ND		29	µg/Kg-dry	1	8/31/2012 04:58 PM
Benzo(k)fluoranthene	ND		19	µg/Kg-dry	1	8/31/2012 04:58 PM
Chrysene	ND		15	µg/Kg-dry	1	8/31/2012 04:58 PM
Dibenzo(a,h)anthracene	ND		19	µg/Kg-dry	1	8/31/2012 04:58 PM
Fluoranthene	ND		15	µg/Kg-dry	1	8/31/2012 04:58 PM
Fluorene	**27**		**15**	**µg/Kg-dry**	1	8/31/2012 04:58 PM
Indeno(1,2,3-cd)pyrene	ND		21	µg/Kg-dry	1	8/31/2012 04:58 PM
Naphthalene	ND		15	µg/Kg-dry	1	8/31/2012 04:58 PM
Pyrene	ND		15	µg/Kg-dry	1	8/31/2012 04:58 PM
Surr: 2-Fluorobiphenyl	*66.3*		*12-100*	*%REC*	1	8/31/2012 04:58 PM
Surr: 4-Terphenyl-d14	*82.4*		*25-137*	*%REC*	1	8/31/2012 04:58 PM
Surr: Nitrobenzene-d5	*58.6*		*37-107*	*%REC*	1	8/31/2012 04:58 PM
VOLATILE ORGANIC COMPOUNDS			**SW8260**		Prep Date: **8/29/2012**	Analyst: **BG**
Benzene	ND		31	µg/Kg-dry	1	8/29/2012 09:58 PM
Ethylbenzene	ND		31	µg/Kg-dry	1	8/29/2012 09:58 PM
m,p-Xylene	ND		62	µg/Kg-dry	1	8/29/2012 09:58 PM
o-Xylene	ND		31	µg/Kg-dry	1	8/29/2012 09:58 PM
Toluene	ND		31	µg/Kg-dry	1	8/29/2012 09:58 PM
Xylenes, Total	ND		93	µg/Kg-dry	1	8/29/2012 09:58 PM
Surr: 1,2-Dichloroethane-d4	*107*		*70-130*	*%REC*	1	8/29/2012 09:58 PM
Surr: 4-Bromofluorobenzene	*102*		*70-130*	*%REC*	1	8/29/2012 09:58 PM
Surr: Dibromofluoromethane	*102*		*70-130*	*%REC*	1	8/29/2012 09:58 PM
Surr: Toluene-d8	*103*		*70-130*	*%REC*	1	8/29/2012 09:58 PM
MOISTURE			**A2540 G**			Analyst: **JJG**
Moisture	**3.3**		**0.050**	**% of sample**	1	8/31/2012 03:45 PM

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

QC BATCH REPORT

Batch ID: **43236** Instrument ID **GC8** Method: **SW8015M**

MBLK Sample ID: **DBLKS1-43236-43236** Units: **mg/Kg** Analysis Date: **8/30/2012 10:36 PM**

Client ID: Run ID: **GC8_120830B** SeqNo: **2068188** Prep Date: **8/30/2012** 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	*1.336*	0	*1.667*	0	*80.1*	*39-115*	0			

LCS Sample ID: **DLCSS1-43236-43236** Units: **mg/Kg** Analysis Date: **8/30/2012 11:03 PM**

Client ID: Run ID: **GC8_120830B** SeqNo: **2068189** Prep Date: **8/30/2012** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	124.7	4.2	166.7	0	74.8	60-130	0			
Surr: 4-Terphenyl-d14	*1.189*	0	*1.667*	0	*71.3*	*39-115*	0			

MS Sample ID: **1208848-02A MS** Units: **mg/Kg** Analysis Date: **8/30/2012 11:30 PM**

Client ID: Run ID: **GC8_120830B** SeqNo: **2068190** Prep Date: **8/30/2012** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	248.7	8.0	321	0	77.5	60-130	0			
Surr: 4-Terphenyl-d14	*2.367*	0	*3.21*	0	*73.7*	*39-115*	0			

MSD Sample ID: **1208848-02A MSD** Units: **mg/Kg** Analysis Date: **8/30/2012 11:58 PM**

Client ID: Run ID: **GC8_120830B** SeqNo: **2068191** Prep Date: **8/30/2012** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	250.5	8.1	325.4	0	77	60-130	248.7	0.736	30	
Surr: 4-Terphenyl-d14	*2.393*	0	*3.254*	0	*73.6*	*39-115*	2.367	*1.1*	*30*	

The following samples were analyzed in this batch: 1208857-01B 1208857-02B 1208857-03B 1208857-04B

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

Client: HRL Compliance Solutions
Work Order: 1208857
Project: WPX Energy Suicide Frac Pit (East Half) 8/28/12

QC BATCH REPORT

Batch ID: **R109169** Instrument ID **GC9** Method: **SW8015**

MBLK Sample ID: **GBLK1-120829-R109169** Units: **µg/L** Analysis Date: **8/29/2012 07:11 PM**
Client ID: Run ID: **GC9_120829A** SeqNo: **2066464** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	ND	200								
Surr: Toluene-d8	*105.9*	0	*100*	0	*106*	*70-130*	0			

LCS Sample ID: **GLCS1-120829-R109169** Units: **µg/L** Analysis Date: **8/29/2012 06:46 PM**
Client ID: Run ID: **GC9_120829A** SeqNo: **2066463** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	9484	200	10000	0	94.8	70-130	0			
Surr: Toluene-d8	*105.6*	0	*100*	0	*106*	*70-130*	0			

MS Sample ID: **1208743-02A MS** Units: **µg/Kg** Analysis Date: **8/30/2012 04:00 AM**
Client ID: Run ID: **GC9_120829A** SeqNo: **2066481** Prep Date: DF: **50**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	455800	2,500	500000	0	91.2	70-130	0			
Surr: Toluene-d8	*4539*	0	*5000*	0	*90.8*	*50-150*	0			

MSD Sample ID: **1208743-02A MSD** Units: **µg/Kg** Analysis Date: **8/30/2012 04:25 AM**
Client ID: Run ID: **GC9_120829A** SeqNo: **2066482** Prep Date: DF: **50**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	452800	2,500	500000	0	90.6	70-130	455800	0.67	30	
Surr: Toluene-d8	*4454*	0	*5000*	0	*89.1*	*50-150*	4539	*1.88*	*30*	

The following samples were analyzed in this batch: 1208857-01A 1208857-02A

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

Client: HRL Compliance Solutions
Work Order: 1208857
Project: WPX Energy Suicide Frac Pit (East Half) 8/28/12

QC BATCH REPORT

Batch ID: **R109184** Instrument ID **GC9** Method: **SW8015**

MBLK Sample ID: **GBLK1-120830-R109184** Units: **µg/L** Analysis Date: **8/30/2012 11:30 AM**
Client ID: Run ID: **GC9_120830A** SeqNo: **2066544** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	ND	200								
Surr: Toluene-d8	*95.8*	0	*100*	0	*95.8*	*70-130*	0			

LCS Sample ID: **GLCS1-120830-R109184** Units: **µg/L** Analysis Date: **8/30/2012 11:05 AM**
Client ID: Run ID: **GC9_120830A** SeqNo: **2066542** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	9691	200	10000	0	96.9	70-130	0			
Surr: Toluene-d8	*92.42*	0	*100*	0	*92.4*	*70-130*	0			

MS Sample ID: **1208857-03A MS** Units: **µg/Kg** Analysis Date: **8/30/2012 07:54 PM**
Client ID: **East Half - South Wall** Run ID: **GC9_120830A** SeqNo: **2066827** Prep Date: DF: **50**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	498500	2,500	500000	0	99.7	70-130	0			
Surr: Toluene-d8	*4887*	0	*5000*	0	*97.7*	*50-150*	0			

MSD Sample ID: **1208857-03A MSD** Units: **µg/Kg** Analysis Date: **8/30/2012 08:19 PM**
Client ID: **East Half - South Wall** Run ID: **GC9_120830A** SeqNo: **2066829** Prep Date: DF: **50**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	491700	2,500	500000	0	98.3	70-130	498500	1.35	30	
Surr: Toluene-d8	*4916*	0	*5000*	0	*98.3*	*50-150*	4887	*0.581*	*30*	

The following samples were analyzed in this batch: 1208857-03A 1208857-04A

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

Client: HRL Compliance Solutions
Work Order: 1208857
Project: WPX Energy Suicide Frac Pit (East Half) 8/28/12

QC BATCH REPORT

Batch ID: **43293** Instrument ID **HG1** Method: **SW7471**

MBLK Sample ID: **MBLK-43293-43293** Units: **mg/Kg** Analysis Date: **9/4/2012 01:48 PM**
Client ID: Run ID: **HG1_120904A** SeqNo: **2068767** Prep Date: **9/4/2012** 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-43293-43293** Units: **mg/Kg** Analysis Date: **9/4/2012 01:50 PM**
Client ID: Run ID: **HG1_120904A** SeqNo: **2068769** Prep Date: **9/4/2012** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.181	0.020	0.1665	0	109	80-120	0			

MS Sample ID: **1208857-01BMS** Units: **mg/Kg** Analysis Date: **9/4/2012 02:02 PM**
Client ID: **East Half - Pit Bottom** Run ID: **HG1_120904A** SeqNo: **2068785** Prep Date: **9/4/2012** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.1414	0.017	0.1415	0.02129	84.9	75-125	0			

MSD Sample ID: **1208857-01BMSD** Units: **mg/Kg** Analysis Date: **9/4/2012 02:04 PM**
Client ID: **East Half - Pit Bottom** Run ID: **HG1_120904A** SeqNo: **2068788** Prep Date: **9/4/2012** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.157	0.017	0.1411	0.02129	96.2	75-125	0.1414	10.4	35	

The following samples were analyzed in this batch: 1208857-01B

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

Client: HRL Compliance Solutions
Work Order: 1208857
Project: WPX Energy Suicide Frac Pit (East Half) 8/28/12

QC BATCH REPORT

Batch ID: **43233** Instrument ID **ICPMS2** Method: **SW6020A** **(Dissolve)**

DUP Sample ID: **1208849-03C DUP** Units: **mg/L** Analysis Date: **9/4/2012 08:07 PM**
Client ID: Run ID: **ICPMS2_120904B** SeqNo: **2069439** Prep Date: **8/31/2012** DF: **10**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	768.3	5.0	0	0	0	0-0	714.7	7.23		
Magnesium	153	2.0	0	0	0	0-0	142.1	7.39		
Sodium	927.6	2.0	0	0	0	0-0	886.3	4.55		

DUP Sample ID: **1208854-01C DUP** Units: **mg/L** Analysis Date: **9/4/2012 08:22 PM**
Client ID: Run ID: **ICPMS2_120904B** SeqNo: **2069442** Prep Date: **8/31/2012** DF: **10**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	79.66	5.0	0	0	0	0-0	85.62	7.21		
Magnesium	3.566	2.0	0	0	0	0-0	6.608	59.8		
Sodium	515.2	2.0	0	0	0	0-0	512.1	0.604		

DUP Sample ID: **1208849-03C DUP** Units: **none** Analysis Date: **9/5/2012**
Client ID: Run ID: **SAR_120905A** SeqNo: **2069654** Prep Date: **8/31/2012** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sodium Adsorption Ratio	7.996	0.010	0	0	0		7.923	0.919	50	

DUP Sample ID: **1208854-01C DUP** Units: **none** Analysis Date: **9/5/2012**
Client ID: Run ID: **SAR_120905A** SeqNo: **2069661** Prep Date: **8/31/2012** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sodium Adsorption Ratio	15.34	0.010	0	0	0		14.35	6.64	50	

The following samples were analyzed in this batch: 1208857-01C

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

Client: HRL Compliance Solutions
Work Order: 1208857
Project: WPX Energy Suicide Frac Pit (East Half) 8/28/12

QC BATCH REPORT

Batch ID: **43287** Instrument ID **ICPMS2** Method: **SW6020A**

MBLK Sample ID: **MBLK-43287-43287** Units: **mg/Kg** Analysis Date: **9/4/2012 01:34 PM**
Client ID: Run ID: **ICPMS2_120904A** SeqNo: **2068721** Prep Date: **9/4/2012** 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	0.00758	0.25								J
Copper	ND	0.25								
Lead	ND	0.25								
Nickel	0.01174	0.25								J
Selenium	ND	0.25								
Silver	ND	0.25								
Zinc	ND	0.50								

LCS Sample ID: **LCS-43287-43287** Units: **mg/Kg** Analysis Date: **9/4/2012 01:39 PM**
Client ID: Run ID: **ICPMS2_120904A** SeqNo: **2068722** Prep Date: **9/4/2012** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	4.804	0.25	5	0	96.1	80-120	0			
Barium	5.02	0.25	5	0	100	80-120	0			
Cadmium	5.37	0.10	5	0	107	80-120	0			
Chromium	4.862	0.25	5	0	97.2	80-120	0			
Copper	5.085	0.25	5	0	102	80-120	0			
Lead	5.025	0.25	5	0	100	80-120	0			
Nickel	4.778	0.25	5	0	95.6	80-120	0			
Selenium	4.78	0.25	5	0	95.6	80-120	0			
Silver	5.03	0.25	5	0	101	80-120	0			
Zinc	5.11	0.50	5	0	102	80-120	0			

MS Sample ID: **1208849-15AMS** Units: **mg/Kg** Analysis Date: **9/4/2012 01:49 PM**
Client ID: Run ID: **ICPMS2_120904A** SeqNo: **2068724** Prep Date: **9/4/2012** DF: **5**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	12.45	1.9	7.68	3.781	113	75-125	0			
Barium	215.6	1.9	7.68	140.3	979	75-125	0			SO
Cadmium	8.072	0.77	7.68	0.3057	101	75-125	0			
Chromium	19.09	1.9	7.68	8.418	139	75-125	0			S
Copper	18.66	1.9	7.68	8.786	129	75-125	0			S
Lead	18.03	1.9	7.68	7.568	136	75-125	0			S
Nickel	23.18	1.9	7.68	12.19	143	75-125	0			S
Selenium	6.728	1.9	7.68	0.09556	86.4	75-125	0			
Silver	6.582	1.9	7.68	-0.2607	89.1	75-125	0			
Zinc	45.81	3.8	7.68	28.95	220	75-125	0			S

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

Client: HRL Compliance Solutions
Work Order: 1208857
Project: WPX Energy Suicide Frac Pit (East Half) 8/28/12

QC BATCH REPORT

Batch ID: **43287** Instrument ID **ICPMS2** Method: **SW6020A**

MSD Sample ID: **1208849-15AMSD** Units: **mg/Kg** Analysis Date: **9/4/2012 01:54 PM**
Client ID: Run ID: **ICPMS2_120904A** SeqNo: **2068725** Prep Date: **9/4/2012** DF: **5**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	12.03	1.9	7.587	3.781	109	75-125	12.45	3.37	25	
Barium	213.4	1.9	7.587	140.3	964	75-125	215.6	0.99	25	SO
Cadmium	7.489	0.76	7.587	0.3057	94.7	75-125	8.072	7.5	25	
Chromium	18.39	1.9	7.587	8.418	131	75-125	19.09	3.73	25	S
Copper	18.02	1.9	7.587	8.786	122	75-125	18.66	3.49	25	
Lead	17.01	1.9	7.587	7.568	124	75-125	18.03	5.77	25	
Nickel	21.75	1.9	7.587	12.19	126	75-125	23.18	6.34	25	S
Selenium	6.134	1.9	7.587	0.09556	79.6	75-125	6.728	9.23	25	
Silver	6.142	1.9	7.587	-0.2607	84.4	75-125	6.582	6.92	25	
Zinc	44.69	3.8	7.587	28.95	207	75-125	45.81	2.49	25	S

The following samples were analyzed in this batch: 1208857-01B

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

Client: HRL Compliance Solutions
Work Order: 1208857
Project: WPX Energy Suicide Frac Pit (East Half) 8/28/12

QC BATCH REPORT

Batch ID: **43235** Instrument ID **SVMS6** Method: **SW8270**

MBLK Sample ID: **SBLKS1-43235-43235** Units: **µg/Kg** Analysis Date: **8/31/2012 10:36 AM**
Client ID: Run ID: **SVMS6_120831A** SeqNo: **2069836** Prep Date: **8/30/2012** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	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								
Surr: 2-Fluorobiphenyl	*1249*	0	*1667*	0	*74.9*	*12-100*	0			
Surr: 4-Terphenyl-d14	*1526*	0	*1667*	0	*91.5*	*25-137*	0			
Surr: Nitrobenzene-d5	*1297*	0	*1667*	0	*77.8*	*37-107*	0			

LCS Sample ID: **SLCSS1-43235-43235** Units: **µg/Kg** Analysis Date: **8/31/2012 11:01 AM**
Client ID: Run ID: **SVMS6_120831A** SeqNo: **2069837** Prep Date: **8/30/2012** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	570.7	30	666.7	0	85.6	45-110	0			
Anthracene	596.3	30	666.7	0	89.4	55-105	0			
Benzo(a)anthracene	585	30	666.7	0	87.7	50-110	0			
Benzo(a)pyrene	616.3	30	666.7	0	92.4	50-110	0			
Benzo(b)fluoranthene	548.3	30	666.7	0	82.2	45-115	0			
Benzo(g,h,i)perylene	731.7	30	666.7	0	110	40-125	0			
Benzo(k)fluoranthene	673	30	666.7	0	101	45-115	0			
Chrysene	648.3	30	666.7	0	97.2	55-110	0			
Dibenzo(a,h)anthracene	717.3	30	666.7	0	108	40-125	0			
Fluoranthene	573.7	30	666.7	0	86	55-115	0			
Fluorene	580.7	30	666.7	0	87.1	50-110	0			
Indeno(1,2,3-cd)pyrene	720.3	30	666.7	0	108	40-120	0			
Naphthalene	583.7	30	666.7	0	87.5	40-105	0			
Pyrene	610.3	30	666.7	0	91.5	45-125	0			
Surr: 2-Fluorobiphenyl	*1205*	0	*1667*	0	*72.3*	*12-100*	0			
Surr: 4-Terphenyl-d14	*1574*	0	*1667*	0	*94.5*	*25-137*	0			
Surr: Nitrobenzene-d5	*1312*	0	*1667*	0	*78.7*	*37-107*	0			

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

Client: HRL Compliance Solutions
Work Order: 1208857
Project: WPX Energy Suicide Frac Pit (East Half) 8/28/12

QC BATCH REPORT

Batch ID: **43235** Instrument ID **SVMS6** Method: **SW8270**

MS Sample ID: **1208848-02A MS** Units: **µg/Kg** Analysis Date: **8/31/2012 11:27 AM**
Client ID: Run ID: **SVMS6_120831A** SeqNo: **2069838** Prep Date: **8/30/2012** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	1071	58	1288	0	83.1	45-110	0			
Anthracene	1135	58	1288	0	88.1	55-105	0			
Benzo(a)anthracene	1107	58	1288	0	85.9	50-110	0			
Benzo(a)pyrene	1158	58	1288	0	89.9	50-110	0			
Benzo(b)fluoranthene	1047	58	1288	0	81.3	45-115	0			
Benzo(g,h,i)perylene	1374	58	1288	0	107	40-125	0			
Benzo(k)fluoranthene	1197	58	1288	0	92.9	45-115	0			
Chrysene	1204	58	1288	0	93.4	55-110	0			
Dibenzo(a,h)anthracene	1343	58	1288	0	104	40-125	0			
Fluoranthene	1103	58	1288	0	85.6	55-115	0			
Fluorene	1102	58	1288	0	85.5	50-110	0			
Indeno(1,2,3-cd)pyrene	1351	58	1288	0	105	40-120	0			
Naphthalene	1079	58	1288	0	83.7	40-105	0			
Pyrene	1141	58	1288	0	88.5	45-125	0			
Surr: 2-Fluorobiphenyl	*2297*	0	*3220*	0	*71.3*	*12-100*	0			
Surr: 4-Terphenyl-d14	*2978*	0	*3220*	0	*92.5*	*25-137*	0			
Surr: Nitrobenzene-d5	*2422*	0	*3220*	0	*75.2*	*37-107*	0			

MSD Sample ID: **1208848-02A MSD** Units: **µg/Kg** Analysis Date: **8/31/2012 11:52 AM**
Client ID: Run ID: **SVMS6_120831A** SeqNo: **2069839** Prep Date: **8/30/2012** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	1075	58	1281	0	83.9	45-110	1071	0.358	30	
Anthracene	1124	58	1281	0	87.7	55-105	1135	0.994	30	
Benzo(a)anthracene	1126	58	1281	0	87.9	50-110	1107	1.7	30	
Benzo(a)pyrene	1184	58	1281	0	92.4	50-110	1158	2.2	30	
Benzo(b)fluoranthene	1129	58	1281	0	88.1	45-115	1047	7.55	30	
Benzo(g,h,i)perylene	1393	58	1281	0	109	40-125	1374	1.32	30	
Benzo(k)fluoranthene	1140	58	1281	0	89	45-115	1197	4.83	30	
Chrysene	1211	58	1281	0	94.5	55-110	1204	0.578	30	
Dibenzo(a,h)anthracene	1361	58	1281	0	106	40-125	1343	1.31	30	
Fluoranthene	1109	58	1281	0	86.5	55-115	1103	0.564	30	
Fluorene	1100	58	1281	0	85.8	50-110	1102	0.189	30	
Indeno(1,2,3-cd)pyrene	1367	58	1281	0	107	40-120	1351	1.21	30	
Naphthalene	1085	58	1281	0	84.7	40-105	1079	0.588	30	
Pyrene	1140	58	1281	0	89	45-125	1141	0.0326	30	
Surr: 2-Fluorobiphenyl	*2317*	0	*3203*	0	*72.3*	*12-100*	2297	*0.852*	*40*	
Surr: 4-Terphenyl-d14	*2998*	0	*3203*	0	*93.6*	*25-137*	2978	*0.664*	*40*	
Surr: Nitrobenzene-d5	*2423*	0	*3203*	0	*75.7*	*37-107*	2422	*0.0703*	*40*	

The following samples were analyzed in this batch: 1208857-01B 1208857-02B 1208857-03B 1208857-04B

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

Client: HRL Compliance Solutions
Work Order: 1208857
Project: WPX Energy Suicide Frac Pit (East Half) 8/28/12

QC BATCH REPORT

Batch ID: **43231** Instrument ID **VMS7** Method: **SW8260**

MBLK Sample ID: **MBLK-43231-43231** Units: **µg/Kg** Analysis Date: **8/29/2012 03:14 PM**
Client ID: Run ID: **VMS7_120829A** SeqNo: **2066099** Prep Date: **8/29/2012** 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	*1095*	0	*1000*	0	*110*	*70-130*	0			
Surr: 4-Bromofluorobenzene	*1060*	0	*1000*	0	*106*	*70-130*	0			
Surr: Dibromofluoromethane	*1080*	0	*1000*	0	*108*	*70-130*	0			
Surr: Toluene-d8	*1060*	0	*1000*	0	*106*	*70-130*	0			

LCS Sample ID: **LCS-43231-43231** Units: **µg/Kg** Analysis Date: **8/29/2012 01:58 PM**
Client ID: Run ID: **VMS7_120829A** SeqNo: **2066098** Prep Date: **8/29/2012** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	1129	30	1000	0	113	75-125	0			
Ethylbenzene	1125	30	1000	0	112	75-125	0			
m,p-Xylene	2296	60	2000	0	115	80-125	0			
o-Xylene	1127	30	1000	0	113	75-125	0			
Toluene	1092	30	1000	0	109	70-125	0			
Xylenes, Total	3423	90	3000	0	114	75-125	0			
Surr: 1,2-Dichloroethane-d4	*1062*	0	*1000*	0	*106*	*70-130*	0			
Surr: 4-Bromofluorobenzene	*1048*	0	*1000*	0	*105*	*70-130*	0			
Surr: Dibromofluoromethane	*1132*	0	*1000*	0	*113*	*70-130*	0			
Surr: Toluene-d8	*1076*	0	*1000*	0	*108*	*70-130*	0			

MS Sample ID: **1208849-01A MS** Units: **µg/Kg** Analysis Date: **8/29/2012 11:39 PM**
Client ID: Run ID: **VMS7_120829A** SeqNo: **2066119** Prep Date: **8/29/2012** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	1170	30	1000	0	117	75-125	0			
Ethylbenzene	1165	30	1000	0	116	75-125	0			
m,p-Xylene	2358	60	2000	90.5	113	80-125	0			
o-Xylene	1140	30	1000	0	114	75-125	0			
Toluene	1106	30	1000	0	111	70-125	0			
Xylenes, Total	3497	90	3000	90	114	75-125	0			
Surr: 1,2-Dichloroethane-d4	*1076*	0	*1000*	0	*108*	*70-130*	0			
Surr: 4-Bromofluorobenzene	*1048*	0	*1000*	0	*105*	*70-130*	0			
Surr: Dibromofluoromethane	*1081*	0	*1000*	0	*108*	*70-130*	0			
Surr: Toluene-d8	*1050*	0	*1000*	0	*105*	*70-130*	0			

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

Client: HRL Compliance Solutions
Work Order: 1208857
Project: WPX Energy Suicide Frac Pit (East Half) 8/28/12

QC BATCH REPORT

Batch ID: **43231** Instrument ID **VMS7** Method: **SW8260**

MSD Sample ID: **1208849-01A MSD** Units: **µg/Kg** Analysis Date: **8/30/2012 12:04 PM**
Client ID: Run ID: **VMS7_120829A** SeqNo: **2066120** Prep Date: **8/29/2012** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	1164	30	1000	0	116	75-125	1170	0.428	30	
Ethylbenzene	1170	30	1000	0	117	75-125	1165	0.386	30	
m,p-Xylene	2352	60	2000	90.5	113	80-125	2358	0.212	30	
o-Xylene	1160	30	1000	0	116	75-125	1140	1.83	30	
Toluene	1118	30	1000	0	112	70-125	1106	0.989	30	
Xylenes, Total	3513	90	3000	90	114	75-125	3497	0.456	30	
Surr: 1,2-Dichloroethane-d4	*1076*	0	*1000*	0	*108*	*70-130*	1076	*0.0465*	*30*	
Surr: 4-Bromofluorobenzene	*1071*	0	*1000*	0	*107*	*70-130*	1048	*2.17*	*30*	
Surr: Dibromofluoromethane	*1095*	0	*1000*	0	*110*	*70-130*	1081	*1.29*	*30*	
Surr: Toluene-d8	*1054*	0	*1000*	0	*105*	*70-130*	1050	*0.333*	*30*	

The following samples were analyzed in this batch: 1208857-01A 1208857-02A 1208857-03A 1208857-04A

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

Client: HRL Compliance Solutions
Work Order: 1208857
Project: WPX Energy Suicide Frac Pit (East Half) 8/28/12

QC BATCH REPORT

Batch ID: **43233** Instrument ID **WETCHEM** Method: **USDA H60 Method**

DUP Sample ID: **1208849-03C DUP** Units: **mmhos/cm @25°F** Analysis Date: **8/31/2012 02:50 PM**
Client ID: Run ID: **WETCHEM_120831O** SeqNo: **2068104** Prep Date: **8/31/2012** DF: **10**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Electrical Conductivity @ Saturation	11.98	0.050	0	0	0		12.57	4.81	50	

DUP Sample ID: **1208854-01C DUP** Units: **mmhos/cm @25°F** Analysis Date: **8/31/2012 02:50 PM**
Client ID: Run ID: **WETCHEM_120831O** SeqNo: **2068107** Prep Date: **8/31/2012** DF: **20**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Electrical Conductivity @ Saturation	3.094	0.10	0	0	0		2.924	5.65	50	

The following samples were analyzed in this batch: 1208857-01C

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

Client: HRL Compliance Solutions
Work Order: 1208857
Project: WPX Energy Suicide Frac Pit (East Half) 8/28/12

QC BATCH REPORT

Batch ID: **43252** Instrument ID **WETCHEM** Method: **SW7196A**

MBLK Sample ID: **MBLK-43252-43252** Units: **mg/Kg** Analysis Date: **8/31/2012 02:10 PM**
Client ID: Run ID: **WETCHEM_120831J** SeqNo: **2067858** Prep Date: **8/30/2012** 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-43252-43252** Units: **mg/Kg** Analysis Date: **8/31/2012 02:10 PM**
Client ID: Run ID: **WETCHEM_120831J** SeqNo: **2067857** Prep Date: **8/30/2012** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	1.698	0.50	1.984	0	85.6	75-110	0			

MS Sample ID: **1208854-01B MS** Units: **mg/Kg** Analysis Date: **8/31/2012 02:10 PM**
Client ID: Run ID: **WETCHEM_120831J** SeqNo: **2067851** Prep Date: **8/30/2012** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	2.308	0.51	2.024	1.267	51.4	60-130	0			S

MSD Sample ID: **1208854-01B MSD** Units: **mg/Kg** Analysis Date: **8/31/2012 02:10 PM**
Client ID: Run ID: **WETCHEM_120831J** SeqNo: **2067852** Prep Date: **8/30/2012** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	2.351	0.50	2.016	1.267	53.7	60-130	2.308	1.85	30	S

The following samples were analyzed in this batch: 1208857-01B

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

Client: HRL Compliance Solutions
Work Order: 1208857
Project: WPX Energy Suicide Frac Pit (East Half) 8/28/12

QC BATCH REPORT

Batch ID: **R109147** Instrument ID **WETCHEM** Method: **SW9045D**

LCS Sample ID: **WLCSW1-120829-R109147** Units: **s.u.** Analysis Date: **8/29/2012 09:00 AM**
Client ID: Run ID: **WETCHEM_120829Q** SeqNo: **2065649** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	4.53	0	4.4	0	103	90-110	0			

DUP Sample ID: **1208854-01BDUP** Units: **s.u.** Analysis Date: **8/29/2012 09:00 AM**
Client ID: Run ID: **WETCHEM_120829Q** SeqNo: **2065651** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	8.93	0	0	0	0	0-0	8.93	0	20	

The following samples were analyzed in this batch: 1208857-01B

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

Client: HRL Compliance Solutions
Work Order: 1208857
Project: WPX Energy Suicide Frac Pit (East Half) 8/28/12

QC BATCH REPORT

Batch ID: **R109277** Instrument ID **MOIST** Method: **A2540 G**

MBLK Sample ID: **WBLKS1-R109277** Units: **% of sample** Analysis Date: **8/31/2012 03:45 PM**
Client ID: Run ID: **MOIST_120831A** SeqNo: **2068364** 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-R109277** Units: **% of sample** Analysis Date: **8/31/2012 03:45 PM**
Client ID: Run ID: **MOIST_120831A** SeqNo: **2068360** 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: **1208854-01B DUP** Units: **% of sample** Analysis Date: **8/31/2012 03:45 PM**
Client ID: Run ID: **MOIST_120831A** SeqNo: **2068346** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	7.93	0.050	0	0	0	0-0	6.53	19.4	20	

The following samples were analyzed in this batch:

1208857-01B	1208857-02B	1208857-03B
1208857-04B		

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 # 1208857

		SAMPLER	Kris Rowe	DATE	8/28/2012	PAGE	1 of 2
PROJECT NAME	WPX Energy - Suicide Frac Pit (East Half)	SITE ID		TURNAROUND	STD	DISPOSAL	By Lab or Return to Client
PROJECT No.		EDD FORMAT					
		PURCHASE ORDER					
COMPANY NAME	HRL COMPLIANCE SOLUTIONS Inc.	BILL TO COMPANY	WPX Energy Rocky Mtn				
SEND REPORT TO	KRIS ROWE	INVOICE ATTN TO	Karolina Blaney				
ADDRESS	2385 F 1/2	ADDRESS	1058 County Road 215				
CITY / STATE / ZIP	GRAND JUNCTION CO 81506	CITY / STATE / ZIP	Parachute CO 81635				
PHONE	970-243-3271	PHONE	970-683-2295				
FAX	970-243-3280	FAX	970-285-9573				
E-MAIL	KROWE@HRLCOMP.COM	E-MAIL	Karolina.Blaney@williams.com				

Lab ID	Field ID	Matrix	Sample Date	Sample Time	# Bottles	Pres.	QC	TEPH	TVPH	BTEX	SEMI VOLS - PAH	910-1 TOTAL METALS (SEE COMMENTS)	SAR / EC / pH
1	East Half - Pit Bottom	SO	8/28/2012	1000	3	8		X	X	X	X	X	X
2	East Half - North Wall	SO	8/28/2012	1100	2	8		X	X	X	X		
3	East Half - South Wall	SO	8/28/2012	1030	2	8		X	X	X	X		
4	East Half - East Wall	SO	8/28/2012	0930	2	8		X	X	X	X		

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

For metals or anions, please detail analytes below.

Comments:

Report Barium as total Barium and do not run Boron

3.8°C

QC PACKAGE (check below)	
	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		Kris Rowe	8/28/2012	17:00
RECEIVED BY		Diane F Shaw	8/29/12	0930
RELINQUISHED BY				
RECEIVED BY				
RELINQUISHED BY				
RECEIVED BY				

ALS Group USA, Corp

Sample Receipt Checklist

Client Name: **HRL** Date/Time Received: **29-Aug-12 09:30**

Work Order: **1208857** Received by: **DS**

Checklist completed by Diane Shaw eSignature 29-Aug-12 Date Reviewed by: Ann Preston eSignature 30-Aug-12 Date

Matrices: Soil
Carrier name: FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Temperature(s)/Thermometer(s):	3.8 c		
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:	8/29/2012 11:53:57 AM		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑
pH adjusted?	Yes ☐	No ☐	N/A ☑
pH adjusted by:			

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

CorrectiveAction:

FedEx Express **NEW Package US Airbill**

FedEx Tracking Number 8001 2126 9240

0200 Form ID No.

FedEx Retrieval Copy

1 From

Date 8/24/12

Sender's Name Kris Rowe Phone 970 243 3257

Company HRL Compliance Solutions

Address 2385 F 1/2 Rd

Dept./Floor/Suite/Room

City Grand Junction State CO ZIP 81505

2 Your Internal Billing Reference

3 To

Recipient's Name Sample Receiving Phone 616 399-6070

Company ALS Group Laboratory

Address 3352 128th AVE

We cannot deliver to P.O. boxes or P.O. ZIP codes.

Dept./Floor/Suite/Room

Address

Use this line for the HOLD location address or for continuation of your shipping address.

City Holland State MI ZIP 49424

01 ☐ HOLD Weekday FedEx location address REQUIRED. NOT available for FedEx First Overnight.

31 ☐ HOLD Saturday FedEx location address REQUIRED. Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

8001 2126 9240

4 Express Package Service * To most locations.

NOTE: Service order has changed. Please select carefully.

Packages up to 150 lbs.
For packages over 150 lbs., use the new FedEx Express Freight US Airbill.

Next Business Day

06 ☐ FedEx First Overnight — Earliest next business morning delivery to select locations. Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

01 ☒ FedEx Priority Overnight — Next business morning.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

05 ☐ FedEx Standard Overnight — Next business afternoon.* Saturday Delivery NOT available.

2 or 3 Business Days

49 ☐ NEW FedEx 2Day A.M. — Second business morning.* Saturday Delivery NOT available.

03 ☐ FedEx 2Day — Second business afternoon.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

20 ☐ FedEx Express Saver — Third business day.* Saturday Delivery NOT available.

5 Packaging * Declared value limit $500.

06 ☐ FedEx Envelope* 02 ☐ FedEx Pak* 03 ☐ FedEx Box 04 ☐ FedEx Tube 01 ☒ Other

6 Special Handling and Delivery Signature Options

03 ☐ **SATURDAY DELIVERY**

☒ No Signature Required — Package may be left without obtaining a signature for delivery.

10 ☐ Direct Signature — Someone at recipient's address may sign for delivery. *Fee applies.*

34 ☐ Indirect Signature — If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only. *Fee applies.*

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

☒ No 04 ☐ Yes — As per attached Shipper's Declaration

☐ Yes — Shipper's Declaration not required

06 ☐ Dry Ice — Dry Ice, 9, UN 1845 ____ x ____ kg

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging or placed in a FedEx Express Drop Box.

☐ Cargo Aircraft Only

7 Payment *Bill to:*

Enter FedEx Acct. No. or Credit Card No. below.

1 ☐ Sender Acct. No. in Section 1 will be billed. 2 ☒ Recipient 3 ☐ Third Party 4 ☐ Credit Card 5 ☐ Cash/Check

Obtain recip. Acct. No. ☐

Total Packages 1 Total Weight ____ lbs.

Credit Card Auth.

†Our liability is limited to $100 unless you declare a higher value. See the current FedEx Service Guide for details.

612

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APPENDIX 2: WESTERN HALF PIT BOTTOM AND WALL SAMPLING RAW ANALYTICAL RESULTS

12-Oct-2012

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

Re: **WPX Western Half Pit Closure 10/4/12** Work Order: **1210189**

Dear Mark,

ALS Environmental received 8 samples on 05-Oct-2012 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.

QC sample results for this data met 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 37.

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

Sincerely,

Ann Preston

Electronically approved by: Ann Preston

Ann Preston
Project Manager

Certificate No: MN331938

ALS Group USA, Corp

Date: 12-Oct-12

Client: HRL Compliance Solutions
Project: WPX Western Half Pit Closure 10/4/12
Work Order: **1210189**

Work Order Sample Summary

Lab Samp ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
1210189-01	Western Pit Half North Wall	Soil		10/4/2012 10:50	10/5/2012 09:30	☐
1210189-02	Western Pit Half East Wall	Soil		10/4/2012 11:00	10/5/2012 09:30	☐
1210189-03	Western Pit Half South Wall	Soil		10/4/2012 11:10	10/5/2012 09:30	☐
1210189-04	Western Pit Half West Wall	Soil		10/4/2012 11:20	10/5/2012 09:30	☐
1210189-05	Western Pit Half Bottom	Soil		10/4/2012 11:30	10/5/2012 09:30	☐
1210189-06	Western Pit Half BKGD 1	Soil		10/4/2012 12:00	10/5/2012 09:30	☐
1210189-07	Western Pit HalfBKGD 2	Soil		10/4/2012 12:10	10/5/2012 09:30	☐
1210189-08	Western Pit Half BKGD 3	Soil		10/4/2012 12:15	10/5/2012 09:30	☐

ALS Group USA, Corp

Date: 12-Oct-12

Client: HRL Compliance Solutions
Project: WPX Western Half Pit Closure 10/4/12
Work Order: 1210189

Case Narrative

Batch 43991 sample 1210189-01 DRO surrogate recovery was above the upper control limits. The sample results may be biased high due to matrix interference.

Batch 44003 MS/MSD data for Metals is not related to this project's samples. No data requires qualification.

ALS Group USA, Corp

Date: 12-Oct-12

Client: HRL Compliance Solutions
Project: WPX Western Half Pit Closure 10/4/12
WorkOrder: **1210189**

QUALIFIERS, ACRONYMS, UNITS

Qualifier	Description
*	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

Acronym	Description
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
SD	Serial Dilution
TDL	Target Detection Limit

Units Reported	Description
% of sample	Percent of Sample
µg/Kg-dry	Micrograms per Kilogram Dry Weight
mg/Kg-dry	Milligrams per Kilogram Dry Weight
ımhos/cm @25°	
none	
s.u.	Standard Units

ALS Group USA, Corp

Date: *12-Oct-12*

Client: HRL Compliance Solutions
Project: WPX Western Half Pit Closure 10/4/12 **Work Order:** 1210189
Sample ID: Western Pit Half North Wall **Lab ID:** 1210189-01
Collection Date: 10/4/2012 10:50 AM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID			**SW8015M**		Prep Date: **10/8/2012**	Analyst: **CW**
DRO (C10-C28)	**270**		**4.2**	**mg/Kg-dry**	1	10/9/2012 12:34 PM
Surr: 4-Terphenyl-d14	*407*	S	*39-115*	*%REC*	1	10/9/2012 12:34 PM
GASOLINE RANGE ORGANICS BY GC-FID			**SW8015**			Analyst: **CW**
GRO (C6-C10)	ND		2.6	mg/Kg-dry	50	10/5/2012 04:30 PM
Surr: Toluene-d8	*105*		*50-150*	*%REC*	50	10/5/2012 04:30 PM
MERCURY BY CVAA			**SW7471**		Prep Date: **10/8/2012**	Analyst: **LR**
Mercury	**0.035**		**0.017**	**mg/Kg-dry**	1	10/9/2012 12:34 PM
METALS BY ICP-MS			**SW6020A**		Prep Date: **10/8/2012**	Analyst: **CES**
Arsenic	**7.7**		**0.82**	**mg/Kg-dry**	2	10/8/2012 10:05 PM
Barium	**260**		**0.82**	**mg/Kg-dry**	2	10/8/2012 10:05 PM
Cadmium	**0.55**		**0.33**	**mg/Kg-dry**	2	10/8/2012 10:05 PM
Chromium	**12**		**0.82**	**mg/Kg-dry**	2	10/8/2012 10:05 PM
Copper	**12**		**0.82**	**mg/Kg-dry**	2	10/8/2012 10:05 PM
Lead	**12**		**0.82**	**mg/Kg-dry**	2	10/8/2012 10:05 PM
Nickel	**14**		**0.82**	**mg/Kg-dry**	2	10/8/2012 10:05 PM
Selenium	**0.84**		**0.82**	**mg/Kg-dry**	2	10/8/2012 10:05 PM
Silver	ND		0.82	mg/Kg-dry	2	10/8/2012 10:05 PM
Zinc	**49**		**1.6**	**mg/Kg-dry**	2	10/8/2012 10:05 PM
SOLUBLE CATIONS FOR SAR			**SW6020A**		Prep Date: **10/9/2012**	Analyst: **CES**
Calcium	**1,100**		**5.1**	**mg/L-dry**	10	10/9/2012 06:25 PM
Magnesium	**410**		**2.0**	**mg/L-dry**	10	10/9/2012 06:25 PM
Sodium	**1,800**		**2.0**	**mg/L-dry**	10	10/9/2012 06:25 PM
SODIUM ADSORPTION RATIO			**USDA H60 METHO**		Prep Date: **10/9/2012**	Analyst: **CES**
Sodium Adsorption Ratio	**11**		**0.010**	**none**	1	10/10/2012
SEMI-VOLATILE ORGANIC COMPOUNDS			**SW8270**		Prep Date: **10/8/2012**	Analyst: **HL**
Acenaphthene	ND		15	µg/Kg-dry	1	10/10/2012 01:48 AM
Anthracene	ND		15	µg/Kg-dry	1	10/10/2012 01:48 AM
Benzo(a)anthracene	ND		17	µg/Kg-dry	1	10/10/2012 01:48 AM
Benzo(a)pyrene	ND		17	µg/Kg-dry	1	10/10/2012 01:48 AM
Benzo(b)fluoranthene	**26**		**18**	**µg/Kg-dry**	1	10/10/2012 01:48 AM
Benzo(g,h,i)perylene	ND		28	µg/Kg-dry	1	10/10/2012 01:48 AM
Benzo(k)fluoranthene	**19**		**18**	**µg/Kg-dry**	1	10/10/2012 01:48 AM
Chrysene	**23**		**15**	**µg/Kg-dry**	1	10/10/2012 01:48 AM
Dibenzo(a,h)anthracene	ND		18	µg/Kg-dry	1	10/10/2012 01:48 AM
Fluoranthene	ND		15	µg/Kg-dry	1	10/10/2012 01:48 AM
Fluorene	**25**		**15**	**µg/Kg-dry**	1	10/10/2012 01:48 AM

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

ALS Group USA, Corp

Date: *12-Oct-12*

Client: HRL Compliance Solutions
Project: WPX Western Half Pit Closure 10/4/12 **Work Order:** 1210189
Sample ID: Western Pit Half North Wall **Lab ID:** 1210189-01
Collection Date: 10/4/2012 10:50 AM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Indeno(1,2,3-cd)pyrene	ND		20	µg/Kg-dry	1	10/10/2012 01:48 AM
Naphthalene	ND		15	µg/Kg-dry	1	10/10/2012 01:48 AM
Pyrene	ND		15	µg/Kg-dry	1	10/10/2012 01:48 AM
Surr: 2-Fluorobiphenyl	*70.7*		*12-100*	*%REC*	1	10/10/2012 01:48 AM
Surr: 4-Terphenyl-d14	*95.4*		*25-137*	*%REC*	1	10/10/2012 01:48 AM
Surr: Nitrobenzene-d5	*67.9*		*37-107*	*%REC*	1	10/10/2012 01:48 AM
VOLATILE ORGANIC COMPOUNDS			**SW8260**		Prep Date: **10/5/2012**	Analyst: **BG**
Benzene	ND		31	µg/Kg-dry	1	10/6/2012 06:08 AM
Ethylbenzene	ND		31	µg/Kg-dry	1	10/6/2012 06:08 AM
m,p-Xylene	ND		61	µg/Kg-dry	1	10/6/2012 06:08 AM
o-Xylene	ND		31	µg/Kg-dry	1	10/6/2012 06:08 AM
Toluene	ND		31	µg/Kg-dry	1	10/6/2012 06:08 AM
Xylenes, Total	ND		92	µg/Kg-dry	1	10/6/2012 06:08 AM
Surr: 1,2-Dichloroethane-d4	*100*		*70-130*	*%REC*	1	10/6/2012 06:08 AM
Surr: 4-Bromofluorobenzene	*100*		*70-130*	*%REC*	1	10/6/2012 06:08 AM
Surr: Dibromofluoromethane	*99.4*		*70-130*	*%REC*	1	10/6/2012 06:08 AM
Surr: Toluene-d8	*99.7*		*70-130*	*%REC*	1	10/6/2012 06:08 AM
ELECTRICAL CONDUCTIVITY (SAR)			**USDA H60 METHO**		Prep Date: **10/9/2012**	Analyst: **JB**
Electrical Conductivity @ Saturation	**15**		**0.025**	**mmhos/cm @25**	5	10/9/2012 03:15 PM
CHROMIUM, TRIVALENT			**CALCULATION**			Analyst: **JJG**
Chromium, Trivalent	**12**		**0.51**	**mg/Kg-dry**	1	10/11/2012 08:40 AM
CHROMIUM, HEXAVALENT			**SW7196A**		Prep Date: **10/9/2012**	Analyst: **MB**
Chromium, Hexavalent	ND		0.51	mg/Kg-dry	1	10/10/2012 01:50 PM
MOISTURE			**A2540 G**			Analyst: **LR**
Moisture	**2.3**		**0.050**	**% of sample**	1	10/5/2012 01:30 PM
PH			**SW9045D**			Analyst: **KF**
pH	**8.47**			**s.u.**	1	10/5/2012 09:45 AM

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

ALS Group USA, Corp

Date: *12-Oct-12*

Client: HRL Compliance Solutions
Project: WPX Western Half Pit Closure 10/4/12 **Work Order:** 1210189
Sample ID: Western Pit Half East Wall **Lab ID:** 1210189-02
Collection Date: 10/4/2012 11:00 AM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID			**SW8015M**		Prep Date: **10/8/2012**	Analyst: **CW**
DRO (C10-C28)	**34**		**4.2**	**mg/Kg-dry**	1	10/9/2012 01:01 PM
Surr: 4-Terphenyl-d14	*61.9*		*39-115*	*%REC*	1	10/9/2012 01:01 PM
GASOLINE RANGE ORGANICS BY GC-FID			**SW8015**			Analyst: **CW**
GRO (C6-C10)	ND		2.5	mg/Kg-dry	50	10/8/2012 01:37 PM
Surr: Toluene-d8	*110*		*50-150*	*%REC*	50	10/8/2012 01:37 PM
MERCURY BY CVAA			**SW7471**		Prep Date: **10/8/2012**	Analyst: **LR**
Mercury	**0.026**		**0.020**	**mg/Kg-dry**	1	10/9/2012 12:40 PM
METALS BY ICP-MS			**SW6020A**		Prep Date: **10/8/2012**	Analyst: **CES**
Arsenic	**7.3**		**0.68**	**mg/Kg-dry**	2	10/8/2012 10:11 PM
Barium	**230**		**0.68**	**mg/Kg-dry**	2	10/8/2012 10:11 PM
Cadmium	**0.49**		**0.27**	**mg/Kg-dry**	2	10/8/2012 10:11 PM
Chromium	**10**		**0.68**	**mg/Kg-dry**	2	10/8/2012 10:11 PM
Copper	**10**		**0.68**	**mg/Kg-dry**	2	10/8/2012 10:11 PM
Lead	**12**		**0.68**	**mg/Kg-dry**	2	10/8/2012 10:11 PM
Nickel	**14**		**0.68**	**mg/Kg-dry**	2	10/8/2012 10:11 PM
Selenium	**0.96**		**0.68**	**mg/Kg-dry**	2	10/8/2012 10:11 PM
Silver	ND		0.68	mg/Kg-dry	2	10/8/2012 10:11 PM
Zinc	**42**		**1.4**	**mg/Kg-dry**	2	10/8/2012 10:11 PM
SOLUBLE CATIONS FOR SAR			**SW6020A**		Prep Date: **10/9/2012**	Analyst: **CES**
Calcium	**650**		**51**	**mg/L-dry**	100	10/10/2012 12:46 PM
Magnesium	**430**		**20**	**mg/L-dry**	100	10/10/2012 12:46 PM
Sodium	**2,100**		**20**	**mg/L-dry**	100	10/10/2012 12:46 PM
SODIUM ADSORPTION RATIO			**USDA H60 METHO**		Prep Date: **10/9/2012**	Analyst: **CES**
Sodium Adsorption Ratio	**15**		**0.010**	**none**	1	10/10/2012
SEMI-VOLATILE ORGANIC COMPOUNDS			**SW8270**		Prep Date: **10/8/2012**	Analyst: **HL**
Acenaphthene	ND		15	µg/Kg-dry	1	10/10/2012 01:21 AM
Anthracene	ND		15	µg/Kg-dry	1	10/10/2012 01:21 AM
Benzo(a)anthracene	ND		17	µg/Kg-dry	1	10/10/2012 01:21 AM
Benzo(a)pyrene	ND		17	µg/Kg-dry	1	10/10/2012 01:21 AM
Benzo(b)fluoranthene	ND		18	µg/Kg-dry	1	10/10/2012 01:21 AM
Benzo(g,h,i)perylene	ND		28	µg/Kg-dry	1	10/10/2012 01:21 AM
Benzo(k)fluoranthene	ND		18	µg/Kg-dry	1	10/10/2012 01:21 AM
Chrysene	ND		15	µg/Kg-dry	1	10/10/2012 01:21 AM
Dibenzo(a,h)anthracene	ND		18	µg/Kg-dry	1	10/10/2012 01:21 AM
Fluoranthene	ND		15	µg/Kg-dry	1	10/10/2012 01:21 AM
Fluorene	ND		15	µg/Kg-dry	1	10/10/2012 01:21 AM

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

ALS Group USA, Corp

Date: *12-Oct-12*

Client: HRL Compliance Solutions
Project: WPX Western Half Pit Closure 10/4/12 **Work Order:** 1210189
Sample ID: Western Pit Half East Wall **Lab ID:** 1210189-02
Collection Date: 10/4/2012 11:00 AM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Indeno(1,2,3-cd)pyrene	ND		20	µg/Kg-dry	1	10/10/2012 01:21 AM
Naphthalene	ND		15	µg/Kg-dry	1	10/10/2012 01:21 AM
Pyrene	ND		15	µg/Kg-dry	1	10/10/2012 01:21 AM
Surr: 2-Fluorobiphenyl	*67.8*		*12-100*	*%REC*	1	10/10/2012 01:21 AM
Surr: 4-Terphenyl-d14	*96.8*		*25-137*	*%REC*	1	10/10/2012 01:21 AM
Surr: Nitrobenzene-d5	*74.9*		*37-107*	*%REC*	1	10/10/2012 01:21 AM
VOLATILE ORGANIC COMPOUNDS			**SW8260**		Prep Date: **10/5/2012**	Analyst: **BG**
Benzene	ND		31	µg/Kg-dry	1	10/6/2012 06:33 AM
Ethylbenzene	ND		31	µg/Kg-dry	1	10/6/2012 06:33 AM
m,p-Xylene	ND		61	µg/Kg-dry	1	10/6/2012 06:33 AM
o-Xylene	ND		31	µg/Kg-dry	1	10/6/2012 06:33 AM
Toluene	ND		31	µg/Kg-dry	1	10/6/2012 06:33 AM
Xylenes, Total	ND		92	µg/Kg-dry	1	10/6/2012 06:33 AM
Surr: 1,2-Dichloroethane-d4	*100*		*70-130*	*%REC*	1	10/6/2012 06:33 AM
Surr: 4-Bromofluorobenzene	*99.0*		*70-130*	*%REC*	1	10/6/2012 06:33 AM
Surr: Dibromofluoromethane	*101*		*70-130*	*%REC*	1	10/6/2012 06:33 AM
Surr: Toluene-d8	*99.8*		*70-130*	*%REC*	1	10/6/2012 06:33 AM
ELECTRICAL CONDUCTIVITY (SAR)			**USDA H60 METHO**		Prep Date: **10/9/2012**	Analyst: **JB**
Electrical Conductivity @ Saturation	**15**		**0.025**	**mmhos/cm @25**	5	10/9/2012 03:15 PM
CHROMIUM, TRIVALENT			**CALCULATION**			Analyst: **JJG**
Chromium, Trivalent	**10**		**0.51**	**mg/Kg-dry**	1	10/11/2012 08:40 AM
CHROMIUM, HEXAVALENT			**SW7196A**		Prep Date: **10/9/2012**	Analyst: **MB**
Chromium, Hexavalent	ND		0.51	mg/Kg-dry	1	10/10/2012 01:50 PM
MOISTURE			**A2540 G**			Analyst: **LR**
Moisture	**1.7**		**0.050**	**% of sample**	1	10/5/2012 01:30 PM
PH			**SW9045D**			Analyst: **KF**
pH	**8.38**			**s.u.**	1	10/5/2012 09:45 AM

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

ALS Group USA, Corp

Date: *12-Oct-12*

Client: HRL Compliance Solutions
Project: WPX Western Half Pit Closure 10/4/12 **Work Order:** 1210189
Sample ID: Western Pit Half South Wall **Lab ID:** 1210189-03
Collection Date: 10/4/2012 11:10 AM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID			**SW8015M**		Prep Date: **10/8/2012**	Analyst: **CW**
DRO (C10-C28)	**140**		**4.3**	**mg/Kg-dry**	1	10/9/2012 01:54 PM
Surr: 4-Terphenyl-d14	*77.8*		*39-115*	*%REC*	1	10/9/2012 01:54 PM
GASOLINE RANGE ORGANICS BY GC-FID			**SW8015**			Analyst: **CW**
GRO (C6-C10)	ND		2.7	mg/Kg-dry	50	10/8/2012 02:02 PM
Surr: Toluene-d8	*105*		*50-150*	*%REC*	50	10/8/2012 02:02 PM
MERCURY BY CVAA			**SW7471**		Prep Date: **10/8/2012**	Analyst: **LR**
Mercury	**0.068**		**0.017**	**mg/Kg-dry**	1	10/9/2012 12:48 PM
METALS BY ICP-MS			**SW6020A**		Prep Date: **10/8/2012**	Analyst: **CES**
Arsenic	**5.0**		**0.88**	**mg/Kg-dry**	2	10/8/2012 10:17 PM
Barium	**3,000**		**88**	**mg/Kg-dry**	200	10/9/2012 03:56 PM
Cadmium	**0.56**		**0.35**	**mg/Kg-dry**	2	10/8/2012 10:17 PM
Chromium	**11**		**0.88**	**mg/Kg-dry**	2	10/8/2012 10:17 PM
Copper	**13**		**0.88**	**mg/Kg-dry**	2	10/8/2012 10:17 PM
Lead	**13**		**0.88**	**mg/Kg-dry**	2	10/8/2012 10:17 PM
Nickel	**15**		**0.88**	**mg/Kg-dry**	2	10/8/2012 10:17 PM
Selenium	ND		0.88	mg/Kg-dry	2	10/8/2012 10:17 PM
Silver	ND		0.88	mg/Kg-dry	2	10/8/2012 10:17 PM
Zinc	**51**		**1.8**	**mg/Kg-dry**	2	10/8/2012 10:17 PM
SOLUBLE CATIONS FOR SAR			**SW6020A**		Prep Date: **10/9/2012**	Analyst: **CES**
Calcium	**4,100**		**55**	**mg/L-dry**	100	10/10/2012 12:53 PM
Magnesium	**88**		**2.2**	**mg/L-dry**	10	10/9/2012 06:36 PM
Sodium	**27,000**		**220**	**mg/L-dry**	1000	10/10/2012 01:37 PM
SODIUM ADSORPTION RATIO			**USDA H60 METHO**		Prep Date: **10/9/2012**	Analyst: **CES**
Sodium Adsorption Ratio	**110**		**0.010**	**none**	1	10/10/2012
SEMI-VOLATILE ORGANIC COMPOUNDS			**SW8270**		Prep Date: **10/8/2012**	Analyst: **HL**
Acenaphthene	ND		16	µg/Kg-dry	1	10/10/2012 02:16 AM
Anthracene	ND		16	µg/Kg-dry	1	10/10/2012 02:16 AM
Benzo(a)anthracene	ND		18	µg/Kg-dry	1	10/10/2012 02:16 AM
Benzo(a)pyrene	ND		18	µg/Kg-dry	1	10/10/2012 02:16 AM
Benzo(b)fluoranthene	ND		19	µg/Kg-dry	1	10/10/2012 02:16 AM
Benzo(g,h,i)perylene	ND		29	µg/Kg-dry	1	10/10/2012 02:16 AM
Benzo(k)fluoranthene	ND		19	µg/Kg-dry	1	10/10/2012 02:16 AM
Chrysene	ND		16	µg/Kg-dry	1	10/10/2012 02:16 AM
Dibenzo(a,h)anthracene	ND		19	µg/Kg-dry	1	10/10/2012 02:16 AM
Fluoranthene	ND		16	µg/Kg-dry	1	10/10/2012 02:16 AM
Fluorene	**54**		**16**	**µg/Kg-dry**	1	10/10/2012 02:16 AM

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

ALS Group USA, Corp

Date: *12-Oct-12*

Client: HRL Compliance Solutions
Project: WPX Western Half Pit Closure 10/4/12 **Work Order:** 1210189
Sample ID: Western Pit Half South Wall **Lab ID:** 1210189-03
Collection Date: 10/4/2012 11:10 AM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Indeno(1,2,3-cd)pyrene	ND		21	µg/Kg-dry	1	10/10/2012 02:16 AM
Naphthalene	**45**		**16**	**µg/Kg-dry**	1	10/10/2012 02:16 AM
Pyrene	**19**		**16**	**µg/Kg-dry**	1	10/10/2012 02:16 AM
Surr: 2-Fluorobiphenyl	*71.5*		*12-100*	*%REC*	1	10/10/2012 02:16 AM
Surr: 4-Terphenyl-d14	*91.5*		*25-137*	*%REC*	1	10/10/2012 02:16 AM
Surr: Nitrobenzene-d5	*67.5*		*37-107*	*%REC*	1	10/10/2012 02:16 AM
VOLATILE ORGANIC COMPOUNDS			**SW8260**		Prep Date: **10/5/2012**	Analyst: **BG**
Benzene	ND		33	µg/Kg-dry	1	10/6/2012 06:57 AM
Ethylbenzene	ND		33	µg/Kg-dry	1	10/6/2012 06:57 AM
m,p-Xylene	ND		66	µg/Kg-dry	1	10/6/2012 06:57 AM
o-Xylene	ND		33	µg/Kg-dry	1	10/6/2012 06:57 AM
Toluene	ND		33	µg/Kg-dry	1	10/6/2012 06:57 AM
Xylenes, Total	ND		98	µg/Kg-dry	1	10/6/2012 06:57 AM
Surr: 1,2-Dichloroethane-d4	*100*		*70-130*	*%REC*	1	10/6/2012 06:57 AM
Surr: 4-Bromofluorobenzene	*99.5*		*70-130*	*%REC*	1	10/6/2012 06:57 AM
Surr: Dibromofluoromethane	*97.5*		*70-130*	*%REC*	1	10/6/2012 06:57 AM
Surr: Toluene-d8	*99.6*		*70-130*	*%REC*	1	10/6/2012 06:57 AM
ELECTRICAL CONDUCTIVITY (SAR)			**USDA H60 METHO**		Prep Date: **10/9/2012**	Analyst: **JB**
Electrical Conductivity @ Saturation	**130**		**0.025**	**mmhos/cm @25**	5	10/9/2012 03:15 PM
CHROMIUM, TRIVALENT			**CALCULATION**			Analyst: **JJG**
Chromium, Trivalent	**11**		**0.55**	**mg/Kg-dry**	1	10/11/2012 08:40 AM
CHROMIUM, HEXAVALENT			**SW7196A**		Prep Date: **10/9/2012**	Analyst: **MB**
Chromium, Hexavalent	ND		0.54	mg/Kg-dry	1	10/10/2012 01:50 PM
MOISTURE			**A2540 G**			Analyst: **LR**
Moisture	**8.4**		**0.050**	**% of sample**	1	10/5/2012 01:30 PM
PH			**SW9045D**			Analyst: **KF**
pH	**7.86**			**s.u.**	1	10/5/2012 09:45 AM

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

ALS Group USA, Corp

Date: *12-Oct-12*

Client: HRL Compliance Solutions
Project: WPX Western Half Pit Closure 10/4/12 **Work Order:** 1210189
Sample ID: Western Pit Half West Wall **Lab ID:** 1210189-04
Collection Date: 10/4/2012 11:20 AM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID			**SW8015M**		Prep Date: **10/8/2012**	Analyst: **CW**
DRO (C10-C28)	**60**		**17**	**mg/Kg-dry**	1	10/9/2012 02:21 PM
Surr: 4-Terphenyl-d14	*63.4*		*39-115*	*%REC*	1	10/9/2012 02:21 PM
GASOLINE RANGE ORGANICS BY GC-FID			**SW8015**			Analyst: **CW**
GRO (C6-C10)	ND		10	mg/Kg-dry	50	10/5/2012 05:44 PM
Surr: Toluene-d8	*109*		*50-150*	*%REC*	50	10/5/2012 05:44 PM
MERCURY BY CVAA			**SW7471**		Prep Date: **10/8/2012**	Analyst: **LR**
Mercury	**0.11**		**0.063**	**mg/Kg-dry**	1	10/9/2012 12:50 PM
METALS BY ICP-MS			**SW6020A**		Prep Date: **10/8/2012**	Analyst: **CES**
Arsenic	**21**		**3.1**	**mg/Kg-dry**	2	10/8/2012 10:22 PM
Barium	**870**		**3.1**	**mg/Kg-dry**	2	10/8/2012 10:22 PM
Cadmium	**2.1**		**1.2**	**mg/Kg-dry**	2	10/8/2012 10:22 PM
Chromium	**37**		**3.1**	**mg/Kg-dry**	2	10/8/2012 10:22 PM
Copper	**39**		**3.1**	**mg/Kg-dry**	2	10/8/2012 10:22 PM
Lead	**41**		**3.1**	**mg/Kg-dry**	2	10/8/2012 10:22 PM
Nickel	**45**		**3.1**	**mg/Kg-dry**	2	10/8/2012 10:22 PM
Selenium	ND		3.1	mg/Kg-dry	2	10/8/2012 10:22 PM
Silver	ND		3.1	mg/Kg-dry	2	10/8/2012 10:22 PM
Zinc	**170**		**6.2**	**mg/Kg-dry**	2	10/8/2012 10:22 PM
SOLUBLE CATIONS FOR SAR			**SW6020A**		Prep Date: **10/9/2012**	Analyst: **CES**
Calcium	**3,100**		**200**	**mg/L-dry**	100	10/10/2012 12:59 PM
Magnesium	**110**		**8.1**	**mg/L-dry**	10	10/9/2012 06:41 PM
Sodium	**15,000**		**81**	**mg/L-dry**	100	10/10/2012 12:59 PM
SODIUM ADSORPTION RATIO			**USDA H60 METHO**		Prep Date: **10/9/2012**	Analyst: **CES**
Sodium Adsorption Ratio	**36**		**0.010**	**none**	1	10/10/2012
SEMI-VOLATILE ORGANIC COMPOUNDS			**SW8270**		Prep Date: **10/8/2012**	Analyst: **HL**
Acenaphthene	ND		60	µg/Kg-dry	1	10/10/2012 12:54 PM
Anthracene	ND		60	µg/Kg-dry	1	10/10/2012 12:54 PM
Benzo(a)anthracene	ND		69	µg/Kg-dry	1	10/10/2012 12:54 PM
Benzo(a)pyrene	ND		69	µg/Kg-dry	1	10/10/2012 12:54 PM
Benzo(b)fluoranthene	ND		73	µg/Kg-dry	1	10/10/2012 12:54 PM
Benzo(g,h,i)perylene	ND		110	µg/Kg-dry	1	10/10/2012 12:54 PM
Benzo(k)fluoranthene	ND		73	µg/Kg-dry	1	10/10/2012 12:54 PM
Chrysene	ND		60	µg/Kg-dry	1	10/10/2012 12:54 PM
Dibenzo(a,h)anthracene	ND		73	µg/Kg-dry	1	10/10/2012 12:54 PM
Fluoranthene	ND		60	µg/Kg-dry	1	10/10/2012 12:54 PM
Fluorene	ND		60	µg/Kg-dry	1	10/10/2012 12:54 PM

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

ALS Group USA, Corp

Date: *12-Oct-12*

Client: HRL Compliance Solutions
Project: WPX Western Half Pit Closure 10/4/12 **Work Order:** 1210189
Sample ID: Western Pit Half West Wall **Lab ID:** 1210189-04
Collection Date: 10/4/2012 11:20 AM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Indeno(1,2,3-cd)pyrene	ND		81	µg/Kg-dry	1	10/10/2012 12:54 PM
Naphthalene	**110**		**60**	**µg/Kg-dry**	1	10/10/2012 12:54 PM
Pyrene	ND		60	µg/Kg-dry	1	10/10/2012 12:54 PM
Surr: 2-Fluorobiphenyl	*70.1*		*12-100*	*%REC*	1	10/10/2012 12:54 PM
Surr: 4-Terphenyl-d14	*99.1*		*25-137*	*%REC*	1	10/10/2012 12:54 PM
Surr: Nitrobenzene-d5	*79.0*		*37-107*	*%REC*	1	10/10/2012 12:54 PM
VOLATILE ORGANIC COMPOUNDS			**SW8260**		Prep Date: **10/5/2012**	Analyst: **BG**
Benzene	ND		120	µg/Kg-dry	1	10/6/2012 07:21 AM
Ethylbenzene	ND		120	µg/Kg-dry	1	10/6/2012 07:21 AM
m,p-Xylene	**440**		**240**	**µg/Kg-dry**	1	10/6/2012 07:21 AM
o-Xylene	ND		120	µg/Kg-dry	1	10/6/2012 07:21 AM
Toluene	ND		120	µg/Kg-dry	1	10/6/2012 07:21 AM
Xylenes, Total	**440**		**360**	**µg/Kg-dry**	1	10/6/2012 07:21 AM
Surr: 1,2-Dichloroethane-d4	*102*		*70-130*	*%REC*	1	10/6/2012 07:21 AM
Surr: 4-Bromofluorobenzene	*99.0*		*70-130*	*%REC*	1	10/6/2012 07:21 AM
Surr: Dibromofluoromethane	*103*		*70-130*	*%REC*	1	10/6/2012 07:21 AM
Surr: Toluene-d8	*100*		*70-130*	*%REC*	1	10/6/2012 07:21 AM
ELECTRICAL CONDUCTIVITY (SAR)			**USDA H60 METHO**		Prep Date: **10/9/2012**	Analyst: **JB**
Electrical Conductivity @ Saturation	**22**		**0.050**	**mmhos/cm @25**	10	10/9/2012 03:15 PM
CHROMIUM, TRIVALENT			**CALCULATION**			Analyst: **JJG**
Chromium, Trivalent	**37**		**2.0**	**mg/Kg-dry**	1	10/11/2012 08:40 AM
CHROMIUM, HEXAVALENT			**SW7196A**		Prep Date: **10/9/2012**	Analyst: **MB**
Chromium, Hexavalent	ND		2.0	mg/Kg-dry	1	10/10/2012 01:50 PM
MOISTURE			**A2540 G**			Analyst: **LR**
Moisture	**75**		**0.050**	**% of sample**	1	10/5/2012 01:30 PM
PH			**SW9045D**			Analyst: **KF**
pH	**8.18**			**s.u.**	1	10/5/2012 09:45 AM

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

ALS Group USA, Corp

Date: *12-Oct-12*

Client: HRL Compliance Solutions
Project: WPX Western Half Pit Closure 10/4/12 **Work Order:** 1210189
Sample ID: Western Pit Half Bottom **Lab ID:** 1210189-05
Collection Date: 10/4/2012 11:30 AM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID			**SW8015M**		Prep Date: **10/8/2012**	Analyst: **CW**
DRO (C10-C28)	**51**		**4.5**	**mg/Kg-dry**	1	10/9/2012 02:48 PM
Surr: 4-Terphenyl-d14	*97.9*		*39-115*	*%REC*	1	10/9/2012 02:48 PM
GASOLINE RANGE ORGANICS BY GC-FID			**SW8015**			Analyst: **CW**
GRO (C6-C10)	ND		2.7	mg/Kg-dry	50	10/8/2012 02:26 PM
Surr: Toluene-d8	*110*		*50-150*	*%REC*	50	10/8/2012 02:26 PM
MERCURY BY CVAA			**SW7471**		Prep Date: **10/8/2012**	Analyst: **LR**
Mercury	**0.035**		**0.021**	**mg/Kg-dry**	1	10/9/2012 12:52 PM
METALS BY ICP-MS			**SW6020A**		Prep Date: **10/8/2012**	Analyst: **CES**
Arsenic	**7.3**		**0.90**	**mg/Kg-dry**	2	10/8/2012 10:28 PM
Barium	**380**		**9.0**	**mg/Kg-dry**	20	10/9/2012 04:02 PM
Cadmium	**1.3**		**0.36**	**mg/Kg-dry**	2	10/8/2012 10:28 PM
Chromium	**11**		**0.90**	**mg/Kg-dry**	2	10/8/2012 10:28 PM
Copper	**12**		**0.90**	**mg/Kg-dry**	2	10/8/2012 10:28 PM
Lead	**13**		**0.90**	**mg/Kg-dry**	2	10/8/2012 10:28 PM
Nickel	**15**		**0.90**	**mg/Kg-dry**	2	10/8/2012 10:28 PM
Selenium	**0.91**		**0.90**	**mg/Kg-dry**	2	10/8/2012 10:28 PM
Silver	ND		0.90	mg/Kg-dry	2	10/8/2012 10:28 PM
Zinc	**52**		**1.8**	**mg/Kg-dry**	2	10/8/2012 10:28 PM
SOLUBLE CATIONS FOR SAR			**SW6020A**		Prep Date: **10/9/2012**	Analyst: **CES**
Calcium	**1,500**		**55**	**mg/L-dry**	100	10/10/2012 01:04 PM
Magnesium	**120**		**2.2**	**mg/L-dry**	10	10/9/2012 06:47 PM
Sodium	**15,000**		**22**	**mg/L-dry**	100	10/10/2012 01:04 PM
SODIUM ADSORPTION RATIO			**USDA H60 METHO**		Prep Date: **10/9/2012**	Analyst: **CES**
Sodium Adsorption Ratio	**99**		**0.010**	**none**	1	10/10/2012
SEMI-VOLATILE ORGANIC COMPOUNDS			**SW8270**		Prep Date: **10/8/2012**	Analyst: **HL**
Acenaphthene	ND		16	µg/Kg-dry	1	10/10/2012 12:26 PM
Anthracene	ND		16	µg/Kg-dry	1	10/10/2012 12:26 PM
Benzo(a)anthracene	ND		18	µg/Kg-dry	1	10/10/2012 12:26 PM
Benzo(a)pyrene	ND		18	µg/Kg-dry	1	10/10/2012 12:26 PM
Benzo(b)fluoranthene	ND		19	µg/Kg-dry	1	10/10/2012 12:26 PM
Benzo(g,h,i)perylene	ND		30	µg/Kg-dry	1	10/10/2012 12:26 PM
Benzo(k)fluoranthene	ND		19	µg/Kg-dry	1	10/10/2012 12:26 PM
Chrysene	ND		16	µg/Kg-dry	1	10/10/2012 12:26 PM
Dibenzo(a,h)anthracene	ND		19	µg/Kg-dry	1	10/10/2012 12:26 PM
Fluoranthene	ND		16	µg/Kg-dry	1	10/10/2012 12:26 PM
Fluorene	ND		16	µg/Kg-dry	1	10/10/2012 12:26 PM

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

ALS Group USA, Corp

Date: *12-Oct-12*

Client: HRL Compliance Solutions
Project: WPX Western Half Pit Closure 10/4/12 **Work Order:** 1210189
Sample ID: Western Pit Half Bottom **Lab ID:** 1210189-05
Collection Date: 10/4/2012 11:30 AM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Indeno(1,2,3-cd)pyrene	ND		21	µg/Kg-dry	1	10/10/2012 12:26 PM
Naphthalene	**59**		**16**	**µg/Kg-dry**	1	10/10/2012 12:26 PM
Pyrene	ND		16	µg/Kg-dry	1	10/10/2012 12:26 PM
Surr: 2-Fluorobiphenyl	*59.8*		*12-100*	*%REC*	1	10/10/2012 12:26 PM
Surr: 4-Terphenyl-d14	*84.9*		*25-137*	*%REC*	1	10/10/2012 12:26 PM
Surr: Nitrobenzene-d5	*52.4*		*37-107*	*%REC*	1	10/10/2012 12:26 PM
VOLATILE ORGANIC COMPOUNDS			**SW8260**		Prep Date: **10/5/2012**	Analyst: **BG**
Benzene	ND		33	µg/Kg-dry	1	10/6/2012 08:34 AM
Ethylbenzene	ND		33	µg/Kg-dry	1	10/6/2012 08:34 AM
m,p-Xylene	ND		66	µg/Kg-dry	1	10/6/2012 08:34 AM
o-Xylene	ND		33	µg/Kg-dry	1	10/6/2012 08:34 AM
Toluene	ND		33	µg/Kg-dry	1	10/6/2012 08:34 AM
Xylenes, Total	ND		99	µg/Kg-dry	1	10/6/2012 08:34 AM
Surr: 1,2-Dichloroethane-d4	*103*		*70-130*	*%REC*	1	10/6/2012 08:34 AM
Surr: 4-Bromofluorobenzene	*103*		*70-130*	*%REC*	1	10/6/2012 08:34 AM
Surr: Dibromofluoromethane	*102*		*70-130*	*%REC*	1	10/6/2012 08:34 AM
Surr: Toluene-d8	*99.3*		*70-130*	*%REC*	1	10/6/2012 08:34 AM
ELECTRICAL CONDUCTIVITY (SAR)			**USDA H60 METHO**		Prep Date: **10/9/2012**	Analyst: **JB**
Electrical Conductivity @ Saturation	**73**		**0.012**	**mmhos/cm @25**	2.5	10/9/2012 03:15 PM
CHROMIUM, TRIVALENT			**CALCULATION**			Analyst: **JJG**
Chromium, Trivalent	**11**		**0.55**	**mg/Kg-dry**	1	10/11/2012 08:40 AM
CHROMIUM, HEXAVALENT			**SW7196A**		Prep Date: **10/9/2012**	Analyst: **MB**
Chromium, Hexavalent	ND		0.54	mg/Kg-dry	1	10/10/2012 01:50 PM
MOISTURE			**A2540 G**			Analyst: **LR**
Moisture	**8.8**		**0.050**	**% of sample**	1	10/5/2012 01:30 PM
PH			**SW9045D**			Analyst: **KF**
pH	**8.17**			**s.u.**	1	10/5/2012 09:45 AM

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

QC BATCH REPORT

Batch ID: **43991** Instrument ID **GC8** Method: **SW8015M**

MBLK Sample ID: **DBLKS1-43991-43991** Units: **mg/Kg** Analysis Date: **10/9/2012 09:00 AM**

Client ID: Run ID: **GC8_121009A** SeqNo: **2107578** Prep Date: **10/8/2012** 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	*0.8487*	0	*1.667*	0	*50.9*	*39-115*	0			

LCS Sample ID: **DLCSS1-43991-43991** Units: **mg/Kg** Analysis Date: **10/9/2012 09:26 AM**

Client ID: Run ID: **GC8_121009A** SeqNo: **2107579** Prep Date: **10/8/2012** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	114.9	4.2	166.7	0	69	49-124	0			
Surr: 4-Terphenyl-d14	*1.035*	0	*1.667*	0	*62.1*	*39-115*	0			

MS Sample ID: **1210188-01B MS** Units: **mg/Kg** Analysis Date: **10/9/2012 09:53 AM**

Client ID: Run ID: **GC8_121009A** SeqNo: **2107580** Prep Date: **10/8/2012** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	276.7	8.0	318.6	40.92	74	49-130	0			
Surr: 4-Terphenyl-d14	*2.114*	0	*3.186*	0	*66.4*	*39-115*	0			

MSD Sample ID: **1210188-01B MSD** Units: **mg/Kg** Analysis Date: **10/9/2012 10:20 AM**

Client ID: Run ID: **GC8_121009A** SeqNo: **2107581** Prep Date: **10/8/2012** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	245.7	8.0	319.4	40.92	64.1	49-130	276.7	11.9	30	
Surr: 4-Terphenyl-d14	*2.164*	0	*3.194*	0	*67.8*	*39-115*	2.114	*2.34*	*30*	

The following samples were analyzed in this batch: 1210189-01B, 1210189-02B, 1210189-03B, 1210189-04B, 1210189-05B

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

Client: HRL Compliance Solutions
Work Order: 1210189
Project: WPX Western Half Pit Closure 10/4/12

QC BATCH REPORT

Batch ID: **R110831** Instrument ID **GC10** Method: **SW8015**

MBLK Sample ID: **GBLK2-121005-R110831** Units: **µg/L** Analysis Date: **10/5/2012 11:43 AM**
Client ID: Run ID: **GC10_121005A** SeqNo: **2104486** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	ND	200								
Surr: Toluene-d8	*109.9*	0	*100*	0	*110*	*70-130*	0			

LCS Sample ID: **GLCS2-121005-R110831** Units: **µg/L** Analysis Date: **10/5/2012 11:19 AM**
Client ID: Run ID: **GC10_121005A** SeqNo: **2104485** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	9613	200	10000	0	96.1	70-130	0			
Surr: Toluene-d8	*102.2*	0	*100*	0	*102*	*70-130*	0			

MS Sample ID: **1210120-01A MS** Units: **µg/Kg** Analysis Date: **10/5/2012 08:35 PM**
Client ID: Run ID: **GC10_121005A** SeqNo: **2104513** Prep Date: DF: **50**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	507700	2,500	500000	0	102	70-130	0			
Surr: Toluene-d8	*5117*	0	*5000*	0	*102*	*50-150*	0			

MSD Sample ID: **1210120-01A MSD** Units: **µg/Kg** Analysis Date: **10/5/2012 08:59 PM**
Client ID: Run ID: **GC10_121005A** SeqNo: **2104514** Prep Date: DF: **50**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	491000	2,500	500000	0	98.2	70-130	507700	3.34	30	
Surr: Toluene-d8	*5254*	0	*5000*	0	*105*	*50-150*	5117	*2.64*	*30*	

The following samples were analyzed in this batch: 1210189-01A 1210189-04A

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

Client: HRL Compliance Solutions
Work Order: 1210189
Project: WPX Western Half Pit Closure 10/4/12

QC BATCH REPORT

Batch ID: **R110883** Instrument ID **GC10** Method: **SW8015**

MBLK Sample ID: **GBLK1-121008-R110883** Units: **µg/L** Analysis Date: **10/8/2012 09:58 AM**
Client ID: Run ID: **GC10_121008A** SeqNo: **2105454** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	ND	200								
Surr: Toluene-d8	*117.3*	0	*100*	0	*117*	*70-130*	0			

LCS Sample ID: **GLCS1-121008-R110883** Units: **µg/L** Analysis Date: **10/8/2012 09:34 AM**
Client ID: Run ID: **GC10_121008A** SeqNo: **2105453** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	10200	200	10000	0	102	70-130	0			
Surr: Toluene-d8	*105.6*	0	*100*	0	*106*	*70-130*	0			

MS Sample ID: **1210152-01A MS** Units: **µg/L** Analysis Date: **10/8/2012 06:32 PM**
Client ID: Run ID: **GC10_121008A** SeqNo: **2105955** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	8570	200	10000	232.7	83.4	70-130	0			
Surr: Toluene-d8	*105.5*	0	*100*	0	*105*	*70-130*	0			

MSD Sample ID: **1210152-01A MSD** Units: **µg/L** Analysis Date: **10/8/2012 06:56 PM**
Client ID: Run ID: **GC10_121008A** SeqNo: **2105956** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	8391	200	10000	232.7	81.6	70-130	8570	2.11	30	
Surr: Toluene-d8	*89.69*	0	*100*	0	*89.7*	*70-130*	105.5	*16.2*	*30*	

The following samples were analyzed in this batch: 1210189-02A 1210189-03A 1210189-05A

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

Client: HRL Compliance Solutions
Work Order: 1210189
Project: WPX Western Half Pit Closure 10/4/12

QC BATCH REPORT

Batch ID: **44004** Instrument ID **HG1** Method: **SW7471**

MBLK Sample ID: **MBLK-44004-44004** Units: **mg/Kg** Analysis Date: **10/9/2012 12:23 PM**
Client ID: Run ID: **HG1_121009A** SeqNo: **2106832** Prep Date: **10/8/2012** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.001333	0.020								J

LCS Sample ID: **LCS-44004-44004** Units: **mg/Kg** Analysis Date: **10/9/2012 12:25 PM**
Client ID: Run ID: **HG1_121009A** SeqNo: **2106833** Prep Date: **10/8/2012** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.1499	0.020	0.1665	0	90	80-120	0			

MS Sample ID: **1210189-01BMS** Units: **mg/Kg** Analysis Date: **10/9/2012 12:36 PM**
Client ID: **Western Pit Half North Wall** Run ID: **HG1_121009A** SeqNo: **2106847** Prep Date: **10/8/2012** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.1583	0.017	0.1411	0.03381	88.3	75-125	0			

MSD Sample ID: **1210189-01BMSD** Units: **mg/Kg** Analysis Date: **10/9/2012 12:38 PM**
Client ID: **Western Pit Half North Wall** Run ID: **HG1_121009A** SeqNo: **2106849** Prep Date: **10/8/2012** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.1591	0.017	0.1425	0.03381	87.9	75-125	0.1583	0.502	35	

The following samples were analyzed in this batch:

1210189-01B	1210189-02B	1210189-03B
1210189-04B	1210189-05B	

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

Client: HRL Compliance Solutions
Work Order: 1210189
Project: WPX Western Half Pit Closure 10/4/12

QC BATCH REPORT

Batch ID: **43980** Instrument ID **ICPMS1** Method: **SW6020A** **(Dissolve)**

DUP Sample ID: **1210191-02A DUP** Units: **mg/L** Analysis Date: **10/9/2012 07:04 PM**
Client ID: Run ID: **ICPMS1_121009A** SeqNo: **2107528** Prep Date: **10/9/2012** DF: **10**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Magnesium	1298	2.0	0	0	0	0-0	1199	7.93		

DUP Sample ID: **1210191-02A DUP** Units: **mg/L** Analysis Date: **10/10/2012 01:32 PM**
Client ID: Run ID: **ICPMS1_121010A** SeqNo: **2108104** Prep Date: **10/9/2012** DF: **100**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	2791	50	0	0	0	0-0	2627	6.05		
Sodium	6010	20	0	0	0	0-0	5478	9.26		

DUP Sample ID: **1210191-02A DUP** Units: **none** Analysis Date: **10/10/2012**
Client ID: Run ID: **SAR_121010A** SeqNo: **2108111** Prep Date: **10/9/2012** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sodium Adsorption Ratio	23.57	0.010	0	0	0		22.23	5.83	50	

The following samples were analyzed in this batch:

1210189-01C	1210189-02C	1210189-03C
1210189-04C	1210189-05C	1210189-08B

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

Client: HRL Compliance Solutions
Work Order: 1210189
Project: WPX Western Half Pit Closure 10/4/12

QC BATCH REPORT

Batch ID: **44003** Instrument ID **ICPMS1** Method: **SW6020A**

MBLK Sample ID: **MBLK-44003-44003** Units: **mg/Kg** Analysis Date: **10/8/2012 07:39 PM**
Client ID: Run ID: **ICPMS1_121008A** SeqNo: **2106619** Prep Date: **10/8/2012** 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	0.01056	0.25								J
Cadmium	0.01841	0.10								J
Chromium	0.01653	0.25								J
Copper	0.0109	0.25								J
Lead	ND	0.25								
Nickel	0.01062	0.25								J
Selenium	ND	0.25								
Silver	ND	0.25								
Zinc	ND	0.50								

LCS Sample ID: **LCS-44003-44003** Units: **mg/Kg** Analysis Date: **10/8/2012 07:45 PM**
Client ID: Run ID: **ICPMS1_121008A** SeqNo: **2106620** Prep Date: **10/8/2012** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	4.564	0.25	5	0	91.3	80-120	0			
Barium	5.18	0.25	5	0	104	80-120	0			
Cadmium	5.24	0.10	5	0	105	80-120	0			
Chromium	4.965	0.25	5	0	99.3	80-120	0			
Copper	5.065	0.25	5	0	101	80-120	0			
Lead	5.15	0.25	5	0	103	80-120	0			
Nickel	5.075	0.25	5	0	102	80-120	0			
Selenium	4.34	0.25	5	0	86.8	80-120	0			
Silver	5.225	0.25	5	0	104	80-120	0			
Zinc	4.659	0.50	5	0	93.2	80-120	0			

MS Sample ID: **1210192-01BMS** Units: **mg/Kg** Analysis Date: **10/9/2012 12:38 AM**
Client ID: Run ID: **ICPMS1_121008A** SeqNo: **2106665** Prep Date: **10/8/2012** DF: **2**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	10.87	0.73	7.289	4.471	87.8	75-125	0			
Cadmium	7.334	0.29	7.289	0.2385	97.3	75-125	0			
Copper	21.33	0.73	7.289	12.8	117	75-125	0			
Lead	25.48	0.73	7.289	16.58	122	75-125	0			
Selenium	7.172	0.73	7.289	0.9825	84.9	75-125	0			
Silver	6.236	0.73	7.289	0.06757	84.6	75-125	0			

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

Client: HRL Compliance Solutions
Work Order: 1210189
Project: WPX Western Half Pit Closure 10/4/12

QC BATCH REPORT

Batch ID: **44003** Instrument ID **ICPMS1** Method: **SW6020A**

MS Sample ID: **1210192-01BMS** Units: **mg/Kg** Analysis Date: **10/9/2012 04:13 PM**
Client ID: Run ID: **ICPMS1_121009A** SeqNo: **2107346** Prep Date: **10/8/2012** DF: **10**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Barium	510.7	3.6	7.289	414.6	1320	75-125	0			SO
Chromium	32.87	3.6	7.289	31.24	22.4	75-125	0			SO
Nickel	22.51	3.6	7.289	19.61	39.8	75-125	0			S
Zinc	59.31	7.3	7.289	60.26	-13.1	75-125	0			SO

MSD Sample ID: **1210192-01BMSD** Units: **mg/Kg** Analysis Date: **10/9/2012 12:43 AM**
Client ID: Run ID: **ICPMS1_121008A** SeqNo: **2106666** Prep Date: **10/8/2012** DF: **2**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	10.37	0.76	7.61	4.471	77.6	75-125	10.87	4.69	25	
Cadmium	7.732	0.30	7.61	0.2385	98.5	75-125	7.334	5.29	25	
Copper	18.72	0.76	7.61	12.8	77.8	75-125	21.33	13	25	
Selenium	7.356	0.76	7.61	0.9825	83.8	75-125	7.172	2.54	25	
Silver	6.788	0.76	7.61	0.06757	88.3	75-125	6.236	8.48	25	

MSD Sample ID: **1210192-01BMSD** Units: **mg/Kg** Analysis Date: **10/9/2012 04:18 PM**
Client ID: Run ID: **ICPMS1_121009A** SeqNo: **2107347** Prep Date: **10/8/2012** DF: **10**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Barium	487.6	3.8	7.61	414.6	959	75-125	510.7	4.63	25	SO
Chromium	37.56	3.8	7.61	31.24	83	75-125	32.87	13.3	25	O
Lead	21.86	3.8	7.61	16.31	73	75-125	23.55	7.42	25	S
Nickel	27.77	3.8	7.61	19.61	107	75-125	22.51	20.9	25	
Zinc	65.65	7.6	7.61	60.26	70.9	75-125	59.31	10.2	25	SO

The following samples were analyzed in this batch:

1210189-01B	1210189-02B	1210189-03B
1210189-04B	1210189-05B	1210189-06A
1210189-07A	1210189-08A	

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

Client: HRL Compliance Solutions
Work Order: 1210189
Project: WPX Western Half Pit Closure 10/4/12

QC BATCH REPORT

Batch ID: **43990** Instrument ID **SVMS5** Method: **SW8270**

MBLK Sample ID: **SBLKS1-43990-43990** Units: **µg/Kg** Analysis Date: **10/9/2012 11:09 PM**
Client ID: Run ID: **SVMS5_121009A** SeqNo: **2107932** Prep Date: **10/8/2012** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	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								
Surr: 2-Fluorobiphenyl	*1288*	0	*1667*	0	*77.3*	*12-100*	0			
Surr: 4-Terphenyl-d14	*1808*	0	*1667*	0	*108*	*25-137*	0			
Surr: Nitrobenzene-d5	*1452*	0	*1667*	0	*87.1*	*37-107*	0			

LCS Sample ID: **SLCSS1-43990-43990** Units: **µg/Kg** Analysis Date: **10/9/2012 10:09 PM**
Client ID: Run ID: **SVMS5_121009A** SeqNo: **2108443** Prep Date: **10/8/2012** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	608.7	30	666.7	0	91.3	45-110	0			
Anthracene	652	30	666.7	0	97.8	55-105	0			
Benzo(a)anthracene	706.7	30	666.7	0	106	50-110	0			
Benzo(a)pyrene	703.3	30	666.7	0	105	50-110	0			
Benzo(b)fluoranthene	698.3	30	666.7	0	105	45-115	0			
Benzo(g,h,i)perylene	769	30	666.7	0	115	40-125	0			
Benzo(k)fluoranthene	702	30	666.7	0	105	45-115	0			
Chrysene	649.7	30	666.7	0	97.4	55-110	0			
Dibenzo(a,h)anthracene	657.7	30	666.7	0	98.6	40-125	0			
Fluoranthene	701.3	30	666.7	0	105	55-115	0			
Fluorene	673.3	30	666.7	0	101	50-110	0			
Indeno(1,2,3-cd)pyrene	782.7	30	666.7	0	117	40-120	0			
Naphthalene	607	30	666.7	0	91	40-105	0			
Pyrene	698.3	30	666.7	0	105	45-125	0			
Surr: 2-Fluorobiphenyl	*1313*	0	*1667*	0	*78.8*	*12-100*	0			
Surr: 4-Terphenyl-d14	*1878*	0	*1667*	0	*113*	*25-137*	0			
Surr: Nitrobenzene-d5	*1475*	0	*1667*	0	*88.5*	*37-107*	0			

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

Client: HRL Compliance Solutions
Work Order: 1210189
Project: WPX Western Half Pit Closure 10/4/12

QC BATCH REPORT

Batch ID: **43990** Instrument ID **SVMS5** Method: **SW8270**

MS Sample ID: **1210188-01B MS** Units: **µg/Kg** Analysis Date: **10/10/2012 01:51 AM**
Client ID: Run ID: **SVMS5_121009A** SeqNo: **2108444** Prep Date: **10/8/2012** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	1134	59	1305	0	86.9	45-110	0			
Anthracene	1231	59	1305	0	94.3	55-105	0			
Benzo(a)anthracene	1315	59	1305	0	101	50-110	0			
Benzo(a)pyrene	1264	59	1305	0	96.8	50-110	0			
Benzo(b)fluoranthene	1220	59	1305	0	93.5	45-115	0			
Benzo(g,h,i)perylene	1334	59	1305	0	102	40-125	0			
Benzo(k)fluoranthene	1363	59	1305	0	104	45-115	0			
Chrysene	1362	59	1305	0	104	55-110	0			
Dibenzo(a,h)anthracene	1137	59	1305	0	87.1	40-125	0			
Fluoranthene	1276	59	1305	0	97.7	55-115	0			
Fluorene	1277	59	1305	0	97.8	50-110	0			
Indeno(1,2,3-cd)pyrene	1331	59	1305	0	102	40-120	0			
Naphthalene	1158	59	1305	0	88.7	40-105	0			
Pyrene	1384	59	1305	0	106	45-125	0			
Surr: 2-Fluorobiphenyl	*2412*	0	*3263*	0	*73.9*	*12-100*	0			
Surr: 4-Terphenyl-d14	*3677*	0	*3263*	0	*113*	*25-137*	0			
Surr: Nitrobenzene-d5	*2645*	0	*3263*	0	*81.1*	*37-107*	0			

MSD Sample ID: **1210188-01B MSD** Units: **µg/Kg** Analysis Date: **10/10/2012 02:21 AM**
Client ID: Run ID: **SVMS5_121009A** SeqNo: **2108445** Prep Date: **10/8/2012** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	1108	59	1319	0	84	45-110	1134	2.3	30	
Anthracene	1198	59	1319	0	90.8	55-105	1231	2.7	30	
Benzo(a)anthracene	1305	59	1319	0	99	50-110	1315	0.722	30	
Benzo(a)pyrene	1234	59	1319	0	93.5	50-110	1264	2.44	30	
Benzo(b)fluoranthene	1242	59	1319	0	94.2	45-115	1220	1.78	30	
Benzo(g,h,i)perylene	1337	59	1319	0	101	40-125	1334	0.195	30	
Benzo(k)fluoranthene	1357	59	1319	0	103	45-115	1363	0.465	30	
Chrysene	1352	59	1319	0	102	55-110	1362	0.759	30	
Dibenzo(a,h)anthracene	1144	59	1319	0	86.7	40-125	1137	0.57	30	
Fluoranthene	1244	59	1319	0	94.3	55-115	1276	2.51	30	
Fluorene	1255	59	1319	0	95.2	50-110	1277	1.72	30	
Indeno(1,2,3-cd)pyrene	1338	59	1319	0	101	40-120	1331	0.489	30	
Naphthalene	1111	59	1319	0	84.2	40-105	1158	4.17	30	
Pyrene	1385	59	1319	0	105	45-125	1384	0.0823	30	
Surr: 2-Fluorobiphenyl	*2393*	0	*3296*	0	*72.6*	*12-100*	2412	*0.799*	*40*	
Surr: 4-Terphenyl-d14	*3714*	0	*3296*	0	*113*	*25-137*	3677	*0.994*	*40*	
Surr: Nitrobenzene-d5	*2584*	0	*3296*	0	*78.4*	*37-107*	2645	*2.33*	*40*	

The following samples were analyzed in this batch: 1210189-01B 1210189-02B 1210189-03B 1210189-04B 1210189-05B

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

Client: HRL Compliance Solutions
Work Order: 1210189
Project: WPX Western Half Pit Closure 10/4/12

QC BATCH REPORT

Batch ID: **43977** Instrument ID **VMS9** Method: **SW8260**

MBLK Sample ID: **MBLK-43977-43977** Units: **µg/Kg** Analysis Date: **10/5/2012 05:15 PM**
Client ID: Run ID: **VMS9_121005A** SeqNo: **2105088** Prep Date: **10/5/2012** 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	*988*	0	*1000*	0	*98.8*	*70-130*	0			
Surr: 4-Bromofluorobenzene	*868*	0	*1000*	0	*86.8*	*70-130*	0			
Surr: Dibromofluoromethane	*915.5*	0	*1000*	0	*91.6*	*70-130*	0			
Surr: Toluene-d8	*942.5*	0	*1000*	0	*94.2*	*70-130*	0			

MBLK Sample ID: **MBLK-43977-43977** Units: **µg/Kg** Analysis Date: **10/6/2012 01:15 AM**
Client ID: Run ID: **VMS5_121005A** SeqNo: **2105812** Prep Date: **10/5/2012** 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	*1036*	0	*1000*	0	*104*	*70-130*	0			
Surr: 4-Bromofluorobenzene	*1026*	0	*1000*	0	*103*	*70-130*	0			
Surr: Dibromofluoromethane	*1016*	0	*1000*	0	*102*	*70-130*	0			
Surr: Toluene-d8	*1020*	0	*1000*	0	*102*	*70-130*	0			

LCS Sample ID: **LCS-43977-43977** Units: **µg/Kg** Analysis Date: **10/5/2012 03:59 PM**
Client ID: Run ID: **VMS9_121005A** SeqNo: **2105087** Prep Date: **10/5/2012** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	919.5	30	1000	0	92	75-125	0			
Ethylbenzene	1036	30	1000	0	104	75-125	0			
m,p-Xylene	1932	60	2000	0	96.6	80-125	0			
o-Xylene	1064	30	1000	0	106	75-125	0			
Toluene	967.5	30	1000	0	96.8	70-125	0			
Xylenes, Total	2996	90	3000	0	99.9	75-125	0			
Surr: 1,2-Dichloroethane-d4	*928*	0	*1000*	0	*92.8*	*70-130*	0			
Surr: 4-Bromofluorobenzene	*1044*	0	*1000*	0	*104*	*70-130*	0			
Surr: Dibromofluoromethane	*1020*	0	*1000*	0	*102*	*70-130*	0			
Surr: Toluene-d8	*999*	0	*1000*	0	*99.9*	*70-130*	0			

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

Client: HRL Compliance Solutions
Work Order: 1210189
Project: WPX Western Half Pit Closure 10/4/12

QC BATCH REPORT

Batch ID: **43977** Instrument ID **VMS9** Method: **SW8260**

LCS Sample ID: **LCS-43977-43977** Units: **µg/Kg** Analysis Date: **10/6/2012 12:01 PM**
Client ID: Run ID: **VMS5_121005A** SeqNo: **2105825** Prep Date: **10/5/2012** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	1100	30	1000	0	110	75-125	0			
Ethylbenzene	1098	30	1000	0	110	75-125	0			
m,p-Xylene	2168	60	2000	0	108	80-125	0			
o-Xylene	1078	30	1000	0	108	75-125	0			
Toluene	1058	30	1000	0	106	70-125	0			
Xylenes, Total	3246	90	3000	0	108	75-125	0			
Surr: 1,2-Dichloroethane-d4	*1005*	0	*1000*	0	*100*	*70-130*	0			
Surr: 4-Bromofluorobenzene	*1010*	0	*1000*	0	*101*	*70-130*	0			
Surr: Dibromofluoromethane	*1018*	0	*1000*	0	*102*	*70-130*	0			
Surr: Toluene-d8	*993*	0	*1000*	0	*99.3*	*70-130*	0			

MS Sample ID: **1210155-01A MS** Units: **µg/Kg** Analysis Date: **10/6/2012 08:58 AM**
Client ID: Run ID: **VMS5_121005A** SeqNo: **2105823** Prep Date: **10/5/2012** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	994.5	30	1000	0	99.4	75-125	0			
Ethylbenzene	1022	30	1000	0	102	75-125	0			
m,p-Xylene	2070	60	2000	47.5	101	80-125	0			
o-Xylene	1023	30	1000	0	102	75-125	0			
Toluene	994	30	1000	0	99.4	70-125	0			
Xylenes, Total	3092	90	3000	47.5	102	75-125	0			
Surr: 1,2-Dichloroethane-d4	*991.5*	0	*1000*	0	*99.2*	*70-130*	0			
Surr: 4-Bromofluorobenzene	*1054*	0	*1000*	0	*105*	*70-130*	0			
Surr: Dibromofluoromethane	*985.5*	0	*1000*	0	*98.6*	*70-130*	0			
Surr: Toluene-d8	*999.5*	0	*1000*	0	*100*	*70-130*	0			

MSD Sample ID: **1210155-01A MSD** Units: **µg/Kg** Analysis Date: **10/6/2012 09:22 AM**
Client ID: Run ID: **VMS5_121005A** SeqNo: **2105824** Prep Date: **10/5/2012** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	974	30	1000	0	97.4	75-125	994.5	2.08	30	
Ethylbenzene	1028	30	1000	0	103	75-125	1022	0.586	30	
m,p-Xylene	2076	60	2000	47.5	101	80-125	2070	0.314	30	
o-Xylene	1016	30	1000	0	102	75-125	1023	0.637	30	
Toluene	975	30	1000	0	97.5	70-125	994	1.93	30	
Xylenes, Total	3092	90	3000	47.5	102	75-125	3092	0	30	
Surr: 1,2-Dichloroethane-d4	*982.5*	0	*1000*	0	*98.2*	*70-130*	991.5	*0.912*	*30*	
Surr: 4-Bromofluorobenzene	*1026*	0	*1000*	0	*103*	*70-130*	1054	*2.74*	*30*	
Surr: Dibromofluoromethane	*993*	0	*1000*	0	*99.3*	*70-130*	985.5	*0.758*	*30*	
Surr: Toluene-d8	*994*	0	*1000*	0	*99.4*	*70-130*	999.5	*0.552*	*30*	

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

Client: HRL Compliance Solutions
Work Order: 1210189
Project: WPX Western Half Pit Closure 10/4/12

QC BATCH REPORT

Batch ID: **43977** Instrument ID **VMS9** Method: **SW8260**

The following samples were analyzed in this batch:

1210189-01A	1210189-02A	1210189-03A
1210189-04A	1210189-05A	

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

Client: HRL Compliance Solutions
Work Order: 1210189
Project: WPX Western Half Pit Closure 10/4/12

QC BATCH REPORT

Batch ID: **43980** Instrument ID **WETCHEM** Method: **USDA H60 Method**

DUP Sample ID: **1210191-02A DUP** Units: **mmhos/cm @25°F** Analysis Date: **10/9/2012 03:15 PM**

Client ID: Run ID: **WETCHEM_121009M** SeqNo: **2107256** Prep Date: **10/9/2012** DF: **10**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Electrical Conductivity @ Saturation	56.6	0.050	0	0	0		53	6.57	50	

The following samples were analyzed in this batch:

1210189-01C	1210189-02C	1210189-03C
1210189-04C	1210189-05C	1210189-08B

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

Client: HRL Compliance Solutions
Work Order: 1210189
Project: WPX Western Half Pit Closure 10/4/12

QC BATCH REPORT

Batch ID: **44037** Instrument ID **WETCHEM** Method: **SW7196A**

MBLK Sample ID: **MBLK-44037-44037** Units: **mg/Kg** Analysis Date: **10/10/2012 01:50 PM**
Client ID: Run ID: **WETCHEM_121010G** SeqNo: **2108215** Prep Date: **10/9/2012** 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-44037-44037** Units: **mg/Kg** Analysis Date: **10/10/2012 01:50 PM**
Client ID: Run ID: **WETCHEM_121010G** SeqNo: **2108214** Prep Date: **10/9/2012** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	1.905	0.50	1.992	0	95.7	75-110	0			

MS Sample ID: **1210192-01B MS** Units: **mg/Kg** Analysis Date: **10/10/2012 01:50 PM**
Client ID: Run ID: **WETCHEM_121010G** SeqNo: **2108211** Prep Date: **10/9/2012** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	1.841	0.49	1.976	0.1584	85.1	60-130	0			

MSD Sample ID: **1210192-01B MSD** Units: **mg/Kg** Analysis Date: **10/10/2012 01:50 PM**
Client ID: Run ID: **WETCHEM_121010G** SeqNo: **2108212** Prep Date: **10/9/2012** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	1.826	0.49	1.961	0.1584	85.1	60-130	1.841	0.787	30	

The following samples were analyzed in this batch:

1210189-01B	1210189-02B	1210189-03B
1210189-04B	1210189-05B	

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

Client: HRL Compliance Solutions
Work Order: 1210189
Project: WPX Western Half Pit Closure 10/4/12

QC BATCH REPORT

Batch ID: **R110799** Instrument ID **WETCHEM** Method: **SW9045D**

LCS Sample ID: **LCS-R110799-R110799** Units: **s.u.** Analysis Date: **10/5/2012 09:45 AM**
Client ID: Run ID: **WETCHEM_121005H** SeqNo: **2103756** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	4.21	0	4.4	0	95.7	90-110	0			

DUP Sample ID: **1210188-01B DUP** Units: **s.u.** Analysis Date: **10/5/2012 09:45 AM**
Client ID: Run ID: **WETCHEM_121005H** SeqNo: **2103758** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	8.93	0	0	0	0	0-0	8.93	0	20	

The following samples were analyzed in this batch:

1210189-01B	1210189-02B	1210189-03B
1210189-04B	1210189-05B	1210189-08A

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

Client: HRL Compliance Solutions
Work Order: 1210189
Project: WPX Western Half Pit Closure 10/4/12

QC BATCH REPORT

Batch ID: **R110857** Instrument ID **MOIST** Method: **A2540 G**

MBLK Sample ID: **WBLKS1-R110857** Units: **% of sample** Analysis Date: **10/5/2012 01:30 PM**
Client ID: Run ID: **MOIST_121005D** SeqNo: **2105061** 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-R110857** Units: **% of sample** Analysis Date: **10/5/2012 01:30 PM**
Client ID: Run ID: **MOIST_121005D** SeqNo: **2105056** 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: **1210105-04A DUP** Units: **% of sample** Analysis Date: **10/5/2012 01:30 PM**
Client ID: Run ID: **MOIST_121005D** SeqNo: **2105041** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	5.95	0.050	0	0	0	0-0	5.7	4.29	20	

DUP Sample ID: **1210189-02B DUP** Units: **% of sample** Analysis Date: **10/5/2012 01:30 PM**
Client ID: **Western Pit Half East Wall** Run ID: **MOIST_121005D** SeqNo: **2105045** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	1.74	0.050	0	0	0	0-0	1.72	1.16	20	

The following samples were analyzed in this batch:

1210189-01B	1210189-02B	1210189-03B
1210189-04B	1210189-05B	1210189-06A
1210189-07A	1210189-08A	

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 # 1210189

		SAMPLER	Reed Wold	DATE	10/4/2012	PAGE	1 of 1
PROJECT NAME	WPX Suicide ~~West Half Pit~~ Closure Western Pit Half	SITE ID	Suicide Pit	TURNAROUND	5 day	DISPOSAL	By Lab or Return to Client
PROJECT No.		EDD FORMAT					
		PURCHASE ORDER					
COMPANY NAME	HRL Compliance	BILL TO COMPANY	WPX				
SEND REPORT TO	Mark Mumby	INVOICE ATTN TO	Karolina Blaney				
ADDRESS	2385 F 1/2 Rd	ADDRESS	1058 Co Rd 215				
CITY / STATE / ZIP	Grand Junction, CO 81506	CITY / STATE / ZIP	Parachure CO 81635				
PHONE	970-243-3271	PHONE	970-683-2295				
FAX	970-243-3280	FAX					
E-MAIL	mmumby@hrlcomp.com rwold@hrlcomp.com krowe@hrlcomp.com	E-MAIL	Karolina.blaney@wpxenergy.com				

Lab ID	Field ID	Matrix	Sample Date	Sample Time	# Bottles	Pres.	QC	BTEX/ GRO	DRO/ PAH/ Metals (table 910-1)	SAR/ Ec/ pH	Arsenic
1	Western Pit Half Suicide Pit North Wall	SO	10/4/2012	10:50	3	8		X	X	X	
2	Suicide Pit East Wall	SO	10/4/2012	11:00	3	8		X	X	X	
3	Suicide Pit South Wall	SO	10/4/2012	11:10	3	8		X	X	X	
4	Suicide Pit West Wall	SO	10/4/2012	11:20	3	8		X	X	X	
5	Suicide Pit Bottom	SO	10/4/2012	11:30	3	8		X	X	X	
6	Suicide Pit BKGD 1	SO	10/4/2012	12:00	1	8					X
7	Suicide Pit BKGD 2	SO	10/4/2012	12:10	1	8					X
8	Suicide Pit BKGD 3	SO	10/4/2012	12:15	2	8				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: 5.0 c

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

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

	SIGNATURE	PRINTED NAME	DATE	TIME
RELINQUISHED BY	Reed Wold	Reed Wold	10/4/12	5:00
RECEIVED BY		Diane F Shaw	10/5/12	0930
RELINQUISHED BY				
RECEIVED BY				
RELINQUISHED BY				
RECEIVED BY				

Ann Preston

From: Kris Rowe [krowe@hrlcomp.com]
Sent: Monday, October 08, 2012 1:22 PM
To: Ann Preston
Subject: RE: 1210189 WPX Suicide West Half Pit Closure 10/4/12 WOA

Ann,

Could you do me a favor, when reporting this analytical, could you remove the work "Suicide" and replace it with "Western Pit Half –"

You can still leave all the North Wall, South Wall, and Pit Bottom.

Feel free to call me with any questions you have

Kris Rowe
Waste Management Project Manager
HRL Compliance Solutions Inc.
2385 F ½ RD
Grand Junction CO 81503
970-261-2015 cell
970-243-3271 office

From: Ann Preston [mailto:Ann.Preston@ALSGlobal.com]
Sent: Saturday, October 06, 2012 9:58 AM
To: Mark Mumby
Cc: Kris Rowe; Ted Brewster; Karolina.blaney@wpxenergy.com; rwold@hrlcomp.com
Subject: 1210189 WPX Suicide West Half Pit Closure 10/4/12 WOA

A project summary for the soil samples we received 10/5/12 is attached. Unless notified otherwise, we will proceed as indicated.

Please contact us if we can be of any further assistance.

Regards,

Ann

Ann L Preston
SENIOR PROJECT MANAGER

ALS | Environmental

ALS Group USA, Corp

Sample Receipt Checklist

Client Name: **HRL** Date/Time Received: **05-Oct-12 09:30**

Work Order: **1210189** Received by: **DS**

Checklist completed by Diane Shaw (eSignature) 05-Oct-12 (Date) Reviewed by: Ann Preston (eSignature) 06-Oct-12 (Date)

Matrices: Soil
Carrier name: FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Temperature(s)/Thermometer(s):	5.0 c		
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:	10/5/2012 11:20:14 AM		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑
pH adjusted?	Yes ☐	No ☐	N/A ☑
pH adjusted by:	-		

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

CorrectiveAction:

CUSTODY SEAL
DATE 10/4/12
SIGNATURE

QEC
Quality Environmental Containers
800-255-3950 • 301-255-3900

FedEx Express US Airbill

FedEx tracking Number 8001 2126 9170

Sender's Copy

1 From *Please print and press hard.*

Date 10.4.12 Sender's FedEx Account Number SENDER'S FEDEX ACCOUNT NUMBER ONLY

Sender's Name Rec J Wold Phone 970 243 3271

Company HCSI

Address 2385 F 1/2 ROAD Dept/Floor/Suite/Room

City GRAND JCT. State CO ZIP 81505

2 Your Internal Billing Reference OPTIONAL
First 24 characters will appear on invoice.

3 To

Recipient's Name SAMPLE RECEIVING Phone (616) 399-6070

Company ALS LABS

Address 3352 128th AVE Dept/Floor/Suite/Room
We cannot deliver to P.O. boxes or P.O. ZIP codes.

Address
Use this line for the HOLD location address or for continuation of your shipping address.

City HOLLAND State MI ZIP 49424

HOLD Weekday
FedEx location address REQUIRED NOT available for FedEx First Overnight.

HOLD Saturday
FedEx location address REQUIRED Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

4 Express Package Service * To most locations.
NOTE: Service order has changed. Please select carefully.

Packages up to 150 lbs.
For packages over 150 lbs., use the new FedEx Express Freight US Airbill.

Next Business Day

- ☐ FedEx First Overnight — Earliest next business morning delivery to select locations. Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- ☑ 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.

2 or 3 Business Days

- ☐ NEW FedEx 2Day A.M. — Second business morning.* Saturday Delivery NOT available.
- ☐ FedEx 2Day — Second business afternoon.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- ☐ FedEx Express Saver — Third business day.* Saturday Delivery NOT available.

5 Packaging * Declared value limit $500.

☐ FedEx Envelope* ☐ FedEx Pak* ☐ FedEx Box ☐ FedEx Tube ☑ Other

6 Special Handling and Delivery Signature Options

☐ SATURDAY Delivery
NOT available for FedEx Standard Overnight, FedEx 2Day A.M., or FedEx Express Saver.

☐ No Signature Required — Package may be left without obtaining a signature for delivery.
☐ Direct Signature — Someone at recipient's address may sign for delivery. *Fee applies.*
☐ Indirect Signature — If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only. *Fee applies.*

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 ____ x ____ kg

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging or placed in a FedEx Express Drop Box. ☐ Cargo Aircraft Only

7 Payment *Bill to:*
Enter FedEx Acct. No. or Credit Card No. below.

☐ Sender Acct. No. in Section 1 will be billed. ☑ Recipient ☐ Third Party ☐ Credit Card ☐ Cash/Check

FedEx Acct. No. / Credit Card No. 1578 0588 6 Exp. Date

Total Packages Total Weight Total Declared Value†

____ ____ lbs. $ ____ .00

†Our liability is limited to $100 unless you declare a higher value. See back for details. By using this Airbill you agree to the service conditions on the back of this Airbill and in the current FedEx Service Guide, including terms that limit our liability.

612

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The FedEx US Airbill has changed. See Section 4.
For shipments over 150 lbs., order the new FedEx Express Freight US Airbill.

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RETAIN THIS COPY FOR YOUR RECORDS.

APPENDIX 3: BACKGROUND RAW ANALYTICAL DATA

ALS Group USA, Corp

Date: *12-Oct-12*

Client: HRL Compliance Solutions
Project: WPX Western Half Pit Closure 10/4/12 **Work Order:** 1210189
Sample ID: Western Pit Half BKGD 1 **Lab ID:** 1210189-06
Collection Date: 10/4/2012 12:00 PM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			**SW6020A**		Prep Date: **10/8/2012**	Analyst: **CES**
Arsenic	**6.1**		**0.73**	**mg/Kg-dry**	2	10/8/2012 10:33 PM
MOISTURE			**A2540 G**			Analyst: **LR**
Moisture	**1.6**		**0.050**	**% of sample**	1	10/5/2012 01:30 PM

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

ALS Group USA, Corp

Date: *12-Oct-12*

Client: HRL Compliance Solutions
Project: WPX Western Half Pit Closure 10/4/12 **Work Order:** 1210189
Sample ID: Western Pit HalfBKGD 2 **Lab ID:** 1210189-07
Collection Date: 10/4/2012 12:10 PM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			**SW6020A**		Prep Date: **10/8/2012**	Analyst: **CES**
Arsenic	**7.5**		**0.72**	**mg/Kg-dry**	2	10/8/2012 10:39 PM
MOISTURE			**A2540 G**			Analyst: **LR**
Moisture	**2.6**		**0.050**	**% of sample**	1	10/5/2012 01:30 PM

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

ALS Group USA, Corp

Date: *12-Oct-12*

Client: HRL Compliance Solutions
Project: WPX Western Half Pit Closure 10/4/12 **Work Order:** 1210189
Sample ID: Western Pit Half BKGD 3 **Lab ID:** 1210189-08
Collection Date: 10/4/2012 12:15 PM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			**SW6020A**		Prep Date: **10/8/2012**	Analyst: **CES**
Arsenic	**6.5**		**0.80**	**mg/Kg-dry**	2	10/8/2012 10:45 PM
SOLUBLE CATIONS FOR SAR			**SW6020A**		Prep Date: **10/9/2012**	Analyst: **CES**
Calcium	**400**		**5.1**	**mg/L-dry**	10	10/9/2012 06:52 PM
Magnesium	**43**		**2.0**	**mg/L-dry**	10	10/9/2012 06:52 PM
Sodium	**57**		**2.0**	**mg/L-dry**	10	10/9/2012 06:52 PM
SODIUM ADSORPTION RATIO			**USDA H60 METHO**		Prep Date: **10/9/2012**	Analyst: **CES**
Sodium Adsorption Ratio	**0.72**		**0.010**	**none**	1	10/10/2012
ELECTRICAL CONDUCTIVITY (SAR)			**USDA H60 METHO**		Prep Date: **10/9/2012**	Analyst: **JB**
Electrical Conductivity @ Saturation	**2.5**		**0.025**	**mmhos/cm @25**	5	10/9/2012 03:15 PM
MOISTURE			**A2540 G**			Analyst: **LR**
Moisture	**2.2**		**0.050**	**% of sample**	1	10/5/2012 01:30 PM
PH			**SW9045D**			Analyst: **KF**
pH	**8.60**			**s.u.**	1	10/5/2012 09:45 AM

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

APPENDIX 4: EXCAVATED MATERIAL RAW ANALYTICAL DATA

15-Oct-2012

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

Re: **WPX Suicide Pit Landfarm 10/5/12** Work Order: **1210245**

Dear Mark,

ALS Environmental received 1 sample on 06-Oct-2012 10:15 AM for the analyses presented in the following report.

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

QC sample results for this data met 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 28.

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

Sincerely,

Ann Preston

Electronically approved by: Ann Preston

Ann Preston
Project Manager

Certificate No: MN331938

ALS Group USA, Corp

Date: 15-Oct-12

Client: HRL Compliance Solutions
Project: WPX Suicide Pit Landfarm 10/5/12
Work Order: **1210245**

Work Order Sample Summary

Lab Samp ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
1210245-01	Suicide Pit Landfarm	Soil		10/5/2012 13:35	10/6/2012 10:15	☐

ALS Group USA, Corp

Date: 15-Oct-12

Client: HRL Compliance Solutions
Project: WPX Suicide Pit Landfarm 10/5/12
Work Order: 1210245

Case Narrative

Batch 44063 MS/MSD data for Metals is not related to this project's samples. No data requires qualification.

ALS Group USA, Corp

Date: 15-Oct-12

Client: HRL Compliance Solutions
Project: WPX Suicide Pit Landfarm 10/5/12
WorkOrder: **1210245**

QUALIFIERS, ACRONYMS, UNITS

Qualifier	Description
*	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

Acronym	Description
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
SD	Serial Dilution
TDL	Target Detection Limit

Units Reported	Description
% of sample	Percent of Sample
µg/Kg-dry	Micrograms per Kilogram Dry Weight
mg/Kg-dry	Milligrams per Kilogram Dry Weight
µmhos/cm @25°	
none	
s.u.	Standard Units

ALS Group USA, Corp

Date: *15-Oct-12*

Client: HRL Compliance Solutions
Project: WPX Suicide Pit Landfarm 10/5/12 **Work Order:** 1210245
Sample ID: Suicide Pit Landfarm **Lab ID:** 1210245-01
Collection Date: 10/5/2012 01:35 PM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID			**SW8015M**		Prep Date: **10/8/2012**	Analyst: **CW**
DRO (C10-C28)	**48**		**4.4**	**mg/Kg-dry**	1	10/9/2012 06:51 PM
Surr: 4-Terphenyl-d14	*72.5*		*39-115*	*%REC*	1	10/9/2012 06:51 PM
GASOLINE RANGE ORGANICS BY GC-FID			**SW8015**			Analyst: **CW**
GRO (C6-C10)	ND		2.7	mg/Kg-dry	50	10/9/2012 06:47 PM
Surr: Toluene-d8	*111*		*50-150*	*%REC*	50	10/9/2012 06:47 PM
MERCURY BY CVAA			**SW7471**		Prep Date: **10/8/2012**	Analyst: **LR**
Mercury	**0.036**		**0.017**	**mg/Kg-dry**	1	10/9/2012 01:25 PM
METALS BY ICP-MS			**SW6020A**		Prep Date: **10/10/2012**	Analyst: **CES**
Arsenic	**6.8**		**0.86**	**mg/Kg-dry**	2	10/10/2012 06:40 PM
Barium	**830**		**8.6**	**mg/Kg-dry**	20	10/11/2012 03:07 PM
Cadmium	**0.54**		**0.34**	**mg/Kg-dry**	2	10/10/2012 06:40 PM
Chromium	**10**		**0.86**	**mg/Kg-dry**	2	10/10/2012 06:40 PM
Copper	**11**		**0.86**	**mg/Kg-dry**	2	10/10/2012 06:40 PM
Lead	**13**		**0.86**	**mg/Kg-dry**	2	10/10/2012 06:40 PM
Nickel	**14**		**0.86**	**mg/Kg-dry**	2	10/10/2012 06:40 PM
Selenium	**1.4**		**0.86**	**mg/Kg-dry**	2	10/10/2012 06:40 PM
Silver	ND		0.86	mg/Kg-dry	2	10/10/2012 06:40 PM
Zinc	**48**		**1.7**	**mg/Kg-dry**	2	10/10/2012 06:40 PM
SOLUBLE CATIONS FOR SAR			**SW6020A**		Prep Date: **10/11/2012**	Analyst: **CES**
Calcium	**200**		**5.4**	**mg/L-dry**	10	10/12/2012 02:10 PM
Magnesium	**6.1**		**2.2**	**mg/L-dry**	10	10/12/2012 02:10 PM
Sodium	**3,900**		**22**	**mg/L-dry**	100	10/12/2012 02:04 PM
SODIUM ADSORPTION RATIO			**USDA H60 METHO**		Prep Date: **10/11/2012**	Analyst: **CES**
Sodium Adsorption Ratio	**70**		**0.010**	**none**	1	10/12/2012
SEMI-VOLATILE ORGANIC COMPOUNDS			**SW8270**		Prep Date: **10/8/2012**	Analyst: **HL**
Acenaphthene	ND		16	µg/Kg-dry	1	10/9/2012 11:59 PM
Anthracene	ND		16	µg/Kg-dry	1	10/9/2012 11:59 PM
Benzo(a)anthracene	ND		18	µg/Kg-dry	1	10/9/2012 11:59 PM
Benzo(a)pyrene	ND		18	µg/Kg-dry	1	10/9/2012 11:59 PM
Benzo(b)fluoranthene	ND		19	µg/Kg-dry	1	10/9/2012 11:59 PM
Benzo(g,h,i)perylene	ND		30	µg/Kg-dry	1	10/9/2012 11:59 PM
Benzo(k)fluoranthene	ND		19	µg/Kg-dry	1	10/9/2012 11:59 PM
Chrysene	ND		16	µg/Kg-dry	1	10/9/2012 11:59 PM
Dibenzo(a,h)anthracene	ND		19	µg/Kg-dry	1	10/9/2012 11:59 PM
Fluoranthene	ND		16	µg/Kg-dry	1	10/9/2012 11:59 PM
Fluorene	**30**		**16**	**µg/Kg-dry**	1	10/9/2012 11:59 PM

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

ALS Group USA, Corp

Date: *15-Oct-12*

Client: HRL Compliance Solutions
Project: WPX Suicide Pit Landfarm 10/5/12 **Work Order:** 1210245
Sample ID: Suicide Pit Landfarm **Lab ID:** 1210245-01
Collection Date: 10/5/2012 01:35 PM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Indeno(1,2,3-cd)pyrene	ND		21	µg/Kg-dry	1	10/9/2012 11:59 PM
Naphthalene	**62**		**16**	**µg/Kg-dry**	1	10/9/2012 11:59 PM
Pyrene	ND		16	µg/Kg-dry	1	10/9/2012 11:59 PM
Surr: 2-Fluorobiphenyl	*73.5*		*12-100*	*%REC*	1	10/9/2012 11:59 PM
Surr: 4-Terphenyl-d14	*96.2*		*25-137*	*%REC*	1	10/9/2012 11:59 PM
Surr: Nitrobenzene-d5	*71.1*		*37-107*	*%REC*	1	10/9/2012 11:59 PM
VOLATILE ORGANIC COMPOUNDS			**SW8260**		Prep Date: **10/8/2012**	Analyst: **AK**
Benzene	ND		33	µg/Kg-dry	1	10/9/2012 08:43 AM
Ethylbenzene	ND		33	µg/Kg-dry	1	10/9/2012 08:43 AM
m,p-Xylene	**190**		**65**	**µg/Kg-dry**	1	10/9/2012 08:43 AM
o-Xylene	**61**		**33**	**µg/Kg-dry**	1	10/9/2012 08:43 AM
Toluene	**48**		**33**	**µg/Kg-dry**	1	10/9/2012 08:43 AM
Xylenes, Total	**250**		**98**	**µg/Kg-dry**	1	10/9/2012 08:43 AM
Surr: 1,2-Dichloroethane-d4	*109*		*70-130*	*%REC*	1	10/9/2012 08:43 AM
Surr: 4-Bromofluorobenzene	*106*		*70-130*	*%REC*	1	10/9/2012 08:43 AM
Surr: Dibromofluoromethane	*102*		*70-130*	*%REC*	1	10/9/2012 08:43 AM
Surr: Toluene-d8	*104*		*70-130*	*%REC*	1	10/9/2012 08:43 AM
ELECTRICAL CONDUCTIVITY (SAR)			**USDA H60 METHO**		Prep Date: **10/11/2012**	Analyst: **JB**
Electrical Conductivity @ Saturation	**23**		**0.050**	**mmhos/cm @25**	10	10/11/2012 03:15 PM
CHROMIUM, TRIVALENT			**CALCULATION**			Analyst: **JJG**
Chromium, Trivalent	**10**			**mg/kg-dry**	1	10/12/2012 07:47 AM
CHROMIUM, HEXAVALENT			**SW7196A**		Prep Date: **10/9/2012**	Analyst: **MB**
Chromium, Hexavalent	ND		0.54	mg/Kg-dry	1	10/10/2012 01:50 PM
MOISTURE			**A2540 G**			Analyst: **LR**
Moisture	**7.8**		**0.050**	**% of sample**	1	10/8/2012 04:30 PM
PH			**SW9045D**			Analyst: **KF**
pH	**8.87**			**s.u.**	1	10/9/2012 10:50 AM

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

QC BATCH REPORT

Batch ID: **43991** Instrument ID **GC8** Method: **SW8015M**

MBLK Sample ID: **DBLKS1-43991-43991** Units: **mg/Kg** Analysis Date: **10/9/2012 09:00 AM**

Client ID: Run ID: **GC8_121009A** SeqNo: **2107578** Prep Date: **10/8/2012** 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	*0.8487*	0	*1.667*	0	*50.9*	*39-115*	0			

LCS Sample ID: **DLCSS1-43991-43991** Units: **mg/Kg** Analysis Date: **10/9/2012 09:26 AM**

Client ID: Run ID: **GC8_121009A** SeqNo: **2107579** Prep Date: **10/8/2012** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	114.9	4.2	166.7	0	69	49-124	0			
Surr: 4-Terphenyl-d14	*1.035*	0	*1.667*	0	*62.1*	*39-115*	0			

MS Sample ID: **1210188-01B MS** Units: **mg/Kg** Analysis Date: **10/9/2012 09:53 AM**

Client ID: Run ID: **GC8_121009A** SeqNo: **2107580** Prep Date: **10/8/2012** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	276.7	8.0	318.6	40.92	74	49-130	0			
Surr: 4-Terphenyl-d14	*2.114*	0	*3.186*	0	*66.4*	*39-115*	0			

MSD Sample ID: **1210188-01B MSD** Units: **mg/Kg** Analysis Date: **10/9/2012 10:20 AM**

Client ID: Run ID: **GC8_121009A** SeqNo: **2107581** Prep Date: **10/8/2012** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	245.7	8.0	319.4	40.92	64.1	49-130	276.7	11.9	30	
Surr: 4-Terphenyl-d14	*2.164*	0	*3.194*	0	*67.8*	*39-115*	2.114	*2.34*	*30*	

The following samples were analyzed in this batch: 1210245-01B

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

Client: HRL Compliance Solutions
Work Order: 1210245
Project: WPX Suicide Pit Landfarm 10/5/12

QC BATCH REPORT

Batch ID: **R110970** Instrument ID **GC10** Method: **SW8015**

MBLK Sample ID: **GBLK1-121009-R110970** Units: **µg/L** Analysis Date: **10/9/2012 05:08 PM**
Client ID: Run ID: **GC10_121009B** SeqNo: **2107643** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	ND	200								
Surr: Toluene-d8	*99.51*	0	*100*	0	*99.5*	*70-130*	0			

LCS Sample ID: **RLCS1-121009-R110970** Units: **µg/L** Analysis Date: **10/9/2012 04:44 PM**
Client ID: Run ID: **GC10_121009B** SeqNo: **2107642** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	9246	200	10000	0	92.5	70-130	0			
Surr: Toluene-d8	*103.5*	0	*100*	0	*104*	*70-130*	0			

MS Sample ID: **1210243-01A MS** Units: **µg/Kg** Analysis Date: **10/10/2012 01:42 AM**
Client ID: Run ID: **GC10_121009B** SeqNo: **2107648** Prep Date: DF: **50**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	430200	2,500	500000	0	86	70-130	0			
Surr: Toluene-d8	*5118*	0	*5000*	0	*102*	*50-150*	0			

MSD Sample ID: **1210243-01A MSD** Units: **µg/Kg** Analysis Date: **10/10/2012 02:06 AM**
Client ID: Run ID: **GC10_121009B** SeqNo: **2107649** Prep Date: DF: **50**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	437300	2,500	500000	0	87.5	70-130	430200	1.64	30	
Surr: Toluene-d8	*5342*	0	*5000*	0	*107*	*50-150*	5118	*4.28*	*30*	

The following samples were analyzed in this batch: 1210245-01A

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

Client: HRL Compliance Solutions
Work Order: 1210245
Project: WPX Suicide Pit Landfarm 10/5/12

QC BATCH REPORT

Batch ID: **44004** Instrument ID **HG1** Method: **SW7471**

MBLK Sample ID: **MBLK-44004-44004** Units: **mg/Kg** Analysis Date: **10/9/2012 12:23 PM**
Client ID: Run ID: **HG1_121009A** SeqNo: **2106832** Prep Date: **10/8/2012** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.001333	0.020								J

LCS Sample ID: **LCS-44004-44004** Units: **mg/Kg** Analysis Date: **10/9/2012 12:25 PM**
Client ID: Run ID: **HG1_121009A** SeqNo: **2106833** Prep Date: **10/8/2012** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.1499	0.020	0.1665	0	90	80-120	0			

MS Sample ID: **1210189-01BMS** Units: **mg/Kg** Analysis Date: **10/9/2012 12:36 PM**
Client ID: Run ID: **HG1_121009A** SeqNo: **2106847** Prep Date: **10/8/2012** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.1583	0.017	0.1411	0.03381	88.3	75-125	0			

MSD Sample ID: **1210189-01BMSD** Units: **mg/Kg** Analysis Date: **10/9/2012 12:38 PM**
Client ID: Run ID: **HG1_121009A** SeqNo: **2106849** Prep Date: **10/8/2012** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.1591	0.017	0.1425	0.03381	87.9	75-125	0.1583	0.502	35	

The following samples were analyzed in this batch: 1210245-01B

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

Client: HRL Compliance Solutions
Work Order: 1210245
Project: WPX Suicide Pit Landfarm 10/5/12

QC BATCH REPORT

Batch ID: **44063** Instrument ID **ICPMS1** Method: **SW6020A**

MBLK Sample ID: **MBLK-44063-44063** Units: **mg/Kg** Analysis Date: **10/10/2012 06:01 PM**
Client ID: Run ID: **ICPMS1_121010A** SeqNo: **2109047** Prep Date: **10/10/2012** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Copper	0.01231	0.25								J
Nickel	0.005335	0.25								J
Zinc	0.04476	0.50								J

MBLK Sample ID: **MBLK-44063-44063** Units: **mg/Kg** Analysis Date: **10/11/2012 12:10 PM**
Client ID: Run ID: **ICPMS1_121011A** SeqNo: **2109463** Prep Date: **10/10/2012** 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	0.005815	0.10								J
Chromium	ND	0.25								
Lead	ND	0.25								
Selenium	ND	0.25								
Silver	ND	0.25								

LCS Sample ID: **LCS-44063-44063** Units: **mg/Kg** Analysis Date: **10/10/2012 06:07 PM**
Client ID: Run ID: **ICPMS1_121010A** SeqNo: **2109048** Prep Date: **10/10/2012** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	4.188	0.25	5	0	83.8	80-120	0			
Barium	4.88	0.25	5	0	97.6	80-120	0			
Cadmium	4.796	0.10	5	0	95.9	80-120	0			
Chromium	4.717	0.25	5	0	94.3	80-120	0			
Copper	4.674	0.25	5	0	93.5	80-120	0			
Lead	5.075	0.25	5	0	102	80-120	0			
Nickel	4.648	0.25	5	0	93	80-120	0			
Silver	4.996	0.25	5	0	99.9	80-120	0			
Zinc	4.33	0.50	5	0	86.6	80-120	0			

LCS Sample ID: **LCS-44063-44063** Units: **mg/Kg** Analysis Date: **10/11/2012 12:16 PM**
Client ID: Run ID: **ICPMS1_121011A** SeqNo: **2109466** Prep Date: **10/10/2012** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Selenium	4.39	0.25	5	0	87.8	80-120	0			

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

Client: HRL Compliance Solutions
Work Order: 1210245
Project: WPX Suicide Pit Landfarm 10/5/12

QC BATCH REPORT

Batch ID: **44063** Instrument ID **ICPMS1** Method: **SW6020A**

MS Sample ID: **1210247-05AMS** Units: **mg/Kg** Analysis Date: **10/10/2012 07:14 PM**
Client ID: Run ID: **ICPMS1_121010A** SeqNo: **2109070** Prep Date: **10/10/2012** DF: **2**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	7.756	0.71	7.133	2.38	75.4	75-125	0			
Cadmium	6.934	0.29	7.133	0.3109	92.9	75-125	0			
Chromium	40.68	0.71	7.133	33.59	99.5	75-125	0			O
Copper	22.3	0.71	7.133	16.28	84.3	75-125	0			
Lead	24.96	0.71	7.133	17.07	111	75-125	0			
Nickel	23.78	0.71	7.133	17.44	88.8	75-125	0			
Silver	6.227	0.71	7.133	0.05814	86.5	75-125	0			
Zinc	56.98	1.4	7.133	51.13	81.9	75-125	0			O

MS Sample ID: **1210247-05AMS** Units: **mg/Kg** Analysis Date: **10/11/2012 12:54 PM**
Client ID: Run ID: **ICPMS1_121011A** SeqNo: **2109475** Prep Date: **10/10/2012** DF: **10**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Barium	285	3.6	7.133	308.2	-327	75-125	0			SO
Selenium	7.996	3.6	7.133	1.656	88.9	75-125	0			

MSD Sample ID: **1210247-05AMSD** Units: **mg/Kg** Analysis Date: **10/10/2012 07:19 PM**
Client ID: Run ID: **ICPMS1_121010A** SeqNo: **2109071** Prep Date: **10/10/2012** DF: **2**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	7.5	0.68	6.812	2.38	75.2	75-125	7.756	3.36	25	
Cadmium	6.729	0.27	6.812	0.3109	94.2	75-125	6.934	3.01	25	
Chromium	40.41	0.68	6.812	33.59	100	75-125	40.68	0.681	25	O
Copper	21.54	0.68	6.812	16.28	77.1	75-125	22.3	3.45	25	
Lead	24.6	0.68	6.812	17.07	111	75-125	24.96	1.45	25	
Nickel	23.3	0.68	6.812	17.44	85.9	75-125	23.78	2.05	25	
Silver	5.828	0.68	6.812	0.05814	84.7	75-125	6.227	6.61	25	
Zinc	55.48	1.4	6.812	51.13	63.8	75-125	56.98	2.67	25	SO

MSD Sample ID: **1210247-05AMSD** Units: **mg/Kg** Analysis Date: **10/11/2012 01:00 PM**
Client ID: Run ID: **ICPMS1_121011A** SeqNo: **2109476** Prep Date: **10/10/2012** DF: **10**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Barium	307.5	3.4	6.812	308.2	-11	75-125	285	7.61	25	SO
Selenium	7.405	3.4	6.812	1.656	84.4	75-125	7.996	7.68	25	

The following samples were analyzed in this batch: 1210245-01B

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

Client: HRL Compliance Solutions
Work Order: 1210245
Project: WPX Suicide Pit Landfarm 10/5/12

QC BATCH REPORT

Batch ID: **44089** Instrument ID **ICPMS1** Method: **SW6020A** **(Dissolve)**

DUP Sample ID: **1210293-02C DUP** Units: **mg/L** Analysis Date: **10/12/2012 02:49 PM**
Client ID: Run ID: **ICPMS1_121012A** SeqNo: **2111184** Prep Date: **10/11/2012** DF: **100**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	816.6	50	0	0	0	0-0	842.2	3.09		
Magnesium	96.96	20	0	0	0	0-0	96.3	0.683		
Sodium	2337	20	0	0	0	0-0	2283	2.34		

DUP Sample ID: **1210293-02C DUP** Units: **none** Analysis Date: **10/12/2012**
Client ID: Run ID: **SAR_121012A** SeqNo: **2111245** Prep Date: **10/11/2012** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sodium Adsorption Ratio	20.59	0.010	0	0	0		19.87	3.58	50	

The following samples were analyzed in this batch: 1210245-01C

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

Client: HRL Compliance Solutions
Work Order: 1210245
Project: WPX Suicide Pit Landfarm 10/5/12

QC BATCH REPORT

Batch ID: **43990** Instrument ID **SVMS5** Method: **SW8270**

MBLK Sample ID: **SBLKS1-43990-43990** Units: **µg/Kg** Analysis Date: **10/9/2012 11:09 PM**
Client ID: Run ID: **SVMS5_121009A** SeqNo: **2107932** Prep Date: **10/8/2012** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	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								
Surr: 2-Fluorobiphenyl	*1288*	0	*1667*	0	*77.3*	*12-100*	0			
Surr: 4-Terphenyl-d14	*1808*	0	*1667*	0	*108*	*25-137*	0			
Surr: Nitrobenzene-d5	*1452*	0	*1667*	0	*87.1*	*37-107*	0			

LCS Sample ID: **SLCSS1-43990-43990** Units: **µg/Kg** Analysis Date: **10/9/2012 10:09 PM**
Client ID: Run ID: **SVMS5_121009A** SeqNo: **2108443** Prep Date: **10/8/2012** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	608.7	30	666.7	0	91.3	45-110	0			
Anthracene	652	30	666.7	0	97.8	55-105	0			
Benzo(a)anthracene	706.7	30	666.7	0	106	50-110	0			
Benzo(a)pyrene	703.3	30	666.7	0	105	50-110	0			
Benzo(b)fluoranthene	698.3	30	666.7	0	105	45-115	0			
Benzo(g,h,i)perylene	769	30	666.7	0	115	40-125	0			
Benzo(k)fluoranthene	702	30	666.7	0	105	45-115	0			
Chrysene	649.7	30	666.7	0	97.4	55-110	0			
Dibenzo(a,h)anthracene	657.7	30	666.7	0	98.6	40-125	0			
Fluoranthene	701.3	30	666.7	0	105	55-115	0			
Fluorene	673.3	30	666.7	0	101	50-110	0			
Indeno(1,2,3-cd)pyrene	782.7	30	666.7	0	117	40-120	0			
Naphthalene	607	30	666.7	0	91	40-105	0			
Pyrene	698.3	30	666.7	0	105	45-125	0			
Surr: 2-Fluorobiphenyl	*1313*	0	*1667*	0	*78.8*	*12-100*	0			
Surr: 4-Terphenyl-d14	*1878*	0	*1667*	0	*113*	*25-137*	0			
Surr: Nitrobenzene-d5	*1475*	0	*1667*	0	*88.5*	*37-107*	0			

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

Client: HRL Compliance Solutions
Work Order: 1210245
Project: WPX Suicide Pit Landfarm 10/5/12

QC BATCH REPORT

Batch ID: **43990** Instrument ID **SVMS5** Method: **SW8270**

MS Sample ID: **1210188-01B MS** Units: **µg/Kg** Analysis Date: **10/10/2012 01:51 AM**
Client ID: Run ID: **SVMS5_121009A** SeqNo: **2108444** Prep Date: **10/8/2012** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	1134	59	1305	0	86.9	45-110	0			
Anthracene	1231	59	1305	0	94.3	55-105	0			
Benzo(a)anthracene	1315	59	1305	0	101	50-110	0			
Benzo(a)pyrene	1264	59	1305	0	96.8	50-110	0			
Benzo(b)fluoranthene	1220	59	1305	0	93.5	45-115	0			
Benzo(g,h,i)perylene	1334	59	1305	0	102	40-125	0			
Benzo(k)fluoranthene	1363	59	1305	0	104	45-115	0			
Chrysene	1362	59	1305	0	104	55-110	0			
Dibenzo(a,h)anthracene	1137	59	1305	0	87.1	40-125	0			
Fluoranthene	1276	59	1305	0	97.7	55-115	0			
Fluorene	1277	59	1305	0	97.8	50-110	0			
Indeno(1,2,3-cd)pyrene	1331	59	1305	0	102	40-120	0			
Naphthalene	1158	59	1305	0	88.7	40-105	0			
Pyrene	1384	59	1305	0	106	45-125	0			
Surr: 2-Fluorobiphenyl	*2412*	0	*3263*	0	*73.9*	*12-100*	0			
Surr: 4-Terphenyl-d14	*3677*	0	*3263*	0	*113*	*25-137*	0			
Surr: Nitrobenzene-d5	*2645*	0	*3263*	0	*81.1*	*37-107*	0			

MSD Sample ID: **1210188-01B MSD** Units: **µg/Kg** Analysis Date: **10/10/2012 02:21 AM**
Client ID: Run ID: **SVMS5_121009A** SeqNo: **2108445** Prep Date: **10/8/2012** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	1108	59	1319	0	84	45-110	1134	2.3	30	
Anthracene	1198	59	1319	0	90.8	55-105	1231	2.7	30	
Benzo(a)anthracene	1305	59	1319	0	99	50-110	1315	0.722	30	
Benzo(a)pyrene	1234	59	1319	0	93.5	50-110	1264	2.44	30	
Benzo(b)fluoranthene	1242	59	1319	0	94.2	45-115	1220	1.78	30	
Benzo(g,h,i)perylene	1337	59	1319	0	101	40-125	1334	0.195	30	
Benzo(k)fluoranthene	1357	59	1319	0	103	45-115	1363	0.465	30	
Chrysene	1352	59	1319	0	102	55-110	1362	0.759	30	
Dibenzo(a,h)anthracene	1144	59	1319	0	86.7	40-125	1137	0.57	30	
Fluoranthene	1244	59	1319	0	94.3	55-115	1276	2.51	30	
Fluorene	1255	59	1319	0	95.2	50-110	1277	1.72	30	
Indeno(1,2,3-cd)pyrene	1338	59	1319	0	101	40-120	1331	0.489	30	
Naphthalene	1111	59	1319	0	84.2	40-105	1158	4.17	30	
Pyrene	1385	59	1319	0	105	45-125	1384	0.0823	30	
Surr: 2-Fluorobiphenyl	*2393*	0	*3296*	0	*72.6*	*12-100*	2412	*0.799*	*40*	
Surr: 4-Terphenyl-d14	*3714*	0	*3296*	0	*113*	*25-137*	3677	*0.994*	*40*	
Surr: Nitrobenzene-d5	*2584*	0	*3296*	0	*78.4*	*37-107*	2645	*2.33*	*40*	

The following samples were analyzed in this batch: 1210245-01B

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

Client: HRL Compliance Solutions
Work Order: 1210245
Project: WPX Suicide Pit Landfarm 10/5/12

QC BATCH REPORT

Batch ID: **44013** Instrument ID **VMS8** Method: **SW8260**

MBLK Sample ID: **MBLK-44013-44013** Units: **µg/Kg** Analysis Date: **10/8/2012 03:13 PM**
Client ID: Run ID: **VMS8_121008A** SeqNo: **2106012** Prep Date: **10/8/2012** 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	*1056*	0	*1000*	0	*106*	*70-130*	0			
Surr: 4-Bromofluorobenzene	*1067*	0	*1000*	0	*107*	*70-130*	0			
Surr: Dibromofluoromethane	*1063*	0	*1000*	0	*106*	*70-130*	0			
Surr: Toluene-d8	*1031*	0	*1000*	0	*103*	*70-130*	0			

MBLK Sample ID: **MBLK-44013-44013** Units: **µg/Kg** Analysis Date: **10/8/2012 03:37 PM**
Client ID: Run ID: **VMS9_121008A** SeqNo: **2106270** Prep Date: **10/8/2012** 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	*969*	0	*1000*	0	*96.9*	*70-130*	0			
Surr: 4-Bromofluorobenzene	*894.5*	0	*1000*	0	*89.4*	*70-130*	0			
Surr: Dibromofluoromethane	*984*	0	*1000*	0	*98.4*	*70-130*	0			
Surr: Toluene-d8	*963.5*	0	*1000*	0	*96.4*	*70-130*	0			

MBLK Sample ID: **MBLK-44013-44013** Units: **µg/Kg** Analysis Date: **10/8/2012 04:04 PM**
Client ID: Run ID: **VMS6_121008A** SeqNo: **2106422** Prep Date: **10/8/2012** 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	*1040*	0	*1000*	0	*104*	*70-130*	0			
Surr: 4-Bromofluorobenzene	*981.5*	0	*1000*	0	*98.2*	*70-130*	0			
Surr: Dibromofluoromethane	*993.5*	0	*1000*	0	*99.4*	*70-130*	0			
Surr: Toluene-d8	*972.5*	0	*1000*	0	*97.2*	*70-130*	0			

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

Client: HRL Compliance Solutions
Work Order: 1210245
Project: WPX Suicide Pit Landfarm 10/5/12

QC BATCH REPORT

Batch ID: **44013** Instrument ID **VMS8** Method: **SW8260**

MBLK Sample ID: **MBLK-44013-44013** Units: **µg/Kg** Analysis Date: **10/8/2012 03:40 PM**
Client ID: Run ID: **VMS5_121008A** SeqNo: **2106808** Prep Date: **10/8/2012** 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	*1030*	0	*1000*	0	*103*	*70-130*	0			
Surr: 4-Bromofluorobenzene	*992*	0	*1000*	0	*99.2*	*70-130*	0			
Surr: Dibromofluoromethane	*995*	0	*1000*	0	*99.5*	*70-130*	0			
Surr: Toluene-d8	*988*	0	*1000*	0	*98.8*	*70-130*	0			

MBLK Sample ID: **MBLK-44013-44013** Units: **µg/Kg** Analysis Date: **10/9/2012 02:22 AM**
Client ID: Run ID: **VMS8_121008B** SeqNo: **2106921** Prep Date: **10/8/2012** 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	*1079*	0	*1000*	0	*108*	*70-130*	0			
Surr: 4-Bromofluorobenzene	*1036*	0	*1000*	0	*104*	*70-130*	0			
Surr: Dibromofluoromethane	*1032*	0	*1000*	0	*103*	*70-130*	0			
Surr: Toluene-d8	*1050*	0	*1000*	0	*105*	*70-130*	0			

MBLK Sample ID: **MBLK-44013-44013** Units: **µg/Kg** Analysis Date: **10/9/2012 03:47 AM**
Client ID: Run ID: **VMS6_121008B** SeqNo: **2106964** Prep Date: **10/8/2012** 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	*1004*	0	*1000*	0	*100*	*70-130*	0			
Surr: 4-Bromofluorobenzene	*981.5*	0	*1000*	0	*98.2*	*70-130*	0			
Surr: Dibromofluoromethane	*976.5*	0	*1000*	0	*97.6*	*70-130*	0			
Surr: Toluene-d8	*967.5*	0	*1000*	0	*96.8*	*70-130*	0			

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

Client: HRL Compliance Solutions
Work Order: 1210245
Project: WPX Suicide Pit Landfarm 10/5/12

QC BATCH REPORT

Batch ID: **44013** Instrument ID **VMS8** Method: **SW8260**

MBLK Sample ID: **MBLK-44013-44013** Units: **µg/Kg** Analysis Date: **10/9/2012 02:47 PM**
Client ID: Run ID: **VMS5_121009A** SeqNo: **2107660** Prep Date: **10/8/2012** 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	*998*	0	*1000*	0	*99.8*	*70-130*	0			
Surr: 4-Bromofluorobenzene	*1006*	0	*1000*	0	*101*	*70-130*	0			
Surr: Dibromofluoromethane	*1012*	0	*1000*	0	*101*	*70-130*	0			
Surr: Toluene-d8	*1020*	0	*1000*	0	*102*	*70-130*	0			

MBLK Sample ID: **MBLK-44013-44013** Units: **µg/Kg** Analysis Date: **10/9/2012 01:35 PM**
Client ID: Run ID: **VMS6_121009A** SeqNo: **2108125** Prep Date: **10/8/2012** 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	*993*	0	*1000*	0	*99.3*	*70-130*	0			
Surr: 4-Bromofluorobenzene	*983.5*	0	*1000*	0	*98.4*	*70-130*	0			
Surr: Dibromofluoromethane	*974.5*	0	*1000*	0	*97.4*	*70-130*	0			
Surr: Toluene-d8	*957*	0	*1000*	0	*95.7*	*70-130*	0			

LCS Sample ID: **LCS-44013-44013** Units: **µg/Kg** Analysis Date: **10/8/2012 02:01 PM**
Client ID: Run ID: **VMS8_121008A** SeqNo: **2106011** Prep Date: **10/8/2012** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	986	30	1000	0	98.6	75-125	0			
Ethylbenzene	1022	30	1000	0	102	75-125	0			
m,p-Xylene	2086	60	2000	0	104	80-125	0			
o-Xylene	1005	30	1000	0	100	75-125	0			
Toluene	997	30	1000	0	99.7	70-125	0			
Xylenes, Total	3091	90	3000	0	103	75-125	0			
Surr: 1,2-Dichloroethane-d4	*1070*	0	*1000*	0	*107*	*70-130*	0			
Surr: 4-Bromofluorobenzene	*1059*	0	*1000*	0	*106*	*70-130*	0			
Surr: Dibromofluoromethane	*1059*	0	*1000*	0	*106*	*70-130*	0			
Surr: Toluene-d8	*1032*	0	*1000*	0	*103*	*70-130*	0			

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

Client: HRL Compliance Solutions
Work Order: 1210245
Project: WPX Suicide Pit Landfarm 10/5/12

QC BATCH REPORT

Batch ID: **44013** Instrument ID **VMS8** Method: **SW8260**

LCS Sample ID: **LCS-44013-44013** Units: **µg/Kg** Analysis Date: **10/8/2012 02:46 PM**
Client ID: Run ID: **VMS9_121008A** SeqNo: **2106269** Prep Date: **10/8/2012** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	978	30	1000	0	97.8	75-125	0			
Ethylbenzene	1090	30	1000	0	109	75-125	0			
m,p-Xylene	2008	60	2000	0	100	80-125	0			
o-Xylene	1102	30	1000	0	110	75-125	0			
Toluene	1008	30	1000	0	101	70-125	0			
Xylenes, Total	3110	90	3000	0	104	75-125	0			
Surr: 1,2-Dichloroethane-d4	*938.5*	0	*1000*	0	*93.8*	*70-130*	0			
Surr: 4-Bromofluorobenzene	*1023*	0	*1000*	0	*102*	*70-130*	0			
Surr: Dibromofluoromethane	*1050*	0	*1000*	0	*105*	*70-130*	0			
Surr: Toluene-d8	*1002*	0	*1000*	0	*100*	*70-130*	0			

LCS Sample ID: **LCS-44013-44013** Units: **µg/Kg** Analysis Date: **10/8/2012 02:02 PM**
Client ID: Run ID: **VMS6_121008A** SeqNo: **2106421** Prep Date: **10/8/2012** DF: **1**

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	939	30	1000	0	93.9	75-125	0			
m,p-Xylene	1893	60	2000	0	94.6	80-125	0			
o-Xylene	926	30	1000	0	92.6	75-125	0			
Toluene	917	30	1000	0	91.7	70-125	0			
Xylenes, Total	2819	90	3000	0	94	75-125	0			
Surr: 1,2-Dichloroethane-d4	*1030*	0	*1000*	0	*103*	*70-130*	0			
Surr: 4-Bromofluorobenzene	*1013*	0	*1000*	0	*101*	*70-130*	0			
Surr: Dibromofluoromethane	*1038*	0	*1000*	0	*104*	*70-130*	0			
Surr: Toluene-d8	*986.5*	0	*1000*	0	*98.6*	*70-130*	0			

LCS Sample ID: **LCS-44013-44013** Units: **µg/Kg** Analysis Date: **10/8/2012 02:27 PM**
Client ID: Run ID: **VMS5_121008A** SeqNo: **2106807** Prep Date: **10/8/2012** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	1052	30	1000	0	105	75-125	0			
Ethylbenzene	1038	30	1000	0	104	75-125	0			
m,p-Xylene	2063	60	2000	0	103	80-125	0			
o-Xylene	1011	30	1000	0	101	75-125	0			
Toluene	1048	30	1000	0	105	70-125	0			
Xylenes, Total	3074	90	3000	0	102	75-125	0			
Surr: 1,2-Dichloroethane-d4	*976.5*	0	*1000*	0	*97.6*	*70-130*	0			
Surr: 4-Bromofluorobenzene	*987.5*	0	*1000*	0	*98.8*	*70-130*	0			
Surr: Dibromofluoromethane	*998.5*	0	*1000*	0	*99.8*	*70-130*	0			
Surr: Toluene-d8	*1013*	0	*1000*	0	*101*	*70-130*	0			

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

Client: HRL Compliance Solutions
Work Order: 1210245
Project: WPX Suicide Pit Landfarm 10/5/12

QC BATCH REPORT

Batch ID: **44013** Instrument ID **VMS8** Method: **SW8260**

LCS Sample ID: **LCS-44013-44013** Units: **µg/Kg** Analysis Date: **10/9/2012 01:35 AM**
Client ID: Run ID: **VMS8_121008B** SeqNo: **2106920** Prep Date: **10/8/2012** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	1063	30	1000	0	106	75-125	0			
Ethylbenzene	1092	30	1000	0	109	75-125	0			
m,p-Xylene	2244	60	2000	0	112	80-125	0			
o-Xylene	1088	30	1000	0	109	75-125	0			
Toluene	1086	30	1000	0	109	70-125	0			
Xylenes, Total	3332	90	3000	0	111	75-125	0			
Surr: 1,2-Dichloroethane-d4	*1058*	0	*1000*	0	*106*	*70-130*	0			
Surr: 4-Bromofluorobenzene	*995.5*	0	*1000*	0	*99.6*	*70-130*	0			
Surr: Dibromofluoromethane	*1029*	0	*1000*	0	*103*	*70-130*	0			
Surr: Toluene-d8	*1022*	0	*1000*	0	*102*	*70-130*	0			

LCS Sample ID: **LCS-44013-44013** Units: **µg/Kg** Analysis Date: **10/9/2012 02:11 AM**
Client ID: Run ID: **VMS6_121008B** SeqNo: **2106962** Prep Date: **10/8/2012** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	945	30	1000	0	94.5	75-125	0			
Ethylbenzene	922.5	30	1000	0	92.2	75-125	0			
m,p-Xylene	1855	60	2000	0	92.8	80-125	0			
o-Xylene	917.5	30	1000	0	91.8	75-125	0			
Toluene	896	30	1000	0	89.6	70-125	0			
Xylenes, Total	2772	90	3000	0	92.4	75-125	0			
Surr: 1,2-Dichloroethane-d4	*1030*	0	*1000*	0	*103*	*70-130*	0			
Surr: 4-Bromofluorobenzene	*999.5*	0	*1000*	0	*100*	*70-130*	0			
Surr: Dibromofluoromethane	*1044*	0	*1000*	0	*104*	*70-130*	0			
Surr: Toluene-d8	*967*	0	*1000*	0	*96.7*	*70-130*	0			

LCS Sample ID: **LCS-44013-44013** Units: **µg/Kg** Analysis Date: **10/9/2012 01:35 PM**
Client ID: Run ID: **VMS5_121009A** SeqNo: **2107659** Prep Date: **10/8/2012** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	1060	30	1000	0	106	75-125	0			
Ethylbenzene	1076	30	1000	0	108	75-125	0			
m,p-Xylene	2169	60	2000	0	108	80-125	0			
o-Xylene	1074	30	1000	0	107	75-125	0			
Toluene	1090	30	1000	0	109	70-125	0			
Xylenes, Total	3244	90	3000	0	108	75-125	0			
Surr: 1,2-Dichloroethane-d4	*971.5*	0	*1000*	0	*97.2*	*70-130*	0			
Surr: 4-Bromofluorobenzene	*997*	0	*1000*	0	*99.7*	*70-130*	0			
Surr: Dibromofluoromethane	*991.5*	0	*1000*	0	*99.2*	*70-130*	0			
Surr: Toluene-d8	*1024*	0	*1000*	0	*102*	*70-130*	0			

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

Client: HRL Compliance Solutions
Work Order: 1210245
Project: WPX Suicide Pit Landfarm 10/5/12

QC BATCH REPORT

Batch ID: **44013** Instrument ID **VMS8** Method: **SW8260**

LCS Sample ID: **LCS-44013-44013** Units: **µg/Kg** Analysis Date: **10/9/2012 11:57 AM**
Client ID: Run ID: **VMS6_121009A** SeqNo: **2108124** Prep Date: **10/8/2012** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	950.5	30	1000	0	95	75-125	0			
Ethylbenzene	928.5	30	1000	0	92.8	75-125	0			
m,p-Xylene	1873	60	2000	0	93.6	80-125	0			
o-Xylene	915.5	30	1000	0	91.6	75-125	0			
Toluene	897.5	30	1000	0	89.8	70-125	0			
Xylenes, Total	2788	90	3000	0	93	75-125	0			
Surr: 1,2-Dichloroethane-d4	*1032*	0	*1000*	0	*103*	*70-130*	0			
Surr: 4-Bromofluorobenzene	*1012*	0	*1000*	0	*101*	*70-130*	0			
Surr: Dibromofluoromethane	*1062*	0	*1000*	0	*106*	*70-130*	0			
Surr: Toluene-d8	*974.5*	0	*1000*	0	*97.4*	*70-130*	0			

MS Sample ID: **1210250-14A MS** Units: **µg/Kg** Analysis Date: **10/8/2012 11:22 PM**
Client ID: Run ID: **VMS6_121008A** SeqNo: **2106423** Prep Date: **10/8/2012** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	1289	41	1355	0	95.2	75-125	0			
Ethylbenzene	1264	41	1355	0	93.3	75-125	0			
m,p-Xylene	2558	81	2710	0	94.4	80-125	0			
o-Xylene	1261	41	1355	0	93	75-125	0			
Toluene	1239	41	1355	0	91.4	70-125	0			
Xylenes, Total	3819	120	4065	0	94	75-125	0			
Surr: 1,2-Dichloroethane-d4	*1347*	0	*1355*	0	*99.4*	*70-130*	0			
Surr: 4-Bromofluorobenzene	*1311*	0	*1355*	0	*96.8*	*70-130*	0			
Surr: Dibromofluoromethane	*1371*	0	*1355*	0	*101*	*70-130*	0			
Surr: Toluene-d8	*1301*	0	*1355*	0	*96*	*70-130*	0			

MSD Sample ID: **1210250-14A MSD** Units: **µg/Kg** Analysis Date: **10/8/2012 11:46 PM**
Client ID: Run ID: **VMS6_121008A** SeqNo: **2106424** Prep Date: **10/8/2012** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	1232	41	1355	0	90.9	75-125	1289	4.57	30	
Ethylbenzene	1197	41	1355	0	88.4	75-125	1264	5.45	30	
m,p-Xylene	2454	81	2710	0	90.6	80-125	2558	4.16	30	
o-Xylene	1205	41	1355	0	88.9	75-125	1261	4.56	30	
Toluene	1180	41	1355	0	87	70-125	1239	4.93	30	
Xylenes, Total	3659	120	4065	0	90	75-125	3819	4.29	30	
Surr: 1,2-Dichloroethane-d4	*1384*	0	*1355*	0	*102*	*70-130*	1347	*2.73*	*30*	
Surr: 4-Bromofluorobenzene	*1344*	0	*1355*	0	*99.2*	*70-130*	1311	*2.5*	*30*	
Surr: Dibromofluoromethane	*1396*	0	*1355*	0	*103*	*70-130*	1371	*1.86*	*30*	
Surr: Toluene-d8	*1311*	0	*1355*	0	*96.8*	*70-130*	1301	*0.726*	*30*	

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

Client: HRL Compliance Solutions
Work Order: 1210245
Project: WPX Suicide Pit Landfarm 10/5/12

QC BATCH REPORT

Batch ID: **44013** Instrument ID **VMS8** Method: **SW8260**

The following samples were analyzed in this batch:	1210245-01A

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

Client: HRL Compliance Solutions
Work Order: 1210245
Project: WPX Suicide Pit Landfarm 10/5/12

QC BATCH REPORT

Batch ID: **44037** Instrument ID **WETCHEM** Method: **SW7196A**

MBLK Sample ID: **MBLK-44037-44037** Units: **mg/Kg** Analysis Date: **10/10/2012 01:50 PM**
Client ID: Run ID: **WETCHEM_121010G** SeqNo: **2108215** Prep Date: **10/9/2012** 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-44037-44037** Units: **mg/Kg** Analysis Date: **10/10/2012 01:50 PM**
Client ID: Run ID: **WETCHEM_121010G** SeqNo: **2108214** Prep Date: **10/9/2012** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	1.905	0.50	1.992	0	95.7	75-110	0			

MS Sample ID: **1210192-01B MS** Units: **mg/Kg** Analysis Date: **10/10/2012 01:50 PM**
Client ID: Run ID: **WETCHEM_121010G** SeqNo: **2108211** Prep Date: **10/9/2012** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	1.841	0.49	1.976	0.1584	85.1	60-130	0			

MSD Sample ID: **1210192-01B MSD** Units: **mg/Kg** Analysis Date: **10/10/2012 01:50 PM**
Client ID: Run ID: **WETCHEM_121010G** SeqNo: **2108212** Prep Date: **10/9/2012** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	1.826	0.49	1.961	0.1584	85.1	60-130	1.841	0.787	30	

The following samples were analyzed in this batch: 1210245-01B

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

Client: HRL Compliance Solutions
Work Order: 1210245
Project: WPX Suicide Pit Landfarm 10/5/12

QC BATCH REPORT

Batch ID: **44089** Instrument ID **WETCHEM** Method: **USDA H60 Method**

DUP Sample ID: **1210293-02C DUP** Units: **mmhos/cm @25°F** Analysis Date: **10/11/2012 03:15 PM**
Client ID: Run ID: **WETCHEM_121011M** SeqNo: **2109840** Prep Date: **10/11/2012** DF: **5**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Electrical Conductivity @ Saturation	17.6	0.025	0	0	0		17.65	0.284	50	

The following samples were analyzed in this batch: 1210245-01C

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

Client: HRL Compliance Solutions
Work Order: 1210245
Project: WPX Suicide Pit Landfarm 10/5/12

QC BATCH REPORT

Batch ID: **R110916** Instrument ID **MOIST** Method: **A2540 G**

MBLK Sample ID: **WBLKS1-R110916** Units: **% of sample** Analysis Date: **10/8/2012 04:30 PM**
Client ID: Run ID: **MOIST_121008D** SeqNo: **2106322** 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-R110916** Units: **% of sample** Analysis Date: **10/8/2012 04:30 PM**
Client ID: Run ID: **MOIST_121008D** SeqNo: **2106318** 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: **1210237-02A DUP** Units: **% of sample** Analysis Date: **10/8/2012 04:30 PM**
Client ID: Run ID: **MOIST_121008D** SeqNo: **2106301** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	8.07	0.050	0	0	0	0-0	8.11	0.494	20	

DUP Sample ID: **1210243-04B DUP** Units: **% of sample** Analysis Date: **10/8/2012 04:30 PM**
Client ID: Run ID: **MOIST_121008D** SeqNo: **2106314** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	21.14	0.050	0	0	0	0-0	20.64	2.39	20	

The following samples were analyzed in this batch: 1210245-01B

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

Client: HRL Compliance Solutions
Work Order: 1210245
Project: WPX Suicide Pit Landfarm 10/5/12

QC BATCH REPORT

Batch ID: **R110924** Instrument ID **WETCHEM** Method: **SW9045D**

LCS Sample ID: **LCS-R110924-R110924** Units: **s.u.** Analysis Date: **10/9/2012 10:50 AM**
Client ID: Run ID: **WETCHEM_121009E** SeqNo: **2106472** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	4.21	0	4.4	0	95.7	90-110	0			

LCS Sample ID: **LCS-R110924-R110924** Units: **s.u.** Analysis Date: **10/9/2012 10:50 AM**
Client ID: Run ID: **WETCHEM_121009E** SeqNo: **2107337** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	4.21	0	4.4	0	95.7	90-110	0			

DUP Sample ID: **1210245-01B DUP** Units: **s.u.** Analysis Date: **10/9/2012 10:50 AM**
Client ID: **Suicide Pit Landfarm** Run ID: **WETCHEM_121009E** SeqNo: **2106474** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	8.87	0	0	0	0	0-0	8.87	0	20	

DUP Sample ID: **1210293-05B DUP** Units: **s.u.** Analysis Date: **10/9/2012 10:50 AM**
Client ID: Run ID: **WETCHEM_121009E** SeqNo: **2106916** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	8.44	0	0	0	0	0-0	8.44	0	20	

DUP Sample ID: **1210284-01A DUP** Units: **s.u.** Analysis Date: **10/9/2012 10:50 AM**
Client ID: Run ID: **WETCHEM_121009E** SeqNo: **2107339** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	7.06	0	0	0	0	0-0	7.06	0	20	

DUP Sample ID: **1210306-01A DUP** Units: **s.u.** Analysis Date: **10/9/2012 10:50 AM**
Client ID: Run ID: **WETCHEM_121009E** SeqNo: **2107376** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	5.81	0	0	0	0	0-0	5.81	0	20	

The following samples were analyzed in this batch: 1210245-01B

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 202r8

WORKORDER # 1210245

		SAMPLER	Reed Wold	DATE	10/5/2012	PAGE	1 of 1
PROJECT NAME	WPX Suicide Pit Landfarm	SITE ID	Suicide Pit	TURNAROUND	5 day	DISPOSAL	By Lab or Return to Client
PROJECT No.		EDD FORMAT					
		PURCHASE ORDER					
COMPANY NAME	HRL Compliance	BILL TO COMPANY	WPX				
SEND REPORT TO	Mark Mumby	INVOICE ATTN TO	Karolina Blaney				
ADDRESS	2385 F 1/2 Rd	ADDRESS	1058 Co Rd 215				
CITY / STATE / ZIP	Grand Junction, CO 81506	CITY / STATE / ZIP	Parachure CO 81635				
PHONE	970-243-3271	PHONE	970-683-2295				
FAX	970-243-3280	FAX					
E-MAIL	mmumby@hrlcomp.com rwold@hrlcomp.com krowe@hrlcomp.com	E-MAIL	Karolina.blaney@wpxenergy.com				

Lab ID	Field ID	Matrix	Sample Date	Sample Time	# Bottles	Pres.	QC	BTEX/ GRO	DRO/ PAH/ Metals (Table 910-10	SAR/ Ec/pH
1	Suicide Pit Landfarm	SO	10/5/2012	1:35	1	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)	
5.4.2	X	LEVEL II (Standard QC)
		LEVEL III (Std QC + forms)
		LEVEL IV (Std QC + forms + raw data)

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

	SIGNATURE	PRINTED NAME	DATE	TIME
RELINQUISHED BY		Reed Wold	10/5/12	5:00
RECEIVED BY		Diane F Shaw	10/6/12	0:15
RELINQUISHED BY				
RECEIVED BY				
RELINQUISHED BY				
RECEIVED BY				

ALS Group USA, Corp

Sample Receipt Checklist

Client Name: **HRL** Date/Time Received: **06-Oct-12 10:15**

Work Order: **1210245** Received by: **DS**

Checklist completed by Diane Shaw (eSignature) 06-Oct-12 (Date) Reviewed by: Ann Preston (eSignature) 08-Oct-12 (Date)

Matrices: Soil
Carrier name: FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Temperature(s)/Thermometer(s):	5.4 c		
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:	10/6/2012 11:10:59 AM		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑
pH adjusted?	Yes ☐	No ☐	N/A ☑
pH adjusted by:	-		

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

CorrectiveAction:

USTODY SEAL

ATE 10/15/10

IGNATURE

QEC
Quality Environmental Containers
800-255-3950 • 304-255-3900

FedEx. US Airbill
Express

8717 2931 7978

0200

Form ID No.

FedEx Retrieval Copy

fedex.com 1.800.GoFedEx 1.800.463.3339

1 From

Date 10/15/10

Sender's FedEx Account Number

Sender's Name Kris Lucy

Phone 614 873-3771

Company HCSJ

Address 2585 1½ Rd

Dept./Floor/Suite/Room

City Mand Junction State CO ZIP 81506

2 Your Internal Billing Reference

3 To

Recipient's Name Sample Receiving

Phone 614 399-6070

Company DLS Global

Address 3352 128th Ave

Dept./Floor/Suite/Room

We cannot deliver to P.O. boxes or P.O. ZIP codes.

Address

Print FedEx location address here if a HOLD option is selected.

City Holland State MI ZIP 49424

1 ☐ HOLD Weekday Print FedEx location address below. NOT available for FedEx First Overnight.

31 ☐ HOLD Saturday Print FedEx location address below. Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

4a Express Package Service * To most locations. Packages up to 150 lbs.

1 ☒ FedEx Priority Overnight Next business morning.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

5 ☐ FedEx Standard Overnight Next business afternoon.* Saturday Delivery NOT available.

6 ☐ FedEx First Overnight Earliest next business morning delivery to select locations.* Saturday Delivery NOT available.

3 ☐ FedEx 2Day Second business day.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

20 ☐ FedEx Express Saver Third business day.* Saturday Delivery NOT available.

4b Express Freight Service ** To most locations. Packages over 150 lbs.

7 ☐ FedEx 1Day Freight Next business day.** Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

FedEx 1Day Freight Booking No.

8 ☐ FedEx 2Day Freight Second business day.** Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

83 ☐ FedEx 3Day Freight Third business day.** Saturday Delivery NOT available.

5 Packaging * Declared value limit $500.

6 ☐ FedEx Envelope* 2 ☐ FedEx Pak* Includes FedEx Small Pak, FedEx Large Pak, and FedEx Sturdy Pak. 3 ☐ FedEx Box 4 ☐ FedEx Tube 1 ☒ Other

6 Special Handling and Delivery Signature Options

3 ☒ SATURDAY DELIVERY

☐ No Signature Required Package may be left without obtaining a signature for delivery.

10 ☐ Direct Signature Someone at recipient's address may sign for delivery. Fee applies.

34 ☐ Indirect Signature If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only. Fee applies.

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

☒ No 4 ☐ Yes As per attached Shipper's Declaration. ☐ Yes Shipper's Declaration not required. 6 ☐ Dry Ice Dry Ice, 9, UN 1845 ____ x ____ kg

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging or placed in a FedEx Express Drop Box.

☐ Cargo Aircraft Only

7 Payment Bill to: Enter FedEx Acct. No. or Credit Card No. below. Obtain Recip. Acct. No. ☐

1 ☐ Sender Acct. No. in Section 1 will be billed. 2 ☒ Recipient 3 ☐ Third Party 4 ☐ Credit Card 5 ☐ Cash/Check

Total Packages 15 Total Weight ____ lbs.

Credit Card Auth.

554

†Our liability is limited to $100 unless you declare a higher value. See the current FedEx Service Guide for details.

Rev. Date 2/08•Part #159281•©1994-2008 FedEx•PRINTED IN U.S.A. SRY

8717 2931 7978

fedex.com 1.800.GoFedEx 1.800.463.3339

APPENDIX 5: SUNDRY NOTICE FORM 4 FOR BACKGROUND ARSENIC CONSIDERATIONS

FORM 4
Rev 12/05

State of Colorado
Oil and Gas Conservation Commission

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

DE | ET | DE | ES

SUNDRY NOTICE

Submit original plus one copy. This form is to be used for general, technical and environmental sundry Information. For proposed or completed operations, describe in full on Technical Information Page (Page 2 of this form.) Identify well or other facility by API Number or by OGCC Facility ID. Operator shall send an informational copy of all sundry notices for wells located in High Density Areas to the Local Government Designee (Rule 603b.)

1. OGCC Operator Number: 96850
2. Name of Operator: WPX Energy Rocky Mountain, LLC
3. Address: 1058 County Road 215
City: Parachute State: CO Zip: 81635
4. Contact Name: Karolina Blaney
Phone: 970-683-2295
Fax: 970-285-9573

Complete the Attachment Checklist

OP OGCC

5. API Number 05- N/A
OGCC Facility ID Number 414570
6. Well/Facility Name: PA 41-31 CCF
7. Well/Facility Number PA 41-31
8. Location (QtrQtr, Sec, Twp, Rng, Meridian): SESE, Sec 31, T6S, R95W, 6th PM
9. County: Garfield
10. Field Name: Parachute
11. Federal, Indian or State Lease Number:

Survey Plat		
Directional Survey		
Surface Eqpmt Diagram		
Technical Info Page	X	
Other		

General Notice

☐ CHANGE OF LOCATION: Attach New Survey Plat (a change of surface qtr/qtr is substantive and requires a new permit)

	FNL/FSL		FEL/FWL	
Change of **Surface** Footage **from** Exterior Section Lines:				
Change of **Surface** Footage **to** Exterior Section Lines:				
Change of **Bottomhole** Footage **from** Exterior Section Lines:				
Change of **Bottomhole** Footage **to** Exterior Section Lines:				attach directional survey

Bottomhole location Qtr/Qtr, Sec, Twp, Rng, Mer

Latitude | Distance to nearest property line | Distance to nearest bldg, public rd, utility or RR

Longitude | Distance to nearest lease line | Is location in a High Density Area (rule 603b)? Yes/No

Ground Elevation | Distance to nearest well same formation | Surface owner consultation date:

GPS DATA:
Date of Measurement | PDOP Reading | Instrument Operator's Name

☐ CHANGE SPACING UNIT

Formation	Formation Code	Spacing order number	Unit Acreage	Unit configuration

☐ Remove from surface bond
Signed surface use agreement attached

☐ CHANGE OF OPERATOR (prior to drilling):
Effective Date:
Plugging Bond: ☐ Blanket ☐ Individual

☐ CHANGE WELL NAME NUMBER
From:
To:
Effective Date:

☐ ABANDONED LOCATION:
Was location ever built? ☐ Yes ☐ No
Is site ready for Inspection? ☐ Yes ☐ No
Date Ready for Inspection:

☐ NOTICE OF CONTINUED SHUT IN STATUS
Date well shut in or temporarily abandoned:
Has Production Equipment been removed from site? ☐ Yes ☐ No
MIT required if shut in longer than two years. Date of last MIT

☐ SPUD DATE:

☐ REQUEST FOR CONFIDENTIAL STATUS (6 mos from date casing set)

☐ SUBSEQUENT REPORT OF STAGE, SQUEEZE OR REMEDIAL CEMENT WORK *submit cbl and cement job summaries

Method used	Cementing tool setting/perf depth	Cement volume	Cement top	Cement bottom	Date

☐ RECLAMATION: Attach technical page describing final reclamation procedures per Rule 1004.
Final reclamation will commence on approximately
☐ Final reclamation is completed and site is ready for inspection.

Technical Engineering/Environmental Notice

☐ Notice of Intent
Approximate Start Date:

☐ Report of Work Done
Date Work Completed:

Details of work must be described in full on Technical Information Page (Page 2 must be submitted.)

☐ Intent to Recomplete (submit form 2)
☐ Change Drilling Plans
☐ Gross Interval Changed?
☐ Casing/Cementing Program Change
☐ Request to Vent or Flare
☐ Repair Well
☐ Rule 502 variance requested
☒ Other: Background
☐ E&P Waste Disposal
☐ Beneficial Reuse of E&P Waste
☐ Status Update/Change of Remediation Plans for Spills and Releases

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

Signed: Karolina Blaney Date: 10/25/2012 Email: Karolina.Blaney@wpxenergy.com

Print Name: Karolina Blaney Title: Environmental Specialist

COGCC Approved: Title: Date:

CONDITIONS OF APPROVAL, IF ANY:

FORM 4 Rev 12/05

TECHNICAL INFORMATION PAGE

FOR OGCC USE ONLY

1. OGCC Operator Number: 96850 API Number: N/A
2. Name of Operator: WPX Energy Rocky Mountain, LLC OGCC Facility ID # 414570
3. Well/Facility Name: PA 41-31 CCF Well/Facility Number: PA 41-31
4. Location (QtrQtr, Sec, Twp, Rng, Meridian): SESE, Sec 31, T6S, R95W, 6th PM

This form is to be completed whenever a Sundry Notice is submitted requiring detailed report of work to be performed or completed. This form shall be transmitted within 30 days of work completed as a "subsequent" report and must accompany Form 4, page 1.

5. **DESCRIBE PROPOSED OR COMPLETED OPERATIONS**

This COGCC Form 4 is being submitted as a request to consider the background concentration levels for arsenic at the PA 41-31 special purposes pit relative to production pit closure at the subject facillity in accordance with footnote 1 to the COGCC Table 9101-1.

The request is based on the analytical results below (see attached analytical)

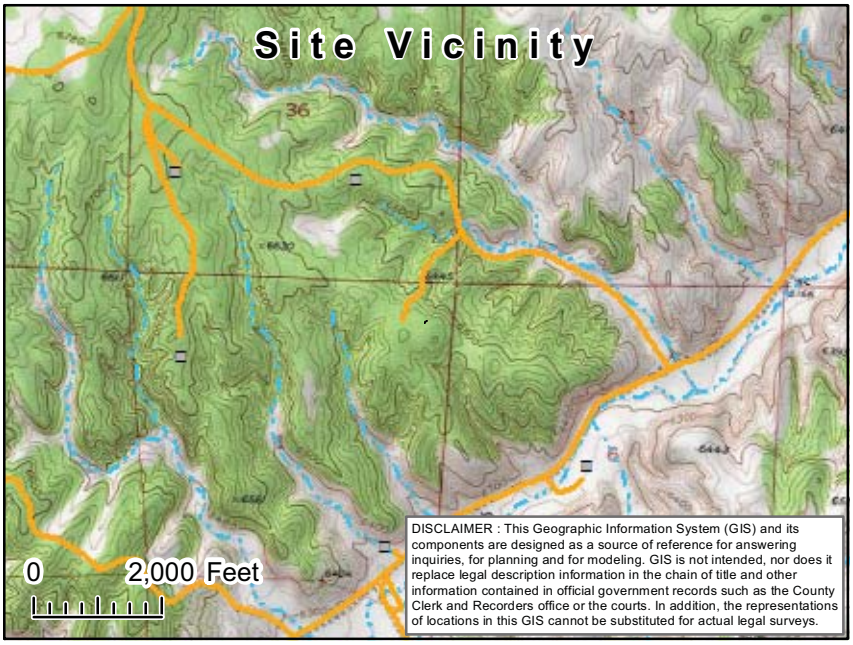
Six (6) grab samples were collected from locations within the pit footprint at depths of approximately 20' to 20.6' below pad grade to ascertain the arsenic concentrations of the facility.

Eastern Half - Pit Bottom - 6.1 mg/kg
Western Half - East Wall - 7.3 mg/kg
Western Half - South Wall - 5.0 mg/kg
Western Half - West Wall - 21 mg/kg
Western Half - North Wall Surface - 7.7 mg/kg

Three (3) grab samples were collected from nearby non-impacted, native soil from surface to 6" below to establish the background arsenic concentrations.

BKGD 1 - 6.1 mg/kg
BKGD 2 - 7.5 mg/kg
BKGD 3 - 6.5 mg/kg

WPX is requesting this approval in order to proceed with closure and reclamation of the PA 41-31 special purpose pit.



Sample Location Map

Location: Frac Pad 41-31-695

WPX Energy Rocky Mountain, LLC

Legend

PLSS

- Township
- Section
- WPX Access Roads
- Perennial Stream
- Intermittent/Ephemeral Stream

N
W E
S

0 37.5 75

HCSI
ENVIRONMENTAL CONSULTANTS

T:\Client_Specific\2008\Williams_EP\Spills\Valley\2012\PA 41-31-695 (Suicide Frac Pit)\PA 41-31-695.mxd HCSI_jharris

Revision Date: 10/19/2012 11:00:04 AM

ALS Group USA, Corp

Date: *18-Oct-12*

Client: HRL Compliance Solutions
Project: WPX Suicide Frac Pit-Western Half Pit Clos.10/4/12 **Work Order:** 1210189
Sample ID: Western Pit Half BKGD 1 **Lab ID:** 1210189-06
Collection Date: 10/4/2012 12:00 PM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			**SW6020A**		Prep Date: **10/8/2012**	Analyst: **CES**
Arsenic	**6.1**		**0.73**	**mg/Kg-dry**	2	10/8/2012 10:33 PM
MOISTURE			**A2540 G**			Analyst: **LR**
Moisture	**1.6**		**0.050**	**% of sample**	1	10/5/2012 01:30 PM

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

ALS Group USA, Corp

Date: *18-Oct-12*

Client: HRL Compliance Solutions
Project: WPX Suicide Frac Pit-Western Half Pit Clos.10/4/12 **Work Order:** 1210189
Sample ID: Western Pit HalfBKGD 2 **Lab ID:** 1210189-07
Collection Date: 10/4/2012 12:10 PM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			**SW6020A**		Prep Date: **10/8/2012**	Analyst: **CES**
Arsenic	**7.5**		**0.72**	**mg/Kg-dry**	2	10/8/2012 10:39 PM
MOISTURE			**A2540 G**			Analyst: **LR**
Moisture	**2.6**		**0.050**	**% of sample**	1	10/5/2012 01:30 PM

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

ALS Group USA, Corp

Date: *18-Oct-12*

Client: HRL Compliance Solutions
Project: WPX Suicide Frac Pit-Western Half Pit Clos.10/4/12 **Work Order:** 1210189
Sample ID: Western Pit Half BKGD 3 **Lab ID:** 1210189-08
Collection Date: 10/4/2012 12:15 PM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			**SW6020A**		Prep Date: **10/8/2012**	Analyst: **CES**
Arsenic	**6.5**		**0.80**	**mg/Kg-dry**	2	10/8/2012 10:45 PM
SOLUBLE CATIONS FOR SAR			**SW6020A**		Prep Date: **10/9/2012**	Analyst: **CES**
Calcium	**400**		**5.1**	**mg/L-dry**	10	10/9/2012 06:52 PM
Magnesium	**43**		**2.0**	**mg/L-dry**	10	10/9/2012 06:52 PM
Sodium	**57**		**2.0**	**mg/L-dry**	10	10/9/2012 06:52 PM
SODIUM ADSORPTION RATIO			**USDA H60 METHO**		Prep Date: **10/9/2012**	Analyst: **CES**
Sodium Adsorption Ratio	**0.72**		**0.010**	**none**	1	10/10/2012
ELECTRICAL CONDUCTIVITY (SAR)			**USDA H60 METHO**		Prep Date: **10/9/2012**	Analyst: **JB**
Electrical Conductivity @ Saturation	**2.5**		**0.025**	**mmhos/cm @25**	5	10/9/2012 03:15 PM
MOISTURE			**A2540 G**			Analyst: **LR**
Moisture	**2.2**		**0.050**	**% of sample**	1	10/5/2012 01:30 PM
PH			**SW9045D**			Analyst: **KF**
pH	**8.60**			**s.u.**	1	10/5/2012 09:45 AM

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