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
Document 2315382
Received 9/1/2015

REM 8998

OGCC Employee: SCS

☐ 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):

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: 05-045-10052 County: Garfield
Facility Name: TR 22-34-597 Facility Number: 274717
Well Name: Well Number:
Location: (QtrQtr, Sec, Twp, Rng, Meridian): SENW S34 T5S R97W 6th PM Latitude: 39.571776 Longitude: -108.266672

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: 56-Parachute-Irigul-Rhone association, 25 to 50 percent slopes

Potential receptors (water wells within 1/4 mi, surface waters, etc.): see attached hydrology map

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

Impacted Media (check):	Extent of Impact:	How Determined:
☐ Soils	based on the laboratory analytical results there	Visual Observation, Laboratory Testing
☐ Vegetation	is no impact to soils or water	
☐ Groundwater		
☐ Surface Water		

REMEDIATION WORKPLAN

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

See attached document

Describe how source is to be removed:

See attached document

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 document

Submit Page 2 with Page 1

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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: _____
OGCC Operator No: _____
Received Date: _____
Well Name & No: _____
Facility Name & No: _____

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 document.

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 document

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 document

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

See attached document

IMPLEMENTATION SCHEDULE

Date Site Investigation Began: 8/11/2015	Date Site Investigation Completed: 8/19/15	Date Remediation Plan Submitted: 11/26/2014
Remediation Start Date: NA	Anticipated Completion Date: NA	Actual Completion Date: 8/19/15

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: 8/28/2015

OGCC Approved: Stanley C. Spencer Digitally signed by Stanley C. Spencer DN: cn=Stanley C. Spencer, o=COGCC, ou=EPS Northwest, email=stan.spencer@state.co.us, c=US Date: 2015.09.01 09:20:38 -06'00' Title: EPS Northwest Date: 09/01/15

Based on review of information presented, it appears that no further action is necessary at this time, and COGCC approves the closure request. However, should future conditions at the site indicate contaminant concentrations in soils exceeding COGCC standards or if ground water is found to be significantly impacted, then further investigation and/or remediation activities may be required at the site.

WPX ENERGY ROCKY MOUNTAIN LLC

TRAIL RIDGE FIELD

NOTICE OF COMPLETION REPORT FOR

TR 22-34-597 PRODUCTION PIT
REMEDIATION # 8998

Prepared For:

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

Prepared By:

2385 F ½ RD
Grand Junction, CO81505
Phone: 970-243-3271
Fax: 970-243-3280

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Appendix 2: Background Raw Analytical Results

Introduction

The purpose of this Notice of Completion report – for the closure of the TR 22-34-597 Production Pit (COGCC Facility ID number 274717; hereinafter referred to as TR 22-34-597 – is to provide detailed information and result analysis for the previously submitted and approved remediation number 8998, 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 submitted electronically on April 8, 2015. 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 April 8, 2015; at which time the aforementioned remediation number was issued. Closure activities began in August 10th, 2015 and were concluded on August 20, 2015. Information included in this report includes but is not limited to; field screening results, laboratory analytical, subliner soil Investigation, soil treatment, and liner recycling.

Evacuation of Pit Contents

Produced water and free liquids were removed from the pit utilizing a vacuum truck and managed at WPX Centralized E&P waste treatment facilities. Once the liquids were removed from the pit, the residual pit contents remaining on the liner were removed using a pressure washer and vac truck and managed at the WPX centralized E&P waste treatment facilities accordingly.

Background Sampling

Three grab samples were collected from the upgradient, undisturbed soil 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 2 for background sampling results.

Pit Liner Investigation and Integrity Assessment

The pit liner consisted of a four layer system. These layers included: a 12mm poly synthetic material, a felt fabric, a tarpaulin textile, and a poly synthetic net. The liner system did not identify any visible tears or rips prior to removal.

Pit Liner Removal

Once the pit liner was cleaned of residual pit contents, the entire liner system was removed from the pit. A trackhoe was utilized to pull the liner off the ground surface and out of the pit. The liner material was stockpiled on site where it was compacted, bailed and processed for transport to a recycling center.

Evaluation of Pit Sub-Soils

After the liner was removed, the pit sub-soils were evaluated for evidence of staining and possibly impacts. In doing so, the pit was divided into a five quadrants in order to accurately characterize the pit as a whole by investigating individual quadrants. The five quadrants were named by their geographical direction in relation to the pit bottom and are defined in Figure 1.

For each quadrant, soils were visually inspected for impacts. Minor staining was present on pit side w and bottom, but did not contain any hydrocarbon odor and was suspected to be from the felt liner pres below the poly liner system.

Remediation Activities

Due to visual observations indicating no presents of impacts, confirmation samples were collected from each of the side walls, and the lowest point of the pit bottom. Samples were collected from six (6) inches to a foot below the surface. Samples were submitted to ALS Laboratory on August 11, 2015 for constituents outlined in COGCC Table 910-1.

- 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. One additional grab sample was collected from the base of the pit, which included the low point of the base to be analyzed for full COGCC Table 910-1, 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 #2313312).

Sample Analysis

Sampling was performed in accordance with WPX Pit Closure Plan, Phase IV, Task 2. See attached Table 2 for summary of confirmation sampling results. Additional detailed provided in Appendix 1.

Backfill Material

Material utilized to backfill the pit will be the original excavated soil from construction of the pit.

- The soil will be placed in five foot lifts and will not be compacted beyond the point of making an impenetrable layer but sufficient to suppose subsequent operations and prevent subsidence.
- The pit will be reclaimed in accordance with the COGCC 1000 Series Rule in addition to all SUA/COA’s per the land owner.

Exceptions to COGCC Table 910-1

The only exceedances with regards to COGCC Table 910-1 were within the arsenic analysis. WPX is requesting that an allowance for arsenic be considered as it is relative to background arsenic levels. Any concern to inorganic concentrations will be covered with 3ft of native material.

Analytical Data Management

Refer to Appendix 1 for the raw analytical analysis for samples collected along the pit bottom and side walls, which are also presented in Table 1. Table 2 includes background sample results with raw analytical data available in Appendix 2.

FIGURES

FIGURE 1: SAMPLE LOCATION MAP

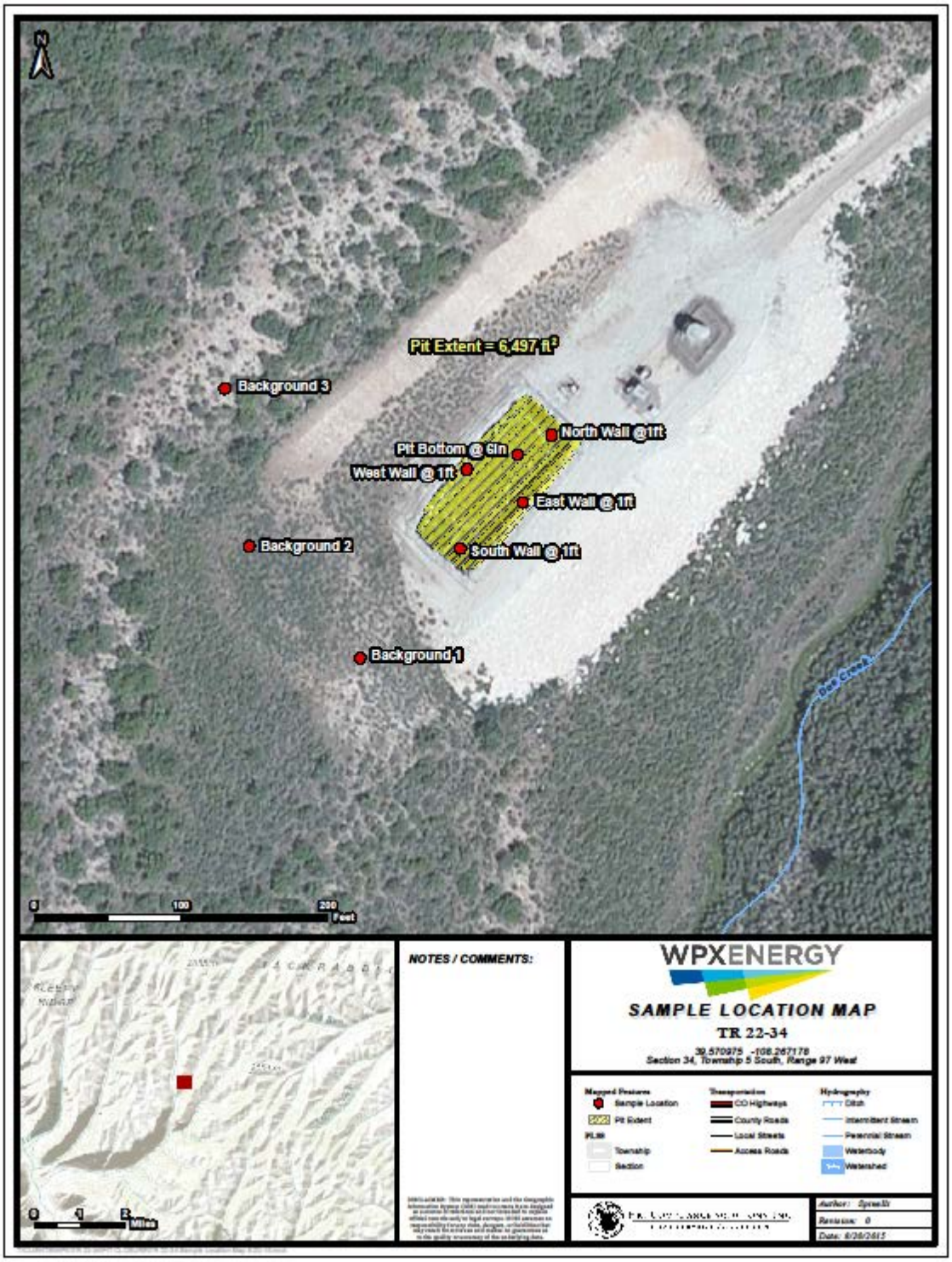

FIGURE 2: PIT SUBSOILS

TABLES

TABLE 1: PIT BOTTOM AND SIDE WALL ANALYTICAL RESULTS

Pit Bottom and Walls	Sample Locations				
	North Wall	South Wall	East Wall	West Wall	Pit Bottom
TEPH (DRO)	240	110	91	160	39
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	160	ND	ND	ND	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	ND	ND	ND	ND	ND
BENZO(G,H,I)PERYLEN	ND	ND	ND	ND	ND
BENZO(K)FLUORANTHENE	ND	ND	ND	ND	ND
CHRYSENE (mg/kg)	ND	ND	ND	ND	ND
DIBENZO(A,H)ANTHRANCENE	ND	ND	ND	ND	ND
FLUORANTHENE	ND	ND	ND	ND	ND
FLUORENE	ND	ND	ND	ND	ND
INDENO(1,2,3-CD)PYRENE	ND	ND	ND	ND	ND
NAPHTHALENE	ND	ND	ND	ND	ND
PYRENE	ND	ND	ND	ND	ND
ARSENIC	-	-	-	-	34
BARIUM	-	-	-	-	370
CADMIUM	-	-	-	-	0.72
CHROMIUM	-	-	-	-	28
CHROMIUM (III)	-	-	-	-	27
CHROMIUM (IV)	-	-	-	-	ND
COPPER	-	-	-	-	36
LEAD	-	-	-	-	8.2
MERCURY	-	-	-	-	0.063
NICKEL	-	-	-	-	34
SELENIUM	-	-	-	-	0.89
SILVER	-	-	-	-	ND
ZINC	-	-	-	-	50
ELECTRICAL CONDUCTIVITY (EC) (mmho/cm)	1.2	2.0	1.5	0.97	5.0
pH	8.6	8.3	8.6	8.6	8.2
SODIUM ADSORPTION RATIO (SAR)	0.64	0.67	0.97	0.75	1.9

Readings above state limits are highlighted in yellow
Note: all results are in, mg/kg = milligram per kilogram, unless noted otherwise
ND = Non Detect
- = Not Sampled

TABLE 2: BACKGROUND ANALYTICAL RESULTS

Sample ID	Arsenic (mg/kg)	Conductivity(mmho/cm)	pH (s.u.)	Sodium Adsorbtion Ratio
BKGD 1	26	1.8	8.0	0.25
BKGD 2	21	N/A	N/A	N/A
BKGD 3	41	N/A	N/A	N/A

Results above state limits are highlighted in yellow

Appendix 1: Pit Bottom and Side Wall Confirmation Raw Analytical Data

19-Aug-2015

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

Re: **WPX Energy - TR 22-34 - Pit Closure** Work Order: **1508648**

Dear Kris,

ALS Environmental received 8 samples on 13-Aug-2015 08:00 AM for the analyses presented in the following report.

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

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

The total number of pages in this report is 35.

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

Sincerely,

Electronically approved by: Chad Whelton

Les Arnold
Senior Project Manager

Certificate No: MN 532786

ADDRESS 3352 128th Avenue Holland, Michigan 49424-9263 | PHONE (616) 399-6070 | FAX (616) 399-6185
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Environmental www.alsglobal.com
RIGHT SOLUTIONS RIGHT PARTNER

ALS Group USA, Corp

Date: 19-Aug-15

Client: HRL Compliance Solutions, Inc
Project: WPX Energy - TR 22-34 - Pit Closure
Work Order: **1508648**

Work Order Sample Summary

Lab Samp ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
1508648-01	West Wall @ 1ft	Soil		8/11/2015 10:10	8/13/2015 08:00	☐
1508648-02	Pit Bottom @ 6in	Soil		8/11/2015 09:45	8/13/2015 08:00	☐
1508648-03	North Wall @ 1ft	Soil		8/11/2015 10:20	8/13/2015 08:00	☐
1508648-04	South Wall @ 1ft	Soil		8/11/2015 10:00	8/13/2015 08:00	☐
1508648-05	East Wall @ 1ft	Soil		8/11/2015 09:50	8/13/2015 08:00	☐
1508648-06	Background 1	Soil		8/11/2015 10:30	8/13/2015 08:00	☐
1508648-07	Background 2	Soil		8/11/2015 10:35	8/13/2015 08:00	☐
1508648-08	Background 3	Soil		8/11/2015 10:40	8/13/2015 08:00	☐

ALS Group USA, Corp

Date: 19-Aug-15

Client: HRL Compliance Solutions, Inc
Project: WPX Energy - TR 22-34 - Pit Closure
Work Order: 1508648

Case Narrative

Samples for the above noted Work Order were received on 8/13/2015. The attached "Sample Receipt Checklist" documents the status of custody seals, container integrity, preservation, and temperature compliance.

Samples were analyzed according to the analytical methodology previously transmitted in the "Work Order Acknowledgement". Methodologies are also documented in the "Analytical Result" section for each sample. Quality control results are listed in the "QC Report" section. Sample association for the reported quality control is located at the end of each batch summary. If applicable, results are appropriately qualified in the Analytical Result and QC Report sections. The "Qualifiers" section documents the various qualifiers, units, and acronyms utilized in reporting.

With the following exceptions, all sample analyses achieved analytical criteria.

Volatile Organics:
No other deviations or anomalies were noted.

Extractable Organics :
No other deviations or anomalies were noted.

Metals:
No other deviations or anomalies were noted.

Wet Chemistry:

Batch 75005, Method CR6_7196_S, Sample 1508648-02A MS/MSD: The MS and MSD recovery was below the lower control limit for Hexavalent Chromium. The corresponding result in the parent sample may be biased low.

ALS Group USA, Corp

Date: 19-Aug-15

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 is present at an estimated concentration between the MDL and Report Limit
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL
X	Analyte was detected in the Method Blank between the MDL and PQL, sample results may exhibit background or reagent contamination at the observed level.

Acronym	Description
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
LOD	Limit of Detection (see MDL)
LOQ	Limit of Quantitation (see PQL)
MBLK	Method Blank
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
TDL	Target Detection Limit
TNTC	Too Numerous To Count
A	APHA Standard Methods
D	ASTM
E	EPA
SW	SW-846 Update III

Units Reported	Description
% of sample	Percent of Sample
µg/Kg-dry	Micrograms per Kilogram Dry Weight
mg/Kg-dry	Milligrams per Kilogram Dry Weight
mg/L	Milligrams per Liter
mmhos/cm @25°C	Millimhos-Centimeter at 25 Degrees Celcius
none	
s.u.	Standard Units

ALS Group USA, Corp

Date: *19-Aug-15*

Client: HRL Compliance Solutions, Inc
Project: WPX Energy - TR 22-34 - Pit Closure
Work Order: 1508648
Sample ID: West Wall @ 1ft
Lab ID: 1508648-01
Collection Date: 8/11/2015 10:10 AM
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID			**SW8015M**		Prep: SW3541 / 8/14/15	Analyst: **IT**
DRO (C10-C28)	**160**		**24**	**mg/Kg-dry**	5	8/14/2015 06:53 PM
Surr: 4-Terphenyl-d14	*78.2*		*39-133*	*%REC*	5	8/14/2015 06:53 PM
GASOLINE RANGE ORGANICS BY GC-FID			**SW8015D**		Prep: SW5035 / 8/13/15	Analyst: **IT**
GRO (C6-C10)	ND		2.9	mg/Kg-dry	1	8/14/2015 01:56 AM
Surr: Toluene-d8	*99.9*		*50-150*	*%REC*	1	8/14/2015 01:56 AM
SOLUBLE CATIONS FOR SAR			**SW846 6010C**		Prep: USDA Method 20B / 8/17/15	Analyst: **JEC**
Calcium	**100**		**5.0**	**mg/L**	10	8/18/2015 01:59 PM
Magnesium	**23**		**2.0**	**mg/L**	10	8/18/2015 01:59 PM
Sodium	**32**		**2.0**	**mg/L**	10	8/18/2015 01:59 PM
SODIUM ADSORPTION RATIO			**USDA H60 METHO**		Prep: USDA Method 20B / 8/17/15	Analyst: **JEC**
Sodium Adsorption Ratio	**0.75**		**0.010**	**none**	1	8/18/2015
SEMI-VOLATILE ORGANIC COMPOUNDS			**SW846 8270D**		Prep: SW3541 / 8/14/15	Analyst: **RM**
Acenaphthene	ND		77	µg/Kg-dry	10	8/14/2015 07:10 PM
Acenaphthylene	ND		77	µg/Kg-dry	10	8/14/2015 07:10 PM
Anthracene	ND		77	µg/Kg-dry	10	8/14/2015 07:10 PM
Benzo(a)anthracene	ND		77	µg/Kg-dry	10	8/14/2015 07:10 PM
Benzo(a)pyrene	ND		77	µg/Kg-dry	10	8/14/2015 07:10 PM
Benzo(b)fluoranthene	ND		77	µg/Kg-dry	10	8/14/2015 07:10 PM
Benzo(g,h,i)perylene	ND		77	µg/Kg-dry	10	8/14/2015 07:10 PM
Benzo(k)fluoranthene	ND		77	µg/Kg-dry	10	8/14/2015 07:10 PM
Chrysene	ND		77	µg/Kg-dry	10	8/14/2015 07:10 PM
Dibenzo(a,h)anthracene	ND		77	µg/Kg-dry	10	8/14/2015 07:10 PM
Fluoranthene	ND		77	µg/Kg-dry	10	8/14/2015 07:10 PM
Fluorene	ND		77	µg/Kg-dry	10	8/14/2015 07:10 PM
Indeno(1,2,3-cd)pyrene	ND		77	µg/Kg-dry	10	8/14/2015 07:10 PM
Naphthalene	ND		77	µg/Kg-dry	10	8/14/2015 07:10 PM
Pyrene	ND		77	µg/Kg-dry	10	8/14/2015 07:10 PM
Surr: 2-Fluorobiphenyl	*71.2*		*12-100*	*%REC*	10	8/14/2015 07:10 PM
Surr: 4-Terphenyl-d14	*71.6*		*25-137*	*%REC*	10	8/14/2015 07:10 PM
Surr: Nitrobenzene-d5	*69.0*		*37-107*	*%REC*	10	8/14/2015 07:10 PM
VOLATILE ORGANIC COMPOUNDS			**SW8260B**		Prep: SW5035 / 8/13/15	Analyst: **AK**
Benzene	ND		35	µg/Kg-dry	1	8/14/2015 02:46 PM
Ethylbenzene	ND		35	µg/Kg-dry	1	8/14/2015 02:46 PM
m,p-Xylene	ND		71	µg/Kg-dry	1	8/14/2015 02:46 PM
o-Xylene	ND		35	µg/Kg-dry	1	8/14/2015 02:46 PM

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

ALS Group USA, Corp

Date: *19-Aug-15*

Client: HRL Compliance Solutions, Inc
Project: WPX Energy - TR 22-34 - Pit Closure
Work Order: 1508648
Sample ID: West Wall @ 1ft
Lab ID: 1508648-01
Collection Date: 8/11/2015 10:10 AM
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Toluene	ND		35	µg/Kg-dry	1	8/14/2015 02:46 PM
Xylenes, Total	ND		110	µg/Kg-dry	1	8/14/2015 02:46 PM
Surr: 1,2-Dichloroethane-d4	*92.0*		*70-130*	*%REC*	1	8/14/2015 02:46 PM
Surr: 4-Bromofluorobenzene	*101*		*70-130*	*%REC*	1	8/14/2015 02:46 PM
Surr: Dibromofluoromethane	*90.9*		*70-130*	*%REC*	1	8/14/2015 02:46 PM
Surr: Toluene-d8	*97.6*		*70-130*	*%REC*	1	8/14/2015 02:46 PM
ELECTRICAL CONDUCTIVITY (SAR)			**USDA H60 METHO**	Prep: USDA Method 20B / 8/17/15		Analyst: **JB**
Electrical Conductivity @ Saturation	**0.97**		**0.050**	**mmhos/cm @2**	10	8/18/2015 05:00 PM
MOISTURE			**E160.3M**			Analyst: **EVB**
Moisture	**15**		**0.050**	**% of sample**	1	8/17/2015 04:08 PM
PH			**SW9045D**	Prep: EXTRACT / 8/17/15		Analyst: **ED**
pH	**8.6**			**s.u.**	1	8/17/2015 04:30 PM

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

ALS Group USA, Corp

Date: *19-Aug-15*

Client: HRL Compliance Solutions, Inc
Project: WPX Energy - TR 22-34 - Pit Closure
Work Order: 1508648
Sample ID: Pit Bottom @ 6in
Lab ID: 1508648-02
Collection Date: 8/11/2015 09:45 AM
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID			**SW8015M**		Prep: SW3541 / 8/14/15	Analyst: **IT**
DRO (C10-C28)	**39**		**4.9**	**mg/Kg-dry**	1	8/14/2015 07:23 PM
Surr: 4-Terphenyl-d14	*55.9*		*39-133*	*%REC*	1	8/14/2015 07:23 PM
GASOLINE RANGE ORGANICS BY GC-FID			**SW8015D**		Prep: SW5035 / 8/13/15	Analyst: **IT**
GRO (C6-C10)	ND		3.0	mg/Kg-dry	1	8/14/2015 02:20 AM
Surr: Toluene-d8	*101*		*50-150*	*%REC*	1	8/14/2015 02:20 AM
MERCURY BY CVAA			**SW7471B**		Prep: SW7471 / 8/18/15	Analyst: **LR**
Mercury	**0.063**		**0.016**	**mg/Kg-dry**	1	8/18/2015 03:31 PM
METALS ANALYSIS BY ICP			**SW846 6010C**		Prep: SW3050B / 8/13/15	Analyst: **JEC**
Arsenic	**34**		**0.80**	**mg/Kg-dry**	2	8/17/2015 12:47 PM
Barium	**370**		**0.40**	**mg/Kg-dry**	1	8/14/2015 06:06 PM
Cadmium	**0.72**		**0.32**	**mg/Kg-dry**	1	8/14/2015 06:06 PM
Chromium	**28**		**0.80**	**mg/Kg-dry**	2	8/17/2015 12:47 PM
Copper	**36**		**0.40**	**mg/Kg-dry**	1	8/14/2015 06:06 PM
Lead	**8.2**		**0.80**	**mg/Kg-dry**	2	8/17/2015 12:47 PM
Nickel	**34**		**0.40**	**mg/Kg-dry**	1	8/14/2015 06:06 PM
Selenium	**0.89**		**0.40**	**mg/Kg-dry**	1	8/19/2015 11:52 AM
Silver	ND		0.40	mg/Kg-dry	1	8/14/2015 06:06 PM
Zinc	**50**		**1.6**	**mg/Kg-dry**	2	8/17/2015 12:47 PM
SOLUBLE CATIONS FOR SAR			**SW846 6010C**		Prep: USDA Method 20B / 8/17/15	Analyst: **JEC**
Calcium	**380**		**5.0**	**mg/L**	10	8/18/2015 02:05 PM
Magnesium	**100**		**2.0**	**mg/L**	10	8/18/2015 02:05 PM
Sodium	**160**		**2.0**	**mg/L**	10	8/18/2015 02:05 PM
SODIUM ADSORPTION RATIO			**USDA H60 METHO**		Prep: USDA Method 20B / 8/17/15	Analyst: **JEC**
Sodium Adsorption Ratio	**1.9**		**0.010**	**none**	1	8/18/2015
SEMI-VOLATILE ORGANIC COMPOUNDS			**SW846 8270D**		Prep: SW3541 / 8/14/15	Analyst: **RM**
Acenaphthene	ND		7.8	µg/Kg-dry	1	8/15/2015 12:44 AM
Acenaphthylene	ND		7.8	µg/Kg-dry	1	8/15/2015 12:44 AM
Anthracene	ND		7.8	µg/Kg-dry	1	8/15/2015 12:44 AM
Benzo(a)anthracene	ND		7.8	µg/Kg-dry	1	8/15/2015 12:44 AM
Benzo(a)pyrene	ND		7.8	µg/Kg-dry	1	8/15/2015 12:44 AM
Benzo(b)fluoranthene	ND		7.8	µg/Kg-dry	1	8/15/2015 12:44 AM
Benzo(g,h,i)perylene	ND		7.8	µg/Kg-dry	1	8/15/2015 12:44 AM
Benzo(k)fluoranthene	ND		7.8	µg/Kg-dry	1	8/15/2015 12:44 AM
Chrysene	ND		7.8	µg/Kg-dry	1	8/15/2015 12:44 AM

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

Client: HRL Compliance Solutions, Inc
Project: WPX Energy - TR 22-34 - Pit Closure
Work Order: 1508648
Sample ID: Pit Bottom @ 6in
Lab ID: 1508648-02
Collection Date: 8/11/2015 09:45 AM
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Dibenzo(a,h)anthracene	ND		7.8	µg/Kg-dry	1	8/15/2015 12:44 AM
Fluoranthene	ND		7.8	µg/Kg-dry	1	8/15/2015 12:44 AM
Fluorene	ND		7.8	µg/Kg-dry	1	8/15/2015 12:44 AM
Indeno(1,2,3-cd)pyrene	ND		7.8	µg/Kg-dry	1	8/15/2015 12:44 AM
Naphthalene	ND		7.8	µg/Kg-dry	1	8/15/2015 12:44 AM
Pyrene	ND		7.8	µg/Kg-dry	1	8/15/2015 12:44 AM
Surr: 2-Fluorobiphenyl	*59.8*		*12-100*	*%REC*	1	8/15/2015 12:44 AM
Surr: 4-Terphenyl-d14	*66.6*		*25-137*	*%REC*	1	8/15/2015 12:44 AM
Surr: Nitrobenzene-d5	*65.2*		*37-107*	*%REC*	1	8/15/2015 12:44 AM
VOLATILE ORGANIC COMPOUNDS			**SW8260B**		Prep: SW5035 / 8/13/15	Analyst: **AK**
Benzene	ND		36	µg/Kg-dry	1	8/14/2015 03:11 PM
Ethylbenzene	ND		36	µg/Kg-dry	1	8/14/2015 03:11 PM
m,p-Xylene	ND		71	µg/Kg-dry	1	8/14/2015 03:11 PM
o-Xylene	ND		36	µg/Kg-dry	1	8/14/2015 03:11 PM
Toluene	ND		36	µg/Kg-dry	1	8/14/2015 03:11 PM
Xylenes, Total	ND		110	µg/Kg-dry	1	8/14/2015 03:11 PM
Surr: 1,2-Dichloroethane-d4	*90.2*		*70-130*	*%REC*	1	8/14/2015 03:11 PM
Surr: 4-Bromofluorobenzene	*97.6*		*70-130*	*%REC*	1	8/14/2015 03:11 PM
Surr: Dibromofluoromethane	*91.0*		*70-130*	*%REC*	1	8/14/2015 03:11 PM
Surr: Toluene-d8	*97.2*		*70-130*	*%REC*	1	8/14/2015 03:11 PM
ELECTRICAL CONDUCTIVITY (SAR)			**USDA H60 METHO**		Prep: USDA Method 20B / 8/17/15	Analyst: **JB**
Electrical Conductivity @ Saturation	**5.0**		**0.050**	**mmhos/cm @2**	10	8/18/2015 05:00 PM
CHROMIUM, TRIVALENT			**CALCULATION**			Analyst: **MB**
Chromium, Trivalent	**27**		**0.59**	**mg/Kg-dry**	1	8/19/2015 01:35 PM
CHROMIUM, HEXAVALENT			**SW7196A**		Prep: SW3060A / 8/14/15	Analyst: **MB**
Chromium, Hexavalent	ND		1.2	mg/Kg-dry	1	8/19/2015 11:00 AM
MOISTURE			**E160.3M**			Analyst: **EVB**
Moisture	**16**		**0.050**	**% of sample**	1	8/17/2015 04:08 PM
PH			**SW9045D**		Prep: EXTRACT / 8/17/15	Analyst: **ED**
pH	**8.2**			**s.u.**	1	8/17/2015 04:30 PM

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

ALS Group USA, Corp

Date: *19-Aug-15*

Client: HRL Compliance Solutions, Inc
Project: WPX Energy - TR 22-34 - Pit Closure
Work Order: 1508648
Sample ID: North Wall @ 1ft
Lab ID: 1508648-03
Collection Date: 8/11/2015 10:20 AM
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID			**SW8015M**		Prep: SW3541 / 8/14/15	Analyst: **IT**
DRO (C10-C28)	**240**		**25**	**mg/Kg-dry**	5	8/14/2015 07:53 PM
Surr: 4-Terphenyl-d14	*64.5*		*39-133*	*%REC*	5	8/14/2015 07:53 PM
GASOLINE RANGE ORGANICS BY GC-FID			**SW8015D**		Prep: SW5035 / 8/13/15	Analyst: **IT**
GRO (C6-C10)	ND		3.0	mg/Kg-dry	1	8/14/2015 04:22 AM
Surr: Toluene-d8	*104*		*50-150*	*%REC*	1	8/14/2015 04:22 AM
SOLUBLE CATIONS FOR SAR			**SW846 6010C**		Prep: USDA Method 20B / 8/17/15	Analyst: **JEC**
Calcium	**160**		**5.0**	**mg/L**	10	8/18/2015 02:10 PM
Magnesium	**31**		**2.0**	**mg/L**	10	8/18/2015 02:10 PM
Sodium	**34**		**2.0**	**mg/L**	10	8/18/2015 02:10 PM
SODIUM ADSORPTION RATIO			**USDA H60 METHO**		Prep: USDA Method 20B / 8/17/15	Analyst: **JEC**
Sodium Adsorption Ratio	**0.64**		**0.010**	**none**	1	8/18/2015
SEMI-VOLATILE ORGANIC COMPOUNDS			**SW846 8270D**		Prep: SW3541 / 8/14/15	Analyst: **RM**
Acenaphthene	ND		79	µg/Kg-dry	10	8/15/2015 01:04 AM
Acenaphthylene	ND		79	µg/Kg-dry	10	8/15/2015 01:04 AM
Anthracene	ND		79	µg/Kg-dry	10	8/15/2015 01:04 AM
Benzo(a)anthracene	ND		79	µg/Kg-dry	10	8/15/2015 01:04 AM
Benzo(a)pyrene	ND		79	µg/Kg-dry	10	8/15/2015 01:04 AM
Benzo(b)fluoranthene	ND		79	µg/Kg-dry	10	8/15/2015 01:04 AM
Benzo(g,h,i)perylene	ND		79	µg/Kg-dry	10	8/15/2015 01:04 AM
Benzo(k)fluoranthene	ND		79	µg/Kg-dry	10	8/15/2015 01:04 AM
Chrysene	ND		79	µg/Kg-dry	10	8/15/2015 01:04 AM
Dibenzo(a,h)anthracene	ND		79	µg/Kg-dry	10	8/15/2015 01:04 AM
Fluoranthene	ND		79	µg/Kg-dry	10	8/15/2015 01:04 AM
Fluorene	ND		79	µg/Kg-dry	10	8/15/2015 01:04 AM
Indeno(1,2,3-cd)pyrene	ND		79	µg/Kg-dry	10	8/15/2015 01:04 AM
Naphthalene	ND		79	µg/Kg-dry	10	8/15/2015 01:04 AM
Pyrene	ND		79	µg/Kg-dry	10	8/15/2015 01:04 AM
Surr: 2-Fluorobiphenyl	*51.4*		*12-100*	*%REC*	10	8/15/2015 01:04 AM
Surr: 4-Terphenyl-d14	*47.8*		*25-137*	*%REC*	10	8/15/2015 01:04 AM
Surr: Nitrobenzene-d5	*51.6*		*37-107*	*%REC*	10	8/15/2015 01:04 AM
VOLATILE ORGANIC COMPOUNDS			**SW8260B**		Prep: SW5035 / 8/13/15	Analyst: **AK**
Benzene	ND		36	µg/Kg-dry	1	8/14/2015 03:36 PM
Ethylbenzene	ND		36	µg/Kg-dry	1	8/14/2015 03:36 PM
m,p-Xylene	ND		73	µg/Kg-dry	1	8/14/2015 03:36 PM
o-Xylene	ND		36	µg/Kg-dry	1	8/14/2015 03:36 PM

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

ALS Group USA, Corp

Date: *19-Aug-15*

Client: HRL Compliance Solutions, Inc
Project: WPX Energy - TR 22-34 - Pit Closure
Work Order: 1508648
Sample ID: North Wall @ 1ft
Lab ID: 1508648-03
Collection Date: 8/11/2015 10:20 AM
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Toluene	ND		36	µg/Kg-dry	1	8/14/2015 03:36 PM
Xylenes, Total	ND		110	µg/Kg-dry	1	8/14/2015 03:36 PM
Surr: 1,2-Dichloroethane-d4	*90.6*		*70-130*	*%REC*	1	8/14/2015 03:36 PM
Surr: 4-Bromofluorobenzene	*97.7*		*70-130*	*%REC*	1	8/14/2015 03:36 PM
Surr: Dibromofluoromethane	*92.8*		*70-130*	*%REC*	1	8/14/2015 03:36 PM
Surr: Toluene-d8	*97.4*		*70-130*	*%REC*	1	8/14/2015 03:36 PM
ELECTRICAL CONDUCTIVITY (SAR)			**USDA H60 METHO**		Prep: USDA Method 20B / 8/17/15	Analyst: **JB**
Electrical Conductivity @ Saturation	**1.2**		**0.050**	**mmhos/cm @2**	10	8/18/2015 05:00 PM
MOISTURE			**E160.3M**			Analyst: **EVB**
Moisture	**18**		**0.050**	**% of sample**	1	8/17/2015 04:08 PM
PH			**SW9045D**		Prep: EXTRACT / 8/17/15	Analyst: **ED**
pH	**8.6**			**s.u.**	1	8/17/2015 04:30 PM

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

ALS Group USA, Corp

Date: *19-Aug-15*

Client: HRL Compliance Solutions, Inc
Project: WPX Energy - TR 22-34 - Pit Closure
Work Order: 1508648
Sample ID: South Wall @ 1ft
Lab ID: 1508648-04
Collection Date: 8/11/2015 10:00 AM
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID			**SW8015M**		Prep: SW3541 / 8/14/15	Analyst: **IT**
DRO (C10-C28)	**110**		**25**	**mg/Kg-dry**	5	8/14/2015 08:23 PM
Surr: 4-Terphenyl-d14	*72.2*		*39-133*	*%REC*	5	8/14/2015 08:23 PM
GASOLINE RANGE ORGANICS BY GC-FID			**SW8015D**		Prep: SW5035 / 8/13/15	Analyst: **IT**
GRO (C6-C10)	ND		3.1	mg/Kg-dry	1	8/14/2015 04:46 AM
Surr: Toluene-d8	*103*		*50-150*	*%REC*	1	8/14/2015 04:46 AM
SOLUBLE CATIONS FOR SAR			**SW846 6010C**		Prep: USDA Method 20B / 8/17/15	Analyst: **JEC**
Calcium	**210**		**5.0**	**mg/L**	10	8/18/2015 02:16 PM
Magnesium	**70**		**2.0**	**mg/L**	10	8/18/2015 02:16 PM
Sodium	**44**		**2.0**	**mg/L**	10	8/18/2015 02:16 PM
SODIUM ADSORPTION RATIO			**USDA H60 METHO**		Prep: USDA Method 20B / 8/17/15	Analyst: **JEC**
Sodium Adsorption Ratio	**0.67**		**0.010**	**none**	1	8/18/2015
SEMI-VOLATILE ORGANIC COMPOUNDS			**SW846 8270D**		Prep: SW3541 / 8/14/15	Analyst: **RM**
Acenaphthene	ND		8.1	µg/Kg-dry	1	8/15/2015 01:23 AM
Acenaphthylene	ND		8.1	µg/Kg-dry	1	8/15/2015 01:23 AM
Anthracene	ND		8.1	µg/Kg-dry	1	8/15/2015 01:23 AM
Benzo(a)anthracene	ND		8.1	µg/Kg-dry	1	8/15/2015 01:23 AM
Benzo(a)pyrene	ND		8.1	µg/Kg-dry	1	8/15/2015 01:23 AM
Benzo(b)fluoranthene	ND		8.1	µg/Kg-dry	1	8/15/2015 01:23 AM
Benzo(g,h,i)perylene	ND		8.1	µg/Kg-dry	1	8/15/2015 01:23 AM
Benzo(k)fluoranthene	ND		8.1	µg/Kg-dry	1	8/15/2015 01:23 AM
Chrysene	ND		8.1	µg/Kg-dry	1	8/15/2015 01:23 AM
Dibenzo(a,h)anthracene	ND		8.1	µg/Kg-dry	1	8/15/2015 01:23 AM
Fluoranthene	ND		8.1	µg/Kg-dry	1	8/15/2015 01:23 AM
Fluorene	ND		8.1	µg/Kg-dry	1	8/15/2015 01:23 AM
Indeno(1,2,3-cd)pyrene	ND		8.1	µg/Kg-dry	1	8/15/2015 01:23 AM
Naphthalene	ND		8.1	µg/Kg-dry	1	8/15/2015 01:23 AM
Pyrene	ND		8.1	µg/Kg-dry	1	8/15/2015 01:23 AM
Surr: 2-Fluorobiphenyl	*73.5*		*12-100*	*%REC*	1	8/15/2015 01:23 AM
Surr: 4-Terphenyl-d14	*64.9*		*25-137*	*%REC*	1	8/15/2015 01:23 AM
Surr: Nitrobenzene-d5	*69.2*		*37-107*	*%REC*	1	8/15/2015 01:23 AM
VOLATILE ORGANIC COMPOUNDS			**SW8260B**		Prep: SW5035 / 8/13/15	Analyst: **AK**
Benzene	ND		37	µg/Kg-dry	1	8/14/2015 04:01 PM
Ethylbenzene	ND		37	µg/Kg-dry	1	8/14/2015 04:01 PM
m,p-Xylene	ND		74	µg/Kg-dry	1	8/14/2015 04:01 PM
o-Xylene	ND		37	µg/Kg-dry	1	8/14/2015 04:01 PM

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

Client: HRL Compliance Solutions, Inc
Project: WPX Energy - TR 22-34 - Pit Closure
Work Order: 1508648
Sample ID: South Wall @ 1ft
Lab ID: 1508648-04
Collection Date: 8/11/2015 10:00 AM
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Toluene	ND		37	µg/Kg-dry	1	8/14/2015 04:01 PM
Xylenes, Total	ND		110	µg/Kg-dry	1	8/14/2015 04:01 PM
Surr: 1,2-Dichloroethane-d4	*90.0*		*70-130*	*%REC*	1	8/14/2015 04:01 PM
Surr: 4-Bromofluorobenzene	*99.0*		*70-130*	*%REC*	1	8/14/2015 04:01 PM
Surr: Dibromofluoromethane	*90.7*		*70-130*	*%REC*	1	8/14/2015 04:01 PM
Surr: Toluene-d8	*95.8*		*70-130*	*%REC*	1	8/14/2015 04:01 PM
ELECTRICAL CONDUCTIVITY (SAR)			**USDA H60 METHO**	Prep: USDA Method 20B / 8/17/15		Analyst: **JB**
Electrical Conductivity @ Saturation	**2.0**		**0.050**	**mmhos/cm @2**	10	8/18/2015 05:00 PM
MOISTURE			**E160.3M**			Analyst: **EVB**
Moisture	**19**		**0.050**	**% of sample**	1	8/17/2015 04:08 PM
PH			**SW9045D**	Prep: EXTRACT / 8/17/15		Analyst: **ED**
pH	**8.3**			**s.u.**	1	8/17/2015 04:30 PM

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

ALS Group USA, Corp

Date: *19-Aug-15*

Client: HRL Compliance Solutions, Inc
Project: WPX Energy - TR 22-34 - Pit Closure
Work Order: 1508648
Sample ID: East Wall @ 1ft
Lab ID: 1508648-05
Collection Date: 8/11/2015 09:50 AM
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID			**SW8015M**		Prep: SW3541 / 8/14/15	Analyst: **IT**
DRO (C10-C28)	**91**		**5.2**	**mg/Kg-dry**	1	8/14/2015 08:53 PM
Surr: 4-Terphenyl-d14	*62.5*		*39-133*	*%REC*	1	8/14/2015 08:53 PM
GASOLINE RANGE ORGANICS BY GC-FID			**SW8015D**		Prep: SW5035 / 8/13/15	Analyst: **IT**
GRO (C6-C10)	ND		3.2	mg/Kg-dry	1	8/14/2015 02:45 AM
Surr: Toluene-d8	*101*		*50-150*	*%REC*	1	8/14/2015 02:45 AM
SOLUBLE CATIONS FOR SAR			**SW846 6010C**		Prep: USDA Method 20B / 8/17/15	Analyst: **JEC**
Calcium	**130**		**5.0**	**mg/L**	10	8/18/2015 02:22 PM
Magnesium	**53**		**2.0**	**mg/L**	10	8/18/2015 02:22 PM
Sodium	**52**		**2.0**	**mg/L**	10	8/18/2015 02:22 PM
SODIUM ADSORPTION RATIO			**USDA H60 METHO**		Prep: USDA Method 20B / 8/17/15	Analyst: **JEC**
Sodium Adsorption Ratio	**0.97**		**0.010**	**none**	1	8/18/2015
SEMI-VOLATILE ORGANIC COMPOUNDS			**SW846 8270D**		Prep: SW3541 / 8/14/15	Analyst: **RM**
Acenaphthene	ND		8.3	µg/Kg-dry	1	8/15/2015 01:43 AM
Acenaphthylene	ND		8.3	µg/Kg-dry	1	8/15/2015 01:43 AM
Anthracene	ND		8.3	µg/Kg-dry	1	8/15/2015 01:43 AM
Benzo(a)anthracene	ND		8.3	µg/Kg-dry	1	8/15/2015 01:43 AM
Benzo(a)pyrene	ND		8.3	µg/Kg-dry	1	8/15/2015 01:43 AM
Benzo(b)fluoranthene	ND		8.3	µg/Kg-dry	1	8/15/2015 01:43 AM
Benzo(g,h,i)perylene	ND		8.3	µg/Kg-dry	1	8/15/2015 01:43 AM
Benzo(k)fluoranthene	ND		8.3	µg/Kg-dry	1	8/15/2015 01:43 AM
Chrysene	ND		8.3	µg/Kg-dry	1	8/15/2015 01:43 AM
Dibenzo(a,h)anthracene	ND		8.3	µg/Kg-dry	1	8/15/2015 01:43 AM
Fluoranthene	ND		8.3	µg/Kg-dry	1	8/15/2015 01:43 AM
Fluorene	ND		8.3	µg/Kg-dry	1	8/15/2015 01:43 AM
Indeno(1,2,3-cd)pyrene	ND		8.3	µg/Kg-dry	1	8/15/2015 01:43 AM
Naphthalene	ND		8.3	µg/Kg-dry	1	8/15/2015 01:43 AM
Pyrene	ND		8.3	µg/Kg-dry	1	8/15/2015 01:43 AM
Surr: 2-Fluorobiphenyl	*62.2*		*12-100*	*%REC*	1	8/15/2015 01:43 AM
Surr: 4-Terphenyl-d14	*60.0*		*25-137*	*%REC*	1	8/15/2015 01:43 AM
Surr: Nitrobenzene-d5	*61.3*		*37-107*	*%REC*	1	8/15/2015 01:43 AM
VOLATILE ORGANIC COMPOUNDS			**SW8260B**		Prep: SW5035 / 8/13/15	Analyst: **AK**
Benzene	ND		38	µg/Kg-dry	1	8/14/2015 04:27 PM
Ethylbenzene	ND		38	µg/Kg-dry	1	8/14/2015 04:27 PM
m,p-Xylene	ND		76	µg/Kg-dry	1	8/14/2015 04:27 PM
o-Xylene	ND		38	µg/Kg-dry	1	8/14/2015 04:27 PM

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

ALS Group USA, Corp

Date: *19-Aug-15*

Client: HRL Compliance Solutions, Inc
Project: WPX Energy - TR 22-34 - Pit Closure
Work Order: 1508648
Sample ID: East Wall @ 1ft
Lab ID: 1508648-05
Collection Date: 8/11/2015 09:50 AM
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Toluene	ND		38	µg/Kg-dry	1	8/14/2015 04:27 PM
Xylenes, Total	ND		110	µg/Kg-dry	1	8/14/2015 04:27 PM
Surr: 1,2-Dichloroethane-d4	*89.4*		*70-130*	*%REC*	1	8/14/2015 04:27 PM
Surr: 4-Bromofluorobenzene	*97.4*		*70-130*	*%REC*	1	8/14/2015 04:27 PM
Surr: Dibromofluoromethane	*89.7*		*70-130*	*%REC*	1	8/14/2015 04:27 PM
Surr: Toluene-d8	*95.7*		*70-130*	*%REC*	1	8/14/2015 04:27 PM
ELECTRICAL CONDUCTIVITY (SAR)			**USDA H60 METHO**	Prep: USDA Method 20B / 8/17/15		Analyst: **JB**
Electrical Conductivity @ Saturation	**1.5**		**0.050**	**mmhos/cm @2**	10	8/18/2015 05:00 PM
MOISTURE			**E160.3M**			Analyst: **EVB**
Moisture	**21**		**0.050**	**% of sample**	1	8/17/2015 04:08 PM
PH			**SW9045D**	Prep: EXTRACT / 8/17/15		Analyst: **ED**
pH	**8.6**			**s.u.**	1	8/17/2015 04:30 PM

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

Appendix 2: Background Raw Analytical Data

ALS Group USA, Corp

Date: *19-Aug-15*

Client: HRL Compliance Solutions, Inc
Project: WPX Energy - TR 22-34 - Pit Closure
Work Order: 1508648
Sample ID: Background 1
Lab ID: 1508648-06
Collection Date: 8/11/2015 10:30 AM
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS ANALYSIS BY ICP			**SW846 6010C**		Prep: SW3050B / 8/13/15	Analyst: **JEC**
Arsenic	**26**		**0.41**	**mg/Kg-dry**	1	8/14/2015 06:12 PM
SOLUBLE CATIONS FOR SAR			**SW846 6010C**		Prep: USDA Method 20B / 8/17/15	Analyst: **JEC**
Calcium	**290**		**5.0**	**mg/L**	10	8/18/2015 02:44 PM
Magnesium	**48**		**2.0**	**mg/L**	10	8/18/2015 02:44 PM
Sodium	**18**		**2.0**	**mg/L**	10	8/18/2015 02:44 PM
SODIUM ADSORPTION RATIO			**USDA H60 METHO**		Prep: USDA Method 20B / 8/17/15	Analyst: **JEC**
Sodium Adsorption Ratio	**0.25**		**0.010**	**none**	1	8/18/2015
ELECTRICAL CONDUCTIVITY (SAR)			**USDA H60 METHO**		Prep: USDA Method 20B / 8/17/15	Analyst: **JB**
Electrical Conductivity @ Saturation	**1.8**		**0.050**	**mmhos/cm @2**	10	8/18/2015 05:00 PM
MOISTURE			**E160.3M**			Analyst: **EVB**
Moisture	**11**		**0.050**	**% of sample**	1	8/17/2015 04:08 PM
PH			**SW9045D**		Prep: EXTRACT / 8/17/15	Analyst: **ED**
pH	**8.0**			**s.u.**	1	8/17/2015 04:30 PM

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

ALS Group USA, Corp

Date: *19-Aug-15*

Client: HRL Compliance Solutions, Inc
Project: WPX Energy - TR 22-34 - Pit Closure
Work Order: 1508648
Sample ID: Background 2
Lab ID: 1508648-07
Collection Date: 8/11/2015 10:35 AM
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS ANALYSIS BY ICP			**SW846 6010C**		Prep: SW3050B / 8/13/15	Analyst: **JEC**
Arsenic	**21**		**0.43**	**mg/Kg-dry**	1	8/14/2015 06:18 PM
MOISTURE			**E160.3M**			Analyst: **EVB**
Moisture	**13**		**0.050**	**% of sample**	1	8/17/2015 04:08 PM

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

ALS Group USA, Corp

Date: *19-Aug-15*

Client: HRL Compliance Solutions, Inc
Project: WPX Energy - TR 22-34 - Pit Closure
Work Order: 1508648
Sample ID: Background 3
Lab ID: 1508648-08
Collection Date: 8/11/2015 10:40 AM
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS ANALYSIS BY ICP			**SW846 6010C**		Prep: SW3050B / 8/13/15	Analyst: **JEC**
Arsenic	**41**		**0.40**	**mg/Kg-dry**	1	8/14/2015 06:24 PM
MOISTURE			**E160.3M**			Analyst: **EVB**
Moisture	**11**		**0.050**	**% of sample**	1	8/17/2015 04:08 PM

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

Client: HRL Compliance Solutions, Inc

QC BATCH REPORT

Work Order: 1508648

Project: WPX Energy - TR 22-34 - Pit Closure

Batch ID: **74809** Instrument ID **GC8** Method: **SW8015M**

MBLK Sample ID: **DBLKS1-74809-74809** Units: **mg/Kg** Analysis Date: **8/14/2015 04:54 PM**

Client ID: Run ID: **GC8_150814A** SeqNo: **3418732** Prep Date: **8/14/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	ND	5.0								
Surr: 4-Terphenyl-d14	*1.355*	0	*2*	0	*67.7*	*39-133*	0			

MBLK Sample ID: **DBLKS1-74809-74809** Units: **mg/Kg** Analysis Date: **8/14/2015 04:54 PM**

Client ID: Run ID: **GC8_150814A** SeqNo: **3418833** Prep Date: **8/14/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	ND	5.0								
Surr: 4-Terphenyl-d14	*1.355*	0	*2*	0	*67.7*	*39-133*	0			

LCS Sample ID: **DLCSS1-74809-74809** Units: **mg/Kg** Analysis Date: **8/14/2015 05:24 PM**

Client ID: Run ID: **GC8_150814A** SeqNo: **3418756** Prep Date: **8/14/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	166.7	5.0	200	0	83.3	61-109	0			
Surr: 4-Terphenyl-d14	*1.215*	0	*2*	0	*60.7*	*39-133*	0			

LCS Sample ID: **DLCSS1-74809-74809** Units: **mg/Kg** Analysis Date: **8/14/2015 05:24 PM**

Client ID: Run ID: **GC8_150814A** SeqNo: **3418835** Prep Date: **8/14/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	166.7	5.0	200	0	83.3	61-109	0			
Surr: 4-Terphenyl-d14	*1.215*	0	*2*	0	*60.7*	*39-133*	0			

MS Sample ID: **1508648-01A MS** Units: **mg/Kg** Analysis Date: **8/14/2015 05:53 PM**

Client ID: **West Wall @ 1ft** Run ID: **GC8_150814A** SeqNo: **3418757** Prep Date: **8/14/2015** DF: **5**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	236.9	21	166.1	133.6	62.2	48-110	0			
Surr: 4-Terphenyl-d14	*1.171*	0	*1.661*	0	*70.5*	*39-133*	0			

MS Sample ID: **1508648-01A MS** Units: **mg/Kg** Analysis Date: **8/14/2015 05:53 PM**

Client ID: **West Wall @ 1ft** Run ID: **GC8_150814A** SeqNo: **3418837** Prep Date: **8/14/2015** DF: **5**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	236.9	21	166.1	133.6	62.2	48-110	0			
Surr: 4-Terphenyl-d14	*1.171*	0	*1.661*	0	*70.5*	*39-133*	0			

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

Client: HRL Compliance Solutions, Inc
Work Order: 1508648
Project: WPX Energy - TR 22-34 - Pit Closure

QC BATCH REPORT

Batch ID: **74809** Instrument ID **GC8** Method: **SW8015M**

MSD	Sample ID: **1508648-01A MSD**				Units: **mg/Kg**			Analysis Date: **8/14/2015 06:23 PM**		
Client ID: **West Wall @ 1ft**	Run ID: **GC8_150814A**			SeqNo: **3418758**		Prep Date: **8/14/2015**		DF: **5**		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	245.9	20	163.3	133.6	68.8	48-110	236.9	3.75	30	
Surr: 4-Terphenyl-d14	*1.151*	0	*1.633*	0	*70.5*	*39-133*	1.171	*1.7*	*30*	

MSD	Sample ID: **1508648-01A MSD**				Units: **mg/Kg**			Analysis Date: **8/14/2015 06:23 PM**		
Client ID: **West Wall @ 1ft**	Run ID: **GC8_150814A**			SeqNo: **3418839**		Prep Date: **8/14/2015**		DF: **5**		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	245.9	20	163.3	133.6	68.8	48-110	236.9	3.75	30	
Surr: 4-Terphenyl-d14	*1.151*	0	*1.633*	0	*70.5*	*39-133*	1.171	*1.7*	*30*	

The following samples were analyzed in this batch: 1508648-01A 1508648-02A 1508648-03A 1508648-04A 1508648-05A

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

Client: HRL Compliance Solutions, Inc
Work Order: 1508648
Project: WPX Energy - TR 22-34 - Pit Closure

QC BATCH REPORT

Batch ID: **74759** Instrument ID **GC10** Method: **SW8015D**

MBLK Sample ID: **MBLK-74759-74759** Units: **µg/Kg** Analysis Date: **8/13/2015 09:04 PM**
Client ID: Run ID: **GC10_150813A** SeqNo: **3416882** Prep Date: **8/13/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	ND	2,500								
Surr: Toluene-d8	*4851*	0	*5000*	0	*97*	*50-150*	0			

LCS Sample ID: **LCS-74759-74759** Units: **µg/Kg** Analysis Date: **8/13/2015 08:40 PM**
Client ID: Run ID: **GC10_150813A** SeqNo: **3416881** Prep Date: **8/13/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	524300	2,500	500000	0	105	70-130	0			
Surr: Toluene-d8	*4936*	0	*5000*	0	*98.7*	*50-150*	0			

MS Sample ID: **1508648-05A MS** Units: **µg/Kg** Analysis Date: **8/14/2015 03:09 AM**
Client ID: **East Wall @ 1ft** Run ID: **GC10_150813A** SeqNo: **3416894** Prep Date: **8/13/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	506800	2,500	500000	0	101	70-130	0			
Surr: Toluene-d8	*4855*	0	*5000*	0	*97.1*	*50-150*	0			

MSD Sample ID: **1508648-05A MSD** Units: **µg/Kg** Analysis Date: **8/14/2015 03:33 AM**
Client ID: **East Wall @ 1ft** Run ID: **GC10_150813A** SeqNo: **3416895** Prep Date: **8/13/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	515100	2,500	500000	0	103	70-130	506800	1.64	30	
Surr: Toluene-d8	*4999*	0	*5000*	0	*100*	*50-150*	4855	*2.92*	*30*	

The following samples were analyzed in this batch:

1508648-01A	1508648-02A	1508648-03A
1508648-04A	1508648-05A	

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

Client: HRL Compliance Solutions, Inc
Work Order: 1508648
Project: WPX Energy - TR 22-34 - Pit Closure

QC BATCH REPORT

Batch ID: **74890** Instrument ID **HG1** Method: **SW7471B**

MBLK Sample ID: **MBLK-74890-74890** Units: **mg/Kg** Analysis Date: **8/18/2015 02:20 PM**
Client ID: Run ID: **HG1_150818A** SeqNo: **3421868** Prep Date: **8/18/2015** DF: **1**

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

LCS Sample ID: **LCS-74890-74890** Units: **mg/Kg** Analysis Date: **8/18/2015 02:23 PM**
Client ID: Run ID: **HG1_150818A** SeqNo: **3421870** Prep Date: **8/18/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.1804	0.020	0.1665	0	108	80-120	0			

MS Sample ID: **1508617-07AMS** Units: **mg/Kg** Analysis Date: **8/18/2015 02:41 PM**
Client ID: Run ID: **HG1_150818A** SeqNo: **3421882** Prep Date: **8/18/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.11	0.012	0.1033	0.006045	101	75-125	0			

MS Sample ID: **1508648-02AMS** Units: **mg/Kg** Analysis Date: **8/18/2015 03:33 PM**
Client ID: **Pit Bottom @ 6in** Run ID: **HG1_150818A** SeqNo: **3422663** Prep Date: **8/18/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.1737	0.014	0.1131	0.05283	107	75-125	0			

MSD Sample ID: **1508617-07AMSD** Units: **mg/Kg** Analysis Date: **8/18/2015 02:50 PM**
Client ID: Run ID: **HG1_150818A** SeqNo: **3421887** Prep Date: **8/18/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.1077	0.012	0.1036	0.006045	98.1	75-125	0.11	2.12	35	

MSD Sample ID: **1508648-02AMSD** Units: **mg/Kg** Analysis Date: **8/18/2015 03:36 PM**
Client ID: **Pit Bottom @ 6in** Run ID: **HG1_150818A** SeqNo: **3422666** Prep Date: **8/18/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.1691	0.014	0.1142	0.05283	102	75-125	0.1737	2.64	35	

The following samples were analyzed in this batch: 1508648-02A

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

Client: HRL Compliance Solutions, Inc
Work Order: 1508648
Project: WPX Energy - TR 22-34 - Pit Closure

QC BATCH REPORT

Batch ID: **74786** Instrument ID **ICP2** Method: **SW846 6010C**

MBLK Sample ID: **MBLK-74786-74786** Units: **mg/Kg** Analysis Date: **8/14/2015 10:14 AM**
Client ID: Run ID: **ICP2_150814A** SeqNo: **3417356** Prep Date: **8/13/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	ND	0.25								
Barium	ND	0.25								
Cadmium	ND	0.50								
Chromium	0.0532	0.25								J
Copper	0.05821	0.50								J
Lead	ND	0.25								
Nickel	ND	0.25								
Selenium	ND	0.50								
Silver	ND	0.25								
Zinc	0.1393	0.50								J

LCS Sample ID: **LCS-74786-74786** Units: **mg/Kg** Analysis Date: **8/14/2015 10:20 AM**
Client ID: Run ID: **ICP2_150814A** SeqNo: **3417357** Prep Date: **8/13/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	5.32	0.25	5	0	106	80-120	0			
Barium	5.288	0.25	5	0	106	80-120	0			
Cadmium	4.767	0.50	5	0	95.3	80-120	0			
Chromium	5.646	0.25	5	0	113	80-120	0			
Copper	5.432	0.50	5	0	109	80-120	0			
Lead	5.289	0.25	5	0	106	80-120	0			
Nickel	5.29	0.25	5	0	106	80-120	0			
Selenium	5.488	0.50	5	0	110	80-120	0			
Silver	5.429	0.25	5	0	109	80-120	0			
Zinc	4.985	0.50	5	0	99.7	80-120	0			

MS Sample ID: **15061798-06AMS** Units: **mg/Kg** Analysis Date: **8/14/2015 10:31 AM**
Client ID: Run ID: **ICP2_150814A** SeqNo: **3417359** Prep Date: **8/13/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	17.37	0.35	6.974	10.02	105	75-125	0			
Barium	78.65	0.35	6.974	74.52	59.1	75-125	0			SO
Cadmium	6.711	0.70	6.974	-0.1335	98.2	75-125	0			
Chromium	21.15	0.35	6.974	16.79	62.4	75-125	0			S
Copper	57.94	0.70	6.974	50.79	103	75-125	0			O
Lead	10.64	0.35	6.974	6.8	55	75-125	0			S
Nickel	36.74	0.35	6.974	31.5	75.1	75-125	0			O
Selenium	8.083	0.70	6.974	0.7412	105	75-125	0			
Silver	7.881	0.35	6.974	-0.1279	115	75-125	0			
Zinc	57.11	0.70	6.974	50.61	93.3	75-125	0			O

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

Client: HRL Compliance Solutions, Inc
Work Order: 1508648
Project: WPX Energy - TR 22-34 - Pit Closure

QC BATCH REPORT

Batch ID: **74786** Instrument ID **ICP2** Method: **SW846 6010C**

MSD Sample ID: **15061798-06AMSD** Units: **mg/Kg** Analysis Date: **8/14/2015 10:37 AM**
Client ID: Run ID: **ICP2_150814A** SeqNo: **3417360** Prep Date: **8/13/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	19.5	0.35	6.916	10.02	137	75-125	17.37	11.5	20	S
Barium	71.75	0.35	6.916	74.52	-40.1	75-125	78.65	9.17	20	SO
Cadmium	6.913	0.69	6.916	-0.1335	102	75-125	6.711	2.96	20	
Chromium	23.5	0.35	6.916	16.79	96.9	75-125	21.15	10.5	20	
Copper	65.86	0.69	6.916	50.79	218	75-125	57.94	12.8	20	SO
Lead	19.04	0.35	6.916	6.8	177	75-125	10.64	56.6	20	SR
Nickel	37.96	0.35	6.916	31.5	93.4	75-125	36.74	3.28	20	O
Selenium	8.364	0.69	6.916	0.7412	110	75-125	8.083	3.41	20	
Silver	8.008	0.35	6.916	-0.1279	118	75-125	7.881	1.59	20	
Zinc	74.39	0.69	6.916	50.61	344	75-125	57.11	26.3	20	SRO

The following samples were analyzed in this batch: 1508648-02A 1508648-06A 1508648-07A 1508648-08A

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

Client: HRL Compliance Solutions, Inc
Work Order: 1508648
Project: WPX Energy - TR 22-34 - Pit Closure

QC BATCH REPORT

Batch ID: **74810** Instrument ID **ICP2** Method: **SW846 6010C**

DUP Sample ID: **1508668-01ADUP** Units: **mg/L** Analysis Date: **8/18/2015 03:12 PM**
Client ID: Run ID: **ICP2_150818A** SeqNo: **3422320** Prep Date: **8/17/2015** DF: **10**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	428.2	5.0	0	0	0	0-0	406.3	5.24		
Magnesium	138.2	2.0	0	0	0	0-0	133.9	3.2		
Sodium	195	2.0	0	0	0	0-0	193.1	0.967		

DUP Sample ID: **1508668-01ADUP** Units: **none** Analysis Date: **8/18/2015**
Client ID: Run ID: **SAR_150818A** SeqNo: **3423502** Prep Date: **8/17/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sodium Adsorption Ratio	2.096	0.010	0	0	0		0			

The following samples were analyzed in this batch:

1508648-01B	1508648-02B	1508648-03B
1508648-04B	1508648-05B	1508648-06A

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

Client: HRL Compliance Solutions, Inc
Work Order: 1508648
Project: WPX Energy - TR 22-34 - Pit Closure

QC BATCH REPORT

Batch ID: **74808** Instrument ID **SVMS8** Method: **SW846 8270D**

MBLK Sample ID: **SBLKS1-74808-74808** Units: **µg/Kg** Analysis Date: **8/14/2015 04:50 PM**
Client ID: Run ID: **SVMS8_150814A** SeqNo: **3419583** Prep Date: **8/14/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	ND	6.7								
Acenaphthylene	ND	6.7								
Anthracene	ND	6.7								
Benzo(a)anthracene	ND	6.7								
Benzo(a)pyrene	ND	6.7								
Benzo(b)fluoranthene	ND	6.7								
Benzo(g,h,i)perylene	ND	6.7								
Benzo(k)fluoranthene	ND	6.7								
Chrysene	ND	6.7								
Dibenzo(a,h)anthracene	ND	6.7								
Fluoranthene	ND	6.7								
Fluorene	ND	6.7								
Indeno(1,2,3-cd)pyrene	ND	6.7								
Naphthalene	ND	6.7								
Pyrene	ND	6.7								
Surr: 2-Fluorobiphenyl	*1147*	0	*1667*	0	*68.8*	*12-100*	0			
Surr: 4-Terphenyl-d14	*1483*	0	*1667*	0	*89*	*25-137*	0			
Surr: Nitrobenzene-d5	*1216*	0	*1667*	0	*73*	*37-107*	0			

LCS Sample ID: **SLCSS1-74808-74808** Units: **µg/Kg** Analysis Date: **8/14/2015 05:10 PM**
Client ID: Run ID: **SVMS8_150814A** SeqNo: **3419585** Prep Date: **8/14/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	516	6.7	666.7	0	77.4	45-110	0			
Acenaphthylene	517	6.7	666.7	0	77.5	45-105	0			
Anthracene	588	6.7	666.7	0	88.2	55-105	0			
Benzo(a)anthracene	590	6.7	666.7	0	88.5	50-110	0			
Benzo(a)pyrene	593.7	6.7	666.7	0	89	50-110	0			
Benzo(b)fluoranthene	632.7	6.7	666.7	0	94.9	45-115	0			
Benzo(g,h,i)perylene	589	6.7	666.7	0	88.3	40-125	0			
Benzo(k)fluoranthene	621	6.7	666.7	0	93.1	45-115	0			
Chrysene	607.7	6.7	666.7	0	91.1	55-110	0			
Dibenzo(a,h)anthracene	565	6.7	666.7	0	84.7	40-125	0			
Fluoranthene	575.3	6.7	666.7	0	86.3	55-115	0			
Fluorene	552.7	6.7	666.7	0	82.9	50-110	0			
Indeno(1,2,3-cd)pyrene	574.3	6.7	666.7	0	86.1	40-120	0			
Naphthalene	454.3	6.7	666.7	0	68.1	40-105	0			
Pyrene	657	6.7	666.7	0	98.5	45-125	0			
Surr: 2-Fluorobiphenyl	*1136*	0	*1667*	0	*68.2*	*12-100*	0			
Surr: 4-Terphenyl-d14	*1490*	0	*1667*	0	*89.4*	*25-137*	0			
Surr: Nitrobenzene-d5	*1171*	0	*1667*	0	*70.3*	*37-107*	0			

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

Client: HRL Compliance Solutions, Inc
Work Order: 1508648
Project: WPX Energy - TR 22-34 - Pit Closure

QC BATCH REPORT

Batch ID: **74808** Instrument ID **SVMS8** Method: **SW846 8270D**

MS Sample ID: **1508648-01A MS** Units: **µg/Kg** Analysis Date: **8/14/2015 06:30 PM**
Client ID: **West Wall @ 1ft** Run ID: **SVMS8_150814A** SeqNo: **3419587** Prep Date: **8/14/2015** DF: **10**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	545.4	66	657.1	0	83	45-110	0			
Acenaphthylene	529	66	657.1	0	80.5	45-105	0			
Anthracene	529	66	657.1	0	80.5	55-105	0			
Benzo(a)anthracene	496.1	66	657.1	0	75.5	50-110	0			
Benzo(a)pyrene	483	66	657.1	0	73.5	50-110	0			
Benzo(b)fluoranthene	492.8	66	657.1	0	75	45-115	0			
Benzo(g,h,i)perylene	476.4	66	657.1	0	72.5	40-125	0			
Benzo(k)fluoranthene	473.1	66	657.1	0	72	45-115	0			
Chrysene	499.4	66	657.1	0	76	55-110	0			
Dibenzo(a,h)anthracene	433.7	66	657.1	0	66	40-125	0			
Fluoranthene	512.6	66	657.1	0	78	55-115	0			
Fluorene	529	66	657.1	0	80.5	50-110	0			
Indeno(1,2,3-cd)pyrene	473.1	66	657.1	0	72	40-120	0			
Naphthalene	486.3	66	657.1	0	74	40-105	0			
Pyrene	512.6	66	657.1	0	78	45-125	0			
Surr: 2-Fluorobiphenyl	*1189*	0	*1643*	0	*72.4*	*12-100*	0			
Surr: 4-Terphenyl-d14	*1170*	0	*1643*	0	*71.2*	*25-137*	0			
Surr: Nitrobenzene-d5	*1114*	0	*1643*	0	*67.8*	*37-107*	0			

MSD Sample ID: **1508648-01A MSD** Units: **µg/Kg** Analysis Date: **8/14/2015 06:50 PM**
Client ID: **West Wall @ 1ft** Run ID: **SVMS8_150814A** SeqNo: **3419589** Prep Date: **8/14/2015** DF: **10**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	536.7	65	654.5	0	82	45-110	545.4	1.61	30	
Acenaphthylene	523.6	65	654.5	0	80	45-105	529	1.02	30	
Anthracene	497.4	65	654.5	0	76	55-105	529	6.15	30	
Benzo(a)anthracene	510.5	65	654.5	0	78	50-110	496.1	2.86	30	
Benzo(a)pyrene	484.3	65	654.5	0	74	50-110	483	0.281	30	
Benzo(b)fluoranthene	481.1	65	654.5	0	73.5	45-115	492.8	2.42	30	
Benzo(g,h,i)perylene	471.3	65	654.5	0	72	40-125	476.4	1.09	30	
Benzo(k)fluoranthene	500.7	65	654.5	0	76.5	45-115	473.1	5.66	30	
Chrysene	481.1	65	654.5	0	73.5	55-110	499.4	3.74	30	
Dibenzo(a,h)anthracene	448.3	65	654.5	0	68.5	40-125	433.7	3.32	30	
Fluoranthene	510.5	65	654.5	0	78	55-115	512.6	0.397	30	
Fluorene	536.7	65	654.5	0	82	50-110	529	1.45	30	
Indeno(1,2,3-cd)pyrene	441.8	65	654.5	0	67.5	40-120	473.1	6.85	30	
Naphthalene	477.8	65	654.5	0	73	40-105	486.3	1.76	30	
Pyrene	504	65	654.5	0	77	45-125	512.6	1.69	30	
Surr: 2-Fluorobiphenyl	*1175*	0	*1636*	0	*71.8*	*12-100*	1189	*1.23*	*40*	
Surr: 4-Terphenyl-d14	*1152*	0	*1636*	0	*70.4*	*25-137*	1170	*1.53*	*40*	
Surr: Nitrobenzene-d5	*1109*	0	*1636*	0	*67.8*	*37-107*	1114	*0.397*	*40*	

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

Client: HRL Compliance Solutions, Inc
Work Order: 1508648
Project: WPX Energy - TR 22-34 - Pit Closure

QC BATCH REPORT

Batch ID: **74808** Instrument ID **SVMS8** Method: **SW846 8270D**

The following samples were analyzed in this batch:

1508648-01A	1508648-02A	1508648-03A
1508648-04A	1508648-05A	

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

Client: HRL Compliance Solutions, Inc
Work Order: 1508648
Project: WPX Energy - TR 22-34 - Pit Closure

QC BATCH REPORT

Batch ID: **74755** Instrument ID **VMS6** Method: **SW8260B**

MBLK Sample ID: **MBLK-74755-74755** Units: **µg/Kg** Analysis Date: **8/14/2015 12:32 PM**
Client ID: Run ID: **VMS6_150814A** SeqNo: **3417434** Prep Date: **8/13/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	30								
Ethylbenzene	ND	30								
m,p-Xylene	ND	60								
o-Xylene	ND	30								
Toluene	ND	30								
Xylenes, Total	ND	90								
Surr: 1,2-Dichloroethane-d4	*1016*	0	*1000*	0	*102*	*70-130*	0			
Surr: 4-Bromofluorobenzene	*983.5*	0	*1000*	0	*98.4*	*70-130*	0			
Surr: Dibromofluoromethane	*974*	0	*1000*	0	*97.4*	*70-130*	0			
Surr: Toluene-d8	*945*	0	*1000*	0	*94.5*	*70-130*	0			

LCS Sample ID: **LCS-74755-74755** Units: **µg/Kg** Analysis Date: **8/14/2015 11:13 AM**
Client ID: Run ID: **VMS6_150814A** SeqNo: **3417433** Prep Date: **8/13/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	980	30	1000	0	98	75-125	0			
Ethylbenzene	931	30	1000	0	93.1	75-125	0			
m,p-Xylene	1912	60	2000	0	95.6	80-125	0			
o-Xylene	924.5	30	1000	0	92.4	75-125	0			
Toluene	960.5	30	1000	0	96	70-125	0			
Xylenes, Total	2836	90	3000	0	94.6	75-125	0			
Surr: 1,2-Dichloroethane-d4	*963*	0	*1000*	0	*96.3*	*70-130*	0			
Surr: 4-Bromofluorobenzene	*1031*	0	*1000*	0	*103*	*70-130*	0			
Surr: Dibromofluoromethane	*992*	0	*1000*	0	*99.2*	*70-130*	0			
Surr: Toluene-d8	*992.5*	0	*1000*	0	*99.2*	*70-130*	0			

MS Sample ID: **1508648-05A MS** Units: **µg/Kg** Analysis Date: **8/14/2015 07:47 PM**
Client ID: **East Wall @ 1ft** Run ID: **VMS7_150814A** SeqNo: **3419121** Prep Date: **8/13/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	1004	30	1000	0	100	75-125	0			
Ethylbenzene	958.5	30	1000	0	95.8	75-125	0			
m,p-Xylene	1850	60	2000	0	92.5	80-125	0			
o-Xylene	889	30	1000	0	88.9	75-125	0			
Toluene	971.5	30	1000	0	97.2	70-125	0			
Xylenes, Total	2740	90	3000	0	91.3	75-125	0			
Surr: 1,2-Dichloroethane-d4	*911.5*	0	*1000*	0	*91.2*	*70-130*	0			
Surr: 4-Bromofluorobenzene	*991.5*	0	*1000*	0	*99.2*	*70-130*	0			
Surr: Dibromofluoromethane	*936*	0	*1000*	0	*93.6*	*70-130*	0			
Surr: Toluene-d8	*949.5*	0	*1000*	0	*95*	*70-130*	0			

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

Client: HRL Compliance Solutions, Inc
Work Order: 1508648
Project: WPX Energy - TR 22-34 - Pit Closure

QC BATCH REPORT

Batch ID: **74755** Instrument ID **VMS6** Method: **SW8260B**

MSD Sample ID: **1508648-05A MSD** Units: **µg/Kg** Analysis Date: **8/14/2015 08:12 PM**
Client ID: **East Wall @ 1ft** Run ID: **VMS7_150814A** SeqNo: **3419122** Prep Date: **8/13/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	1105	30	1000	0	110	75-125	1004	9.63	30	
Ethylbenzene	1064	30	1000	0	106	75-125	958.5	10.4	30	
m,p-Xylene	2038	60	2000	0	102	80-125	1850	9.67	30	
o-Xylene	960.5	30	1000	0	96	75-125	889	7.73	30	
Toluene	1082	30	1000	0	108	70-125	971.5	10.8	30	
Xylenes, Total	2999	90	3000	0	100	75-125	2740	9.04	30	
Surr: 1,2-Dichloroethane-d4	*908*	0	*1000*	0	*90.8*	*70-130*	911.5	*0.385*	*30*	
Surr: 4-Bromofluorobenzene	*989.5*	0	*1000*	0	*99*	*70-130*	991.5	*0.202*	*30*	
Surr: Dibromofluoromethane	*963*	0	*1000*	0	*96.3*	*70-130*	936	*2.84*	*30*	
Surr: Toluene-d8	*975*	0	*1000*	0	*97.5*	*70-130*	949.5	*2.65*	*30*	

The following samples were analyzed in this batch: 1508648-01A 1508648-02A 1508648-03A 1508648-04A 1508648-05A

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

Client: HRL Compliance Solutions, Inc
Work Order: 1508648
Project: WPX Energy - TR 22-34 - Pit Closure

QC BATCH REPORT

Batch ID: **74810** Instrument ID **WETCHEM** Method: **USDA H60 Metho**

DUP Sample ID: **1508668-01A DUP** Units: **mmhos/cm @25°** Analysis Date: **8/18/2015 05:00 PM**
Client ID: Run ID: **WETCHEM_150818M** SeqNo: **3422187** Prep Date: **8/17/2015** DF: **10**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Electrical Conductivity @ Saturation	4.54	0.050	0	0	0		4.28	5.9	50	

The following samples were analyzed in this batch:

1508648-01B	1508648-02B	1508648-03B
1508648-04B	1508648-05B	1508648-06A

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

Client: HRL Compliance Solutions, Inc
Work Order: 1508648
Project: WPX Energy - TR 22-34 - Pit Closure

QC BATCH REPORT

Batch ID: **74906** Instrument ID **WETCHEM** Method: **SW9045D**

LCS Sample ID: **LCS-74906-74906** Units: **s.u.** Analysis Date: **8/17/2015 04:30 PM**
Client ID: Run ID: **WETCHEM_150817I** SeqNo: **3420246** Prep Date: **8/17/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	3.98	0	4	0	99.5	90-110	0			

DUP Sample ID: **1508648-06A DUP** Units: **s.u.** Analysis Date: **8/17/2015 04:30 PM**
Client ID: **Background 1** Run ID: **WETCHEM_150817I** SeqNo: **3420253** Prep Date: **8/17/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	8.02	0	0	0	0	0-0	8.04	0.249	20	

DUP Sample ID: **1508665-01A DUP** Units: **s.u.** Analysis Date: **8/17/2015 04:30 PM**
Client ID: Run ID: **WETCHEM_150817I** SeqNo: **3420256** Prep Date: **8/17/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	8.66	0	0	0	0	0-0	8.57	1.04	20	

DUP Sample ID: **1508854-01B DUP** Units: **s.u.** Analysis Date: **8/17/2015 04:30 PM**
Client ID: Run ID: **WETCHEM_150817I** SeqNo: **3420264** Prep Date: **8/17/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	8.16	0	0	0	0	0-0	8.28	1.46	20	

The following samples were analyzed in this batch:

1508648-01A	1508648-02A	1508648-03A
1508648-04A	1508648-05A	1508648-06A

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

Client: HRL Compliance Solutions, Inc
Work Order: 1508648
Project: WPX Energy - TR 22-34 - Pit Closure

QC BATCH REPORT

Batch ID: **75005** Instrument ID **WETCHEM** Method: **SW7196A**

MBLK Sample ID: **MBLK-75005-75005** Units: **mg/Kg** Analysis Date: **8/19/2015 11:00 AM**
Client ID: Run ID: **WETCHEM_150819D** SeqNo: **3423243** Prep Date: **8/14/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	ND	1.0								

LCS Sample ID: **LCS-75005-75005** Units: **mg/Kg** Analysis Date: **8/19/2015 11:00 AM**
Client ID: Run ID: **WETCHEM_150819D** SeqNo: **3423242** Prep Date: **8/14/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	4.81	1.0	5	0	96.2	80-120	0			

MS Sample ID: **1508648-02A MS** Units: **mg/Kg** Analysis Date: **8/19/2015 11:00 AM**
Client ID: **Pit Bottom @ 6in** Run ID: **WETCHEM_150819D** SeqNo: **3423238** Prep Date: **8/14/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	4.257	0.99	4.95	0.9505	66.8	75-125	0			S

MS Sample ID: **1508648-02A MSI** Units: **mg/Kg** Analysis Date: **8/19/2015 11:00 AM**
Client ID: **Pit Bottom @ 6in** Run ID: **WETCHEM_150819D** SeqNo: **3423240** Prep Date: **8/14/2015** DF: **100**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	2903	99	3122	0.9505	92.9	75-125	0			

MSD Sample ID: **1508648-02A MSD** Units: **mg/Kg** Analysis Date: **8/19/2015 11:00 AM**
Client ID: **Pit Bottom @ 6in** Run ID: **WETCHEM_150819D** SeqNo: **3423239** Prep Date: **8/14/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	4.776	1.0	5.102	0.9505	75	75-125	4.257	11.5	20	S

The following samples were analyzed in this batch: 1508648-02A

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

Client: HRL Compliance Solutions, Inc
Work Order: 1508648
Project: WPX Energy - TR 22-34 - Pit Closure

QC BATCH REPORT

Batch ID: **R169835** Instrument ID **MOIST** Method: **E160.3M**

MBLK Sample ID: **WBLKS-R169835** Units: **% of sample** Analysis Date: **8/17/2015 04:08 PM**
Client ID: Run ID: **MOIST_150817C** SeqNo: **3421470** 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-R169835** Units: **% of sample** Analysis Date: **8/17/2015 04:08 PM**
Client ID: Run ID: **MOIST_150817C** SeqNo: **3421469** 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: **1508648-01A DUP** Units: **% of sample** Analysis Date: **8/17/2015 04:08 PM**
Client ID: **West Wall @ 1ft** Run ID: **MOIST_150817C** SeqNo: **3421448** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	17.32	0.050	0	0	0		15.21	13	20	

DUP Sample ID: **1508664-03A DUP** Units: **% of sample** Analysis Date: **8/17/2015 04:08 PM**
Client ID: Run ID: **MOIST_150817C** SeqNo: **3421460** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	44.63	0.050	0	0	0		44.26	0.832	20	

The following samples were analyzed in this batch:

1508648-01A	1508648-02A	1508648-03A
1508648-04A	1508648-05A	1508648-06A
1508648-07A	1508648-08A	

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

ALS Laboratory Group

3352 128th Avenue, Holland, MI 49424
TF: (616) 399-6070 FX: (616) 399-6185

Chain-of-Custody

Form 202r8

WORKORDER # 1508648

PAGE 1 of 1

DISPOSAL (By Lab) or Return to Client

SAMPLER	Jordan Cario	DATE	8/11/2015
PROJECT NAME	WPX Energy - TR 22-34 - Pit Closure	SITE ID	TR 22-34
PROJECT No.		EDD FORMAT	
		PURCHASE ORDER	
COMPANY NAME	HRL Compliance Solutions, Inc.	BILL TO COMPANY	WPX Energy
SEND REPORT TO	HRL - Kris Rowe, Jordan Cario WPX - Karolina Blaney	INVOICE ATTN TO	Karolina Blaney
ADDRESS	2385 F 1/2 Road	ADDRESS	1058 CR 215
CITY / STATE / ZIP	Grand Junction, CO, 81505	CITY / STATE / ZIP	Parachute, CO 81650
PHONE	970-243-3271	PHONE	970-683-2295
FAX	970-243-3280	FAX	
E-MAIL	krowe@hrlcomp.com, jcario@hrlcomp.com, karolina.blaney@wpxenergy.com	E-MAIL	karolina.blaney@wpxenergy.com

TURNAROUND: Standard (5-day)

Lab ID	Field ID	Matrix	Sample Date	Sample Time	# Bottles	Pres.	QC	DRO	GRO	BTEX	910-1 Metals*	Semi Vols* - PAH	SAR / EC / pH	Arsenic
1	West Wall @ 1ft	S	8/11/15	10:10	2	8		X	X	X		X	X	
2	Pit Bottom @ 6in	S	8/11/15	9:45	2	8		X	X	X	X	X	X	
3	North Wall @ 1ft	S	8/11/15	10:20	2	8		X	X	X		X	X	
4	South Wall @ 1ft	S	8/11/15	10:00	2	8		X	X	X		X	X	
5	East Wall @ 1ft	S	8/11/15	9:50	2	8		X	X	X		X	X	
6	Background 1	S	8/11/15	10:30	1	8							X	X
7	Background 2	S	8/11/15	10:35	1	8								X
8	Background 3	S	8/11/15	10:40	1	8								X

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

For metals or anions, please detail analytes below.

Comments:

* See attached Analytical Table (COGCC Table 910-1)
(Soils Sections)

3.6° 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		Jordan Cario	8/11/15	13:30
RECEIVED BY			8-11-15	1370
RELINQUISHED BY			8-11-15	1375
RECEIVED BY		Keith Wiebenga	8/12/15	0800
RELINQUISHED BY				
RECEIVED BY				

ALS Group USA, Corp

Sample Receipt Checklist

Client Name: **HRL** Date/Time Received: **13-Aug-15 08:00**

Work Order: **1508648** Received by: **KRW**

Checklist completed by Keith Wierenga (eSignature) 13-Aug-15 (Date) Reviewed by: Chad Whelton (eSignature) 13-Aug-15 (Date)

Matrices: Soil

Carrier name: FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Sample(s) received on ice?	Yes ☑	No ☐	
Temperature(s)/Thermometer(s):	3.6/3.6 C	SR2	
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:	8/13/2015 9:26:22 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: