

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

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: _____

County: Garfield

Facility Name: Chevron TR 21-31-597

Facility Number: 284695

Well Name: Chevron TR 21-31-597

Well Number: N/A

Location: (QtrQtr, Sec, Twp, Rng, Meridian): NENW, Sec 31, T5S, R97W, 6th PM Latitude: 39.574725 Longitude: -108.322453

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: Parachute-Irigul, 5-30% Slope

Potential receptors (water wells within 1/4 mi, surface waters, etc.): Wiess Creek lies approximately 1,300ft to the east

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

Impacted Media (check):



Soils



Vegetation



Groundwater



Surface Water

Extent of Impact:

See Attached Notice of Completion Report

How Determined:

Visual observations, laboratory data, and field screening instruments.

REMEDIAL WORKPLAN

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

See Attached Notice of Completion (NOC) Report

Describe how source is to be removed:

See Attached Notice of Completion (NOC) Report

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 Notice of Completion (NOC) Report



Page 2
REMEDIATION WORKPLAN (Cont.)

Tracking Number: _____
Name of Operator: _____
OGCC Operator No: _____
Received Date: _____
Well Name & No: _____
Facility Name & No: _____

OGCC Employee: _____

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

See Attached Notice of Completion (NOC) Report

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 Notice of Completion (NOC) Report

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 Notice of Completion (NOC) Report

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

See Attached Notice of Completion (NOC) Report

IMPLEMENTATION SCHEDULE

Date Site Investigation Began: August 14, 2015 Date Site Investigation Completed: August 14, 2015 Date Remediation Plan Submitted: July 12, 2011
Remediation Start Date: August 21, 2015 Anticipated Completion Date: May 12, 2016 Actual Completion Date: May 12, 2016

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: _____

Title: Environmental Specialist Date: _____

OGCC Approved: _____ Title: _____ Date: _____

***WPX ENERGY ROCKY MOUNTAIN LLC
TRAIL RIDGE FIELD
NOTICE OF COMPLETION REPORT FOR
TR 21-31-597 PRODUCTION PIT
REMEDATION #5946***

Prepared For:



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

Prepared By:



HRL COMPLIANCE SOLUTIONS, INC.
Environmental Consultants

2385 F ½ RD
Grand Junction, CO81505
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 TR 21-31-597 Production Pit (COGCC Facility ID number 284695; hereinafter referred to as TR 21-31-597 – is to provide detailed information and result analysis for the previously submitted and approved remediation number 5946, 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 July 12, 2011. 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 July 26, 2011; at which time the aforementioned remediation number was issued. Closure activities began on August 1, 2015 and were concluded on October 31, 2015. Onsite land farming operations were concluded on May 12, 2016. 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 3 and Appendix 3 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. Because of the layout of the pit construction, the pit was divided into a five (5) 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 the east/northeaster pit side wall and contained a mild hydrocarbon odor.

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 14, 2015 for constituents outlined in COGCC Table 910-1. Results are outlined in Table 1, with raw data available in Appendix 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).

Confirmation samples indicated that all of the side walls and pit bottom satisfied COGCC Table 910-1 with the exception of the eastern/northeastern side wall, which exceeded total petroleum hydrocarbons (TPH) within the diesel range organics (DRO). An additional foot was excavated off the eastern side wall and samples were re-collected on October 31, 2015. Samples received on November 3, 2015 confirmed that the eastern side wall now satisfied COGCC Table 910-1 thresholds and not additional excavation was needed. Eastern wall confirmation data is available in Table 2, with raw analytical data available in Appendix 2.

Sample Analysis

Sampling was performed in accordance with WPX Pit Closure Plan, Phase IV, Task 2. See attached Table 1 for initial side wall and pit bottom sampling. Table 2 provides the re-sampling data for the eastern side wall, along with Table 3 containing background data. Table 4 provides landfarm confirmation data with raw data provided in Appendix 4.

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.

Facility Name: TR 21-31-597
Remediation: 5946
Facility ID: 284695

Name of Operator: WPX Energy Rocky Mountain, LLC
Latitude: 39.575010 Longitude: -108.322671
Location (QtrQty, Sec, Twp, Rng, Meridian): NENW, Sec 31, T5S, R97W

COGCC Operator # 96850
County: Garfield

- 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.

FIGURES

FIGURE 1: SAMPLE LOCATION MAP

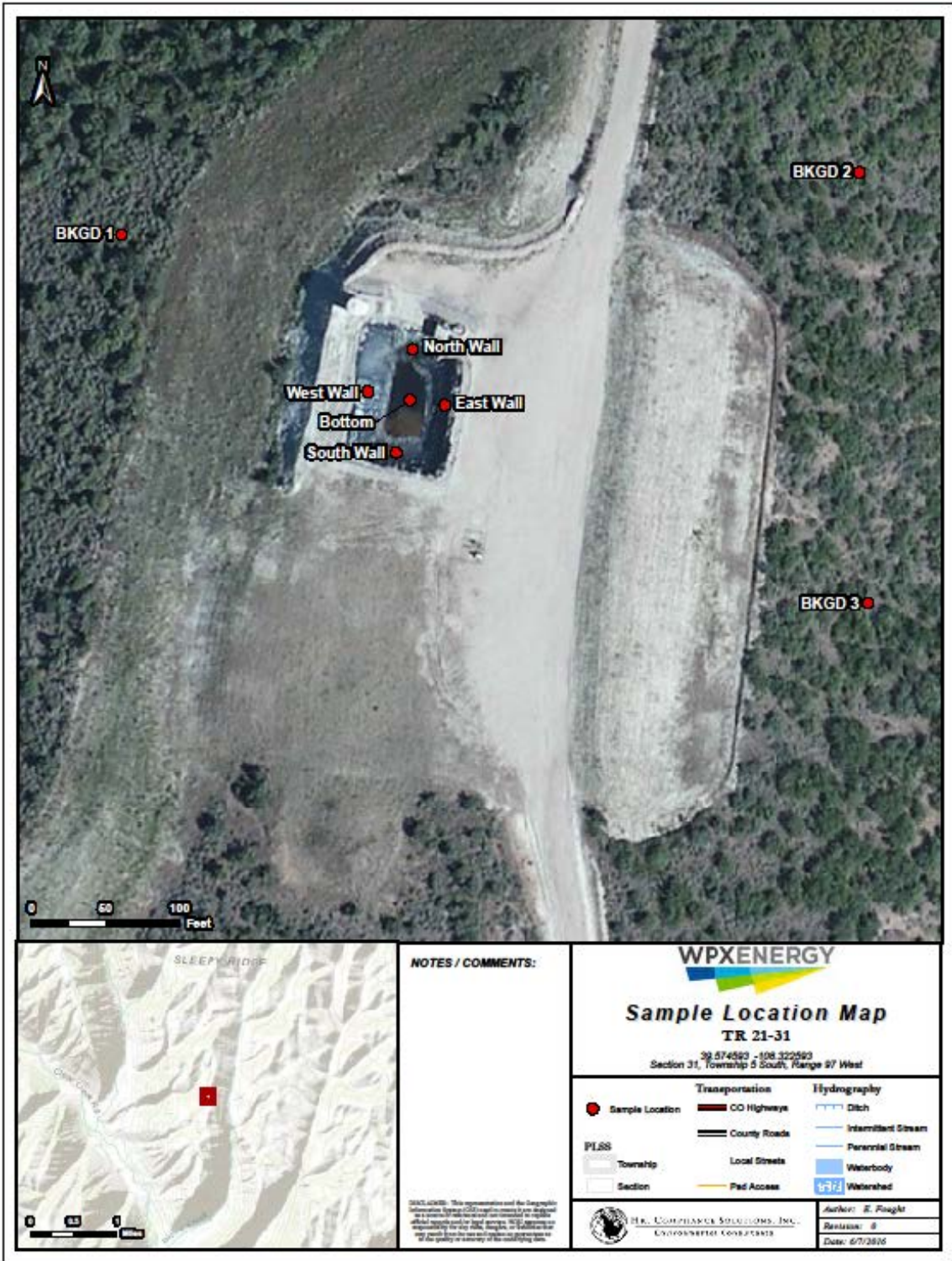


FIGURE 2: EASTERN WALL ADDITIONAL EXCAVATION



Subsoils post additional excavation on eastern side wall.

TABLES

TABLE 1: PIT BOTTOM AND SIDE WALL ANALYTICAL RESULTS

Pit Confirmation Data	North Wall	East Wall	South Wall	West Wall	Pit Bottom
TEPH (DRO)	150	810	280	76	96
TVPH (GRO)	ND	ND	ND	ND	37
BENZENE	ND	ND	ND	ND	ND
TOLUENE	ND	ND	ND	ND	ND
ETHYLBENZENE	ND	ND	ND	ND	ND
XYLENE TOTAL	ND	ND	ND	ND	ND
ACENAPHTHENE	ND	ND	ND	ND	ND
ANTHRACENE	ND	ND	ND	ND	ND
BENZO(A)ANTHRACENE	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)PERYLENE	ND	ND	ND	ND	ND
BENZO(K)FLUORANTHENE	ND	ND	ND	ND	ND
CHRYSENE (mg/kg)	ND	ND	ND	ND	ND
DIBENZO(A,H)ANTHRACENE	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	0.040
PYRENE	ND	ND	ND	ND	ND
ARSENIC	-	-	-	-	13
BARIUM	-	-	-	-	570
CADMIUM	-	-	-	-	ND
CHROMIUM	-	-	-	-	13
CHROMIUM (III)	-	-	-	-	13
CHROMIUM (IV)	-	-	-	-	ND
COPPER	-	-	-	-	16
LEAD	-	-	-	-	9.2
MERCURY	-	-	-	-	0.023
NICKEL	-	-	-	-	23
SELENIUM	-	-	-	-	ND
SILVER	-	-	-	-	ND
ZINC	-	-	-	-	41
ELECTRICAL CONDUCTIVITY (EC) (mmho/cm)	11	6.2	1.3	11	14
pH	8.7	8.6	9.0	8.7	8.3
SODIUM ADSORPTION RATIO (SAR)	49	19	6.1	49	24

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: NORTHEAST WALL – RESAMPLE

Pit Confirmation Data	Northeast Wall
TEPH (DRO)	ND
TVPH (GRO)	ND

Results are presented in mg/kg

TABLE 3: BACKGROUND DATA

Sample ID	Arsenic (mg/kg)	Conductivity(mmho/cm)	pH (s.u.)	Sodium Adsorbion Ratio
BKGD 1	11	0.71	7.2	0.27
BKGD 2	12	-	-	-
BKGD 3	11	-	-	-

Results above state limits are highlighted in yellow

Table 4: Landfarm Confirmation Data

Landfarm/Spoil Pile	Landfarm Confirmation
TEPH (DRO)	76
TVPH (GRO)	88
BENZENE	ND
TOLUENE	ND
ETHYLBENZENE	ND
XYLENE TOTAL	ND
ACENAPHTHENE	ND
ANTHRACENE	ND
BENZO(A)ANTHRACENE	ND
BENZO(A)PYRENE	ND
BENZO(B)FLUORANTHENE	ND
BENZO(G,H,I)PERYLENE	ND
BENZO(K)FLUORANTHENE	ND
CHRYSENE (mg/kg)	ND
DIBENZO(A,H)ANTHRACENE	ND
FLUORANTHENE	ND
FLUORENE	ND
INDENO(1,2,3-CD)PYRENE	ND
NAPHTHALENE	ND
PYRENE	ND
ARSENIC	12
BARIIUM	550
CADMIUM	ND
CHROMIUM	19
CHROMIUM (III)	19
CHROMIUM (IV)	ND
COPPER	18
LEAD	14
MERCURY	0.039
NICKEL	17
SELENIUM	1.1
SILVER	ND
ZINC	56
ELECTRICAL CONDUCTIVITY (EC) (mmho/cm)	4.3
pH	8.3
SODIUM ADSORPTION RATIO (SAR)	8.9

Results are presented in mg/kg unless otherwise noted.

APPENDIX 1: PIT SIDE WALL AND BOTTOM CONFIRMATION RAW DATA



21-Aug-2015

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

Re: **WPX Energy - TR 21-31 - Pit Closure**

Work Order: **1508869**

Dear Kris,

ALS Environmental received 8 samples on 15-Aug-2015 09:30 AM for the analyses presented in the following report.

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

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

The total number of pages in this report is 40.

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

Sincerely,

A handwritten signature in black ink, appearing to read "Les Arnold".

Electronically approved by: Les Arnold

Les Arnold
Senior Project Manager



Certificate No: MN 532786

Report of Laboratory Analysis

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

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

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

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

Client: HRL Compliance Solutions, Inc
Project: WPX Energy - TR 21-31 - Pit Closure
Work Order: 1508869

Work Order Sample Summary

<u>Lab Samp ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Tag Number</u>	<u>Collection Date</u>	<u>Date Received</u>	<u>Hold</u>
1508869-01	North Wall @ 1 ft	Soil		8/14/2015 13:35	8/15/2015 09:30	<input type="checkbox"/>
1508869-02	East Wall @ 1 ft	Soil		8/14/2015 13:45	8/15/2015 09:30	<input type="checkbox"/>
1508869-03	South Wall @ 1 ft	Soil		8/14/2015 13:50	8/15/2015 09:30	<input type="checkbox"/>
1508869-04	West Wall @ 1 ft	Soil		8/14/2015 14:00	8/15/2015 09:30	<input type="checkbox"/>
1508869-05	Pit Bottom @ 6 in	Soil		8/14/2015 14:10	8/15/2015 09:30	<input type="checkbox"/>
1508869-06	Background 1	Soil		8/14/2015 14:20	8/15/2015 09:30	<input type="checkbox"/>
1508869-07	Background 2	Soil		8/14/2015 14:30	8/15/2015 09:30	<input type="checkbox"/>
1508869-08	Background 3	Soil		8/14/2015 14:40	8/15/2015 09:30	<input type="checkbox"/>

Client: HRL Compliance Solutions, Inc
Project: WPX Energy - TR 21-31 - Pit Closure
Work Order: 1508869

Case Narrative

Samples for the above noted Work Order were received on 08/15/15 . 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.

Sample Receiving:

No deviations or anomalies were noted.

Volatile Organics:

No deviations or anomalies were noted.

Extractable Organics:

No deviations or anomalies were noted.

Metals:

No deviations or anomalies were noted.

Wet Chemistry:

Batch 75107, Method CR6_7196_S, Sample 1508869-05A: The MS and MSD recoveries were below the lower control limit for Hexavalent Chromium. The corresponding result in the parent sample may be biased low for this analyte.

Batch 75107, Method CR6_7196_S, Sample 1508869-05A: The RPD between the MS and MSD was outside the control limit for Hexavalent Chromium. The corresponding result in the parent sample should be considered estimated for this analyte.

No other deviations or anomalies were noted.

ALS Group USA, Corp

Date: 21-Aug-15

Client: HRL Compliance Solutions, Inc
Project: WPX Energy - TR 21-31 - Pit Closure
Sample ID: North Wall @ 1 ft
Collection Date: 8/14/2015 01:35 PM

Work Order: 1508869
Lab ID: 1508869-01
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
			SW8015M		Prep: SW3541 / 8/18/15	Analyst: IT
DRO (C10-C28)	150		5.0	mg/Kg-dry	1	8/19/2015 12:33 PM
Surr: 4-Terphenyl-d14	70.3		39-133	%REC	1	8/19/2015 12:33 PM
GASOLINE RANGE ORGANICS BY GC-FID						
			SW8015D		Prep: SW5035 / 8/17/15	Analyst: IT
GRO (C6-C10)	ND		3.1	mg/Kg-dry	1	8/18/2015 02:23 PM
Surr: Toluene-d8	92.8		50-150	%REC	1	8/18/2015 02:23 PM
SOLUBLE CATIONS FOR SAR						
			SW846 6010C		Prep: USDA Method 20B / 8/19/15	Analyst: JEC
Calcium	92		5.0	mg/L	10	8/20/2015 10:55 AM
Magnesium	8.1		2.0	mg/L	10	8/20/2015 10:55 AM
Sodium	1,800		2.0	mg/L	10	8/20/2015 10:55 AM
SODIUM ADSORPTION RATIO						
			USDA H60 METHO		Prep: USDA Method 20B / 8/19/15	Analyst: JEC
Sodium Adsorption Ratio	49		0.010	none	1	8/20/2015
SEMI-VOLATILE ORGANIC COMPOUNDS						
			SW846 8270D		Prep: SW3541 / 8/18/15	Analyst: RS
Acenaphthene	ND		8.1	µg/Kg-dry	1	8/18/2015 06:30 PM
Anthracene	ND		8.1	µg/Kg-dry	1	8/18/2015 06:30 PM
Benzo(a)anthracene	ND		8.1	µg/Kg-dry	1	8/18/2015 06:30 PM
Benzo(a)pyrene	ND		8.1	µg/Kg-dry	1	8/18/2015 06:30 PM
Benzo(b)fluoranthene	ND		8.1	µg/Kg-dry	1	8/18/2015 06:30 PM
Benzo(g,h,i)perylene	ND		8.1	µg/Kg-dry	1	8/18/2015 06:30 PM
Benzo(k)fluoranthene	ND		8.1	µg/Kg-dry	1	8/18/2015 06:30 PM
Chrysene	ND		8.1	µg/Kg-dry	1	8/18/2015 06:30 PM
Dibenzo(a,h)anthracene	ND		8.1	µg/Kg-dry	1	8/18/2015 06:30 PM
Fluoranthene	ND		8.1	µg/Kg-dry	1	8/18/2015 06:30 PM
Fluorene	ND		8.1	µg/Kg-dry	1	8/18/2015 06:30 PM
Indeno(1,2,3-cd)pyrene	ND		8.1	µg/Kg-dry	1	8/18/2015 06:30 PM
Naphthalene	ND		8.1	µg/Kg-dry	1	8/18/2015 06:30 PM
Pyrene	ND		8.1	µg/Kg-dry	1	8/18/2015 06:30 PM
Surr: 2,4,6-Tribromophenol	71.7		34-140	%REC	1	8/18/2015 06:30 PM
Surr: 2-Fluorobiphenyl	68.9		12-100	%REC	1	8/18/2015 06:30 PM
Surr: 2-Fluorophenol	87.2		33-117	%REC	1	8/18/2015 06:30 PM
Surr: 4-Terphenyl-d14	71.7		25-137	%REC	1	8/18/2015 06:30 PM
Surr: Nitrobenzene-d5	77.1		37-107	%REC	1	8/18/2015 06:30 PM
Surr: Phenol-d6	93.9		40-106	%REC	1	8/18/2015 06:30 PM
VOLATILE ORGANIC COMPOUNDS						
			SW8260B		Prep: SW5035 / 8/17/15	Analyst: AK
Benzene	ND		37	µg/Kg-dry	1	8/18/2015 09:29 PM
Ethylbenzene	ND		37	µg/Kg-dry	1	8/18/2015 09:29 PM

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

ALS Group USA, Corp**Date:** 21-Aug-15

Client: HRL Compliance Solutions, Inc
Project: WPX Energy - TR 21-31 - Pit Closure
Sample ID: North Wall @ 1 ft
Collection Date: 8/14/2015 01:35 PM

Work Order: 1508869
Lab ID: 1508869-01
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
m,p-Xylene	ND		73	µg/Kg-dry	1	8/18/2015 09:29 PM
o-Xylene	ND		37	µg/Kg-dry	1	8/18/2015 09:29 PM
Toluene	ND		37	µg/Kg-dry	1	8/18/2015 09:29 PM
Xylenes, Total	ND		110	µg/Kg-dry	1	8/18/2015 09:29 PM
Surr: 1,2-Dichloroethane-d4	100		70-130	%REC	1	8/18/2015 09:29 PM
Surr: 4-Bromofluorobenzene	102		70-130	%REC	1	8/18/2015 09:29 PM
Surr: Dibromofluoromethane	75.6		70-130	%REC	1	8/18/2015 09:29 PM
Surr: Toluene-d8	101		70-130	%REC	1	8/18/2015 09:29 PM
ELECTRICAL CONDUCTIVITY (SAR)			USDA H60 METHO Prep: USDA Method 20B / 8/19/15			Analyst: JB
Electrical Conductivity @ Saturation	11		0.050	mmhos/cm @2	10	8/19/2015 10:50 AM
MOISTURE			E160.3M			Analyst: EVB
Moisture	18		0.050	% of sample	1	8/19/2015 04:30 PM
PH			SW9045D Prep: EXTRACT / 8/19/15			Analyst: ED
pH	8.7			s.u.	1	8/19/2015 07:30 PM

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

ALS Group USA, Corp

Date: 21-Aug-15

Client: HRL Compliance Solutions, Inc
Project: WPX Energy - TR 21-31 - Pit Closure
Sample ID: East Wall @ 1 ft
Collection Date: 8/14/2015 01:45 PM

Work Order: 1508869
Lab ID: 1508869-02
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
DRO (C10-C28)	810		SW8015M		Prep: SW3541 / 8/18/15	Analyst: IT
			4.9	mg/Kg-dry	1	8/19/2015 01:03 AM
Surr: 4-Terphenyl-d14	53.6		39-133	%REC	1	8/19/2015 01:03 AM
GASOLINE RANGE ORGANICS BY GC-FID						
GRO (C6-C10)	ND		SW8015D		Prep: SW5035 / 8/17/15	Analyst: IT
			2.9	mg/Kg-dry	1	8/18/2015 02:47 PM
Surr: Toluene-d8	97.9		50-150	%REC	1	8/18/2015 02:47 PM
SOLUBLE CATIONS FOR SAR						
			SW846 6010C		Prep: USDA Method 20B / 8/19/15	Analyst: JEC
Calcium	110		5.0	mg/L	10	8/20/2015 11:01 AM
Magnesium	33		2.0	mg/L	10	8/20/2015 11:01 AM
Sodium	900		2.0	mg/L	10	8/20/2015 11:01 AM
SODIUM ADSORPTION RATIO						
			USDA H60 METHO		Prep: USDA Method 20B / 8/19/15	Analyst: JEC
Sodium Adsorption Ratio	19		0.010	none	1	8/20/2015
SEMI-VOLATILE ORGANIC COMPOUNDS						
			SW846 8270D		Prep: SW3541 / 8/18/15	Analyst: RS
Acenaphthene	ND		7.8	µg/Kg-dry	1	8/18/2015 06:54 PM
Anthracene	ND		7.8	µg/Kg-dry	1	8/18/2015 06:54 PM
Benzo(a)anthracene	ND		7.8	µg/Kg-dry	1	8/18/2015 06:54 PM
Benzo(a)pyrene	ND		7.8	µg/Kg-dry	1	8/18/2015 06:54 PM
Benzo(b)fluoranthene	ND		7.8	µg/Kg-dry	1	8/18/2015 06:54 PM
Benzo(g,h,i)perylene	ND		7.8	µg/Kg-dry	1	8/18/2015 06:54 PM
Benzo(k)fluoranthene	ND		7.8	µg/Kg-dry	1	8/18/2015 06:54 PM
Chrysene	ND		7.8	µg/Kg-dry	1	8/18/2015 06:54 PM
Dibenzo(a,h)anthracene	ND		7.8	µg/Kg-dry	1	8/18/2015 06:54 PM
Fluoranthene	ND		7.8	µg/Kg-dry	1	8/18/2015 06:54 PM
Fluorene	ND		7.8	µg/Kg-dry	1	8/18/2015 06:54 PM
Indeno(1,2,3-cd)pyrene	ND		7.8	µg/Kg-dry	1	8/18/2015 06:54 PM
Naphthalene	ND		7.8	µg/Kg-dry	1	8/18/2015 06:54 PM
Pyrene	ND		7.8	µg/Kg-dry	1	8/18/2015 06:54 PM
Surr: 2,4,6-Tribromophenol	84.0		34-140	%REC	1	8/18/2015 06:54 PM
Surr: 2-Fluorobiphenyl	68.7		12-100	%REC	1	8/18/2015 06:54 PM
Surr: 2-Fluorophenol	84.4		33-117	%REC	1	8/18/2015 06:54 PM
Surr: 4-Terphenyl-d14	86.4		25-137	%REC	1	8/18/2015 06:54 PM
Surr: Nitrobenzene-d5	76.3		37-107	%REC	1	8/18/2015 06:54 PM
Surr: Phenol-d6	95.4		40-106	%REC	1	8/18/2015 06:54 PM
VOLATILE ORGANIC COMPOUNDS						
			SW8260B		Prep: SW5035 / 8/17/15	Analyst: AK
Benzene	ND		35	µg/Kg-dry	1	8/18/2015 09:54 PM
Ethylbenzene	ND		35	µg/Kg-dry	1	8/18/2015 09:54 PM

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

ALS Group USA, Corp

Date: 21-Aug-15

Client: HRL Compliance Solutions, Inc
Project: WPX Energy - TR 21-31 - Pit Closure
Sample ID: East Wall @ 1 ft
Collection Date: 8/14/2015 01:45 PM

Work Order: 1508869
Lab ID: 1508869-02
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
m,p-Xylene	ND		71	µg/Kg-dry	1	8/18/2015 09:54 PM
o-Xylene	ND		35	µg/Kg-dry	1	8/18/2015 09:54 PM
Toluene	ND		35	µg/Kg-dry	1	8/18/2015 09:54 PM
Xylenes, Total	ND		110	µg/Kg-dry	1	8/18/2015 09:54 PM
Surr: 1,2-Dichloroethane-d4	101		70-130	%REC	1	8/18/2015 09:54 PM
Surr: 4-Bromofluorobenzene	98.3		70-130	%REC	1	8/18/2015 09:54 PM
Surr: Dibromofluoromethane	97.6		70-130	%REC	1	8/18/2015 09:54 PM
Surr: Toluene-d8	101		70-130	%REC	1	8/18/2015 09:54 PM
ELECTRICAL CONDUCTIVITY (SAR)			USDA H60 METHO	Prep: USDA Method 20B / 8/19/15		Analyst: JB
Electrical Conductivity @ Saturation	6.2		0.050	mmhos/cm @2	10	8/19/2015 10:50 AM
MOISTURE			E160.3M			Analyst: EVB
Moisture	15		0.050	% of sample	1	8/19/2015 04:30 PM
PH			SW9045D	Prep: EXTRACT / 8/19/15		Analyst: ED
pH	8.6			s.u.	1	8/19/2015 07:30 PM

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

ALS Group USA, Corp

Date: 21-Aug-15

Client: HRL Compliance Solutions, Inc
Project: WPX Energy - TR 21-31 - Pit Closure
Sample ID: South Wall @ 1 ft
Collection Date: 8/14/2015 01:50 PM

Work Order: 1508869
Lab ID: 1508869-03
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
DRO (C10-C28)	280		SW8015M		Prep: SW3541 / 8/18/15	Analyst: IT
Surr: 4-Terphenyl-d14	65.3		4.9	mg/Kg-dry	1	8/19/2015 01:33 AM
			39-133	%REC	1	8/19/2015 01:33 AM
GASOLINE RANGE ORGANICS BY GC-FID						
GRO (C6-C10)	ND		SW8015D		Prep: SW5035 / 8/17/15	Analyst: IT
Surr: Toluene-d8	96.2		3.0	mg/Kg-dry	1	8/18/2015 03:12 PM
			50-150	%REC	1	8/18/2015 03:12 PM
SOLUBLE CATIONS FOR SAR						
			SW846 6010C		Prep: USDA Method 20B / 8/19/15	Analyst: JEC
Calcium	45		5.0	mg/L	10	8/20/2015 11:07 AM
Magnesium	10		2.0	mg/L	10	8/20/2015 11:07 AM
Sodium	180		2.0	mg/L	10	8/20/2015 11:07 AM
SODIUM ADSORPTION RATIO						
			USDA H60 METHO		Prep: USDA Method 20B / 8/19/15	Analyst: JEC
Sodium Adsorption Ratio	6.1		0.010	none	1	8/20/2015
SEMI-VOLATILE ORGANIC COMPOUNDS						
			SW846 8270D		Prep: SW3541 / 8/18/15	Analyst: RS
Acenaphthene	ND		7.9	µg/Kg-dry	1	8/18/2015 10:45 PM
Anthracene	ND		7.9	µg/Kg-dry	1	8/18/2015 10:45 PM
Benzo(a)anthracene	ND		7.9	µg/Kg-dry	1	8/18/2015 10:45 PM
Benzo(a)pyrene	ND		7.9	µg/Kg-dry	1	8/18/2015 10:45 PM
Benzo(b)fluoranthene	ND		7.9	µg/Kg-dry	1	8/18/2015 10:45 PM
Benzo(g,h,i)perylene	ND		7.9	µg/Kg-dry	1	8/18/2015 10:45 PM
Benzo(k)fluoranthene	ND		7.9	µg/Kg-dry	1	8/18/2015 10:45 PM
Chrysene	ND		7.9	µg/Kg-dry	1	8/18/2015 10:45 PM
Dibenzo(a,h)anthracene	ND		7.9	µg/Kg-dry	1	8/18/2015 10:45 PM
Fluoranthene	ND		7.9	µg/Kg-dry	1	8/18/2015 10:45 PM
Fluorene	ND		7.9	µg/Kg-dry	1	8/18/2015 10:45 PM
Indeno(1,2,3-cd)pyrene	ND		7.9	µg/Kg-dry	1	8/18/2015 10:45 PM
Naphthalene	ND		7.9	µg/Kg-dry	1	8/18/2015 10:45 PM
Pyrene	ND		7.9	µg/Kg-dry	1	8/18/2015 10:45 PM
Surr: 2,4,6-Tribromophenol	90.4		34-140	%REC	1	8/18/2015 10:45 PM
Surr: 2-Fluorobiphenyl	77.1		12-100	%REC	1	8/18/2015 10:45 PM
Surr: 2-Fluorophenol	89.5		33-117	%REC	1	8/18/2015 10:45 PM
Surr: 4-Terphenyl-d14	86.1		25-137	%REC	1	8/18/2015 10:45 PM
Surr: Nitrobenzene-d5	75.7		37-107	%REC	1	8/18/2015 10:45 PM
Surr: Phenol-d6	90.9		40-106	%REC	1	8/18/2015 10:45 PM
VOLATILE ORGANIC COMPOUNDS						
			SW8260B		Prep: SW5035 / 8/17/15	Analyst: AK
Benzene	ND		36	µg/Kg-dry	1	8/18/2015 10:18 PM
Ethylbenzene	ND		36	µg/Kg-dry	1	8/18/2015 10:18 PM

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

ALS Group USA, Corp

Date: 21-Aug-15

Client: HRL Compliance Solutions, Inc
Project: WPX Energy - TR 21-31 - Pit Closure
Sample ID: South Wall @ 1 ft
Collection Date: 8/14/2015 01:50 PM

Work Order: 1508869
Lab ID: 1508869-03
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
m,p-Xylene	ND		71	µg/Kg-dry	1	8/18/2015 10:18 PM
o-Xylene	ND		36	µg/Kg-dry	1	8/18/2015 10:18 PM
Toluene	ND		36	µg/Kg-dry	1	8/18/2015 10:18 PM
Xylenes, Total	ND		110	µg/Kg-dry	1	8/18/2015 10:18 PM
Surr: 1,2-Dichloroethane-d4	103		70-130	%REC	1	8/18/2015 10:18 PM
Surr: 4-Bromofluorobenzene	102		70-130	%REC	1	8/18/2015 10:18 PM
Surr: Dibromofluoromethane	101		70-130	%REC	1	8/18/2015 10:18 PM
Surr: Toluene-d8	99.8		70-130	%REC	1	8/18/2015 10:18 PM
ELECTRICAL CONDUCTIVITY (SAR)			USDA H60 METHO		Prep: USDA Method 20B / 8/19/15	Analyst: JB
Electrical Conductivity @ Saturation	1.3		0.050	mmhos/cm @2	10	8/19/2015 10:50 AM
MOISTURE			E160.3M			Analyst: EVB
Moisture	16		0.050	% of sample	1	8/19/2015 04:30 PM
PH			SW9045D		Prep: EXTRACT / 8/19/15	Analyst: ED
pH	9.0			s.u.	1	8/19/2015 07:30 PM

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

ALS Group USA, Corp

Date: 21-Aug-15

Client: HRL Compliance Solutions, Inc
Project: WPX Energy - TR 21-31 - Pit Closure
Sample ID: West Wall @ 1 ft
Collection Date: 8/14/2015 02:00 PM

Work Order: 1508869
Lab ID: 1508869-04
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
DRO (C10-C28)	76		SW8015M		Prep: SW3541 / 8/18/15	Analyst: IT
<i>Surr: 4-Terphenyl-d14</i>	62.6		5.1	mg/Kg-dry	1	8/19/2015 02:03 AM
			39-133	%REC	1	8/19/2015 02:03 AM
GASOLINE RANGE ORGANICS BY GC-FID						
GRO (C6-C10)	ND		SW8015D		Prep: SW5035 / 8/17/15	Analyst: IT
<i>Surr: Toluene-d8</i>	97.9		3.1	mg/Kg-dry	1	8/18/2015 03:36 PM
			50-150	%REC	1	8/18/2015 03:36 PM
SOLUBLE CATIONS FOR SAR						
			SW846 6010C		Prep: USDA Method 20B / 8/19/15	Analyst: JEC
Calcium	85		5.0	mg/L	10	8/20/2015 11:29 AM
Magnesium	8.5		2.0	mg/L	10	8/20/2015 11:29 AM
Sodium	1,800		2.0	mg/L	10	8/20/2015 11:29 AM
SODIUM ADSORPTION RATIO						
			USDA H60 METHO		Prep: USDA Method 20B / 8/19/15	Analyst: JEC
Sodium Adsorption Ratio	49		0.010	none	1	8/20/2015
SEMI-VOLATILE ORGANIC COMPOUNDS						
			SW846 8270D		Prep: SW3541 / 8/18/15	Analyst: RS
Acenaphthene	ND		8.1	µg/Kg-dry	1	8/18/2015 07:18 PM
Anthracene	ND		8.1	µg/Kg-dry	1	8/18/2015 07:18 PM
Benzo(a)anthracene	ND		8.1	µg/Kg-dry	1	8/18/2015 07:18 PM
Benzo(a)pyrene	ND		8.1	µg/Kg-dry	1	8/18/2015 07:18 PM
Benzo(b)fluoranthene	ND		8.1	µg/Kg-dry	1	8/18/2015 07:18 PM
Benzo(g,h,i)perylene	ND		8.1	µg/Kg-dry	1	8/18/2015 07:18 PM
Benzo(k)fluoranthene	ND		8.1	µg/Kg-dry	1	8/18/2015 07:18 PM
Chrysene	ND		8.1	µg/Kg-dry	1	8/18/2015 07:18 PM
Dibenzo(a,h)anthracene	ND		8.1	µg/Kg-dry	1	8/18/2015 07:18 PM
Fluoranthene	ND		8.1	µg/Kg-dry	1	8/18/2015 07:18 PM
Fluorene	ND		8.1	µg/Kg-dry	1	8/18/2015 07:18 PM
Indeno(1,2,3-cd)pyrene	ND		8.1	µg/Kg-dry	1	8/18/2015 07:18 PM
Naphthalene	ND		8.1	µg/Kg-dry	1	8/18/2015 07:18 PM
Pyrene	ND		8.1	µg/Kg-dry	1	8/18/2015 07:18 PM
<i>Surr: 2,4,6-Tribromophenol</i>	84.0		34-140	%REC	1	8/18/2015 07:18 PM
<i>Surr: 2-Fluorobiphenyl</i>	63.9		12-100	%REC	1	8/18/2015 07:18 PM
<i>Surr: 2-Fluorophenol</i>	59.2		33-117	%REC	1	8/18/2015 07:18 PM
<i>Surr: 4-Terphenyl-d14</i>	78.0		25-137	%REC	1	8/18/2015 07:18 PM
<i>Surr: Nitrobenzene-d5</i>	48.5		37-107	%REC	1	8/18/2015 07:18 PM
<i>Surr: Phenol-d6</i>	84.1		40-106	%REC	1	8/18/2015 07:18 PM
VOLATILE ORGANIC COMPOUNDS						
			SW8260B		Prep: SW5035 / 8/17/15	Analyst: AK
Benzene	ND		37	µg/Kg-dry	1	8/18/2015 10:43 PM
Ethylbenzene	ND		37	µg/Kg-dry	1	8/18/2015 10:43 PM

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

ALS Group USA, Corp

Date: 21-Aug-15

Client: HRL Compliance Solutions, Inc
Project: WPX Energy - TR 21-31 - Pit Closure
Sample ID: West Wall @ 1 ft
Collection Date: 8/14/2015 02:00 PM

Work Order: 1508869
Lab ID: 1508869-04
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
m,p-Xylene	ND		73	µg/Kg-dry	1	8/18/2015 10:43 PM
o-Xylene	ND		37	µg/Kg-dry	1	8/18/2015 10:43 PM
Toluene	ND		37	µg/Kg-dry	1	8/18/2015 10:43 PM
Xylenes, Total	ND		110	µg/Kg-dry	1	8/18/2015 10:43 PM
Surr: 1,2-Dichloroethane-d4	98.5		70-130	%REC	1	8/18/2015 10:43 PM
Surr: 4-Bromofluorobenzene	101		70-130	%REC	1	8/18/2015 10:43 PM
Surr: Dibromofluoromethane	95.8		70-130	%REC	1	8/18/2015 10:43 PM
Surr: Toluene-d8	99.0		70-130	%REC	1	8/18/2015 10:43 PM
ELECTRICAL CONDUCTIVITY (SAR)			USDA H60 METHO		Prep: USDA Method 20B / 8/19/15	Analyst: JB
Electrical Conductivity @ Saturation	11		0.050	mmhos/cm @2	10	8/19/2015 10:50 AM
MOISTURE			E160.3M			Analyst: EVB
Moisture	18		0.050	% of sample	1	8/19/2015 04:30 PM
PH			SW9045D		Prep: EXTRACT / 8/19/15	Analyst: ED
pH	8.7			s.u.	1	8/19/2015 07:30 PM

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

ALS Group USA, Corp

Date: 21-Aug-15

Client: HRL Compliance Solutions, Inc
Project: WPX Energy - TR 21-31 - Pit Closure
Sample ID: Pit Bottom @ 6 in
Collection Date: 8/14/2015 02:10 PM

Work Order: 1508869
Lab ID: 1508869-05
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
DRO (C10-C28)	96		SW8015M		Prep: SW3541 / 8/18/15	Analyst: IT
<i>Surr: 4-Terphenyl-d14</i>	64.9		4.8	mg/Kg-dry	1	8/19/2015 02:33 AM
			39-133	%REC	1	8/19/2015 02:33 AM
GASOLINE RANGE ORGANICS BY GC-FID						
GRO (C6-C10)	37		SW8015D		Prep: SW5035 / 8/17/15	Analyst: IT
<i>Surr: Toluene-d8</i>	98.8		3.0	mg/Kg-dry	1	8/18/2015 04:01 PM
			50-150	%REC	1	8/18/2015 04:01 PM
MERCURY BY CVAA						
Mercury	0.023		SW7471B		Prep: SW7471 / 8/19/15	Analyst: LR
			0.014	mg/Kg-dry	1	8/19/2015 08:38 PM
METALS ANALYSIS BY ICP						
Arsenic	13		SW846 6010C		Prep: SW3050B / 8/17/15	Analyst: JEC
Barium	570		0.45	mg/Kg-dry	1	8/18/2015 06:42 PM
Cadmium	ND		0.45	mg/Kg-dry	1	8/18/2015 06:42 PM
Chromium	13		0.90	mg/Kg-dry	1	8/18/2015 06:42 PM
Copper	16		0.45	mg/Kg-dry	1	8/18/2015 06:42 PM
Lead	9.2		0.90	mg/Kg-dry	1	8/18/2015 06:42 PM
Nickel	23		0.45	mg/Kg-dry	1	8/18/2015 06:42 PM
Selenium	ND		0.45	mg/Kg-dry	1	8/18/2015 06:42 PM
Silver	ND		0.90	mg/Kg-dry	1	8/18/2015 06:42 PM
Zinc	41		0.45	mg/Kg-dry	1	8/18/2015 06:42 PM
SOLUBLE CATIONS FOR SAR						
			SW846 6010C		Prep: USDA Method 20B / 8/19/15	Analyst: JEC
Calcium	260		5.0	mg/L	10	8/20/2015 11:35 AM
Magnesium	100		2.0	mg/L	10	8/20/2015 11:35 AM
Sodium	1,800		2.0	mg/L	10	8/20/2015 11:35 AM
SODIUM ADSORPTION RATIO						
			USDA H60 METHO		Prep: USDA Method 20B / 8/19/15	Analyst: JEC
Sodium Adsorption Ratio	24		0.010	none	1	8/20/2015
SEMI-VOLATILE ORGANIC COMPOUNDS						
			SW846 8270D		Prep: SW3541 / 8/18/15	Analyst: RS
Acenaphthene	ND		7.7	µg/Kg-dry	1	8/18/2015 07:41 PM
Anthracene	ND		7.7	µg/Kg-dry	1	8/18/2015 07:41 PM
Benzo(a)anthracene	ND		7.7	µg/Kg-dry	1	8/18/2015 07:41 PM
Benzo(a)pyrene	ND		7.7	µg/Kg-dry	1	8/18/2015 07:41 PM
Benzo(b)fluoranthene	ND		7.7	µg/Kg-dry	1	8/18/2015 07:41 PM
Benzo(g,h,i)perylene	ND		7.7	µg/Kg-dry	1	8/18/2015 07:41 PM
Benzo(k)fluoranthene	ND		7.7	µg/Kg-dry	1	8/18/2015 07:41 PM
Chrysene	ND		7.7	µg/Kg-dry	1	8/18/2015 07:41 PM
Dibenzo(a,h)anthracene	ND		7.7	µg/Kg-dry	1	8/18/2015 07:41 PM

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

ALS Group USA, Corp

Date: 21-Aug-15

Client: HRL Compliance Solutions, Inc
Project: WPX Energy - TR 21-31 - Pit Closure
Sample ID: Pit Bottom @ 6 in
Collection Date: 8/14/2015 02:10 PM

Work Order: 1508869
Lab ID: 1508869-05
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Fluoranthene	ND		7.7	µg/Kg-dry	1	8/18/2015 07:41 PM
Fluorene	ND		7.7	µg/Kg-dry	1	8/18/2015 07:41 PM
Indeno(1,2,3-cd)pyrene	ND		7.7	µg/Kg-dry	1	8/18/2015 07:41 PM
Naphthalene	ND		7.7	µg/Kg-dry	1	8/18/2015 07:41 PM
Pyrene	ND		7.7	µg/Kg-dry	1	8/18/2015 07:41 PM
Surr: 2,4,6-Tribromophenol	80.4		34-140	%REC	1	8/18/2015 07:41 PM
Surr: 2-Fluorobiphenyl	66.3		12-100	%REC	1	8/18/2015 07:41 PM
Surr: 2-Fluorophenol	75.0		33-117	%REC	1	8/18/2015 07:41 PM
Surr: 4-Terphenyl-d14	81.5		25-137	%REC	1	8/18/2015 07:41 PM
Surr: Nitrobenzene-d5	65.7		37-107	%REC	1	8/18/2015 07:41 PM
Surr: Phenol-d6	90.0		40-106	%REC	1	8/18/2015 07:41 PM
VOLATILE ORGANIC COMPOUNDS			SW8260B	Prep: SW5035 / 8/17/15	Analyst: AK	
Benzene	ND		35	µg/Kg-dry	1	8/18/2015 11:08 PM
Ethylbenzene	ND		35	µg/Kg-dry	1	8/18/2015 11:08 PM
m,p-Xylene	ND		71	µg/Kg-dry	1	8/18/2015 11:08 PM
o-Xylene	ND		35	µg/Kg-dry	1	8/18/2015 11:08 PM
Toluene	ND		35	µg/Kg-dry	1	8/18/2015 11:08 PM
Xylenes, Total	ND		110	µg/Kg-dry	1	8/18/2015 11:08 PM
Surr: 1,2-Dichloroethane-d4	99.4		70-130	%REC	1	8/18/2015 11:08 PM
Surr: 4-Bromofluorobenzene	90.1		70-130	%REC	1	8/18/2015 11:08 PM
Surr: Dibromofluoromethane	97.1		70-130	%REC	1	8/18/2015 11:08 PM
Surr: Toluene-d8	96.2		70-130	%REC	1	8/18/2015 11:08 PM
ELECTRICAL CONDUCTIVITY (SAR)			USDA H60 METHO	Prep: USDA Method 20B / 8/19/15	Analyst: JB	
Electrical Conductivity @ Saturation	14		0.050	mmhos/cm @2	10	8/19/2015 10:50 AM
CHROMIUM, TRIVALENT			CALCULATION	Analyst: MB		
Chromium, Trivalent	13		0.59	mg/Kg-dry	1	8/21/2015 05:05 PM
CHROMIUM, HEXAVALENT			SW7196A	Prep: SW3060A / 8/20/15	Analyst: MB	
Chromium, Hexavalent	ND		1.1	mg/Kg-dry	1	8/21/2015 03:00 PM
MOISTURE			E160.3M	Analyst: EVB		
Moisture	15		0.050	% of sample	1	8/19/2015 04:30 PM
PH			SW9045D	Prep: EXTRACT / 8/19/15	Analyst: ED	
pH	8.3			s.u.	1	8/19/2015 07:30 PM

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

ALS Group USA, Corp

Date: 21-Aug-15

Client: HRL Compliance Solutions, Inc
Project: WPX Energy - TR 21-31 - Pit Closure
Sample ID: Background 1
Collection Date: 8/14/2015 02:20 PM

Work Order: 1508869
Lab ID: 1508869-06
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS ANALYSIS BY ICP						
Arsenic	11		SW846 6010C 0.44	mg/Kg-dry	Prep: SW3050B / 8/17/15 1	Analyst: JEC 8/18/2015 06:48 PM
SOLUBLE CATIONS FOR SAR						
Calcium	95		SW846 6010C 5.0	mg/L	Prep: USDA Method 20B / 8/19/15 10	Analyst: JEC 8/20/2015 11:41 AM
Magnesium	19		2.0	mg/L	10	8/20/2015 11:41 AM
Sodium	11		2.0	mg/L	10	8/20/2015 11:41 AM
SODIUM ADSORPTION RATIO						
Sodium Adsorption Ratio	0.27		USDA H60 METHO 0.010	none	Prep: USDA Method 20B / 8/19/15 1	Analyst: JEC 8/20/2015
ELECTRICAL CONDUCTIVITY (SAR)						
Electrical Conductivity @ Saturation	0.71		USDA H60 METHO 0.050	mmhos/cm @2	Prep: USDA Method 20B / 8/19/15 10	Analyst: JB 8/19/2015 10:50 AM
MOISTURE						
Moisture	11		E160.3M 0.050	% of sample	1	Analyst: EVB 8/19/2015 04:30 PM
PH						
pH	7.2		SW9045D s.u.		Prep: EXTRACT / 8/19/15 1	Analyst: ED 8/19/2015 07:30 PM

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

ALS Group USA, Corp**Date:** 21-Aug-15

Client: HRL Compliance Solutions, Inc
Project: WPX Energy - TR 21-31 - Pit Closure
Sample ID: Background 2
Collection Date: 8/14/2015 02:30 PM

Work Order: 1508869
Lab ID: 1508869-07
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<hr/>						
METALS ANALYSIS BY ICP			SW846 6010C		Prep: SW3050B / 8/17/15	Analyst: JEC
Arsenic	12		0.38	mg/Kg-dry	1	8/18/2015 06:54 PM
MOISTURE			E160.3M			Analyst: EVB
Moisture	11		0.050	% of sample	1	8/19/2015 04:30 PM

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

ALS Group USA, Corp

Date: 21-Aug-15

Client: HRL Compliance Solutions, Inc
Project: WPX Energy - TR 21-31 - Pit Closure
Sample ID: Background 3
Collection Date: 8/14/2015 02:40 PM

Work Order: 1508869
Lab ID: 1508869-08
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<hr/>						
METALS ANALYSIS BY ICP			SW846 6010C		Prep: SW3050B / 8/17/15	Analyst: JEC
Arsenic	11		0.42	mg/Kg-dry	1	8/18/2015 07:00 PM
MOISTURE			E160.3M			Analyst: EVB
Moisture	10		0.050	% of sample	1	8/19/2015 04:30 PM

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

Client: HRL Compliance Solutions, Inc
Project: WPX Energy - TR 21-31 - Pit Closure
WorkOrder: 1508869

**QUALIFIERS,
ACRONYMS, UNITS**

<u>Qualifier</u>	<u>Description</u>
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte is present at an estimated concentration between the MDL and Report Limit
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL
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.

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

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

Sample Receipt Checklist

Client Name: HRL

Date/Time Received: 15-Aug-15 09:30

Work Order: 1508869

Received by: DS

Checklist completed by Diane Shaw 17-Aug-15
eSignature Date

Reviewed by: Chad Whelton 17-Aug-15
eSignature Date

Matrices: Soil

Carrier name: FedEx

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature in compliance?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample(s) received on ice?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Temperature(s)/Thermometer(s):	<u>3.4/3.4 c</u>		<u>SR2</u>
Cooler(s)/Kit(s):	<u></u>		
Date/Time sample(s) sent to storage:	<u>8/17/2015 9:58:51 AM</u>		
Water - VOA vials have zero headspace?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input checked="" type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
pH adjusted?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
pH adjusted by:	<u>-</u>		

Login Notes:

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:

Comments:

CorrectiveAction:

ALS Group USA, Corp

Date: 21-Aug-15

Client: HRL Compliance Solutions, Inc

Work Order: 1508869

Project: WPX Energy - TR 21-31 - Pit Closure

QC BATCH REPORT

Batch ID: **74945**

Instrument ID **GC8**

Method: **SW8015M**

MBLK		Sample ID: DBLKS1-74945-74945				Units: mg/Kg		Analysis Date: 8/18/2015 05:33 PM		
Client ID:		Run ID: GC8_150818A				SeqNo: 3423302		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

DRO (C10-C28) ND 5.0
Surr: 4-Terphenyl-d14 1.381 0 2 0 69.1 39-133 0

MBLK		Sample ID: DBLKS1-74945-74945				Units: mg/Kg		Analysis Date: 8/18/2015 05:33 PM		
Client ID:		Run ID: GC8_150818A				SeqNo: 3423315		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

DRO (C10-C28) ND 5.0
Surr: 4-Terphenyl-d14 1.381 0 2 0 69.1 39-133 0

LCS		Sample ID: DLCSS1-74945-74945				Units: mg/Kg		Analysis Date: 8/18/2015 06:03 PM		
Client ID:		Run ID: GC8_150818A				SeqNo: 3423303		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

DRO (C10-C28) 162.6 5.0 200 0 81.3 61-109 0
Surr: 4-Terphenyl-d14 1.202 0 2 0 60.1 39-133 0

LCS		Sample ID: DLCSS1-74945-74945				Units: mg/Kg		Analysis Date: 8/18/2015 06:03 PM		
Client ID:		Run ID: GC8_150818A				SeqNo: 3423316		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

DRO (C10-C28) 162.6 5.0 200 0 81.3 61-109 0
Surr: 4-Terphenyl-d14 1.202 0 2 0 60.1 39-133 0

MS		Sample ID: 1508583-02B MS				Units: mg/Kg		Analysis Date: 8/18/2015 06:33 PM		
Client ID:		Run ID: GC8_150818A				SeqNo: 3423304		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

DRO (C10-C28) 117 4.1 165.6 36.37 48.7 48-110 0
Surr: 4-Terphenyl-d14 0.8363 0 1.656 0 50.5 39-133 0

MS		Sample ID: 1508583-02B MS				Units: mg/Kg		Analysis Date: 8/18/2015 06:33 PM		
Client ID:		Run ID: GC8_150818A				SeqNo: 3423317		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

DRO (C10-C28) 117 4.1 165.6 36.37 48.7 48-110 0
Surr: 4-Terphenyl-d14 0.8363 0 1.656 0 50.5 39-133 0

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

Client: HRL Compliance Solutions, Inc
Work Order: 1508869
Project: WPX Energy - TR 21-31 - Pit Closure

QC BATCH REPORT

Batch ID: **74945** Instrument ID **GC8** Method: **SW8015M**

MSD				Sample ID: 1508583-02B MSD				Units: mg/Kg			Analysis Date: 8/18/2015 07:03 PM			
Client ID:				Run ID: GC8_150818A				SeqNo: 3423305			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			
DRO (C10-C28)		131.3	4.1	163.2	36.37	58.1	48-110	117	11.4	30				
Surr: 4-Terphenyl-d14		0.9723	0	1.632	0	59.6	39-133	0.8363	15	30				

MSD				Sample ID: 1508583-02B MSD			Units: mg/Kg		Analysis Date: 8/18/2015 07:03 PM		
Client ID:			Run ID: GC8_150818A			SeqNo: 3423319		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	
DRO (C10-C28)	131.3	4.1	163.2	36.37	58.1	48-110	117	11.4	30		
Surr: 4-Terphenyl-d14	0.9723	0	1.632	0	59.6	39-133	0.8363	15	30		

The following samples were analyzed in this batch:

1508869-01A	1508869-02A	1508869-03A
1508869-04A	1508869-05A	

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

Client: HRL Compliance Solutions, Inc
Work Order: 1508869
Project: WPX Energy - TR 21-31 - Pit Closure

QC BATCH REPORT

Batch ID: **74885** Instrument ID **GC10** Method: **SW8015D**

MBLK		Sample ID: MBLK-74885-74885				Units: µg/Kg		Analysis Date: 8/18/2015 01:34 PM		
Client ID:		Run ID: GC10_150818A				SeqNo: 3423359		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
GRO (C6-C10)	ND	2,500								
Surr: Toluene-d8	4814	0	5000	0	96.3	50-150	0			

LCS		Sample ID: LCS-74885-74885				Units: µg/Kg		Analysis Date: 8/18/2015 01:09 PM		
Client ID:		Run ID: GC10_150818A				SeqNo: 3423358		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
GRO (C6-C10)	569400	2,500	500000	0	114	70-130	0			
Surr: Toluene-d8	4840	0	5000	0	96.8	50-150	0			

MS		Sample ID: 1508869-05A MS				Units: µg/Kg		Analysis Date: 8/18/2015 04:25 PM		
Client ID: Pit Bottom @ 6 in		Run ID: GC10_150818A				SeqNo: 3423366		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
GRO (C6-C10)	603300	2,500	500000	30990	114	70-130	0			
Surr: Toluene-d8	5054	0	5000	0	101	50-150	0			

MSD		Sample ID: 1508869-05A MSD				Units: µg/Kg		Analysis Date: 8/18/2015 04:50 PM		
Client ID: Pit Bottom @ 6 in		Run ID: GC10_150818A				SeqNo: 3423367		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
GRO (C6-C10)	546200	2,500	500000	30990	103	70-130	603300	9.94	30	
Surr: Toluene-d8	4848	0	5000	0	97	50-150	5054	4.14	30	

The following samples were analyzed in this batch:

1508869-01A	1508869-02A	1508869-03A
1508869-04A	1508869-05A	

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

Client: HRL Compliance Solutions, Inc
Work Order: 1508869
Project: WPX Energy - TR 21-31 - Pit Closure

QC BATCH REPORT

Batch ID: **75014** Instrument ID **HG1** Method: **SW7471B**

MBLK		Sample ID: MBLK-75014-75014				Units: mg/Kg		Analysis Date: 8/19/2015 04:17 PM		
Client ID:		Run ID: HG1_150819A				SeqNo: 3423948		Prep Date: 8/19/2015		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-75014-75014					Units: mg/Kg		Analysis Date: 8/19/2015 04:20 PM		
Client ID:			Run ID: HG1_150819A			SeqNo: 3423949		Prep Date: 8/19/2015		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	

Mercury 0.1784 0.020 0.1665 0 107 80-120 0

MS		Sample ID: 1508778-08AMS					Units: mg/Kg		Analysis Date: 8/19/2015 04:44 PM		
Client ID:			Run ID: HG1_150819A			SeqNo: 3424519		Prep Date: 8/19/2015		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	

Mercury 0.1527 0.013 0.11 0.04551 97.4 75-125 0

MSD		Sample ID: 1508778-08AMSD				Units: mg/Kg		Analysis Date: 8/19/2015 04:46 PM		
Client ID:		Run ID: HG1_150819A			SeqNo: 3424520		Prep Date: 8/19/2015		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.1478 0.013 0.1097 0.04551 93.3 75-125 0.1527 3.26 35

The following samples were analyzed in this batch:

1508869-05A

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

Client: HRL Compliance Solutions, Inc
Work Order: 1508869
Project: WPX Energy - TR 21-31 - Pit Closure

QC BATCH REPORT

Batch ID: **74880** Instrument ID **ICP2** Method: **SW846 6010C**

MBLK		Sample ID: MBLK-74880-74880				Units: mg/Kg		Analysis Date: 8/17/2015 05:13 PM		
Client ID:		Run ID: ICP2_150817A				SeqNo: 3420745		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
Arsenic	ND	0.25								
Barium	ND	0.25								
Cadmium	ND	0.50								
Chromium	0.01831	0.25								J
Copper	ND	0.50								
Lead	ND	0.25								
Nickel	ND	0.25								
Selenium	ND	0.50								
Silver	ND	0.25								
Zinc	ND	0.50								

LCS		Sample ID: LCS-74880-74880				Units: mg/Kg		Analysis Date: 8/17/2015 05:19 PM		
Client ID:		Run ID: ICP2_150817A				SeqNo: 3420747		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
Arsenic	5.224	0.25	5	0	104	80-120	0			
Barium	5.066	0.25	5	0	101	80-120	0			
Cadmium	4.676	0.50	5	0	93.5	80-120	0			
Chromium	5.336	0.25	5	0	107	80-120	0			
Copper	5.205	0.50	5	0	104	80-120	0			
Lead	5.099	0.25	5	0	102	80-120	0			
Nickel	5.275	0.25	5	0	105	80-120	0			
Selenium	5.475	0.50	5	0	109	80-120	0			
Silver	5.115	0.25	5	0	102	80-120	0			
Zinc	5.329	0.50	5	0	107	80-120	0			

MS		Sample ID: 1508866-01AMS				Units: mg/Kg		Analysis Date: 8/17/2015 05:46 PM		
Client ID:		Run ID: ICP2_150817A				SeqNo: 3420752		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
Arsenic	15.12	0.40	7.949	5.675	119	75-125	0			
Barium	241.2	0.40	7.949	218.8	282	75-125	0			SO
Cadmium	7.867	0.79	7.949	0.2118	96.3	75-125	0			
Chromium	24.38	0.40	7.949	13.24	140	75-125	0			S
Copper	23.78	0.79	7.949	14.3	119	75-125	0			
Lead	14.25	0.40	7.949	7	91.2	75-125	0			
Nickel	35.29	0.40	7.949	23.88	144	75-125	0			S
Selenium	9.366	0.79	7.949	0.4697	112	75-125	0			
Silver	8.349	0.40	7.949	-0.1794	107	75-125	0			
Zinc	47.86	0.79	7.949	33.9	176	75-125	0			SO

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

Client: HRL Compliance Solutions, Inc
Work Order: 1508869
Project: WPX Energy - TR 21-31 - Pit Closure

QC BATCH REPORT

Batch ID: **74880** Instrument ID **ICP2** Method: **SW846 6010C**

MSD		Sample ID: 1508866-01AMSD				Units: mg/Kg		Analysis Date: 8/17/2015 05:52 PM		
Client ID:		Run ID: ICP2_150817A				SeqNo: 3420753		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
Arsenic	15.23	0.40	7.987	5.675	120	75-125	15.12	0.724	20	
Barium	252.1	0.40	7.987	218.8	417	75-125	241.2	4.42	20	SO
Cadmium	7.993	0.80	7.987	0.2118	97.4	75-125	7.867	1.6	20	
Chromium	24.53	0.40	7.987	13.24	141	75-125	24.38	0.592	20	S
Copper	23.69	0.80	7.987	14.3	118	75-125	23.78	0.406	20	
Lead	14.28	0.40	7.987	7	91.1	75-125	14.25	0.174	20	
Nickel	35.44	0.40	7.987	23.88	145	75-125	35.29	0.44	20	S
Selenium	9.296	0.80	7.987	0.4697	111	75-125	9.366	0.752	20	
Silver	8.477	0.40	7.987	-0.1794	108	75-125	8.349	1.52	20	
Zinc	48.76	0.80	7.987	33.9	186	75-125	47.86	1.87	20	SO

The following samples were analyzed in this batch:

1508869-05A
 1508869-08A

1508869-06A

1508869-07A

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

Client: HRL Compliance Solutions, Inc
Work Order: 1508869
Project: WPX Energy - TR 21-31 - Pit Closure

QC BATCH REPORT

Batch ID: **74931** Instrument ID **ICP2** Method: **SW846 6010C**

DUP		Sample ID: 1508866-01ADUP				Units: mg/L		Analysis Date: 8/20/2015 10:38 AM		
Client ID:		Run ID: ICP2_150820A				SeqNo: 3426302		Prep Date: 8/19/2015		DF: 10
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	183.5	5.0	0	0	0	0-0	182.3	0.622		
Magnesium	17.11	2.0	0	0	0	0-0	17.17	0.344		
Sodium	19.75	2.0	0	0	0	0-0	19.8	0.268		

DUP		Sample ID: 1508866-01ADUP				Units: none		Analysis Date: 8/20/2015		
Client ID:		Run ID: SAR_150820A				SeqNo: 3426348		Prep Date: 8/19/2015		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sodium Adsorption Ratio	0.3738	0.010	0	0	0		0.3757	0.515	50	

The following samples were analyzed in this batch:

1508869-01B	1508869-02B	1508869-03B
1508869-04B	1508869-05B	1508869-06A

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

Client: HRL Compliance Solutions, Inc
Work Order: 1508869
Project: WPX Energy - TR 21-31 - Pit Closure

QC BATCH REPORT

Batch ID: **74944** Instrument ID **SVMS8** Method: **SW846 8270D**

MBLK		Sample ID: SBLKS1-74944-74944				Units: µg/Kg		Analysis Date: 8/18/2015 06:58 PM		
Client ID:		Run ID: SVMS8_150818A				SeqNo: 3423515		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
Acenaphthene	ND	6.7								
Anthracene	ND	6.7								
Benzo(a)anthracene	ND	6.7								
Benzo(a)pyrene	ND	6.7								
Benzo(b)fluoranthene	ND	6.7								
Benzo(g,h,i)perylene	ND	6.7								
Benzo(k)fluoranthene	ND	6.7								
Chrysene	ND	6.7								
Dibenzo(a,h)anthracene	ND	6.7								
Fluoranthene	ND	6.7								
Fluorene	ND	6.7								
Indeno(1,2,3-cd)pyrene	ND	6.7								
Naphthalene	ND	6.7								
Pyrene	ND	6.7								
<i>Surr: 2,4,6-Tribromophenol</i>	1368	0	1667	0	82.1	34-140		0		
<i>Surr: 2-Fluorobiphenyl</i>	1075	0	1667	0	64.5	12-100		0		
<i>Surr: 2-Fluorophenol</i>	1308	0	1667	0	78.5	33-117		0		
<i>Surr: 4-Terphenyl-d14</i>	1517	0	1667	0	91	25-137		0		
<i>Surr: Nitrobenzene-d5</i>	1161	0	1667	0	69.6	37-107		0		
<i>Surr: Phenol-d6</i>	1318	0	1667	0	79.1	40-106		0		

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

Client: HRL Compliance Solutions, Inc
Work Order: 1508869
Project: WPX Energy - TR 21-31 - Pit Closure

QC BATCH REPORT

Batch ID: **74944** Instrument ID **SVMS8** Method: **SW846 8270D**

LCS		Sample ID: SLCSS1-74944-74944				Units: µg/Kg		Analysis Date: 8/18/2015 07:18 PM		
Client ID:		Run ID: SVMS8_150818A				SeqNo: 3423516		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
Acenaphthene	562	6.7	666.7	0	84.3	45-110	0			
Anthracene	619.3	6.7	666.7	0	92.9	55-105	0			
Benzo(a)anthracene	646.7	6.7	666.7	0	97	50-110	0			
Benzo(a)pyrene	647.7	6.7	666.7	0	97.1	50-110	0			
Benzo(b)fluoranthene	675.3	6.7	666.7	0	101	45-115	0			
Benzo(g,h,i)perylene	597.3	6.7	666.7	0	89.6	40-125	0			
Benzo(k)fluoranthene	663	6.7	666.7	0	99.4	45-115	0			
Chrysene	640	6.7	666.7	0	96	55-110	0			
Dibenzo(a,h)anthracene	592.3	6.7	666.7	0	88.8	40-125	0			
Fluoranthene	602.7	6.7	666.7	0	90.4	55-115	0			
Fluorene	578	6.7	666.7	0	86.7	50-110	0			
Indeno(1,2,3-cd)pyrene	604	6.7	666.7	0	90.6	40-120	0			
Naphthalene	543.7	6.7	666.7	0	81.5	40-105	0			
Pyrene	725.7	6.7	666.7	0	109	45-125	0			
Surr: 2,4,6-Tribromophenol	1474	0	1667	0	88.5	34-140	0			
Surr: 2-Fluorobiphenyl	1283	0	1667	0	77	12-100	0			
Surr: 2-Fluorophenol	1481	0	1667	0	88.9	33-117	0			
Surr: 4-Terphenyl-d14	1513	0	1667	0	90.8	25-137	0			
Surr: Nitrobenzene-d5	1372	0	1667	0	82.3	37-107	0			
Surr: Phenol-d6	1483	0	1667	0	89	40-106	0			

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

Client: HRL Compliance Solutions, Inc
Work Order: 1508869
Project: WPX Energy - TR 21-31 - Pit Closure

QC BATCH REPORT

Batch ID: **74944** Instrument ID **SVMS8** Method: **SW846 8270D**

MS				Sample ID: 1508869-03A MS			Units: µg/Kg		Analysis Date: 8/18/2015 10:05 PM	
Client ID: South Wall @ 1 ft				Run ID: SVMS8_150818A			SeqNo: 3423481		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
Acenaphthene	579	6.6	655.7	0	88.3	45-110	0			
Anthracene	593.4	6.6	655.7	0	90.5	55-105	0			
Benzo(a)anthracene	574.1	6.6	655.7	0	87.5	50-110	0			
Benzo(a)pyrene	567.2	6.6	655.7	0	86.5	50-110	0			
Benzo(b)fluoranthene	580	6.6	655.7	0	88.4	45-115	0			
Benzo(g,h,i)perylene	599.3	6.6	655.7	0	91.4	40-125	0			
Benzo(k)fluoranthene	569.8	6.6	655.7	0	86.9	45-115	0			
Chrysene	580	6.6	655.7	0	88.4	55-110	0			
Dibenzo(a,h)anthracene	584.2	6.6	655.7	0	89.1	40-125	0			
Fluoranthene	540	6.6	655.7	0	82.3	55-115	0			
Fluorene	590.5	6.6	655.7	0	90	50-110	0			
Indeno(1,2,3-cd)pyrene	607.2	6.6	655.7	0	92.6	40-120	0			
Naphthalene	423.9	6.6	655.7	0	64.6	40-105	0			
Pyrene	631.8	6.6	655.7	0	96.3	45-125	0			
Surr: 2,4,6-Tribromophenol	1464	0	1639	0	89.3	34-140	0			
Surr: 2-Fluorobiphenyl	1288	0	1639	0	78.6	12-100	0			
Surr: 2-Fluorophenol	1075	0	1639	0	65.6	33-117	0			
Surr: 4-Terphenyl-d14	1410	0	1639	0	86	25-137	0			
Surr: Nitrobenzene-d5	992.1	0	1639	0	60.5	37-107	0			
Surr: Phenol-d6	1185	0	1639	0	72.3	40-106	0			

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

Client: HRL Compliance Solutions, Inc
Work Order: 1508869
Project: WPX Energy - TR 21-31 - Pit Closure

QC BATCH REPORT

Batch ID: **74944** Instrument ID **SVMS8** Method: **SW846 8270D**

MSD				Sample ID: 1508869-03A MSD			Units: µg/Kg		Analysis Date: 8/18/2015 10:25 PM	
Client ID: South Wall @ 1 ft				Run ID: SVMS8_150818A			SeqNo: 3423483		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
Acenaphthene	548.4	6.6	659.1	0	83.2	45-110	579	5.43	30	
Anthracene	583.6	6.6	659.1	0	88.5	55-105	593.4	1.66	30	
Benzo(a)anthracene	548.7	6.6	659.1	0	83.2	50-110	574.1	4.52	30	
Benzo(a)pyrene	558.9	6.6	659.1	0	84.8	50-110	567.2	1.47	30	
Benzo(b)fluoranthene	577.4	6.6	659.1	0	87.6	45-115	580	0.45	30	
Benzo(g,h,i)perylene	585.3	6.6	659.1	0	88.8	40-125	599.3	2.37	30	
Benzo(k)fluoranthene	553	6.6	659.1	0	83.9	45-115	569.8	3	30	
Chrysene	556.6	6.6	659.1	0	84.4	55-110	580	4.11	30	
Dibenzo(a,h)anthracene	570.4	6.6	659.1	0	86.5	40-125	584.2	2.39	30	
Fluoranthene	526.9	6.6	659.1	0	79.9	55-115	540	2.44	30	
Fluorene	576	6.6	659.1	0	87.4	50-110	590.5	2.47	30	
Indeno(1,2,3-cd)pyrene	596.8	6.6	659.1	0	90.5	40-120	607.2	1.72	30	
Naphthalene	454.4	6.6	659.1	0	68.9	40-105	423.9	6.95	30	
Pyrene	600.8	6.6	659.1	0	91.1	45-125	631.8	5.03	30	
<i>Surr: 2,4,6-Tribromophenol</i>	<i>1430</i>	<i>0</i>	<i>1648</i>	<i>0</i>	<i>86.8</i>	<i>34-140</i>	<i>1464</i>	<i>2.35</i>	<i>40</i>	
<i>Surr: 2-Fluorobiphenyl</i>	<i>1247</i>	<i>0</i>	<i>1648</i>	<i>0</i>	<i>75.7</i>	<i>12-100</i>	<i>1288</i>	<i>3.27</i>	<i>40</i>	
<i>Surr: 2-Fluorophenol</i>	<i>1229</i>	<i>0</i>	<i>1648</i>	<i>0</i>	<i>74.6</i>	<i>33-117</i>	<i>1075</i>	<i>13.3</i>	<i>40</i>	
<i>Surr: 4-Terphenyl-d14</i>	<i>1336</i>	<i>0</i>	<i>1648</i>	<i>0</i>	<i>81.1</i>	<i>25-137</i>	<i>1410</i>	<i>5.37</i>	<i>40</i>	
<i>Surr: Nitrobenzene-d5</i>	<i>1150</i>	<i>0</i>	<i>1648</i>	<i>0</i>	<i>69.8</i>	<i>37-107</i>	<i>992.1</i>	<i>14.8</i>	<i>40</i>	
<i>Surr: Phenol-d6</i>	<i>1237</i>	<i>0</i>	<i>1648</i>	<i>0</i>	<i>75.1</i>	<i>40-106</i>	<i>1185</i>	<i>4.32</i>	<i>40</i>	

The following samples were analyzed in this batch:

1508869-01A	1508869-02A	1508869-03A
1508869-04A	1508869-05A	

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

Client: HRL Compliance Solutions, Inc
Work Order: 1508869
Project: WPX Energy - TR 21-31 - Pit Closure

QC BATCH REPORT

Batch ID: **74884** Instrument ID **VMS5** Method: **SW8260B**

MBLK				Sample ID: MBLK-74884-74884				Units: µg/Kg			Analysis Date: 8/18/2015 03:50 PM		
Client ID:			Run ID: VMS5_150818A				SeqNo: 3422839			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			
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	955	0	1000	0	95.5	70-130		0					
Surr: 4-Bromofluorobenzene	948.5	0	1000	0	94.8	70-130		0					
Surr: Dibromofluoromethane	1020	0	1000	0	102	70-130		0					
Surr: Toluene-d8	963	0	1000	0	96.3	70-130		0					

LCS				Sample ID: LCS-74884-74884			Units: µg/Kg		Analysis Date: 8/18/2015 02:32 PM		
Client ID:			Run ID: VMS5_150818A			SeqNo: 3422836		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	
Benzene	1124	30	1000	0	112	75-125	0				
Ethylbenzene	1172	30	1000	0	117	75-125	0				
m,p-Xylene	2366	60	2000	0	118	80-125	0				
o-Xylene	1152	30	1000	0	115	75-125	0				
Toluene	1124	30	1000	0	112	70-125	0				
Xylenes, Total	3518	90	3000	0	117	75-125	0				
Surr: 1,2-Dichloroethane-d4	917	0	1000	0	91.7	70-130	0				
Surr: 4-Bromofluorobenzene	1028	0	1000	0	103	70-130	0				
Surr: Dibromofluoromethane	1004	0	1000	0	100	70-130	0				
Surr: Toluene-d8	975	0	1000	0	97.5	70-130	0				

MS				Sample ID: 1508869-05A MS			Units: µg/Kg		Analysis Date: 8/19/2015 04:07 AM		
Client ID: Pit Bottom @ 6 in			Run ID: VMS7_150818A			SeqNo: 3422952		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	
Benzene	940	30	1000	0	94	75-125	0				
Ethylbenzene	1029	30	1000	0	103	75-125	0				
m,p-Xylene	2080	60	2000	28.5	103	80-125	0				
o-Xylene	998.5	30	1000	0	99.8	75-125	0				
Toluene	1020	30	1000	7.5	101	70-125	0				
Xylenes, Total	3079	90	3000	28	102	75-125	0				
Surr: 1,2-Dichloroethane-d4	965.5	0	1000	0	96.6	70-130	0				
Surr: 4-Bromofluorobenzene	1024	0	1000	0	102	70-130	0				
Surr: Dibromofluoromethane	884	0	1000	0	88.4	70-130	0				
Surr: Toluene-d8	993	0	1000	0	99.3	70-130	0				

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

Client: HRL Compliance Solutions, Inc
Work Order: 1508869
Project: WPX Energy - TR 21-31 - Pit Closure

QC BATCH REPORT

Batch ID: **74884** Instrument ID **VMS5** Method: **SW8260B**

MSD				Sample ID: 1508869-05A MSD			Units: µg/Kg		Analysis Date: 8/19/2015 04:32 AM	
Client ID: Pit Bottom @ 6 in				Run ID: VMS7_150818A			SeqNo: 3422955		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
Benzene	1030	30	1000	0	103	75-125	940	9.09	30	
Ethylbenzene	1035	30	1000	0	104	75-125	1029	0.581	30	
m,p-Xylene	2082	60	2000	28.5	103	80-125	2080	0.0481	30	
o-Xylene	1014	30	1000	0	101	75-125	998.5	1.54	30	
Toluene	1009	30	1000	7.5	100	70-125	1020	1.04	30	
Xylenes, Total	3096	90	3000	28	102	75-125	3079	0.534	30	
Surr: 1,2-Dichloroethane-d4	978	0	1000	0	97.8	70-130	965.5	1.29	30	
Surr: 4-Bromofluorobenzene	975.5	0	1000	0	97.6	70-130	1024	4.8	30	
Surr: Dibromofluoromethane	1004	0	1000	0	100	70-130	884	12.8	30	
Surr: Toluene-d8	984.5	0	1000	0	98.4	70-130	993	0.86	30	

The following samples were analyzed in this batch:

1508869-01A	1508869-02A	1508869-03A
1508869-04A	1508869-05A	

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

Client: HRL Compliance Solutions, Inc
Work Order: 1508869
Project: WPX Energy - TR 21-31 - Pit Closure

QC BATCH REPORT

Batch ID: **74931** Instrument ID **WETCHEM** Method: **USDA H60 Metho**

DUP		Sample ID: 1508866-01A DUP				Units: mmhos/cm @25°		Analysis Date: 8/19/2015 10:50 AM		
Client ID:		Run ID: WETCHEM_150819A			SeqNo: 3423093		Prep Date: 8/19/2015		DF: 10	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Electrical Conductivity @ Saturation	1.245	0.050	0	0	0		1.246	0.0803	50	

The following samples were analyzed in this batch:

1508869-01B	1508869-02B	1508869-03B
1508869-04B	1508869-05B	1508869-06A

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

Client: HRL Compliance Solutions, Inc
Work Order: 1508869
Project: WPX Energy - TR 21-31 - Pit Closure

QC BATCH REPORT

Batch ID: **75031** Instrument ID **WETCHEM** Method: **SW9045D**

LCS		Sample ID: LCS-75031-75031					Units: s.u.		Analysis Date: 8/19/2015 07:30 PM		
Client ID:		Run ID: WETCHEM_150819X					SeqNo: 3424174		Prep Date: 8/19/2015		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	

pH 3.89 0 4 0 97.2 90-110 0

DUP		Sample ID: 1508853-01A DUP				Units: s.u.		Analysis Date: 8/19/2015 07:30 PM		
Client ID:		Run ID: WETCHEM_150819X				SeqNo: 3424176		Prep Date: 8/19/2015		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

pH 7.34 0 0 0 0 0-0 7.42 1.08 20

DUP				Sample ID: 1508869-01A DUP				Units: s.u.		Analysis Date: 8/19/2015 07:30 PM			
Client ID: North Wall @ 1 ft				Run ID: WETCHEM_150819X				SeqNo: 3424191		Prep Date: 8/19/2015		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual			

pH 8.59 0 0 0 0 0-0 8.69 1.16 20

The following samples were analyzed in this batch:

1508869-01A	1508869-02A	1508869-03A
1508869-04A	1508869-05A	1508869-06A

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

Client: HRL Compliance Solutions, Inc
Work Order: 1508869
Project: WPX Energy - TR 21-31 - Pit Closure

QC BATCH REPORT

Batch ID: **75107** Instrument ID **WETCHEM** Method: **SW7196A**

MBLK		Sample ID: MBLK-75107-75107				Units: mg/Kg		Analysis Date: 8/21/2015 03:00 PM		
Client ID:		Run ID: WETCHEM_150821H		SeqNo: 3427785		Prep Date: 8/20/2015		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-75107-75107				Units: mg/Kg		Analysis Date: 8/21/2015 03:00 PM		
Client ID:		Run ID: WETCHEM_150821H		SeqNo: 3427784		Prep Date: 8/20/2015		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 5.2 1.0 5 0 104 80-120 0

MS		Sample ID: 1508869-05A MS				Units: mg/Kg		Analysis Date: 8/21/2015 03:00 PM		
Client ID: Pit Bottom @ 6 in		Run ID: WETCHEM_150821H		SeqNo: 3427780		Prep Date: 8/20/2015		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 2.336 0.93 4.673 0.181 46.1 75-125 0 S

MS		Sample ID: 1508869-05A MSI				Units: mg/Kg		Analysis Date: 8/21/2015 03:00 PM		
Client ID: Pit Bottom @ 6 in		Run ID: WETCHEM_150821H		SeqNo: 3427782		Prep Date: 8/20/2015		DF: 100		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 2422 98 2587 0.181 93.6 75-125 0

MSD		Sample ID: 1508869-05A MSD				Units: mg/Kg		Analysis Date: 8/21/2015 03:00 PM		
Client ID: Pit Bottom @ 6 in		Run ID: WETCHEM_150821H		SeqNo: 3427781		Prep Date: 8/20/2015		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 3.366 0.99 4.95 0.181 64.3 75-125 2.336 36.1 20 SR

The following samples were analyzed in this batch: 1508869-05A

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

Client: HRL Compliance Solutions, Inc
Work Order: 1508869
Project: WPX Energy - TR 21-31 - Pit Closure

QC BATCH REPORT

Batch ID: **R170013** Instrument ID **MOIST** Method: **E160.3M**

MBLK		Sample ID: WBLKS-R170013				Units: % of sample		Analysis Date: 8/19/2015 04:30 PM		
Client ID:		Run ID: MOIST_150819C				SeqNo: 3425312		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	0.03	0.050								J

LCS		Sample ID: LCS-R170013				Units: % of sample		Analysis Date: 8/19/2015 04:30 PM		
Client ID:		Run ID: MOIST_150819C				SeqNo: 3425311		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: 1508869-01A DUP				Units: % of sample		Analysis Date: 8/19/2015 04:30 PM		
Client ID: North Wall @ 1 ft		Run ID: MOIST_150819C				SeqNo: 3425291		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	18.99	0.050	0	0	0		18.29	3.76	20	

DUP		Sample ID: 1508920-01B DUP				Units: % of sample		Analysis Date: 8/19/2015 04:30 PM		
Client ID:		Run ID: MOIST_150819C				SeqNo: 3425308		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	9.2	0.050	0	0	0		9.44	2.58	20	

The following samples were analyzed in this batch:

1508869-01A	1508869-02A	1508869-03A
1508869-04A	1508869-05A	1508869-06A
1508869-07A	1508869-08A	

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



Original

INVOICE

Printed on: 21-Aug-15

Remit To: ALS Group USA, Corp
P. O. Box 975444
Dallas, TX 75397-5444
Attn: Accounts Receivable
TEL: (616) 399-6070
FAX: (616) 399-6185

Invoice To: WPX Energy Rocky Mountain, LLC
1058 Country Rd 215
Parachute, CO 81635

Attn: Leo Braun
Phone: (970) 683-2295

Work Order: 1508869
PO Number: NA
Order Name: WPX Energy - TR 21-31 - Pit Closure
Project Contact: Kris Rowe
Date Received: 15-Aug-15

Invoice No: 20-1508869-0

Invoice Date: 21-Aug-15

Payment Due: 20-Sep-15

Payment Terms: Net 30 days

Item/Remarks	Matrix	Unit Price	Mult	Ext Price	Qty	Test Total
Chromium, Hexavalent	Soil	\$35.00	1	\$35.00	1	\$35.00
Diesel Range Organics by GC-FID C10-C28	Soil	\$30.00	1	\$30.00	5	\$150.00
Gasoline Range Organics by GC-FID C6-C10	Soil	\$26.00	1	\$26.00	5	\$130.00
Mercury by CVAA	Soil	\$15.00	1	\$15.00	1	\$15.00
Metals Analysis by ICP Table 910-1 Add Hg, Cr+6, Cr+3	Soil	\$45.00	1	\$45.00	1	\$45.00
Metals Analysis by ICP Arsenic Only	Soil	\$15.00	1	\$15.00	3	\$45.00
pH	Soil	\$6.00	1	\$6.00	6	\$36.00
Preservation for VOCs	Soil	\$10.00	1	\$10.00	5	\$50.00
Semi-Volatile Organic Compounds PNA Only	Soil	\$65.00	1	\$65.00	5	\$325.00
Sodium Adsorption Ratio SAR Analysis	Soil	\$50.00	1	\$50.00	6	\$300.00
Volatile Organic Compounds BTEX Only	Soil	\$28.00	1	\$28.00	5	\$140.00



ALS Laboratory Group

3352 128th Avenue, Holland, MI 49424
 TF: (816) 369-6070 FX: (816) 369-6185

Chain-of-Custody

Form 2826

WORKORDER #

1508869

PAGE

1 of 1

PROJECT NAME	WPX Energy - TR 21-31 - Pit Closure	SAMPLER	Jordan Carlo	DATE	8/14/2015	DISPOSAL	By Lab or Return to Client
PROJECT No.		SITE ID	TR 21-31	TURNAROUND	Standard (5-day)		
		EDD FORMAT					
		PURCHASE ORDER					
COMPANY NAME	HRL Compliance Solutions, Inc.	BILL TO COMPANY	WPX Energy				
SEND REPORT TO	HRL - Kris Rowe, Jordan Carlo 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	970-683-2285				
FAX	970-243-3280	FAX					
E-MAIL	krowe@hrlcomp.com, jcarlo@hrlcomp.com, karolina.blaney@wpxenergy.com	E-MAIL	karolina.blaney@wpxenergy.com				
Lab ID	Field ID	Matrix	Sample Date	Sample Time	# Bottles	Pres.	QC
1	North Wall @ 1ft	S	8/14/15	1:35	2	8	
2	East Wall @ 1ft			1:45	2		
3	South Wall @ 1ft			1:50	2		
4	West Wall @ 1ft			2:00	2		
5	Pit Bottom @ 6in			2:10	2		
6	Background 1			2:20	1		
7	Background 2			2:30	1		
8	Background 3			2:40	1		

*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)
See attached Analytical Table (COGCC Table 910-1) 3.4c	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
Jordan Carlo	Jordan Carlo	8/14/2015	16:30
WHL	WHL	8/14/15	16:30
Diane E. Shea	Diane E. Shea	8/15/15	09:30

ORIGIN ID: RILA (616) 298-1033
 NICK MARTINEZ
 ALS ENVIRONMENTAL PARACHUTE
 PARACHUTE SERVICE CENTER
 127 EAST 1ST ST
 PARACHUTE, CO 81635
 UNITED STATES US

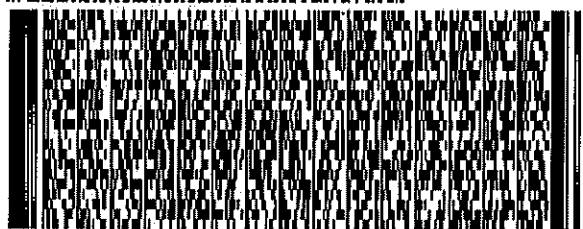
SHIP DATE: 14AUG15
 ACTWGT: 55.00 LB
 CAD: 2264840/NET3670
 DIMS: 14x26x15 IN
 BILL SENDER

TO **SAMPLE RECEIVING**
ALS ENVIRONMENTAL HOLLAND LAB
3352 128TH AVE

HOLLAND MI 49424

(616) 399-8070 REF: 081415-1
 INV
 PO: PARACHUTE DEPT:

539J1FECA31D0



FedEx
Express



REL#
3785346

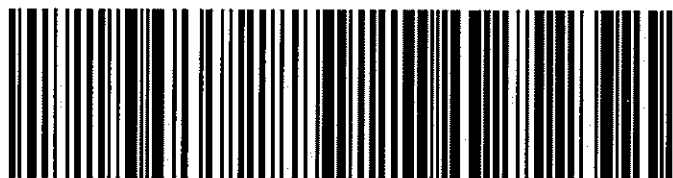
2 of 2
 MPS# 7742 9111 2361
 Mstr# 7742 9111 1928

SATURDAY 12:00P
PRIORITY OVERNIGHT

0201

X0 HLMA

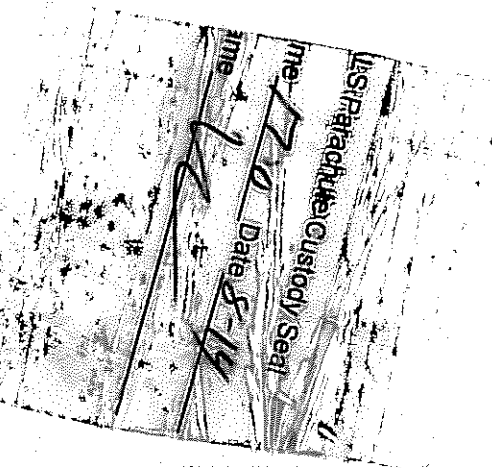
49424
GRR
 MI-US



After printing this label:

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



Invoice To: WPX Energy Rocky Mountain, LLC
1058 Country Rd 215
Parachute, CO 81635

Attn: Leo Braun
Phone: (970) 683-2295

Work Order: 1508869
PO Number: **NA**
Order Name: WPX Energy - TR 21-31 - Pit Closure
Project Contact: Kris Rowe
Date Received: 15-Aug-15

Invoice No: 20-1508869-0
Invoice Date: 21-Aug-15
Payment Due: 20-Sep-15
Payment Terms: Net 30 days

<u>Item/Remarks</u>	<u>Matrix</u>	<u>Unit Price</u>	<u>Mult</u>	<u>Ext Price</u>	<u>Qty</u>	<u>Test Total</u>
Subtotal:						\$1,271.00

INVOICE TOTAL (USD): \$1,271.00

Invoice is due and payable within the above referenced terms from date of receipt. A finance charge of 1.5% will be added to past due accounts over 30 days.

Thank you for choosing ALS Environmental.

APPENDIX 2: EAST/NORTHEASTERN CONFIRMATION SAMPLE

HRL Compliance Solutions- CO

Sample Delivery Group: L797969
Samples Received: 10/31/2015
Project Number:
Description: TR 21-31-597 Pit Closure
Site: TR 21-31-597
Report To: Kris Rowe
2385 F ½ Road
Grand Junction, CO 81505

Entire Report Reviewed By:



Jarred Willis

Technical Service Representative

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



¹Cp: Cover Page 1

²Tc: Table of Contents 2

³Ss: Sample Summary 3

⁴Cn: Case Narrative 4

⁵Sr: Sample Results 5

 EAST WALL CONFIRMATION L797969-01 5

⁶Qc: Quality Control Summary 6

 Volatile Organic Compounds (GC) by Method 8015D/GRO 6

 Semi-Volatile Organic Compounds (GC) by Method 3546/DRO 7

⁷Gl: Glossary of Terms 8

⁸Al: Accreditations & Locations 9

⁹Sc: Chain of Custody 10

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc



EAST WALL CONFIRMATION L797969-01 Solid

Collected by
Jordan Cario

Collected date/time
10/30/15 10:00

Received date/time
10/31/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Semi-Volatile Organic Compounds (GC) by Method 3546/DRO	WG825898	1	11/01/15 04:10	11/02/15 15:43	DMG
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG825851	5	10/31/15 11:51	11/02/15 01:34	BMB

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. All MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Jarred Willis
Technical Service Representative

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.500	5	11/02/2015 01:34	WG825851
(S) <i>a,a,a</i> -Trifluorotoluene(FID)	97.5		59.0-128		11/02/2015 01:34	WG825851

Semi-Volatile Organic Compounds (GC) by Method 3546/DRO

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	ND		4.00	1	11/02/2015 15:43	WG825898
(S) <i>o</i> -Terphenyl	50.9		50.0-150		11/02/2015 15:43	WG825898

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Method Blank (MB)

(MB) 11/01/15 19:18

Analyte	MB Result mg/kg	MB Qualifier	MB RDL mg/kg
TPH (GC/FID) Low Fraction	ND		0.100
(S) a,a,a-Trifluorotoluene(FID)	98.0		59.0-128

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 11/01/15 18:16 • (LCSD) 11/01/15 18:36

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.50	6.03	6.07	110	110	63.5-137			0.660	20
(S) a,a,a-Trifluorotoluene(FID)				98.7	99.6	59.0-128				

L797726-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 11/01/15 23:50 • (MS) 11/01/15 19:39 • (MSD) 11/01/15 20:00

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.50	ND	18.5	18.7	67.3	68.0	5	28.5-138			0.930	23.6
(S) a,a,a-Trifluorotoluene(FID)					98.0	97.5		59.0-128				

Method Blank (MB)

(MB) 11/02/15 11:40

Analyte	MB Result mg/kg	MB Qualifier	MB RDL mg/kg
TPH (GC/FID) High Fraction	ND		4.00
(S) o-Terphenyl	82.3		50.0-150

1
Cp

2
Tc

3
Ss

4
Cn

5
Sr

6
Qc

7
Gl

8
Al

9
Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 11/02/15 11:51 • (LCSD) 11/02/15 12:02

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) High Fraction	60.0	45.4	41.4	75.6	69.0	50.0-150			9.21	20
(S) o-Terphenyl				86.7	78.2	50.0-150				

L797839-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 11/02/15 12:24 • (MS) 11/02/15 12:35 • (MSD) 11/02/15 12:46

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) High Fraction	60.0	2.11	41.9	41.3	66.3	65.3	1	50.0-150			1.46	20
(S) o-Terphenyl					70.6	66.4		50.0-150				



Abbreviations and Definitions

SDG	Sample Delivery Group.
MDL	Method Detection Limit.
RDL	Reported Detection Limit.
ND,U	Not detected at the Reporting Limit (or MDL where applicable).
RPD	Relative Percent Difference.
(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
Rec.	Recovery.
SDL	Sample Detection Limit.
MQL	Method Quantitation Limit.
Unadj. MQL	Unadjusted Method Quantitation Limit.

Qualifier	Description
-----------	-------------

The remainder of this page intentionally left blank, there are no qualifiers applied to this SDG.

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc



ESC Lab Sciences is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our "one location" design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be **YOUR LAB OF CHOICE**.

State Accreditations

Alabama	40660	Nevada	TN-03-2002-34
Alaska	UST-080	New Hampshire	2975
Arizona	AZ0612	New Jersey–NELAP	TN002
Arkansas	88-0469	New Mexico	TN00003
California	01157CA	New York	11742
Colorado	TN00003	North Carolina	Env375
Connecticut	PH-0197	North Carolina ¹	DW21704
Florida	E87487	North Carolina ²	41
Georgia	NELAP	North Dakota	R-140
Georgia ¹	923	Ohio–VAP	CL0069
Idaho	TN00003	Oklahoma	9915
Illinois	200008	Oregon	TN200002
Indiana	C-TN-01	Pennsylvania	68-02979
Iowa	364	Rhode Island	221
Kansas	E-10277	South Carolina	84004
Kentucky ¹	90010	South Dakota	n/a
Kentucky ²	16	Tennessee ¹⁴	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	6157585858
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	109
Minnesota	047-999-395	Washington	C1915
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA
Nebraska	NE-OS-15-05		

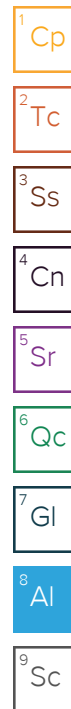
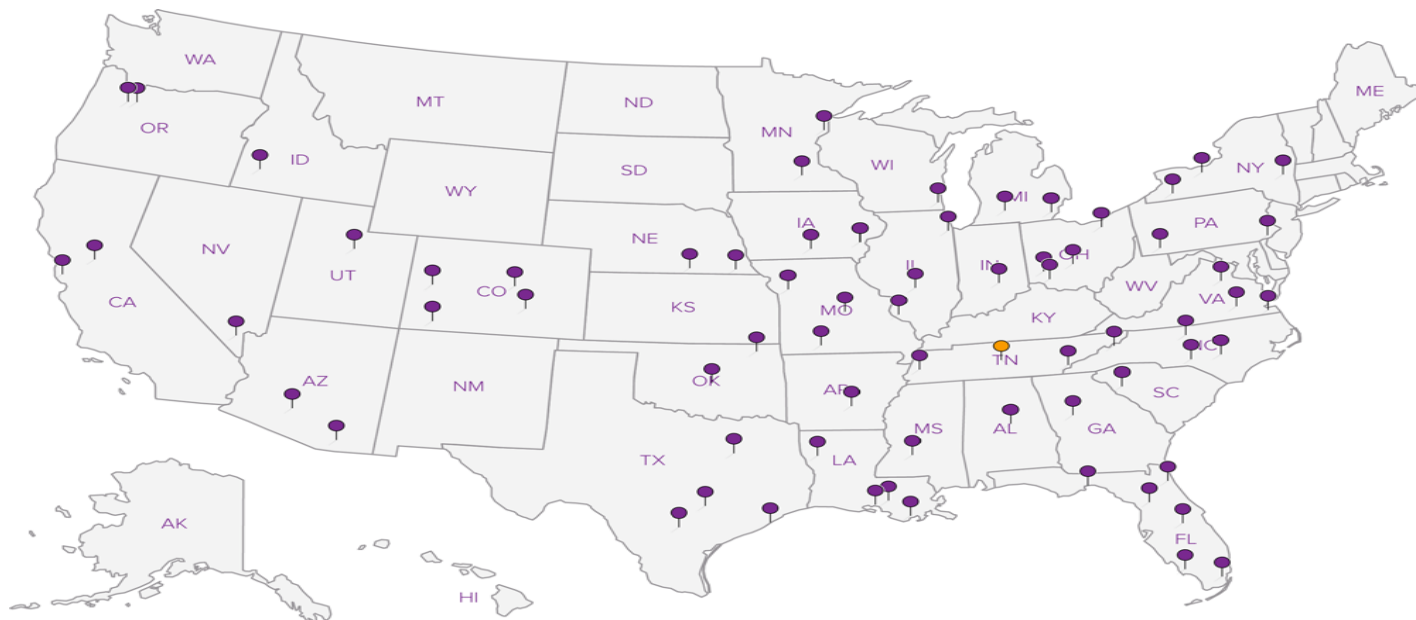
¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ^{n/a} Accreditation not applicable

Third Party & Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA	100789
Canada	1461.01	DOD	1461.01
EPA–Crypto	TN00003	USDA	S-67674

Our Locations

ESC Lab Sciences has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. **ESC Lab Sciences performs all testing at our central laboratory.**



[illegible]

APPENDIX 3: BACKGROUND RAW ANALYTICAL DATA

ALS Group USA, Corp

Date: 21-Aug-15

Client: HRL Compliance Solutions, Inc
Project: WPX Energy - TR 21-31 - Pit Closure
Sample ID: Background 1
Collection Date: 8/14/2015 02:20 PM

Work Order: 1508869
Lab ID: 1508869-06
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS ANALYSIS BY ICP						
Arsenic	11		SW846 6010C 0.44	mg/Kg-dry	Prep: SW3050B / 8/17/15 1	Analyst: JEC 8/18/2015 06:48 PM
SOLUBLE CATIONS FOR SAR						
Calcium	95		SW846 6010C 5.0	mg/L	Prep: USDA Method 20B / 8/19/15 10	Analyst: JEC 8/20/2015 11:41 AM
Magnesium	19		2.0	mg/L	10	8/20/2015 11:41 AM
Sodium	11		2.0	mg/L	10	8/20/2015 11:41 AM
SODIUM ADSORPTION RATIO						
Sodium Adsorption Ratio	0.27		USDA H60 METHO 0.010	none	Prep: USDA Method 20B / 8/19/15 1	Analyst: JEC 8/20/2015
ELECTRICAL CONDUCTIVITY (SAR)						
Electrical Conductivity @ Saturation	0.71		USDA H60 METHO 0.050	mmhos/cm @2	Prep: USDA Method 20B / 8/19/15 10	Analyst: JB 8/19/2015 10:50 AM
MOISTURE						
Moisture	11		E160.3M 0.050	% of sample	1	Analyst: EVB 8/19/2015 04:30 PM
PH						
pH	7.2		SW9045D s.u.		Prep: EXTRACT / 8/19/15 1	Analyst: ED 8/19/2015 07:30 PM

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

ALS Group USA, Corp**Date:** 21-Aug-15

Client: HRL Compliance Solutions, Inc
Project: WPX Energy - TR 21-31 - Pit Closure
Sample ID: Background 2
Collection Date: 8/14/2015 02:30 PM

Work Order: 1508869
Lab ID: 1508869-07
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<hr/>						
METALS ANALYSIS BY ICP			SW846 6010C		Prep: SW3050B / 8/17/15	Analyst: JEC
Arsenic	12		0.38	mg/Kg-dry	1	8/18/2015 06:54 PM
MOISTURE			E160.3M			Analyst: EVB
Moisture	11		0.050	% of sample	1	8/19/2015 04:30 PM

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

ALS Group USA, Corp

Date: 21-Aug-15

Client: HRL Compliance Solutions, Inc
Project: WPX Energy - TR 21-31 - Pit Closure
Sample ID: Background 3
Collection Date: 8/14/2015 02:40 PM

Work Order: 1508869
Lab ID: 1508869-08
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<hr/>						
METALS ANALYSIS BY ICP			SW846 6010C		Prep: SW3050B / 8/17/15	Analyst: JEC
Arsenic	11		0.42	mg/Kg-dry	1	8/18/2015 07:00 PM
MOISTURE			E160.3M			Analyst: EVB
Moisture	10		0.050	% of sample	1	8/19/2015 04:30 PM

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

APPENDIX 4: LANDFARM RAW ANALYTICAL DATA



25-May-2016

Karolina Blaney
WPX Energy Rocky Mountain, LLC
1058 Country Rd 215
Parachute, CO 81635

Re: **TR 21-31-597**

Work Order: **16051021**

Dear Karolina,

ALS Environmental received 1 sample on 18-May-2016 09:30 AM for the analyses presented in the following report.

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

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

The total number of pages in this report is 23.

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

Sincerely,

A handwritten signature in black ink, appearing to read "Chad Whelton".

Electronically approved by: Chad Whelton

Chad Whelton
Project Manager



Certificate No: MN 998501

Report of Laboratory Analysis

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

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

Environmental

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

Client: WPX Energy Rocky Mountain, LLC
Project: TR 21-31-597
Work Order: 16051021

Work Order Sample Summary

<u>Lab Samp ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Tag Number</u>	<u>Collection Date</u>	<u>Date Received</u>	<u>Hold</u>
16051021-01	TR 21-31-597 Spoil	Soil		5/12/2016 16:36	5/18/2016 09:30	<input type="checkbox"/>

<u>Qualifier</u>	<u>Description</u>
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte is present at an estimated concentration between the MDL and Report Limit
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL
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.

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

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

ALS Group USA, Corp

Date: 25-May-16

Client: WPX Energy Rocky Mountain, LLC
Project: TR 21-31-597
Sample ID: TR 21-31-597 Spoil
Collection Date: 5/12/2016 04:36 PM

Work Order: 16051021
Lab ID: 16051021-01
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
			SW8015M		Prep: SW3541 / 5/20/16	Analyst: IT
DRO (C10-C28)	76		5.3	mg/Kg-dry	1	5/20/2016 08:29 PM
<i>Surr: 4-Terphenyl-d14</i>	<i>57.0</i>		<i>39-133</i>	<i>%REC</i>	<i>1</i>	5/20/2016 08:29 PM
GASOLINE RANGE ORGANICS BY GC-FID						
			SW8015D		Prep: SW5035 / 5/20/16	Analyst: IT
GRO (C6-C10)	88		3.9	mg/Kg-dry	1	5/21/2016 12:08 PM
<i>Surr: Toluene-d8</i>	<i>95.2</i>		<i>50-150</i>	<i>%REC</i>	<i>1</i>	5/21/2016 12:08 PM
MERCURY BY CVAA						
			SW7471B		Prep: SW7471 / 5/20/16	Analyst: LR
Mercury	0.039		0.020	mg/Kg-dry	1	5/20/2016 05:36 PM
METALS ANALYSIS BY ICP						
			SW846 6010C		Prep: SW3050B / 5/19/16	Analyst: JEC
Arsenic	12		0.50	mg/Kg-dry	1	5/20/2016 01:40 PM
Barium	550		0.50	mg/Kg-dry	1	5/20/2016 01:40 PM
Cadmium	ND		1.0	mg/Kg-dry	1	5/20/2016 01:40 PM
Chromium	19		0.50	mg/Kg-dry	1	5/20/2016 01:40 PM
Copper	18		1.0	mg/Kg-dry	1	5/20/2016 01:40 PM
Lead	14		0.50	mg/Kg-dry	1	5/20/2016 01:40 PM
Nickel	17		0.50	mg/Kg-dry	1	5/20/2016 01:40 PM
Selenium	1.1		1.0	mg/Kg-dry	1	5/23/2016 12:36 PM
Silver	ND		0.50	mg/Kg-dry	1	5/20/2016 01:40 PM
Zinc	56		1.0	mg/Kg-dry	1	5/20/2016 01:40 PM
SOLUBLE CATIONS FOR SAR						
			SW846 6010C		Prep: USDA Method 20B / 5/24/16	Analyst: JEC
Calcium	230		5.0	mg/L	10	5/24/2016 01:19 PM
Magnesium	46		2.0	mg/L	10	5/24/2016 01:19 PM
Sodium	560		2.0	mg/L	10	5/24/2016 01:19 PM
SODIUM ADSORPTION RATIO						
			USDA H60 METHO		Prep: USDA Method 20B / 5/24/16	Analyst: JEC
Sodium Adsorption Ratio	8.9		0.010	none	1	5/24/2016
SEMI-VOLATILE ORGANIC COMPOUNDS						
			SW846 8270D		Prep: SW3541 / 5/19/16	Analyst: RM
Acenaphthene	ND		0.0085	mg/Kg-dry	1	5/20/2016 05:19 AM
Anthracene	ND		0.0085	mg/Kg-dry	1	5/20/2016 05:19 AM
Benzo(a)anthracene	ND		0.0085	mg/Kg-dry	1	5/20/2016 05:19 AM
Benzo(a)pyrene	ND		0.0085	mg/Kg-dry	1	5/20/2016 05:19 AM
Benzo(b)fluoranthene	ND		0.0085	mg/Kg-dry	1	5/20/2016 05:19 AM
Benzo(k)fluoranthene	ND		0.0085	mg/Kg-dry	1	5/20/2016 05:19 AM
Chrysene	ND		0.0085	mg/Kg-dry	1	5/20/2016 05:19 AM
Dibenzo(a,h)anthracene	ND		0.0085	mg/Kg-dry	1	5/20/2016 05:19 AM
Fluoranthene	ND		0.0085	mg/Kg-dry	1	5/20/2016 05:19 AM

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

ALS Group USA, Corp

Date: 25-May-16

Client: WPX Energy Rocky Mountain, LLC
Project: TR 21-31-597
Sample ID: TR 21-31-597 Spoil
Collection Date: 5/12/2016 04:36 PM

Work Order: 16051021
Lab ID: 16051021-01
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Fluorene	ND		0.0085	mg/Kg-dry	1	5/20/2016 05:19 AM
Indeno(1,2,3-cd)pyrene	ND		0.0085	mg/Kg-dry	1	5/20/2016 05:19 AM
Naphthalene	ND		0.0085	mg/Kg-dry	1	5/20/2016 05:19 AM
Pyrene	ND		0.0085	mg/Kg-dry	1	5/20/2016 05:19 AM
Surr: 2-Fluorobiphenyl	78.2		12-100	%REC	1	5/20/2016 05:19 AM
Surr: 4-Terphenyl-d14	78.7		25-137	%REC	1	5/20/2016 05:19 AM
Surr: Nitrobenzene-d5	97.8		37-107	%REC	1	5/20/2016 05:19 AM
VOLATILE ORGANIC COMPOUNDS			SW8260B	Prep: SW5035 / 5/20/16		Analyst: LSY
Benzene	ND		0.047	mg/Kg-dry	1	5/20/2016 04:39 PM
Ethylbenzene	ND		0.047	mg/Kg-dry	1	5/20/2016 04:39 PM
m,p-Xylene	ND		0.094	mg/Kg-dry	1	5/20/2016 04:39 PM
o-Xylene	ND		0.047	mg/Kg-dry	1	5/20/2016 04:39 PM
Toluene	ND		0.047	mg/Kg-dry	1	5/20/2016 04:39 PM
Xylenes, Total	ND		0.14	mg/Kg-dry	1	5/20/2016 04:39 PM
Surr: 1,2-Dichloroethane-d4	93.8		70-130	%REC	1	5/20/2016 04:39 PM
Surr: 4-Bromofluorobenzene	99.6		70-130	%REC	1	5/20/2016 04:39 PM
Surr: Dibromofluoromethane	89.2		70-130	%REC	1	5/20/2016 04:39 PM
Surr: Toluene-d8	102		70-130	%REC	1	5/20/2016 04:39 PM
ELECTRICAL CONDUCTIVITY (SAR)			USDA H60 METHO	Prep: USDA Method 20B / 5/24/16		Analyst: JB
Electrical Conductivity @ Saturation	4.3		0.050	mmhos/cm @2	10	5/24/2016 04:30 PM
CHROMIUM, TRIVALENT			CALCULATION			Analyst: JB
Chromium, Trivalent	19		0.64	mg/Kg-dry	1	5/24/2016 03:20 PM
CHROMIUM, HEXAVALENT			SW7196A	Prep: SW3060A / 5/20/16		Analyst: RD
Chromium, Hexavalent	ND		1.3	mg/Kg-dry	1	5/23/2016 11:00 AM
MOISTURE			SW3550C			Analyst: EDL
Moisture	22		0.050	% of sample	1	5/18/2016 08:27 PM
PH			SW9045D	Prep: EXTRACT / 5/19/16		Analyst: EDL
pH	8.3			s.u.	1	5/19/2016 06:07 PM

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

ALS Group USA, Corp

Date: 25-May-16

Client: WPX Energy Rocky Mountain, LLC
Work Order: 16051021
Project: TR 21-31-597

QC BATCH REPORT

Batch ID: **86321** Instrument ID **GC8** Method: **SW8015M**

MBLK		Sample ID: DBLKS1-86321-86321				Units: mg/Kg		Analysis Date: 5/20/2016 04:29 PM		
Client ID:		Run ID: GC8_160520A				SeqNo: 3839613		Prep Date: 5/20/2016		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 1.588 0 2 0 79.4 39-133 0

LCS		Sample ID: DLCSS1-86321-86321				Units: mg/Kg		Analysis Date: 5/20/2016 04:59 PM		
Client ID:		Run ID: GC8_160520A				SeqNo: 3839614		Prep Date: 5/20/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

DRO (C10-C28) 158.3 5.0 200 0 79.2 61-109 0
Surr: 4-Terphenyl-d14 1.38 0 2 0 69 39-133 0

MS		Sample ID: 16051017-22A MS				Units: mg/Kg		Analysis Date: 5/20/2016 05:29 PM		
Client ID:		Run ID: GC8_160520A				SeqNo: 3839615		Prep Date: 5/20/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

DRO (C10-C28) 187.9 4.1 164.8 60.04 77.6 48-110 0
Surr: 4-Terphenyl-d14 1.265 0 1.648 0 76.8 39-133 0

MSD		Sample ID: 16051017-22A MSD				Units: mg/Kg		Analysis Date: 5/20/2016 05:59 PM		
Client ID:		Run ID: GC8_160520A				SeqNo: 3839616		Prep Date: 5/20/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

DRO (C10-C28) 161 4.1 162.7 60.04 62.1 48-110 187.9 15.4 30
Surr: 4-Terphenyl-d14 1.2 0 1.627 0 73.8 39-133 1.265 5.25 30

The following samples were analyzed in this batch:

16051021-01A

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

Client: WPX Energy Rocky Mountain, LLC
Work Order: 16051021
Project: TR 21-31-597

QC BATCH REPORT

Batch ID: **86323** Instrument ID **GC9** Method: **SW8015D**

MBLK		Sample ID: MBLK-86323-86323				Units: µg/Kg-dry		Analysis Date: 5/20/2016 11:43 PM		
Client ID:		Run ID: GC9_160520A				SeqNo: 3839647		Prep Date: 5/20/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	ND	2,500								
<i>Surr: Toluene-d8</i>	4634	0	5000	0	92.7	50-150	0			

LCS		Sample ID: LCS-86323-86323				Units: µg/Kg-dry		Analysis Date: 5/20/2016 11:18 PM		
Client ID:		Run ID: GC9_160520A				SeqNo: 3839646		Prep Date: 5/20/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	519700	2,500	500000	0	104	70-130	0			
<i>Surr: Toluene-d8</i>	4764	0	5000	0	95.3	50-150	0			

MS		Sample ID: 16051017-22A MS				Units: µg/Kg-dry		Analysis Date: 5/21/2016 01:23 AM		
Client ID:		Run ID: GC9_160520A				SeqNo: 3839648		Prep Date: 5/20/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	1050000	3,800	750000	307400	99	70-130	0			
<i>Surr: Toluene-d8</i>	7224	0	7500	0	96.3	50-150	0			

MSD		Sample ID: 16051017-22A MSD				Units: µg/Kg-dry		Analysis Date: 5/21/2016 01:48 AM		
Client ID:		Run ID: GC9_160520A				SeqNo: 3839649		Prep Date: 5/20/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	1002000	3,800	750000	307400	92.7	70-130	1050000	4.6	30	
<i>Surr: Toluene-d8</i>	7203	0	7500	0	96	50-150	7224	0.291	30	

The following samples were analyzed in this batch:

16051021-01A

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

Client: WPX Energy Rocky Mountain, LLC
Work Order: 16051021
Project: TR 21-31-597

QC BATCH REPORT

Batch ID: **86347** Instrument ID **HG1** Method: **SW7471B**

MBLK		Sample ID: MBLK-86347-86347				Units: mg/Kg		Analysis Date: 5/20/2016 05:31 PM		
Client ID:		Run ID: HG1_160520A				SeqNo: 3840229		Prep Date: 5/20/2016		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-86347-86347				Units: mg/Kg		Analysis Date: 5/20/2016 05:33 PM		
Client ID:		Run ID: HG1_160520A			SeqNo: 3840230		Prep Date: 5/20/2016		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.1717 0.020 0.1665 0 103 80-120 0

MS		Sample ID: 1605989-04AMS				Units: mg/Kg		Analysis Date: 5/20/2016 06:03 PM		
Client ID:			Run ID: HG1_160520A			SeqNo: 3840243		Prep Date: 5/20/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.1241 0.015 0.1215 0.008685 95 75-125 0

MSD				Sample ID: 1605989-04AMSD				Units: mg/Kg		Analysis Date: 5/20/2016 06:05 PM			
Client ID:				Run ID: HG1_160520A				SeqNo: 3840244		Prep Date: 5/20/2016		DF: 1	

Mercury 0.1321 0.015 0.1227 0.008685 101 75-125 0.1241 6.23 35

The following samples were analyzed in this batch:

16051021-01A

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

Client: WPX Energy Rocky Mountain, LLC
Work Order: 16051021
Project: TR 21-31-597

QC BATCH REPORT

Batch ID: **86283** Instrument ID **ICP2** Method: **SW846 6010C**

Sample ID: MBLK-86283-86283				Units: mg/Kg			Analysis Date: 5/20/2016 10:12 AM				
Client ID:			Run ID: ICP2_160520A			SeqNo: 3838316		Prep Date: 5/19/2016		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	0.02576	0.25								J	
Copper	ND	0.50									
Lead	ND	0.25									
Nickel	ND	0.25									
Selenium	ND	0.50									
Silver	ND	0.25									
Zinc	0.1362	0.50								J	

LCS				Sample ID: LCS-86283-86283			Units: mg/Kg		Analysis Date: 5/20/2016 10:17 AM		
Client ID:			Run ID: ICP2_160520A			SeqNo: 3838318		Prep Date: 5/19/2016		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Arsenic	4.477	0.25	5	0	89.5	80-120	0				
Barium	4.386	0.25	5	0	87.7	80-120	0				
Cadmium	4.304	0.50	5	0	86.1	80-120	0				
Chromium	4.729	0.25	5	0	94.6	80-120	0				
Copper	4.414	0.50	5	0	88.3	80-120	0				
Lead	4.47	0.25	5	0	89.4	80-120	0				
Nickel	4.448	0.25	5	0	89	80-120	0				
Selenium	4.495	0.50	5	0	89.9	80-120	0				
Silver	4.312	0.25	5	0	86.2	80-120	0				
Zinc	4.517	0.50	5	0	90.3	80-120	0				

MS				Sample ID: 1605989-06AMS			Units: mg/Kg		Analysis Date: 5/20/2016 10:39 AM		
Client ID:			Run ID: ICP2_160520A			SeqNo: 3838328		Prep Date: 5/19/2016		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Arsenic	13.67	0.37	7.386	7.421	84.6	75-125	0				
Barium	85.11	0.37	7.386	70.63	196	75-125	0			SO	
Cadmium	6.655	0.74	7.386	0.2253	87.1	75-125	0				
Chromium	23.47	0.37	7.386	13.98	128	75-125	0			S	
Copper	182.8	0.74	7.386	177	78.9	75-125	0			O	
Lead	120.3	0.37	7.386	162.6	-573	75-125	0			SO	
Nickel	20.6	0.37	7.386	12.04	116	75-125	0				
Selenium	7.961	0.74	7.386	0.881	95.9	75-125	0				
Silver	6.646	0.37	7.386	0.09759	88.7	75-125	0				
Zinc	159.8	0.74	7.386	153.2	90.1	75-125	0			O	

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

Client: WPX Energy Rocky Mountain, LLC
Work Order: 16051021
Project: TR 21-31-597

QC BATCH REPORT

Batch ID: **86283** Instrument ID **ICP2** Method: **SW846 6010C**

MSD		Sample ID: 1605989-06AMSD				Units: mg/Kg		Analysis Date: 5/20/2016 10:45 AM		
Client ID:		Run ID: ICP2_160520A				SeqNo: 3838330		Prep Date: 5/19/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	15.72	0.37	7.353	7.421	113	75-125	13.67	13.9	20	
Barium	124.2	0.37	7.353	70.63	729	75-125	85.11	37.4	20	SRO
Cadmium	6.857	0.74	7.353	0.2253	90.2	75-125	6.655	2.99	20	
Chromium	20.61	0.37	7.353	13.98	90.2	75-125	23.47	12.9	20	
Copper	420.9	0.74	7.353	177	3320	75-125	182.8	78.9	20	SRO
Lead	87.1	0.37	7.353	162.6	-1030	75-125	120.3	32	20	SRO
Nickel	20.21	0.37	7.353	12.04	111	75-125	20.6	1.88	20	
Selenium	7.951	0.74	7.353	0.881	96.2	75-125	7.961	0.126	20	
Silver	6.689	0.37	7.353	0.09759	89.6	75-125	6.646	0.638	20	
Zinc	318.3	0.74	7.353	153.2	2250	75-125	159.8	66.3	20	SRO

The following samples were analyzed in this batch:

16051021-01A

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

Client: WPX Energy Rocky Mountain, LLC
Work Order: 16051021
Project: TR 21-31-597

QC BATCH REPORT

Batch ID: **86460** Instrument ID **ICP2** Method: **SW846 6010C**

DUP		Sample ID: 16051021-01ADUP				Units: mg/L		Analysis Date: 5/24/2016 01:25 PM		
Client ID: TR 21-31-597 Spoil		Run ID: ICP2_160524A				SeqNo: 3844125		Prep Date: 5/24/2016		DF: 10
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	227.5	5.0	0	0	0	0-0	227.6	0.0527		
Magnesium	45.53	2.0	0	0	0	0-0	45.55	0.0271		
Sodium	561.7	2.0	0	0	0	0-0	562.1	0.0676		

DUP		Sample ID: 16051021-01ADUP				Units: none		Analysis Date: 5/24/2016		
Client ID: TR 21-31-597 Spoil		Run ID: SAR_160524A				SeqNo: 3844202		Prep Date: 5/24/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sodium Adsorption Ratio	8.892	0.010	0	0	0		8.896	0.0444	50	

The following samples were analyzed in this batch:

16051021-01A

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

Client: WPX Energy Rocky Mountain, LLC
Work Order: 16051021
Project: TR 21-31-597

QC BATCH REPORT

Batch ID: **86263** Instrument ID **SVMS5** Method: **SW846 8270D**

MBLK				Sample ID: SBLKS1-86263-86263				Units: µg/Kg			Analysis Date: 5/19/2016 09:02 PM		
Client ID:			Run ID: SVMS5_160519A				SeqNo: 3839020		Prep Date: 5/19/2016		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual			
Acenaphthene	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(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	1191	0	1667	0	71.5	12-100	0						
Surr: 4-Terphenyl-d14	1598	0	1667	0	95.9	25-137	0						
Surr: Nitrobenzene-d5	1208	0	1667	0	72.5	37-107	0						

LCS		Sample ID: SLCSS1-86263-86263				Units: µg/Kg		Analysis Date: 5/19/2016 09:25 PM		
Client ID:		Run ID: SVMS5_160519A			SeqNo: 3839021		Prep Date: 5/19/2016		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	539.7	6.7	666.7	0	80.9	45-110	0			
Anthracene	645.3	6.7	666.7	0	96.8	55-105	0			
Benzo(a)anthracene	655.3	6.7	666.7	0	98.3	50-110	0			
Benzo(a)pyrene	687.3	6.7	666.7	0	103	50-110	0			
Benzo(b)fluoranthene	659.7	6.7	666.7	0	98.9	45-115	0			
Benzo(k)fluoranthene	688	6.7	666.7	0	103	45-115	0			
Chrysene	642.3	6.7	666.7	0	96.3	55-110	0			
Dibenzo(a,h)anthracene	689	6.7	666.7	0	103	40-125	0			
Fluoranthene	650	6.7	666.7	0	97.5	55-115	0			
Fluorene	559	6.7	666.7	0	83.8	50-110	0			
Indeno(1,2,3-cd)pyrene	674.7	6.7	666.7	0	101	40-120	0			
Naphthalene	595.7	6.7	666.7	0	89.3	40-105	0			
Pyrene	703.7	6.7	666.7	0	106	45-125	0			
Surr: 2-Fluorobiphenyl	1343	0	1667	0	80.6	12-100	0			
Surr: 4-Terphenyl-d14	1674	0	1667	0	100	25-137	0			
Surr: Nitrobenzene-d5	1409	0	1667	0	84.6	37-107	0			

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

Client: WPX Energy Rocky Mountain, LLC
Work Order: 16051021
Project: TR 21-31-597

QC BATCH REPORT

Batch ID: **86263** Instrument ID **SVMS5** Method: **SW846 8270D**

MS				Sample ID: 16051017-13A MS				Units: µg/Kg		Analysis Date: 5/19/2016 10:23 PM	
Client ID:			Run ID: SVMS5_160519A			SeqNo: 3838954		Prep Date: 5/19/2016		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Acenaphthene	496	6.6	656.1	0	75.6	45-110	0				
Anthracene	595.7	6.6	656.1	0	90.8	55-105	0				
Benzo(a)anthracene	584.2	6.6	656.1	0	89	50-110	0				
Benzo(a)pyrene	627.5	6.6	656.1	0	95.6	50-110	0				
Benzo(b)fluoranthene	617	6.6	656.1	0	94	45-115	0				
Benzo(k)fluoranthene	626.2	6.6	656.1	0	95.4	45-115	0				
Chrysene	575.7	6.6	656.1	0	87.7	55-110	0				
Dibenzo(a,h)anthracene	582.9	6.6	656.1	0	88.8	40-125	0				
Fluoranthene	576.3	6.6	656.1	4.319	87.2	55-115	0				
Fluorene	499.6	6.6	656.1	0	76.1	50-110	0				
Indeno(1,2,3-cd)pyrene	582.9	6.6	656.1	0	88.8	40-120	0				
Naphthalene	550.8	6.6	656.1	8.97	82.6	40-105	0				
Pyrene	677.1	6.6	656.1	4.651	102	45-125	0				
Surr: 2-Fluorobiphenyl	1184	0	1640	0	72.2	12-100	0				
Surr: 4-Terphenyl-d14	1609	0	1640	0	98.1	25-137	0				
Surr: Nitrobenzene-d5	1278	0	1640	0	77.9	37-107	0				

MSD				Sample ID: 16051017-13A MSD				Units: µg/Kg		Analysis Date: 5/20/2016 04:44 PM	
Client ID:			Run ID: SVMS5_160519A			SeqNo: 3839583		Prep Date: 5/19/2016		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Acenaphthene	502.5	6.6	659.5	0	76.2	45-110	496	1.3	30		
Anthracene	597.4	6.6	659.5	0	90.6	55-105	595.7	0.293	30		
Benzo(a)anthracene	600.1	6.6	659.5	0	91	50-110	584.2	2.68	30		
Benzo(a)pyrene	627.5	6.6	659.5	0	95.1	50-110	627.5	0.0111	30		
Benzo(b)fluoranthene	640.3	6.6	659.5	0	97.1	45-115	617	3.7	30		
Benzo(k)fluoranthene	627.1	6.6	659.5	0	95.1	45-115	626.2	0.146	30		
Chrysene	585.6	6.6	659.5	0	88.8	55-110	575.7	1.7	30		
Dibenzo(a,h)anthracene	590.2	6.6	659.5	0	89.5	40-125	582.9	1.24	30		
Fluoranthene	568.1	6.6	659.5	4.319	85.5	55-115	576.3	1.44	30		
Fluorene	489.3	6.6	659.5	0	74.2	50-110	499.6	2.08	30		
Indeno(1,2,3-cd)pyrene	604.7	6.6	659.5	0	91.7	40-120	582.9	3.67	30		
Naphthalene	537.4	6.6	659.5	8.97	80.1	40-105	550.8	2.45	30		
Pyrene	688.4	6.6	659.5	4.651	104	45-125	677.1	1.67	30		
Surr: 2-Fluorobiphenyl	1228	0	1649	0	74.5	12-100	1184	3.65	40		
Surr: 4-Terphenyl-d14	1610	0	1649	0	97.7	25-137	1609	0.0636	40		
Surr: Nitrobenzene-d5	1195	0	1649	0	72.5	37-107	1278	6.7	40		

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

Client: WPX Energy Rocky Mountain, LLC
Work Order: 16051021
Project: TR 21-31-597

QC BATCH REPORT

Batch ID: **86263** Instrument ID **SVMS5** Method: **SW846 8270D**

MSD				Sample ID: 16051017-13A MSD			Units: µg/Kg		Analysis Date: 5/20/2016 04:44 PM		
Client ID:			Run ID: SVMS5_160520A			SeqNo: 3841168		Prep Date: 5/19/2016		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Acenaphthene	502.5	6.6	659.5	0	76.2	45-110	496	1.3	30		
Anthracene	597.4	6.6	659.5	0	90.6	55-105	595.7	0.293	30		
Benzo(a)anthracene	600.1	6.6	659.5	0	91	50-110	584.2	2.68	30		
Benzo(a)pyrene	627.5	6.6	659.5	0	95.1	50-110	627.5	0.0111	30		
Benzo(b)fluoranthene	640.3	6.6	659.5	0	97.1	45-115	617	3.7	30		
Benzo(k)fluoranthene	627.1	6.6	659.5	0	95.1	45-115	626.2	0.146	30		
Chrysene	585.6	6.6	659.5	0	88.8	55-110	575.7	1.7	30		
Dibenzo(a,h)anthracene	590.2	6.6	659.5	0	89.5	40-125	582.9	1.24	30		
Fluoranthene	568.1	6.6	659.5	4.319	85.5	55-115	576.3	1.44	30		
Fluorene	489.3	6.6	659.5	0	74.2	50-110	499.6	2.08	30		
Indeno(1,2,3-cd)pyrene	604.7	6.6	659.5	0	91.7	40-120	582.9	3.67	30		
Naphthalene	537.4	6.6	659.5	8.97	80.1	40-105	550.8	2.45	30		
Pyrene	688.4	6.6	659.5	4.651	104	45-125	677.1	1.67	30		
Surr: 2-Fluorobiphenyl	1228	0	1649	0	74.5	12-100	1184	3.65	40		
Surr: 4-Terphenyl-d14	1610	0	1649	0	97.7	25-137	1609	0.0636	40		
Surr: Nitrobenzene-d5	1195	0	1649	0	72.5	37-107	1278	6.7	40		

The following samples were analyzed in this batch:

16051021-01A

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

Client: WPX Energy Rocky Mountain, LLC
Work Order: 16051021
Project: TR 21-31-597

QC BATCH REPORT

Batch ID: **86322** Instrument ID **VMS5** Method: **SW8260B**

MBLK				Sample ID: MBLK-86322-86322				Units: µg/Kg-dry			Analysis Date: 5/20/2016 03:04 PM			
Client ID:				Run ID: VMS5_160520A				SeqNo: 3840523			Prep Date: 5/20/2016		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	973.5	0	1000	0	97.4	70-130		0						
Surr: 4-Bromofluorobenzene	961	0	1000	0	96.1	70-130		0						
Surr: Dibromofluoromethane	1007	0	1000	0	101	70-130		0						
Surr: Toluene-d8	985.5	0	1000	0	98.6	70-130		0						

LCS				Sample ID: LCS-86322-86322			Units: µg/Kg-dry		Analysis Date: 5/20/2016 01:19 PM		
Client ID:			Run ID: VMS5_160520A			SeqNo: 3840522		Prep Date: 5/20/2016		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	1138	30	1000	0	114	75-125	0				
Ethylbenzene	1124	30	1000	0	112	75-125	0				
m,p-Xylene	2284	60	2000	0	114	80-125	0				
o-Xylene	1096	30	1000	0	110	75-125	0				
Toluene	1084	30	1000	0	108	70-125	0				
Xylenes, Total	3379	90	3000	0	113	75-125	0				
Surr: 1,2-Dichloroethane-d4	966.5	0	1000	0	96.6	70-130	0				
Surr: 4-Bromofluorobenzene	995.5	0	1000	0	99.6	70-130	0				
Surr: Dibromofluoromethane	998	0	1000	0	99.8	70-130	0				
Surr: Toluene-d8	989.5	0	1000	0	99	70-130	0				

MS				Sample ID: 1605959-02A MS			Units: µg/Kg-dry		Analysis Date: 5/20/2016 10:31 PM		
Client ID:			Run ID: VMS5_160520A			SeqNo: 3840527		Prep Date: 5/20/2016		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	1598	45	1500	0	107	75-125	0				
Ethylbenzene	1544	45	1500	0	103	75-125	0				
m,p-Xylene	3100	90	3000	0	103	80-125	0				
o-Xylene	1516	45	1500	0	101	75-125	0				
Toluene	1503	45	1500	22.5	98.7	70-125	0				
Xylenes, Total	4617	140	4500	0	103	75-125	0				
Surr: 1,2-Dichloroethane-d4	1449	0	1500	0	96.6	70-130	0				
Surr: 4-Bromofluorobenzene	1531	0	1500	0	102	70-130	0				
Surr: Dibromofluoromethane	1513	0	1500	0	101	70-130	0				
Surr: Toluene-d8	1468	0	1500	0	97.8	70-130	0				

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

Client: WPX Energy Rocky Mountain, LLC
Work Order: 16051021
Project: TR 21-31-597

QC BATCH REPORT

Batch ID: **86322** Instrument ID **VMS5** Method: **SW8260B**

MSD		Sample ID: 1605959-02A MSD				Units: µg/Kg-dry		Analysis Date: 5/20/2016 10:57 PM		
Client ID:		Run ID: VMS5_160520A				SeqNo: 3840528		Prep Date: 5/20/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	1642	45	1500	0	109	75-125	1598	2.69	30	
Ethylbenzene	1616	45	1500	0	108	75-125	1544	4.51	30	
m,p-Xylene	3250	90	3000	0	108	80-125	3100	4.7	30	
o-Xylene	1591	45	1500	0	106	75-125	1516	4.78	30	
Toluene	1591	45	1500	22.5	105	70-125	1503	5.67	30	
Xylenes, Total	4840	140	4500	0	108	75-125	4617	4.73	30	
<i>Surr: 1,2-Dichloroethane-d4</i>	1437	0	1500	0	95.8	70-130	1449	0.832	30	
<i>Surr: 4-Bromofluorobenzene</i>	1530	0	1500	0	102	70-130	1531	0.049	30	
<i>Surr: Dibromofluoromethane</i>	1476	0	1500	0	98.4	70-130	1513	2.46	30	
<i>Surr: Toluene-d8</i>	1484	0	1500	0	98.9	70-130	1468	1.07	30	

The following samples were analyzed in this batch:

16051021-01A

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

Client: WPX Energy Rocky Mountain, LLC
Work Order: 16051021
Project: TR 21-31-597

QC BATCH REPORT

Batch ID: **86302** Instrument ID **WETCHEM** Method: **SW9045D**

LCS		Sample ID: LCS-86302-86302				Units: s.u.		Analysis Date: 5/19/2016 06:07 PM		
Client ID:		Run ID: WETCHEM_160519J			SeqNo: 3837507		Prep Date: 5/19/2016		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	3.97	0	4	0	99.2	90-110	0			

DUP				Sample ID: 16051021-01A DUP				Units: s.u.		Analysis Date: 5/19/2016 06:07 PM			
Client ID: TR 21-31-597 Spoil				Run ID: WETCHEM_160519J				SeqNo: 3837438		Prep Date: 5/19/2016		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	8.27	2.03	20				

The following samples were analyzed in this batch:

16051021-01A

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

Client: WPX Energy Rocky Mountain, LLC
Work Order: 16051021
Project: TR 21-31-597

QC BATCH REPORT

Batch ID: **86430** Instrument ID **WETCHEM** Method: **SW7196A**

MBLK		Sample ID: MBLK-86430-86430				Units: mg/Kg		Analysis Date: 5/23/2016 11:00 AM		
Client ID:		Run ID: WETCHEM_160523R		SeqNo: 3842459		Prep Date: 5/20/2016		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-86430-86430				Units: mg/Kg		Analysis Date: 5/23/2016 11:00 AM		
Client ID:		Run ID: WETCHEM_160523R		SeqNo: 3842458		Prep Date: 5/20/2016		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 4.51 1.0 5 0 90.2 80-120 0

MS		Sample ID: 16051112-01A MS				Units: mg/Kg		Analysis Date: 5/23/2016 11:00 AM		
Client ID:		Run ID: WETCHEM_160523R		SeqNo: 3842450		Prep Date: 5/20/2016		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 4.784 0.98 4.902 0 97.6 75-125 0

MS		Sample ID: 16051112-01A MSI				Units: mg/Kg		Analysis Date: 5/23/2016 11:00 AM		
Client ID:		Run ID: WETCHEM_160523R		SeqNo: 3842452		Prep Date: 5/20/2016		DF: 100		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 2234 99 2294 0 97.4 75-125 0

MSD		Sample ID: 16051112-01A MSD				Units: mg/Kg		Analysis Date: 5/23/2016 11:00 AM		
Client ID:		Run ID: WETCHEM_160523R		SeqNo: 3842451		Prep Date: 5/20/2016		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 4.465 0.99 4.95 0 90.2 75-125 4.784 6.9 20

The following samples were analyzed in this batch:

16051021-01A

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

Client: WPX Energy Rocky Mountain, LLC
Work Order: 16051021
Project: TR 21-31-597

QC BATCH REPORT

Batch ID: **86460** Instrument ID **WETCHEM** Method: **USDA H60 Metho**

DUP		Sample ID: 16051021-01A DUP				Units: mmhos/cm @25°		Analysis Date: 5/24/2016 04:30 PM		
Client ID: TR 21-31-597 Spoil			Run ID: WETCHEM_160524R			SeqNo: 3844816		Prep Date: 5/24/2016		DF: 10
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Electrical Conductivity @ Saturation	4.39	0.050	0	0	0		4.26	3.01	50	

The following samples were analyzed in this batch:

16051021-01A

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

Client: WPX Energy Rocky Mountain, LLC
Work Order: 16051021
Project: TR 21-31-597

QC BATCH REPORT

Batch ID: **R187845** Instrument ID **MOIST** Method: **SW3550C**

MBLK				Sample ID: WBLKS-R187845				Units: % of sample			Analysis Date: 5/18/2016 08:27 PM			
Client ID:				Run ID: MOIST_160518E				SeqNo: 3836184			Prep Date:		DF: 1	
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual			
Moisture		0.03	0.050								J			

LCS		Sample ID: LCS-R187845				Units: % of sample		Analysis Date: 5/18/2016 08:27 PM		
Client ID:		Run ID: MOIST_160518E			SeqNo: 3836183		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: 16051017-13A DUP				Units: % of sample			Analysis Date: 5/18/2016 08:27 PM			
Client ID:				Run ID: MOIST_160518E				SeqNo: 3836169			Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual				
Moisture	14.12	0.050	0	0	0		14.91	5.44	20					

DUP				Sample ID: 16051021-01A DUP				Units: % of sample			Analysis Date: 5/18/2016 08:27 PM			
Client ID: TR 21-31-597 Spoil				Run ID: MOIST_160518E				SeqNo: 3836179			Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual				
Moisture	21.56	0.050	0	0	0		21.96	1.84	20					

The following samples were analyzed in this batch:

16051021-01A

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

WORKORDER

1605102

PAGE

1 of 1


DISPOSAL








By Lab or Return to Client

[illegible]

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

For metals or anions, please detail analytes below.

Comments: <div style="text-align: center;">  </div>	QC PACKAGE (check below)	
	<input checked="" type="checkbox"/>	LEVEL II (Standard QC)
	<input type="checkbox"/>	LEVEL III (Std QC + forms)
	<input type="checkbox"/>	LEVEL IV (Std QC + forms + raw data)
	<input type="checkbox"/>	
Preservative Key: 1-HCl 2-HNO ₃ 3-H ₂ SO ₄ 4-NaOH 5-NaHSO ₄ 7-Other 8-4 degrees C 8-5035		

	SIGNATURE	PRINTED NAME	DATE	TIME
RELINQUISHED BY		Robert Stockton	5/16/2016	
RECEIVED BY			5/16/16	11:00
RELINQUISHED BY			5-16-16	1350
RECEIVED BY			5/18/16	930
RELINQUISHED BY				
RECEIVED BY				

ORIGIN ID: RILA (616) 298-1033
NICK MARTINEZ
ALS ENVIRONMENTAL PARACHUTE
PARACHUTE SERVICE CENTER
127 EAST 1ST ST
PARACHUTE, CO 81635
UNITED STATES US

SHIP DATE: 16MAY16
ACTWGT: 63.00 LB
CAD: 22848401NET3730
DIMS: 13x20x14 IN
BILL SENDER

TO **SAMPLE RECEIVING**
ALS ENVIRONMENTAL HOLLAND LAB
3352 128TH AVE

540J163231727F

HOLLAND MI 49424

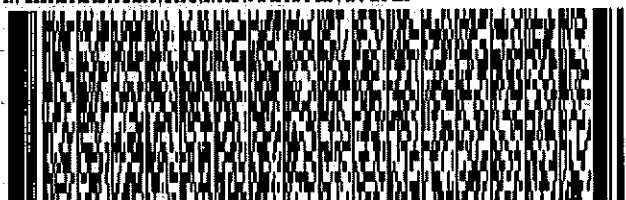
(616) 399-8070

REF: 051616-1

INV

PO: PARACHUTE

DEPT:



FedEx
Express



REL#
3785346

4 of 4

MPS#

0263

7830 9051 9359

Mstr# 7830 9051 9039

0201

TUE - 17 MAY 10:30A
PRIORITY OVERNIGHT

XX HLMA

49424
MI-US GRR



22c

FedEx Ship Manager - Print Your Label(s)

5/16/2016

After printing this label:

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

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

Sample Receipt Checklist

Client Name: **WPX**

Date/Time Received: **18-May-16 09:30**

Work Order: **16051021**

Received by: **MEB**

Checklist completed by Meghan Broadbent
eSignature

18-May-16
Date

Reviewed by: Chad Whelton
eSignature

19-May-16
Date

Matrices: **soil**

Carrier name: **FedEx**

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature in compliance?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample(s) received on ice?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Temperature(s)/Thermometer(s):	<u>3.2/3.2</u>		<u>SR2</u>
Cooler(s)/Kit(s):	<u></u>		
Date/Time sample(s) sent to storage:	<u>5/18/2016 2:46:12 PM</u>		
Water - VOA vials have zero headspace?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input checked="" type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
pH adjusted?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
pH adjusted by:	<u>-</u>		

Login Notes:

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:

Comments:

CorrectiveAction: