

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural
Resources Department

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised August 24, 2018
Submit to appropriate OCD District office

Incident ID	
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party: WPX Energy/RKI Exploration	OGRID: 246289
Contact Name: Deborah Watson	Contact Telephone: 575-885-7561
Contact email: deborah.watson@wpxenergy.com	Incident # (assigned by OCD) 2RP-3080
Contact mailing address: 5315 Buena Vista Drive, Carlsbad, NM	

Location of Release Source

Latitude N32.09274 Longitude W103.94691
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: North Brushy Draw 35-9H	Site Type: Well Pad
Date Release Discovered: June 23, 2015	API# (if applicable): 30-015-42220

Unit Letter	Section	Township	Range	County
A	35	25 South	29 East	Eddy

Surface Owner: ☐ State ☒ Federal ☐ Tribal ☐ Private (Name: _____)

Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

<input type="checkbox"/> Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
<input checked="" type="checkbox"/> Produced Water	Volume Released (bbls) 70	Volume Recovered (bbls) 60
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release: A bolt broke on the suction screen pot of the jet pump. The leak was isolated and the bolt replaced.

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If YES, for what reason(s) does the responsible party consider this a major release? Volume of Release
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? The initial C-141 was submitted to OCD on June 24, 2015. Taylor Jones contacted Heather Patterson on June 24, 2015 at 1330 hrs.	

Initial Response

The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury

<input type="checkbox"/> The source of the release has been stopped.	
<input type="checkbox"/> The impacted area has been secured to protect human health and the environment.	
<input type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.	
<input type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.	
If all the actions described above have <u>not</u> been undertaken, explain why:	
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
Printed Name: _____	Title: _____
Signature: _____	Date: _____
email: _____	Telephone: _____
<u>OCD Only</u>	
Received by: _____	Date: _____

Incident ID	
District RP	
Facility ID	
Application ID	

Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

Closure Report Attachment Checklist: *Each of the following items must be included in the closure report.*

- ☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC
- ☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- ☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
- ☒ Description of remediation activities

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Deborah Watson

Title: Environmental Specialist

Signature:



Date: June 26, 2019

email: deborah.watson@wpenergy.com

Telephone: 575-885-7561

OCD Only

Received by: _____

Date: _____

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: Ashley Maxwell Date: 3/29/2023

Printed Name: Ashley Maxwell

Title: Environmental Specialist



June 26, 2019

Mr. Bradford Billings
EMNRD - OCD
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

Re: North Brushy Draw 35-9H Release Closure Report (2RP-3080)

Dear Mr. Billings:

This report summarizes the remediation and confirmation soil sampling activities conducted at the North Brushy Draw 35-9H release location. Initial response and remediation activities were conducted by the prior operator of the well, RKI Exploration and Production (RKI). Confirmation sampling was conducted by the present operator, WPX Energy (WPX).

Release Summary

Site Name	North Brush Draw 35-9H		
API #	30-015-42220	RP #	2RP-3080
Well Site Location Description	Unit Letter A, Section 35, Township 25 South, Range 29 East (N32.09274, W103.94732)		
Release Source	Suction screen pot on the jet pump (N32.09225, W103.94691)		
Release Discovery Date	June 23, 2015	Release Contents	Produced water
Volume Released	70 barrels	Volume Recovered	60 barrels

Remediation Standards Determination

Remediation of the release began under 19.15.29 New Mexico Authority Code (NMAC) Release Notification (filed 12/1/2008), but continued through the transition to 19.15.29 NMAC Releases (filed 8/14/2018). The remediation standards per 19.15.29 NMAC are determined by depth to groundwater with a concentration of less than 10,000 milligrams per kilogram (mg/kg) total dissolved solids (TDS) and several factors outlined in 19.15.29.12(4)(e) NMAC.

Depth to groundwater at the site is estimated to be greater than 100 feet below ground surface (bgs) based on local well records and the area's geology and geomorphology. However, an ephemeral wash is present approximately 177 feet southeast of the release location. Therefore, closure criteria for the soils impacted

North Brushy Draw 35-9H Release Closure Report
June 26, 2019
Page 2 of 3

at the release location are determined by the "less than or equal to 50 feet" category of Table 1, 19.15.29.12 NMAC. These remedial standards are as follows: 600 mg/kg chloride per United States Environmental Protection Agency (USEPA) Method 300.0 or SM 4500-Cl B; 100 mg/kg total petroleum hydrocarbons (TPH) as gasoline range organics (GRO), diesel range organics (DRO), and mineral oil range organics (MRO) per USEPA Method 8015M; 50 mg/kg total benzene, toluene, ethylbenzene, and xylenes (BTEX) per USEPA Method 8021B or 8260B; and 10 mg/kg benzene per USEPA Method 8021B or 8260B.

Field Activities

The release of approximately 70 barrels of produced water occurred inside the lined containment of the tank battery due to the failure of a bolt on the suction screen pot of the jet pump. Approximately 60 barrels of fluids were recovered utilizing a vacuum truck and impacted soils were excavated from the release area.

An initial site visit was conducted by Vertex Resources Services, Inc. (Vertex) on June 30, 2017, to identify appropriate locations to perform soil sampling. Vertex returned to the location on September 27, 2018, to verify liner integrity and to collect confirmation soil samples from three soil borings. The soil borings were advanced utilizing a hand auger and soil samples were collected from each boring at 0, 2, and 4 feet bgs for laboratory analysis.

A topographic map is included as Figure 1 and an aerial site map illustrating the confirmation soil sampling locations is included as Figure 2. A photograph log and field notes are attached.

Confirmation Soil Sampling

Soil samples were collected in laboratory provided sample containers and analyzed for the following parameters:

- BTEX per USEPA Method 8260,
- TPH (GRO/DRO/MRO) per USEPA Method 8015, and
- Chlorides per SM 4500-Cl.

Laboratory analytical results are summarized in Table 1. The laboratory report is included as an attachment.

Confirmation Soil Sample Laboratory Analytical Results

Confirmation soil sample laboratory analytical results are summarized as follows:

- Benzene concentrations are below the laboratory reporting limits.
- Total BTEX concentrations are below the laboratory reporting limits.
- Total TPH concentrations as GRO/DRO/MRO are below the laboratory reporting limits.
- Chloride concentrations range from 16 to 60 mg/kg.

North Brushy Draw 35-9H Release Closure Report
June 26, 2019
Page 3 of 3

Laboratory reporting limits for all constituents are below the remediation standards. Laboratory analytical results are summarized in Table 1, and the analytical laboratory report is attached.

Conclusions

Laboratory analytical results for the confirmation soil samples collected at the release location report that concentrations of benzene, total BTEX, total TPH (GRO/DRO/MRO), and chloride are below the closure criteria determined for the location per Table 1, 19.15.29.12 NMAC. Therefore, closure of the release is requested.

For additional information or questions regarding this release, please contact me at (575) 885-7561.

Sincerely,

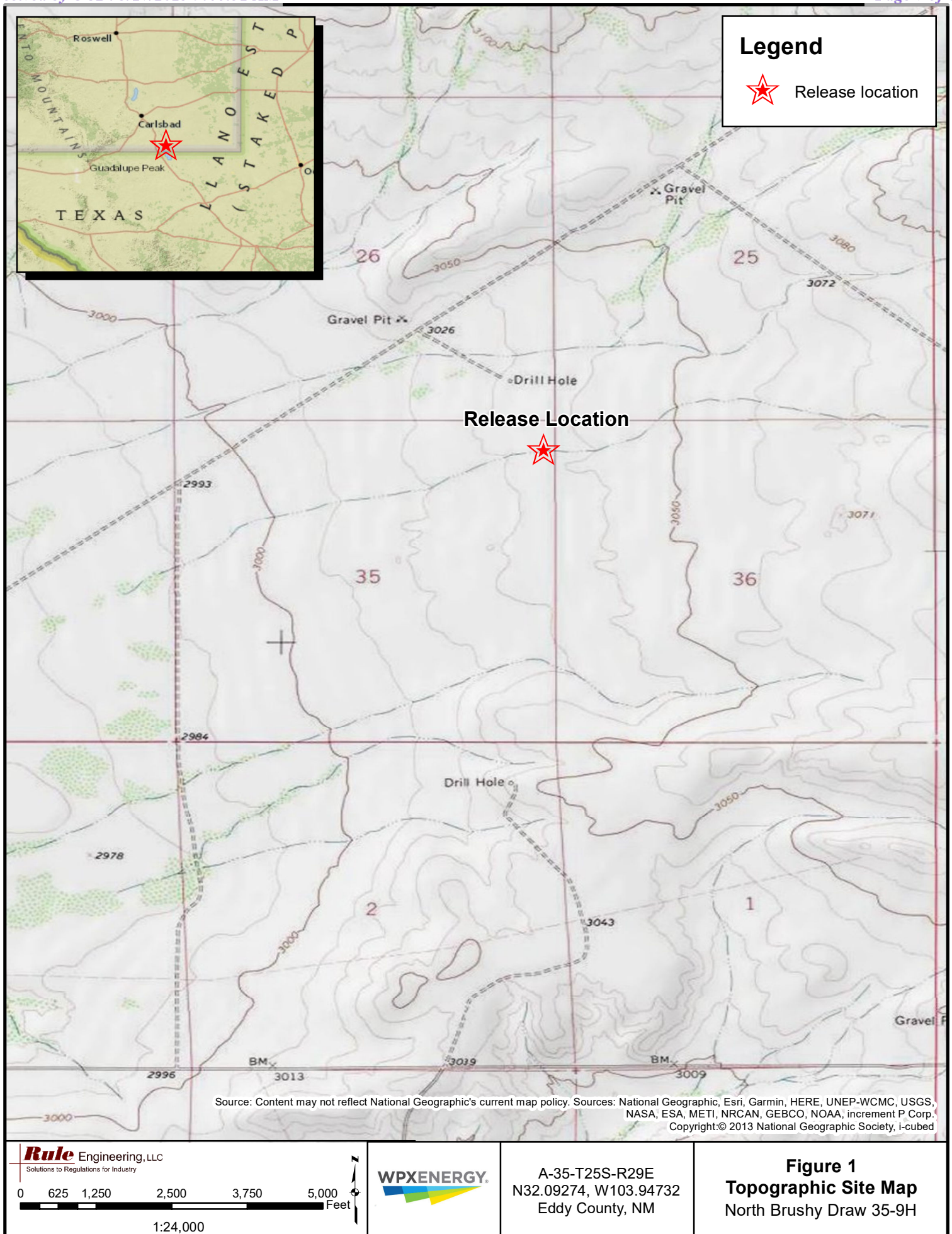


Deborah Watson
Environmental Specialist

Attachments:

Figure 1. Topographic Site Map
Figure 2. Aerial Site Map
Table 1. Summary of Confirmation Soil Sampling Laboratory Analytical Results
Photographic Log
Field Notes
Analytical Laboratory Reports (ALS Environmental – 1810025)

Document Path: R:\27 GIS CAD\WPX Energy\North Brushy Draw 35-9H\North Brushy Draw 35-9H TopoMap.mxd



Document Path: R:\127 GIS CAD\WPX Energy\North Brushy Draw 35-9H\North Brushy Draw 35-9H Aerial Map.mxd



Source: Google 2019

<p>Rule Engineering, LLC Solutions to Regulations for Industry</p> <p>0 10 20 40 60 80 Feet</p> <p>1:400</p>	<p>WPXENERGY</p>	<p>A-35-T25S-R29E N32.09274, W103.94732 Eddy County, NM</p>	<p>Figure 2 Aerial Map North Brushy Draw 35-9H</p>
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Table 1. Summary of Confirmation Soil Sampling Laboratory Analytical Results
WPX Energy
North Brushy Draw 35-9H (2RP-3080)
Eddy County, New Mexico

Sample Name	Date	Approximate Sample Depth (ft bgs)	Laboratory Analytical Results								
			Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	TPH as GRO (mg/kg)	TPH as DRO (mg/kg)	TPH as MRO (mg/kg)	Chloride (mg/kg)
Remediation Standard*			10	NE	NE	NE	50	100			600
BH18-01 (0')	9/27/2018	0	<0.045	<0.045	<0.045	<0.14	<0.28	<7.5	<6.1	<6.1	17
BH18-01 (2')	9/27/2018	2	<0.041	<0.041	<0.041	<0.12	<0.24	<6.9	<5.9	<5.9	24
BH18-01 (4')	9/27/2018	4	<0.040	<0.040	<0.040	<0.12	<0.24	<6.6	<5.8	<5.8	60
BH18-02 (0')	9/27/2018	0	<0.043	<0.043	<0.043	<0.13	<0.26	<7.2	<6.1	<6.1	16
BH18-02 (2')	9/27/2018	2	<0.041	<0.041	<0.041	<0.12	<0.24	<6.9	<5.9	<5.9	36
BH18-02 (4')	9/27/2018	4	<0.037	<0.037	<0.037	<0.11	<0.22	<6.2	<5.6	<5.6	36
BH18-03 (0')	9/27/2018	0	<0.041	<0.041	<0.041	<0.12	<0.24	<6.8	<5.6	<5.6	18
BH18-03 (2')	9/27/2018	2	<0.037	<0.037	<0.037	<0.11	<0.22	<6.2	<5.4	<5.4	35
BH18-03 (4')	9/27/2018	4	<0.038	<0.038	<0.038	<0.11	<0.22	<6.4	<5.4	<5.4	38

Notes:

ft bgs - feet below grade surface

mg/kg - milligrams per kilogram

NE - not established

ND - not detected above laboratory reporting limits

BTEX - benzene, toluene, ethylbenzene, and xylenes

*Per Table 1 of 19.15.29.12 NMAC, based on category "less than or equal to 50 feet" depth to groundwater

TPH - total petroleum hydrocarbons

GRO - gasoline range organics

DRO - diesel range organics

MRO - mineral oil range organics

WPX Energy Inc.
North Brushy Draw 35-9H
Incident: 2RP-3080



Photo 1. Near the southeast corner, looking west

Photo Date: June 30, 2018 GPS: N: 32.09223 W: -103.94710



Photo 2. Between the heater treater and tank battery, looking east

Photo Date: June 30, 2018 GPS: N: 32.09222 W: -103.94740

WPX Energy Inc.
North Brushy Draw 35-9H
Incident: 2RP-3080



Photo 3. Looking west from near the northeast corner of the containment area

Photo Date: June 30, 2017 GPS: N: 32.092373 W: -103.94686



Photo 4. Looking south from the northeast corner of the containment area

Photo Date: June 30, 2017 GPS: N: 32.092383 W: -103.94690

WPX Energy Inc.
North Brushy Draw 35-9H
Incident: 2RP-3080



Photo 5. Looking west from the southeast corner of the containment area

Photo Date: June 30, 2017 GPS: N: 32.09224 W: -103.94686



Photo 6. Looking north from the west end of the containment area

Photo Date: June 30, 2017 GPS: N: 32.09231 W: -103.94733

WPX Energy Inc.
North Brushy Draw 35-9H
Incident: 2RP-3080



Photo 7. Near the southeast corner, looking south

Photo Date: September 27, 2018 GPS: N: 32.09232 W: -103.9469



Photo 8. Near the southeast corner, looking southwest

Photo Date: September 27, 2018 GPS: N: 32.09227 W: -103.94683

WPX Energy Inc.
North Brushy Draw 35-9H
Incident: 2RP-3080



Photo 9. Near southeast corner of the tank battery, looking west

Photo Date: September 27, 2018 GPS: N: 32.09224 W: -103.94687



Photo 10. Near the southeast corner of the tank battery, looking north, northeast

Photo Date: September 27, 2018 GPS: N: 32.09222 W: -103.9469

WPX Energy Inc.
North Brushy Draw 35-9H
Incident: 2RP-3080



Photo 11. Borehole near the south side of the containment area

Photo Date: September 27, 2018 GPS: N: 32.09230 W: -103.94711



Photo 12. Borehole near southeast corner of containment area

Photo Date: September 27, 2018 GPS: N: 32.09231 W: -103.94687

WPX Energy Inc.
North Brushy Draw 35-9H
Incident: 2RP-3080



Photo 13. Borehole near the southeast corner of the containment area

Photo Date: September 27, 2018 GPS: N: 32.09219 W: -103.94886



SITE VISIT REPORT

Client Name: WPX Energy
 Client Contact: Karolina Blaney/Jim Raley
 Project: WPX Historical Spill Closure
 Vertex Personnel: Rebecca Savoie
 Vertex File Number: 17E-00043

Site Name: N Brushy Draw 35-9H
 API Number: 30-015-42220
 OCD Spill Ref #: RP-3080
 Inspection Date: June-30-17

Background

Area Affected: on & offsite **Volume Spilled: see details** **Volume Recovered: see details**
 06/23/15: Broken bolt on suction screen pot of the jet pump allowed 70 bbls of produced water to release. Fluid was standing around the jet pump skid and around production tanks. Some fluid escaped the well pad. Vacuum truck was used to recover free liquid; offsite area will be dug and hauled.

Description of Site Observations

Surface Location: N Brushy Draw 35-9H located in 35 TS 25S R 29E
 Inspected spill area for historical impacts and clean-up activities, if any.
 Collected Trimble (GIS) data for areas of concern.

Follow up/Recommendations

Areas of Concern/Observations

Area of Interest	Trimble Mapping		Comments/Description
	Area	Point	

Samples Taken (Continued On Next Page)

Soil Location	Depth (bgs)	Type	Comments

Project Supervisor: Nathan Chancler

Project Team: Rebecca Savoie



SITE VISIT REPORT

Client Name:	WPX Energy
Client Contact:	Karolina Blaney/Jim Raley
Project:	WPX Historical Spill Closure
Vertex Personnel:	Rebecca Savoie
Vertex File Number:	17E-00043

Site Name:	N Brushy Draw 35-9H
API Number:	30-015-42220
OCD Spill Ref #:	RP-3080
Inspection Date:	June-30-17

Samples Continued			
Soil Location	Depth (bgs)	Type	Comments
Photo Log			
Name	Direction	Issue	Description
190	SE		well placard
191	E		flare stack and visible soil staning
192	SSE		flare stack and visible soil staning
193	N		flare stack and visible soil staning
194	W		tank farm - secondary, lined containment along northern boundary
195	S		tank farm - secondary, lined containment along eastern boundary
196	W		tank farm - along SE corner
197	W		tank farm - along eastern boundary
198	W		from eastern boundary; land adjacent to tank farm - no impacts noted
199	E		tank farm - western boundary
200	SE		SW corner of secondary containment viewing off site
201	E		SW corner of secondary containment viewing off site

Project Supervisor: Nathan Chancler

Project Team: Rebecca Savoie

Daily Field Report

VERTEX

Client:	WPX	Date:	9/27/2018
Site Location:	North Brushy Draw 35-9H	Project #:	17E-00043
Project Owner:	Jason Crabtree	API:	30-15-42220 2RP-3080
Project Manager:	Dhugal Hanton		

Summary of Daily Operations

- Leave Carlsbad for North Brushy Draw 35-9H - 13:15 hrs
- Arrive on site 15:00 hrs begin taking pictures of site, noted dead plants and wet soil around containment
- Began collecting soil samples at 15:45 and finished at 16:30
- Collected and field tested samples up to 4 feet deep from 3 different sample points
- Finished packing sample jars and left the site at 17:45
- Arrive back in Carlsbad 19:00

Planned Activities and Recommendations

- Ship samples tomorrow 9-28-2018

Photo Log

Picture Number (Camera Label)	Viewing Direction	Description
IMG_1221	S	Site placard
IMG_1222	SE	Whole site
IMG_1223	S	Lined containment holding rainwater
IMG_1224	S	Outside containment
IMG_1225	S	Outside containment
IMG_1226	W	Outside containment
IMG_1227	W	Outside containment
IMG_1228	NW	Dead plants and wet soil along containment
IMG_1229	NE	Dead plants outside containment
IMG_1230	N	Dead plants outside containment
IMG_1231	NW	Wet soil outside containment
IMG_1232	S	Live plants just off site
IMG_1233	W	Live plants just off site and dead plants outside containment
IMG_1234	W	BH18-01
IMG_1235	W	BH18-01 Filled in

Cont'd on Page 2

Released to Imaging: 3/29/2023 1:34:49 PM

Spill Response and Sampling

Page ____ of ____

Client:	WPX
Date:	9-27-2018
Site Name:	North Brushy Draw 35-9H
Site Location:	32.0926101, -103.9468205
Project Owner:	Jason Crabtree
Project Manager:	Dhugal Hanton
Project #:	17E-00043
API & Incident #:	30-15-42220 2RP-3080

Initial Spill Information - Record on First Visit	
Spill Date:	6/23/2015
Spill Volume:	70 bbls
Spill Cause:	A bolt broke on the suction screen pot of the jump pump
Spill Product:	Oil Emulsion
Recovered Spill Volume:	60 bbls
Recovery Method:	Vacuum truck
On Lease/Off Lease	on and off lease

Site Sketch

The sketch shows a rectangular area representing the site. In the upper left, a box is labeled "Pumpjack". In the upper right, an arrow points to a triangle labeled "Flare". A north arrow is in the top right corner. In the lower center, there is a large rectangle containing three circles. To the left of this rectangle is a smaller rectangle containing two circles. Three numbered circles (1, 2, 3) are located near the bottom right of the large rectangle, with circle 1 at the top right, circle 2 below it, and circle 3 to the left of circle 2.

Approx. Total Spill Area _____

Site Wide Picture **Yes/No** Circle Site Placard Picture **Yes/No** Circle



New Mexico Office of the State Engineer

Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced, O=orphaned, C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters) (In feet)

POD Number	Code	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tw	Rng	X	Y	Distance	DepthWell	DepthWater	Water Column
C 01360		CUB	ED	4	3	3	05	26S	30E	602997	3548152	4702	770	173	597
C 02371		C	ED	2	3	15	25S	29E	596741	3555106*		4750	200	60	140
C 02680		CUB	ED	2	3	15	25S	29E	596741	3555106*		4750	200		
C 01361		CUB	ED	3	4	3	05	26S	30E	603240	3548157	4889	775	184	591
Average Depth to Water:														139 feet	
Minimum Depth:														60 feet	
Maximum Depth:														184 feet	

Record Count: 4

UTMNAD83 Radius Search (in meters):

Eastng (X): 599374.575 Northing (Y): 3551151.839 Radius: 5000

*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

5/22/19 12:27 PM

WATER COLUMN/ AVERAGE DEPTH TO WATER



11-Oct-2018

Karolina Blaney
WPX Energy
5315 Buena Vista Dr.
Carlsbad, NM 88220

Re: **North Brushy Draw 35-9H**

Work Order: **1810025**

Dear Karolina,

ALS Environmental received 9 samples on 01-Oct-2018 09:30 AM for the analyses presented in the following report.

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

Sample results are compliant with industry accepted practices and Quality Control 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 22.

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

ADDRESS: 3352 128th Avenue, Holland, MI, USA
PHONE: +1 (616) 399-6070 FAX: +1 (616) 399-6185

Sincerely,

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

Electronically approved by: Chad Whelton

Chad Whelton
Project Manager

Report of Laboratory Analysis

Certificate No: MN 998501

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

Environmental

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

ALS Group, USA

Date: 11-Oct-18

Client: WPX Energy
Project: North Brushy Draw 35-9H
Work Order: 1810025

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>
1810025-01	BH18-01 (0')	Soil		9/27/2018 15:40	10/1/2018 09:30	<input type="checkbox"/>
1810025-02	BH18-01 (2')	Soil		9/27/2018 15:45	10/1/2018 09:30	<input type="checkbox"/>
1810025-03	BH18-01 (4')	Soil		9/27/2018 15:50	10/1/2018 09:30	<input type="checkbox"/>
1810025-04	BH18-02 (0')	Soil		9/27/2018 16:00	10/1/2018 09:30	<input type="checkbox"/>
1810025-05	BH18-02 (2')	Soil		9/27/2018 16:05	10/1/2018 09:30	<input type="checkbox"/>
1810025-06	BH18-02 (4')	Soil		9/27/2018 16:10	10/1/2018 09:30	<input type="checkbox"/>
1810025-07	BH18-03 (0')	Soil		9/27/2018 16:20	10/1/2018 09:30	<input type="checkbox"/>
1810025-08	BH18-03 (2')	Soil		9/27/2018 16:25	10/1/2018 09:30	<input type="checkbox"/>
1810025-09	BH18-03 (4')	Soil		9/27/2018 16:30	10/1/2018 09:30	<input type="checkbox"/>

ALS Group, USA

Date: 11-Oct-18

Client: WPX Energy
Project: North Brushy Draw 35-9H
WorkOrder: 1810025

QUALIFIERS, ACRONYMS, UNITS

<u>Qualifier</u>	<u>Description</u>
*	Value exceeds Regulatory Limit
**	Estimated Value
a	Analyte is non-accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
Hr	BOD/CBOD - Sample was reset outside Hold Time, value should be considered estimated.
J	Analyte is present at an estimated concentration between the MDL and Report Limit
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 Reporting Limit, 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

ALS Group, USA

Date: 11-Oct-18

Client: WPX Energy

Project: North Brushy Draw 35-9H

Work Order: 1810025

Sample ID: BH18-01 (0')

Lab ID: 1810025-01

Collection Date: 9/27/2018 03:40 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
			SW8015C		Prep: SW3546 10/5/18 18:25	Analyst: RP
DRO (C10-C28)	ND		6.1	mg/Kg-dry	1	10/10/2018 05:57 PM
ORO (C28-C40)	ND		6.1	mg/Kg-dry	1	10/10/2018 05:57 PM
Surr: 4-Terphenyl-d14	90.1		34-130	%REC	1	10/10/2018 05:57 PM
GASOLINE RANGE ORGANICS BY GC-FID						
			SW8015D		Prep: SW5035 10/3/18 10:13	Analyst: RP
GRO (C6-C10)	ND		7.5	mg/Kg-dry	1	10/3/2018 11:35 PM
Surr: Toluene-d8	98.5		71-123	%REC	1	10/3/2018 11:35 PM
VOLATILE ORGANIC COMPOUNDS						
			SW8260C		Prep: SW5035 10/3/18 10:14	Analyst: WH
Benzene	ND		0.045	mg/Kg-dry	1	10/6/2018 10:15 PM
Ethylbenzene	ND		0.045	mg/Kg-dry	1	10/6/2018 10:15 PM
m,p-Xylene	ND		0.090	mg/Kg-dry	1	10/6/2018 10:15 PM
o-Xylene	ND		0.045	mg/Kg-dry	1	10/6/2018 10:15 PM
Toluene	ND		0.045	mg/Kg-dry	1	10/6/2018 10:15 PM
Xylenes, Total	ND		0.14	mg/Kg-dry	1	10/6/2018 10:15 PM
Surr: 1,2-Dichloroethane-d4	97.8		70-130	%REC	1	10/6/2018 10:15 PM
Surr: 4-Bromofluorobenzene	94.8		70-130	%REC	1	10/6/2018 10:15 PM
Surr: Dibromofluoromethane	95.6		70-130	%REC	1	10/6/2018 10:15 PM
Surr: Toluene-d8	96.9		70-130	%REC	1	10/6/2018 10:15 PM
CHLORIDE						
			A4500-CL E-11		Prep: EXTRACT 10/3/18 21:00	Analyst: RLM
Chloride	17		12	mg/Kg-dry	1	10/4/2018 02:00 PM
MOISTURE						
			SW3550C			Analyst: TRP
Moisture	20		0.050	% of sample	1	10/5/2018 04:19 PM

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

ALS Group, USA

Date: 11-Oct-18

Client: WPX Energy

Project: North Brushy Draw 35-9H

Work Order: 1810025

Sample ID: BH18-01 (2')

Lab ID: 1810025-02

Collection Date: 9/27/2018 03:45 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
			SW8015C		Prep: SW3546 10/5/18 18:25	Analyst: RP
DRO (C10-C28)	ND		5.9	mg/Kg-dry	1	10/11/2018 01:45 AM
ORO (C28-C40)	ND		5.9	mg/Kg-dry	1	10/11/2018 01:45 AM
Surr: 4-Terphenyl-d14	72.6		34-130	%REC	1	10/11/2018 01:45 AM
GASOLINE RANGE ORGANICS BY GC-FID						
			SW8015D		Prep: SW5035 10/3/18 10:13	Analyst: RP
GRO (C6-C10)	ND		6.9	mg/Kg-dry	1	10/4/2018 12:04 PM
Surr: Toluene-d8	96.2		71-123	%REC	1	10/4/2018 12:04 PM
VOLATILE ORGANIC COMPOUNDS						
			SW8260C		Prep: SW5035 10/3/18 10:14	Analyst: WH
Benzene	ND		0.041	mg/Kg-dry	1	10/6/2018 10:30 PM
Ethylbenzene	ND		0.041	mg/Kg-dry	1	10/6/2018 10:30 PM
m,p-Xylene	ND		0.083	mg/Kg-dry	1	10/6/2018 10:30 PM
o-Xylene	ND		0.041	mg/Kg-dry	1	10/6/2018 10:30 PM
Toluene	ND		0.041	mg/Kg-dry	1	10/6/2018 10:30 PM
Xylenes, Total	ND		0.12	mg/Kg-dry	1	10/6/2018 10:30 PM
Surr: 1,2-Dichloroethane-d4	98.9		70-130	%REC	1	10/6/2018 10:30 PM
Surr: 4-Bromofluorobenzene	99.0		70-130	%REC	1	10/6/2018 10:30 PM
Surr: Dibromofluoromethane	94.2		70-130	%REC	1	10/6/2018 10:30 PM
Surr: Toluene-d8	98.1		70-130	%REC	1	10/6/2018 10:30 PM
CHLORIDE						
			A4500-CL E-11		Prep: EXTRACT 10/3/18 21:00	Analyst: RLM
Chloride	24		12	mg/Kg-dry	1	10/4/2018 02:00 PM
MOISTURE						
			SW3550C			Analyst: TRP
Moisture	16		0.050	% of sample	1	10/5/2018 04:19 PM

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

ALS Group, USA

Date: 11-Oct-18

Client: WPX Energy

Project: North Brushy Draw 35-9H

Work Order: 1810025

Sample ID: BH18-01 (4')

Lab ID: 1810025-03

Collection Date: 9/27/2018 03:50 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
			SW8015C		Prep: SW3546 10/5/18 18:25	Analyst: RP
DRO (C10-C28)	ND		5.8	mg/Kg-dry	1	10/11/2018 02:14 AM
ORO (C28-C40)	ND		5.8	mg/Kg-dry	1	10/11/2018 02:14 AM
Surr: 4-Terphenyl-d14	64.6		34-130	%REC	1	10/11/2018 02:14 AM
GASOLINE RANGE ORGANICS BY GC-FID						
			SW8015D		Prep: SW5035 10/3/18 10:13	Analyst: RP
GRO (C6-C10)	ND		6.6	mg/Kg-dry	1	10/4/2018 12:34 PM
Surr: Toluene-d8	98.1		71-123	%REC	1	10/4/2018 12:34 PM
VOLATILE ORGANIC COMPOUNDS						
			SW8260C		Prep: SW5035 10/3/18 10:14	Analyst: WH
Benzene	ND		0.040	mg/Kg-dry	1	10/6/2018 10:46 PM
Ethylbenzene	ND		0.040	mg/Kg-dry	1	10/6/2018 10:46 PM
m,p-Xylene	ND		0.080	mg/Kg-dry	1	10/6/2018 10:46 PM
o-Xylene	ND		0.040	mg/Kg-dry	1	10/6/2018 10:46 PM
Toluene	ND		0.040	mg/Kg-dry	1	10/6/2018 10:46 PM
Xylenes, Total	ND		0.12	mg/Kg-dry	1	10/6/2018 10:46 PM
Surr: 1,2-Dichloroethane-d4	101		70-130	%REC	1	10/6/2018 10:46 PM
Surr: 4-Bromofluorobenzene	97.2		70-130	%REC	1	10/6/2018 10:46 PM
Surr: Dibromofluoromethane	94.1		70-130	%REC	1	10/6/2018 10:46 PM
Surr: Toluene-d8	99.2		70-130	%REC	1	10/6/2018 10:46 PM
CHLORIDE						
			A4500-CL E-11		Prep: EXTRACT 10/3/18 21:00	Analyst: RLM
Chloride	60		12	mg/Kg-dry	1	10/4/2018 02:00 PM
MOISTURE						
			SW3550C			Analyst: TRP
Moisture	14		0.050	% of sample	1	10/5/2018 04:19 PM

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

ALS Group, USA

Date: 11-Oct-18

Client: WPX Energy

Project: North Brushy Draw 35-9H

Work Order: 1810025

Sample ID: BH18-02 (0')

Lab ID: 1810025-04

Collection Date: 9/27/2018 04:00 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
			SW8015C		Prep: SW3546 10/5/18 18:25	Analyst: RP
DRO (C10-C28)	ND		6.1	mg/Kg-dry	1	10/11/2018 02:44 AM
ORO (C28-C40)	ND		6.1	mg/Kg-dry	1	10/11/2018 02:44 AM
Surr: 4-Terphenyl-d14	53.1		34-130	%REC	1	10/11/2018 02:44 AM
GASOLINE RANGE ORGANICS BY GC-FID						
			SW8015D		Prep: SW5035 10/3/18 10:13	Analyst: RP
GRO (C6-C10)	ND		7.2	mg/Kg-dry	1	10/4/2018 01:04 AM
Surr: Toluene-d8	95.3		71-123	%REC	1	10/4/2018 01:04 AM
VOLATILE ORGANIC COMPOUNDS						
			SW8260C		Prep: SW5035 10/3/18 10:14	Analyst: AK
Benzene	ND		0.043	mg/Kg-dry	1	10/5/2018 09:34 PM
Ethylbenzene	ND		0.043	mg/Kg-dry	1	10/5/2018 09:34 PM
m,p-Xylene	ND		0.086	mg/Kg-dry	1	10/5/2018 09:34 PM
o-Xylene	ND		0.043	mg/Kg-dry	1	10/5/2018 09:34 PM
Toluene	ND		0.043	mg/Kg-dry	1	10/5/2018 09:34 PM
Xylenes, Total	ND		0.13	mg/Kg-dry	1	10/5/2018 09:34 PM
Surr: 1,2-Dichloroethane-d4	95.6		70-130	%REC	1	10/5/2018 09:34 PM
Surr: 4-Bromofluorobenzene	94.6		70-130	%REC	1	10/5/2018 09:34 PM
Surr: Dibromofluoromethane	91.9		70-130	%REC	1	10/5/2018 09:34 PM
Surr: Toluene-d8	96.2		70-130	%REC	1	10/5/2018 09:34 PM
CHLORIDE						
			A4500-CL E-11		Prep: EXTRACT 10/3/18 21:00	Analyst: RLM
Chloride	16		12	mg/Kg-dry	1	10/4/2018 02:00 PM
MOISTURE						
			SW3550C			Analyst: TRP
Moisture	18		0.050	% of sample	1	10/5/2018 04:19 PM

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

ALS Group, USA

Date: 11-Oct-18

Client: WPX Energy

Project: North Brushy Draw 35-9H

Work Order: 1810025

Sample ID: BH18-02 (2')

Lab ID: 1810025-05

Collection Date: 9/27/2018 04:05 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
			SW8015C		Prep: SW3546 10/5/18 18:25	Analyst: RP
DRO (C10-C28)	ND		5.9	mg/Kg-dry	1	10/11/2018 03:13 AM
ORO (C28-C40)	ND		5.9	mg/Kg-dry	1	10/11/2018 03:13 AM
Surr: 4-Terphenyl-d14	64.6		34-130	%REC	1	10/11/2018 03:13 AM
GASOLINE RANGE ORGANICS BY GC-FID						
			SW8015D		Prep: SW5035 10/3/18 10:13	Analyst: RP
GRO (C6-C10)	ND		6.9	mg/Kg-dry	1	10/4/2018 01:33 AM
Surr: Toluene-d8	102		71-123	%REC	1	10/4/2018 01:33 AM
VOLATILE ORGANIC COMPOUNDS						
			SW8260C		Prep: SW5035 10/3/18 10:14	Analyst: WH
Benzene	ND		0.041	mg/Kg-dry	1	10/6/2018 11:01 PM
Ethylbenzene	ND		0.041	mg/Kg-dry	1	10/6/2018 11:01 PM
m,p-Xylene	ND		0.083	mg/Kg-dry	1	10/6/2018 11:01 PM
o-Xylene	ND		0.041	mg/Kg-dry	1	10/6/2018 11:01 PM
Toluene	ND		0.041	mg/Kg-dry	1	10/6/2018 11:01 PM
Xylenes, Total	ND		0.12	mg/Kg-dry	1	10/6/2018 11:01 PM
Surr: 1,2-Dichloroethane-d4	101		70-130	%REC	1	10/6/2018 11:01 PM
Surr: 4-Bromofluorobenzene	96.5		70-130	%REC	1	10/6/2018 11:01 PM
Surr: Dibromofluoromethane	95.2		70-130	%REC	1	10/6/2018 11:01 PM
Surr: Toluene-d8	98.2		70-130	%REC	1	10/6/2018 11:01 PM
CHLORIDE						
			A4500-CL E-11		Prep: EXTRACT 10/3/18 21:00	Analyst: RLM
Chloride	36		12	mg/Kg-dry	1	10/4/2018 02:00 PM
MOISTURE						
			SW3550C			Analyst: TRP
Moisture	16		0.050	% of sample	1	10/5/2018 04:19 PM

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

ALS Group, USA

Date: 11-Oct-18

Client: WPX Energy

Project: North Brushy Draw 35-9H

Work Order: 1810025

Sample ID: BH18-02 (4')

Lab ID: 1810025-06

Collection Date: 9/27/2018 04:10 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
			SW8015C		Prep: SW3546 10/5/18 18:25	Analyst: RP
DRO (C10-C28)	ND		5.6	mg/Kg-dry	1	10/11/2018 03:42 AM
ORO (C28-C40)	ND		5.6	mg/Kg-dry	1	10/11/2018 03:42 AM
Surr: 4-Terphenyl-d14	65.6		34-130	%REC	1	10/11/2018 03:42 AM
GASOLINE RANGE ORGANICS BY GC-FID						
			SW8015D		Prep: SW5035 10/3/18 10:13	Analyst: RP
GRO (C6-C10)	ND		6.2	mg/Kg-dry	1	10/4/2018 02:32 AM
Surr: Toluene-d8	97.6		71-123	%REC	1	10/4/2018 02:32 AM
VOLATILE ORGANIC COMPOUNDS						
			SW8260C		Prep: SW5035 10/3/18 10:14	Analyst: WH
Benzene	ND		0.037	mg/Kg-dry	1	10/6/2018 11:16 PM
Ethylbenzene	ND		0.037	mg/Kg-dry	1	10/6/2018 11:16 PM
m,p-Xylene	ND		0.075	mg/Kg-dry	1	10/6/2018 11:16 PM
o-Xylene	ND		0.037	mg/Kg-dry	1	10/6/2018 11:16 PM
Toluene	ND		0.037	mg/Kg-dry	1	10/6/2018 11:16 PM
Xylenes, Total	ND		0.11	mg/Kg-dry	1	10/6/2018 11:16 PM
Surr: 1,2-Dichloroethane-d4	99.9		70-130	%REC	1	10/6/2018 11:16 PM
Surr: 4-Bromofluorobenzene	98.5		70-130	%REC	1	10/6/2018 11:16 PM
Surr: Dibromofluoromethane	95.2		70-130	%REC	1	10/6/2018 11:16 PM
Surr: Toluene-d8	98.8		70-130	%REC	1	10/6/2018 11:16 PM
CHLORIDE						
			A4500-CL E-11		Prep: EXTRACT 10/3/18 21:00	Analyst: RLM
Chloride	36		11	mg/Kg-dry	1	10/4/2018 02:00 PM
MOISTURE						
			SW3550C			Analyst: TRP
Moisture	11		0.050	% of sample	1	10/5/2018 04:19 PM

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

ALS Group, USA

Date: 11-Oct-18

Client: WPX Energy

Project: North Brushy Draw 35-9H

Work Order: 1810025

Sample ID: BH18-03 (0')

Lab ID: 1810025-07

Collection Date: 9/27/2018 04:20 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID			SW8015C		Prep: SW3546 10/8/18 16:23	Analyst: RP
DRO (C10-C28)	ND		5.6	mg/Kg-dry	1	10/11/2018 06:37 AM
ORO (C28-C40)	ND		5.6	mg/Kg-dry	1	10/11/2018 06:37 AM
Surr: 4-Terphenyl-d14	79.6		34-130	%REC	1	10/11/2018 06:37 AM
GASOLINE RANGE ORGANICS BY GC-FID			SW8015D		Prep: SW5035 10/3/18 10:13	Analyst: RP
GRO (C6-C10)	ND		6.8	mg/Kg-dry	1	10/4/2018 03:02 AM
Surr: Toluene-d8	94.6		71-123	%REC	1	10/4/2018 03:02 AM
VOLATILE ORGANIC COMPOUNDS			SW8260C		Prep: SW5035 10/3/18 10:14	Analyst: EMR
Benzene	ND		0.041	mg/Kg-dry	1	10/6/2018 11:39 PM
Ethylbenzene	ND		0.041	mg/Kg-dry	1	10/6/2018 11:39 PM
m,p-Xylene	ND		0.081	mg/Kg-dry	1	10/6/2018 11:39 PM
o-Xylene	ND		0.041	mg/Kg-dry	1	10/6/2018 11:39 PM
Toluene	ND		0.041	mg/Kg-dry	1	10/6/2018 11:39 PM
Xylenes, Total	ND		0.12	mg/Kg-dry	1	10/6/2018 11:39 PM
Surr: 1,2-Dichloroethane-d4	95.4		70-130	%REC	1	10/6/2018 11:39 PM
Surr: 4-Bromofluorobenzene	98.5		70-130	%REC	1	10/6/2018 11:39 PM
Surr: Dibromofluoromethane	93.4		70-130	%REC	1	10/6/2018 11:39 PM
Surr: Toluene-d8	98.1		70-130	%REC	1	10/6/2018 11:39 PM
CHLORIDE			A4500-CL E-11		Prep: EXTRACT 10/3/18 21:00	Analyst: RLM
Chloride	18		11	mg/Kg-dry	1	10/4/2018 02:00 PM
MOISTURE			SW3550C			Analyst: TRP
Moisture	15		0.050	% of sample	1	10/5/2018 04:19 PM

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

ALS Group, USA

Date: 11-Oct-18

Client: WPX Energy

Project: North Brushy Draw 35-9H

Work Order: 1810025

Sample ID: BH18-03 (2')

Lab ID: 1810025-08

Collection Date: 9/27/2018 04:25 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
			SW8015C		Prep: SW3546 10/8/18 16:23	Analyst: RP
DRO (C10-C28)	ND		5.4	mg/Kg-dry	1	10/11/2018 07:35 AM
ORO (C28-C40)	ND		5.4	mg/Kg-dry	1	10/11/2018 07:35 AM
Surr: 4-Terphenyl-d14	91.1		34-130	%REC	1	10/11/2018 07:35 AM
GASOLINE RANGE ORGANICS BY GC-FID						
			SW8015D		Prep: SW5035 10/3/18 10:13	Analyst: RP
GRO (C6-C10)	ND		6.2	mg/Kg-dry	1	10/4/2018 03:32 AM
Surr: Toluene-d8	91.3		71-123	%REC	1	10/4/2018 03:32 AM
VOLATILE ORGANIC COMPOUNDS						
			SW8260C		Prep: SW5035 10/3/18 10:14	Analyst: EMR
Benzene	ND		0.037	mg/Kg-dry	1	10/6/2018 11:55 PM
Ethylbenzene	ND		0.037	mg/Kg-dry	1	10/6/2018 11:55 PM
m,p-Xylene	ND		0.075	mg/Kg-dry	1	10/6/2018 11:55 PM
o-Xylene	ND		0.037	mg/Kg-dry	1	10/6/2018 11:55 PM
Toluene	ND		0.037	mg/Kg-dry	1	10/6/2018 11:55 PM
Xylenes, Total	ND		0.11	mg/Kg-dry	1	10/6/2018 11:55 PM
Surr: 1,2-Dichloroethane-d4	90.6		70-130	%REC	1	10/6/2018 11:55 PM
Surr: 4-Bromofluorobenzene	101		70-130	%REC	1	10/6/2018 11:55 PM
Surr: Dibromofluoromethane	94.4		70-130	%REC	1	10/6/2018 11:55 PM
Surr: Toluene-d8	97.5		70-130	%REC	1	10/6/2018 11:55 PM
CHLORIDE						
			A4500-CL E-11		Prep: EXTRACT 10/3/18 21:00	Analyst: RLM
Chloride	35		11	mg/Kg-dry	1	10/4/2018 02:00 PM
MOISTURE						
			SW3550C			Analyst: TRP
Moisture	11		0.050	% of sample	1	10/5/2018 04:19 PM

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

ALS Group, USA

Date: 11-Oct-18

Client: WPX Energy

Project: North Brushy Draw 35-9H

Work Order: 1810025

Sample ID: BH18-03 (4')

Lab ID: 1810025-09

Collection Date: 9/27/2018 04:30 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID			SW8015C	Prep: SW3546	10/8/18 16:23	Analyst: RP
DRO (C10-C28)	ND		5.4	mg/Kg-dry	1	10/11/2018 08:05 AM
ORO (C28-C40)	ND		5.4	mg/Kg-dry	1	10/11/2018 08:05 AM
Surr: 4-Terphenyl-d14	61.1		34-130	%REC	1	10/11/2018 08:05 AM
GASOLINE RANGE ORGANICS BY GC-FID			SW8015D	Prep: SW5035	10/3/18 10:13	Analyst: RP
GRO (C6-C10)	ND		6.4	mg/Kg-dry	1	10/4/2018 04:01 AM
Surr: Toluene-d8	104		71-123	%REC	1	10/4/2018 04:01 AM
VOLATILE ORGANIC COMPOUNDS			SW8260C	Prep: SW5035	10/3/18 10:14	Analyst: EMR
Benzene	ND		0.038	mg/Kg-dry	1	10/7/2018 12:10 PM
Ethylbenzene	ND		0.038	mg/Kg-dry	1	10/7/2018 12:10 PM
m,p-Xylene	ND		0.076	mg/Kg-dry	1	10/7/2018 12:10 PM
o-Xylene	ND		0.038	mg/Kg-dry	1	10/7/2018 12:10 PM
Toluene	ND		0.038	mg/Kg-dry	1	10/7/2018 12:10 PM
Xylenes, Total	ND		0.11	mg/Kg-dry	1	10/7/2018 12:10 PM
Surr: 1,2-Dichloroethane-d4	89.9		70-130	%REC	1	10/7/2018 12:10 PM
Surr: 4-Bromofluorobenzene	97.0		70-130	%REC	1	10/7/2018 12:10 PM
Surr: Dibromofluoromethane	91.8		70-130	%REC	1	10/7/2018 12:10 PM
Surr: Toluene-d8	104		70-130	%REC	1	10/7/2018 12:10 PM
CHLORIDE			A4500-CL E-11	Prep: EXTRACT	10/3/18 21:00	Analyst: RLM
Chloride	38		11	mg/Kg-dry	1	10/4/2018 02:00 PM
MOISTURE			SW3550C			Analyst: TRP
Moisture	12		0.050	% of sample	1	10/5/2018 04:19 PM

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

ALS Group, USA

Date: 11-Oct-18

Client: WPX Energy

QC BATCH REPORT

Work Order: 1810025

Project: North Brushy Draw 35-9H

Batch ID: 125752

Instrument ID GC8

Method: SW8015C

MBLK		Sample ID: MBLK-125752-125752				Units: mg/Kg		Analysis Date: 10/10/2018 12:57 PM		
Client ID:		Run ID: GC8_181010A				SeqNo: 5313569		Prep Date: 10/5/2018		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

ORO (C28-C40)

ND

5.0

Surr: 4-Terphenyl-d14

2.133

0

3.33

0

64.1

34-130

0

LCS		Sample ID: LCS-125752-125752				Units: mg/Kg		Analysis Date: 10/10/2018 01:26 PM		
Client ID:		Run ID: GC8_181010A				SeqNo: 5313570		Prep Date: 10/5/2018		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

DRO (C10-C28)

381.4

5.0

333

0

115

65-122

0

ORO (C28-C40)

336.4

5.0

333

0

101

81-116

0

Surr: 4-Terphenyl-d14

2.7

0

3.33

0

81.1

34-130

0

MS		Sample ID: 1810025-01A MS				Units: mg/Kg		Analysis Date: 10/10/2018 01:56 PM		
Client ID: BH18-01 (0')		Run ID: GC8_181010A				SeqNo: 5313571		Prep Date: 10/5/2018		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

DRO (C10-C28)

423.1

4.9

326.9

0

129

65-122

0

S

ORO (C28-C40)

390.1

4.9

326.9

0

119

81-116

0

S

Surr: 4-Terphenyl-d14

1.996

0

3.269

0

61.1

34-130

0

MSD		Sample ID: 1810025-01A MSD				Units: mg/Kg		Analysis Date: 10/10/2018 05:28 PM		
Client ID: BH18-01 (0')		Run ID: GC8_181010A				SeqNo: 5315541		Prep Date: 10/5/2018		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

DRO (C10-C28)

363.6

4.9

327.1

0

111

65-122

423.1

15.1

30

ORO (C28-C40)

315.9

4.9

327.1

0

96.6

81-116

390.1

21

30

Surr: 4-Terphenyl-d14

1.948

0

3.271

0

59.6

34-130

1.996

2.43

30

The following samples were analyzed in this batch:

1810025-01A	1810025-02A	1810025-03A
1810025-04A	1810025-05A	1810025-06A

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

QC Page: 1 of 8

Client: WPX Energy
Work Order: 1810025
Project: North Brushy Draw 35-9H

QC BATCH REPORT

Batch ID: **125850** Instrument ID **GC8** Method: **SW8015C**

MBLK		Sample ID: DBLKS1-125850-125850				Units: mg/Kg		Analysis Date: 10/11/2018 04:11 A		
Client ID:		Run ID: GC8_181010A				SeqNo: 5315559		Prep Date: 10/8/2018		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								
ORO (C28-C40)	ND	5.0								
Surr: 4-Terphenyl-d14	1.983	0	3.33	0	59.6	34-130	0			

LCS		Sample ID: DLCSS1-125850-125850				Units: mg/Kg		Analysis Date: 10/11/2018 04:40 A		
Client ID:		Run ID: GC8_181010A				SeqNo: 5315560		Prep Date: 10/8/2018		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	354.4	5.0	333	0	106	65-122	0			
ORO (C28-C40)	312	5.0	333	0	93.7	81-116	0			
Surr: 4-Terphenyl-d14	2.067	0	3.33	0	62.1	34-130	0			

MS		Sample ID: 1810051-13B MS				Units: mg/Kg		Analysis Date: 10/11/2018 05:10 A		
Client ID:		Run ID: GC8_181010A				SeqNo: 5315561		Prep Date: 10/8/2018		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	320.4	5.0	331.1	11.02	93.4	65-122	0			
ORO (C28-C40)	307.4	5.0	331.1	19.43	87	81-116	0			
Surr: 4-Terphenyl-d14	2.071	0	3.311	0	62.6	34-130	0			

MSD		Sample ID: 1810051-13B MSD				Units: mg/Kg		Analysis Date: 10/11/2018 05:39 A		
Client ID:		Run ID: GC8_181010A				SeqNo: 5315562		Prep Date: 10/8/2018		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	347.7	5.0	330.4	11.02	102	65-122	320.4	8.18	30	
ORO (C28-C40)	330.4	5.0	330.4	19.43	94.1	81-116	307.4	7.21	30	
Surr: 4-Terphenyl-d14	2.332	0	3.304	0	70.6	34-130	2.071	11.8	30	

The following samples were analyzed in this batch:

1810025-07A	1810025-08A	1810025-09A
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Note: See Qualifiers Page for a list of Qualifiers and their explanation.

QC Page: 2 of 8

Client: WPX Energy
Work Order: 1810025
Project: North Brushy Draw 35-9H

QC BATCH REPORT

Batch ID: **125610** Instrument ID **GC9** Method: **SW8015D**

MBLK		Sample ID: MBLK-125610-125610				Units: µg/Kg-dry		Analysis Date: 10/4/2018 01:42 PM		
Client ID:		Run ID: GC9_181003A				SeqNo: 5300913		Prep Date: 10/3/2018		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	ND	5,000	0	0	0		0			
Surr: Toluene-d8	4812	0	5000	0	96.2	71-123	0			

MBLK		Sample ID: MBLK-125610-125610				Units: µg/Kg-dry		Analysis Date: 10/7/2018 07:18 PM		
Client ID:		Run ID: GC9_181007A				SeqNo: 5309444		Prep Date: 10/3/2018		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	0	0	0		0			

LCS		Sample ID: LCS-125610-125610				Units: µg/Kg-dry		Analysis Date: 10/4/2018 12:44 PM		
Client ID:		Run ID: GC9_181003A				SeqNo: 5300912		Prep Date: 10/3/2018		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	471200	5,000	500000	0	94.2	71-123	0			
Surr: Toluene-d8	4620	0	5000	0	92.4	71-123	0			

LCS		Sample ID: LCS-125610-125610				Units: µg/Kg-dry		Analysis Date: 10/7/2018 06:20 PM		
Client ID:		Run ID: GC9_181007A				SeqNo: 5309442		Prep Date: 10/3/2018		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	4781	2,500	5000	0	95.6	80-120	0			

LCSD		Sample ID: LCSD-125610-125610				Units: µg/Kg-dry		Analysis Date: 10/8/2018 05:49 PM		
Client ID:		Run ID: GC9_181007A				SeqNo: 5309489		Prep Date: 10/3/2018		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	5139	2,500	5000	0	103	80-120	10830	71.3	20	RH

MS		Sample ID: 1810025-04A MS				Units: µg/Kg-dry		Analysis Date: 10/4/2018 10:47 AM		
Client ID: BH18-02 (0')		Run ID: GC9_181003A				SeqNo: 5300906		Prep Date: 10/3/2018		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	746600	7,200	719500	0	104	71-123	0			
Surr: Toluene-d8	7286	0	7195	0	101	71-123	0			

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

QC Page: 3 of 8

Client: WPX Energy
Work Order: 1810025
Project: North Brushy Draw 35-9H

QC BATCH REPORT

Batch ID: 125610 Instrument ID GC9 Method: SW8015D

MSD		Sample ID: 1810025-04A MSD				Units: µg/Kg-dry		Analysis Date: 10/4/2018 11:16 AM		
Client ID: BH18-02 (0')		Run ID: GC9_181003A				SeqNo: 5300907		Prep Date: 10/3/2018		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	705600	7,200	719500	0	98.1	71-123	746600	5.65	30	
Surr: Toluene-d8	7297	0	7195	0	101	71-123	7286	0.158	30	

The following samples were analyzed in this batch:

1810025-01A	1810025-02A	1810025-03A
1810025-04A	1810025-05A	1810025-06A
1810025-07A	1810025-08A	1810025-09A

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

Client: WPX Energy
Work Order: 1810025
Project: North Brushy Draw 35-9H

QC BATCH REPORT

Batch ID: **125611** Instrument ID **VMS9** Method: **SW8260C**

MBLK				Sample ID: MBLK-125611-125611				Units: µg/Kg-dry			Analysis Date: 10/5/2018 04:27 PM			
Client ID:				Run ID: VMS9_181005A				SeqNo: 5304636			Prep Date: 10/3/2018		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	945	0	1000	0	94.5	70-130		0						
Surr: 4-Bromofluorobenzene	965.5	0	1000	0	96.6	70-130		0						
Surr: Dibromofluoromethane	939	0	1000	0	93.9	70-130		0						
Surr: Toluene-d8	947	0	1000	0	94.7	70-130		0						

LCS				Sample ID: LCS-125611-125611			Units: µg/Kg-dry		Analysis Date: 10/5/2018 02:57 PM		
Client ID:			Run ID: VMS9_181005A			SeqNo: 5304634		Prep Date: 10/3/2018		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	919.5	30	1000	0	92	75-125	0				
Ethylbenzene	942.5	30	1000	0	94.2	75-125	0				
m,p-Xylene	1856	60	2000	0	92.8	80-125	0				
o-Xylene	958.5	30	1000	0	95.8	75-125	0				
Toluene	889	30	1000	0	88.9	70-125	0				
Xylenes, Total	2814	90	3000	0	93.8	75-125	0				
Surr: 1,2-Dichloroethane-d4	956	0	1000	0	95.6	70-130	0				
Surr: 4-Bromofluorobenzene	967.5	0	1000	0	96.8	70-130	0				
Surr: Dibromofluoromethane	978	0	1000	0	97.8	70-130	0				
Surr: Toluene-d8	995	0	1000	0	99.5	70-130	0				

MS				Sample ID: 1810025-04A MS				Units: µg/Kg-dry		Analysis Date: 10/9/2018 02:36 AM	
Client ID: BH18-02 (0')			Run ID: VMS9_181008A		SeqNo: 5307985		Prep Date: 10/3/2018		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	1454	43	1439	0	101	75-125	0				
Ethylbenzene	1502	43	1439	0	104	75-125	0				
m,p-Xylene	2962	86	2878	0	103	80-125	0				
o-Xylene	1530	43	1439	0	106	75-125	0				
Toluene	1378	43	1439	0	95.8	70-125	0				
Xylenes, Total	4491	130	4317	0	104	75-125	0				
Surr: 1,2-Dichloroethane-d4	1422	0	1439	0	98.8	70-130	0				
Surr: 4-Bromofluorobenzene	1415	0	1439	0	98.4	70-130	0				
Surr: Dibromofluoromethane	1332	0	1439	0	92.6	70-130	0				
Surr: Toluene-d8	1431	0	1439	0	99.4	70-130	0				

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

Client: WPX Energy

Work Order: 1810025

Project: North Brushy Draw 35-9H

QC BATCH REPORT

Batch ID: 125611

Instrument ID VMS9

Method: SW8260C

MSD				Sample ID: 1810025-04A MSD			Units: µg/Kg-dry		Analysis Date: 10/9/2018 02:51 AM		
Client ID: BH18-02 (0')			Run ID: VMS9_181008A			SeqNo: 5307987		Prep Date: 10/3/2018		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	1503	43	1439	0	104	75-125	1454	3.31	30		
Ethylbenzene	1522	43	1439	0	106	75-125	1502	1.33	30		
m,p-Xylene	2986	86	2878	0	104	80-125	2962	0.823	30		
o-Xylene	1529	43	1439	0	106	75-125	1530	0.047	30		
Toluene	1392	43	1439	0	96.7	70-125	1378	0.987	30		
Xylenes, Total	4515	130	4317	0	105	75-125	4491	0.527	30		
Surr: 1,2-Dichloroethane-d4	1436	0	1439	0	99.8	70-130	1422	1.01	30		
Surr: 4-Bromofluorobenzene	1366	0	1439	0	95	70-130	1415	3.52	30		
Surr: Dibromofluoromethane	1346	0	1439	0	93.6	70-130	1332	1.07	30		
Surr: Toluene-d8	1420	0	1439	0	98.6	70-130	1431	0.808	30		

The following samples were analyzed in this batch:	1810025-01A	1810025-02A	1810025-03A
	1810025-04A	1810025-05A	1810025-06A
	1810025-07A	1810025-08A	1810025-09A

Client: WPX Energy
Work Order: 1810025
Project: North Brushy Draw 35-9H

QC BATCH REPORT

Batch ID: **125697** Instrument ID **GALLERY** Method: **A4500-CI E-11**

MBLK		Sample ID: MBLK-125697-125697				Units: mg/Kg		Analysis Date: 10/4/2018 02:00 PM		
Client ID:		Run ID: GALLERY_181004A		SeqNo: 5301572		Prep Date: 10/3/2018		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride ND 10

MS		Sample ID: 1810083-01AMS				Units: mg/Kg		Analysis Date: 10/4/2018 02:00 PM		
Client ID:		Run ID: GALLERY_181004A		SeqNo: 5301585		Prep Date: 10/3/2018		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride 481 10 500 8.768 94.4 75-125 0

MSD		Sample ID: 1810083-01AMSD				Units: mg/Kg		Analysis Date: 10/4/2018 02:00 PM		
Client ID:		Run ID: GALLERY_181004A		SeqNo: 5301586		Prep Date: 10/3/2018		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride 508.3 10 500 8.768 99.9 75-125 481 5.52 25

LCS1		Sample ID: LCS1-125697-125697				Units: mg/Kg		Analysis Date: 10/4/2018 02:00 PM		
Client ID:		Run ID: GALLERY_181004A		SeqNo: 5301573		Prep Date: 10/3/2018		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride 117.8 10 100 0 118 80-120 0

LCS2		Sample ID: LCS2-125697-125697				Units: mg/Kg		Analysis Date: 10/4/2018 02:00 PM		
Client ID:		Run ID: GALLERY_181004A		SeqNo: 5301587		Prep Date: 10/3/2018		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride 528.6 10 500 0 106 80-120 0

The following samples were analyzed in this batch:

1810025-01A	1810025-02A	1810025-03A
1810025-04A	1810025-05A	1810025-06A
1810025-07A	1810025-08A	1810025-09A

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

QC Page: 7 of 8

Client: WPX Energy
Work Order: 1810025
Project: North Brushy Draw 35-9H

QC BATCH REPORT

Batch ID: **R246260** Instrument ID **MOIST** Method: **SW3550C**

MBLK		Sample ID: WBLKS-R246260				Units: % of sample		Analysis Date: 10/5/2018 04:19 PM		
Client ID:		Run ID: MOIST_181005E				SeqNo: 5304285		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	ND	0.050								

LCS		Sample ID: LCS-R246260				Units: % of sample		Analysis Date: 10/5/2018 04:19 PM		
Client ID:		Run ID: MOIST_181005E				SeqNo: 5304284		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: 1810025-05A DUP				Units: % of sample		Analysis Date: 10/5/2018 04:19 PM		
Client ID: BH18-02 (2')		Run ID: MOIST_181005E				SeqNo: 5304273		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	16.24	0.050	0	0	0	0-0	16.25	0.0616	10	

DUP		Sample ID: 1810025-07A DUP				Units: % of sample		Analysis Date: 10/5/2018 04:19 PM		
Client ID: BH18-03 (0')		Run ID: MOIST_181005E				SeqNo: 5304276		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	0-0	14.51	2.72	10	

The following samples were analyzed in this batch:

1810025-01A	1810025-02A	1810025-03A
1810025-04A	1810025-05A	1810025-06A
1810025-07A	1810025-08A	1810025-09A

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

QC Page: 8 of 8



ALS Laboratory Group

HOLLAND, Michigan 49424

Chain-of-Custody

Form 202r8

WORKORDER
#

1810025

PROJECT NAME		North Brushy Draw 35-9H (3080)		SAMPLER				DATE		27/09/2018		PAGE		1 of 1	
PROJECT No.		17E-00043		SITE ID		North Brushy Draw 35-9H		TURNAROUND		5 days		DISPOSAL		By Lab or Return to Client	
COMPANY NAME		WPX Energy		EDD FORMAT				DRO + GRO + ORO BTX Chloride Hold							
SEND REPORT TO		All		PURCHASE ORDER											
ADDRESS				BILL TO COMPANY		WPX Energy									
CITY / STATE / ZIP				INVOICE ATTN TO		Jim Raley									
PHONE				ADDRESS		5315 Buena Vista Dr									
FAX				CITY / STATE / ZIP		Carlsbad, NM 88220									
E-MAIL		James.rale@wpxenergy.com; Dhanton@vertex.ca; Jcrabtree@vertex.ca		PHONE		575-885-1313									
FAX				E-MAIL		James.rale@wpxenergy.com; Dhanton@vertex.ca; Jcrabtree@vertex.ca									
Lab ID		Field ID		Matrix		Sample Date		Sample Time		# Bottles		Pres.		QC	
		BH18-01 (0')		S		22/01/2018		15:40		2					
		BH18-01 (2')		S		27/09/2018		15:45		2					
		BH18-01 (4')		S		27/09/2018		15:50		2					
		BH18-02 (0')		S		27/09/2018		16:00		2					
		BH18-02 (2')		S		27/09/2018		16:05		2					
		BH18-02 (4')		S		27/09/2018		16:10		2					
		BH18-03 (0')		S		27/09/2018		16:20		2					
		BH18-03 (2')		S		27/09/2018		16:25		2					
		BH18-03 (4')		S		27/09/2018		16:30		2					

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

For metals or anions, please detail analytes below.

Comments:	QC PACKAGE (check below)	
	X	LEVEL II (Standard QC)
		LEVEL III (Std QC + forms)
		LEVEL IV (Std QC + forms + raw data)
Preservative Key: 1-HCl 2-HNO3 3-H2SO4 4-NaOH 5-NaHSO4 7-Other 8-4 degrees C 9-5035		

SIGNATURE		PRINTED NAME	DATE	TIME
RELINQUISHED BY	Karolina Blaney	Karolina Blaney	28/09/2018	11:00
RECEIVED BY				
RELINQUISHED BY	Jason Crabtree	Jason Crabtree	28/09/2018	11:00
RECEIVED BY	Kerry Wierwille	Kerry Wierwille	10/1/18	0930
RELINQUISHED BY				
RECEIVED BY				

ALS Group, USA

Sample Receipt Checklist

Client Name: **WPX - NM**Date/Time Received: **01-Oct-18 09:30**Work Order: **1810025**Received by: **KRW**Checklist completed by Keith Wurenga 01-Oct-18
eSignature DateReviewed by: Chad Whelton 01-Oct-18
eSignature DateMatrices: **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>5.8/5.8 C</u>		<u>SR2</u>
Cooler(s)/Kit(s):	<u></u>		
Date/Time sample(s) sent to storage:	<u>10/1/2018 11:30:15 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:

SRC Page 1 of 1

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 200956

CONDITIONS

Operator: WPX Energy Permian, LLC Devon Energy - Regulatory Oklahoma City, OK 73102	OGRID: 246289
	Action Number: 200956
	Action Type: [IM-SD] Incident File Support Doc (ENV) (IM-BNF)

CONDITIONS

Created By	Condition	Condition Date
amaxwell	None	3/29/2023