March 23, 2020
Mike Bratcher
NMOCD District 2
811 South First Street
Artesia, NM 88210

Re: North Brushy Draw Federal 35 #001H Release Closure Request (NRM2003458859)

Mr. Bratcher,

The following report summarizes the excavation and sampling activities at the North Brushy Draw Federal 35 #001H well pad. WPX requests no further action for this incident. The updated C-141 is included with this report. If any questions or further information is warranted, please do not hesitate to contact me by cell phone at (575) 725-1647 or by email at Lynda.Laumbach@wpxenergy.com.

Best regards,

Lynda Laumbach
Environmental Specialist

CC: Jim Raley, WPX
Robert Hamlet, NMOCD
Victoria Venegas, NMOCD

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	NRM2003458859
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party: WPX Energy Permian, LLC.	OGRID: 246289
Contact Name: Lynda Laumbach	Contact Telephone: (575) 725-1647
Contact email: Lynda.Laumbach@wpxenergy.com	Incident # *(assigned by OCD)*
Contact mailing address: 5315 Buena Vista Drive, Carlsbad, NM 88220	

Location of Release Source

Latitude 32.09287 Longitude -103.95341
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: North Brushy Draw Federal 35 #001H	Site Type: Production Facility
Date Release Discovered: 12/28/2019	API# *(if applicable)*: 30-015-39753

Unit Letter	Section	Township	Range	County
B	35	25S	29E	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)

☒ Crude Oil	Volume Released (bbls): 8	Volume Recovered (bbls): 5
☐ Produced Water	Volume Released (bbls):	Volume Recovered (bbls):
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☐ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release:
At 12:20 hours on 12/28/2019 a weld on the outlet of the oil tank failed causing 8bbl of oil to be released inside the SPCC earthen containment. All fluids remained inside containment. A vacuum truck was used to recover 5 bbls of standing fluids. An environmental contractor will be retained to remediate the release.

$$bbl\ estimate = \frac{saturated\ soil\ volume\ (ft^3)}{4.21(\frac{ft^3}{bbl\ equivalent})} * estimated\ soil\ porosity(\%)$$

State of New Mexico
Oil Conservation Division

Incident ID	NRM2003458859
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☐ Yes ☒ No	If YES, for what reason(s) does the responsible party consider this a major release?
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?	

Initial Response

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

☒ The source of the release has been stopped.

☒ The impacted area has been secured to protect human health and the environment.

☒ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.

☒ All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have not 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: Lynda Laumbach Title: Environmental Specialist

Signature: Lynda Laumbach Date: 12/30/2019

email: Lynda.Laumbach@wpxenergy.com Telephone: (575)725-1647

OCD Only

Received by: Ramona Marcus Date: 2/3/2020

State of New Mexico
Oil Conservation Division

Incident ID	NRM2003458859
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release?	>50 (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☒ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☒ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☒ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☒ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☒ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☒ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☒ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☒ No
Did the release impact areas **not** on an exploration, development, production, or storage site?	☐ Yes ☒ No

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

Characterization Report Checklist: ***Each of the following items must be included in the report.***

☒ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
☒ Field data
☒ Data table of soil contaminant concentration data
☒ Depth to water determination
☒ Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
☒ Boring or excavation logs
☒ Photographs including date and GIS information
☒ Topographic/Aerial maps
☒ Laboratory data including chain of custody

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

State of New Mexico
Oil Conservation Division

Incident ID	NRM2003458859
District RP	
Facility ID	
Application ID	

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: Lynda Laumbach Title: Environmental Specialist

Signature: Lynda Laumbach Date: 03/23/2020

email: Lynda.Laumbach@wpxenergy.com Telephone: (575)725-1647

OCD Only

Received by: _____ Date: _____

Incident ID	NRM2003458859
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: Lynda Laumbach Title: Environmental Specialist

Signature: Lynda Laumbach Date: 03/23/2020

email: Lynda.Laumbach@wpxenergy.com Telephone: (575)725-1647

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: _____ Date: _____

Printed Name: _____ Title: _____

HRL COMPLIANCE SOLUTIONS
P.O. Box 1708 • Artesia, NM 88211
www.hrlcomp.com

March 15, 2020

Ms. Lynda Laumbach
WPX Energy, LLC
5315 Buena Vista Drive
Carlsbad, New Mexico 88220
Email: Lynda.Laumbach@wpxenergy.com

Subject: **Closure Report**
North Brushy Draw Federal 35 #001H
API #: 30-015-39753
Eddy County, New Mexico

Dear Ms. Laumbach:

HRL Compliance Solutions, Inc. (HRL) is pleased to present this closure report for the release and subsequent remediation at the North Brushy Draw Federal 35 #001H production facility (Site). The Site is located in Eddy County, New Mexico (Figure 1). Photographs of the Site can be found in Attachment A.

Release Summary and Initial Response

On December 28, 2019, a release of eight barrels of crude oil was observed at the Site. This release occurred when a weld on the outlet of the oil tank failed. The crude oil impacted the area within secondary containment adjacent to the oil tank. A liner was not present within the secondary containment.

The volume released was between five barrels and 25 barrels; therefore, in accordance with New Mexico Administrative Code (NMAC) 19.15.29.7 this release is considered a minor release. On December 28, 2019 Lynda Laumbach of WPX reported the release to the New Mexico Oil Conservation Division (NMOCD) District 2 on a Release Notification and Corrective Action Form (Form C-141) (Attachment B).

Item	Discussion
Site Name	North Brushy Draw Federal 35 #001H
Incident ID	NRM2003458859
Latitude	32.09287
Longitude	-103.95341
Township/Range/Section/Unit	Township 25 South/Range 29 East/ Section 35/Unit B
Date Release Discovered	December 28, 2019
Cause of Release	A weld on the outlet of the oil tank failed

Item	Discussion
Type of Material Released	Crude oil
Volume Release	8 barrels
Volume Recovered	5 barrels
Volume Lost	3 barrels

Initial Site Assessment

On December 30, 2019, HRL mobilized to the Site to evaluate the release. HRL utilized a Trimble GeoXT global positioning system (GPS) unit to map the surficial extent of the release (Figure 2). Based on visual staining, the release impacted an approximate area of 590-square feet.

New Mexico Administrative Code (NMAC) Site Characterization Criteria

Title 19, Chapter 15, Part 29, Section 11 of the New Mexico Administrative Code (NMAC) provides requirements for release characterization once the free liquids and recoverable materials have been removed from the Site.

Site Map

A scaled diagram depicting the potentially impacted area and nearby significant features has been prepared (Figure 1).

Depth to Groundwater

Based on research from the New Mexico Office of the State Engineer (NMOSE), depth to groundwater is estimated to be greater than 50 feet below ground surface (Figure 3).

Wellhead Protection Area

There are no sources of water, including springs, wells, or other sources of fresh water within one-half mile of the release (Figure 4).

Distance to Nearest Significant Watercourse

A significant watercourse is defined as "…a watercourse with a defined bed and bank either named or identified by a dashed blue line on a USGS 7.5-minute quadrangle map or the next lower order tributary with a defined bed and bank" (19.15.17.7 NMAC). No significant watercourses are present within one-half mile of the extent of the release.

Additional Site Characterization Criteria

The following additional site characterization criteria were evaluated for the release.

Additional Site Characterization Criteria	Response/Discussion
Is the Site within 300 feet of a continuously flowing water or other significant watercourse?	No
Is the Site within 200 feet of a lakebed, sinkhole, or playa lake?	No
Is the Site within 300 feet of an occupied permanent residence, school, hospital institution, or church?	No
Is the Site within 500 feet of a spring or private, domestic fresh water well used by less than five households for domestic or stock watering purposes?	No
Is the Site within 1,000 feet of any fresh water well or spring?	No
Is the Site within 300 feet of a wetland?	No
Is the Site within the area overlying a subsurface mine?	No
Is the Site within an unstable area?	No
Is the Site within the 100-year floodplain?	No

Closure Criteria

Based on the NMAC Site Characterization Criteria, HRL has applied the following NMOCD Closure Criteria to the Site:

Depth to Groundwater	Parameter	Closure Criteria in milligrams per kilogram (mg/kg)
51 feet to 100 feet below ground surface	Chloride	10,000 mg/kg or natural background, whichever is greater
	Total Petroleum Hydrocarbons (TPH) *[Gasoline Range Organics (GRO) + Diesel Range Organics (DRO) + Oil Range Organics (ORO)]*	2,500 mg/kg
	Gasoline Range Organics (GRO) + Diesel Range Organics (DRO)	1,000 mg/kg
	Benzene	10 mg/kg
	Benzene, Toluene, Ethylbenzene, and Total Xylenes (BTEX)	50 mg/kg

Remediation

Based on the presence of free liquids in the soil, it was determined that remediation of the impacted soil was necessary. WPX retained Kelley Oilfield Services to conduct the excavation of impacted soil. Remediation activity at the Site consisted of the excavation of impacted soil and off-site disposal at R360 Red Bluff, an exploration and production waste disposal facility located in Orla, Texas. Excavation activities began on January 9, 2020. HRL provided guidance for excavation activities based on collection of soil samples for analysis in the field (field screening) using field instrumentation. Field screening activities were conducted for:

- Chloride using an electrical conductivity (EC) meter in accordance with methods recommended by the U.S. Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS)
- Non-specific volatile organic compounds (VOCs) using a photoionization detector (PID) with a 10.6 electron-volt (eV) lamp
- Total petroleum hydrocarbons (TPH) using a PetroFlag® field test kit in accordance with U.S. Environmental Protection Agency (EPA) Method 9074

Additional excavation was conducted on January 31, 2020 following the results of analytical data exceeding NMOCD closure standards. Upon completion of remediation activities, HRL observed the total area of the excavation to be approximately 590-square feet (Figure 2) and 3 feet deep (Photographs, Attachment B).

Confirmatory Soil Samples

A confirmation sample plan was implemented utilizing a five-point composite sample strategy that represented areas less than 200-square feet, in accordance with 19.15.29.12 NMAC. Confirmatory soil samples were collected on January 16, 2020. Sample locations where initial confirmation samples exceeded NMOCD closure standards were resampled on February 11, 2020, following the completion of additional excavation (Figures 4 and 5). The confirmation samples were submitted to Hall Environmental Analysis Laboratory Inc., Albuquerque, New Mexico. The soil samples were analyzed for:

- Chloride by US EPA Method 300.0
- BTEX by US EPA Method 8021B
- TPH – GRO, DRO, and ORO by US EPA Method 8015M

Final laboratory results are summarized in Table 1; analytical reports are included in Attachment C.

Conclusions and Recommendations

The presence of free liquids in the soil indicated remediation action was necessary to meet cleanup standards specified in 19.15.29.12 NMAC. Remediation action included excavation of impacted soil and off-site disposal. Final sample results indicate that the impacted area has been remediated to closure standards. Upon WPX's request, the site was backfilled with clean fill to accommodate the replacement of the tank in question. WPX requests no further action for this incident.

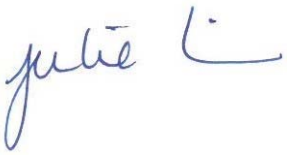
Scope and Limitations

The scope of HRL's services consists of performing site characterization, overseeing remediation, activities, confirmation sampling, and preparation of this closure report. All work has been performed in accordance with generally accepted professional environmental consulting practices for oil and gas releases in the Permian Basin.

If you have any questions or concerns, please do not hesitate to contact Kevin Smith at (575) 616-7398 Ext. 435 or via email at ksmith@hrlcomp.com.

Sincerely,

HRL Compliance Solutions, Inc.



Julie Linn, PG, RG
Project Manager

Figures:

Figure 1: Site Location Map
Figure 2: Impacted Area Map
Figure 3: Depth to Groundwater Map
Figure 4: Confirmation Sample Location Map - Footprint (Sample ID)
Figure 5: Confirmation Sample Location Map - Footprint (Sample Points)
Figure 6: Confirmation Sample Location Map – Sidewalls

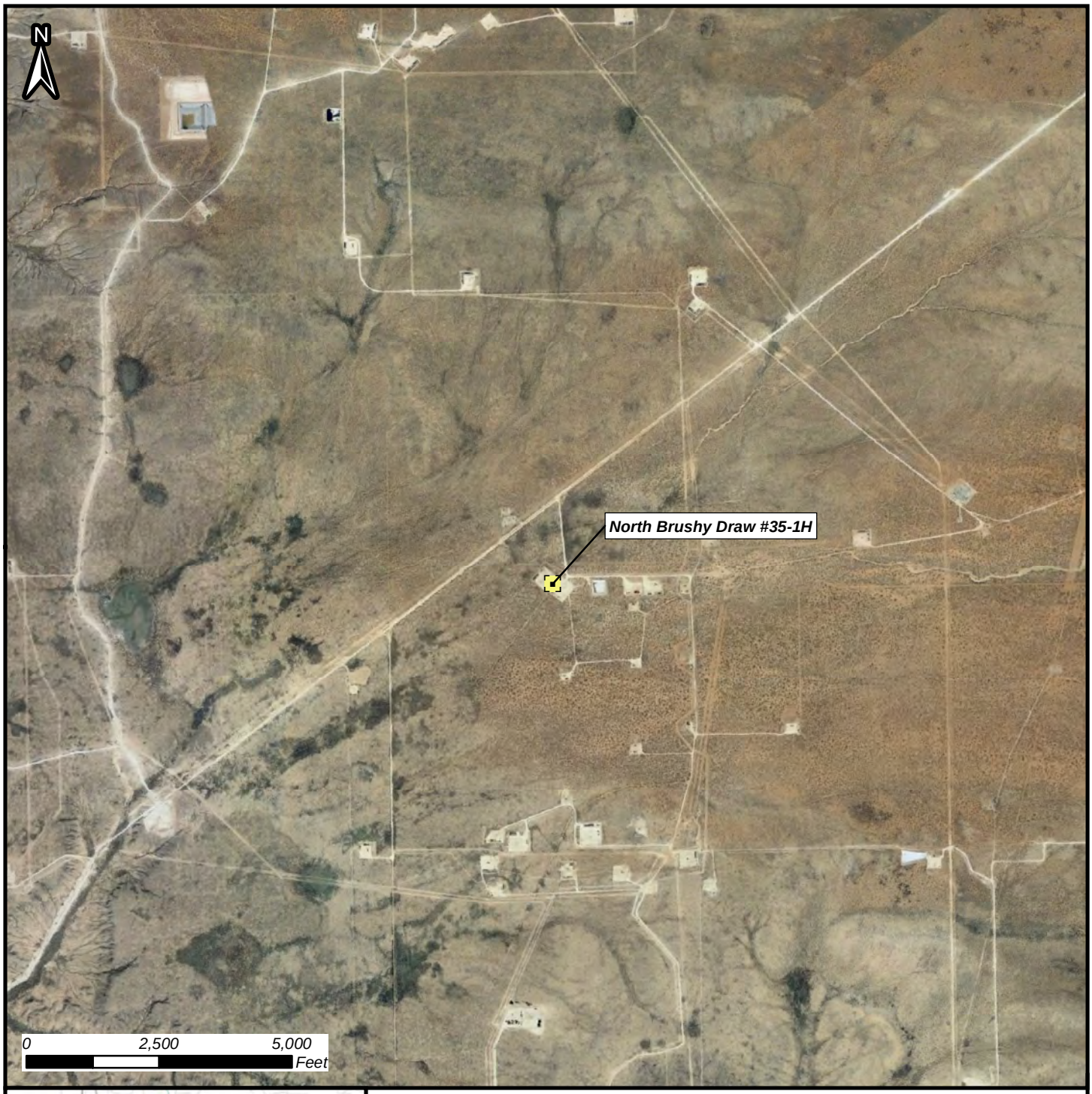
Tables:

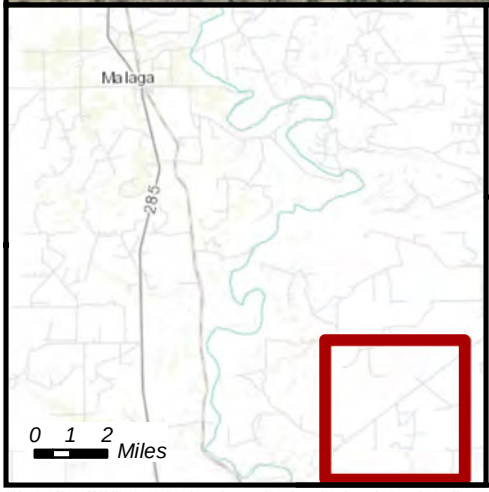
Table 1: Analytical Results Summary

Attachments:

Attachment A: Photographs
Attachment B: NMOCD Form C-141
Attachment C: Laboratory Analytical Reports

Figures





WPXENERGY

Figure 1: Site Location Map
North Brushy Draw #35-1H
December 2019 Spill
32.092847679, -103.953407171
Section 35, Township 25 South, Range 29 East

NOTES / COMMENTS:

Mapped Features

Facility Location

HRL COMPLIANCE SOLUTIONS

Author: A. Asay
Revision: 0
Date: 2/28/2020

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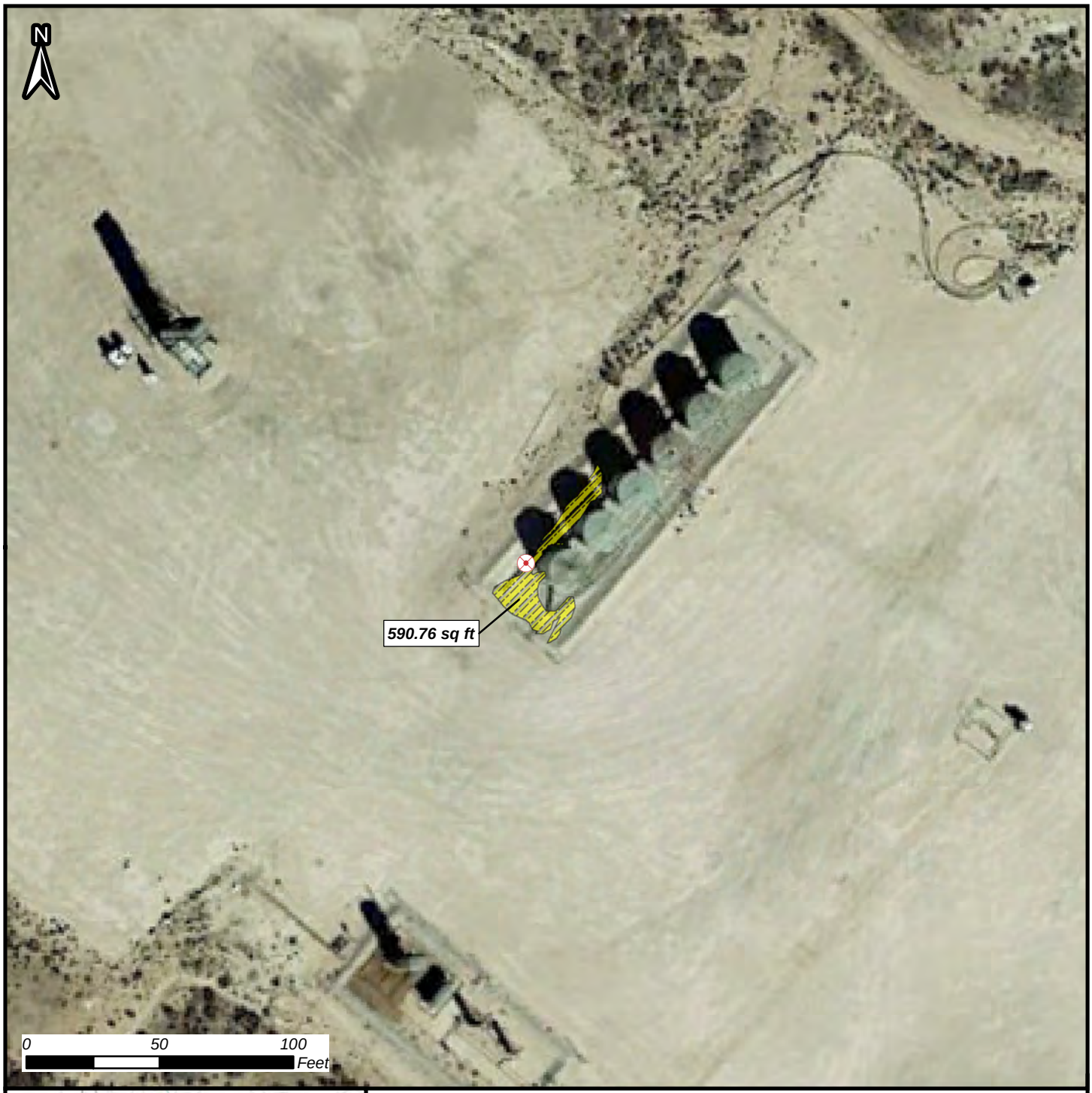

WPXENERGY

Figure 2: Impacted Area Map

North Brushy Draw #35-1H
December 2019 Spill

32.092847679, -103.953407171
Section 35, Township 25 South, Range 29 East

NOTES / COMMENTS:

The impacted area covers an extent of roughly 590.76 square feet.

Mapped Features

- Point of Release
- Impacted Area

HRL COMPLIANCE SOLUTIONS

Author: A. Asay
Revision: 0
Date: 2/28/2020

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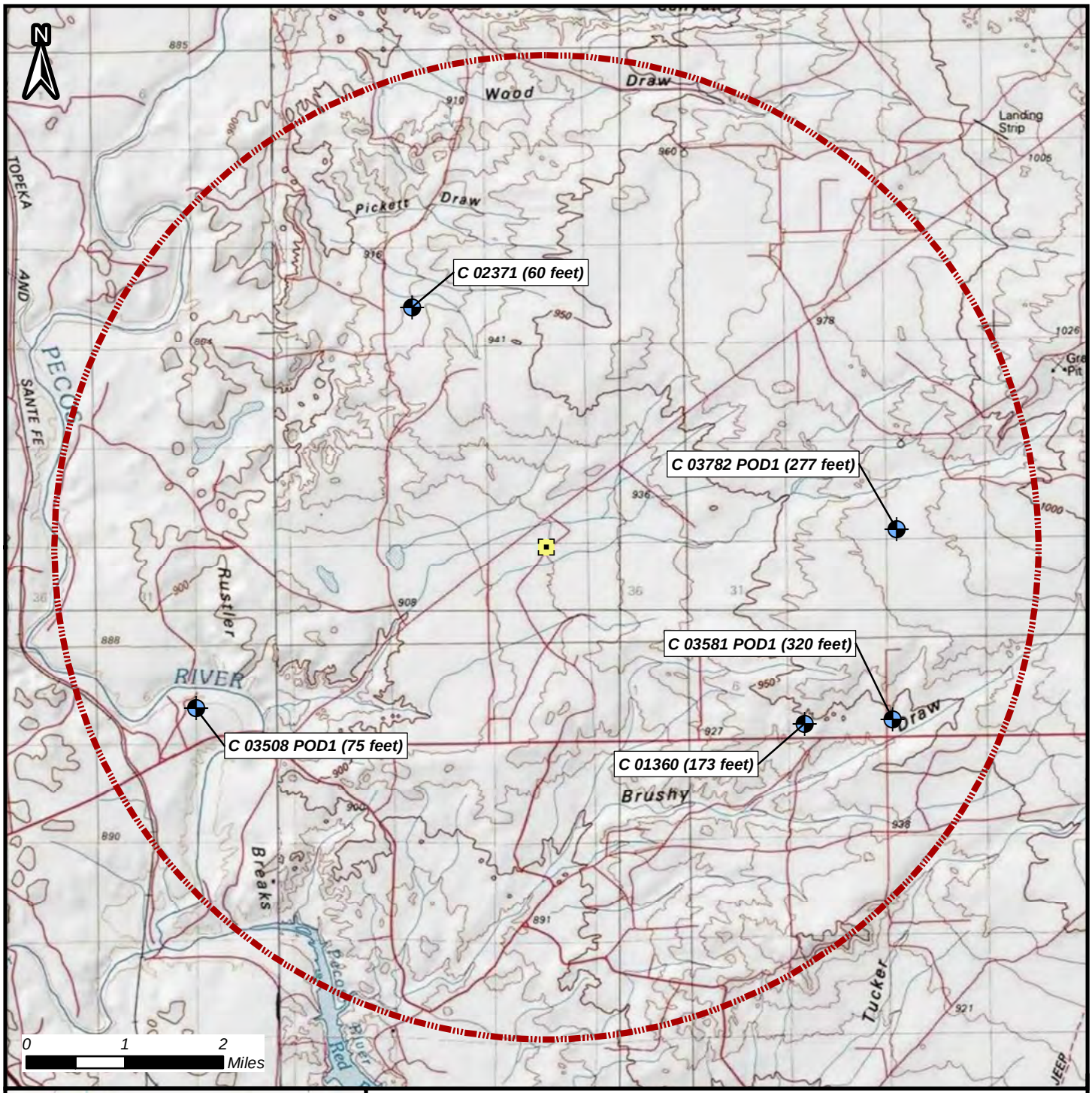

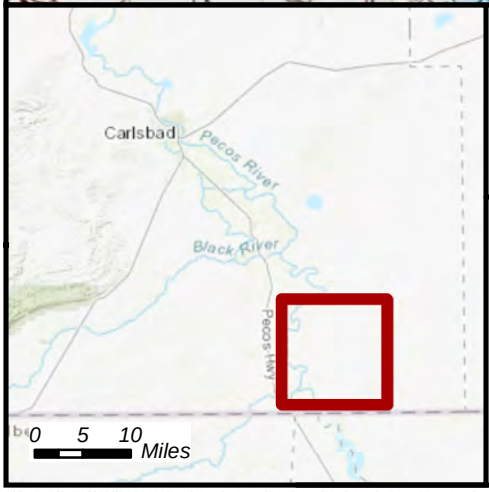

WPXENERGY

Figure 3: Depth to Groundwater Map

North Brushy Draw #35-1H
December 2019 Spill

32.092847679, -103.953407171
Section 35, Township 25 South, Range 29 East

Mapped Features

- Point of Release
- Groundwater Monitoring Well
- 5-Mile Radius

Well Number	Water Level Below Ground Surface (ft)	Distance from Source (mi)
C 03508 POD1	75	3.92
C 01360	173	3.18
C 03581 POD1	320	3.93
C 03782 POD1	277	3.56
C 02371	60	2.79

HRL COMPLIANCE SOLUTIONS

Author: A. Asay
Revision: 0
Date: 2/28/2020

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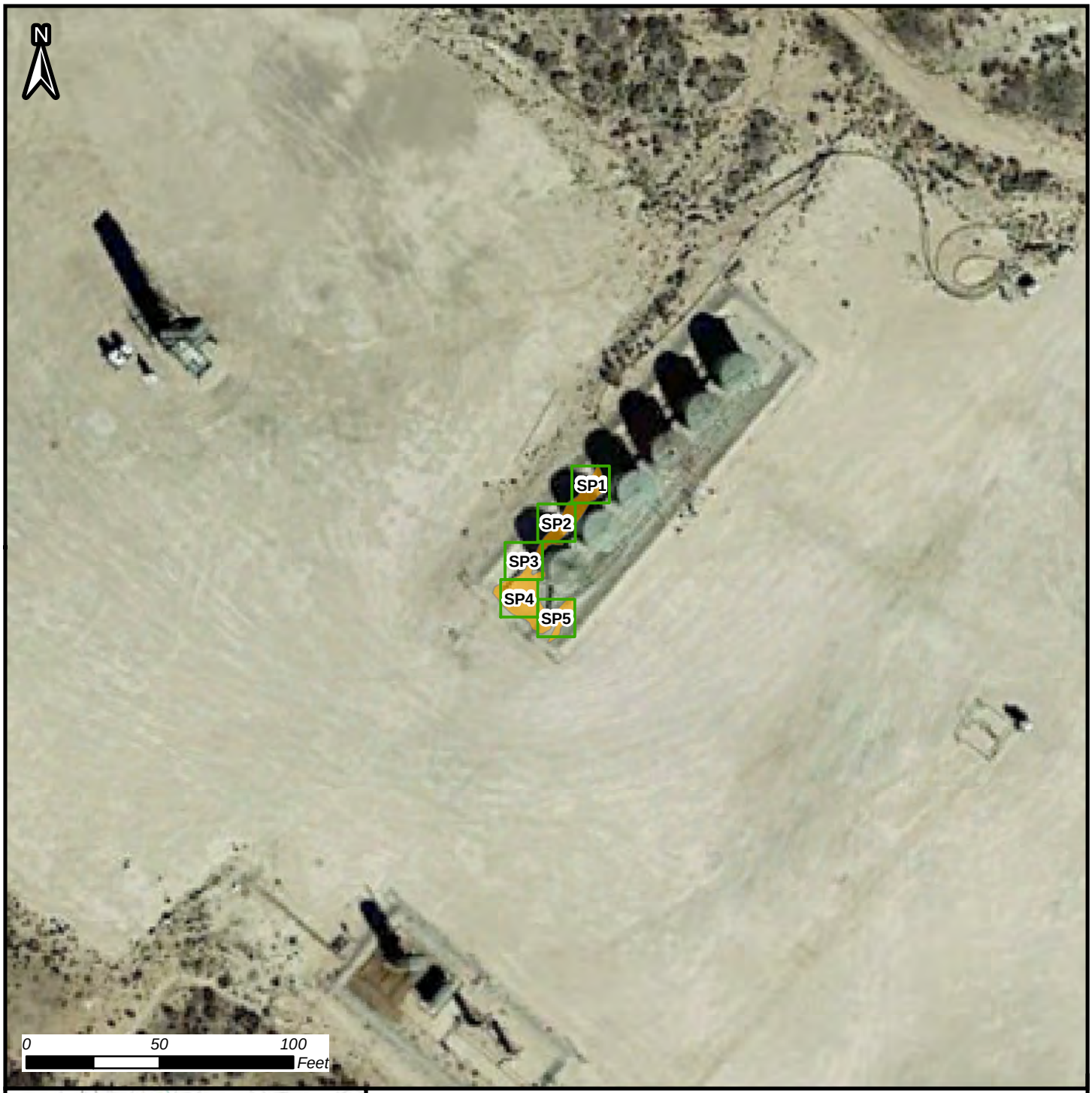

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Figure 4: Confirmation Sample Grid

North Brushy Draw #35-1H
Excavation Footprint
December 2019 Spill
32.092847679, -103.953407171
Section 35, Township 25 South, Range 29 East

NOTES / COMMENTS:

Mapped Features

14' X 14' Grid

Impacted Area

HRL COMPLIANCE SOLUTIONS

Author: A. Asay
Revision: 0
Date: 2/28/2020

T:\CLIENTS\WPX\2020\PERMIAN\North Brushy Draw 35-1H\Maps\North Brushy Draw 35-1H Stratified Random Sample Map (Labels) 022820.mxd

WPXENERGY

Figure 5: Confirmation Sample Map
North Brushy Draw #35-1H
Excavation Footprint
December 2019 Spill
32.092847679, -103.953407171
Section 35, Township 25 South, Range 29 East

NOTES / COMMENTS:

Mapped Features

- Composite Sample Location
- 14' X 14' Grid
- Impacted Area

HRL COMPLIANCE SOLUTIONS

Author: A. Asay
Revision: 0
Date: 2/28/2020

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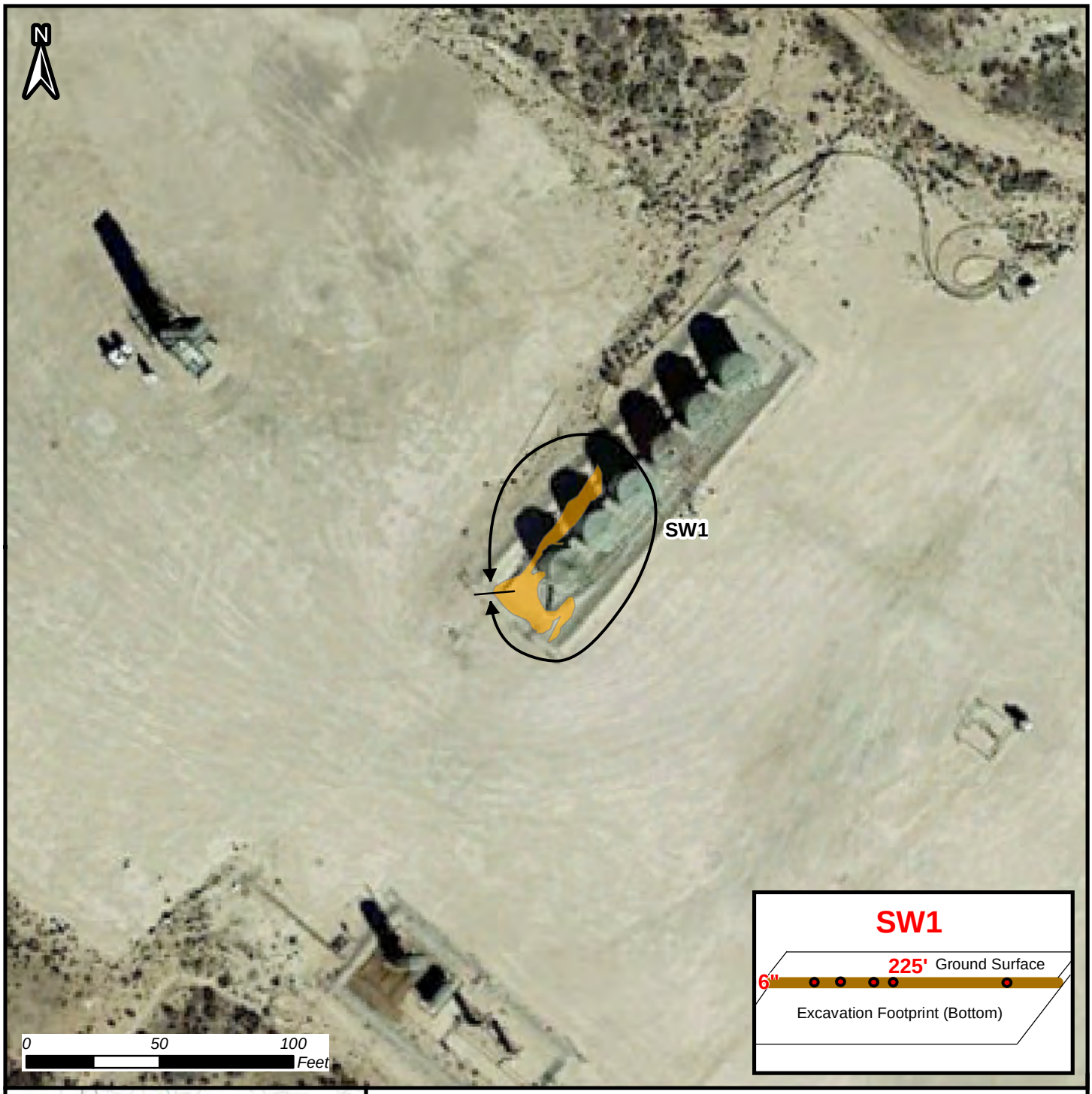

WPXENERGY

Figure 6: Sidewall Confirmation Sample Diagram

North Brushy Draw #35-1H Sidewalls
December 2019 Spill
32.092847679, -103.953407171
Section 35, Township 25 South, Range 29 East

NOTES / COMMENTS:

The sidewalls maintain an average depth of approximately six inches.

Mapped Features

- Sidewall Sample Location
- Impacted Area

HRL COMPLIANCE SOLUTIONS

Author: A. Asay
Revision: 0
Date: 2/28/2020

T:\CLIENTS\WPX\2020\PERMIAN\North Brushy Draw 35-1H\Maps\North Brushy Draw 35-1H Stratified Random Sample Map (Sidewalls) 022820.mxd

Tables

HRL COMPLIANCE SOLUTIONS

Table 1
Soil Sample Results
WPX Energy Permian Basin, LLC
North Brushy Draw Federal 35 #001H
Eddy County, New Mexico

Sample ID	Depth (feet)	Sample Date	Chloride	Benzene	BTEX	GRO + DRO	TPH
			Values are in milligrams per kilogram (mg/kg)				
NMOCD Closure Criteria (Groundwater greater than 100 feet) *			20,000	10	50	1,000	2,500
FP1	2	1/16/2020	1,300	ND	2.3	1,746	2,316
FP1	3	2/11/2020	NS	NS	NS	ND	ND
FP2	2	1/16/2020	710	0.11	16	5,260	6,860
FP2	3	2/11/2020	NS	NS	NS	ND	ND
FP3	2	1/16/2020	310	ND	0.95	1,646	2,256
FP3	3	2/11/2020	NS	NS	NS	ND	ND
FP4	2	1/16/2020	700	0.052	7.5	6,330	9,830
FP4	3	2/11/2020	NS	NS	NS	ND	ND
FP5	2	1/16/2020	330	ND	0.16	2,925	3,925
FP5	3	2/11/2020	NS	NS	NS	ND	ND
SW1	2	1/16/2020	450	ND	ND	1,408	1,958
SW1	3	2/11/2020	NS	NS	NS	ND	ND

Notes:

NMOCD: New Mexico Oil Conservation Division

GRO: Gasoline Range Organics

DRO: Diesel Range Organics

TPH: Total Petroleum Hydrocarbons

NS: Not Sampled

Results shaded in grey exceed closure criteria

* Closure Criteria specified in 19.15.17.13 NMAC

Attachment A

Photographs

Impacted Area
December 30, 2019

Impacted Area
December 30, 2019

Impacted Area
December 30, 2019

Impacted Area
December 30, 2019

Remediated Area
January 16, 2020

Remediated Area
January 16, 2020

Remediated Area
January 16, 2020

Remediated Area
January 16, 2020

Remediated Area
February 16, 2020

Remediated Area
February 16, 2020

Remediated Area
February 26, 2020

Remediated Area
February 26, 2020

Attachment B

NMOCD Form C-141

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 Permian, LLC.	OGRID: 246289
Contact Name: Lynda Laumbach	Contact Telephone: (575) 725-1647
Contact email: Lynda.Laumbach@wpxenergy.com	Incident # *(assigned by OCD)*
Contact mailing address: 5315 Buena Vista Drive, Carlsbad, NM 88220	

Location of Release Source

Latitude 32.09287 Longitude -103.95341
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: North Brushy Draw Federal 35 #001H	Site Type: Production Facility
Date Release Discovered: 12/28/2019	API# *(if applicable)*: 30-015-39753

Unit Letter	Section	Township	Range	County
B	35	25S	29E	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)

☒ Crude Oil	Volume Released (bbls): 8	Volume Recovered (bbls): 5
☐ Produced Water	Volume Released (bbls):	Volume Recovered (bbls):
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☐ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release:
At 12:20 hours on 12/28/2019 a weld on the outlet of the oil tank failed causing 8bbl of oil to be released inside the SPCC earthen containment. All fluids remained inside containment. A vacuum truck was used to recover 5 bbls of standing fluids. An environmental contractor will be retained to remediate the release.

$$bbl\ estimate = \frac{saturated\ soil\ volume\ (ft^3)}{4.21(\frac{ft^3}{bbl\ equivalent})} * estimated\ soil\ porosity(\%)$$

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? ☐ Yes ☒ No	If YES, for what reason(s) does the responsible party consider this a major release?
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?	

Initial Response

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

☒ The source of the release has been stopped.

☒ The impacted area has been secured to protect human health and the environment.

☒ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.

☒ All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have not 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: Lynda Laumbach Title: Environmental Specialist

Signature:  Date: 12/30/2019

email: Lynda.Laumbach@wpxenergy.com Telephone: (575)725-1647

OCD Only

Received by: _____ Date: _____

Attachment C

Laboratory Analytical Reports

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

January 27, 2020

Lynda Laumbauch

WPX Energy
5315 Buena Vista Drive
Carlsbad, NM 88220
TEL: (505) 386-9693
FAX:

RE: North Brushy Draw 35-1 OrderNo.: 2001768

Dear Lynda Laumbauch:

Hall Environmental Analysis Laboratory received 6 sample(s) on 1/21/2020 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2001768**
Date Reported: **1/27/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: WPX Energy **Client Sample ID:** FP1
Project: North Brushy Draw 35-1 **Collection Date:** 1/16/2020 11:41:00 AM
Lab ID: 2001768-001 **Matrix:** SOIL **Received Date:** 1/21/2020 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**CAS**
Chloride	1300	60		mg/Kg	20	1/23/2020 3:20:03 PM	49992
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**BRM**
Diesel Range Organics (DRO)	1700	96		mg/Kg	10	1/23/2020 9:50:55 AM	49989
Motor Oil Range Organics (MRO)	570	480		mg/Kg	10	1/23/2020 9:50:55 AM	49989
Surr: DNOP	0	55.1-146	S	%Rec	10	1/23/2020 9:50:55 AM	49989
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	46	5.0		mg/Kg	1	1/23/2020 8:33:29 PM	49978
Surr: BFB	378	66.6-105	S	%Rec	1	1/23/2020 8:33:29 PM	49978
EPA METHOD 8021B: VOLATILES						Analyst:	**NSB**
Benzene	ND	0.025		mg/Kg	1	1/23/2020 8:33:29 PM	49978
Toluene	0.095	0.050		mg/Kg	1	1/23/2020 8:33:29 PM	49978
Ethylbenzene	0.21	0.050		mg/Kg	1	1/23/2020 8:33:29 PM	49978
Xylenes, Total	2.3	0.099		mg/Kg	1	1/23/2020 8:33:29 PM	49978
Surr: 4-Bromofluorobenzene	119	80-120		%Rec	1	1/23/2020 8:33:29 PM	49978

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2001768**
Date Reported: **1/27/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: WPX Energy **Client Sample ID:** FP2
Project: North Brushy Draw 35-1 **Collection Date:** 1/16/2020 11:52:00 AM
Lab ID: 2001768-002 **Matrix:** SOIL **Received Date:** 1/21/2020 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	710	60		mg/Kg	20	1/23/2020 3:32:24 PM	49992
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	5000	93		mg/Kg	10	1/23/2020 10:30:50 AM	49989
Motor Oil Range Organics (MRO)	1600	470		mg/Kg	10	1/23/2020 10:30:50 AM	49989
Surr: DNOP	0	55.1-146	S	%Rec	10	1/23/2020 10:30:50 AM	49989
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	260	4.8		mg/Kg	1	1/23/2020 9:43:41 PM	49978
Surr: BFB	1120	66.6-105	S	%Rec	1	1/23/2020 9:43:41 PM	49978
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	0.11	0.024		mg/Kg	1	1/23/2020 9:43:41 PM	49978
Toluene	3.5	0.048		mg/Kg	1	1/23/2020 9:43:41 PM	49978
Ethylbenzene	2.0	0.048		mg/Kg	1	1/23/2020 9:43:41 PM	49978
Xylenes, Total	16	0.95		mg/Kg	10	1/24/2020 2:35:27 PM	49978
Surr: 4-Bromofluorobenzene	184	80-120	S	%Rec	1	1/23/2020 9:43:41 PM	49978

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2001768**
Date Reported: **1/27/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: WPX Energy **Client Sample ID:** FP3
Project: North Brushy Draw 35-1 **Collection Date:** 1/16/2020 11:59:00 AM
Lab ID: 2001768-003 **Matrix:** SOIL **Received Date:** 1/21/2020 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	310	60		mg/Kg	20	1/23/2020 3:44:46 PM	49992
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	1600	98		mg/Kg	10	1/23/2020 10:40:00 AM	49989
Motor Oil Range Organics (MRO)	610	490		mg/Kg	10	1/23/2020 10:40:00 AM	49989
Surr: DNOP	0	55.1-146	S	%Rec	10	1/23/2020 10:40:00 AM	49989
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	46	4.9		mg/Kg	1	1/23/2020 10:53:55 PM	49978
Surr: BFB	387	66.6-105	S	%Rec	1	1/23/2020 10:53:55 PM	49978
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	1/23/2020 10:53:55 PM	49978
Toluene	0.073	0.049		mg/Kg	1	1/23/2020 10:53:55 PM	49978
Ethylbenzene	0.14	0.049		mg/Kg	1	1/23/2020 10:53:55 PM	49978
Xylenes, Total	0.95	0.097		mg/Kg	1	1/23/2020 10:53:55 PM	49978
Surr: 4-Bromofluorobenzene	115	80-120		%Rec	1	1/23/2020 10:53:55 PM	49978

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2001768**
Date Reported: **1/27/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: WPX Energy **Client Sample ID:** FP4
Project: North Brushy Draw 35-1 **Collection Date:** 1/16/2020 12:05:00 PM
Lab ID: 2001768-004 **Matrix:** SOIL **Received Date:** 1/21/2020 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	700	60		mg/Kg	20	1/23/2020 3:57:08 PM	49992
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	6200	460		mg/Kg	50	1/23/2020 4:18:32 PM	49989
Motor Oil Range Organics (MRO)	3500	2300		mg/Kg	50	1/23/2020 4:18:32 PM	49989
Surr: DNOP	0	55.1-146	S	%Rec	50	1/23/2020 4:18:32 PM	49989
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	130	4.7		mg/Kg	1	1/23/2020 11:17:21 PM	49978
Surr: BFB	645	66.6-105	S	%Rec	1	1/23/2020 11:17:21 PM	49978
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	0.052	0.024		mg/Kg	1	1/23/2020 11:17:21 PM	49978
Toluene	1.6	0.047		mg/Kg	1	1/23/2020 11:17:21 PM	49978
Ethylbenzene	1.0	0.047		mg/Kg	1	1/23/2020 11:17:21 PM	49978
Xylenes, Total	7.5	0.095		mg/Kg	1	1/23/2020 11:17:21 PM	49978
Surr: 4-Bromofluorobenzene	146	80-120	S	%Rec	1	1/23/2020 11:17:21 PM	49978

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2001768**
Date Reported: **1/27/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: WPX Energy **Client Sample ID:** FP5
Project: North Brushy Draw 35-1 **Collection Date:** 1/16/2020 12:15:00 PM
Lab ID: 2001768-005 **Matrix:** SOIL **Received Date:** 1/21/2020 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**CAS**
Chloride	330	60		mg/Kg	20	1/23/2020 4:34:11 PM	49992
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**BRM**
Diesel Range Organics (DRO)	2900	94		mg/Kg	10	1/23/2020 10:58:13 AM	49989
Motor Oil Range Organics (MRO)	1000	470		mg/Kg	10	1/23/2020 10:58:13 AM	49989
Surr: DNOP	0	55.1-146	S	%Rec	10	1/23/2020 10:58:13 AM	49989
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	25	5.0		mg/Kg	1	1/23/2020 11:40:40 PM	49978
Surr: BFB	296	66.6-105	S	%Rec	1	1/23/2020 11:40:40 PM	49978
EPA METHOD 8021B: VOLATILES						Analyst:	**NSB**
Benzene	ND	0.025		mg/Kg	1	1/23/2020 11:40:40 PM	49978
Toluene	ND	0.050		mg/Kg	1	1/23/2020 11:40:40 PM	49978
Ethylbenzene	ND	0.050		mg/Kg	1	1/23/2020 11:40:40 PM	49978
Xylenes, Total	0.16	0.099		mg/Kg	1	1/23/2020 11:40:40 PM	49978
Surr: 4-Bromofluorobenzene	107	80-120		%Rec	1	1/23/2020 11:40:40 PM	49978

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2001768**
Date Reported: **1/27/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: WPX Energy
Client Sample ID: SW1
Project: North Brushy Draw 35-1
Collection Date: 1/16/2020 11:33:00 AM
Lab ID: 2001768-006 **Matrix:** SOIL **Received Date:** 1/21/2020 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	450	60		mg/Kg	20	1/24/2020 1:37:28 AM	50009
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	1400	89		mg/Kg	10	1/23/2020 11:07:22 AM	49989
Motor Oil Range Organics (MRO)	550	440		mg/Kg	10	1/23/2020 11:07:22 AM	49989
Surr: DNOP	0	55.1-146	S	%Rec	10	1/23/2020 11:07:22 AM	49989
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	8.6	5.0		mg/Kg	1	1/24/2020 12:04:01 AM	49978
Surr: BFB	168	66.6-105	S	%Rec	1	1/24/2020 12:04:01 AM	49978
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	1/24/2020 12:04:01 AM	49978
Toluene	ND	0.050		mg/Kg	1	1/24/2020 12:04:01 AM	49978
Ethylbenzene	ND	0.050		mg/Kg	1	1/24/2020 12:04:01 AM	49978
Xylenes, Total	ND	0.099		mg/Kg	1	1/24/2020 12:04:01 AM	49978
Surr: 4-Bromofluorobenzene	100	80-120		%Rec	1	1/24/2020 12:04:01 AM	49978

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2001768**
27-Jan-20

Client: WPX Energy
Project: North Brushy Draw 35-1

Sample ID: **MB-50009** SampType: **mblk** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS** Batch ID: **50009** RunNo: **66045**
Prep Date: **1/23/2020** Analysis Date: **1/23/2020** SeqNo: **2268022** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-50009** SampType: **lcs** TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS** Batch ID: **50009** RunNo: **66045**
Prep Date: **1/23/2020** Analysis Date: **1/23/2020** SeqNo: **2268023** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	92.5	90	110			

Sample ID: **MB-49992** SampType: **mblk** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS** Batch ID: **49992** RunNo: **66016**
Prep Date: **1/23/2020** Analysis Date: **1/23/2020** SeqNo: **2268195** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-49992** SampType: **lcs** TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS** Batch ID: **49992** RunNo: **66016**
Prep Date: **1/23/2020** Analysis Date: **1/23/2020** SeqNo: **2268196** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	92.9	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2001768**

27-Jan-20

Client: WPX Energy

Project: North Brushy Draw 35-1

Sample ID: **LCS-49989** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **LCSS** Batch ID: **49989** RunNo: **66004**

Prep Date: **1/23/2020** Analysis Date: **1/23/2020** SeqNo: **2266978** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	50	10	50.00	0	100	63.9	124			
Surr: DNOP	4.5		5.000		89.5	55.1	146			

Sample ID: **MB-49989** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **PBS** Batch ID: **49989** RunNo: **66004**

Prep Date: **1/23/2020** Analysis Date: **1/23/2020** SeqNo: **2266979** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.3		10.00		93.0	55.1	146			

Sample ID: **MB-50023** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **PBS** Batch ID: **50023** RunNo: **66047**

Prep Date: **1/24/2020** Analysis Date: **1/24/2020** SeqNo: **2268100** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	11		10.00		108	55.1	146			

Sample ID: **LCS-50023** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **LCSS** Batch ID: **50023** RunNo: **66047**

Prep Date: **1/24/2020** Analysis Date: **1/24/2020** SeqNo: **2268101** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.1		5.000		103	55.1	146			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2001768**
27-Jan-20

Client: WPX Energy
Project: North Brushy Draw 35-1

Sample ID: **mb-49978** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS** Batch ID: **49978** RunNo: **66017**
Prep Date: **1/22/2020** Analysis Date: **1/23/2020** SeqNo: **2267664** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	890		1000		88.5	66.6	105			

Sample ID: **lcs-49978** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS** Batch ID: **49978** RunNo: **66017**
Prep Date: **1/22/2020** Analysis Date: **1/23/2020** SeqNo: **2267665** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	92.7	80	120			
Surr: BFB	990		1000		99.4	66.6	105			

Sample ID: **2001768-001ams** SampType: **MS** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **FP1** Batch ID: **49978** RunNo: **66017**
Prep Date: **1/22/2020** Analysis Date: **1/23/2020** SeqNo: **2267667** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	58	5.0	24.98	46.01	47.8	69.1	142			S
Surr: BFB	3200		999.0		320	66.6	105			S

Sample ID: **2001768-001amsd** SampType: **MSD** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **FP1** Batch ID: **49978** RunNo: **66017**
Prep Date: **1/22/2020** Analysis Date: **1/23/2020** SeqNo: **2267668** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	64	4.9	24.46	46.01	73.3	69.1	142	9.85	20	
Surr: BFB	3300		978.5		340	66.6	105	0	0	S

Sample ID: **MB-50043** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS** Batch ID: **50043** RunNo: **66068**
Prep Date: **1/24/2020** Analysis Date: **1/27/2020** SeqNo: **2269049** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	770		1000		77.0	66.6	105			

Sample ID: **LCS-50043** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS** Batch ID: **50043** RunNo: **66068**
Prep Date: **1/24/2020** Analysis Date: **1/27/2020** SeqNo: **2269050** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	890		1000		89.0	66.6	105			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2001768**
27-Jan-20

Client: WPX Energy
Project: North Brushy Draw 35-1

Sample ID: **mb-49978** SampType: **MBLK** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS** Batch ID: **49978** RunNo: **66017**
Prep Date: **1/22/2020** Analysis Date: **1/23/2020** SeqNo: **2267696** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		99.9	80	120			

Sample ID: **LCS-49978** SampType: **LCS** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS** Batch ID: **49978** RunNo: **66017**
Prep Date: **1/22/2020** Analysis Date: **1/23/2020** SeqNo: **2267697** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.98	0.025	1.000	0	97.8	80	120			
Toluene	0.96	0.050	1.000	0	96.3	80	120			
Ethylbenzene	0.96	0.050	1.000	0	96.3	80	120			
Xylenes, Total	2.9	0.10	3.000	0	97.0	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		103	80	120			

Sample ID: **2001768-002ams** SampType: **MS** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **FP2** Batch ID: **49978** RunNo: **66017**
Prep Date: **1/22/2020** Analysis Date: **1/23/2020** SeqNo: **2267700** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.025	0.9804	0.1120	105	78.5	119			
Toluene	4.3	0.049	0.9804	3.523	74.9	75.7	123			S
Ethylbenzene	3.0	0.049	0.9804	2.028	99.9	74.3	126			
Xylenes, Total	17	0.098	2.941	14.25	78.6	72.9	130			E
Surr: 4-Bromofluorobenzene	1.7		0.9804		177	80	120			S

Sample ID: **2001768-002amsd** SampType: **MSD** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **FP2** Batch ID: **49978** RunNo: **66017**
Prep Date: **1/22/2020** Analysis Date: **1/23/2020** SeqNo: **2267701** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.024	0.9524	0.1120	105	78.5	119	2.65	20	
Toluene	4.1	0.048	0.9524	3.523	65.1	75.7	123	2.70	20	S
Ethylbenzene	2.9	0.048	0.9524	2.028	90.9	74.3	126	3.86	20	
Xylenes, Total	16	0.095	2.857	14.25	59.5	72.9	130	3.75	20	ES
Surr: 4-Bromofluorobenzene	1.7		0.9524		176	80	120	0	0	S

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2001768**

27-Jan-20

Client: WPX Energy

Project: North Brushy Draw 35-1

Sample ID: **MB-50043**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **50043**	RunNo: **66068**
Prep Date: **1/24/2020**	Analysis Date: **1/27/2020**	SeqNo: **2269077** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.87		1.000		86.6	80	120			

Sample ID: **LCS-50043**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **50043**	RunNo: **66068**
Prep Date: **1/24/2020**	Analysis Date: **1/27/2020**	SeqNo: **2269078** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.88		1.000		87.7	80	120			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: **WPX ENERGY CARLSB** Work Order Number: **2001768** RcptNo: 1

Received By: **Isaiah Ortiz** **1/21/2020 9:00:00 AM** I-OK

Completed By: **Isaiah Ortiz** **1/21/2020 9:22:39 AM** I-OK

Reviewed By: DAD 1/21/20

Chain of Custody

1. Is Chain of Custody sufficiently complete? Yes ☑ No ☐ Not Present ☐
2. How was the sample delivered? Courier

Log In

3. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☑ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
8. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes ☐ No ☐ NA ☑
10. Were any sample containers received broken? Yes ☐ No ☑
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody) Yes ☑ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
13. Is it clear what analyses were requested? Yes ☑ No ☐
14. Were all holding times able to be met? (If no, notify customer for authorization.) Yes ☑ No ☐

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)
Adjusted? _____
Checked by: YG 1/21/20

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date: _____
By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding: _____
Client Instructions: _____

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.4	Good	Not Present			

Chain-of-Custody Record

Client: WPX

attn: Lynda Laumbauch

Mailing Address: 5315 Buena Vista Dr.
Carlsbad, NM 88220

Phone #: 575-725-1647

email or Fax#: lynda.laumbauch@wpxenergy.com

QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:
☒ Standard ☐ Rush 5day

Project Name: North Brushy Draw 35-1

Project #:

Project Manager: Lynda Laumbauch

Sampler: Elwell, HRL comp.

On Ice: ☒ Yes ☐ No

# of Coolers: 1

Cooler Temp(including CF): 0.2 +0.2[F] 0.4°C

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2001768	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
1-16-20	1141	Soil	FP 1	4oz jar	Ice	-001	X	X					X			
1.16.20	1152	Soil	FP 2	4oz jar	Ice	-002	X	X					X			
1.16.20	1159	Soil	FP 3	4oz jar	Ice	-003	X	X					X			
1.16.20	1205	Soil	FP 4	4oz jar	Ice	-004	X	X					X			
1.16.20	1215	Soil	FP 5	4 oz jar	Ice	-005	X	X					X			
1.16.20	1133	Soil	SW 1	4 oz jar	Ice	-006	X	X					X			

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
1/20/20	13:05	Taylor Elwell			1/20/20	1305
1/20/20	1900		I-O courier		1/21/20	0900

Remarks: Please send report to Julie Linn and Kevin Smith (HRL compliance)
jlinn@hrlcomp.com
ksmith@hrlcomp.com

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

February 19, 2020

Julie Linn

WPX Energy
5315 Buena Vista Drive
Carlsbad, NM 88220
TEL: (505) 386-9693
FAX

RE: North Brushy Draw 35 1 OrderNo.: 2002595

Dear Julie Linn:

Hall Environmental Analysis Laboratory received 6 sample(s) on 2/14/2020 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman

Laboratory Manager

4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order: **2002595**
Date Reported: **2/19/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: WPX Energy **Lab Order:** 2002595
Project: North Brushy Draw 35 1

Lab ID: 2002595-001 **Collection Date:** 2/11/2020 1:06:00 PM
Client Sample ID: FP1 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	2/18/2020 7:14:47 PM	50486
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	2/18/2020 7:14:47 PM	50486
Surr: DNOP	86.8	55.1-146		%Rec	1	2/18/2020 7:14:47 PM	50486
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	2/19/2020 12:38:24 AM	50481
Surr: BFB	82.8	66.6-105		%Rec	1	2/19/2020 12:38:24 AM	50481

Lab ID: 2002595-002 **Collection Date:** 2/11/2020 1:08:00 PM
Client Sample ID: FP2 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	2/18/2020 7:23:57 PM	50486
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	2/18/2020 7:23:57 PM	50486
Surr: DNOP	89.5	55.1-146		%Rec	1	2/18/2020 7:23:57 PM	50486
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/19/2020 1:01:50 AM	50481
Surr: BFB	83.9	66.6-105		%Rec	1	2/19/2020 1:01:50 AM	50481

Lab ID: 2002595-003 **Collection Date:** 2/11/2020 1:11:00 PM
Client Sample ID: FP3 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	2/18/2020 7:33:07 PM	50486
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	2/18/2020 7:33:07 PM	50486
Surr: DNOP	95.3	55.1-146		%Rec	1	2/18/2020 7:33:07 PM	50486
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	2/19/2020 1:25:16 AM	50481
Surr: BFB	82.0	66.6-105		%Rec	1	2/19/2020 1:25:16 AM	50481

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order: **2002595**
Date Reported: **2/19/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: WPX Energy **Lab Order:** 2002595
Project: North Brushy Draw 35 1

Lab ID: 2002595-004 **Collection Date:** 2/11/2020 1:16:00 PM
Client Sample ID: FP4 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	2/18/2020 7:42:18 PM	50486
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	2/18/2020 7:42:18 PM	50486
Surr: DNOP	88.9	55.1-146		%Rec	1	2/18/2020 7:42:18 PM	50486
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	2/19/2020 2:35:30 AM	50481
Surr: BFB	83.2	66.6-105		%Rec	1	2/19/2020 2:35:30 AM	50481

Lab ID: 2002595-005 **Collection Date:** 2/11/2020 1:18:00 PM
Client Sample ID: FP5 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	9.0		mg/Kg	1	2/18/2020 7:51:28 PM	50486
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	2/18/2020 7:51:28 PM	50486
Surr: DNOP	83.3	55.1-146		%Rec	1	2/18/2020 7:51:28 PM	50486
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	2/19/2020 2:58:50 AM	50481
Surr: BFB	81.4	66.6-105		%Rec	1	2/19/2020 2:58:50 AM	50481

Lab ID: 2002595-006 **Collection Date:** 2/11/2020 1:21:00 PM
Client Sample ID: SW1 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	2/18/2020 8:00:37 PM	50486
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	2/18/2020 8:00:37 PM	50486
Surr: DNOP	90.8	55.1-146		%Rec	1	2/18/2020 8:00:37 PM	50486
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	2/19/2020 3:22:10 AM	50481
Surr: BFB	81.1	66.6-105		%Rec	1	2/19/2020 3:22:10 AM	50481

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2002595**
19-Feb-20

Client: WPX Energy
Project: North Brushy Draw 35 1

Sample ID: **MB-50486**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **50486**	RunNo: **66605**
Prep Date: **2/17/2020**	Analysis Date: **2/18/2020**	SeqNo: **2289790** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	11		10.00		111	55.1	146			

Sample ID: **LCS-50486**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **50486**	RunNo: **66605**
Prep Date: **2/17/2020**	Analysis Date: **2/18/2020**	SeqNo: **2289791** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	60	10	50.00	0	120	70	130			
Surr: DNOP	5.1		5.000		102	55.1	146			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2002595**

19-Feb-20

Client: WPX Energy

Project: North Brushy Draw 35 1

Sample ID: **mb-50481**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**							
Client ID: **PBS**	Batch ID: **50481**	RunNo: **66629**							
Prep Date: **2/17/2020**	Analysis Date: **2/18/2020**	SeqNo: **2289517**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	810		1000		80.7	66.6	105			

Sample ID: **lcs-50481**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**							
Client ID: **LCSS**	Batch ID: **50481**	RunNo: **66629**							
Prep Date: **2/17/2020**	Analysis Date: **2/18/2020**	SeqNo: **2289518**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	93.0	80	120			
Surr: BFB	920		1000		92.0	66.6	105			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: **WPX ENERGY CARLSB** Work Order Number: **2002595** RcptNo: 1

Received By: **Desiree Dominguez** **2/14/2020 9:25:00 AM** DD

Completed By: **Erin Melendrez** **2/14/2020 12:52:37 PM**

Reviewed By: JR 2/14/20

Chain of Custody

1. Is Chain of Custody sufficiently complete? Yes ☑ No ☐ Not Present ☐
2. How was the sample delivered? Courier

Log In

3. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☑ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
8. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes ☐ No ☐ NA ☑
10. Were any sample containers received broken? Yes ☐ No ☑
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody) Yes ☑ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
13. Is it clear what analyses were requested? Yes ☑ No ☐
14. Were all holding times able to be met? (If no, notify customer for authorization.) Yes ☑ No ☐

# of preserved bottles checked for pH: (<2 or >12 unless noted)
Adjusted?
Checked by: DAD 2/14/20

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: Date:
By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:
Client Instructions:

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good				

Chain-of-Custody Record

Client: WPX Energy

attn: Lynda Lanmbach

Mailing Address: 5315 Buena Vista Dr.

Carlsbad, NM 88220

Phone #: (505) 885-1313

email or Fax#: Lynda.Lanmbach@wpxenergy.com

QA/QC Package:

☒ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance

☐ NELAC ☐ Other_____

☐ EDD (Type) _____

Turn-Around Time: 5 Day TAT

☒ Standard ☐ Rush_____

Project Name: North Brushy Draw 35-1

Project #:

Project Manager: Julie Linn, HRL

Sampler: Kevin Smith, HRL

On Ice: ☒ Yes ☐ No

# of Coolers: 1

Cooler Temp(including CF): 0.9 +0.1 = 1.0°c

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2002595	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
2/11/2020	1:06pm	Soil	FP1	4 oz. jar	Ice	-001		X								
2/11/2020	1:08pm	X	FP2	X	X	-002		X								
2/11/2020	1:11pm	X	FP3	X	X	-003		X								
2/11/2020	1:16pm	X	FP4	X	X	-004		X								
2/11/2020	1:18pm	X	FP5	X	X	-005		X								
2/11/2020	1:21pm	X	SW1	X	X	-006		X								

Date	Time	Relinquished by:	Received by:	Via:	Date	Time
2/13/20	8:10pm	Kevin Smith			2/13/20	0810
2/13/20	1992			Courier	2/14/20	9:25

Remarks: Please email report to Julie Linn: jlinn@hrlcomp.com Kevin Smith: ksmith@hrlcomp.com Send invoice to WPX

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.