REMEDIATION PLAN

DEVON ENERGY COMPANY

Created for submission to New Mexico Oil Conservation Division on 05/03/2022

SHARLENE HARVESTER
Senior Environmental Scientist

ENERGIZING AMERICA

May 03, 2022

Bradford Billings, Chad Hensley, Jennifer Nobui, Nelson Velez and/or Robert Hamlet
State of New Mexico
Energy, Minerals, and Natural Resources
New Mexico Oil Conservation Division
811 South First Street
Artesia, New Mexico 88210

RE: REMEDIATION PLAN

COMPANY	Devon Energy
LOCATION	North Brushy Header
PLSS	Unit M Sec 36 T25S R29E
GPS	32.079119, -103.944930
INCIDENT ID	nAPP2134442133

BACKGROUND

Wescom, Inc., hereafter referred to as Wescom, has prepared this Remediation Plan on behalf of Devon Energy Company, hereafter referred to as Devon, regarding the release at the North Brushy Header (Site) located in Unit M, Section 36, Township 25 South and Range 29 East in Eddy County, New Mexico. The GPS coordinates are North 32.079119 and West -103.944930. The Site is owned by the State of New Mexico and falls within New Mexico Oil Conservation Division (NMOCD), District 2 Artesia.

On November 29, 2021, a leak was discovered where a hammer union was not correctly tightened on a newly installed line. The failure resulted in the release of approximately 56 barrels (bbls) of produced water onto a pipeline right-of-way (ROW). The release traveled approximately 100 feet to the North of the GPS coordinates listed previously. The volume of the release was determined using the following calculation:

$$BBL\ Estimate\ = Spill\ sq.ft \times \left(\frac{1 cubic\ yard}{27\ cubic\ feet}\right) \times \left(\frac{6.41187384\ bbl}{1\ yd^3} equivalent\right) \times Estimated\ Soil\ Porosity\ (\%)$$

A Right of Entry request was submitted to the New Mexico State Land Office on February 7, 2022. The Right of Entry request was granted for a term of 180 days to complete the remediation associated with this release (see Attachment H). Devon Energy will notify the surface lessee, Byron W. Paschal prior to conducting remediation activities. Approximately 1,000 cubic yards of soil was impacted by the release. A hand auger was used to complete spill delineation on February 25th and March 10th, 2022. On March 10th, 2022, a backhoe was used to complete a surface scrape of impacted area and aid in vertical delineation.

SURFACE & GROUND WATER

The New Mexico Office of the State Engineer (OSE) records indicates the nearest depth to groundwater measurement is greater than 105 feet below ground surface (bgs) and is 0.39 miles West of the Site. No playas or lakes are located within a one-mile radius of this Site. (Attachment C).

KARST POTENTIAL

According to data from the Bureau of Land Management, this Site is located within medium karst potential as shown in Attachment D. There are no indicators of karst around the Site surface.

TARGET REMEDIAL LEVELS

The target cleanup levels are determined using the NMOCD Closure Criteria (19.15.29.12.B(4) and Table 1 NMAC, inserted below) including karst guidelines from the Bureau of Land Management. As the entire release impact is off-pad, the applicable reclamation requirements for impacts above four feet bgs are as follows: 10 parts per million (ppm) Benzene, 50 ppm combined benzene, toluene, ethyl benzene, and xylene (BTEX), 100 ppm Total Petroleum Hydrocarbons (TPH) and 600 mg/kg (ppm) of chloride. Reclamation requirements will be achieved as per NMAC 19.15.29.13.D(1).

Closure Criteria (19.15.29.12.B(4) and Table 1 NMAC)						
North Brushy Header — 32.079119, -103.944930						
Depth to Groundwater		**Closure Criteria (unites in mg/kg)**				
		Chloride * numberical limit or background, whichever is greater	TPH	GRO+DRO	BTEX	Benzene
Based on high karst potential		600	100		50	10
less than 50 ft bgs or no water data within 1/2 mile		600	100		50	10
51 ft to 100 ft		10000	2500	1000	50	10
greater than 100 ft	**> 105**	**20000**	**2500**	**1000**	**50**	**10**
Surface Water	**Yes or No**	**If yes, then**				
< 300 feet from continuously flowing watercourse or other significant watercourse?	No					
< 200 feet from lakebed, sinkhole or playa lake	No					
Water Well or Water Source						
< 500 feet from spring or a private, domestic fresh water well used by less than 5 households for domestic or stock watering purposes?	No					
< 1000 feet from fresh water well or spring?	No					
Human and Other Areas						
< 300 feet from an occupied permanent residence, school, hospital, institution or church?	No					
Within incorporated municipal boundaries or within a defined municipal fresh water well field?	No					
< 100 feet from wetland?	No					
Within area overlying a subsurface mine?	No					
Within an unstable area?	No					
Within a 100-year floodplan?	No					

Table: Closure Criteria Findings

SITE ASSESSMENT AND DELINEATION

Devon contracted Wescom to conduct onsite delineation activities beginning November 30, 2021, and again on February 25th and March 10th, 2022. A hand auger and backhoe were used to complete delineation sampling. Figure 2 shows locations and depths of sample points.

Soil samples CONF02C and CONF03 through CONF08 were collected at zero feet (ft) to determine the horizontal extent of the spill area. Soil samples CONF01-7', CONF09-4', and CONF10-2' were collected to verify the vertical extents of the subsurface contamination.

A background sample BG01, was collected 70 feet to the West of the spill area. All soil samples were properly packaged, preserved, and transported to Envirotech Inc. by chain of custody, and analyzed for Total Petroleum Hydrocarbons, or TPH—Method 8015M/D, BTEX—Method 8021B, and Chlorides—Method 300.0. All final delineation samples were below the applicable RRALs for the Site, as shown in Table 1.

REMEDIATION PLAN

Horizontal and vertical delineation of the impacted area has been achieved as shown in the laboratory analytical data on Table 1 and illustrated on Figure 2. Based on the proximity of the release to active lines, Devon or a third-party operator may require additional safety precautions above encroachment guidelines, including restrictions on hand shoveling and cribbing. At a minimum, excavation must be 15 feet from active gas lines and two feet from the produced water line. Devon requests a variance to maintain a safe distance from the active lines and leave soils in place.

Devon, or third-party operator, will excavate the impacted material using heavy equipment and/or hydrovac. Devon respectfully requests a variance regarding the frequency of confirmation sample collection from NMOCD for this Site. Due to the size of the release footprint (6,310 square feet) and the homogeneity of the release and soil type (see Attachment F), Devon proposes collecting five-point composite samples at a frequency of every 500 square feet. Samples will be collected from the sidewalls and floor of the excavation to confirm that impacted material is removed in accordance with reclamation requirements. Devon believes collecting confirmation samples on a 500 square foot frequency will provide sufficient data confirming soil impacts have been adequately excavated.

Following excavation, the spill area will be backfilled with material that is consistent with soils in the surrounding area. Pastureland will be reseeded with the appropriate BLM seed mixture at a time in which germination is favorable.

Devon Energy requests an additional 180 days to complete the remediation of the release area. Scheduling contractors to conduct excavation, backfill, and reseeding of the spill area is currently restricting Devon from completing and closing out the spill within the current timelines.

If you have any questions or comments, please do not hesitate to call Mrs. Ashley Giovengo at (505) 382-1211.

Sincerely,

Wescom, Inc.

Sharlene Harvester
Senior Environmental Scientist

cc: Jim Raley, Devon Energy
Bradford Billings, NMOCD
Chad Hensley, NMOCD
Jennifer Nobui, NMOCD
Nelson Velez, NMOCD
Robert Hamlet, NMOCD

REFERENCE MATERIALS

FIGURES

TABLES

ATTACHMENTS

FIGURES

FIGURE 1.
SPILL LOCATION

0 65 130 195 260 Feet

N

North Brushy Header
Incident ID: nAPP2134442133
GPS Coordinates: 32.079119, -103.944930
Eddy County, New Mexico
Devon Energy

LEGEND

Spill Area

WESCOM

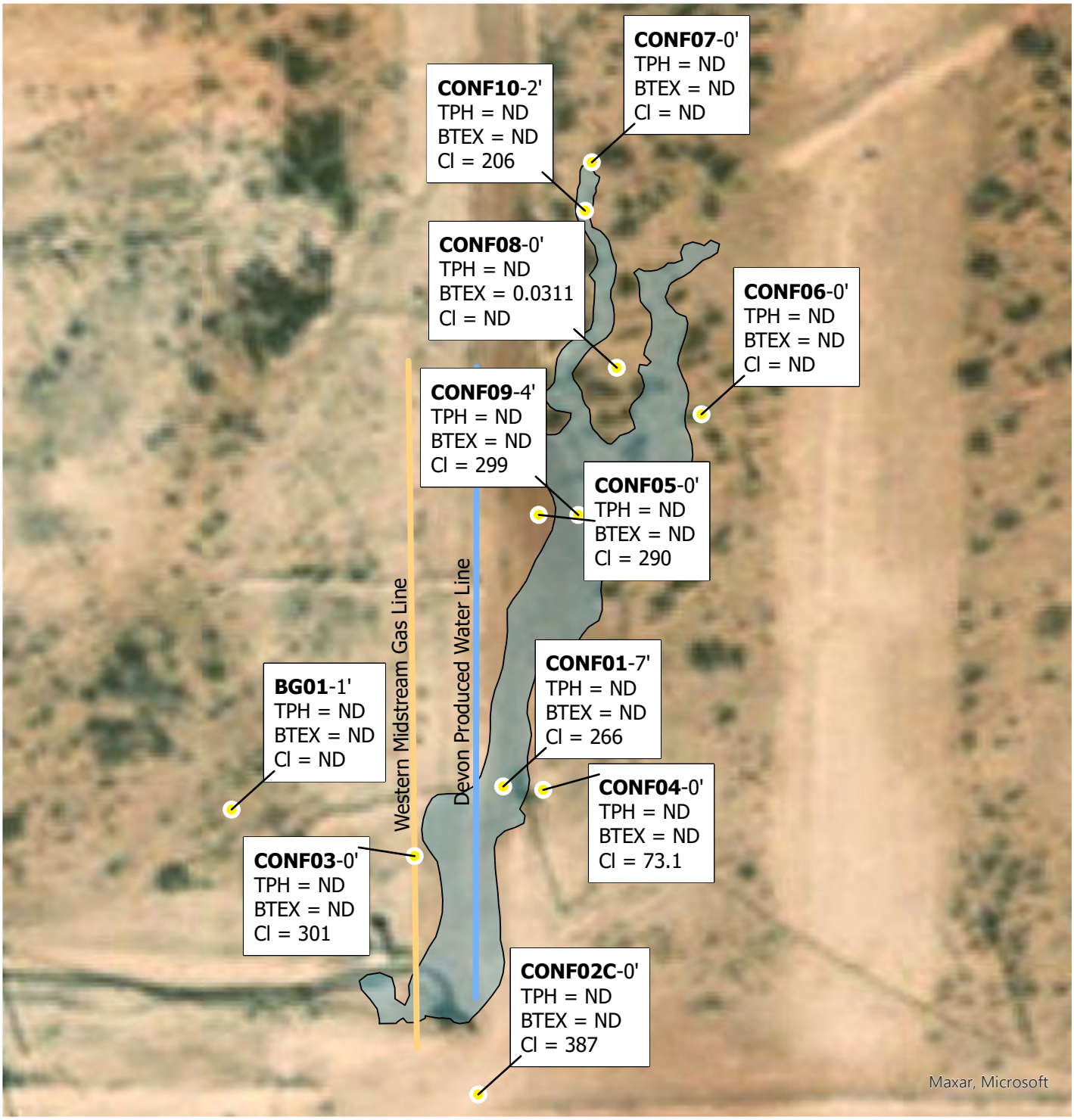

FIGURE 2.
DELINEATION SAMPLING

0 40 80 120 160 Feet

N

North Brushy Header
Incident ID: nAPP2134442133
GPS Coordinates: 32.079119, -103.944930
Eddy County, New Mexico
Devon Energy

LEGEND

- Sample Locations
- Westerm Midstream Gas line
- Devon Energy Produced Water Line
- Spill Area

WESCOM

TABLE

North Brushy Header | nAPP2134442133

Devon Energy | 03.18.2022

Table 1. Laboratory Analysis Results: Delineation Samples

Sample Description			Petroleum Hydrocarbons			Inorganic
			Volatile		Extractable	
Sample ID	Depth (ft.)	Date	Benzene (mk/kg)	Total BTEX (mk/kg)	TPH (mk/kg)	Chloride (mk/kg)
Closure Criteria			**10**	**50**	**100**	**600**
BG01	0	3/7/2022	ND	0.0259	ND	ND
BG01	1	3/7/2022	ND	ND	ND	ND
CONF01	7	3/18/2022	ND	ND	ND	266
CONF02C	0	3/7/2022	ND	ND	ND	387
CONF03	0	3/7/2022	ND	0.0396	ND	301
CONF04	0	3/7/2022	ND	ND	ND	73.1
CONF05	0	3/7/2022	ND	0.0276	ND	290
CONF06	0	3/7/2022	ND	ND	ND	ND
CONF07	0	3/7/2022	ND	ND	ND	ND
CONF08	0	3/7/2022	ND	0.0311	ND	ND
CONF09	4	3/18/2022	ND	ND	ND	229
CONF10	2	3/18/2022	ND	ND	ND	206

ABBREVIATIONS

BTEX — Benzene, Toluene, Ethylene, Xylene
DRO — Diesel Range Organics
ft. — Feet
TPH — Total Petroleum Hydrocarbons
GRO — Gasoline Range Organics
ND — Non-detect
mg/kg — Milligrams per Kilogram

Notes

Bold Red - Results are above closure criteria
Gray Highlight - Background Samples

ATTACHMENT A

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	nAPP2134442133
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party: WPX Energy Permian, LLC	OGRID: 246289
Contact Name: Jim Raley	Contact Telephone: 575-689-7597
Contact email: jim.raley@dvn.com	Incident # *(assigned by OCD)* nAPP2134442133
Contact mailing address: 5315 Buena Vista Dr., Carlsbad NM 88220	

Location of Release Source

Latitude 32.079119 Longitude -103.944930
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: North Brushy Header	Site Type: Produced Water Transfer Line
Date Release Discovered: November 29th, 2021	API# *(if applicable) N/A*

Unit Letter	Section	Township	Range	County
M	36	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) 0	Volume Recovered (bbls) 0
☒ Produced Water	Volume Released (bbls) 56	Volume Recovered (bbls) 0
	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: Hammer Union was not correctly tightened on newly installed line, allowing for release of fluids to pipeline ROW. (Release occurred at 32.079119, -103.944930 and traveled to North approx. 100')

Spill sqft. x (1 cubic yard/27 cubic feet) x (porosity) x (6.41187384 bbls fluid/1 cubic yard) = approximately 56 bbls released fluids.

State of New Mexico
Oil Conservation Division

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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? Volume exceeds 25 bbls.
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc) Yes. By email to Mike Bratcher and Emily Hernandez on 12/01/2021	

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: ____James Raley_____ Title: Environmental Specialist _____

Signature: _____ _____ Date: ___12/10/2021_____

email: ___jim.raley@dvn.com_____ Telephone: ___575-689-7597_____

OCD Only

Received by: _____ Date: _____

State of New Mexico
Oil Conservation Division

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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?	>105 (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.

Form C-141
Page 4

State of New Mexico
Oil Conservation Division

Incident ID	nAPP2134442133
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: Jim Raley Title: Environmental Specialist

Signature: Jim Raley Date: 3/7/2022

email: jim.raley@dvn.com Telephone: 575-689-7597

OCD Only

Received by: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	nAPP2134442133
District RP	
Facility ID	
Application ID	

Remediation Plan

Remediation Plan Checklist: ***Each of the following items must be included in the plan.***

☒ Detailed description of proposed remediation technique
☒ Scaled sitemap with GPS coordinates showing delineation points
☒ Estimated volume of material to be remediated
☒ Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
☒ Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

Deferral Requests Only: ***Each of the following items must be confirmed as part of any request for deferral of remediation.***

☐ Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.

☐ Extents of contamination must be fully delineated.

☐ Contamination does not cause an imminent risk to human health, the environment, or groundwater.

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: Jim Raley
Title: Environmental Specialist

Signature: Jim Raley
Date: 3/7/2022

email: jim.raley@dvn.com
Telephone: 575-689-7597

OCD Only

Received by: _____ Date: _____

☐ Approved ☒ Approved with Attached Conditions of Approval ☐ Denied ☐ Deferral Approved

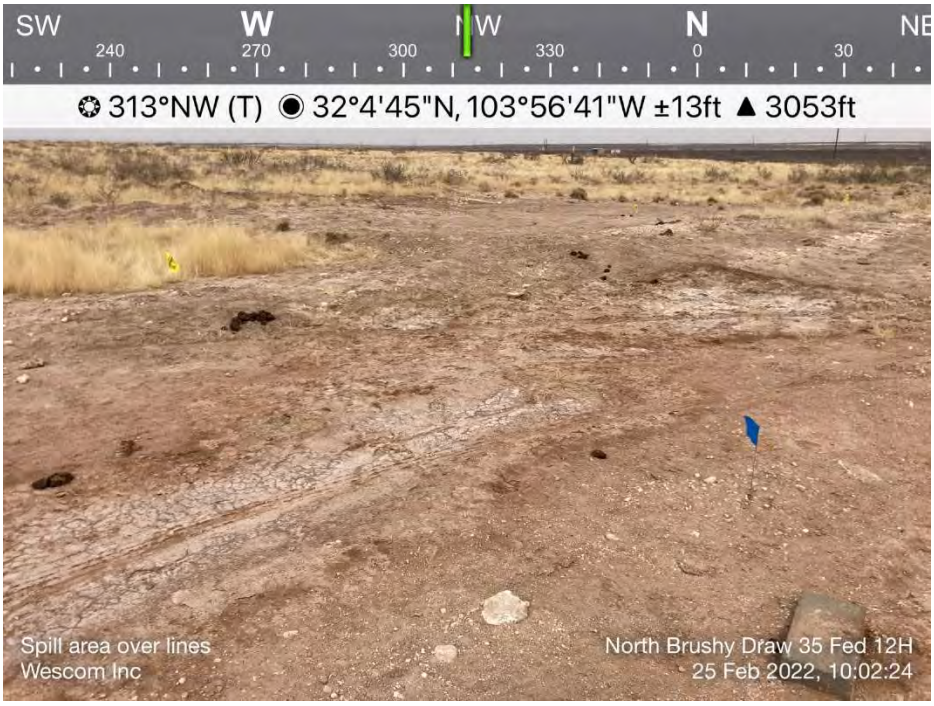
Signature: Jennifer Nobui
Date: 05/26/2022

ATTACHMENT B

Site Photos

Southeast Side of Spill Area

Northwest Side of Spill Area



Southeast Side of Spill Area

Northwest Side of Spill Area

Southeast Side of Spill Area

Northwest Side of Spill Area

Southeast Side of Spill Area

Northwest Side of Spill Area

ATTACHMENT C

Closure Criteria Supporting Documents

WPXENERGY

Earth Systems Response & Restoration

Site Investigation Report

Date of report:	1/5/2021	
Site Names:	RDX 16-25	Ross Draw Unit #38
	RDX 17 #3	Ross Draw Unit #55
	RDX Fed Com 17-44H	Ross Draw Unit #57
	RDX Fed Com 21-43	N Brushy Fed 35 #010H
County:	Eddy County, New Mexico	
Project No:	0397	

Site Activities

Earth Systems Response and Restoration (ESRR) field activities were conducted December 8th through the 10th in Eddy county, New Mexico. ESRR oversaw the advancement of one soil boring at the eight above-mentioned locations to an approximate depth of 105 feet (ft.) below grade surface utilizing an air-rotary drilling rig operated by a State of New Mexico licensed driller. Additionally, HRL Compliance Solutions (HRL) conducted on-site soil logging activities during the advancement of the soil borings. Please see the detailed lithologic descriptions attached.

Upon completion of the soil borings, a PVC casing fitted with 5 ft. of machine-slotted well screen at the bottom was inserted into each soil boring. The PVC casing was left in place for a minimum of 72 hours prior to being gauged by HRL Consulting on December 12th with a water level meter to determine the presence or absence of groundwater. Subsequent to gauging activities, each soil boring had the PVC casing removed and was then backfilled with its associated native soil cuttings to grade surface.

Conclusions

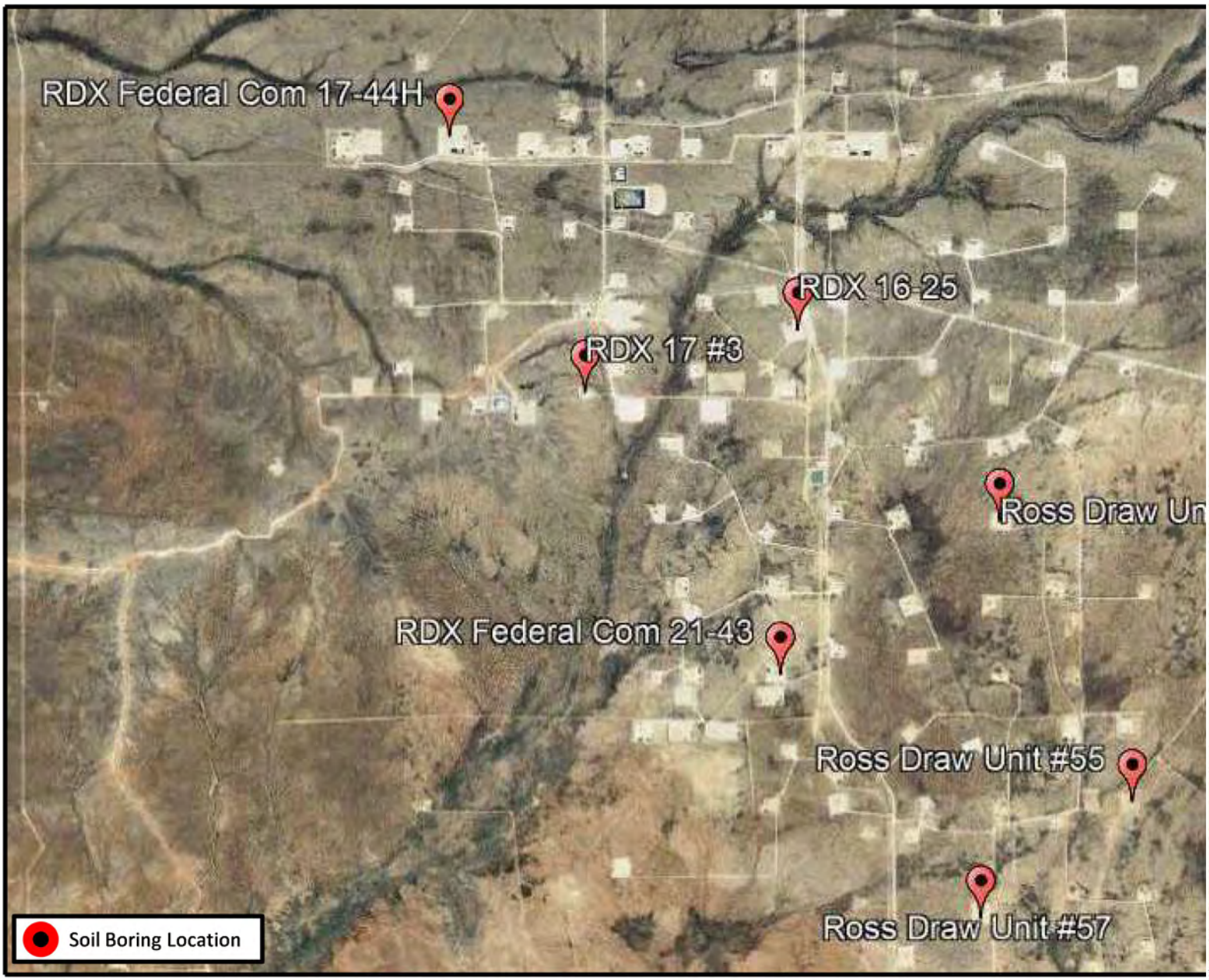
Groundwater was not detected in any of the eight soil borings as determined by utilizing a water level meter after 72 hours of development. It can be reasonably determined groundwater is deeper than 105 ft. bgs in the vicinity of the advanced soil borings.

Respectfully,

K. Williams

Kris Williams, CHMM, REM
Operations Manager

Attached: Drilling Locations Maps
Soil Boring Logs



Earth Systems
Response & Restoration

Drilling Location Site Map

RDX 16-25	(32.039900, -103.883337)	Ross Draw Unit #38
RDX 17 #3	(32.036765, -103.895993)	Ross Draw Unit #55
RDX Federal Com 17-44H	(32.049656, -103.904054)	Ross Draw Unit #57
RDX Federal Com 21-43	32.022571, -103.884371)	

Earth Systems
Response & Restoration

Drilling Location Site Map

North Brushy Federal 35 #010H (32.079909, -103.951386)
RDX Federal Com 17-44H (32.049656, -103.904054)

HRL COMPLIANCE SOLUTIONS

BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number: MW-1		Location: RDX 16-25	
Date: 12/10/2020		Client: WPX Energy	
Drilling Method: Air Rotary	Sampling Method: None	Logged By: J. Linn, PG	Drilled By: Talon LPE
Gravel Pack Type: 10/20 sand	Gravel Pack Depth Interval: 3 bags	Seal Type: None / Seal Depth Interval: None	Latitude: 32.0399004
Casing Type: PVC / Diameter: 2-inch / Depth Interval: 0-105 feet bgs		Boring Total Depth (ft. BGS): 110	Longitude: -103.8833368
Screen Type: PVC / Slot: 0.010-inch / Diameter: 2-inch / Depth Interval: 105-110 ft		Well Total Depth (ft. BGS): 110	Depth to Water (ft. BTOC): > 110 / DTW Date: 12/16/2020

Depth Interval (ft)	Recovery (ft)	Plasticity	Moisture	Odor	Staining	PID (ppm)	USCS	Sample ID	Lithology/Remarks
0	NM	L	D	N	N	NM	SW	NS	Pale orange to pink tan well graded sand with silt
5									
10									
15									
20									
25	NM	L	D	N	N	NM	SP	NS	Pale pinky orange poorly graded fine sand
30									
35									
40	NM	L	D	N	N	NM	SW	NS	Orange to pale red well graded sand with gravel
45									
50	NM	L	D	N	N	NM	SP	NS	Pale pinky orange poorly graded fine sand
55									
60	NM	L	D	N	N	NM	SP	NS	Pale pinky orange poorly graded fine sand with minor medium and coarse sand - TD: 110' bgs
65									
70									
75									
80									
85									
90									
95									
100									
105									
110									

Well Completion

HRL COMPLIANCE SOLUTIONS

BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number: MW-1		Location: RDX 17 #3	
Date: 12/8/2020		Client: WPX Energy	
Drilling Method: Air Rotary	Sampling Method: None	Logged By: J. Linn, PG	Drilled By: Talon LPE
Gravel Pack Type: 10/20 Sand	Gravel Pack Depth Interval: 3 Bags	Seal Type: None / Seal Depth Interval: None	Latitude: 32.036765
Casing Type: PVC / Diameter: 2-inch / Depth Interval: 0-102 feet bgs		Boring Total Depth (ft. BGS): 107	Longitude: -103.895993
Screen Type: PVC / Slot: 0.010-inch / Diameter: 2-inch / Depth Interval: 102-107 ft		Well Total Depth (ft. BGS): 107	Depth to Water (ft. BTOC): > 107 / DTW Date: 12/16/2020

Depth Interval (ft)	Recovery (ft)	Plasticity	Moisture	Odor	Staining	PID (ppm)	USCS	Sample ID	Lithology/Remarks
0	NM	L	D	N	N	NM	SP	NS	Pale orange poorly graded fine sand
5									
10									
15									
20									
25									
30	NM	L	D	N	N	NM	SP	NS	Same as above with slight increase in coarse sand and gravel
35									
40	NM	L	D	N	N	NM	SP	NS	Pale orange poorly graded fine sand with very slight silt
45									
50									
55	NM	L	D	N	N	NM	SP	NS	Pale orange poorly graded fine sand
60	NM	L	D	N	N	NM	SW	NS	Pale orange well graded fine sand
65	NM	M	SL M	N	N	NM	SM	NS	Pale red orange clayey silty fine sand with minor coarse sand and gravel
70									
75									
80									
85									
90	NM	L	SL M	N	N	NM	SP	NS	Pale orange poorly sorted fine sand - TD 107' BGS
95									
100									
105									

Well Completion

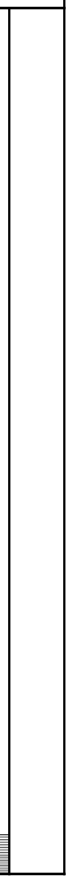
HRL COMPLIANCE SOLUTIONS

BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number: MW-1			Location: RDX Federal Com 17-44H
Date: 12/8/2020			Client: WPX Energy
Drilling Method: Air Rotary	Sampling Method: None	Logged By: J. Linn, PG	Drilled By: Talon LPE
Gravel Pack Type: 10/20 Sand	Gravel Pack Depth Interval: 3 Bags	Seal Type: None	Seal Depth Interval: None	Latitude: 32.049656
Casing Type: PVC	Diameter: 2-inch	Depth Interval: 0-105 ft bgs	Boring Total Depth (ft. BGS): 110	Longitude: -103.904054
Screen Type: PVC	Slot: 0.010-inch	Diameter: 2-inch	Depth Interval: 105 - 110 ft	Well Total Depth (ft. BGS): 110	Depth to Water (ft. BTOC): > 110	DTW Date: 12/16/2020

Depth Interval (ft)	Recovery (ft)	Plasticity	Moisture	Odor	Staining	PID (ppm)	USCS	Sample ID	Lithology/Remarks
0	NM	L	D	N	N	NM	CE	NS	Buff to pale pink colored caliche
5									
10									
15									
20									
25									
30									
35									
40									
45	NM	L	D	N	N	NM	SW	NS	Pinky orange well graded sand with minor silt
50									
55									
60									
65	NM	L	D	N	N	NM	SP	NS	Pinky pale brown orange poorly graded fine sand with minor silt
70									
75									
80	NM	L	D	N	N	NM	SW-SM SW-SC	NS	Pinky brown orange well-graded sand with silt and clay
85									
90									
95	NM	L	D	N	N	NM	SP	NS	Pinky pale brown orange poorly graded fine sand with minor silt - TD: 110' bgs
100									
105									

Well Completion



HRL COMPLIANCE SOLUTIONS

BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number: MW-1		Location: RDX Federal Com 21-43	
Date: 12/9/2020		Client: WPX Energy	
Drilling Method: Air Rotary	Sampling Method: None	Logged By: J. Linn, P.G.	Drilled By: Talon LPE
Gravel Pack Type: 10/20 Sand	Gravel Pack Depth Interval: 3 Bags	Seal Type: None / Seal Depth Interval: None	Latitude: 32.022571
Casing Type: PVC / Diameter: 2-inch / Depth Interval: 0-100 feet bgs		Boring Total Depth (ft. BGS): 110	Longitude: -103.884371
Screen Type: PVC / Slot: 0.010-inch / Diameter: 2-inch / Depth Interval: 100 - 105 ft		Well Total Depth (ft. BGS): 105	Depth to Water (ft. BTOC): > 105 / DTW Date: 12/16/2020

Depth Interval (ft)	Recovery (ft)	Plasticity	Moisture	Odor	Staining	PID (ppm)	USCS	Sample ID	Lithology/Remarks
0	NM	L	D	N	N	NM	SP	NS	Pale orange to tan poorly graded fine sand
5									
10									
15									
20	NM	H	D	N	N	NM	CL	NS	Pale orange/tan/pale red clay, dry, with silt, fine sand, and minor caliche
25	NM	L	D	N	N	NM	SP	NS	Pale orange to pale red poorly graded fine sand
30									
35									
40									
45									
50	NM	L	D	N	N	NM	SP	NS	Golden yellow poorly graded fine sand with minor silt and clay
55									
60									
65	NM	L	D	N	N	NM	SP	NS	Pale orange to pale red poorly graded fine sand with minor silt/clay
70									
75									
80	NM	M	D	N	N	NM	SC	NS	Buff to orange color fine sand with medium sand and clay
85									
90									
95	NM	H	D	N	N	NM	CL	NS	Brown orange clay with silt and fine sand
100	NM	H	D	N	N	NM	SC	NS	Golden yellow and buff colored clay with fine sand - TD Boring: 110' BGS; Sand 110' - 105' BGS
105									

Well Completion

HRL COMPLIANCE SOLUTIONS

BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number: MW-1		Location: Ross Draw Unit #38	
Date: 12/8/2020		Client: WPX Energy	
Drilling Method: Air Rotary	Sampling Method: None	Logged By: J. Linn, PG	Drilled By: Talon LPE
Gravel Pack Type: 10/20 Sand	Gravel Pack Depth Interval: 3 Bags	Seal Type: None / Seal Depth Interval: None	Latitude: 32.030300
Casing Type: PVC / Diameter: 2-inch / Depth Interval: 0-100 feet bgs		Boring Total Depth (ft. BGS): 105	Longitude: -103.871338
Screen Type: PVC / Slot: 0.010-inch / Diameter: 2-inch / Depth Interval: 100-105 ft		Well Total Depth (ft. BGS): 105	Depth to Water (ft. BTOC): > 105 / DTW Date: 12/16/2020

Depth Interval (ft)	Recovery (ft)	Plasticity	Moisture	Odor	Staining	PID (ppm)	USCS	Sample ID	Lithology/Remarks	Well Completion
0	NM	L	D	N	N	NM	SW	NS	Pale orange/pale pink to buff colored fine sand with minor medium and coarse sand	
5										
10										
15										
20	NM	L	D	N	N	NM	SP	NS	Pale orange/pale pink poorly graded fine sand	
25										
30										
35	NM	L	D	N	N	NM	SP	NS	Tan/pale brown/pale orange poorly graded fine sand	
40										
45										
50										
55										
60										
65										
70	NM	L	D	N	N	NM	SP	NS	Brick red brown poorly graded fine sand	
75										
80										
85										
90										
95										
100	NM	L	D	N	N	NM	SP	NS	Tan/pale brown/pale orange poorly graded fine sand - TD 105' BGS	

HRL COMPLIANCE SOLUTIONS

BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number: MW-1		Location: Ross Draw Unit #55	
Date: 12/9/2020		Client: WPX Energy	
Drilling Method: Air Rotary	Sampling Method: None	Logged By: J. Linn, PG	Drilled By: Talon LPE
Gravel Pack Type: 10/20 Sand	Gravel Pack Depth Interval: 3 Bags	Seal Type: None / Seal Depth Interval: None	Latitude: 32.016165
Casing Type: PVC / Diameter: 2-inch / Depth Interval: 0-101'7"		Boring Total Depth (ft. BGS): 106'7"	Longitude: -103.86346
Screen Type: PVC / Slot: 0.010-inch / Diameter: 2-inch / Depth Interval: 101'7" - 106'7"		Well Total Depth (ft. BGS): 106'7"	Depth to Water (ft. BTOC): >106' 7" / DTW Date: 12/16/2020

Depth Interval (ft)	Recovery (ft)	Plasticity	Moisture	Odor	Staining	PID (ppm)	USCS	Sample ID	Lithology/Remarks	Well Completion
0	NM	L	D	N	N	NM	SP	NS	Pale pink to buff colored poorly graded sand with minor silt	
5										
10										
15										
20	NM	L	D	N	N	NM	SW	NS	Pale tan orange well graded fine sand with minor medium and coarse sand	
25										
30										
35	NM	L	D	N	N	NM	SP	NS	Pale orange brown poorly graded fine sand with minor gravel	
40										
45										
50										
55										
60										
65	NM	L	D	N	N	NM	SP	NS	Grey poorly graded fine sand with minor gravel	
70										
75										
80										
85										
90	NM	L	D	N	N	NM	SP	NS	Darker grey poorly graded fine sand with minor silt and minor medium sand	
95										
100	NM	M	D	N	N	NM	SC	NS	Dark grey fine sand with moderate silt and clay - TD 106'7"	
106'7"										

HRL COMPLIANCE SOLUTIONS

BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number: MW-1		Location: Ross Draw Unit #57	
Date: 12/9/2020		Client: WPX Energy	
Drilling Method: Air Rotary	Sampling Method: None	Logged By: J. Linn, PG	Drilled By: Talon LPE
Gravel Pack Type: 10/20 Sand	Gravel Pack Depth Interval: 3 Bags	Seal Type: None / Seal Depth Interval: None	Latitude: 32.01032
Casing Type: PVC / Diameter: 2-inch / Depth Interval: 0-105 feet bgs		Boring Total Depth (ft. BGS): 110	Longitude: -103.87246
Screen Type: PVC / Slot: 0.010-inch / Diameter: 2-inch / Depth Interval: 105-110 ft		Well Total Depth (ft. BGS): 110	Depth to Water (ft. BTOC): > 110 / DTW Date: 12/16/2020

Depth Interval (ft)	Recovery (ft)	Plasticity	Moisture	Odor	Staining	PID (ppm)	USCS	Sample ID	Lithology/Remarks	Well Completion
0	NM	L/M	D	N	N	NM	SM	NS	Tan/pale orange/pale brown poorly graded fine sand	
5										
10										
15										
20										
25										
30										
35										
40	NM	M	D	N	N	NM	SW	NS	Hard, dry pale pink orange well graded sand with gravel	
45										
50	NM	M	D	N	N	NM	SM	NS	Pale orange red tan silty fine sand	
55										
60	NM	L	D	N	N	NM	SW	NS	Dark brown greyish well graded sand	
65										
70	NM	L/M	D to SL M	N	N	NM	SW	NS	Grey well graded sand	
75										
80										
85										
90										
95										
100	NM	L/M	D	N	N	NM	SM	NS	Tan/pale orange/pale brown poorly graded fine sand - TD 110' bgs	
105										

HRL COMPLIANCE SOLUTIONS

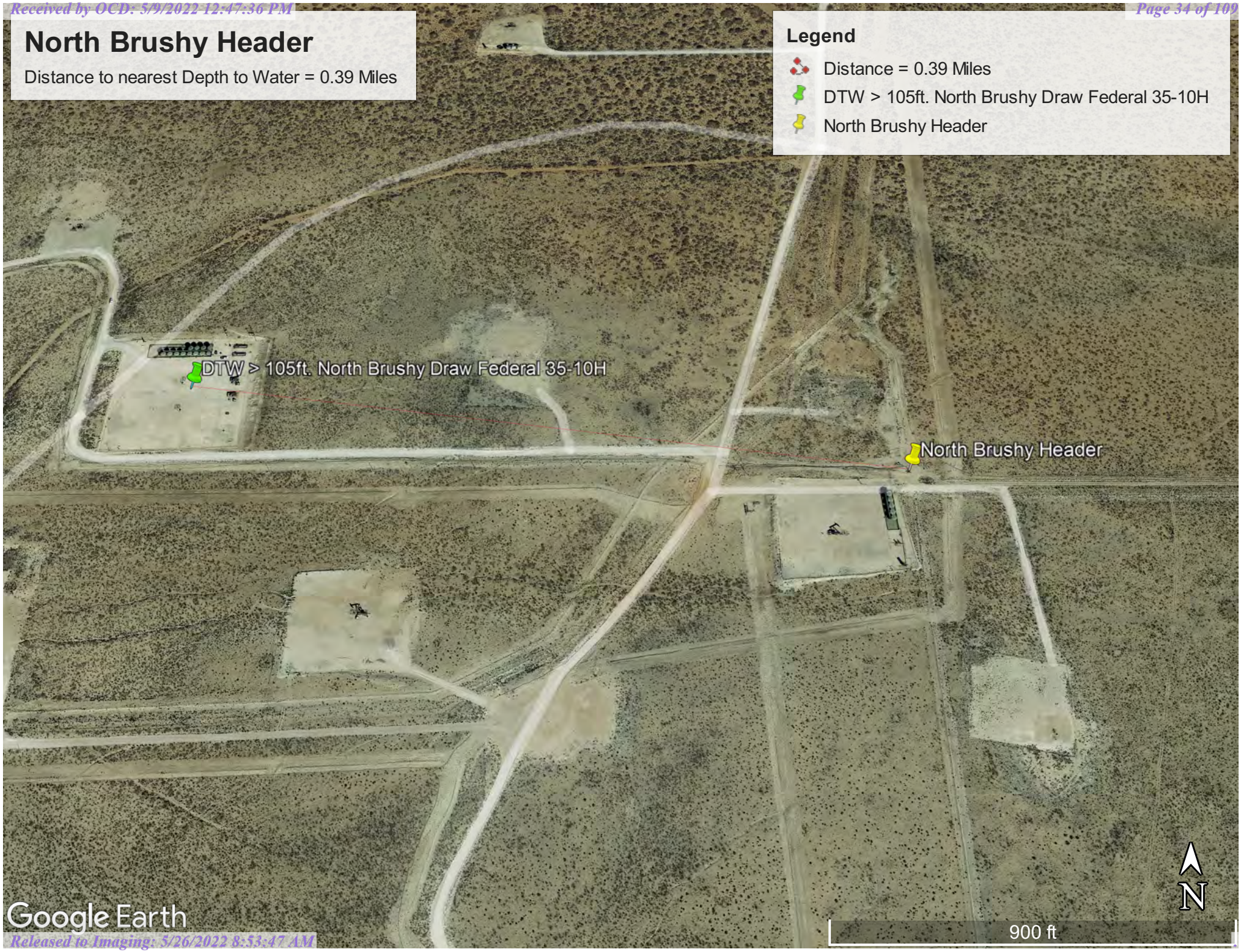
BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number: MW-1				Location: North Brushy Federal 35 # 010H	
Date: 12/8/2020				Client: WPX Energy	
Drilling Method: Air Rotary	Sampling Method: None	Logged By: J. Linn, PG		Drilled By: Talon LPE	
Gravel Pack Type: 10/20 Sand	Gravel Pack Depth Interval: 3 Bags	Seal Type: None	Seal Depth Interval: None	Latitude: 32.079909	
Casing Type: PVC	Diameter: 2-inch	Depth Interval: 0-100 feet bgs	Boring Total Depth (ft. BGS): 105	Longitude: -103.951386	
Screen Type: PVC	Slot: 0.010-inch	Diameter: 2-inch / Depth Interval: 100 - 105 ft	Well Total Depth (ft. BGS): 105	Depth to Water (ft. BTOC): > 105	DTW Date: 12/16/2020

Depth Interval (ft)	Recovery (ft)	Plasticity	Moisture	Odor	Staining	PID (ppm)	USCS	Sample ID	Lithology/Remarks	Well Completion
0	NM	L	D	N	N	NM	CE	NS	Buff to pale pink caliche	
5										
10										
15										
20	NM	L	D	N	N	NM	SM	NS	Tan to pale red silty sand	
25										
30										
35										
40										
45										
50										
55	NM	M	M	N	N	NM	ML	NS	Tan to pale red sandy silt with minor medium sand	
60										
65	NM	H	M	N	N	NM	CL	NS	Tan clay with minor gravel	
70	NM	L	D	N	N	NM	SP	NS	Pale red poorly graded fine sand with minor silt	
75										
80										
85	NM	H	D/SLM	N	N	NM	CL	NS	Grey sandy lean clay with minor medium sand and minor angular gravel	
90	NM	M/H	M	N	N	NM	CL	NS	Brown with orange sandy lean clay with minor medium sand and angular gravel - TD Boring: 105'	
95										
100										

North Brushy Header

Distance to nearest Depth to Water = 0.39 Miles



U.S. Fish and Wildlife Service
National Wetlands Inventory

North Brushy Header - Riverine 694ft

December 3, 2021

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

National Wetlands Inventory (NWI)
This page was produced by the NWI mapper

U.S. Fish and Wildlife Service
National Wetlands Inventory

North Brushy Header - FW Pond 5,178ft

December 3, 2021

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

National Wetlands Inventory (NWI)
This page was produced by the NWI mapper

U.S. Fish and Wildlife Service
National Wetlands Inventory

North Brushy Header - Wetland 11,122ft

December 3, 2021

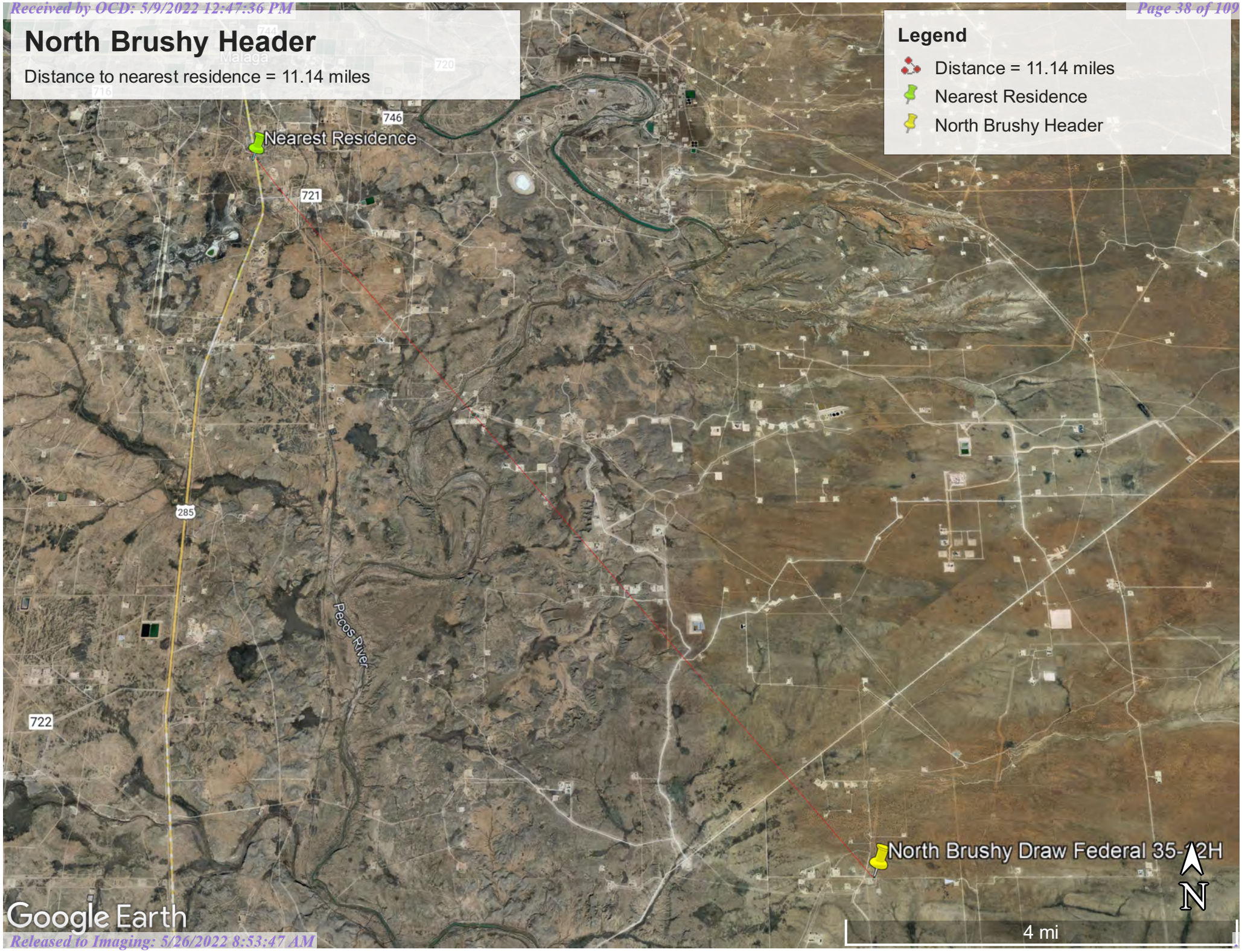
Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

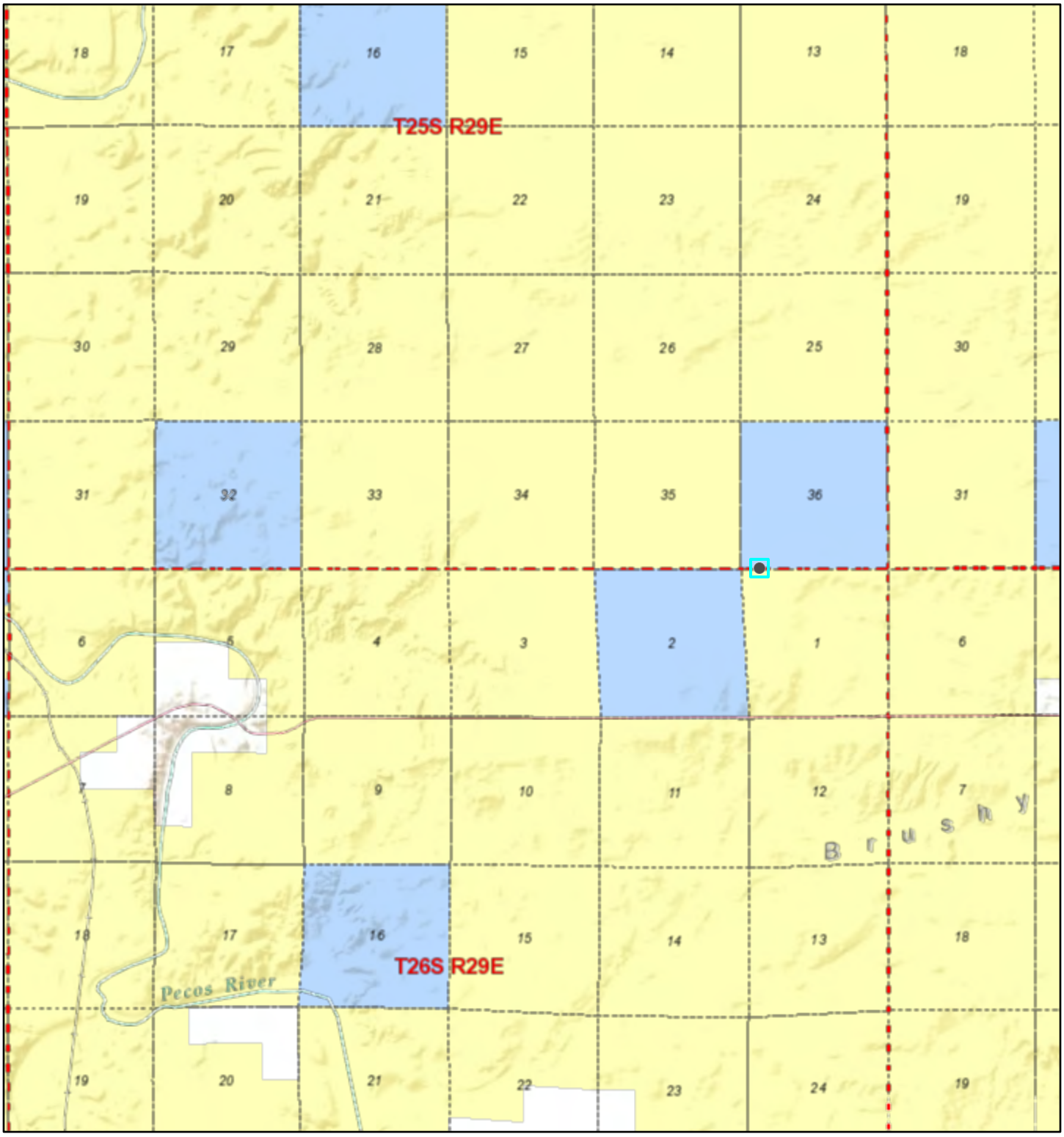
This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

North Brushy Header

Distance to nearest residence = 11.14 miles



Active Mines Near North Brushy Header



12/1/2021, 8:38:31 AM

1:72,224

0 0.5 1 2 mi

0 0.75 1.5 3 km

Township / Range
Sections

Land Ownership
Bureau of Land Management
Bureau of Reclamation
Department of Agriculture
Department of Defense
Department of Energy
National Park Service
Private Land
State Game and Fish
State Land
State Parks
Tribal

U.S. Bureau of Land Management - New Mexico State Office, Sources: Esri, USGS, NOAA, Sources: Esri, Garmin, USGS, NPS

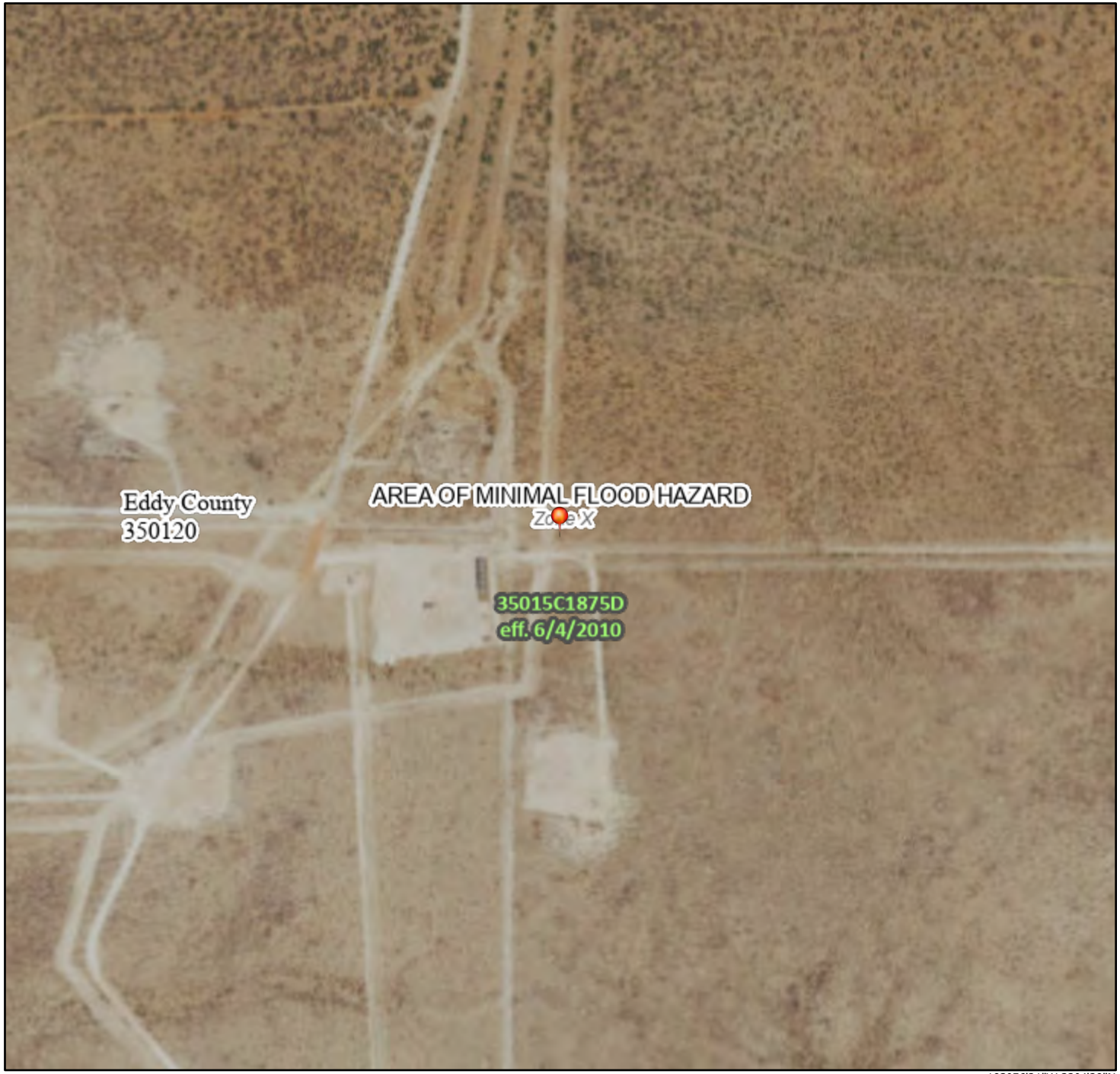
EMNRD MMD GIS Coordinator

New Energy, Minerals and Natural Resources Department (http://nm-emnrd.maps.arcgis.com/apps/webappviewer/index.html?id=1b5e577974664d689b47790897ca2795)

National Flood Hazard Layer FIRMette

FEMA

103°56'58"W 32°5'N



103°56'21"W 32°4'29"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 / 17.5 Cross Sections with 1% Annual Chance / Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 12/1/2021 at 10:40 AM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

ATTACHMENT D

Karst Map

North Brushy Header

Karst Potential = Medium

Legend

- 01 Low
- 02 Medium
- 03 High
- North Brushy Header

North Brushy Header

Google Earth

400 ft

N

ATTACHMENT E

Envirotech Inc. Laboratory Analysis Reports

Report to:

Ashley Giovengo

5796 U.S. Hwy 64
Farmington, NM 87401

Phone: (505) 632-1881
Envirotech-inc.com

envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Devon Energy - Carlsbad

Project Name:	North Brushy Header
Work Order:	E203008
Job Number:	01058-0007
Received:	3/2/2022

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
3/8/22

Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise.
Statement of Data Authenticity: Envirotech Inc, attests the data reported has not been altered in any way.
Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech Inc.
Envirotech Inc, holds the Utah TNI certification NM00979 for data reported.
Envirotech Inc, holds the Texas TNI certification T104704557 for data reported.
Envirotech Inc, holds the NM SDWA certification for data reported. (Lab #NM00979)

Date Reported: 3/8/22

Ashley Giovengo
6488 7 Rivers Hwy
Artesia, NM 88210

Project Name: North Brushy Header
Workorder: E203008
Date Received: 3/2/2022 10:20:00AM

Ashley Giovengo,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 3/2/2022 10:20:00AM, under the Project Name: North Brushy Header.

The analytical test results summarized in this report with the Project Name: North Brushy Header apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

Please review the Chain-of-Custody (COC) and Sample Receipt Checklist (SRC) for any issues reguarding sample receipt temperature, containers, preservation etc. To best understand your test results, review the entire report summarizing your sample data and the associated quality control batch data.

All reported data in this analytical report were analyzed according to the referenced method(s) and are in compliance with the latest NELAC/TNI standards, unless otherwise noted. Samples or analytical quality control parameters not meeting specific QC criteria are qualified with a data flag. Data flag definitions are located in the Notes and Definitions section of this analytical report.

If you have any questions concerning this report, please feel free to contact Envirotech, Inc.

Respectfully,

Walter Hinchman
Laboratory Director
Office: 505-632-1881
Cell: 775-287-1762
whinchman@envirotech-inc.com

Raina Schwanz
Laboratory Administrator
Office: 505-632-1881
rainaschwanz@envirotech-inc.com

Alexa Michaels
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labadmin@envirotech-inc.com

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ljarboe@envirotech-inc.com

West Texas Midland/Odessa Area
Rayny Hagan
Technical Representative
Office: 505-421-LABS(5227)

Envirotech Web Address: www.envirotech-inc.com

Table of Contents

Sample Summary

Devon Energy - Carlsbad	Project Name:	North Brushy Header	**Reported:**
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	03/08/22 16:04

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
BG01 - 0'	E203008-01A	Soil	02/25/22	03/02/22	Glass Jar, 4 oz.
BG01 - 1'	E203008-02A	Soil	02/25/22	03/02/22	Glass Jar, 4 oz.
CONF02C - 0'	E203008-03A	Soil	02/25/22	03/02/22	Glass Jar, 4 oz.
CONF03 - 0'	E203008-04A	Soil	02/25/22	03/02/22	Glass Jar, 4 oz.
CONF04 - 0'	E203008-05A	Soil	02/25/22	03/02/22	Glass Jar, 4 oz.
CONF05 - 0'	E203008-06A	Soil	02/25/22	03/02/22	Glass Jar, 4 oz.
CONF06 - 0'	E203008-07A	Soil	02/25/22	03/02/22	Glass Jar, 4 oz.
CONF07 - 0'	E203008-08A	Soil	02/25/22	03/02/22	Glass Jar, 4 oz.
CONF08 - 0'	E203008-09A	Soil	02/25/22	03/02/22	Glass Jar, 4 oz.

Sample Data

Devon Energy - Carlsbad	Project Name:	North Brushy Header	
6488 7 Rivers Hwy	Project Number:	01058-0007	**Reported:**
Artesia NM, 88210	Project Manager:	Ashley Giovengo	3/8/2022 4:04:24PM

BG01 - 0'

E203008-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: RKS			Batch: 2210039
Benzene	ND	0.0250	1	03/02/22	03/07/22	
Ethylbenzene	ND	0.0250	1	03/02/22	03/07/22	
Toluene	ND	0.0250	1	03/02/22	03/07/22	
o-Xylene	**0.0259**	0.0250	1	03/02/22	03/07/22	
p,m-Xylene	ND	0.0500	1	03/02/22	03/07/22	
Total Xylenes	**0.0259**	0.0250	1	03/02/22	03/07/22	
Surrogate: 4-Bromochlorobenzene-PID		*92.7 %*	*70-130*	*03/02/22*	*03/07/22*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2210039
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/02/22	03/07/22	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*111 %*	*70-130*	*03/02/22*	*03/07/22*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: JL			Batch: 2210032
Diesel Range Organics (C10-C28)	ND	25.0	1	03/02/22	03/04/22	
Oil Range Organics (C28-C36)	ND	50.0	1	03/02/22	03/04/22	
Surrogate: n-Nonane		*126 %*	*50-200*	*03/02/22*	*03/04/22*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: RAS			Batch: 2210043
Chloride	ND	20.0	1	03/03/22	03/03/22	

Sample Data

Devon Energy - Carlsbad	Project Name:	North Brushy Header	
6488 7 Rivers Hwy	Project Number:	01058-0007	**Reported:**
Artesia NM, 88210	Project Manager:	Ashley Giovengo	3/8/2022 4:04:24PM

BG01 - 1'

E203008-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: RKS			Batch: 2210039
Benzene	ND	0.0250	1	03/02/22	03/07/22	
Ethylbenzene	ND	0.0250	1	03/02/22	03/07/22	
Toluene	ND	0.0250	1	03/02/22	03/07/22	
o-Xylene	ND	0.0250	1	03/02/22	03/07/22	
p,m-Xylene	ND	0.0500	1	03/02/22	03/07/22	
Total Xylenes	ND	0.0250	1	03/02/22	03/07/22	
Surrogate: 4-Bromochlorobenzene-PID		*93.5 %*	*70-130*	*03/02/22*	*03/07/22*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2210039
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/02/22	03/07/22	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*110 %*	*70-130*	*03/02/22*	*03/07/22*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: JL			Batch: 2211011
Diesel Range Organics (C10-C28)	ND	25.0	1	03/02/22	03/08/22	
Oil Range Organics (C28-C36)	ND	50.0	1	03/02/22	03/08/22	
Surrogate: n-Nonane		*108 %*	*50-200*	*03/02/22*	*03/08/22*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: RAS			Batch: 2210043
Chloride	ND	20.0	1	03/03/22	03/03/22	

Sample Data

Devon Energy - Carlsbad	Project Name:	North Brushy Header	
6488 7 Rivers Hwy	Project Number:	01058-0007	**Reported:**
Artesia NM, 88210	Project Manager:	Ashley Giovengo	3/8/2022 4:04:24PM

CONF02C - 0'

E203008-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: RKS			Batch: 2210039
Benzene	ND	0.0250	1	03/02/22	03/07/22	
Ethylbenzene	ND	0.0250	1	03/02/22	03/07/22	
Toluene	ND	0.0250	1	03/02/22	03/07/22	
o-Xylene	ND	0.0250	1	03/02/22	03/07/22	
p,m-Xylene	ND	0.0500	1	03/02/22	03/07/22	
Total Xylenes	ND	0.0250	1	03/02/22	03/07/22	
Surrogate: 4-Bromochlorobenzene-PID		*92.4 %*	*70-130*	*03/02/22*	*03/07/22*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2210039
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/02/22	03/07/22	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*99.9 %*	*70-130*	*03/02/22*	*03/07/22*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: JL			Batch: 2210032
Diesel Range Organics (C10-C28)	ND	25.0	1	03/02/22	03/04/22	
Oil Range Organics (C28-C36)	ND	50.0	1	03/02/22	03/04/22	
Surrogate: n-Nonane		*113 %*	*50-200*	*03/02/22*	*03/04/22*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: RAS			Batch: 2210043
Chloride	**387**	20.0	1	03/03/22	03/03/22	

Sample Data

Devon Energy - Carlsbad	Project Name:	North Brushy Header	
6488 7 Rivers Hwy	Project Number:	01058-0007	**Reported:**
Artesia NM, 88210	Project Manager:	Ashley Giovengo	3/8/2022 4:04:24PM

CONF03 - 0'

E203008-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: RKS			Batch: 2210039
Benzene	ND	0.0250	1	03/02/22	03/07/22	
Ethylbenzene	ND	0.0250	1	03/02/22	03/07/22	
Toluene	ND	0.0250	1	03/02/22	03/07/22	
o-Xylene	**0.0396**	0.0250	1	03/02/22	03/07/22	
p,m-Xylene	ND	0.0500	1	03/02/22	03/07/22	
Total Xylenes	**0.0396**	0.0250	1	03/02/22	03/07/22	
Surrogate: 4-Bromochlorobenzene-PID		*91.4 %*	*70-130*	*03/02/22*	*03/07/22*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2210039
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/02/22	03/07/22	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*112 %*	*70-130*	*03/02/22*	*03/07/22*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: JL			Batch: 2210032
Diesel Range Organics (C10-C28)	ND	25.0	1	03/02/22	03/04/22	
Oil Range Organics (C28-C36)	ND	50.0	1	03/02/22	03/04/22	
Surrogate: n-Nonane		*125 %*	*50-200*	*03/02/22*	*03/04/22*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: RAS			Batch: 2210043
Chloride	**301**	20.0	1	03/03/22	03/04/22	

Sample Data

Devon Energy - Carlsbad	Project Name:	North Brushy Header	
6488 7 Rivers Hwy	Project Number:	01058-0007	**Reported:**
Artesia NM, 88210	Project Manager:	Ashley Giovengo	3/8/2022 4:04:24PM

CONF04 - 0'

E203008-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: RKS			Batch: 2210039
Benzene	ND	0.0250	1	03/02/22	03/07/22	
Ethylbenzene	ND	0.0250	1	03/02/22	03/07/22	
Toluene	ND	0.0250	1	03/02/22	03/07/22	
o-Xylene	ND	0.0250	1	03/02/22	03/07/22	
p,m-Xylene	ND	0.0500	1	03/02/22	03/07/22	
Total Xylenes	ND	0.0250	1	03/02/22	03/07/22	
Surrogate: 4-Bromochlorobenzene-PID		*93.4 %*	*70-130*	*03/02/22*	*03/07/22*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2210039
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/02/22	03/07/22	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*99.6 %*	*70-130*	*03/02/22*	*03/07/22*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: JL			Batch: 2210032
Diesel Range Organics (C10-C28)	ND	25.0	1	03/02/22	03/04/22	
Oil Range Organics (C28-C36)	ND	50.0	1	03/02/22	03/04/22	
Surrogate: n-Nonane		*107 %*	*50-200*	*03/02/22*	*03/04/22*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: RAS			Batch: 2210043
Chloride	**73.1**	20.0	1	03/03/22	03/04/22	

Sample Data

Devon Energy - Carlsbad	Project Name:	North Brushy Header	
6488 7 Rivers Hwy	Project Number:	01058-0007	**Reported:**
Artesia NM, 88210	Project Manager:	Ashley Giovengo	3/8/2022 4:04:24PM

CONF05 - 0'

E203008-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: RKS			Batch: 2210039
Benzene	ND	0.0250	1	03/02/22	03/07/22	
Ethylbenzene	ND	0.0250	1	03/02/22	03/07/22	
Toluene	ND	0.0250	1	03/02/22	03/07/22	
o-Xylene	**0.0276**	0.0250	1	03/02/22	03/07/22	
p,m-Xylene	ND	0.0500	1	03/02/22	03/07/22	
Total Xylenes	**0.0276**	0.0250	1	03/02/22	03/07/22	
Surrogate: 4-Bromochlorobenzene-PID		*93.1 %*	*70-130*	*03/02/22*	*03/07/22*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2210039
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/02/22	03/07/22	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*102 %*	*70-130*	*03/02/22*	*03/07/22*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: JL			Batch: 2210032
Diesel Range Organics (C10-C28)	ND	25.0	1	03/02/22	03/04/22	
Oil Range Organics (C28-C36)	ND	50.0	1	03/02/22	03/04/22	
Surrogate: n-Nonane		*120 %*	*50-200*	*03/02/22*	*03/04/22*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: RAS			Batch: 2210043
Chloride	**290**	20.0	1	03/03/22	03/04/22	

Sample Data

Devon Energy - Carlsbad	Project Name:	North Brushy Header	
6488 7 Rivers Hwy	Project Number:	01058-0007	**Reported:**
Artesia NM, 88210	Project Manager:	Ashley Giovengo	3/8/2022 4:04:24PM

CONF06 - 0'

E203008-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: RKS			Batch: 2210039
Benzene	ND	0.0250	1	03/02/22	03/07/22	
Ethylbenzene	ND	0.0250	1	03/02/22	03/07/22	
Toluene	ND	0.0250	1	03/02/22	03/07/22	
o-Xylene	ND	0.0250	1	03/02/22	03/07/22	
p,m-Xylene	ND	0.0500	1	03/02/22	03/07/22	
Total Xylenes	ND	0.0250	1	03/02/22	03/07/22	
Surrogate: 4-Bromochlorobenzene-PID		*93.0 %*	*70-130*	*03/02/22*	*03/07/22*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2210039
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/02/22	03/07/22	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*101 %*	*70-130*	*03/02/22*	*03/07/22*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: JL			Batch: 2210032
Diesel Range Organics (C10-C28)	ND	25.0	1	03/02/22	03/04/22	
Oil Range Organics (C28-C36)	ND	50.0	1	03/02/22	03/04/22	
Surrogate: n-Nonane		*120 %*	*50-200*	*03/02/22*	*03/04/22*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: RAS			Batch: 2210043
Chloride	ND	20.0	1	03/03/22	03/04/22	

Sample Data

Devon Energy - Carlsbad	Project Name:	North Brushy Header	
6488 7 Rivers Hwy	Project Number:	01058-0007	**Reported:**
Artesia NM, 88210	Project Manager:	Ashley Giovengo	3/8/2022 4:04:24PM

CONF07 - 0'

E203008-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: RKS			Batch: 2210039
Benzene	ND	0.0250	1	03/02/22	03/07/22	
Ethylbenzene	ND	0.0250	1	03/02/22	03/07/22	
Toluene	ND	0.0250	1	03/02/22	03/07/22	
o-Xylene	ND	0.0250	1	03/02/22	03/07/22	
p,m-Xylene	ND	0.0500	1	03/02/22	03/07/22	
Total Xylenes	ND	0.0250	1	03/02/22	03/07/22	
Surrogate: 4-Bromochlorobenzene-PID		*94.0 %*	*70-130*	*03/02/22*	*03/07/22*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2210039
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/02/22	03/07/22	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*98.6 %*	*70-130*	*03/02/22*	*03/07/22*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: JL			Batch: 2210032
Diesel Range Organics (C10-C28)	ND	25.0	1	03/02/22	03/04/22	
Oil Range Organics (C28-C36)	ND	50.0	1	03/02/22	03/04/22	
Surrogate: n-Nonane		*125 %*	*50-200*	*03/02/22*	*03/04/22*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: RAS			Batch: 2210043
Chloride	ND	20.0	1	03/03/22	03/04/22	

Sample Data

Devon Energy - Carlsbad	Project Name:	North Brushy Header	
6488 7 Rivers Hwy	Project Number:	01058-0007	**Reported:**
Artesia NM, 88210	Project Manager:	Ashley Giovengo	3/8/2022 4:04:24PM

CONF08 - 0'

E203008-09

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: RKS			Batch: 2210039
Benzene	ND	0.0250	1	03/02/22	03/07/22	
Ethylbenzene	ND	0.0250	1	03/02/22	03/07/22	
Toluene	ND	0.0250	1	03/02/22	03/07/22	
o-Xylene	**0.0311**	0.0250	1	03/02/22	03/07/22	
p,m-Xylene	ND	0.0500	1	03/02/22	03/07/22	
Total Xylenes	**0.0311**	0.0250	1	03/02/22	03/07/22	
Surrogate: 4-Bromochlorobenzene-PID		*94.2 %*	*70-130*	*03/02/22*	*03/07/22*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2210039
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/02/22	03/07/22	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*102 %*	*70-130*	*03/02/22*	*03/07/22*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: JL			Batch: 2210032
Diesel Range Organics (C10-C28)	ND	25.0	1	03/02/22	03/04/22	
Oil Range Organics (C28-C36)	ND	50.0	1	03/02/22	03/04/22	
Surrogate: n-Nonane		*127 %*	*50-200*	*03/02/22*	*03/04/22*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: RAS			Batch: 2210043
Chloride	ND	20.0	1	03/03/22	03/04/22	

QC Summary Data

Devon Energy - Carlsbad	Project Name:	North Brushy Header	**Reported:**
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	3/8/2022 4:04:24PM

Volatile Organics by EPA 8021B

Analyst: RKS

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2210039-BLK1)									Prepared: 03/02/22 Analyzed: 03/07/22
Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: 4-Bromochlorobenzene-PID	*7.15*		*8.00*		*89.4*	*70-130*			
LCS (2210039-BS1)									Prepared: 03/02/22 Analyzed: 03/07/22
Benzene	4.69	0.0250	5.00		93.7	70-130			
Ethylbenzene	4.96	0.0250	5.00		99.2	70-130			
Toluene	5.18	0.0250	5.00		104	70-130			
o-Xylene	4.89	0.0250	5.00		97.8	70-130			
p,m-Xylene	10.1	0.0500	10.0		101	70-130			
Total Xylenes	15.0	0.0250	15.0		99.7	70-130			
Surrogate: 4-Bromochlorobenzene-PID	*7.17*		*8.00*		*89.6*	*70-130*			
Matrix Spike (2210039-MS1)				**Source: E203008-04**					Prepared: 03/02/22 Analyzed: 03/07/22
Benzene	4.62	0.0250	5.00	ND	92.4	54-133			
Ethylbenzene	4.91	0.0250	5.00	ND	98.2	61-133			
Toluene	5.12	0.0250	5.00	ND	102	61-130			
o-Xylene	4.87	0.0250	5.00	0.0396	96.7	63-131			
p,m-Xylene	9.99	0.0500	10.0	ND	99.9	63-131			
Total Xylenes	14.9	0.0250	15.0	0.0396	98.8	63-131			
Surrogate: 4-Bromochlorobenzene-PID	*7.34*		*8.00*		*91.8*	*70-130*			
Matrix Spike Dup (2210039-MSD1)				**Source: E203008-04**					Prepared: 03/02/22 Analyzed: 03/07/22
Benzene	4.72	0.0250	5.00	ND	94.4	54-133	2.16	20	
Ethylbenzene	5.01	0.0250	5.00	ND	100	61-133	2.12	20	
Toluene	5.21	0.0250	5.00	ND	104	61-130	1.75	20	
o-Xylene	4.98	0.0250	5.00	0.0396	98.8	63-131	2.15	20	
p,m-Xylene	10.2	0.0500	10.0	ND	102	63-131	1.99	20	
Total Xylenes	15.2	0.0250	15.0	0.0396	101	63-131	2.04	20	
Surrogate: 4-Bromochlorobenzene-PID	*7.47*		*8.00*		*93.4*	*70-130*			

QC Summary Data

Devon Energy - Carlsbad	Project Name:	North Brushy Header	**Reported:**
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	3/8/2022 4:04:24PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: RKS

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2210039-BLK1)									Prepared: 03/02/22 Analyzed: 03/07/22
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	*9.00*		*8.00*		*112*	*70-130*			
LCS (2210039-BS2)									Prepared: 03/02/22 Analyzed: 03/07/22
Gasoline Range Organics (C6-C10)	53.3	20.0	50.0		107	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*9.17*		*8.00*		*115*	*70-130*			
Matrix Spike (2210039-MS2)				**Source: E203008-04**					Prepared: 03/02/22 Analyzed: 03/07/22
Gasoline Range Organics (C6-C10)	54.4	20.0	50.0	ND	109	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*8.92*		*8.00*		*112*	*70-130*			
Matrix Spike Dup (2210039-MSD2)				**Source: E203008-04**					Prepared: 03/02/22 Analyzed: 03/07/22
Gasoline Range Organics (C6-C10)	54.3	20.0	50.0	ND	109	70-130	0.0989	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	*8.99*		*8.00*		*112*	*70-130*			

QC Summary Data

Devon Energy - Carlsbad	Project Name:	North Brushy Header	**Reported:**
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	3/8/2022 4:04:24PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: JL

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2210032-BLK1)									Prepared: 03/02/22 Analyzed: 03/04/22
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	*52.6*		*50.0*		*105*	*50-200*			
LCS (2210032-BS1)									Prepared: 03/02/22 Analyzed: 03/04/22
Diesel Range Organics (C10-C28)	611	25.0	500		122	38-132			
Surrogate: n-Nonane	*48.2*		*50.0*		*96.3*	*50-200*			
Matrix Spike (2210032-MS1)				**Source: E203012-04**					Prepared: 03/02/22 Analyzed: 03/04/22
Diesel Range Organics (C10-C28)	500	25.0	500	ND	99.9	38-132			
Surrogate: n-Nonane	*49.6*		*50.0*		*99.2*	*50-200*			
Matrix Spike Dup (2210032-MSD1)				**Source: E203012-04**					Prepared: 03/02/22 Analyzed: 03/04/22
Diesel Range Organics (C10-C28)	570	25.0	500	ND	114	38-132	13.2	20	
Surrogate: n-Nonane	*56.2*		*50.0*		*112*	*50-200*			

QC Summary Data

Devon Energy - Carlsbad	Project Name:	North Brushy Header	**Reported:**
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	3/8/2022 4:04:24PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: JL

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2211011-BLK1)									Prepared: 03/07/22 Analyzed: 03/07/22
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	*50.7*		*50.0*		*101*	*50-200*			
LCS (2211011-BS1)									Prepared: 03/07/22 Analyzed: 03/07/22
Diesel Range Organics (C10-C28)	470	25.0	500		94.0	38-132			
Surrogate: n-Nonane	*51.0*		*50.0*		*102*	*50-200*			
Matrix Spike (2211011-MS1)				**Source: E203021-05**					Prepared: 03/07/22 Analyzed: 03/07/22
Diesel Range Organics (C10-C28)	487	25.0	500	ND	97.5	38-132			
Surrogate: n-Nonane	*50.7*		*50.0*		*101*	*50-200*			
Matrix Spike Dup (2211011-MSD1)				**Source: E203021-05**					Prepared: 03/07/22 Analyzed: 03/07/22
Diesel Range Organics (C10-C28)	499	25.0	500	ND	99.8	38-132	2.30	20	
Surrogate: n-Nonane	*50.9*		*50.0*		*102*	*50-200*			

QC Summary Data

Devon Energy - Carlsbad	Project Name:	North Brushy Header	**Reported:**
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	3/8/2022 4:04:24PM

Anions by EPA 300.0/9056A

Analyst: RAS

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2210043-BLK1)									Prepared: 03/03/22 Analyzed: 03/03/22
Chloride	ND	20.0							
LCS (2210043-BS1)									Prepared: 03/03/22 Analyzed: 03/05/22
Chloride	244	20.0	250		97.8	90-110			
Matrix Spike (2210043-MS1)				**Source: E203003-01**					Prepared: 03/03/22 Analyzed: 03/03/22
Chloride	4060	40.0	250	4020	15.0	80-120			M5
Matrix Spike Dup (2210043-MSD1)				**Source: E203003-01**					Prepared: 03/03/22 Analyzed: 03/03/22
Chloride	4570	40.0	250	4020	220	80-120	11.9	20	M5

QC Summary Report Comment:
Calculations are based off of the raw (non-rounded) data. However, for reporting purposes all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

Definitions and Notes

Devon Energy - Carlsbad	Project Name:	North Brushy Header	
6488 7 Rivers Hwy	Project Number:	01058-0007	**Reported:**
Artesia NM, 88210	Project Manager:	Ashley Giovengo	03/08/22 16:04

M5	The analysis of the MS sample required a dilution such that the spike recovery calculation does not provide useful information. The accociated LCS spike recovery was acceptable.
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
RPD	Relative Percent Difference
DNI	Did Not Ignite

Note (1): Methods marked with ** are non-accredited methods.

Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.

Project Information | Chain of Custody | Page 1 of 1

Client: Devon	**Bill To**
Project: North Brushy Header	Attention: Jim Raley
Project Manager: Ashley Giovengo	Address: 5315 Buena Vista Dr
Address: 1224 Standpipe Rd	City, State, Zip: Calsbad, NM 88220
City, State, Zip: Carlsbad, NM 88220	Phone: 575-689-7597
Phone: 505-382-1211	Email: jim.raley@dvn.com
Email: ashley.giovengo@wescominc.com	
Report due by:	

Lab Use Only		TAT				EPA Program	
Lab WO#	Job Number	1D	2D	3D	Standard	CWA	SDWA
E203008	01058-0007				x		
							RCRA

State					
NM	CO	UT	AZ	TX	
x					

Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	TCQ TPH	TCQ Chloride	BGDOC NM	BGDOC TX			Remarks
15:05	2/25/21	Soil	1 Jar	BG01 - 0'	1									X				
15:12	2/25/21	Soil	1 Jar	BG01 - 1'	2									X				
14:24	2/25/21	Soil	1 Jar	CONF02C - 0'	3									X				
12:22	2/25/21	Soil	1 Jar	CONF03 - 0'	4									X				
12:27	2/25/21	Soil	1 Jar	CONF04 - 0	5									X				
12:31	2/25/21	Soil	1 Jar	CONF05 - 0'	6									X				
12:39	2/25/21	Soil	1 Jar	CONF06 - 0'	7									X				
12:43	2/25/21	Soil	1 Jar	CONF07 - 0'	8									X				
12:49	2/25/21	Soil	1 Jar	CONF08 - 0'	9									X				

Additional Instructions: Kept on ice, Please CC: cole.burton@wescominc.com, shar.harvester@wescominc.com, jim.raley@dvn.com, ashley.giovengo@wescominc.com

I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabelling the sample location, date or time of collection is considered fraud and may be grounds for legal action. Sampled by:

Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
	03/01/22	09:55am		3.1.22	955
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
	3.1.22	1645	Caitlin Christian	3/2/22	10:20
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time

Lab Use Only
Received on ice: (Y) / N
T1 T2 T3
AVG Temp °C 4

Sample Matrix: **S** - Soil, **Sd** - Solid, **Sg** - Sludge, **A** - Aqueous, **O** - Other

Container Type: **g** - glass, **p** - poly/plastic, **ag** - amber glass, v - VOA

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.

envirotech

Envirotech Analytical Laboratory

Printed: 3/2/2022 12:37:07PM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.
If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	Devon Energy - Carlsbad	Date Received:	03/02/22 10:20	Work Order ID:	E203008
Phone:	(505) 382-1211	Date Logged In:	03/01/22 11:43	Logged In By:	Caitlin Christian
Email:	ashley.giovengo@wescominc.com	Due Date:	03/08/22 17:00 (4 day TAT)		

Chain of Custody (COC)

1. Does the sample ID match the COC?	Yes	
2. Does the number of samples per sampling site location match the COC	Yes	
3. Were samples dropped off by client or carrier?	Yes	Carrier: UPS
4. Was the COC complete, i.e., signatures, dates/times, requested analyses?	Yes	
5. Were all samples received within holding time? Note: Analysis, such as pH which should be conducted in the field, i.e, 15 minute hold time, are not included in this disucssion.	Yes	

Comments/Resolution

Sample Turn Around Time (TAT)

6. Did the COC indicate standard TAT, or Expedited TAT?	Yes	

Sample Cooler

7. Was a sample cooler received?	Yes	
8. If yes, was cooler received in good condition?	Yes	
9. Was the sample(s) received intact, i.e., not broken?	Yes	
10. Were custody/security seals present?	No	
11. If yes, were custody/security seals intact?	NA	
12. Was the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling	Yes	
13. If no visible ice, record the temperature. Actual sample temperature: 4°C		

Sample Container

14. Are aqueous VOC samples present?	No	
15. Are VOC samples collected in VOA Vials?	NA	
16. Is the head space less than 6-8 mm (pea sized or less)?	NA	
17. Was a trip blank (TB) included for VOC analyses?	NA	
18. Are non-VOC samples collected in the correct containers?	Yes	
19. Is the appropriate volume/weight or number of sample containers collected?	Yes	

Field Label

20. Were field sample labels filled out with the minimum information:		
Sample ID?	Yes	
Date/Time Collected?	Yes	
Collectors name?	No	

Sample Preservation

21. Does the COC or field labels indicate the samples were preserved?	No	
22. Are sample(s) correctly preserved?	NA	
24. Is lab filteration required and/or requested for dissolved metals?	No	

Multiphase Sample Matrix

26. Does the sample have more than one phase, i.e., multiphase?	No	
27. If yes, does the COC specify which phase(s) is to be analyzed?	NA	

Subcontract Laboratory

28. Are samples required to get sent to a subcontract laboratory?	No	
29. Was a subcontract laboratory specified by the client and if so who?	NA	Subcontract Lab: na

Client Instruction

Signature of client authorizing changes to the COC or sample disposition.

Date

envirotech Inc.

Report to:

Ashley Giovengo

5796 U.S. Hwy 64
Farmington, NM 87401

Phone: (505) 632-1881
Envirotech-inc.com

envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Devon Energy - Carlsbad

Project Name:	North Brushy Header
Work Order:	E203082
Job Number:	01058-0007
Received:	3/14/2022

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
3/18/22

Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise.
Statement of Data Authenticity: Envirotech Inc, attests the data reported has not been altered in any way.
Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech Inc.
Envirotech Inc, holds the Utah TNI certification NM00979 for data reported.
Envirotech Inc, holds the Texas TNI certification T104704557 for data reported.
Envirotech Inc, holds the NM SDWA certification for data reported. (Lab #NM00979)

Date Reported: 3/18/22

Ashley Giovengo
6488 7 Rivers Hwy
Artesia, NM 88210

Project Name: North Brushy Header
Workorder: E203082
Date Received: 3/14/2022 8:40:00AM

Ashley Giovengo,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 3/14/2022 8:40:00AM, under the Project Name: North Brushy Header.

The analytical test results summarized in this report with the Project Name: North Brushy Header apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

Please review the Chain-of-Custody (COC) and Sample Receipt Checklist (SRC) for any issues reguarding sample receipt temperature, containers, preservation etc. To best understand your test results, review the entire report summarizing your sample data and the associated quality control batch data.

All reported data in this analytical report were analyzed according to the referenced method(s) and are in compliance with the latest NELAC/TNI standards, unless otherwise noted. Samples or analytical quality control parameters not meeting specific QC criteria are qualified with a data flag. Data flag definitions are located in the Notes and Definitions section of this analytical report.

If you have any questions concerning this report, please feel free to contact Envirotech, Inc.

Respectfully,

Walter Hinchman
Laboratory Director
Office: 505-632-1881
Cell: 775-287-1762
whinchman@envirotech-inc.com

Raina Schwanz
Laboratory Administrator
Office: 505-632-1881
rainaschwanz@envirotech-inc.com

Alexa Michaels
Sample Custody Officer
Office: 505-632-1881
labadmin@envirotech-inc.com

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Southern New Mexico Area
Lynn Jarboe
Technical Representative/Client Services
Office: 505-421-LABS(5227)
Cell: 505-320-4759
ljarboe@envirotech-inc.com

West Texas Midland/Odessa Area
Rayny Hagan
Technical Representative
Office: 505-421-LABS(5227)

Envirotech Web Address: www.envirotech-inc.com

Table of Contents

Sample Summary

Devon Energy - Carlsbad	Project Name:	North Brushy Header	**Reported:**
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	03/18/22 16:38

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
CONF01 - 7'	E203082-01A	Soil	03/10/22	03/14/22	Glass Jar, 4 oz.
CONF09 - 4'	E203082-02A	Soil	03/10/22	03/14/22	Glass Jar, 4 oz.
CONF10 - 2'	E203082-03A	Soil	03/10/22	03/14/22	Glass Jar, 4 oz.

Sample Data

Devon Energy - Carlsbad	Project Name:	North Brushy Header	
6488 7 Rivers Hwy	Project Number:	01058-0007	**Reported:**
Artesia NM, 88210	Project Manager:	Ashley Giovengo	3/18/2022 4:38:35PM

CONF01 - 7'

E203082-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: RKS			Batch: 2212046
Benzene	ND	0.0250	1	03/16/22	03/17/22	
Ethylbenzene	ND	0.0250	1	03/16/22	03/17/22	
Toluene	ND	0.0250	1	03/16/22	03/17/22	
o-Xylene	ND	0.0250	1	03/16/22	03/17/22	
p,m-Xylene	ND	0.0500	1	03/16/22	03/17/22	
Total Xylenes	ND	0.0250	1	03/16/22	03/17/22	
Surrogate: 4-Bromochlorobenzene-PID		*91.7 %*	*70-130*	*03/16/22*	*03/17/22*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2212046
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/16/22	03/17/22	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*99.4 %*	*70-130*	*03/16/22*	*03/17/22*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: JL			Batch: 2212053
Diesel Range Organics (C10-C28)	ND	25.0	1	03/16/22	03/17/22	
Oil Range Organics (C28-C36)	ND	50.0	1	03/16/22	03/17/22	
Surrogate: n-Nonane		*103 %*	*50-200*	*03/16/22*	*03/17/22*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: RAS			Batch: 2212060
Chloride	**266**	20.0	1	03/16/22	03/17/22	

Sample Data

Devon Energy - Carlsbad	Project Name:	North Brushy Header	
6488 7 Rivers Hwy	Project Number:	01058-0007	**Reported:**
Artesia NM, 88210	Project Manager:	Ashley Giovengo	3/18/2022 4:38:35PM

CONF09 - 4'

E203082-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: RKS			Batch: 2212046
Benzene	ND	0.0250	1	03/16/22	03/17/22	
Ethylbenzene	ND	0.0250	1	03/16/22	03/17/22	
Toluene	ND	0.0250	1	03/16/22	03/17/22	
o-Xylene	ND	0.0250	1	03/16/22	03/17/22	
p,m-Xylene	ND	0.0500	1	03/16/22	03/17/22	
Total Xylenes	ND	0.0250	1	03/16/22	03/17/22	
Surrogate: 4-Bromochlorobenzene-PID		*91.7 %*	*70-130*	*03/16/22*	*03/17/22*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2212046
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/16/22	03/17/22	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*100 %*	*70-130*	*03/16/22*	*03/17/22*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: JL			Batch: 2212053
Diesel Range Organics (C10-C28)	ND	25.0	1	03/16/22	03/17/22	
Oil Range Organics (C28-C36)	ND	50.0	1	03/16/22	03/17/22	
Surrogate: n-Nonane		*97.6 %*	*50-200*	*03/16/22*	*03/17/22*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: RAS			Batch: 2212060
Chloride	**229**	20.0	1	03/16/22	03/17/22	

Sample Data

Devon Energy - Carlsbad	Project Name:	North Brushy Header	
6488 7 Rivers Hwy	Project Number:	01058-0007	**Reported:**
Artesia NM, 88210	Project Manager:	Ashley Giovengo	3/18/2022 4:38:35PM

CONF10 - 2'

E203082-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: RKS			Batch: 2212046
Benzene	ND	0.0250	1	03/16/22	03/17/22	
Ethylbenzene	ND	0.0250	1	03/16/22	03/17/22	
Toluene	ND	0.0250	1	03/16/22	03/17/22	
o-Xylene	ND	0.0250	1	03/16/22	03/17/22	
p,m-Xylene	ND	0.0500	1	03/16/22	03/17/22	
Total Xylenes	ND	0.0250	1	03/16/22	03/17/22	
Surrogate: 4-Bromochlorobenzene-PID		*92.3 %*	*70-130*	*03/16/22*	*03/17/22*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2212046
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/16/22	03/17/22	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*99.9 %*	*70-130*	*03/16/22*	*03/17/22*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: JL			Batch: 2212053
Diesel Range Organics (C10-C28)	ND	25.0	1	03/16/22	03/17/22	
Oil Range Organics (C28-C36)	ND	50.0	1	03/16/22	03/17/22	
Surrogate: n-Nonane		*103 %*	*50-200*	*03/16/22*	*03/17/22*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: RAS			Batch: 2212060
Chloride	**206**	20.0	1	03/16/22	03/17/22	

QC Summary Data

Devon Energy - Carlsbad	Project Name:	North Brushy Header	**Reported:**
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	3/18/2022 4:38:35PM

Volatile Organics by EPA 8021B

Analyst: RKS

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2212046-BLK1)									Prepared: 03/16/22 Analyzed: 03/17/22
Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: 4-Bromochlorobenzene-PID	*7.39*		*8.00*		*92.4*	*70-130*			
LCS (2212046-BS1)									Prepared: 03/16/22 Analyzed: 03/18/22
Benzene	4.33	0.0250	5.00		86.7	70-130			
Ethylbenzene	4.51	0.0250	5.00		90.1	70-130			
Toluene	4.61	0.0250	5.00		92.2	70-130			
o-Xylene	4.63	0.0250	5.00		92.6	70-130			
p,m-Xylene	9.15	0.0500	10.0		91.5	70-130			
Total Xylenes	13.8	0.0250	15.0		91.9	70-130			
Surrogate: 4-Bromochlorobenzene-PID	*7.58*		*8.00*		*94.7*	*70-130*			
Matrix Spike (2212046-MS1)				**Source: E203085-01**					Prepared: 03/16/22 Analyzed: 03/18/22
Benzene	4.17	0.0250	5.00	ND	83.5	54-133			
Ethylbenzene	4.35	0.0250	5.00	ND	87.0	61-133			
Toluene	4.45	0.0250	5.00	ND	88.9	61-130			
o-Xylene	4.46	0.0250	5.00	ND	89.3	63-131			
p,m-Xylene	8.84	0.0500	10.0	ND	88.4	63-131			
Total Xylenes	13.3	0.0250	15.0	ND	88.7	63-131			
Surrogate: 4-Bromochlorobenzene-PID	*7.61*		*8.00*		*95.1*	*70-130*			
Matrix Spike Dup (2212046-MSD1)				**Source: E203085-01**					Prepared: 03/16/22 Analyzed: 03/18/22
Benzene	4.30	0.0250	5.00	ND	86.1	54-133	3.05	20	
Ethylbenzene	4.50	0.0250	5.00	ND	89.9	61-133	3.29	20	
Toluene	4.58	0.0250	5.00	ND	91.7	61-130	3.06	20	
o-Xylene	4.63	0.0250	5.00	ND	92.5	63-131	3.60	20	
p,m-Xylene	9.13	0.0500	10.0	ND	91.3	63-131	3.20	20	
Total Xylenes	13.8	0.0250	15.0	ND	91.7	63-131	3.33	20	
Surrogate: 4-Bromochlorobenzene-PID	*7.50*		*8.00*		*93.8*	*70-130*			

QC Summary Data

Devon Energy - Carlsbad	Project Name:	North Brushy Header	**Reported:**
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	3/18/2022 4:38:35PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: RKS

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2212046-BLK1)									Prepared: 03/16/22 Analyzed: 03/17/22
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.96*		*8.00*		*99.5*	*70-130*			
LCS (2212046-BS2)									Prepared: 03/16/22 Analyzed: 03/18/22
Gasoline Range Organics (C6-C10)	46.7	20.0	50.0		93.5	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*8.13*		*8.00*		*102*	*70-130*			
Matrix Spike (2212046-MS2)				**Source: E203085-01**					Prepared: 03/16/22 Analyzed: 03/18/22
Gasoline Range Organics (C6-C10)	47.3	20.0	50.0	ND	94.5	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*8.11*		*8.00*		*101*	*70-130*			
Matrix Spike Dup (2212046-MSD2)				**Source: E203085-01**					Prepared: 03/16/22 Analyzed: 03/18/22
Gasoline Range Organics (C6-C10)	47.8	20.0	50.0	ND	95.7	70-130	1.20	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	*8.08*		*8.00*		*101*	*70-130*			

QC Summary Data

Devon Energy - Carlsbad	Project Name:	North Brushy Header	**Reported:**
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	3/18/2022 4:38:35PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: JL

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2212053-BLK1)									Prepared: 03/16/22 Analyzed: 03/17/22
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	*46.5*		*50.0*		*92.9*	*50-200*			
LCS (2212053-BS1)									Prepared: 03/16/22 Analyzed: 03/17/22
Diesel Range Organics (C10-C28)	487	25.0	500		97.4	38-132			
Surrogate: n-Nonane	*41.1*		*50.0*		*82.2*	*50-200*			
Matrix Spike (2212053-MS1)				**Source: E203085-02**					Prepared: 03/16/22 Analyzed: 03/17/22
Diesel Range Organics (C10-C28)	487	25.0	500	ND	97.3	38-132			
Surrogate: n-Nonane	*40.2*		*50.0*		*80.5*	*50-200*			
Matrix Spike Dup (2212053-MSD1)				**Source: E203085-02**					Prepared: 03/16/22 Analyzed: 03/17/22
Diesel Range Organics (C10-C28)	498	25.0	500	ND	99.7	38-132	2.40	20	
Surrogate: n-Nonane	*37.8*		*50.0*		*75.6*	*50-200*			

QC Summary Data

Devon Energy - Carlsbad	Project Name:	North Brushy Header	**Reported:**
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	3/18/2022 4:38:35PM

Anions by EPA 300.0/9056A

Analyst: RAS

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2212060-BLK1)									Prepared: 03/16/22 Analyzed: 03/17/22
Chloride	ND	20.0							
LCS (2212060-BS1)									Prepared: 03/16/22 Analyzed: 03/17/22
Chloride	258	20.0	250		103	90-110			
Matrix Spike (2212060-MS1)				**Source: E203077-01**					Prepared: 03/16/22 Analyzed: 03/17/22
Chloride	404	20.0	250	130	109	80-120			
Matrix Spike Dup (2212060-MSD1)				**Source: E203077-01**					Prepared: 03/16/22 Analyzed: 03/17/22
Chloride	395	20.0	250	130	106	80-120	2.06	20	

QC Summary Report Comment:
Calculations are based off of the raw (non-rounded) data. However, for reporting purposes all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

Definitions and Notes

Devon Energy - Carlsbad	Project Name:	North Brushy Header	
6488 7 Rivers Hwy	Project Number:	01058-0007	**Reported:**
Artesia NM, 88210	Project Manager:	Ashley Giovengo	03/18/22 16:38

ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
RPD	Relative Percent Difference
DNI	Did Not Ignite

Note (1): Methods marked with ** are non-accredited methods.

Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.

Project Information | Chain of Custody | Page 1 of 1

Client: Devon	
Project: North Brushy Header	
Project Manager: Ashley Giovengo	
Address: 1224 Standpipe Rd	
City, State, Zip: Carlsbad, NM 88220	
Phone: 505-382-1211	
Email: ashley.giovengo@wescominc.com	
Report due by:	

Bill To

Attention:	Jim Raley
Address:	5315 Buena Vista Dr
City, State, Zip:	Calsbad, NM 88220
Phone:	575-689-7597
Email:	jim.raley@dvn.com

Lab Use Only

Lab WO#	Job Number
E203082	01058-0007

TAT

1D	2D	3D	Standard
			x

EPA Program

CWA	SDWA	RCRA

State

NM	CO	UT	AZ	TX	
x					

Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0			BGDOC NM	BGDOC TX			Remarks
10:57	3/10/22	Soil	1 Jar	CONF01 - 7'	1									X				
11:34	3/10/22	Soil	1 Jar	CONF09 - 4'	2									X				
12:23	3/10/22	Soil	1 Jar	CONF10 - 2'	3									X				

Analysis and Method

Additional Instructions: Kept on ice, Please CC: cole.burton@wescominc.com, shar.harvester@wescominc.com, jim.raley@dvn.com, ashley.giovengo@wescominc.com

I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabelling the sample location, date or time of collection is considered fraud and may be grounds for legal action. Sampled by:

Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
	3/11/22	12:46 pm		3.11.22	1248
	3.13.22	1745	Caitlin Christian	3/14/22	8:40

Lab Use Only

Received on ice: (Y) / N

T1 T2 T3

AVG Temp °C 4

Sample Matrix: **S** - Soil, **Sd** - Solid, **Sg** - Sludge, **A** - Aqueous, **O** - Other

Container Type: **g** - glass, **p** - poly/plastic, **ag** - amber glass, v - VOA

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.

envirotech

Envirotech Analytical Laboratory

Printed: 3/14/2022 9:44:17AM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.
If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	Devon Energy - Carlsbad	Date Received:	03/14/22 08:40	Work Order ID:	E203082
Phone:	(505) 382-1211	Date Logged In:	03/14/22 09:40	Logged In By:	Caitlin Christian
Email:	ashley.giovengo@wescominc.com	Due Date:	03/18/22 17:00 (4 day TAT)		

Chain of Custody (COC)

1. Does the sample ID match the COC?	Yes	
2. Does the number of samples per sampling site location match the COC	Yes	
3. Were samples dropped off by client or carrier?	Yes	Carrier: Courrier
4. Was the COC complete, i.e., signatures, dates/times, requested analyses?	Yes	
5. Were all samples received within holding time? Note: Analysis, such as pH which should be conducted in the field, i.e, 15 minute hold time, are not included in this disucssion.	Yes	

Comments/Resolution

Sample Turn Around Time (TAT)

6. Did the COC indicate standard TAT, or Expedited TAT?	Yes	

Sample Cooler

7. Was a sample cooler received?	Yes	
8. If yes, was cooler received in good condition?	Yes	
9. Was the sample(s) received intact, i.e., not broken?	Yes	
10. Were custody/security seals present?	No	
11. If yes, were custody/security seals intact?	NA	
12. Was the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling	Yes	
13. If no visible ice, record the temperature. Actual sample temperature: 4°C		

Sample Container

14. Are aqueous VOC samples present?	No	
15. Are VOC samples collected in VOA Vials?	NA	
16. Is the head space less than 6-8 mm (pea sized or less)?	NA	
17. Was a trip blank (TB) included for VOC analyses?	NA	
18. Are non-VOC samples collected in the correct containers?	Yes	
19. Is the appropriate volume/weight or number of sample containers collected?	Yes	

Field Label

20. Were field sample labels filled out with the minimum information:		
Sample ID?	Yes	
Date/Time Collected?	Yes	
Collectors name?	No	

Sample Preservation

21. Does the COC or field labels indicate the samples were preserved?	No	
22. Are sample(s) correctly preserved?	NA	
24. Is lab filteration required and/or requested for dissolved metals?	No	

Multiphase Sample Matrix

26. Does the sample have more than one phase, i.e., multiphase?	No	
27. If yes, does the COC specify which phase(s) is to be analyzed?	NA	

Subcontract Laboratory

28. Are samples required to get sent to a subcontract laboratory?	No	
29. Was a subcontract laboratory specified by the client and if so who?	NA	Subcontract Lab: na

Client Instruction

Signature of client authorizing changes to the COC or sample disposition.

Date

envirotech Inc.

ATTACHMENT F

NSDA Soil Resource Report

United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Eddy Area, New Mexico

North Brushy Header - Incident ID: nAPP2134442133

April 21, 2022

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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Contents

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

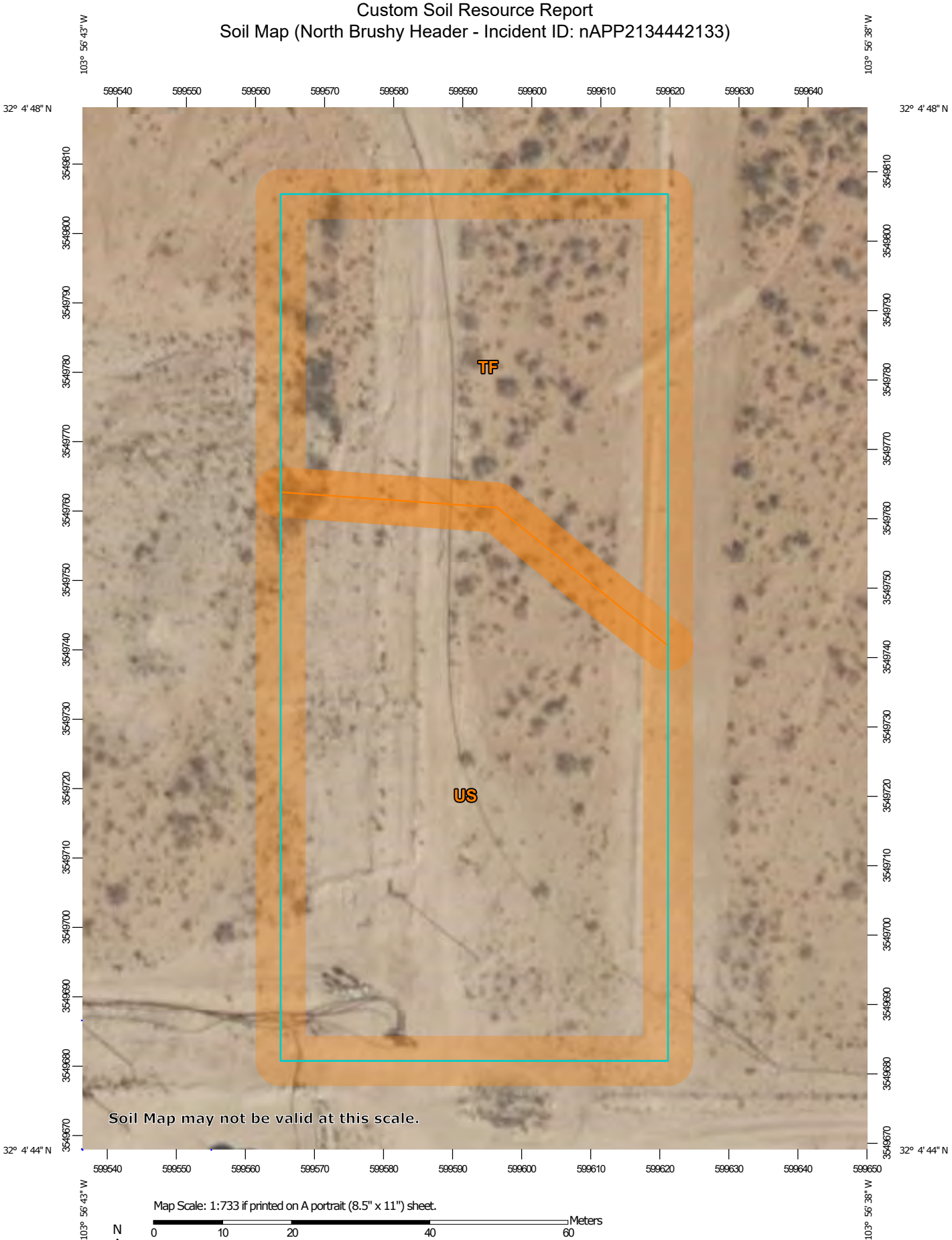
After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map (North Brushy Header - Incident ID: nAPP2134442133)



MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Eddy Area, New Mexico
Survey Area Data: Version 17, Sep 12, 2021

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Feb 7, 2020—May 12, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend (North Brushy Header - Incident ID: nAPP2134442133)

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
TF	Tonuco loamy fine sand, 0 to 3 percent slopes	0.7	39.2%
US	Upton-Simona complex, 1 to 15 percent slopes, eroded	1.1	60.8%
Totals for Area of Interest		**1.7**	**100.0%**

Map Unit Descriptions (North Brushy Header - Incident ID: nAPP2134442133)

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate

pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Eddy Area, New Mexico

TF—Tonuco loamy fine sand, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 1w61
Elevation: 3,000 to 4,100 feet
Mean annual precipitation: 10 to 14 inches
Mean annual air temperature: 60 to 64 degrees F
Frost-free period: 200 to 217 days
Farmland classification: Not prime farmland

Map Unit Composition

Tonuco and similar soils: 98 percent
Minor components: 2 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Tonuco

Setting

Landform: Plains, alluvial fans
Landform position (three-dimensional): Rise
Down-slope shape: Convex, linear
Across-slope shape: Linear
Parent material: Mixed alluvium and/or eolian sands

Typical profile

H1 - 0 to 5 inches: loamy fine sand
H2 - 5 to 15 inches: loamy fine sand
H3 - 15 to 19 inches: indurated

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: 6 to 20 inches to petrocalcic
Drainage class: Excessively drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline (0.0 to 1.0 mmhos/cm)
Sodium adsorption ratio, maximum: 1.0
Available water supply, 0 to 60 inches: Very low (about 1.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: D
Ecological site: R042XC004NM - Sandy
Hydric soil rating: No

Minor Components

Tonuco

Percent of map unit: 1 percent

Ecological site: R042XC004NM - Sandy
Hydric soil rating: No

Dune land
Percent of map unit: 1 percent
Hydric soil rating: No

US—Upton-Simona complex, 1 to 15 percent slopes, eroded

Map Unit Setting
National map unit symbol: 1w66
Elevation: 2,000 to 5,700 feet
Mean annual precipitation: 6 to 14 inches
Mean annual air temperature: 57 to 70 degrees F
Frost-free period: 180 to 260 days
Farmland classification: Not prime farmland

Map Unit Composition
Upton and similar soils: 40 percent
Simona and similar soils: 35 percent
Minor components: 25 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Upton

Setting
Landform: Ridges, fans
Landform position (three-dimensional): Side slope, rise
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Residuum weathered from limestone

Typical profile
H1 - 0 to 9 inches: gravelly loam
H2 - 9 to 13 inches: gravelly loam
H3 - 13 to 21 inches: cemented
H4 - 21 to 60 inches: very gravelly loam

Properties and qualities
Slope: 1 to 15 percent
Depth to restrictive feature: 7 to 20 inches to petrocalcic
Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Low to moderately high (0.01 to 0.60 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 75 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 1.0

Available water supply, 0 to 60 inches: Very low (about 1.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: D
Ecological site: R042XC025NM - Shallow
Hydric soil rating: No

Description of Simona

Setting

Landform: Plains, alluvial fans
Landform position (three-dimensional): Rise
Down-slope shape: Convex, linear
Across-slope shape: Linear
Parent material: Mixed alluvium and/or eolian sands

Typical profile

H1 - 0 to 6 inches: gravelly fine sandy loam
H2 - 6 to 20 inches: gravelly fine sandy loam
H3 - 20 to 24 inches: indurated

Properties and qualities

Slope: 1 to 5 percent
Depth to restrictive feature: 7 to 20 inches to petrocalcic
Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 15 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 1.0
Available water supply, 0 to 60 inches: Very low (about 2.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: D
Ecological site: R042XC002NM - Shallow Sandy
Hydric soil rating: No

Minor Components

Rock outcrop

Percent of map unit: 9 percent
Hydric soil rating: No

Dune land

Percent of map unit: 8 percent
Hydric soil rating: No

Pajarito

Percent of map unit: 8 percent
Ecological site: R042XC003NM - Loamy Sand

Hydric soil rating: No

References

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ATTACHMENT G

Notification Emails

Shar Harvester <shar.harvester@wescominc.com>

Extension Request - North Brushy Header - nAPP2134442133

Hensley, Chad, EMNRD <Chad.Hensley@state.nm.us> Mon, Feb 21, 2022 at 2:33 PM
To: "Raley, Jim" <Jim.Raley@dvn.com>, "Hamlet, Robert, EMNRD" <Robert.Hamlet@state.nm.us>
Cc: "Bratcher, Mike, EMNRD" <mike.bratcher@state.nm.us>, "Eads, Cristina, EMNRD" <Cristina.Eads@state.nm.us>, "ashley.giovengo@wescominc.com" <ashley.giovengo@wescominc.com>, "shar.harvester@wescominc.com" <shar.harvester@wescominc.com>

Jim,

Extension is granted to 5/08/2022. Please include this correspondence in your closure report.

Chad Hensley • Environmental Science & Specialist

Environmental Bureau

EMNRD - Oil Conservation Division

811 First St. | Artesia, NM 88210

Office: 575.748.1283 | Cell: 575-703-1723

chad.hensley@state.nm.us

http://www.emnrd.state.nm.us/OCD/

From: Raley, Jim <Jim.Raley@dvn.com>
Sent: Monday, February 21, 2022 1:30 PM
To: Hamlet, Robert, EMNRD <Robert.Hamlet@state.nm.us>
Cc: Bratcher, Mike, EMNRD <mike.bratcher@state.nm.us>; Eads, Cristina, EMNRD <Cristina.Eads@state.nm.us>; Hensley, Chad, EMNRD <Chad.Hensley@state.nm.us>; ashley.giovengo@wescominc.com; shar.harvester@wescominc.com
Subject: [EXTERNAL] RE: Extension Request - North Brushy Header - nAPP2134442133

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

[Quoted text hidden]

Ashley Giovengo <ashley.giovengo@wescominc.com>

RE: [EXTERNAL] 48-Hour Confirmation Sample Notice - nAPP2134442133 (North Brushy Header)

1 message

Billings, Bradford, EMNRD <Bradford.Billings@state.nm.us> Wed, Feb 23, 2022 at 3:53 PM
To: "cole.burton@wescominc.com" <cole.burton@wescominc.com>, "Bratcher, Mike, EMNRD" <mike.bratcher@state.nm.us>, "Hensley, Chad, EMNRD" <Chad.Hensley@state.nm.us>, "Hamlet, Robert, EMNRD" <Robert.Hamlet@state.nm.us>, "Nobui, Jennifer, EMNRD" <Jennifer.Nobui@state.nm.us>, "Velez, Nelson, EMNRD" <Nelson.Velez@state.nm.us>
Cc: Shar Harvester <shar.harvester@wescominc.com>, "ashley.giovengo@wescominc.com" <ashley.giovengo@wescominc.com>, Joey Croce <joey.croce@wescominc.com>, "Raley, Jim" <Jim.Raley@dvn.com>, Cody York <cody.york@wescominc.com>

Hello,

Thank you for the notice. Please keep a copy of this communication. The copy should be submitted with associated report. OCD it not sure at this time of our attendance or not.

Sincerely,

Bradford Billings

EMNRD/OCD

From: cole.burton@wescominc.com <cole.burton@wescominc.com>
Sent: Wednesday, February 23, 2022 3:06 PM
To: Bratcher, Mike, EMNRD <mike.bratcher@state.nm.us>; Hensley, Chad, EMNRD <Chad.Hensley@state.nm.us>; Hamlet, Robert, EMNRD <Robert.Hamlet@state.nm.us>; Billings, Bradford, EMNRD <Bradford.Billings@state.nm.us>; Nobui, Jennifer, EMNRD <Jennifer.Nobui@state.nm.us>; Velez, Nelson, EMNRD <Nelson.Velez@state.nm.us>
Cc: Shar Harvester <shar.harvester@wescominc.com>; ashley.giovengo@wescominc.com; Joey Croce <joey.croce@wescominc.com>; Raley, Jim <Jim.Raley@dvn.com>; Cody York <cody.york@wescominc.com>
Subject: [EXTERNAL] 48-Hour Confirmation Sample Notice - nAPP2134442133 (North Brushy Header)

Hello All,

We intend to take confirmation samples at North Brushy Header - nAPP2134442133 starting on (2/25/22).

Please let us know if you plan to be onsite to oversee this sampling event.

Thanks,

Cole Burton, Environmental Field Technician

O (218) 724-1322 | **C** (505) 205-0455

WescomInc.com | cole.burton@WescomInc.com

"I am in charge of my own safety."

WESCOM

Ashley Giovengo <ashley.giovengo@wescominc.com>

RE: [EXTERNAL] 48-Hour Confirmation Sample Notice - North Brushy Header (nAPP2134442133)

1 message

Bratcher, Mike, EMNRD <mike.bratcher@state.nm.us> Tue, Mar 8, 2022 at 6:55 AM
To: Ashley Giovengo <ashley.giovengo@wescominc.com>, "Hamlet, Robert, EMNRD" <Robert.Hamlet@state.nm.us>, "Billings, Bradford, EMNRD" <Bradford.Billings@state.nm.us>, "Hensley, Chad, EMNRD" <Chad.Hensley@state.nm.us>, "Nobui, Jennifer, EMNRD" <Jennifer.Nobui@state.nm.us>, "Velez, Nelson, EMNRD" <Nelson.Velez@state.nm.us>
Cc: Shar Harvester <shar.harvester@wescominc.com>, Cole Burton <cole.burton@wescominc.com>, "Raley, Jim" <Jim.Raley@dvn.com>

Ashley,

Thank you for the notification. Please include a copy of this and all email notifications and correspondence in the remedial and/or closure report to insure documentation in the project files.

Thank you,

Mike Bratcher • Incident Supervisor

Environmental Bureau

EMNRD - Oil Conservation Division

811S. First St. | Artesia, NM 88210

(575) 626-0857 | mike.bratcher@state.nm.us

http://www.emnrd.state.nm.us/OCD/

From: Ashley Giovengo <ashley.giovengo@wescominc.com>
Sent: Monday, March 7, 2022 10:16 PM
To: Hamlet, Robert, EMNRD <Robert.Hamlet@state.nm.us>; Billings, Bradford, EMNRD <Bradford.Billings@state.nm.us>; Bratcher, Mike, EMNRD <mike.bratcher@state.nm.us>; Hensley, Chad, EMNRD <Chad.Hensley@state.nm.us>; Nobui, Jennifer, EMNRD <Jennifer.Nobui@state.nm.us>; Velez, Nelson, EMNRD <Nelson.Velez@state.nm.us>
Cc: Shar Harvester <shar.harvester@wescominc.com>; Cole Burton <cole.burton@wescominc.com>; Raley, Jim <Jim.Raley@dvn.com>
Subject: [EXTERNAL] 48-Hour Confirmation Sample Notice - North Brushy Header (nAPP2134442133)

Hello All,

We intend to take confirmation samples at North Brushy Header - nAPP2134442133 starting on (03/10/22) through (03/11/2022).

Please let us know if you plan to be onsite to oversee this sampling event.

Thanks,

Ashley Giovengo, Environmental Manager - Permian
O (218) 724-1322 | **C** (505) 382-1211
WescomInc.com | ashley.giovengo@WescomInc.com
"I am in charge of my own safety."

Minnesota | North Dakota | New Mexico | Wisconsin

ATTACHMENT H

Right-of-Entry Permit

NEW MEXICO STATE LAND OFFICE
Commissioner of Public Lands
Stephanie Garcia Richard
New Mexico State Land Office Building
P.O. Box 1148, Santa Fe, NM 87504-1148

RIGHT OF ENTRY PERMIT
CONTRACT NO. RE – 6003

This Agreement is made and entered into between the COMMISSIONER OF PUBLIC LANDS (the "Commissioner") and

Devon Energy
5315 Buena Vista Drive
Carlsbad, NM 88220

("Permittee"). The parties agree as follows:

1. RIGHT OF ENTRY ("ROE")

The Commissioner grants to Permittee, and its authorized representatives, employees, and contractors, permission to use the state trust lands identified below (the "Premises"), and ingress and egress to the Premises, for the sole purposes of (1) surveying/conducting an environmental investigation on the site of a produced water spill (the "Premises"), Incident No. nAPP2134442133, and (2) conducting surface reclamation activities, including removal of equipment and debris, and any required remediation per 19.2.100.67 NMAC.

The Premises is situated in the following location in **Eddy County**, New Mexico:

Section	Township	Range	Subdivision	County	Longitude/Latitude
36	25S	29E	SW4SE4	Eddy	32.0790557/-103.9448414

2. TERM AND TERMINATION

Right of entry is granted for a term of **180 days**, commencing on the execution date of this document by the Commissioner of Public Lands.

3. FEES

$ 50.00 Application Fee
$ 500.00 Permit Fee
$ 550.00 Total Fee

4. CONDITIONS OF USE

A. The issuance of this ROE does not guarantee that any subsequent lease, permit or any other instrument will be issued to Permittee for the Premises.
B. No blading or widening of any roads that provide access to the Premises is permitted under this ROE.
C. No sale of any material extracted from the Premises is allowed under this ROE.
D. Permittee shall observe all applicable federal, state and local laws and regulations.
E. Permittee shall take all reasonable precautions to prevent and suppress forest, brush and grass fires and prevent pollution of waters on or in the vicinity of the Premises.
F. Permittee shall not block or disrupt roads or trails commonly in use.
G. This ROE is subject to any and all easements and rights-of-way previously granted and now in force and affect.
H. Permittee shall be responsible for repair and restitution for damage to any Premises or improvements as a result of activities related to this ROE.
I. Prior to entering the Premises, Permittee must identify and contact any existing surface lessees. The grant of this ROE does not allow access across private lands.
J. Permittee may utilize this ROE upon its execution for inspection of the Premises and to conduct any necessary tests or inspections. Permittee may not conduct remediation or reclamation work until it has submitted a written plan for such work, and received State Land Office approval.
K. Personnel present on State Land: **Devon Energy personnel and contractors.**
L. Equipment and materials present on State Land: **Heavy equipment, trucks, and associated equipment.**

5. SITE CONDITIONS

A. No surface disturbance, other than soil sampling, except as described in a reclamation plan submitted to and approved by the State Land Office.
B. Access to the Premises shall be over existing roads.
C. The natural environmental conditions that exist contemporaneously with this grant of ROE shall be preserved and protected. Permittee must follow all applicable environmental and cultural resource protection laws and regulations.

6. INDEMNITY

Permittee shall save, hold harmless, indemnify and defend the State of New Mexico, the Commissioner and Commissioner's employees, agents and contractors, in both their official and individual capacities, from any and all liability, claims, losses, damages, or expenses of any character or nature whatsoever, including but not limited to attorney's fees, court costs, loss of land value or use, third party claims, penalties, or removal, remedial or restoration costs arising out of, or alleged to arise out of Permittee's operations or presence on the Premises (or operations or presence of his representatives, employees, or contractors).

7. SURVIVAL OF TERMS

Permittee's obligations regarding indemnity, site conditions, and compliance with applicable standards and laws, shall survive the termination, cancellation or relinquishment of this Agreement, and any cause of action of the Commissioner to enforce any right, liability, claim, loss, damage or expense under those paragraphs shall not be deemed to accrue until the Commissioner's actual discovery of said right, liability, claim, loss, damage or expense.

8. NOTIFICATION

Permittee must notify the State Land Office immediately in the event Permittee or his representatives, employees, or contractors observe any spill, fire, or other emergency on the Premises, or if Permittee or his representatives, employees, or contractors experience any serious injury while on the Premises.

WITNESS the hands of PERMITTEE and COMMISSIONER on the day(s) and year entered below.

Jim Raley Digitally signed by Jim Raley Date: 2022.02.07 11:02:01 -07'00'

DATE: 2/7/22

PERMITTEE SIGNATURE

Jim Raley

Env. Specialist - Devon Energy

PERMITTEE NAME AND TITLE (PRINT)

BY: _____

SEAL:

Stephanie Garcia Richard
Commissioner of Public Lands

DATE: _____

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 105290

CONDITIONS

Operator:	OGRID:
WPX Energy Permian, LLC Devon Energy - Regulatory Oklahoma City, OK 73102	246289
	Action Number: 105290
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jnobui	Remediation Plan Approved with Conditions. Composite confirmation samples will be collected from the bottom and sidewalls of the excavation from areas representing no more than four hundred (400) square feet.	5/26/2022