State of New Mexico
Oil Conservation Division

Incident ID	NRM2003146585
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

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

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

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

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

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

Form C-141
Page 4

State of New Mexico
Oil Conservation Division

Incident ID	NRM2003146585
District RP	
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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: Dale Woodall Title: Environmental Professional

Signature: Dale Woodall Date: 3/20/2023

email: dale.woodall@dvn.com Telephone: 575-748-1838

OCD Only

Received by: Jocelyn Harimon Date: 03/20/2023

State of New Mexico
Oil Conservation Division

Incident ID	NRM2003146585
District RP	
Facility ID	
Application ID	

Closure

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

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

[x] A scaled site and sampling diagram as described in 19.15.29.11 NMAC

[x] Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)

[x] Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)

[x] Description of remediation activities

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

Printed Name: Dale Woodall Title: Environmental Professional

Signature: Dale Woodall Date: 3/20/2023

email: dale.woodall@dvn.com Telephone: 575-748-1838

OCD Only

Received by: Jocelyn Harimon Date: 03/20/2023

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

Closure Approved by: _____ Date: _____

Printed Name: _____ Title: _____

Pima Environmental Services
5614 N. Lovington Highway
Hobbs, NM 88240
575-964-7740

March 16, 2023

NMOCD District 2
811 S. First Street
Artesia, NM 88210

Re: Site Assessment, Liner Inspection, and Closure Report
Big Cat 16 CTB 9
API No. N/A
GPS: Latitude 32.30098 Longitude -103.6807
UL -- N, Sec. 16, T23S, R32E
Lea County, NM
NMOCD Ref. No. NRM2003146585

Pima Environmental Services, LLC. (Pima) has been contracted by Devon Energy Production Company, LP (Devon) to perform a spill assessment, remediation activities, and submit this closure report for a crude oil release that occurred at the Big Cat 16 CTB 9 (Big Cat). The initial C-141 was submitted on November 11, 2019 (Appendix C). This incident was assigned Incident ID NRM2003146585 by the New Mexico Oil Conservation Division (NMOCD).

Site Characterization

The Big Cat is located approximately twenty-seven (27) miles southwest of Eunice, NM. This spill site is in Unit N, Section 16, Township 23S, Range 32E, Latitude 32.30098 Longitude -103.6807, Lea County, NM. Figure 1 references a Location Map.

Per the New Mexico Bureau of Geology and Mineral Resources, the geology is made up of Interlayered eolian sands and piedmont-slope deposits along the eastern flank of the Pecos River valley, primarily between Roswell and Carlsbad. Typically capped by thin eolian deposits. The soil in this area is made up of Kermit-Palomas fine sands, 0 to 12 percent slopes according to the United States Department of Agriculture Natural Resources Conservation Service soil survey (Appendix B). The drainage class in this area is excessively drained. There is a high potential for karst geology to be present around the Big Cat (Figure 3).

According to the New Mexico Office of the State Engineer, depth to the nearest groundwater in this area is 400 feet below grade surface (BGS). According to the United States Geological Survey (USGS), the nearest groundwater is 478 feet BGS. The closest waterway is a Salt Playa is located approximately 14.79 miles to the west of this location. See Appendix A for referenced water surveys.

Table 1 NMAC and Closure Criteria 19.15.29					
Depth to Groundwater (Appendix A)	Constituent & Limits				
	Chlorides	Total TPH	GRO+DRO	BTEX	Benzene
<50’ (High Karst)	600 mg/kg	100 mg/kg		50 mg/kg	10 mg/kg
51-100’	10,000 mg/kg	2,500 mg/kg	1,000 mg/kg	50 mg/kg	10 mg/kg
>100’	20,000 mg/kg	2,500 mg/kg	1,000 mg/kg	50 mg/kg	10 mg/kg

Reference Figure 2 for a Topographic Map.

Release Information

NRM2003146585: On October 27, 2019, a fire was caused by fluid being sent to the flare after the VRT swamped out, when the VRT swamped out it pressured up the tank and caused a release of liquid out of the thief hatch, the released fluids were calculated to be approximately 0.24 barrel (bbl) of produced crude oil from the tank and 2 bbls of crude oil from the flare. No fluid was able to be recovered, due to being on fire under the flare, and the .24 of a bbl was removed during the wash of the containment.

Remediation Activities, Site Assessment, and Soil Sampling Results

On June 28, 2022, Pima mobilized personnel to the site to begin collecting soil samples from spill area. The laboratory results of this sampling event can be found in the following data table. A Site Map can be found in Figure 4.

6-28-22 Soil Sample Results

NMOCD Table 1 Closure Criteria 19.15.29 NMAC (Depth to Groundwater is <50)								
DEVON ENERGY BIG CAT 16 CTB 9								
Date: 6-28-22		NM Approved Laboratory Results						
Sample ID	Depth (BGS)	BTEX mg/kg	Benzene mg/kg	GRO mg/kg	DRO mg/kg	MRO mg/kg	Total TPH mg/kg	Cl mg/kg
BG-1	0-6"	ND	ND	ND	ND	ND	0	ND
BG-2	0-6"	ND	ND	ND	ND	ND	0	ND
SW-1	0-6"	ND	ND	ND	ND	ND	0	ND
SW-2	0-6"	ND	ND	ND	ND	ND	0	ND
SW-3	0-6"	ND	ND	ND	ND	ND	0	ND
SW-4	0-6"	ND	ND	ND	ND	ND	0	ND
S-1	1'	ND	ND	ND	ND	ND	0	ND
S-2	1'	ND	ND	ND	ND	ND	0	ND

ND- Analyte Not Detected

Based on the sample results, the contamination levels are less than the regulatory limits of the most stringent criteria in the Table 1 of NMAC 19.15.29.1.

Complete laboratory reports can be found in Appendix E.

Site Assessment and Liner Inspection.

On March 10, 2023, after sending the 48-hour Notification (Appendix C) via email, Pima Environmental conducted a liner inspection at this location. We concluded that this liner and containment maintained its integrity and was able to retain the fluids. The Liner Inspection Form and photographic documentation can be found in Appendix D.

Closure Request

After careful review, Pima requests that this incident, NRM2003146585 be closed. Devon has complied with the applicable closure requirements set forth in rule 19.15.19.12 NMAC.

Should you have any questions or need additional information, please feel free to contact Gio Gomez at 806-782-1151 or gio@pimaoil.com.

Respectfully,

Gio Gomez

Gio Gomez
Project Manager
Pima Environmental Services, LLC

Attachments

Figures:
1- Location Map
2- Topographic Map
3- Karst Map
4- Site Map

Appendices:
Appendix A – Referenced Water Surveys
Appendix B – Soil Survey and Geological Data
Appendix C – C-141 Form and 48 Hour Notification
Appendix D – Liner Inspection Form & Photographic Documentation
Appendix E – Laboratory Reports

Pima Environmental Services

Figures:

1-Location Map

2-Topographic Map

3-Karst Map

4-Site Map

Big Cat 16 CTB 9

Devon Energy
API: N/A
Lea County, NM
Location Map

Legend

- 27 Miles SW of Eunice, NM
- Big Cat 16 CTB 9

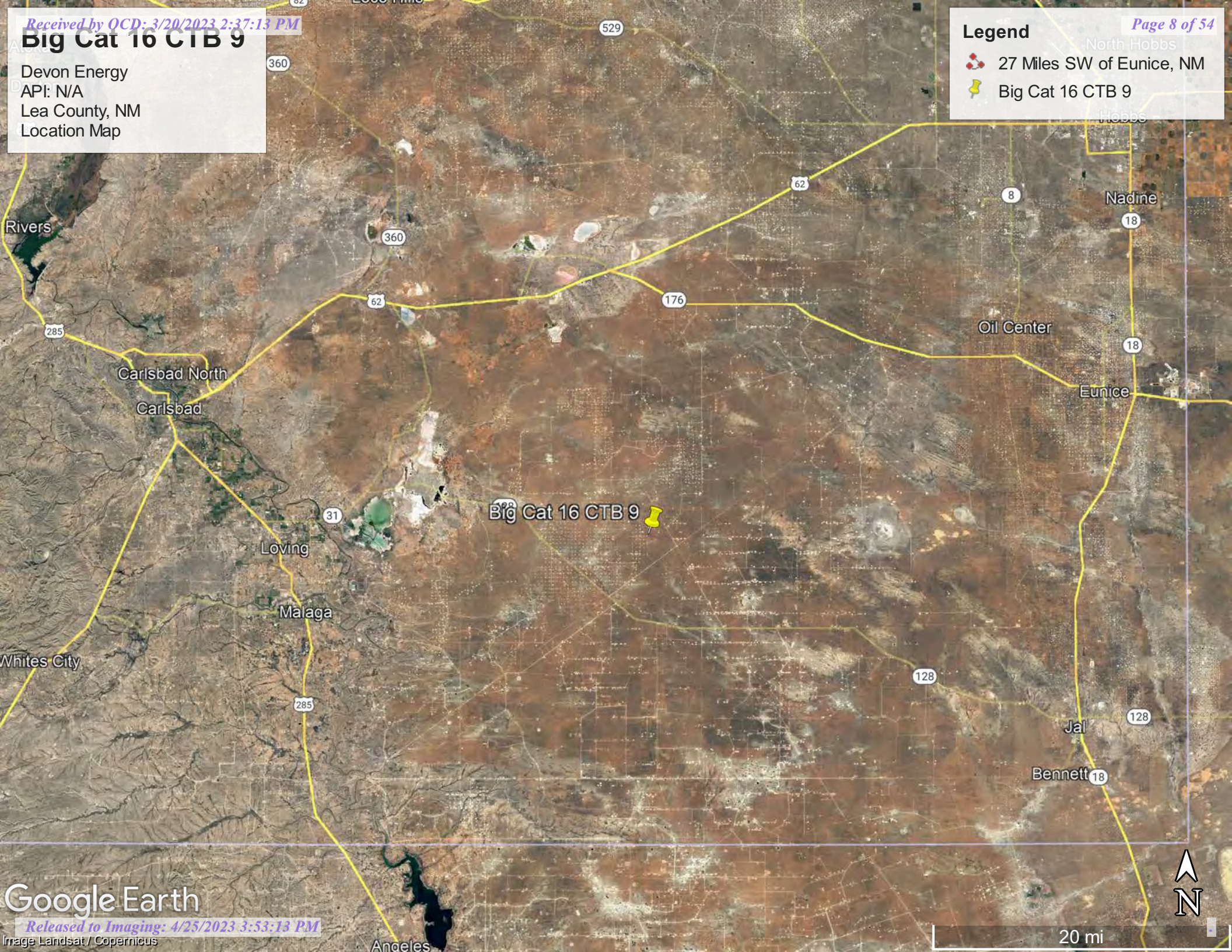


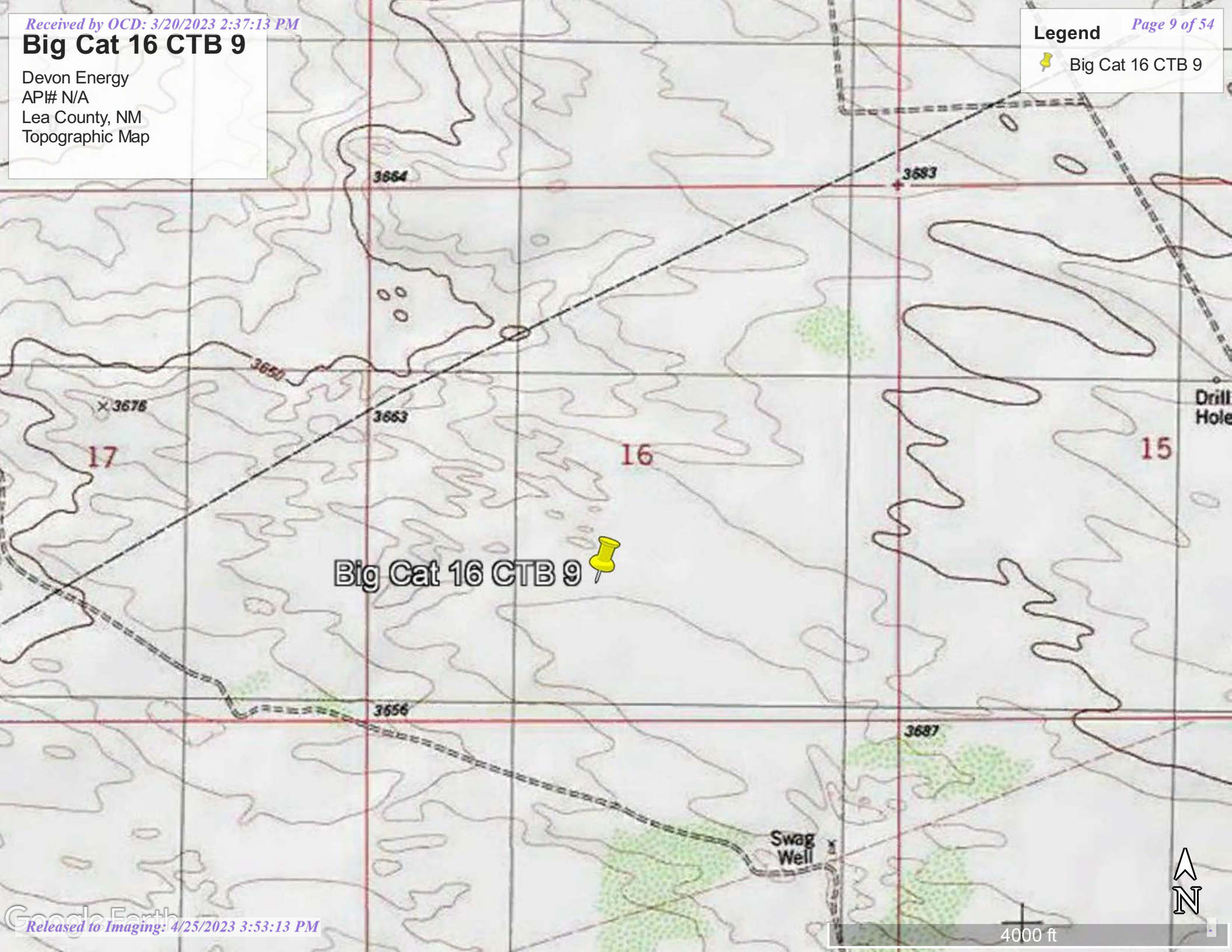
Image Landsat / Copernicus

Big Cat 16 CTB 9

Devon Energy
API# N/A
Lea County, NM
Topographic Map

Legend

Big Cat 16 CTB 9

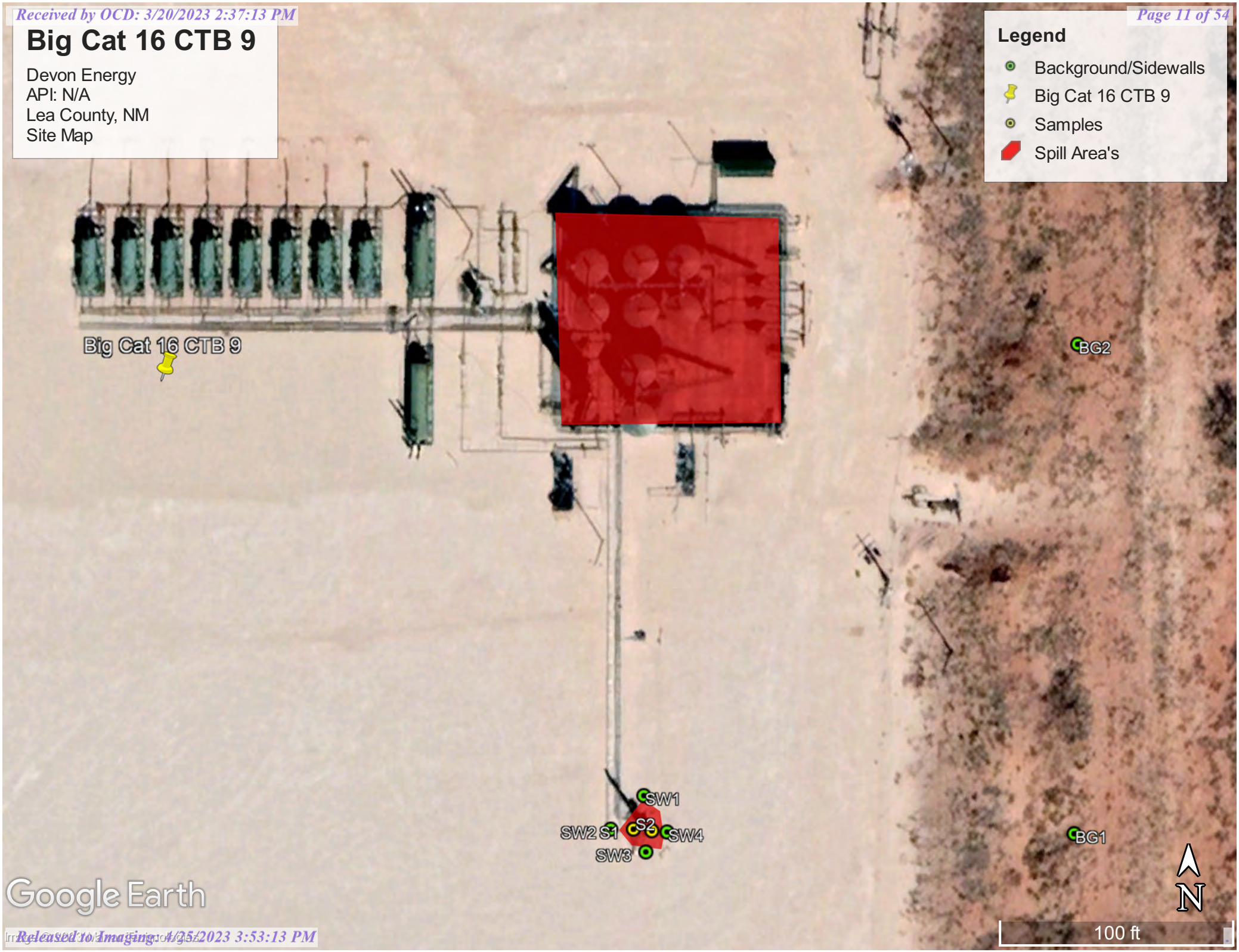


Big Cat 16 CTB 9

Devon Energy
API# N/A
Lea County, NM
Karst Map

Big Cat 16 CTB 9

Devon Energy
API: N/A
Lea County, NM
Site Map



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Appendix A

Water Surveys:

OSE

USGS

Surface Water Map

New Mexico Office of the State Engineer
Water Column/Average Depth to Water

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

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

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

POD Number	Code	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
C 02216		CUB	LE	2	2	4	21	23S	32E	625035	3573261*	1539	585	400	185
C 03851 POD1		CUB	LE	3	3	4	20	23S	32E	622880	3572660	2321	1392	713	679
C 03529 POD1		C	LE	2	4	3	29	23S	32E	622651	3571212	3694	550		
C 02349		CUB	ED		2	3	03	23S	32E	625678	3578004*	3741	525		

Average Depth to Water: **556 feet**

Minimum Depth: **400 feet**

Maximum Depth: **713 feet**

Record Count: 4

UTMNAD83 Radius Search (in meters):

Easting (X): 624211.76 **Northing (Y):** 3574561.51 **Radius:** 5000

***UTM location was derived from PLSS - see Help**

6/13/22 4:58 PM

WATER COLUMN/ AVERAGE DEPTH TO WATER

National Water Information System: Web Interface

USGS Water Resources

Data Category: Groundwater | Geographic Area: United States | GO

Click to hideNews Bulletins

- Explore the *NEW* USGS National Water Dashboard interactive map to access real-time water data from over 13,500 stations nationwide.
- Full News

Groundwater levels for the Nation

Important: Next Generation Monitoring Location Page

Search Results -- 1 sites found

site_no list =

- 321732103401701

Minimum number of levels = 1

Save file of selected sites to local disk for future upload

USGS 321732103401701 23S.32E.21.223444

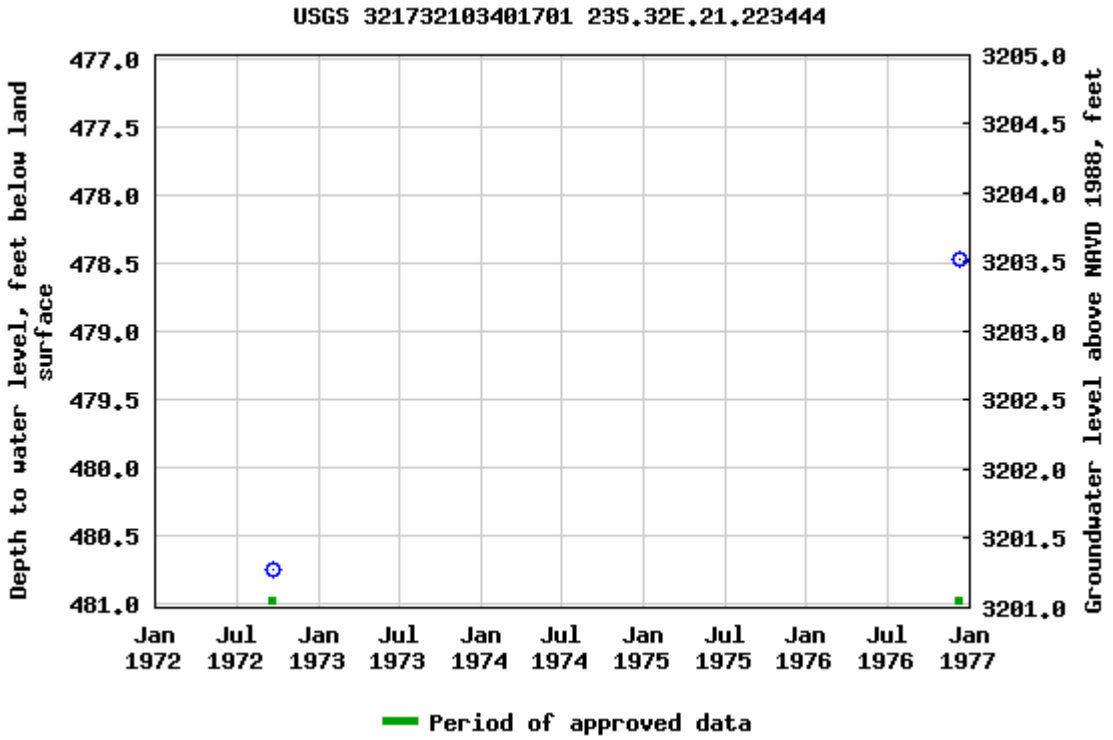
Available data for this site | Groundwater: Field measurements | GO

Lea County, New Mexico
Hydrologic Unit Code 13060011
Latitude 32°17'32", Longitude 103°40'17" NAD27
Land-surface elevation 3,682 feet above NAVD88
The depth of the well is 550 feet below land surface.
This well is completed in the Other aquifers (N9999OTHER) national aquifer.

This well is completed in the Santa Rosa Sandstone (231SNRS) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period



Breaks in the plot represent a gap of at least one year between field measurements.
Download a presentation-quality graph

Questions about sites/data?
Feedback on this web site
Automated retrievals
Help
Data Tips
Explanation of terms

Subscribe for system changes
News

Title: Groundwater for USA: Water Levels
URL: https://nwis.waterdata.usgs.gov/nwis/gwlevels?

Page Contact Information: USGS Water Data Support Team
Page Last Modified: 2022-06-13 18:55:55 EDT
0.58 0.5 nadww02

Pima Environmental Services

Appendix B

Soil Survey & Geological Data

FEMA Flood Map

Wetlands Map

Lea County, New Mexico

KD—Kermit-Palomas fine sands, 0 to 12 percent slopes

Map Unit Setting

National map unit symbol: dmpv
Elevation: 3,000 to 4,400 feet
Mean annual precipitation: 10 to 12 inches
Mean annual air temperature: 60 to 62 degrees F
Frost-free period: 190 to 205 days
Farmland classification: Not prime farmland

Map Unit Composition

Kermit and similar soils: 70 percent
Palomas and similar soils: 20 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Kermit

Setting

Landform: Dunes
Landform position (two-dimensional): Shoulder, backslope, footslope
Landform position (three-dimensional): Side slope
Down-slope shape: Concave, convex, linear
Across-slope shape: Convex
Parent material: Calcareous sandy eolian deposits derived from sedimentary rock

Typical profile

A - 0 to 8 inches: fine sand
C - 8 to 60 inches: fine sand

Properties and qualities

Slope: 3 to 12 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Excessively drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): Very high (20.00 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: 2.0
Available water supply, 0 to 60 inches: Low (about 3.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e

Hydrologic Soil Group: A
Ecological site: R042XC005NM - Deep Sand
Hydric soil rating: No

Description of Palomas

Setting

Landform: Dunes
Landform position (two-dimensional): Shoulder, backslope, footslope
Landform position (three-dimensional): Side slope
Down-slope shape: Concave, convex, linear
Across-slope shape: Convex
Parent material: Alluvium derived from sandstone

Typical profile

A - 0 to 16 inches: fine sand
Bt - 16 to 60 inches: sandy clay loam
Bk - 60 to 66 inches: sandy loam

Properties and qualities

Slope: 0 to 5 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 50 percent
Gypsum, maximum content: 1 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 2.0
Available water supply, 0 to 60 inches: Moderate (about 7.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: B
Ecological site: R042XC003NM - Loamy Sand
Hydric soil rating: No

Minor Components

Maljamar

Percent of map unit: 4 percent
Ecological site: R042XC003NM - Loamy Sand
Hydric soil rating: No

Pyote

Percent of map unit: 4 percent

Ecological site: R042XC003NM - Loamy Sand
Hydric soil rating: No

Palomas

Percent of map unit: 1 percent
Ecological site: R042XC003NM - Loamy Sand
Hydric soil rating: No

Dune land

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

Data Source Information

Soil Survey Area: Lea County, New Mexico
Survey Area Data: Version 18, Sep 10, 2021

National Flood Hazard Layer FIRMette

FEMA

103°41'10"W 32°18'19"N

103°40'32"W 32°17'49"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 Cross Sections with 1% Annual Chance
- 17.5 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.

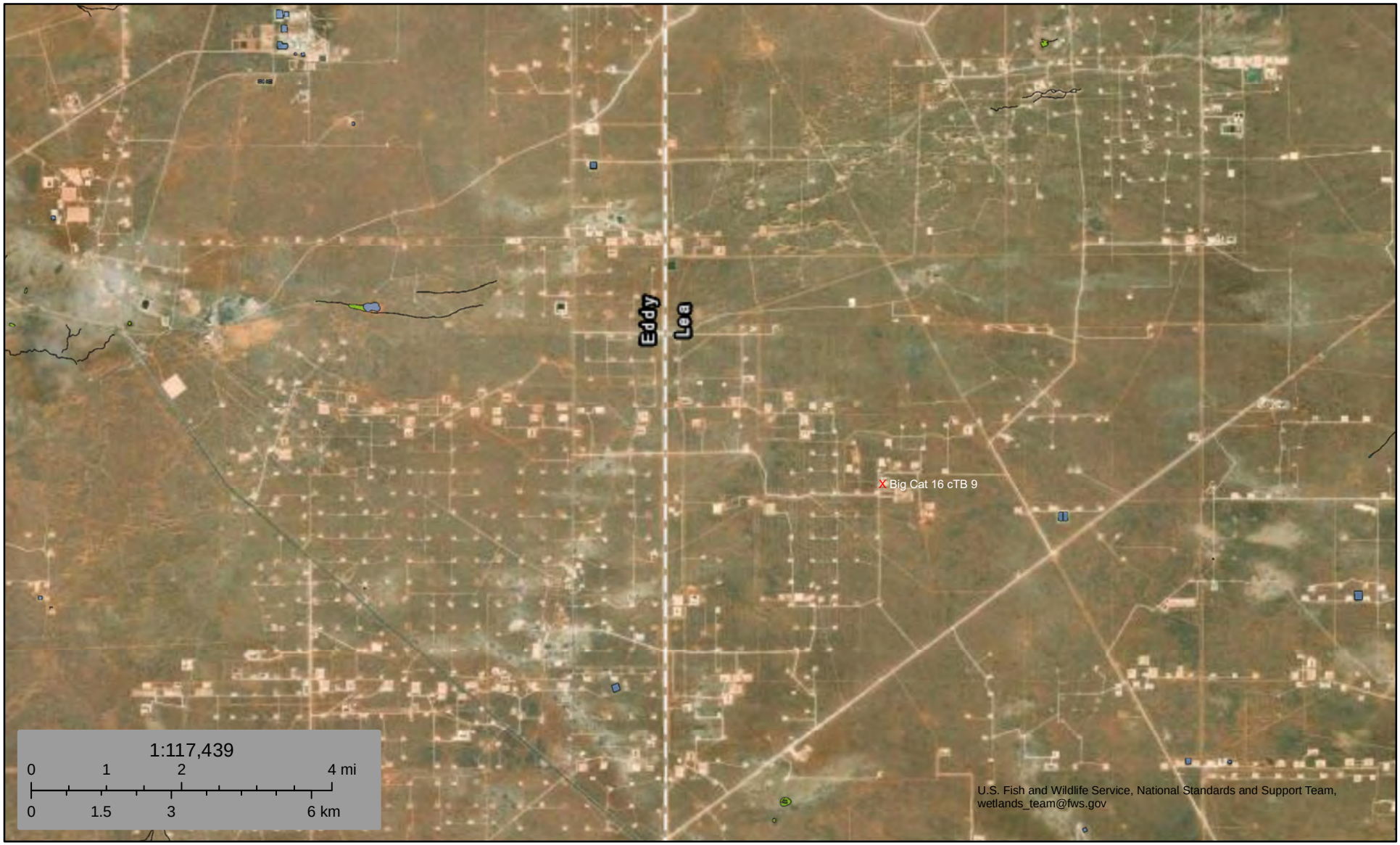
This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 6/13/2022 at 6:53 PM 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.

U.S. Fish and Wildlife Service
National Wetlands Inventory

Wetlands Map



November 21, 2022

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

Pima Environmental Services

Appendix C

C-141 Form

48-Hour Notification

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	NRM2003146585
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

9J3H6-191205-C-1410

Responsible Party Devon Energy Production Company	OGRID 6137
Contact Name Amanda T. Davis	Contact Telephone 575-748-0176
Contact email amanda.davis@dvn.com	Incident # *(assigned by OCD)*
Contact mailing address 6488 Seven Rivers HWY	

Location of Release Source

Latitude 32.30098 Longitude -103.6807
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Big Cat 16 CTB 9	Site Type Oil
Date Release Discovered 10/27/2019	API# *(if applicable)*

Unit Letter	Section	Township	Range	County
N	16	23S	32E	Lea

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) 2.24	Volume Recovered (bbls) 0
☐ Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of total dissolved solids (TDS) 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: The fire was caused by fluid being sent to the flare after the VRT swamped out due to the VRU engine overheating. The fire remained centralized at the flare and was quickly extinguished with fire extinguishers. Approximately, 2 bbls was released at the flare.
When the VRT swamped out it pressured up the tank and caused a release of liquid out of the thief hatch, which ran down the tanks. Approximately, 0.24 bbls was released at the tanks in containment. All fluids released remained on location.

State of New Mexico
Oil Conservation Division

Incident ID	NRM2003146585
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☒ Yes ☐ No	If YES, for what reason(s) does the responsible party consider this a major release? This is considered a major release because the oil released caused a fire.

If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?

Email notification to blm_cfo_spill@blm.gov, Jim Griswold and emnrd-ocd-district1spills@state.nm.us from Amanda Davis on 10/28/2019.

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: Kendra DeHoyos Title: EHS Associate

Signature: Kendra DeHoyos Date: 11/11/2019

email: kendra.dehoyos@dvn.com Telephone: 575-748-3371

OCD Only

Received by: Ramona Marcus Date: 01/31/2020

State of New Mexico
Oil Conservation Division

Incident ID	NRM2003146585
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

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

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

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

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

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

Form C-141
Page 4

State of New Mexico
Oil Conservation Division

Incident ID	NRM2003146585
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: Dale Woodall Title: Environmental Professional

Signature: Dale Woodall Date: 3/20/2023

email: dale.woodall@dvn.com Telephone: 575-748-1838

OCD Only

Received by: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	NRM2003146585
District RP	
Facility ID	
Application ID	

Closure

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

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

[x] A scaled site and sampling diagram as described in 19.15.29.11 NMAC

[x] Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)

[x] Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)

[x] Description of remediation activities

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

Printed Name: Dale Woodall Title: Environmental Professional

Signature: Dale Woodall Date: 3/20/2023

email: dale.woodall@dvn.com Telephone: 575-748-1838

OCD Only

Received by: _____ Date: _____

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

Closure Approved by: Jennifer Nobui Date: 04/25/2023

Printed Name: Jennifer Nobui Title: Environmental Specialist A

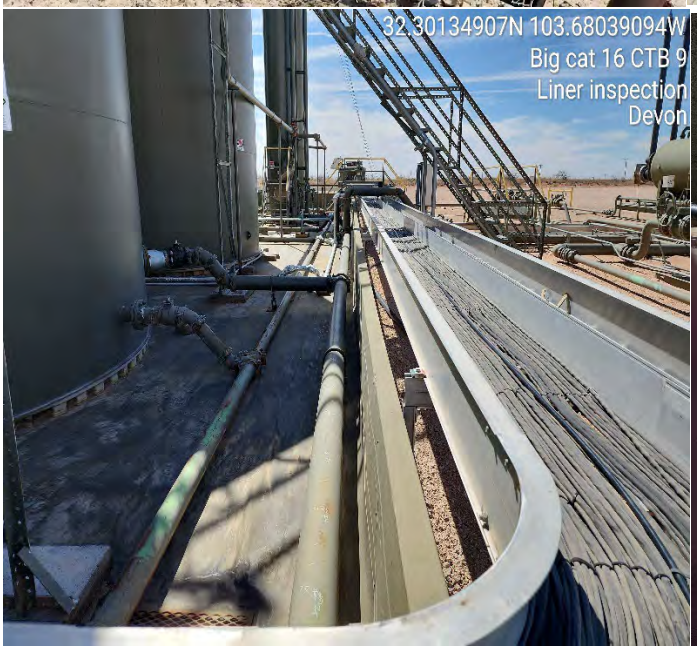
Pima Environmental Services

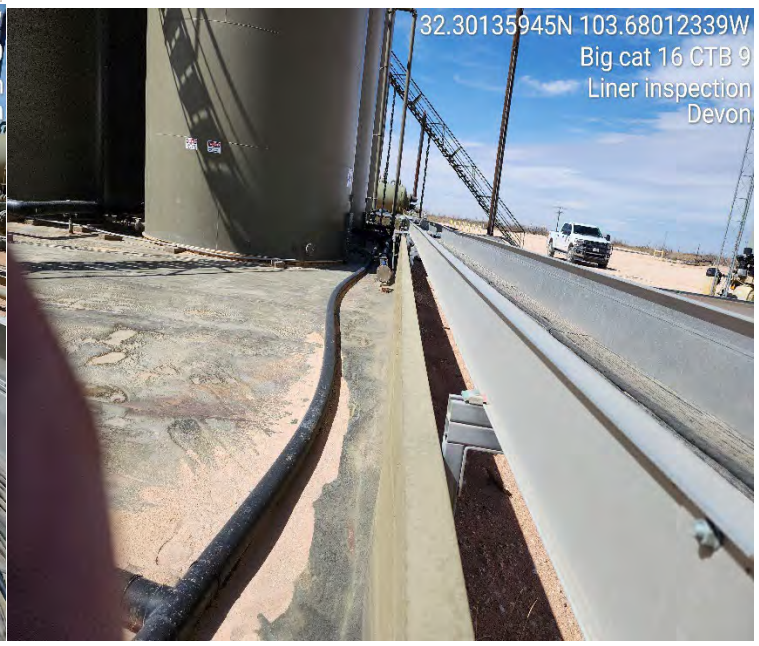
Appendix D

Photographic Documentation

SITE PHOTOGRAPHS
DEVON ENERGY
BIG CAT 16 CTB 9

Liner Inspection






32.30134837N 103.68013605W
Big cat 16 CTB 9
Liner inspection
Devon


32.30134405N 103.68011319W
Big cat 16 CTB 9
Liner inspection
Devon


32.30119352N 103.68015827W
Big cat 16 CTB 9
Liner inspection
Devon


32.30111526N 103.6801198W
Big cat 16 CTB 9
Liner inspection
Devon


32.3011053N 103.68013087W
Big cat 16 CTB 9
Liner inspection
Devon


32.30110769N 103.68040589W
Big cat 16 CTB 9
Liner inspection
Devon


32.30111361N 103.68041903W
Big cat 16 CTB 9
Liner inspection
Devon


32.30114864N 103.68041652W
Big cat 16 CTB 9
Liner inspection
Devon

Flare photos

Pima Environmental Services

Appendix E

Laboratory Reports

Report to:

Tom Bynum

5796 U.S. Hwy 64
Farmington, NM 87401

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

envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Pima Environmental Services-Carlsbad

Project Name:	Big Cat 16 CTB 9
Work Order:	E206242
Job Number:	01058-0007
Received:	6/30/2022

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
7/7/22

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: 7/7/22

Tom Bynum
PO Box 247
Plains, TX 79355-0247

Project Name: Big Cat 16 CTB 9
Workorder: E206242
Date Received: 6/30/2022 11:35:00AM

Tom Bynum,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 6/30/2022 11:35:00AM, under the Project Name: Big Cat 16 CTB 9.

The analytical test results summarized in this report with the Project Name: Big Cat 16 CTB 9 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

Field Offices:

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

Pima Environmental Services-Carlsbad	Project Name:	Big Cat 16 CTB 9	**Reported:**
PO Box 247	Project Number:	01058-0007	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	07/07/22 16:05

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
BG1	E206242-01A	Soil	06/28/22	06/30/22	Glass Jar, 4 oz.
BG2	E206242-02A	Soil	06/28/22	06/30/22	Glass Jar, 4 oz.
SW-1	E206242-03A	Soil	06/28/22	06/30/22	Glass Jar, 4 oz.
SW-2	E206242-04A	Soil	06/28/22	06/30/22	Glass Jar, 4 oz.
SW-3	E206242-05A	Soil	06/28/22	06/30/22	Glass Jar, 4 oz.
SW-4	E206242-06A	Soil	06/28/22	06/30/22	Glass Jar, 4 oz.
S-1 1'	E206242-07A	Soil	06/28/22	06/30/22	Glass Jar, 4 oz.
S-2 1'	E206242-08A	Soil	06/28/22	06/30/22	Glass Jar, 4 oz.

Sample Data

Pima Environmental Services-Carlsbad	Project Name:	Big Cat 16 CTB 9	
PO Box 247	Project Number:	01058-0007	**Reported:**
Plains TX, 79355-0247	Project Manager:	Tom Bynum	7/7/2022 4:05:30PM

BG1

E206242-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: IY			Batch: 2228023
Benzene	ND	0.0250	1	07/06/22	07/06/22	
Ethylbenzene	ND	0.0250	1	07/06/22	07/06/22	
Toluene	ND	0.0250	1	07/06/22	07/06/22	
o-Xylene	ND	0.0250	1	07/06/22	07/06/22	
p,m-Xylene	ND	0.0500	1	07/06/22	07/06/22	
Total Xylenes	ND	0.0250	1	07/06/22	07/06/22	
Surrogate: 4-Bromochlorobenzene-PID		*93.2 %*	*70-130*	*07/06/22*	*07/06/22*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY			Batch: 2228023
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/06/22	07/06/22	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*92.0 %*	*70-130*	*07/06/22*	*07/06/22*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: JL			Batch: 2228026
Diesel Range Organics (C10-C28)	ND	25.0	1	07/06/22	07/07/22	
Oil Range Organics (C28-C36)	ND	50.0	1	07/06/22	07/07/22	
Surrogate: n-Nonane		*144 %*	*50-200*	*07/06/22*	*07/07/22*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: KL			Batch: 2228017
Chloride	ND	20.0	1	07/06/22	07/07/22	

Sample Data

Pima Environmental Services-Carlsbad	Project Name:	Big Cat 16 CTB 9	
PO Box 247	Project Number:	01058-0007	**Reported:**
Plains TX, 79355-0247	Project Manager:	Tom Bynum	7/7/2022 4:05:30PM

BG2

E206242-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: IY			Batch: 2228023
Benzene	ND	0.0250	1	07/06/22	07/06/22	
Ethylbenzene	ND	0.0250	1	07/06/22	07/06/22	
Toluene	ND	0.0250	1	07/06/22	07/06/22	
o-Xylene	ND	0.0250	1	07/06/22	07/06/22	
p,m-Xylene	ND	0.0500	1	07/06/22	07/06/22	
Total Xylenes	ND	0.0250	1	07/06/22	07/06/22	
Surrogate: 4-Bromochlorobenzene-PID		*92.7 %*	*70-130*	*07/06/22*	*07/06/22*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY			Batch: 2228023
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/06/22	07/06/22	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*91.8 %*	*70-130*	*07/06/22*	*07/06/22*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: JL			Batch: 2228026
Diesel Range Organics (C10-C28)	ND	25.0	1	07/06/22	07/07/22	
Oil Range Organics (C28-C36)	ND	50.0	1	07/06/22	07/07/22	
Surrogate: n-Nonane		*141 %*	*50-200*	*07/06/22*	*07/07/22*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: KL			Batch: 2228017
Chloride	ND	20.0	1	07/06/22	07/07/22	

Sample Data

Pima Environmental Services-Carlsbad	Project Name:	Big Cat 16 CTB 9	
PO Box 247	Project Number:	01058-0007	**Reported:**
Plains TX, 79355-0247	Project Manager:	Tom Bynum	7/7/2022 4:05:30PM

SW-1

E206242-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: IY			Batch: 2228023
Benzene	ND	0.0250	1	07/06/22	07/06/22	
Ethylbenzene	ND	0.0250	1	07/06/22	07/06/22	
Toluene	ND	0.0250	1	07/06/22	07/06/22	
o-Xylene	ND	0.0250	1	07/06/22	07/06/22	
p,m-Xylene	ND	0.0500	1	07/06/22	07/06/22	
Total Xylenes	ND	0.0250	1	07/06/22	07/06/22	
Surrogate: 4-Bromochlorobenzene-PID		*91.5 %*	*70-130*	*07/06/22*	*07/06/22*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY			Batch: 2228023
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/06/22	07/06/22	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*91.8 %*	*70-130*	*07/06/22*	*07/06/22*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: JL			Batch: 2228026
Diesel Range Organics (C10-C28)	ND	25.0	1	07/06/22	07/07/22	
Oil Range Organics (C28-C36)	ND	50.0	1	07/06/22	07/07/22	
Surrogate: n-Nonane		*127 %*	*50-200*	*07/06/22*	*07/07/22*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: KL			Batch: 2228017
Chloride	ND	200	10	07/06/22	07/07/22	

Sample Data

Pima Environmental Services-Carlsbad	Project Name:	Big Cat 16 CTB 9	
PO Box 247	Project Number:	01058-0007	**Reported:**
Plains TX, 79355-0247	Project Manager:	Tom Bynum	7/7/2022 4:05:30PM

SW-2

E206242-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: IY			Batch: 2228023
Benzene	ND	0.0250	1	07/06/22	07/06/22	
Ethylbenzene	ND	0.0250	1	07/06/22	07/06/22	
Toluene	ND	0.0250	1	07/06/22	07/06/22	
o-Xylene	ND	0.0250	1	07/06/22	07/06/22	
p,m-Xylene	ND	0.0500	1	07/06/22	07/06/22	
Total Xylenes	ND	0.0250	1	07/06/22	07/06/22	
Surrogate: 4-Bromochlorobenzene-PID		*91.8 %*	*70-130*	*07/06/22*	*07/06/22*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY			Batch: 2228023
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/06/22	07/06/22	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*92.0 %*	*70-130*	*07/06/22*	*07/06/22*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: JL			Batch: 2228026
Diesel Range Organics (C10-C28)	ND	25.0	1	07/06/22	07/07/22	
Oil Range Organics (C28-C36)	ND	50.0	1	07/06/22	07/07/22	
Surrogate: n-Nonane		*121 %*	*50-200*	*07/06/22*	*07/07/22*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: KL			Batch: 2228017
Chloride	ND	200	10	07/06/22	07/07/22	

Sample Data

Pima Environmental Services-Carlsbad	Project Name:	Big Cat 16 CTB 9	
PO Box 247	Project Number:	01058-0007	**Reported:**
Plains TX, 79355-0247	Project Manager:	Tom Bynum	7/7/2022 4:05:30PM

SW-3

E206242-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: IY			Batch: 2228023
Benzene	ND	0.0250	1	07/06/22	07/06/22	
Ethylbenzene	ND	0.0250	1	07/06/22	07/06/22	
Toluene	ND	0.0250	1	07/06/22	07/06/22	
o-Xylene	ND	0.0250	1	07/06/22	07/06/22	
p,m-Xylene	ND	0.0500	1	07/06/22	07/06/22	
Total Xylenes	ND	0.0250	1	07/06/22	07/06/22	
Surrogate: 4-Bromochlorobenzene-PID		*92.3 %*	*70-130*	*07/06/22*	*07/06/22*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY			Batch: 2228023
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/06/22	07/06/22	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*91.9 %*	*70-130*	*07/06/22*	*07/06/22*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: JL			Batch: 2228026
Diesel Range Organics (C10-C28)	ND	25.0	1	07/06/22	07/07/22	
Oil Range Organics (C28-C36)	ND	50.0	1	07/06/22	07/07/22	
Surrogate: n-Nonane		*125 %*	*50-200*	*07/06/22*	*07/07/22*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: KL			Batch: 2228017
Chloride	ND	200	10	07/06/22	07/07/22	

Sample Data

Pima Environmental Services-Carlsbad	Project Name:	Big Cat 16 CTB 9	
PO Box 247	Project Number:	01058-0007	**Reported:**
Plains TX, 79355-0247	Project Manager:	Tom Bynum	7/7/2022 4:05:30PM

SW-4

E206242-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: IY			Batch: 2228023
Benzene	ND	0.0250	1	07/06/22	07/06/22	
Ethylbenzene	ND	0.0250	1	07/06/22	07/06/22	
Toluene	ND	0.0250	1	07/06/22	07/06/22	
o-Xylene	ND	0.0250	1	07/06/22	07/06/22	
p,m-Xylene	ND	0.0500	1	07/06/22	07/06/22	
Total Xylenes	ND	0.0250	1	07/06/22	07/06/22	
Surrogate: 4-Bromochlorobenzene-PID		*91.4 %*	*70-130*	*07/06/22*	*07/06/22*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY			Batch: 2228023
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/06/22	07/06/22	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*92.1 %*	*70-130*	*07/06/22*	*07/06/22*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: JL			Batch: 2228026
Diesel Range Organics (C10-C28)	ND	25.0	1	07/06/22	07/07/22	
Oil Range Organics (C28-C36)	ND	50.0	1	07/06/22	07/07/22	
Surrogate: n-Nonane		*100 %*	*50-200*	*07/06/22*	*07/07/22*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: KL			Batch: 2228017
Chloride	ND	200	10	07/06/22	07/07/22	

Sample Data

Pima Environmental Services-Carlsbad	Project Name:	Big Cat 16 CTB 9	
PO Box 247	Project Number:	01058-0007	**Reported:**
Plains TX, 79355-0247	Project Manager:	Tom Bynum	7/7/2022 4:05:30PM

S-1 1'

E206242-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: IY			Batch: 2228023
Benzene	ND	0.0250	1	07/06/22	07/06/22	
Ethylbenzene	ND	0.0250	1	07/06/22	07/06/22	
Toluene	ND	0.0250	1	07/06/22	07/06/22	
o-Xylene	ND	0.0250	1	07/06/22	07/06/22	
p,m-Xylene	ND	0.0500	1	07/06/22	07/06/22	
Total Xylenes	ND	0.0250	1	07/06/22	07/06/22	
Surrogate: 4-Bromochlorobenzene-PID		*91.0 %*	*70-130*	*07/06/22*	*07/06/22*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY			Batch: 2228023
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/06/22	07/06/22	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*92.4 %*	*70-130*	*07/06/22*	*07/06/22*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: JL			Batch: 2228026
Diesel Range Organics (C10-C28)	ND	25.0	1	07/06/22	07/07/22	
Oil Range Organics (C28-C36)	ND	50.0	1	07/06/22	07/07/22	
Surrogate: n-Nonane		*111 %*	*50-200*	*07/06/22*	*07/07/22*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: KL			Batch: 2228017
Chloride	ND	200	10	07/06/22	07/07/22	

Sample Data

Pima Environmental Services-Carlsbad	Project Name:	Big Cat 16 CTB 9	
PO Box 247	Project Number:	01058-0007	**Reported:**
Plains TX, 79355-0247	Project Manager:	Tom Bynum	7/7/2022 4:05:30PM

S-2 1'

E206242-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: IY			Batch: 2228023
Benzene	ND	0.0250	1	07/06/22	07/06/22	
Ethylbenzene	ND	0.0250	1	07/06/22	07/06/22	
Toluene	ND	0.0250	1	07/06/22	07/06/22	
o-Xylene	ND	0.0250	1	07/06/22	07/06/22	
p,m-Xylene	ND	0.0500	1	07/06/22	07/06/22	
Total Xylenes	ND	0.0250	1	07/06/22	07/06/22	
Surrogate: 4-Bromochlorobenzene-PID		*92.5 %*	*70-130*	*07/06/22*	*07/06/22*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY			Batch: 2228023
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/06/22	07/06/22	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*93.5 %*	*70-130*	*07/06/22*	*07/06/22*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: JL			Batch: 2228026
Diesel Range Organics (C10-C28)	ND	25.0	1	07/06/22	07/07/22	
Oil Range Organics (C28-C36)	ND	50.0	1	07/06/22	07/07/22	
Surrogate: n-Nonane		*114 %*	*50-200*	*07/06/22*	*07/07/22*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: KL			Batch: 2228017
Chloride	ND	200	10	07/06/22	07/07/22	

QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Big Cat 16 CTB 9	**Reported:**
PO Box 247	Project Number:	01058-0007	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	7/7/2022 4:05:30PM

Volatile Organics by EPA 8021B

Analyst: IY

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2228023-BLK1)									Prepared: 07/06/22 Analyzed: 07/06/22
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	*7.36*		*8.00*		*92.0*	*70-130*			
LCS (2228023-BS1)									Prepared: 07/06/22 Analyzed: 07/06/22
Benzene	5.02	0.0250	5.00		100	70-130			
Ethylbenzene	4.47	0.0250	5.00		89.4	70-130			
Toluene	4.76	0.0250	5.00		95.2	70-130			
o-Xylene	4.62	0.0250	5.00		92.4	70-130			
p,m-Xylene	9.22	0.0500	10.0		92.2	70-130			
Total Xylenes	13.8	0.0250	15.0		92.3	70-130			
Surrogate: 4-Bromochlorobenzene-PID	*7.50*		*8.00*		*93.8*	*70-130*			
LCS Dup (2228023-BSD1)									Prepared: 07/06/22 Analyzed: 07/06/22
Benzene	5.30	0.0250	5.00		106	70-130	5.29	20	
Ethylbenzene	4.70	0.0250	5.00		94.0	70-130	5.09	20	
Toluene	5.02	0.0250	5.00		100	70-130	5.29	20	
o-Xylene	4.87	0.0250	5.00		97.4	70-130	5.28	20	
p,m-Xylene	9.69	0.0500	10.0		96.9	70-130	4.97	20	
Total Xylenes	14.6	0.0250	15.0		97.1	70-130	5.08	20	
Surrogate: 4-Bromochlorobenzene-PID	*7.54*		*8.00*		*94.3*	*70-130*			

QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Big Cat 16 CTB 9	**Reported:**
PO Box 247	Project Number:	01058-0007	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	7/7/2022 4:05:30PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: IY

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2228023-BLK1)									Prepared: 07/06/22 Analyzed: 07/06/22
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.25*		*8.00*		*90.6*	*70-130*			
LCS (2228023-BS2)									Prepared: 07/06/22 Analyzed: 07/06/22
Gasoline Range Organics (C6-C10)	50.6	20.0	50.0		101	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.37*		*8.00*		*92.1*	*70-130*			
LCS Dup (2228023-BSD2)									Prepared: 07/06/22 Analyzed: 07/06/22
Gasoline Range Organics (C6-C10)	53.0	20.0	50.0		106	70-130	4.66	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.42*		*8.00*		*92.7*	*70-130*			

QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Big Cat 16 CTB 9	**Reported:**
PO Box 247	Project Number:	01058-0007	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	7/7/2022 4:05:30PM

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 (2228026-BLK1)									Prepared: 07/06/22 Analyzed: 07/06/22
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	*58.7*		*50.0*		*117*	*50-200*			
LCS (2228026-BS1)									Prepared: 07/06/22 Analyzed: 07/06/22
Diesel Range Organics (C10-C28)	520	25.0	500		104	38-132			
Surrogate: n-Nonane	*57.4*		*50.0*		*115*	*50-200*			
Matrix Spike (2228026-MS1)				**Source: E206241-02**					Prepared: 07/06/22 Analyzed: 07/07/22
Diesel Range Organics (C10-C28)	680	25.0	500	ND	136	38-132			M2
Surrogate: n-Nonane	*74.0*		*50.0*		*148*	*50-200*			
Matrix Spike Dup (2228026-MSD1)				**Source: E206241-02**					Prepared: 07/06/22 Analyzed: 07/07/22
Diesel Range Organics (C10-C28)	692	25.0	500	ND	138	38-132	1.80	20	M2
Surrogate: n-Nonane	*67.8*		*50.0*		*136*	*50-200*			

QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Big Cat 16 CTB 9	**Reported:**
PO Box 247	Project Number:	01058-0007	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	7/7/2022 4:05:30PM

Anions by EPA 300.0/9056A

Analyst: KL

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2228017-BLK1)									Prepared: 07/06/22 Analyzed: 07/07/22
Chloride	ND	20.0							
LCS (2228017-BS1)									Prepared: 07/06/22 Analyzed: 07/07/22
Chloride	252	20.0	250		101	90-110			
Matrix Spike (2228017-MS1)				**Source: E206238-01**					Prepared: 07/06/22 Analyzed: 07/07/22
Chloride	255	20.0	250	ND	102	80-120			
Matrix Spike Dup (2228017-MSD1)				**Source: E206238-01**					Prepared: 07/06/22 Analyzed: 07/07/22
Chloride	257	20.0	250	ND	103	80-120	0.504	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

Pima Environmental Services-Carlsbad	Project Name:	Big Cat 16 CTB 9	
PO Box 247	Project Number:	01058-0007	**Reported:**
Plains TX, 79355-0247	Project Manager:	Tom Bynum	07/07/22 16:05

M2	Matrix spike recovery was outside quality control limits. The associated 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.

Client: Pima Environmental Services	Bill To	Lab Use Only		TAT	EPA Program
Project: Big Cat 16 CTB 9	Attention: Devon Energy	Lab WO#: E206242	Job Number: 01058-0007	1D / 2D / 3D / Standard: X (Standard)	CWA / SDWA
Project Manager: Tom Bynum	Address:	Analysis and Method			RCRA
Address: 5614 N. Lovington Hwy.	City, State, Zip				State: NM X, CO, UT, AZ, TX
City, State, Zip Hobbs, NM, 88240	Phone:				
Phone: 580-748-1613	Email:				
Email: tom@pimaoil.com	Pima Project # 125				
Report due by:					

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
8:00	6/28/22	S		BG1	1									X				
8:05	|	|		BG2	2									|				
8:10	|	|		SW-1	3									|				
8:15	|	|		SW-2	4									|				
8:20	|	|		SW-3	5									|				
8:25	|	|		SW-4	6									|				
8:30	|	|		S-1 1'	7									|				
8:35	|	|		S-2 1'	8									|				

Additional Instructions: Bill To Devon Energy-

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: Rudy Alvarez

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
Ned Rogers	6/29/22	1:20 P	[signature]	6-29-22	1:30
[signature]	6-29-22	3:40	Caitlin Christie	6/30/22	11:35

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: 7/5/2022 3:00:05PM

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:	Pima Environmental Services-Carlsbad	Date Received:	06/30/22 11:35	Work Order ID:	E206242
Phone:	(575) 631-6977	Date Logged In:	06/30/22 12:26	Logged In By:	Caitlin Christian
Email:	tom@pimaoil.com	Due Date:	07/07/22 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	
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

Comments/Resolution

Client Instruction

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

Date

envirotech Inc.

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 198951

CONDITIONS

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 198951
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jnobui	Closure Report Approved. Please remember to include a copy of the email notification in the closure report.	4/25/2023