

Incident ID	nAPP2233949873
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?	<100 (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas not on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

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

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

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

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

State of New Mexico
Oil Conservation Division

Page 4

Incident ID	nAPP2233949873
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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: EHS Professional

Signature: *Dale Woodall* Date: 2/2/2023

email: dale.woodall@dvn.com Telephone: 405-318-4697

OCD Only

Received by: Jocelyn Harimon Date: 02/02/2023

State of New Mexico
Oil Conservation Division

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Closure

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

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

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

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

Printed Name: Dale Woodall Title: EHS Professional
 Signature: *Dale Woodall* Date: 2/2/2023
 email: dale.woodall@dvn.com Telephone: 405-318-4697

OCD Only

Received by: Jocelyn Harimon Date: 02/02/2023

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

January 31, 2023

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

Re: Site Assessment, Remediation, and Closure Report
Thistle North Central CTB
API No. N/A
GPS: Latitude 32.283487 Longitude -103.562399
UL -- N, 22, T23S, R33E
Lea County, NM
NMOCD Ref. No. NAPP2233949873

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 produced water release that occurred at the Thistle North Central CTB (Thistle). The initial C-141 was submitted on December 16, 2022 (Appendix C). This incident was assigned Incident ID NAPP2233949873 by the New Mexico Oil Conservation Division (NMOCD).

Site Characterization

The Thistle is located approximately twenty-five (25) miles southwest of Eunice, NM. This spill site is in Unit N, Section 22, Township 23S, Range 33E, Latitude 32.283487 Longitude -103.562399, 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 Tonuco loamy fine sands, 0 to 3 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 low potential for karst geology to be present around the Thistle (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 120 feet BGS. The closest waterway is a Salt Playa located approximately 8.84 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' (Lack of GW data)	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

NAPP2233949873: On December 5, 2022, a dumped on a heater pump, developed a leak causing fluid release onto pad. The released fluids were calculated to be approximately 29 barrels (bbls) of produced water. Vacuum truck was not able to recover any fluid.

Site Assessment, and Soil Sampling Results

On December 20, 2022, Pima mobilized personnel to the site to begin collecting soil samples from the affected 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.

12-20-22 Soil Sample Results

NMOCD Table 1 Closure Criteria 19.15.29 NMAC (Depth to Groundwater is <100')								
DEVON ENERGY -THISTLE NORTH CTB								
Sample Date: 12/20/22		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
SW 1	6"	ND	ND	ND	ND	ND	0	ND
SW 2	6"	ND	ND	ND	ND	ND	0	ND
SW 3	6"	ND	ND	ND	ND	ND	0	ND
SW 4	6"	ND	ND	ND	ND	ND	0	ND
SW 5	6"	ND	ND	ND	ND	ND	0	ND
SW 6	6"	ND	ND	ND	ND	ND	0	ND
SW 7	6"	ND	ND	ND	ND	ND	0	ND
SW 8	6"	ND	ND	ND	ND	ND	0	ND
SW 9	6"	ND	ND	ND	ND	ND	0	ND
SW 10	6"	ND	ND	ND	ND	ND	0	ND
SW 11	6"	ND	ND	ND	ND	ND	0	ND
SW 12	6"	ND	ND	ND	ND	ND	0	ND
S-1	1'	ND	ND	ND	ND	ND	0	170
	2'	ND	ND	ND	ND	ND	0	88.6
S-2	1'	ND	ND	ND	ND	ND	0	21.7
	2'	ND	ND	ND	ND	ND	0	22
S-3	1'	ND	ND	ND	ND	ND	0	27.2
	2'	ND	ND	ND	ND	ND	0	ND
S-4	1'	ND	ND	ND	ND	ND	0	45.7
	2'	ND	ND	ND	ND	ND	0	ND
S-5	1'	ND	ND	ND	ND	ND	0	ND
	2'	ND	ND	ND	ND	ND	0	32.8
S-6	1'	ND	ND	ND	ND	ND	0	ND
	2'	ND	ND	ND	ND	ND	0	ND
S-7	1'	ND	ND	ND	ND	ND	0	ND
	2'	ND	ND	ND	ND	ND	0	ND
S-8	1'	ND	ND	ND	ND	ND	0	ND
	2'	ND	ND	ND	ND	ND	0	ND
S-9	1'	ND	ND	ND	ND	ND	0	48.1
	2'	ND	ND	ND	ND	ND	0	30.4
BG 1	6"	ND	ND	ND	ND	ND	0	ND

ND- Analyte Not Detected

Complete laboratory reports can be found in Appendix E.

Based on the sample results, the bottoms and sidewalls were below NMOCD Closure Criteria 19.15.29 NMAC.

Closure Request

After careful review, Pima requests that this incident, NAPP2233949873 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

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
- Appendix D – Photographic Documentation
- Appendix E – Laboratory Report



Pima Environmental Services

Figures:

1-Location Map

2-Topographic Map

3-Karst Map

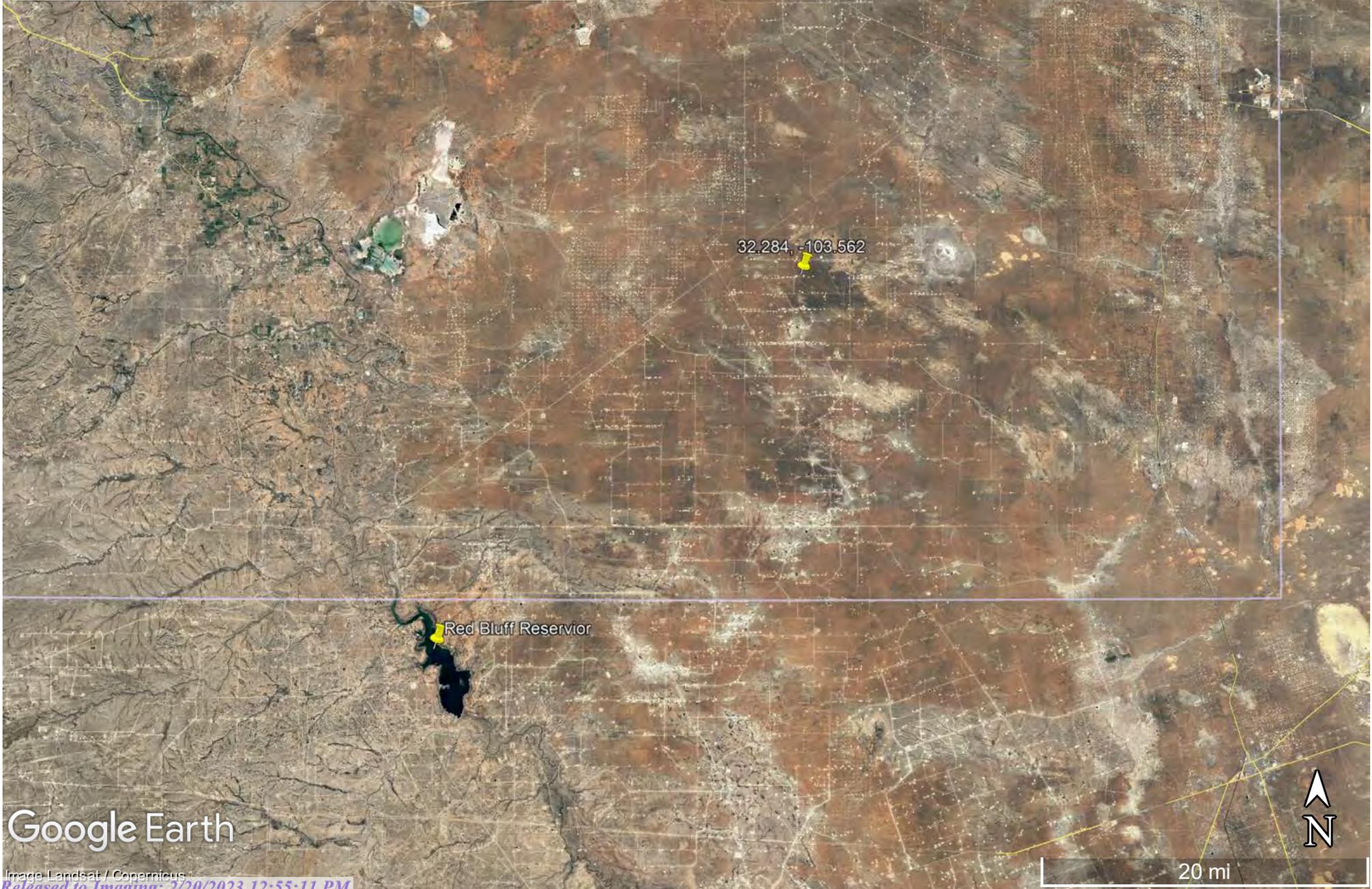
4-Site Map

Thistle North Central Tank Battery

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

Legend

 Thistle North Central Tank Battery



32.284, -103.562

Red Bluff Reservoir

Google Earth

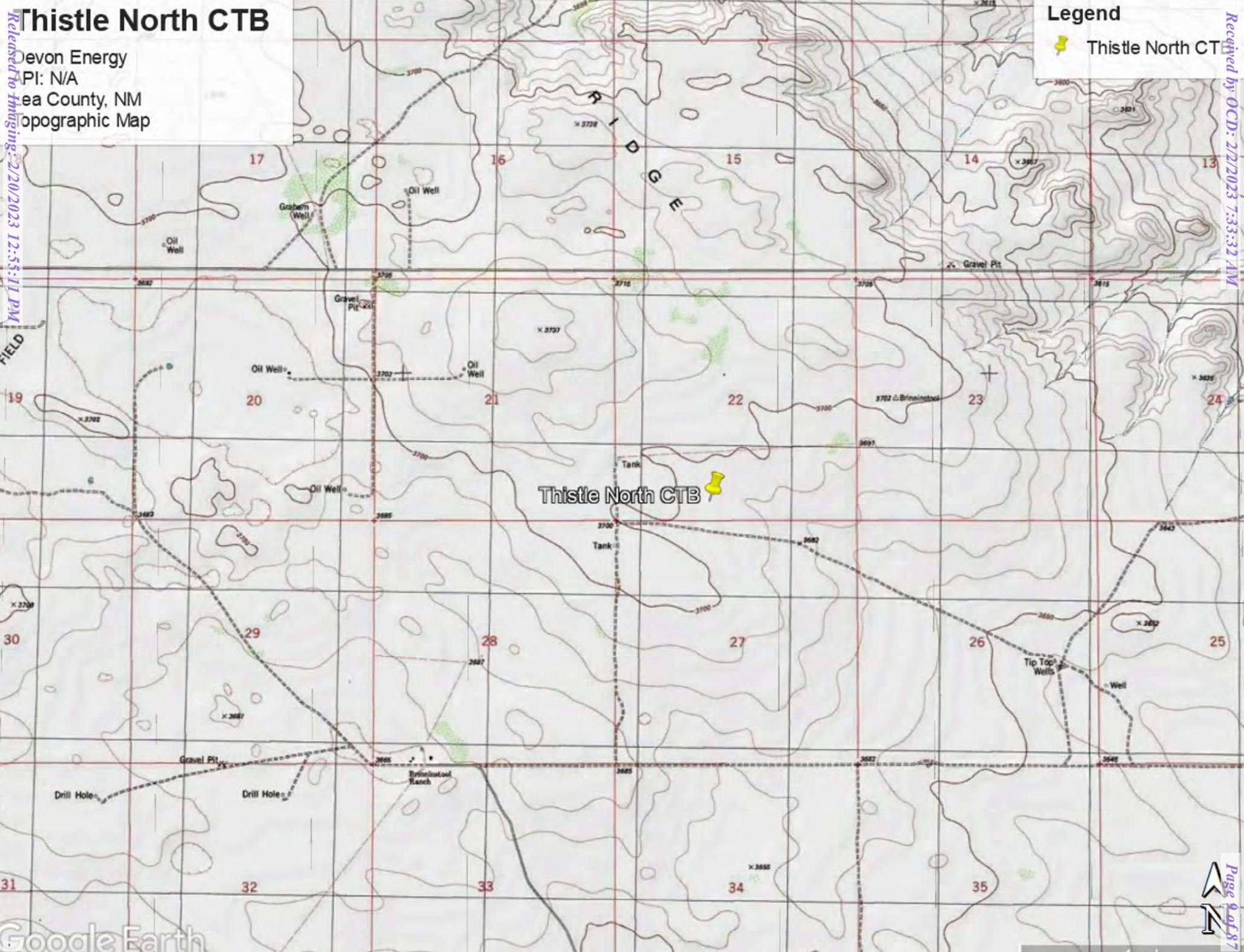
Image Landsat / Copernicus

20 mi

Thistle North CTB

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

Legend
Thistle North CTB



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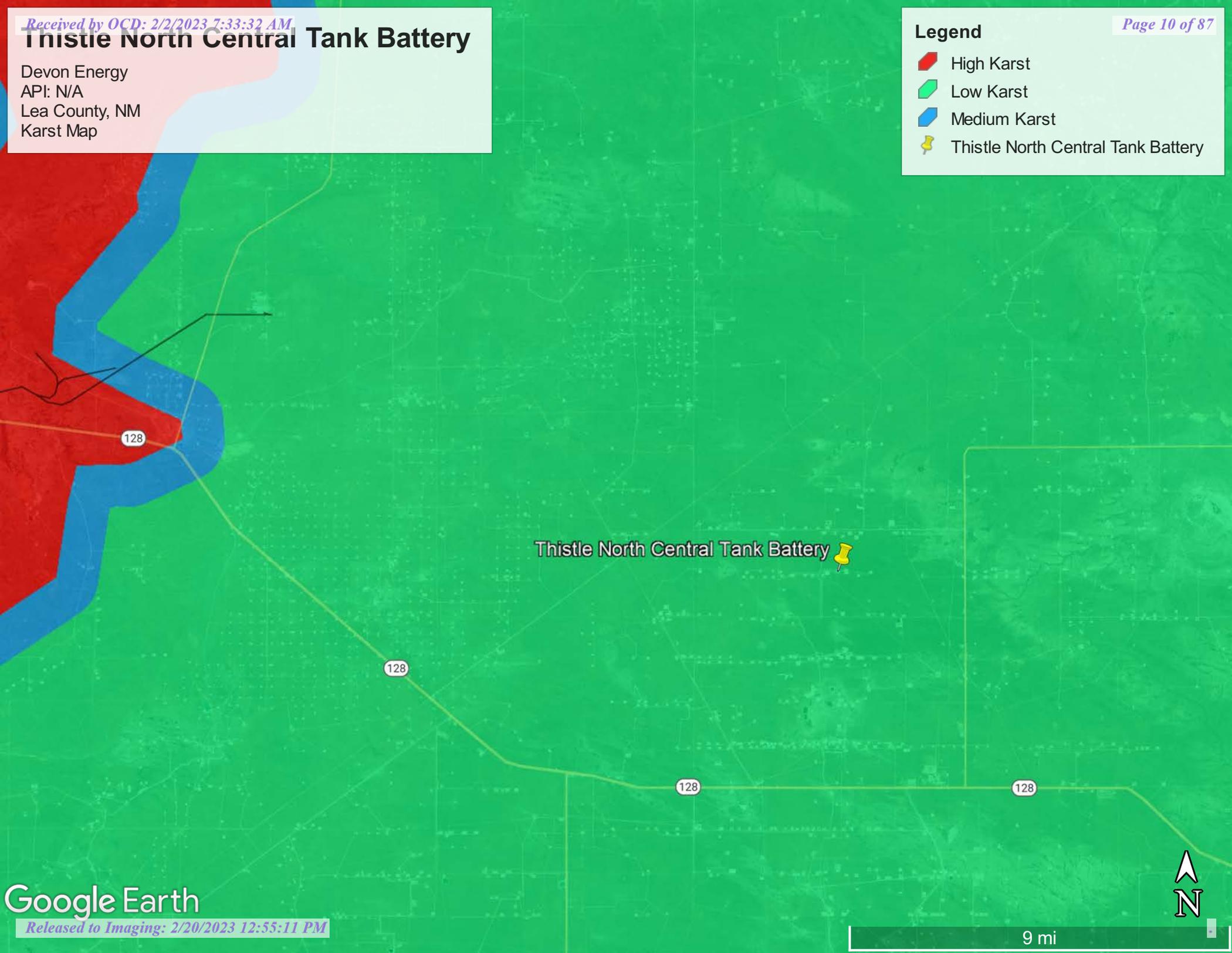
Received by OCD: 2/2/2023 7:33:32 AM

Thistle North Central Tank Battery

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

Legend

-  High Karst
-  Low Karst
-  Medium Karst
-  Thistle North Central Tank Battery

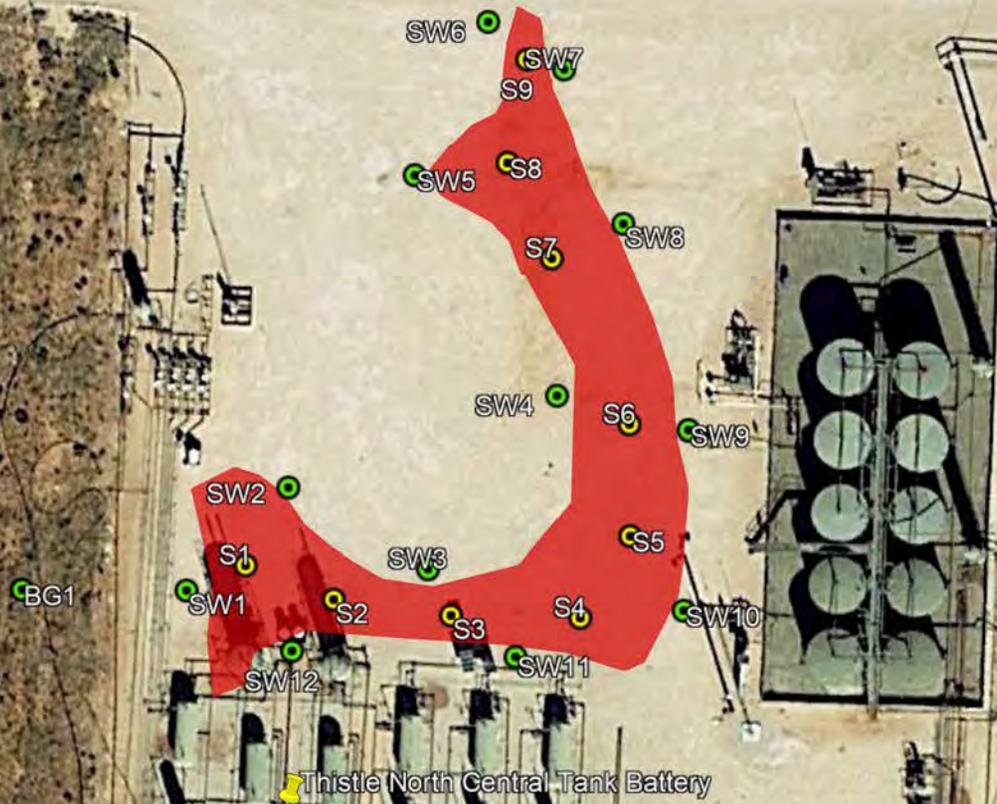


Thistle North Central Tank Battery

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

Legend

- Background/Sidewalls
- Samples
- Spill Area Sqft 7,517
- 📍 Thistle North Central Tank Battery





Pima Environmental Services

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	POD Code	Sub-basin	County	Q 64	Q 16	Q 4	Q 2	Q 28	Sec	Tws	Rng	X	Y	Distance	DepthWell	DepthWater	Water Column
C_02278	CUB	LE	3	4	2	28	23S	33E	634484	3571989*	1248	650	400	250			
C_02280	CUB	LE	3	2	4	28	23S	33E	634489	3571586*	1544	650	400	250			
C_02281	CUB	LE	3	4	4	28	23S	33E	634495	3571183*	1879	545	400	145			
C_04664 POD1	CUB	LE	4	1	4	15	23S	33E	635784	3574818	2029	55					
C_02279	CUB	LE	3	4	3	28	23S	33E	633691	3571173*	2385	650	400	250			
C_02283	CUB	LE	4	2	2	26	23S	33E	637896	3572431*	2513	325	225	100			
C_02282	CUB	LE	3	1	1	25	23S	33E	638098	3572436*	2712	325	225	100			
C_02277	CUB	LE	2	3	4	20	23S	33E	632663	3572970*	2754	550	400	150			
C_02284	CUB	LE	4	2	4	26	23S	33E	637907	3571626*	2765	325	225	100			
C_03582 POD1	C	LE	4	1	1	14	23S	33E	636583	3575666	3074	590					
C_04595 POD1	CUB	LE	4	3	3	34	23S	33E	635150	3569564	3268	55					
C_04353 POD1	CUB	ED	4	2	2	24	23S	33E	639474	3574098	4256	603	330	273			
C_02276	CUB	LE	3	1	4	19	23S	33E	630848	3573154*	4577	650	400	250			
C_02275	CUB	LE	3	3	2	19	23S	33E	630843	3573557*	4629	650	400	250			

Average Depth to Water: **345 feet**
 Minimum Depth: **225 feet**
 Maximum Depth: **400 feet**

Record Count: 14

UTMNAD83 Radius Search (in meters):

Easting (X): 635413.47

Northing (Y): 3572822.8

Radius: 5000

*UTM location was derived from PLSS - see Help

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

12/6/22 1:35 PM

WATER COLUMN/ AVERAGE DEPTH TO WATER



USGS Home
Contact USGS
Search USGS

National Water Information System: Web Interface

USGS Water Resources

Data Category:

Groundwater

Geographic Area:

United States

GO

Click to hide News Bulletins

- See the [Water Data for the Nation Blog](#) for the latest news and updates.

Groundwater levels for the Nation

i Important: [Next Generation Monitoring Location Page](#)

Search Results -- 1 sites found

site_no list =

- 321611103321601

Minimum number of levels = 1

[Save file of selected sites](#) to local disk for future upload

USGS 321611103321601 23S.33E.26.42100

Available data for this site

Groundwater: Field measurements

GO

Lea County, New Mexico

Hydrologic Unit Code 13070007

Latitude 32°16'28.0", Longitude 103°32'15.6" NAD83

Land-surface elevation 3,641 feet above NAVD88

The depth of the well is 190 feet below land surface.

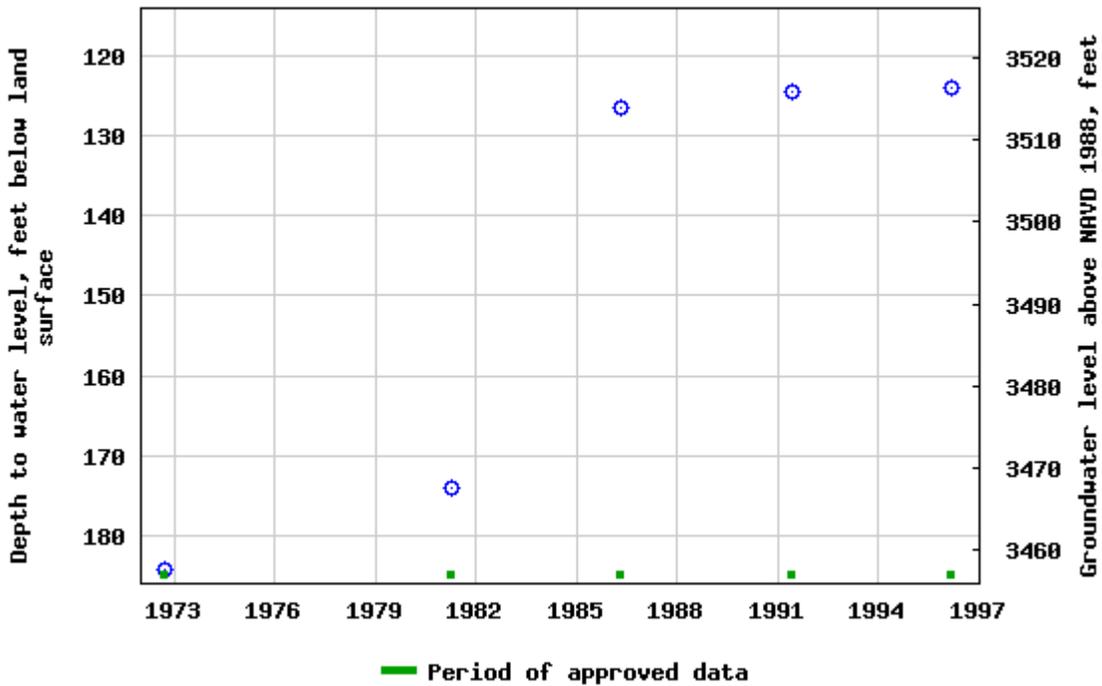
This well is completed in the Other aquifers (N9999OTHER) national aquifer.

This well is completed in the Chinle Formation (231CHNL) local aquifer.

Output formats

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

USGS 321611103321601 23S.33E.26.42100



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](#)
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[Accessibility](#) [FOIA](#) [Privacy](#) [Policies and Notices](#)

[U.S. Department of the Interior](#) | [U.S. Geological Survey](#)

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: 2022-12-06 15:32:33 EST

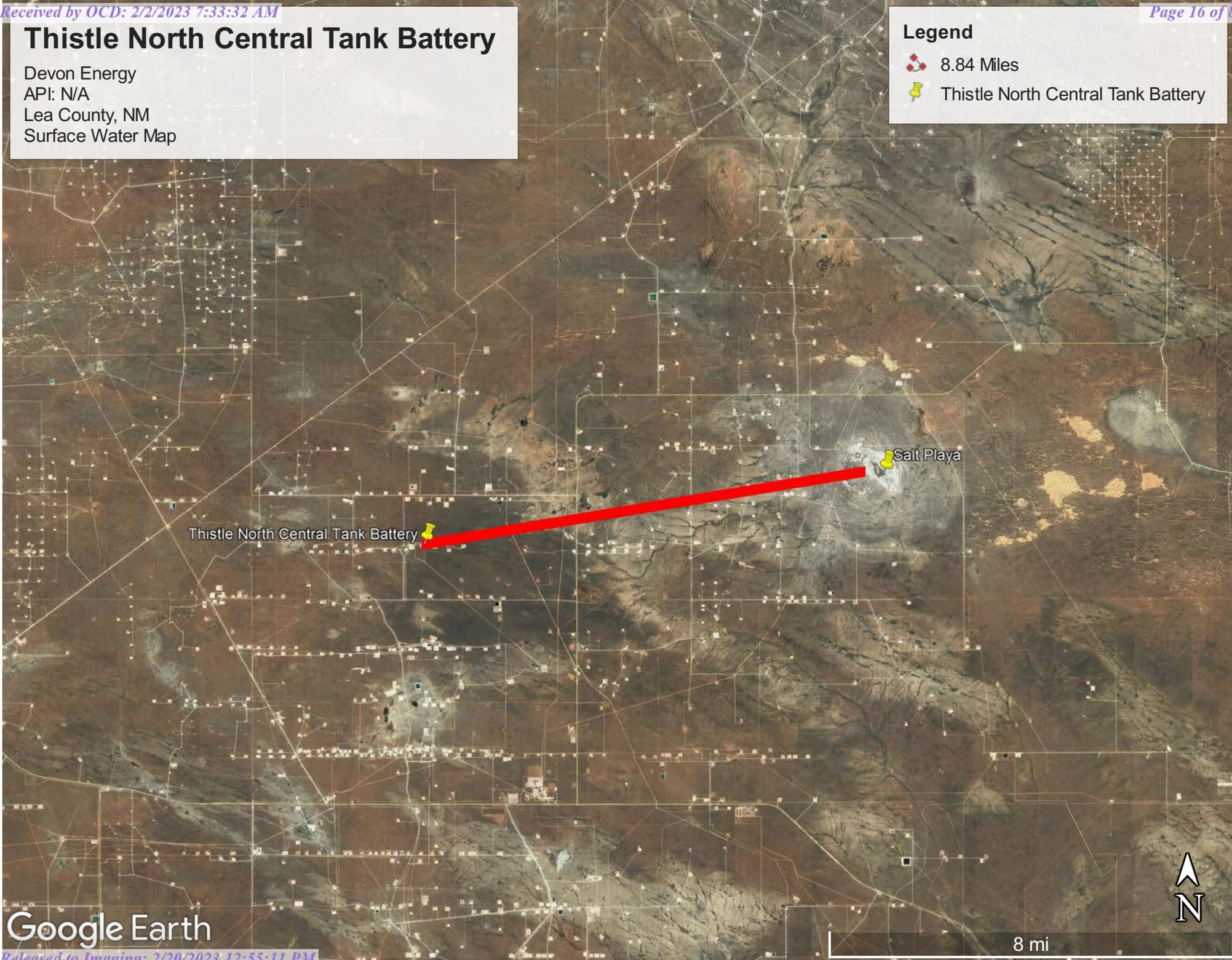
0.6 0.49 nadww02

Thistle North Central Tank Battery

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

Legend

-  8.84 Miles
-  Thistle North Central Tank Battery





Pima Environmental Services

Appendix B

Soil Survey & Geological Data

FEMA Flood Map

Wetlands Map

Map Unit Description: Tonuco loamy fine sand, 0 to 3 percent slopes---Lea County, New Mexico

Lea County, New Mexico

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

Map Unit Setting

National map unit symbol: 2tw3c
Elevation: 3,280 to 4,460 feet
Mean annual precipitation: 10 to 16 inches
Mean annual air temperature: 59 to 64 degrees F
Frost-free period: 180 to 220 days
Farmland classification: Not prime farmland

Map Unit Composition

Tonuco and similar soils: 70 percent
Minor components: 30 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Tonuco

Setting

Landform: Ridges, plains
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Rise
Down-slope shape: Convex, linear
Across-slope shape: Linear
Parent material: Sandy eolian deposits

Typical profile

A - 0 to 12 inches: loamy fine sand
Bw - 12 to 17 inches: loamy sand
Bkkm - 17 to 39 inches: cemented material

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: 12 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
Calcium carbonate, maximum content: 2 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: Very low (about 1.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Map Unit Description: Tonuco loamy fine sand, 0 to 3 percent slopes---Lea County, New Mexico

Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: D
Ecological site: R077DY048TX - Shallow 12-17" PZ
Hydric soil rating: No

Minor Components

Simona

Percent of map unit: 15 percent
Landform: Ridges, plains
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Rise
Down-slope shape: Convex, linear
Across-slope shape: Linear
Ecological site: R070BD002NM - Shallow Sandy
Hydric soil rating: No

Berino

Percent of map unit: 10 percent
Landform: Ridges, plains
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Rise
Down-slope shape: Convex, linear
Across-slope shape: Linear
Ecological site: R070BD003NM - Loamy Sand
Hydric soil rating: No

Cacique

Percent of map unit: 5 percent
Landform: Ridges, plains
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Rise
Down-slope shape: Convex, linear
Across-slope shape: Linear
Ecological site: R070BD004NM - Sandy
Hydric soil rating: No

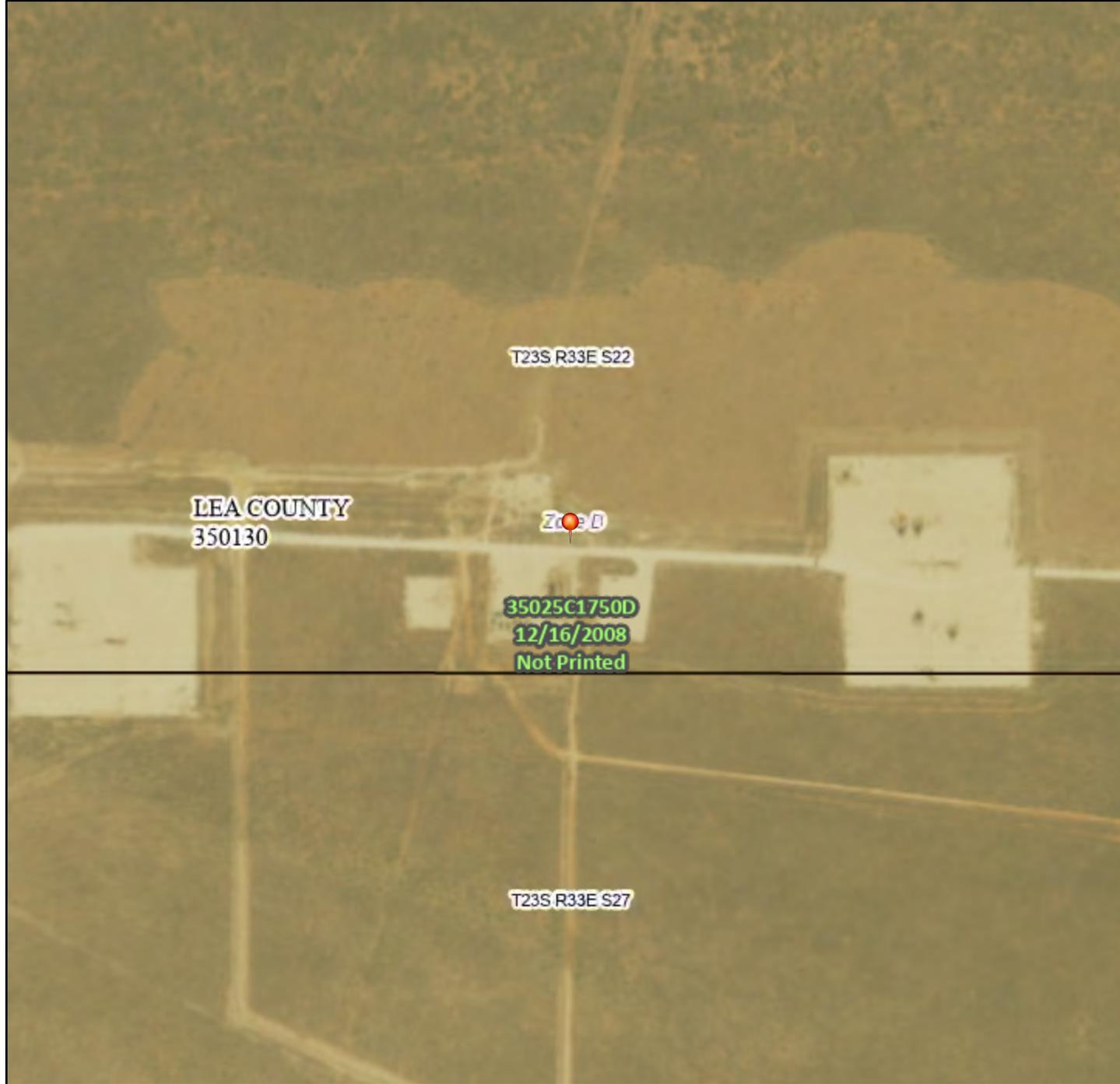
Data Source Information

Soil Survey Area: Lea County, New Mexico
Survey Area Data: Version 19, Sep 8, 2022

National Flood Hazard Layer FIRMMette



103°34'2"W 32°17'18"N



Legend

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

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) <i>Zone A, V, A99</i>
		With BFE or Depth <i>Zone AE, AO, AH, VE, AR</i>
		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 <i>Zone X</i>
		Future Conditions 1% Annual Chance Flood Hazard <i>Zone X</i>
		Area with Reduced Flood Risk due to Levee. See Notes. <i>Zone X</i>
		Area with Flood Risk due to Levee <i>Zone D</i>

OTHER AREAS		NO SCREEN Area of Minimal Flood Hazard <i>Zone X</i>
		Effective LOMRs
		Area of Undetermined Flood Hazard <i>Zone D</i>
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
OTHER FEATURES		Profile Baseline
		Hydrographic Feature

MAP PANELS		Digital Data Available
		No Digital Data Available
		Unmapped

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 **12/6/2022 at 3:40 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.



Wetlands Map



December 6, 2022

Wetlands

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



Pima Environmental Services

Appendix C

C-141 Form

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

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

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

Incident ID	nAPP2233949873
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party Devon Energy Production Company	OGRID 6137
Contact Name Dale Woodall	Contact Telephone
Contact email Dale.Woodall@dvn.com	Incident # (assigned by OCD)
Contact mailing address 6488 Seven Rivers Hwy Artesia, NM 88210	

Location of Release Source

Latitude 32.283487 Longitude -103.562399
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Thistle North Central CTB	Site Type Oil
Date Release Discovered 12/05/2022	API# (if applicable)

Unit Letter	Section	Township	Range	County
N	22	23S	33E	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)

<input type="checkbox"/> Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
<input checked="" type="checkbox"/> Produced Water	Volume Released (bbls) 29 BBLS	Volume Recovered (bbls) 0 BBLS
	Is the concentration of total dissolved solids (TDS) in the produced water >10,000 mg/l?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release Leak developed on heater dump.

State of New Mexico
Oil Conservation Division

Incident ID	nAPP2233949873
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If YES, for what reason(s) does the responsible party consider this a major release? Spill is over 25 BBLS.
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? Notice given to OCD by Dale Woodall, on OCD Portal on 12/5/2022.	

Initial Response

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

<input checked="" type="checkbox"/> The source of the release has been stopped. <input checked="" type="checkbox"/> The impacted area has been secured to protect human health and the environment. <input checked="" type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. <input checked="" type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.	
If all the actions described above have <u>not</u> been undertaken, explain why: 	
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
Printed Name: <u>Kendra Ruiz</u>	Title: <u>EHS Associate</u>
Signature: <u>Kendra Ruiz</u>	Date: <u>12/16/2022</u>
email: <u>Kendra.Ruiz@dvn.com</u>	Telephone: <u>575-748-0167</u>
<u>OCD Only</u>	
Received by: <u>Jocelyn Harimon</u>	Date: <u>12/16/2022</u>

Spill Volume(Bbls) Calculator		
<i>Inputs in blue, Outputs in red</i>		
Contaminated Soil measurement		
Length(Ft)	Width(Ft)	Depth(Ft)
		0.021
Cubic Feet of Soil Impacted		0.000
Barrels of Soil Impacted		0.00
Soil Type		Clay/Sand
Barrels of Oil Assuming 100% Saturation		0.00
Saturation	Fluid present with shovel/backhoe	
Estimated Barrels of Oil Released		0.00
Free Standing Fluid Only		
Length(Ft)	Width(Ft)	Depth(Ft)
30	30.000	0.042
Standing fluid		6.723
Total fluids spilled		6.723

Spill Volume(Bbls) Calculator		
<i>Inputs in blue, Outputs in red</i>		
Contaminated Soil measurement		
Length(Ft)	Width(Ft)	Depth(Ft)
		0.042
Cubic Feet of Soil Impacted		0.000
Barrels of Soil Impacted		0.00
Soil Type		Clay
Barrels of Oil Assuming 100% Saturation		0.00
Saturation	Fluid present with shovel/backhoe	
Estimated Barrels of Oil Released		0.00
Free Standing Fluid Only		
Length(Ft)	Width(Ft)	Depth(Ft)
33	21.000	0.083
Standing fluid		10.230
Total fluids spilled		10.230

Spill Volume(Bbls) Calculator		
<i>Inputs in blue, Outputs in red</i>		
Contaminated Soil measurement		
Length(Ft)	Width(Ft)	Depth(Ft)
		<u>0.042</u>
Cubic Feet of Soil Impacted		<u>0.000</u>
Barrels of Soil Impacted		<u>0.00</u>
Soil Type		Clay
Barrels of Oil Assuming 100% Saturation		<u>0.00</u>
Saturation	Fluid present with shovel/backhoe	
Estimated Barrels of Oil Released		0.00
Free Standing Fluid Only		
Length(Ft)	Width(Ft)	Depth(Ft)
<u>54</u>	<u>32.000</u>	<u>0.042</u>
Standing fluid		<u>12.908</u>
Total fluids spilled		<u>12.908</u>

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 167820

CONDITIONS

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 167820
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jharimon	None	12/16/2022

Incident ID	nAPP2233949873
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?	<100 (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas not on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

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

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

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

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

State of New Mexico
Oil Conservation Division

Page 4

Incident ID	nAPP2233949873
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: EHS Professional

Signature: *Dale Woodall* Date: 2/2/2023

email: dale.woodall@dvn.com Telephone: 405-318-4697

OCD Only

Received by: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	nAPP2233949873
District RP	
Facility ID	
Application ID	

Closure

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

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

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

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

Printed Name: Dale Woodall Title: EHS Professional
 Signature: *Dale Woodall* Date: 2/2/2023
 email: dale.woodall@dvn.com Telephone: 405-318-4697

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: 02/20/2023
 Printed Name: Jennifer Nobui Title: Environmental Specialist A



Pima Environmental Services

Appendix D

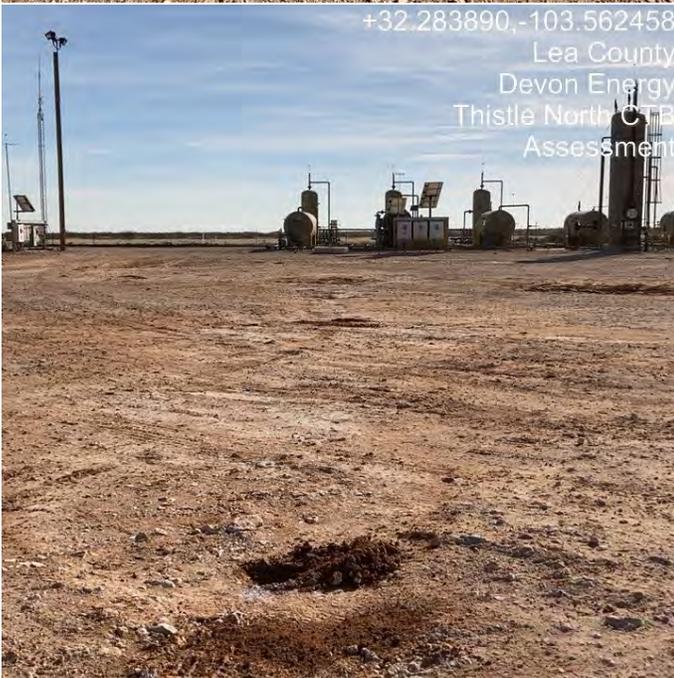
Photographic Documentation



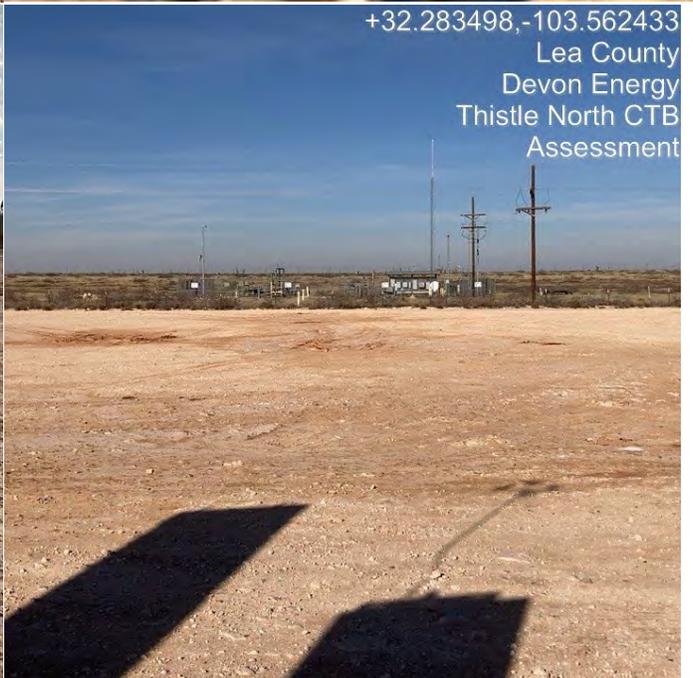
**SITE PHOTOGRAPHS
DEVON ENERGY
THISTLE NORTH CENTRAL TANK BATTERY**

Site Assessment





+32.283890,-103.562458
Lea County
Devon Energy
Thistle North CTB
Assessment



+32.283498,-103.562433
Lea County
Devon Energy
Thistle North CTB
Assessment





Pima Environmental Services

Appendix E

Laboratory Reports

Report to:
Tom Bynum



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Pima Environmental Services-Carlsbad

Project Name: Thistle North CTB

Work Order: E212128

Job Number: 01058-0007

Received: 12/22/2022

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
12/29/22

5796 U.S. Hwy 64
Farmington, NM 87401

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



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: 12/29/22

Tom Bynum
PO Box 247
Plains, TX 79355-0247

Project Name: Thistle North CTB
Workorder: E212128
Date Received: 12/22/2022 11:00:00AM

Tom Bynum,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 12/22/2022 11:00:00AM, under the Project Name: Thistle North CTB.

The analytical test results summarized in this report with the Project Name: Thistle North CTB 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 regarding 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
ljjarboe@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

Title Page	1
Cover Page	2
Table of Contents	3
Sample Summary	5
Sample Data	6
SW-1	6
SW-2	7
SW-3	8
SW-4	9
SW-5	10
SW-6	11
SW-7	12
SW-8	13
SW-9	14
SW-10	15
SW-11	16
SW-12	17
S1 - 1'	18
S1 - 2'	19
S2 - 1'	20
S2 - 2'	21
S3 - 1'	22
S3 - 2'	23
S4 - 1'	24
S4 - 2'	25

Table of Contents (continued)

S5 - 1'	26
S5 - 2'	27
S6 - 1'	28
S6 - 2'	29
S7 - 1'	30
S7 - 2'	31
S8 - 1'	32
S8 - 2'	33
S9 - 1'	34
S9 - 2'	35
BG1	36
QC Summary Data	37
QC - Volatile Organics by EPA 8021B	37
QC - Nonhalogenated Organics by EPA 8015D - GRO	39
QC - Nonhalogenated Organics by EPA 8015D - DRO/ORO	41
QC - Anions by EPA 300.0/9056A	43
Definitions and Notes	46
Chain of Custody etc.	47

Sample Summary

Pima Environmental Services-Carlsbad
PO Box 247
Plains TX, 79355-0247

Project Name: Thistle North CTB
Project Number: 01058-0007
Project Manager: Tom Bynum

Reported:
12/29/22 11:19

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SW-1	E212128-01A	Soil	12/20/22	12/22/22	Glass Jar, 2 oz.
SW-2	E212128-02A	Soil	12/20/22	12/22/22	Glass Jar, 2 oz.
SW-3	E212128-03A	Soil	12/20/22	12/22/22	Glass Jar, 2 oz.
SW-4	E212128-04A	Soil	12/20/22	12/22/22	Glass Jar, 2 oz.
SW-5	E212128-05A	Soil	12/20/22	12/22/22	Glass Jar, 2 oz.
SW-6	E212128-06A	Soil	12/20/22	12/22/22	Glass Jar, 2 oz.
SW-7	E212128-07A	Soil	12/20/22	12/22/22	Glass Jar, 2 oz.
SW-8	E212128-08A	Soil	12/20/22	12/22/22	Glass Jar, 2 oz.
SW-9	E212128-09A	Soil	12/20/22	12/22/22	Glass Jar, 2 oz.
SW-10	E212128-10A	Soil	12/20/22	12/22/22	Glass Jar, 2 oz.
SW-11	E212128-11A	Soil	12/20/22	12/22/22	Glass Jar, 2 oz.
SW-12	E212128-12A	Soil	12/20/22	12/22/22	Glass Jar, 2 oz.
S1 - 1'	E212128-13A	Soil	12/20/22	12/22/22	Glass Jar, 2 oz.
S1 - 2'	E212128-14A	Soil	12/20/22	12/22/22	Glass Jar, 2 oz.
S2 - 1'	E212128-15A	Soil	12/20/22	12/22/22	Glass Jar, 2 oz.
S2 - 2'	E212128-16A	Soil	12/20/22	12/22/22	Glass Jar, 2 oz.
S3 - 1'	E212128-17A	Soil	12/20/22	12/22/22	Glass Jar, 2 oz.
S3 - 2'	E212128-18A	Soil	12/20/22	12/22/22	Glass Jar, 2 oz.
S4 - 1'	E212128-19A	Soil	12/20/22	12/22/22	Glass Jar, 2 oz.
S4 - 2'	E212128-20A	Soil	12/20/22	12/22/22	Glass Jar, 2 oz.
S5 - 1'	E212128-21A	Soil	12/20/22	12/22/22	Glass Jar, 2 oz.
S5 - 2'	E212128-22A	Soil	12/20/22	12/22/22	Glass Jar, 2 oz.
S6 - 1'	E212128-23A	Soil	12/20/22	12/22/22	Glass Jar, 2 oz.
S6 - 2'	E212128-24A	Soil	12/20/22	12/22/22	Glass Jar, 2 oz.
S7 - 1'	E212128-25A	Soil	12/20/22	12/22/22	Glass Jar, 2 oz.
S7 - 2'	E212128-26A	Soil	12/20/22	12/22/22	Glass Jar, 2 oz.
S8 - 1'	E212128-27A	Soil	12/20/22	12/22/22	Glass Jar, 2 oz.
S8 - 2'	E212128-28A	Soil	12/20/22	12/22/22	Glass Jar, 2 oz.
S9 - 1'	E212128-29A	Soil	12/20/22	12/22/22	Glass Jar, 2 oz.
S9 - 2'	E212128-30A	Soil	12/20/22	12/22/22	Glass Jar, 2 oz.
BG1	E212128-31A	Soil	12/20/22	12/22/22	Glass Jar, 2 oz.



Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Thistle North CTB Project Number: 01058-0007 Project Manager: Tom Bynum	Reported: 12/29/2022 11:19:47AM
---	---	---

SW-1

E212128-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B		mg/kg	mg/kg	Analyst: SL		Batch: 2252058
Benzene	ND	0.0250	1	12/22/22	12/23/22	
Ethylbenzene	ND	0.0250	1	12/22/22	12/23/22	
Toluene	ND	0.0250	1	12/22/22	12/23/22	
o-Xylene	ND	0.0250	1	12/22/22	12/23/22	
p,m-Xylene	ND	0.0500	1	12/22/22	12/23/22	
Total Xylenes	ND	0.0250	1	12/22/22	12/23/22	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		108 %	70-130	12/22/22	12/23/22	
Nonhalogenated Organics by EPA 8015D - GRO		mg/kg	mg/kg	Analyst: SL		Batch: 2252058
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/22/22	12/23/22	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		101 %	70-130	12/22/22	12/23/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO		mg/kg	mg/kg	Analyst: SL		Batch: 2253002
Diesel Range Organics (C10-C28)	ND	25.0	1	12/27/22	12/27/22	
Oil Range Organics (C28-C36)	ND	50.0	1	12/27/22	12/27/22	
<i>Surrogate: n-Nonane</i>		88.9 %	50-200	12/27/22	12/27/22	
Anions by EPA 300.0/9056A		mg/kg	mg/kg	Analyst: SL		Batch: 2252056
Chloride	ND	20.0	1	12/22/22	12/23/22	



Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Thistle North CTB Project Number: 01058-0007 Project Manager: Tom Bynum	Reported: 12/29/2022 11:19:47AM
---	---	---

SW-2

E212128-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg		Analyst: SL		Batch: 2252058
Benzene	ND	0.0250	1	12/22/22	12/22/22	
Ethylbenzene	ND	0.0250	1	12/22/22	12/22/22	
Toluene	ND	0.0250	1	12/22/22	12/22/22	
o-Xylene	ND	0.0250	1	12/22/22	12/22/22	
p,m-Xylene	ND	0.0500	1	12/22/22	12/22/22	
Total Xylenes	ND	0.0250	1	12/22/22	12/22/22	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		110 %	70-130	12/22/22	12/22/22	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: SL		Batch: 2252058
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/22/22	12/22/22	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		100 %	70-130	12/22/22	12/22/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: SL		Batch: 2253002
Diesel Range Organics (C10-C28)	ND	25.0	1	12/27/22	12/27/22	
Oil Range Organics (C28-C36)	ND	50.0	1	12/27/22	12/27/22	
<i>Surrogate: n-Nonane</i>		84.8 %	50-200	12/27/22	12/27/22	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: SL		Batch: 2252056
Chloride	ND	20.0	1	12/22/22	12/23/22	



Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Thistle North CTB Project Number: 01058-0007 Project Manager: Tom Bynum	Reported: 12/29/2022 11:19:47AM
---	---	---

SW-3

E212128-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg		Analyst: SL		Batch: 2252058
Benzene	ND	0.0250	1	12/22/22	12/23/22	
Ethylbenzene	ND	0.0250	1	12/22/22	12/23/22	
Toluene	ND	0.0250	1	12/22/22	12/23/22	
o-Xylene	ND	0.0250	1	12/22/22	12/23/22	
p,m-Xylene	ND	0.0500	1	12/22/22	12/23/22	
Total Xylenes	ND	0.0250	1	12/22/22	12/23/22	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		108 %	70-130	12/22/22	12/23/22	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: SL		Batch: 2252058
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/22/22	12/23/22	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		101 %	70-130	12/22/22	12/23/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: SL		Batch: 2253002
Diesel Range Organics (C10-C28)	ND	25.0	1	12/27/22	12/27/22	
Oil Range Organics (C28-C36)	ND	50.0	1	12/27/22	12/27/22	
<i>Surrogate: n-Nonane</i>		89.8 %	50-200	12/27/22	12/27/22	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: SL		Batch: 2252056
Chloride	ND	20.0	1	12/22/22	12/23/22	



Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Thistle North CTB Project Number: 01058-0007 Project Manager: Tom Bynum	Reported: 12/29/2022 11:19:47AM
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SW-4

E212128-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg		Analyst: SL		Batch: 2252058
Benzene	ND	0.0250	1	12/22/22	12/23/22	
Ethylbenzene	ND	0.0250	1	12/22/22	12/23/22	
Toluene	ND	0.0250	1	12/22/22	12/23/22	
o-Xylene	ND	0.0250	1	12/22/22	12/23/22	
p,m-Xylene	ND	0.0500	1	12/22/22	12/23/22	
Total Xylenes	ND	0.0250	1	12/22/22	12/23/22	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		109 %	70-130	12/22/22	12/23/22	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: SL		Batch: 2252058
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/22/22	12/23/22	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		101 %	70-130	12/22/22	12/23/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: SL		Batch: 2253002
Diesel Range Organics (C10-C28)	ND	25.0	1	12/27/22	12/27/22	
Oil Range Organics (C28-C36)	ND	50.0	1	12/27/22	12/27/22	
<i>Surrogate: n-Nonane</i>		100 %	50-200	12/27/22	12/27/22	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: SL		Batch: 2252056
Chloride	ND	20.0	1	12/22/22	12/23/22	



Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Thistle North CTB Project Number: 01058-0007 Project Manager: Tom Bynum	Reported: 12/29/2022 11:19:47AM
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SW-5

E212128-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg		Analyst: SL		Batch: 2252058
Benzene	ND	0.0250	1	12/22/22	12/23/22	
Ethylbenzene	ND	0.0250	1	12/22/22	12/23/22	
Toluene	ND	0.0250	1	12/22/22	12/23/22	
o-Xylene	ND	0.0250	1	12/22/22	12/23/22	
p,m-Xylene	ND	0.0500	1	12/22/22	12/23/22	
Total Xylenes	ND	0.0250	1	12/22/22	12/23/22	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		108 %	70-130	12/22/22	12/23/22	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: SL		Batch: 2252058
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/22/22	12/23/22	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		100 %	70-130	12/22/22	12/23/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: SL		Batch: 2253002
Diesel Range Organics (C10-C28)	ND	25.0	1	12/27/22	12/27/22	
Oil Range Organics (C28-C36)	ND	50.0	1	12/27/22	12/27/22	
<i>Surrogate: n-Nonane</i>		87.5 %	50-200	12/27/22	12/27/22	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: SL		Batch: 2252056
Chloride	ND	20.0	1	12/22/22	12/23/22	



Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Thistle North CTB Project Number: 01058-0007 Project Manager: Tom Bynum	Reported: 12/29/2022 11:19:47AM
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SW-6

E212128-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: SL		Batch: 2252058
Benzene	ND	0.0250	1	12/22/22	12/23/22	
Ethylbenzene	ND	0.0250	1	12/22/22	12/23/22	
Toluene	ND	0.0250	1	12/22/22	12/23/22	
o-Xylene	ND	0.0250	1	12/22/22	12/23/22	
p,m-Xylene	ND	0.0500	1	12/22/22	12/23/22	
Total Xylenes	ND	0.0250	1	12/22/22	12/23/22	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		109 %	70-130	12/22/22	12/23/22	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: SL		Batch: 2252058
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/22/22	12/23/22	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		102 %	70-130	12/22/22	12/23/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: SL		Batch: 2253002
Diesel Range Organics (C10-C28)	ND	25.0	1	12/27/22	12/27/22	
Oil Range Organics (C28-C36)	ND	50.0	1	12/27/22	12/27/22	
<i>Surrogate: n-Nonane</i>						
		77.3 %	50-200	12/27/22	12/27/22	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: SL		Batch: 2252056
Chloride	ND	20.0	1	12/22/22	12/23/22	



Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Thistle North CTB Project Number: 01058-0007 Project Manager: Tom Bynum	Reported: 12/29/2022 11:19:47AM
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SW-7

E212128-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg		Analyst: SL		Batch: 2252058
Benzene	ND	0.0250	1	12/22/22	12/23/22	
Ethylbenzene	ND	0.0250	1	12/22/22	12/23/22	
Toluene	ND	0.0250	1	12/22/22	12/23/22	
o-Xylene	ND	0.0250	1	12/22/22	12/23/22	
p,m-Xylene	ND	0.0500	1	12/22/22	12/23/22	
Total Xylenes	ND	0.0250	1	12/22/22	12/23/22	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		108 %	70-130	12/22/22	12/23/22	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: SL		Batch: 2252058
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/22/22	12/23/22	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		102 %	70-130	12/22/22	12/23/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: SL		Batch: 2253002
Diesel Range Organics (C10-C28)	ND	25.0	1	12/27/22	12/27/22	
Oil Range Organics (C28-C36)	ND	50.0	1	12/27/22	12/27/22	
<i>Surrogate: n-Nonane</i>		94.0 %	50-200	12/27/22	12/27/22	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: SL		Batch: 2252056
Chloride	ND	20.0	1	12/22/22	12/23/22	



Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Thistle North CTB Project Number: 01058-0007 Project Manager: Tom Bynum	Reported: 12/29/2022 11:19:47AM
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SW-8

E212128-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg		Analyst: SL		Batch: 2252058
Benzene	ND	0.0250	1	12/22/22	12/23/22	
Ethylbenzene	ND	0.0250	1	12/22/22	12/23/22	
Toluene	ND	0.0250	1	12/22/22	12/23/22	
o-Xylene	ND	0.0250	1	12/22/22	12/23/22	
p,m-Xylene	ND	0.0500	1	12/22/22	12/23/22	
Total Xylenes	ND	0.0250	1	12/22/22	12/23/22	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		109 %	70-130	12/22/22	12/23/22	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: SL		Batch: 2252058
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/22/22	12/23/22	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		101 %	70-130	12/22/22	12/23/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: SL		Batch: 2253002
Diesel Range Organics (C10-C28)	ND	25.0	1	12/27/22	12/27/22	
Oil Range Organics (C28-C36)	ND	50.0	1	12/27/22	12/27/22	
<i>Surrogate: n-Nonane</i>		85.2 %	50-200	12/27/22	12/27/22	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: SL		Batch: 2252056
Chloride	ND	20.0	1	12/22/22	12/23/22	



Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Thistle North CTB Project Number: 01058-0007 Project Manager: Tom Bynum	Reported: 12/29/2022 11:19:47AM
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SW-9

E212128-09

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg		Analyst: SL		Batch: 2252058
Benzene	ND	0.0250	1	12/22/22	12/23/22	
Ethylbenzene	ND	0.0250	1	12/22/22	12/23/22	
Toluene	ND	0.0250	1	12/22/22	12/23/22	
o-Xylene	ND	0.0250	1	12/22/22	12/23/22	
p,m-Xylene	ND	0.0500	1	12/22/22	12/23/22	
Total Xylenes	ND	0.0250	1	12/22/22	12/23/22	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		109 %	70-130	12/22/22	12/23/22	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: SL		Batch: 2252058
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/22/22	12/23/22	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		101 %	70-130	12/22/22	12/23/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: SL		Batch: 2253002
Diesel Range Organics (C10-C28)	ND	25.0	1	12/27/22	12/27/22	
Oil Range Organics (C28-C36)	ND	50.0	1	12/27/22	12/27/22	
<i>Surrogate: n-Nonane</i>		80.9 %	50-200	12/27/22	12/27/22	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: SL		Batch: 2252056
Chloride	ND	20.0	1	12/22/22	12/23/22	



Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Thistle North CTB Project Number: 01058-0007 Project Manager: Tom Bynum	Reported: 12/29/2022 11:19:47AM
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SW-10

E212128-10

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg		Analyst: SL		Batch: 2252058
Benzene	ND	0.0250	1	12/22/22	12/23/22	
Ethylbenzene	ND	0.0250	1	12/22/22	12/23/22	
Toluene	ND	0.0250	1	12/22/22	12/23/22	
o-Xylene	ND	0.0250	1	12/22/22	12/23/22	
p,m-Xylene	ND	0.0500	1	12/22/22	12/23/22	
Total Xylenes	ND	0.0250	1	12/22/22	12/23/22	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		108 %	70-130	12/22/22	12/23/22	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: SL		Batch: 2252058
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/22/22	12/23/22	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		101 %	70-130	12/22/22	12/23/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: SL		Batch: 2253002
Diesel Range Organics (C10-C28)	ND	25.0	1	12/27/22	12/27/22	
Oil Range Organics (C28-C36)	ND	50.0	1	12/27/22	12/27/22	
<i>Surrogate: n-Nonane</i>		84.8 %	50-200	12/27/22	12/27/22	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: SL		Batch: 2252056
Chloride	ND	20.0	1	12/22/22	12/23/22	



Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Thistle North CTB Project Number: 01058-0007 Project Manager: Tom Bynum	Reported: 12/29/2022 11:19:47AM
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SW-11

E212128-11

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg		Analyst: SL		Batch: 2252058
Benzene	ND	0.0250	1	12/22/22	12/23/22	
Ethylbenzene	ND	0.0250	1	12/22/22	12/23/22	
Toluene	ND	0.0250	1	12/22/22	12/23/22	
o-Xylene	ND	0.0250	1	12/22/22	12/23/22	
p,m-Xylene	ND	0.0500	1	12/22/22	12/23/22	
Total Xylenes	ND	0.0250	1	12/22/22	12/23/22	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		108 %	70-130	12/22/22	12/23/22	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: SL		Batch: 2252058
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/22/22	12/23/22	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		101 %	70-130	12/22/22	12/23/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: SL		Batch: 2253002
Diesel Range Organics (C10-C28)	ND	25.0	1	12/27/22	12/27/22	
Oil Range Organics (C28-C36)	ND	50.0	1	12/27/22	12/27/22	
<i>Surrogate: n-Nonane</i>		88.5 %	50-200	12/27/22	12/27/22	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: SL		Batch: 2252056
Chloride	ND	20.0	1	12/22/22	12/23/22	



Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Thistle North CTB Project Number: 01058-0007 Project Manager: Tom Bynum	Reported: 12/29/2022 11:19:47AM
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SW-12

E212128-12

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg		Analyst: SL		Batch: 2252058
Benzene	ND	0.0250	1	12/22/22	12/23/22	
Ethylbenzene	ND	0.0250	1	12/22/22	12/23/22	
Toluene	ND	0.0250	1	12/22/22	12/23/22	
o-Xylene	ND	0.0250	1	12/22/22	12/23/22	
p,m-Xylene	ND	0.0500	1	12/22/22	12/23/22	
Total Xylenes	ND	0.0250	1	12/22/22	12/23/22	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		108 %	70-130	12/22/22	12/23/22	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: SL		Batch: 2252058
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/22/22	12/23/22	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		101 %	70-130	12/22/22	12/23/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: SL		Batch: 2253002
Diesel Range Organics (C10-C28)	ND	25.0	1	12/27/22	12/27/22	
Oil Range Organics (C28-C36)	ND	50.0	1	12/27/22	12/27/22	
<i>Surrogate: n-Nonane</i>		94.3 %	50-200	12/27/22	12/27/22	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: SL		Batch: 2252056
Chloride	ND	20.0	1	12/22/22	12/23/22	



Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Thistle North CTB Project Number: 01058-0007 Project Manager: Tom Bynum	Reported: 12/29/2022 11:19:47AM
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S1 - 1'

E212128-13

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg		Analyst: SL		Batch: 2252058
Benzene	ND	0.0250	1	12/22/22	12/23/22	
Ethylbenzene	ND	0.0250	1	12/22/22	12/23/22	
Toluene	ND	0.0250	1	12/22/22	12/23/22	
o-Xylene	ND	0.0250	1	12/22/22	12/23/22	
p,m-Xylene	ND	0.0500	1	12/22/22	12/23/22	
Total Xylenes	ND	0.0250	1	12/22/22	12/23/22	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		109 %	70-130	12/22/22	12/23/22	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: SL		Batch: 2252058
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/22/22	12/23/22	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		101 %	70-130	12/22/22	12/23/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: SL		Batch: 2253002
Diesel Range Organics (C10-C28)	ND	25.0	1	12/27/22	12/27/22	
Oil Range Organics (C28-C36)	ND	50.0	1	12/27/22	12/27/22	
<i>Surrogate: n-Nonane</i>		92.3 %	50-200	12/27/22	12/27/22	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: SL		Batch: 2252056
Chloride	170	20.0	1	12/22/22	12/23/22	



Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Thistle North CTB Project Number: 01058-0007 Project Manager: Tom Bynum	Reported: 12/29/2022 11:19:47AM
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S1 - 2'

E212128-14

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg		Analyst: SL		Batch: 2252058
Benzene	ND	0.0250	1	12/22/22	12/23/22	
Ethylbenzene	ND	0.0250	1	12/22/22	12/23/22	
Toluene	ND	0.0250	1	12/22/22	12/23/22	
o-Xylene	ND	0.0250	1	12/22/22	12/23/22	
p,m-Xylene	ND	0.0500	1	12/22/22	12/23/22	
Total Xylenes	ND	0.0250	1	12/22/22	12/23/22	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		108 %	70-130	12/22/22	12/23/22	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: SL		Batch: 2252058
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/22/22	12/23/22	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		101 %	70-130	12/22/22	12/23/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: SL		Batch: 2253002
Diesel Range Organics (C10-C28)	ND	25.0	1	12/27/22	12/27/22	
Oil Range Organics (C28-C36)	ND	50.0	1	12/27/22	12/27/22	
<i>Surrogate: n-Nonane</i>		87.7 %	50-200	12/27/22	12/27/22	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: SL		Batch: 2252056
Chloride	88.6	20.0	1	12/22/22	12/23/22	



Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Thistle North CTB Project Number: 01058-0007 Project Manager: Tom Bynum	Reported: 12/29/2022 11:19:47AM
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S2 - 1'

E212128-15

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg		Analyst: SL		Batch: 2252058
Benzene	ND	0.0250	1	12/22/22	12/23/22	
Ethylbenzene	ND	0.0250	1	12/22/22	12/23/22	
Toluene	ND	0.0250	1	12/22/22	12/23/22	
o-Xylene	ND	0.0250	1	12/22/22	12/23/22	
p,m-Xylene	ND	0.0500	1	12/22/22	12/23/22	
Total Xylenes	ND	0.0250	1	12/22/22	12/23/22	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		109 %	70-130	12/22/22	12/23/22	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: SL		Batch: 2252058
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/22/22	12/23/22	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		100 %	70-130	12/22/22	12/23/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: SL		Batch: 2253002
Diesel Range Organics (C10-C28)	ND	25.0	1	12/27/22	12/27/22	
Oil Range Organics (C28-C36)	ND	50.0	1	12/27/22	12/27/22	
<i>Surrogate: n-Nonane</i>		85.9 %	50-200	12/27/22	12/27/22	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: SL		Batch: 2252056
Chloride	21.7	20.0	1	12/22/22	12/23/22	



Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Thistle North CTB Project Number: 01058-0007 Project Manager: Tom Bynum	Reported: 12/29/2022 11:19:47AM
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S2 - 2'

E212128-16

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg		Analyst: SL		Batch: 2252058
Benzene	ND	0.0250	1	12/22/22	12/23/22	
Ethylbenzene	ND	0.0250	1	12/22/22	12/23/22	
Toluene	ND	0.0250	1	12/22/22	12/23/22	
o-Xylene	ND	0.0250	1	12/22/22	12/23/22	
p,m-Xylene	ND	0.0500	1	12/22/22	12/23/22	
Total Xylenes	ND	0.0250	1	12/22/22	12/23/22	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		110 %	70-130	12/22/22	12/23/22	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: SL		Batch: 2252058
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/22/22	12/23/22	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		99.8 %	70-130	12/22/22	12/23/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: SL		Batch: 2253002
Diesel Range Organics (C10-C28)	ND	25.0	1	12/27/22	12/27/22	
Oil Range Organics (C28-C36)	ND	50.0	1	12/27/22	12/27/22	
<i>Surrogate: n-Nonane</i>		101 %	50-200	12/27/22	12/27/22	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: SL		Batch: 2252056
Chloride	22.0	20.0	1	12/22/22	12/23/22	



Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Thistle North CTB Project Number: 01058-0007 Project Manager: Tom Bynum	Reported: 12/29/2022 11:19:47AM
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S3 - 1'

E212128-17

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg		Analyst: SL		Batch: 2252058
Benzene	ND	0.0250	1	12/22/22	12/23/22	
Ethylbenzene	ND	0.0250	1	12/22/22	12/23/22	
Toluene	ND	0.0250	1	12/22/22	12/23/22	
o-Xylene	ND	0.0250	1	12/22/22	12/23/22	
p,m-Xylene	ND	0.0500	1	12/22/22	12/23/22	
Total Xylenes	ND	0.0250	1	12/22/22	12/23/22	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		110 %	70-130	12/22/22	12/23/22	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: SL		Batch: 2252058
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/22/22	12/23/22	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		101 %	70-130	12/22/22	12/23/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: SL		Batch: 2253002
Diesel Range Organics (C10-C28)	ND	25.0	1	12/27/22	12/27/22	
Oil Range Organics (C28-C36)	ND	50.0	1	12/27/22	12/27/22	
<i>Surrogate: n-Nonane</i>		94.0 %	50-200	12/27/22	12/27/22	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: SL		Batch: 2252056
Chloride	27.2	20.0	1	12/22/22	12/23/22	



Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Thistle North CTB Project Number: 01058-0007 Project Manager: Tom Bynum	Reported: 12/29/2022 11:19:47AM
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S3 - 2'

E212128-18

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg		Analyst: SL		Batch: 2252058
Benzene	ND	0.0250	1	12/22/22	12/23/22	
Ethylbenzene	ND	0.0250	1	12/22/22	12/23/22	
Toluene	ND	0.0250	1	12/22/22	12/23/22	
o-Xylene	ND	0.0250	1	12/22/22	12/23/22	
p,m-Xylene	ND	0.0500	1	12/22/22	12/23/22	
Total Xylenes	ND	0.0250	1	12/22/22	12/23/22	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		110 %	70-130	12/22/22	12/23/22	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: SL		Batch: 2252058
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/22/22	12/23/22	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		101 %	70-130	12/22/22	12/23/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: SL		Batch: 2253002
Diesel Range Organics (C10-C28)	ND	25.0	1	12/27/22	12/27/22	
Oil Range Organics (C28-C36)	ND	50.0	1	12/27/22	12/27/22	
<i>Surrogate: n-Nonane</i>		95.2 %	50-200	12/27/22	12/27/22	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: SL		Batch: 2252056
Chloride	ND	20.0	1	12/22/22	12/23/22	



Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Thistle North CTB Project Number: 01058-0007 Project Manager: Tom Bynum	Reported: 12/29/2022 11:19:47AM
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S4 - 1'

E212128-19

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg		Analyst: SL		Batch: 2252058
Benzene	ND	0.0250	1	12/22/22	12/23/22	
Ethylbenzene	ND	0.0250	1	12/22/22	12/23/22	
Toluene	ND	0.0250	1	12/22/22	12/23/22	
o-Xylene	ND	0.0250	1	12/22/22	12/23/22	
p,m-Xylene	ND	0.0500	1	12/22/22	12/23/22	
Total Xylenes	ND	0.0250	1	12/22/22	12/23/22	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		110 %	70-130	12/22/22	12/23/22	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: SL		Batch: 2252058
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/22/22	12/23/22	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		100 %	70-130	12/22/22	12/23/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: SL		Batch: 2253002
Diesel Range Organics (C10-C28)	ND	25.0	1	12/27/22	12/28/22	
Oil Range Organics (C28-C36)	ND	50.0	1	12/27/22	12/28/22	
<i>Surrogate: n-Nonane</i>		90.2 %	50-200	12/27/22	12/28/22	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: SL		Batch: 2252056
Chloride	45.7	20.0	1	12/22/22	12/23/22	



Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Thistle North CTB Project Number: 01058-0007 Project Manager: Tom Bynum	Reported: 12/29/2022 11:19:47AM
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S4 - 2'

E212128-20

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg		Analyst: SL		Batch: 2252058
Benzene	ND	0.0250	1	12/22/22	12/23/22	
Ethylbenzene	ND	0.0250	1	12/22/22	12/23/22	
Toluene	ND	0.0250	1	12/22/22	12/23/22	
o-Xylene	ND	0.0250	1	12/22/22	12/23/22	
p,m-Xylene	ND	0.0500	1	12/22/22	12/23/22	
Total Xylenes	ND	0.0250	1	12/22/22	12/23/22	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		110 %	70-130	12/22/22	12/23/22	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: SL		Batch: 2252058
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/22/22	12/23/22	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		101 %	70-130	12/22/22	12/23/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: SL		Batch: 2253002
Diesel Range Organics (C10-C28)	ND	25.0	1	12/27/22	12/28/22	
Oil Range Organics (C28-C36)	ND	50.0	1	12/27/22	12/28/22	
<i>Surrogate: n-Nonane</i>		98.7 %	50-200	12/27/22	12/28/22	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: SL		Batch: 2252056
Chloride	ND	20.0	1	12/22/22	12/23/22	



Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Thistle North CTB Project Number: 01058-0007 Project Manager: Tom Bynum	Reported: 12/29/2022 11:19:47AM
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S5 - 1'

E212128-21

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg		Analyst: SL		Batch: 2252059
Benzene	ND	0.0250	1	12/22/22	12/23/22	
Ethylbenzene	ND	0.0250	1	12/22/22	12/23/22	
Toluene	ND	0.0250	1	12/22/22	12/23/22	
o-Xylene	ND	0.0250	1	12/22/22	12/23/22	
p,m-Xylene	ND	0.0500	1	12/22/22	12/23/22	
Total Xylenes	ND	0.0250	1	12/22/22	12/23/22	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		110 %	70-130	12/22/22	12/23/22	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: SL		Batch: 2252059
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/22/22	12/23/22	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		99.3 %	70-130	12/22/22	12/23/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: SL		Batch: 2253001
Diesel Range Organics (C10-C28)	ND	25.0	1	12/27/22	12/27/22	
Oil Range Organics (C28-C36)	ND	50.0	1	12/27/22	12/27/22	
<i>Surrogate: n-Nonane</i>		101 %	50-200	12/27/22	12/27/22	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: SL		Batch: 2252057
Chloride	ND	20.0	1	12/22/22	12/23/22	



Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Thistle North CTB Project Number: 01058-0007 Project Manager: Tom Bynum	Reported: 12/29/2022 11:19:47AM
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S5 - 2'

E212128-22

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg		Analyst: SL		Batch: 2252059
Benzene	ND	0.0250	1	12/22/22	12/23/22	
Ethylbenzene	ND	0.0250	1	12/22/22	12/23/22	
Toluene	ND	0.0250	1	12/22/22	12/23/22	
o-Xylene	ND	0.0250	1	12/22/22	12/23/22	
p,m-Xylene	ND	0.0500	1	12/22/22	12/23/22	
Total Xylenes	ND	0.0250	1	12/22/22	12/23/22	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		110 %	70-130	12/22/22	12/23/22	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: SL		Batch: 2252059
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/22/22	12/23/22	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		99.7 %	70-130	12/22/22	12/23/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: SL		Batch: 2253001
Diesel Range Organics (C10-C28)	ND	25.0	1	12/27/22	12/27/22	
Oil Range Organics (C28-C36)	ND	50.0	1	12/27/22	12/27/22	
<i>Surrogate: n-Nonane</i>		102 %	50-200	12/27/22	12/27/22	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: SL		Batch: 2252057
Chloride	32.8	20.0	1	12/22/22	12/23/22	



Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Thistle North CTB Project Number: 01058-0007 Project Manager: Tom Bynum	Reported: 12/29/2022 11:19:47AM
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S6 - 1'

E212128-23

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg		Analyst: SL		Batch: 2252059
Benzene	ND	0.0250	1	12/22/22	12/23/22	
Ethylbenzene	ND	0.0250	1	12/22/22	12/23/22	
Toluene	ND	0.0250	1	12/22/22	12/23/22	
o-Xylene	ND	0.0250	1	12/22/22	12/23/22	
p,m-Xylene	ND	0.0500	1	12/22/22	12/23/22	
Total Xylenes	ND	0.0250	1	12/22/22	12/23/22	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		110 %	70-130	12/22/22	12/23/22	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: SL		Batch: 2252059
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/22/22	12/23/22	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		100 %	70-130	12/22/22	12/23/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: SL		Batch: 2253001
Diesel Range Organics (C10-C28)	ND	25.0	1	12/27/22	12/27/22	
Oil Range Organics (C28-C36)	ND	50.0	1	12/27/22	12/27/22	
<i>Surrogate: n-Nonane</i>		104 %	50-200	12/27/22	12/27/22	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: SL		Batch: 2252057
Chloride	ND	20.0	1	12/22/22	12/23/22	



Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Thistle North CTB Project Number: 01058-0007 Project Manager: Tom Bynum	Reported: 12/29/2022 11:19:47AM
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S6 - 2'

E212128-24

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg		Analyst: SL		Batch: 2252059
Benzene	ND	0.0250	1	12/23/22	12/23/22	
Ethylbenzene	ND	0.0250	1	12/23/22	12/23/22	
Toluene	ND	0.0250	1	12/23/22	12/23/22	
o-Xylene	ND	0.0250	1	12/23/22	12/23/22	
p,m-Xylene	ND	0.0500	1	12/23/22	12/23/22	
Total Xylenes	ND	0.0250	1	12/23/22	12/23/22	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		110 %	70-130	12/23/22	12/23/22	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: SL		Batch: 2252059
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/23/22	12/23/22	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		100 %	70-130	12/23/22	12/23/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: SL		Batch: 2253001
Diesel Range Organics (C10-C28)	ND	25.0	1	12/27/22	12/27/22	
Oil Range Organics (C28-C36)	ND	50.0	1	12/27/22	12/27/22	
<i>Surrogate: n-Nonane</i>		105 %	50-200	12/27/22	12/27/22	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: SL		Batch: 2252061
Chloride	ND	20.0	1	12/23/22	12/27/22	



Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Thistle North CTB Project Number: 01058-0007 Project Manager: Tom Bynum	Reported: 12/29/2022 11:19:47AM
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S7 - 1'

E212128-25

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg		Analyst: SL		Batch: 2252059
Benzene	ND	0.0250	1	12/22/22	12/23/22	
Ethylbenzene	ND	0.0250	1	12/22/22	12/23/22	
Toluene	ND	0.0250	1	12/22/22	12/23/22	
o-Xylene	ND	0.0250	1	12/22/22	12/23/22	
p,m-Xylene	ND	0.0500	1	12/22/22	12/23/22	
Total Xylenes	ND	0.0250	1	12/22/22	12/23/22	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		110 %	70-130	12/22/22	12/23/22	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: SL		Batch: 2252059
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/22/22	12/23/22	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		99.0 %	70-130	12/22/22	12/23/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: SL		Batch: 2253001
Diesel Range Organics (C10-C28)	ND	25.0	1	12/27/22	12/27/22	
Oil Range Organics (C28-C36)	ND	50.0	1	12/27/22	12/27/22	
<i>Surrogate: n-Nonane</i>		99.7 %	50-200	12/27/22	12/27/22	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: SL		Batch: 2252057
Chloride	ND	20.0	1	12/22/22	12/23/22	



Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Thistle North CTB Project Number: 01058-0007 Project Manager: Tom Bynum	Reported: 12/29/2022 11:19:47AM
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S7 - 2'

E212128-26

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg		Analyst: SL		Batch: 2252059
Benzene	ND	0.0250	1	12/22/22	12/23/22	
Ethylbenzene	ND	0.0250	1	12/22/22	12/23/22	
Toluene	ND	0.0250	1	12/22/22	12/23/22	
o-Xylene	ND	0.0250	1	12/22/22	12/23/22	
p,m-Xylene	ND	0.0500	1	12/22/22	12/23/22	
Total Xylenes	ND	0.0250	1	12/22/22	12/23/22	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		111 %	70-130	12/22/22	12/23/22	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: SL		Batch: 2252059
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/22/22	12/23/22	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		99.6 %	70-130	12/22/22	12/23/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: SL		Batch: 2253001
Diesel Range Organics (C10-C28)	ND	25.0	1	12/27/22	12/27/22	
Oil Range Organics (C28-C36)	ND	50.0	1	12/27/22	12/27/22	
<i>Surrogate: n-Nonane</i>		99.0 %	50-200	12/27/22	12/27/22	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: SL		Batch: 2252057
Chloride	ND	20.0	1	12/22/22	12/23/22	



Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Thistle North CTB Project Number: 01058-0007 Project Manager: Tom Bynum	Reported: 12/29/2022 11:19:47AM
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S8 - 1'

E212128-27

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg		Analyst: SL		Batch: 2252059
Benzene	ND	0.0250	1	12/22/22	12/23/22	
Ethylbenzene	ND	0.0250	1	12/22/22	12/23/22	
Toluene	ND	0.0250	1	12/22/22	12/23/22	
o-Xylene	ND	0.0250	1	12/22/22	12/23/22	
p,m-Xylene	ND	0.0500	1	12/22/22	12/23/22	
Total Xylenes	ND	0.0250	1	12/22/22	12/23/22	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		110 %	70-130	12/22/22	12/23/22	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: SL		Batch: 2252059
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/22/22	12/23/22	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		99.2 %	70-130	12/22/22	12/23/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: SL		Batch: 2253001
Diesel Range Organics (C10-C28)	ND	25.0	1	12/27/22	12/27/22	
Oil Range Organics (C28-C36)	ND	50.0	1	12/27/22	12/27/22	
<i>Surrogate: n-Nonane</i>		104 %	50-200	12/27/22	12/27/22	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: SL		Batch: 2252057
Chloride	ND	20.0	1	12/22/22	12/23/22	



Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Thistle North CTB Project Number: 01058-0007 Project Manager: Tom Bynum	Reported: 12/29/2022 11:19:47AM
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S8 - 2'

E212128-28

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg		Analyst: SL		Batch: 2252059
Benzene	ND	0.0250	1	12/22/22	12/23/22	
Ethylbenzene	ND	0.0250	1	12/22/22	12/23/22	
Toluene	ND	0.0250	1	12/22/22	12/23/22	
o-Xylene	ND	0.0250	1	12/22/22	12/23/22	
p,m-Xylene	ND	0.0500	1	12/22/22	12/23/22	
Total Xylenes	ND	0.0250	1	12/22/22	12/23/22	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		110 %	70-130	12/22/22	12/23/22	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: SL		Batch: 2252059
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/22/22	12/23/22	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		100 %	70-130	12/22/22	12/23/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: SL		Batch: 2253001
Diesel Range Organics (C10-C28)	ND	25.0	1	12/27/22	12/27/22	
Oil Range Organics (C28-C36)	ND	50.0	1	12/27/22	12/27/22	
<i>Surrogate: n-Nonane</i>		106 %	50-200	12/27/22	12/27/22	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: SL		Batch: 2252057
Chloride	ND	20.0	1	12/22/22	12/23/22	



Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Thistle North CTB Project Number: 01058-0007 Project Manager: Tom Bynum	Reported: 12/29/2022 11:19:47AM
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S9 - 1'

E212128-29

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg		Analyst: SL		Batch: 2252059
Benzene	ND	0.0250	1	12/22/22	12/23/22	
Ethylbenzene	ND	0.0250	1	12/22/22	12/23/22	
Toluene	ND	0.0250	1	12/22/22	12/23/22	
o-Xylene	ND	0.0250	1	12/22/22	12/23/22	
p,m-Xylene	ND	0.0500	1	12/22/22	12/23/22	
Total Xylenes	ND	0.0250	1	12/22/22	12/23/22	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		110 %	70-130	12/22/22	12/23/22	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: SL		Batch: 2252059
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/22/22	12/23/22	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		99.6 %	70-130	12/22/22	12/23/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: SL		Batch: 2253001
Diesel Range Organics (C10-C28)	ND	25.0	1	12/27/22	12/27/22	
Oil Range Organics (C28-C36)	ND	50.0	1	12/27/22	12/27/22	
<i>Surrogate: n-Nonane</i>		101 %	50-200	12/27/22	12/27/22	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: SL		Batch: 2252057
Chloride	48.1	20.0	1	12/22/22	12/23/22	



Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Thistle North CTB Project Number: 01058-0007 Project Manager: Tom Bynum	Reported: 12/29/2022 11:19:47AM
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S9 - 2'

E212128-30

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg		Analyst: SL		Batch: 2252059
Benzene	ND	0.0250	1	12/22/22	12/23/22	
Ethylbenzene	ND	0.0250	1	12/22/22	12/23/22	
Toluene	ND	0.0250	1	12/22/22	12/23/22	
o-Xylene	ND	0.0250	1	12/22/22	12/23/22	
p,m-Xylene	ND	0.0500	1	12/22/22	12/23/22	
Total Xylenes	ND	0.0250	1	12/22/22	12/23/22	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		110 %	70-130	12/22/22	12/23/22	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: SL		Batch: 2252059
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/22/22	12/23/22	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		99.3 %	70-130	12/22/22	12/23/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: SL		Batch: 2253001
Diesel Range Organics (C10-C28)	ND	25.0	1	12/27/22	12/27/22	
Oil Range Organics (C28-C36)	ND	50.0	1	12/27/22	12/27/22	
<i>Surrogate: n-Nonane</i>		104 %	50-200	12/27/22	12/27/22	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: SL		Batch: 2252057
Chloride	30.4	20.0	1	12/22/22	12/23/22	



Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Thistle North CTB Project Number: 01058-0007 Project Manager: Tom Bynum	Reported: 12/29/2022 11:19:47AM
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BG1

E212128-31

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg		Analyst: SL		Batch: 2252059
Benzene	ND	0.0250	1	12/22/22	12/27/22	
Ethylbenzene	ND	0.0250	1	12/22/22	12/27/22	
Toluene	ND	0.0250	1	12/22/22	12/27/22	
o-Xylene	ND	0.0250	1	12/22/22	12/27/22	
p,m-Xylene	ND	0.0500	1	12/22/22	12/27/22	
Total Xylenes	ND	0.0250	1	12/22/22	12/27/22	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		108 %	70-130	12/22/22	12/27/22	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: SL		Batch: 2252059
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/22/22	12/27/22	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		102 %	70-130	12/22/22	12/27/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: SL		Batch: 2253001
Diesel Range Organics (C10-C28)	ND	25.0	1	12/27/22	12/28/22	
Oil Range Organics (C28-C36)	ND	50.0	1	12/27/22	12/28/22	
<i>Surrogate: n-Nonane</i>		104 %	50-200	12/27/22	12/28/22	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: SL		Batch: 2252057
Chloride	ND	20.0	1	12/22/22	12/23/22	



QC Summary Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Thistle North CTB Project Number: 01058-0007 Project Manager: Tom Bynum	Reported: 12/29/2022 11:19:47AM
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Volatile Organics by EPA 8021B

Analyst: SL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2252058-BLK1)

Prepared: 12/22/22 Analyzed: 12/22/22

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	8.80		8.00		110	70-130			

LCS (2252058-BS1)

Prepared: 12/22/22 Analyzed: 12/22/22

Benzene	4.75	0.0250	5.00		95.0	70-130			
Ethylbenzene	5.17	0.0250	5.00		103	70-130			
Toluene	5.16	0.0250	5.00		103	70-130			
o-Xylene	5.37	0.0250	5.00		107	70-130			
p,m-Xylene	10.5	0.0500	10.0		105	70-130			
Total Xylenes	15.9	0.0250	15.0		106	70-130			
Surrogate: 4-Bromochlorobenzene-PID	8.61		8.00		108	70-130			

Matrix Spike (2252058-MS1)

Source: E212128-02

Prepared: 12/22/22 Analyzed: 12/22/22

Benzene	5.30	0.0250	5.00	ND	106	54-133			
Ethylbenzene	5.74	0.0250	5.00	ND	115	61-133			
Toluene	5.75	0.0250	5.00	ND	115	61-130			
o-Xylene	5.95	0.0250	5.00	ND	119	63-131			
p,m-Xylene	11.6	0.0500	10.0	ND	116	63-131			
Total Xylenes	17.6	0.0250	15.0	ND	117	63-131			
Surrogate: 4-Bromochlorobenzene-PID	8.44		8.00		106	70-130			

Matrix Spike Dup (2252058-MSD1)

Source: E212128-02

Prepared: 12/22/22 Analyzed: 12/22/22

Benzene	4.48	0.0250	5.00	ND	89.6	54-133	16.8	20	
Ethylbenzene	4.85	0.0250	5.00	ND	97.0	61-133	16.8	20	
Toluene	4.85	0.0250	5.00	ND	97.0	61-130	17.0	20	
o-Xylene	5.03	0.0250	5.00	ND	101	63-131	16.8	20	
p,m-Xylene	9.86	0.0500	10.0	ND	98.6	63-131	16.6	20	
Total Xylenes	14.9	0.0250	15.0	ND	99.3	63-131	16.7	20	
Surrogate: 4-Bromochlorobenzene-PID	8.47		8.00		106	70-130			



QC Summary Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Thistle North CTB Project Number: 01058-0007 Project Manager: Tom Bynum	Reported: 12/29/2022 11:19:47AM
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Volatile Organics by EPA 8021B

Analyst: SL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2252059-BLK1)

Prepared: 12/22/22 Analyzed: 12/23/22

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	8.78		8.00		110	70-130			

LCS (2252059-BS1)

Prepared: 12/22/22 Analyzed: 12/23/22

Benzene	4.49	0.0250	5.00		89.9	70-130			
Ethylbenzene	4.89	0.0250	5.00		97.7	70-130			
Toluene	4.88	0.0250	5.00		97.6	70-130			
o-Xylene	5.06	0.0250	5.00		101	70-130			
p,m-Xylene	9.91	0.0500	10.0		99.1	70-130			
Total Xylenes	15.0	0.0250	15.0		99.8	70-130			
Surrogate: 4-Bromochlorobenzene-PID	8.62		8.00		108	70-130			

Matrix Spike (2252059-MS1)

Source: E212128-23

Prepared: 12/22/22 Analyzed: 12/23/22

Benzene	5.22	0.0250	5.00	ND	104	54-133			
Ethylbenzene	5.71	0.0250	5.00	ND	114	61-133			
Toluene	5.69	0.0250	5.00	ND	114	61-130			
o-Xylene	5.93	0.0250	5.00	ND	119	63-131			
p,m-Xylene	11.6	0.0500	10.0	ND	116	63-131			
Total Xylenes	17.5	0.0250	15.0	ND	117	63-131			
Surrogate: 4-Bromochlorobenzene-PID	8.52		8.00		107	70-130			

Matrix Spike Dup (2252059-MSD1)

Source: E212128-23

Prepared: 12/22/22 Analyzed: 12/23/22

Benzene	4.79	0.0250	5.00	ND	95.7	54-133	8.63	20	
Ethylbenzene	5.21	0.0250	5.00	ND	104	61-133	9.22	20	
Toluene	5.21	0.0250	5.00	ND	104	61-130	8.97	20	
o-Xylene	5.42	0.0250	5.00	ND	108	63-131	9.02	20	
p,m-Xylene	10.6	0.0500	10.0	ND	106	63-131	9.15	20	
Total Xylenes	16.0	0.0250	15.0	ND	106	63-131	9.11	20	
Surrogate: 4-Bromochlorobenzene-PID	8.58		8.00		107	70-130			



QC Summary Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Thistle North CTB Project Number: 01058-0007 Project Manager: Tom Bynum	Reported: 12/29/2022 11:19:47AM
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Nonhalogenated Organics by EPA 8015D - GRO

Analyst: SL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2252058-BLK1)

Prepared: 12/22/22 Analyzed: 12/22/22

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	8.08		8.00		101	70-130			

LCS (2252058-BS2)

Prepared: 12/22/22 Analyzed: 12/22/22

Gasoline Range Organics (C6-C10)	59.6	20.0	50.0		119	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	8.13		8.00		102	70-130			

Matrix Spike (2252058-MS2)

Source: E212128-02

Prepared: 12/22/22 Analyzed: 12/22/22

Gasoline Range Organics (C6-C10)	53.3	20.0	50.0	ND	107	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	8.17		8.00		102	70-130			

Matrix Spike Dup (2252058-MSD2)

Source: E212128-02

Prepared: 12/22/22 Analyzed: 12/22/22

Gasoline Range Organics (C6-C10)	47.5	20.0	50.0	ND	95.1	70-130	11.4	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	8.16		8.00		102	70-130			



QC Summary Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Thistle North CTB Project Number: 01058-0007 Project Manager: Tom Bynum	Reported: 12/29/2022 11:19:47AM
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Nonhalogenated Organics by EPA 8015D - GRO

Analyst: SL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2252059-BLK1)

Prepared: 12/22/22 Analyzed: 12/23/22

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	8.09		8.00		101	70-130			

LCS (2252059-BS2)

Prepared: 12/22/22 Analyzed: 12/23/22

Gasoline Range Organics (C6-C10)	54.6	20.0	50.0		109	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	8.09		8.00		101	70-130			

Matrix Spike (2252059-MS2)

Source: E212128-23

Prepared: 12/22/22 Analyzed: 12/23/22

Gasoline Range Organics (C6-C10)	50.6	20.0	50.0	ND	101	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	8.00		8.00		100	70-130			

Matrix Spike Dup (2252059-MSD2)

Source: E212128-23

Prepared: 12/22/22 Analyzed: 12/23/22

Gasoline Range Organics (C6-C10)	51.3	20.0	50.0	ND	103	70-130	1.24	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	8.08		8.00		101	70-130			



QC Summary Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Thistle North CTB Project Number: 01058-0007 Project Manager: Tom Bynum	Reported: 12/29/2022 11:19:47AM
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Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: SL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2253001-BLK1)

Prepared: 12/27/22 Analyzed: 12/27/22

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: <i>n</i> -Nonane	46.5		50.0		93.0	50-200			

LCS (2253001-BS1)

Prepared: 12/27/22 Analyzed: 12/27/22

Diesel Range Organics (C10-C28)	246	25.0	250		98.4	38-132			
Surrogate: <i>n</i> -Nonane	47.6		50.0		95.2	50-200			

Matrix Spike (2253001-MS1)

Source: E212130-04

Prepared: 12/27/22 Analyzed: 12/27/22

Diesel Range Organics (C10-C28)	260	25.0	250	ND	104	38-132			
Surrogate: <i>n</i> -Nonane	42.5		50.0		85.0	50-200			

Matrix Spike Dup (2253001-MSD1)

Source: E212130-04

Prepared: 12/27/22 Analyzed: 12/27/22

Diesel Range Organics (C10-C28)	268	25.0	250	ND	107	38-132	2.97	20	
Surrogate: <i>n</i> -Nonane	44.9		50.0		89.9	50-200			



QC Summary Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Thistle North CTB Project Number: 01058-0007 Project Manager: Tom Bynum	Reported: 12/29/2022 11:19:47AM
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Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: SL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2253002-BLK1)

Prepared: 12/27/22 Analyzed: 12/27/22

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	45.9		50.0		91.8	50-200			

LCS (2253002-BS1)

Prepared: 12/27/22 Analyzed: 12/27/22

Diesel Range Organics (C10-C28)	245	25.0	250		98.1	38-132			
Surrogate: n-Nonane	46.7		50.0		93.3	50-200			

Matrix Spike (2253002-MS1)

Source: E212128-07

Prepared: 12/27/22 Analyzed: 12/27/22

Diesel Range Organics (C10-C28)	257	25.0	250	ND	103	38-132			
Surrogate: n-Nonane	45.3		50.0		90.7	50-200			

Matrix Spike Dup (2253002-MSD1)

Source: E212128-07

Prepared: 12/27/22 Analyzed: 12/27/22

Diesel Range Organics (C10-C28)	250	25.0	250	ND	100	38-132	2.66	20	
Surrogate: n-Nonane	42.9		50.0		85.8	50-200			



QC Summary Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Thistle North CTB Project Number: 01058-0007 Project Manager: Tom Bynum	Reported: 12/29/2022 11:19:47AM
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Anions by EPA 300.0/9056A

Analyst: SL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2252056-BLK1)

Prepared: 12/22/22 Analyzed: 12/23/22

Chloride ND 20.0

LCS (2252056-BS1)

Prepared: 12/22/22 Analyzed: 12/23/22

Chloride 267 20.0 250 107 90-110

Matrix Spike (2252056-MS1)

Source: E212128-01

Prepared: 12/22/22 Analyzed: 12/23/22

Chloride 275 20.0 250 ND 110 80-120

Matrix Spike Dup (2252056-MSD1)

Source: E212128-01

Prepared: 12/22/22 Analyzed: 12/23/22

Chloride 268 20.0 250 ND 107 80-120 2.58 20



QC Summary Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Thistle North CTB Project Number: 01058-0007 Project Manager: Tom Bynum	Reported: 12/29/2022 11:19:47AM
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Anions by EPA 300.0/9056A

Analyst: SL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2252057-BLK1)

Prepared: 12/22/22 Analyzed: 12/23/22

Chloride ND 20.0

LCS (2252057-BS1)

Prepared: 12/22/22 Analyzed: 12/23/22

Chloride 269 20.0 250 108 90-110

Matrix Spike (2252057-MS1)

Source: E212128-21

Prepared: 12/22/22 Analyzed: 12/23/22

Chloride 281 20.0 250 ND 112 80-120

Matrix Spike Dup (2252057-MSD1)

Source: E212128-21

Prepared: 12/22/22 Analyzed: 12/23/22

Chloride 283 20.0 250 ND 113 80-120 0.678 20



QC Summary Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Thistle North CTB Project Number: 01058-0007 Project Manager: Tom Bynum	Reported: 12/29/2022 11:19:47AM
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Anions by EPA 300.0/9056A

Analyst: SL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2252061-BLK1)

Prepared: 12/23/22 Analyzed: 12/27/22

Chloride ND 20.0

LCS (2252061-BS1)

Prepared: 12/23/22 Analyzed: 12/27/22

Chloride 250 20.0 250 100 90-110

Matrix Spike (2252061-MS1)

Source: E212130-01

Prepared: 12/23/22 Analyzed: 12/27/22

Chloride 262 20.0 250 ND 105 80-120

Matrix Spike Dup (2252061-MSD1)

Source: E212130-01

Prepared: 12/23/22 Analyzed: 12/27/22

Chloride 263 20.0 250 ND 105 80-120 0.260 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:	Thistle North CTB	
PO Box 247	Project Number:	01058-0007	Reported:
Plains TX, 79355-0247	Project Manager:	Tom Bynum	12/29/22 11:19

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 Project: <u>THIS IS NORTH CTB</u> Project Manager: Tom Bynum Address: 56 14 N. Lovington Hwy. City, State, Zip Hobbs, NM, 88240 Phone: 580-748-1613 Email: tom@pimaoil.com Report due by:	Bill To Attention: <u>Devon</u> Address: City, State, Zip Phone: Email: Pima Project # <u>1-219</u>		Lab Use Only Lab WO# <u>E212128</u> Job Number <u>010580009</u>		TAT 1D 2D 3D Standard <u>X</u>				EPA Program CWA SDWA RCRA	
	Analysis and Method DRO/DRO by 8015 GRO/DRO by 8015 BTEX by 8021 VOC by 8260 Metals 6010 Chloride 300.0 BGDOC NM BGDOC TX							State NM CO UT AZ TX <u>X</u>		
	Remarks									
	(Empty row for additional remarks)									

Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	DRO/DRO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	BGDOC NM	BGDOC TX	Remarks
9:00	12/20/22	S	1	SW-1	1							X		
9:05				SW-2	2									
9:10				SW-3	3									
9:15				SW-4	4									
9:20				SW-5	5									
9:25				SW-6	6									
9:30				SW-7	7									
9:35				SW-8	8									
9:40				SW-9	9									
9:45				SW-10	10									

Additional Instructions:

Bill to Devon: 21102360

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. 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) <u>[Signature]</u>	Date <u>12-21-22</u>	Time <u>2:00</u>	Received by: (Signature) <u>[Signature]</u>	Date <u>12-21-22</u>	Time <u>1400</u>	Received on ice: <input checked="" type="radio"/> Y <input type="radio"/> N T1 _____ T2 _____ T3 _____ AVG Temp °C <u>4</u>
Relinquished by: (Signature) <u>[Signature]</u>	Date <u>12-21-22</u>	Time <u>1530</u>	Received by: (Signature) <u>[Signature]</u>	Date <u>12-22-22</u>	Time <u>11:00</u>	
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	

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.



Client: Pima Environmental Services Project: <u>THIRTE NORTH CTB</u> Project Manager: Tom Bynum Address: 5614 N. Lovington Hwy. City, State, Zip Hobbs, NM, 88240 Phone: 580-748-1613 Email: tom@pimaoil.com Report due by:	Attention: <u>Devon</u> Address: City, State, Zip Phone: Email: Pima Project # <u>1-219</u>	Lab Use Only		TAT			EPA Program			
		Lab WO# <u>E212128</u>	Job Number <u>010580007</u>	1D	2D	3D	Standard	CWA	SDWA	
		Analysis and Method							RCRA	
		DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8250	Metals 6010	Chloride 300.0	BGDOC NM	BGDOC TX	State

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 8250	Metals 6010	Chloride 300.0	BGDOC NM	BGDOC TX	Remarks
9:50	12/20/22	S	1	SW-11	11							X		
9:55				SW-12	12									
10:00				S1-1'	13									
10:05				S1-2'	14									
10:10				S2-1'	15									
10:15				S2-2'	16									
10:20				S3-1'	17									
10:25				S3-2'	18									
10:30				S4-1'	19									
10:35				S4-2'	20									

Additional Instructions: Bill to Devon: 21102360

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.
 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) <u>AB</u>	Date <u>12-21-22</u>	Time <u>2:00</u>	Received by: (Signature) <u>Michelle Campbell</u>	Date <u>12-21-22</u>	Time <u>1400</u>	Lab Use Only Received on ice: <input checked="" type="radio"/> Y <input type="radio"/> N T1 _____ T2 _____ T3 _____ AVG Temp °C <u>4</u>
Relinquished by: (Signature) <u>Michelle Campbell</u>	Date <u>12-21-22</u>	Time <u>1530</u>	Received by: (Signature) <u>[Signature]</u>	Date <u>12/22/22</u>	Time <u>11:00</u>	
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	

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.



Client: Pima Environmental Services	Bill To Attention: <u>Devon</u> Address: _____ City, State, Zip _____ Phone: _____ Email: _____ Pima Project # <u>1-219</u>	Lab Use Only				TAT				EPA Program	
Project: <u>THISTLE North CTB</u>		Lab WO# <u>E212128</u>	Job Number <u>010580007</u>			1D	2D	3D	Standard	CWA	SDWA
Project Manager: Tom Bynum		Analysis and Method									
Address: 5614 N. Lovington Hwy.		DRO/RO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	BGDOC NM	BGDOC TX	RCRA	
City, State, Zip Hobbs, NM, 88240		State									
Phone: 580-748-1613	NM <input checked="" type="checkbox"/> CO <input type="checkbox"/> UT <input type="checkbox"/> AZ <input type="checkbox"/> TX <input type="checkbox"/>										
Email: tom@pimaoil.com	Remarks										
Report due by:											

Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	DRO/RO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	BGDOC NM	BGDOC TX	Remarks
10:40	2/20/22	S	1	S5.1'	21							X		
10:45				S5.2'	22									
10:50				S6.1'	23									
10:55				S6.2'	24									Sample #24 Not Received 2/22/22
11:00				S7.1'	25									
11:05				S7.2'	26									
11:10				S8.1'	27									
11:15				S8.2'	28									
11:20				S9.1'	29									
11:25				S9.2'	30									

Additional Instructions: Bill to Devon: 21102360

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. 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) <u>AB</u>	Date <u>12-21-22</u>	Time <u>2:00</u>	Received by: (Signature) <u>Michelle Gonzalez</u>	Date <u>12-21-22</u>	Time <u>1400</u>	Received on ice: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Relinquished by: (Signature) <u>Michelle Gonzalez</u>	Date <u>12-21-22</u>	Time <u>1530</u>	Received by: (Signature) <u>[Signature]</u>	Date <u>12/22/22</u>	Time <u>11:00</u>	T1 _____ T2 _____ T3 _____
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	AVG Temp °C <u>4</u>

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.



Client: Pima Environmental Services		Bill To		Lab Use Only		TAT		EPA Program					
Project: <u>THSHE NORTH CTB</u>		Attention: <u>Devon</u>		Lab WO# <u>E212128</u>		Job Number <u>010580007</u>		1D	2D	3D	Standard	CWA	SDWA
Project Manager: Tom Bynum		Address:		Analysis and Method									
Address: 56 14 N. Lovington Hwy.		City, State, Zip											RCRA
City, State, Zip Hobbs, NM. 88240		Phone:											
Phone: 580-748-1613		Email:											
Email: tom@pimaoil.com		Pima Project # <u>1-219</u>											
Report due by:													

Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	DRO/DRO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	BGDOC NM	BGDOC TX	Remarks
11:30	12/20/22	S	1	BG1	31							X		

Additional Instructions: Bill to Devon: 2102300

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: Ned Rogers

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) <u>AB</u>	Date <u>12-21-22</u>	Time <u>2:00</u>	Received by: (Signature) <u>Michelle Cruzales</u>	Date <u>12-21-22</u>	Time <u>14:00</u>	Lab Use Only Received on ice: <input checked="" type="radio"/> Y <input type="radio"/> N T1 _____ T2 _____ T3 _____ AVG Temp °C <u>4</u>
Relinquished by: (Signature) <u>Michelle Cruzales</u>	Date <u>12-21-22</u>	Time <u>15:30</u>	Received by: (Signature) <u>[Signature]</u>	Date <u>12-21-22</u>	Time <u>11:00</u>	
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	

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 Analytical Laboratory

Printed: 12/22/2022 3:11:46PM

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:	12/22/22 11:00	Work Order ID:	E212128
Phone:	(575) 631-6977	Date Logged In:	12/22/22 12:05	Logged In By:	Alexa Michaels
Email:	tom@pimaoil.com	Due Date:	12/29/22 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
- 4. Was the COC complete, i.e., signatures, dates/times, requested analyses? Yes
- 5. Were all samples received within holding time? Yes

Carrier: UPS

Note: Analysis, such as pH which should be conducted in the field, i.e, 15 minute hold time, are not included in this discussion.

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? Yes

Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling

- 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 filtration 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.

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 181885

CONDITIONS

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 181885
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jnobui	Closure Report Approved.	2/20/2023