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TALON LPE

Closure Report

Verna Rae Tank Battery
Lea County, New Mexico
API ID # 30-025-26547
Incident # NAPP2313060635

Prepared For:

Matador Resources
5347 N. 26th Street 2nd Floor.
Artesia, NM 88210

Prepared By:

Talon/LPE
408 W. Texas Avenue
Artesia, New Mexico 88210

August 16, 2023

NMOCD
506 W. Texas Ave
Artesia, NM 88210

Subject: **Closure Report**
Verna Rae Tank Battery
Lea County, New Mexico
Facility ID # fAPP2203274819
Incident # NAPP2313060635

To Whom It May Concern,

Matador Resources contracted Talon/LPE (Talon) to perform soil assessment and remediation services at the above referenced location. The incident description, soil sampling results, remedial actions, and closure request are presented herein.

Site Information

The Verna Rae Tank Battery is located approximately 29 miles southwest of Hobbs, New Mexico. The legal location for this release is Unit Letter L, Section 06, Township 20 South, and Range 34 East in Lea County, New Mexico. More specifically the latitude and longitude for the release are 32.607422 and -103.594414. A Site Location Map is presented in Appendix I.

According to the soil survey provided by the United States Department of Agriculture National Resources Conservation Services, the soil in this area is comprised of Pyote and Maljamar fine sands with, 0 to 3 percent slopes. The referenced soil data is presented in Appendix II. Per the New Mexico Bureau of Geology and Mineral Resources, the local geology consists of eolian and piedmont deposits interlayed 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.

Groundwater and Site Characterization

The New Mexico Office of the State Engineer Database indicates the nearest reported depth to groundwater is 0.46 mile from the site and is recorded at 110 feet below ground surface (bgs). Further research of the Bureau of Land Management Karst data indicates that this site is situated in low karst area. The FEMA data base locates the site in a minimal flood hazard zone.

Approximate Depth to Groundwater	110 feet bgs

☐Yes ☒No	Within 300 feet of any continuously flowing watercourse or any other significant watercourse
☐Yes ☒No	Within 200 feet of any lakebed, sinkhole or a playa lake
☐Yes ☒No	Within 300 feet from an occupied permanent residence, school, hospital, institution or church
☐Yes ☒No	Within 500 feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes
☐Yes ☒No	Within 1000 feet of any freshwater well or spring
☐Yes ☒No	Within incorporated municipal boundaries or within a defined municipal freshwater well field covered under a municipal ordinance adopted pursuant to Section 3-2703 NMSA 1978
☐Yes ☒No	Within 300 feet of a wetland
☐Yes ☒No	Within the area overlying a subsurface mine
☐Yes ☒No	Within an unstable area
☐Yes ☒No	Within a 100-year floodplain

With depth to water source not available that meets New Mexico Oil Conservation Division's (NMOCD) criteria within ½ mile of the site, or less than 25 years of age, the responsible party must therefore adhere to the cleanup criteria for this site of groundwater less than 50 feet bgs, Table I, NMOCD Rule 19.15.29 NMAC.

Closure Criteria for Soils Impacted by a Release			
Depth below horizontal extents of release to ground water less than 10,000 mg/l TDS	Constituent	Method	Limit
≤ 50 feet	Total Chlorides	EPA 300.0 or SM4500 Cl B	600 mg/kg
	TPH (GRO+DRO+MRO)	EPA SW-846 Method 8015M	100 mg/kg
	BTEX	EPA SW-846 Method 8021B or 8260B	50 mg/kg
	Benzene	EPA SW-846 Method 8021B or 8260B	10 mg/kg

Incident Description

On May 10, 2023, piping along the back of the tank battery failed due to corrosion (approximately 51 barrels (bbls) of produced water and 9 bbls of oil were released on the pad location. 38 bbls and pasture. 38 bbls. of produced water and 7 bbls of oil were recovered. The initial C-141 submitted to the NMOCD, can be reviewed under incident number NAPP2313060635. The site location map is presented in Appendix I.

Site Assessment Activities

On May 12, 2023, upon client authorization, Talon mobilized personnel and microblaze trailer to the site to apply microblaze to the lightly coated vegetation overspray in the pasture located in the vicinity os sample location S-3. Approximently 750 gallons of microblazed treatment was applied to the impacted area. S-1 through S-5 can be seen on the assessment map attached Figure 1 in Appendix I.

On May 17, 2023, upon client authorization, Talon mobilized personnel to the site to conduct an initial site assessment. The impacted area was photographed, soil samples were collected utilizing a hand auger, and the area was mapped. All soil samples were properly packaged in laboratory provided glassware, preserved on ice in the custody of Talon personnel, and transported to Cardinal Analytical Laboratory for analysis of Total Chlorides (SM4500Cl-B), Total Petroleum Hydrocarbons (TPH, EPA Method 8015M) and Volatile Organics (BTEX, EPA Method 8021B). Sample locations are shown on the attached Figure 1 in Appendix I, and the results of the sampling event are presented below in Table 1.

Table 1

Site Assessment Analytical Data

Sample ID	Sample Date	Depth (BGS)	Benzene mg/kg	BTEX mg/kg	GRO mg/kg	DRO mg/kg	MRO mg/kg	Total TPH mg/kg	Chlorides mg/kg
NMOCD Table 1 Closure Criteria 19.15.29 NMAC			10 mg/kg	50 mg/kg	DRO + GRO + MRO combined = 100 mg/kg			100 mg/kg	600 mg/kg
S-1	5/17/23	1’	ND	ND	ND	ND	ND	0	496
	5/17/23	2’	ND	ND	ND	ND	ND	0	256
	5/17/23	3’	ND	ND	ND	ND	ND	0	64
	5/17/23	4’	ND	ND	ND	ND	ND	0	112
S-2	5/17/23	1’	ND	ND	ND	ND	ND	0	80
	5/17/23	2’R	ND	ND	ND	ND	ND	0	16
S-3	5/17/23	1’	ND	ND	ND	102	18	120	176
	5/17/23	2’	ND	ND	ND	ND	ND	0	48
	5/17/23	3’	ND	ND	ND	ND	ND	0	32
	5/17/23	4’	ND	ND	ND	ND	ND	0	16
S-4	5/17/23	1’	ND	ND	ND	220	57	277	2080
	5/17/23	2’	ND	ND	ND	ND	ND	0	64
	5/17/23	3’	ND	ND	ND	11	ND	11	80
	5/17/23	4’	ND	ND	ND	ND	ND	0	80
S-5	5/17/23	1’	ND	ND	ND	14	ND	14	80
	5/17/23	2’	ND	ND	ND	ND	ND	0	32
BG-1	5/17/23	0’	ND	ND	ND	ND	ND	0	32

NOTES:

BGS	Below ground surface
mg/kg	milligrams per kilogram
ND	Analyte Not Detected

Highlighted cells indicate exceedance of NMOCD Table 1 Closure Criteria

Remediation Activities

On June 23 and 28, 2023, Talon Returned to location and removed impacted soils located at S-4. SW-1 original sample returned of the criteria and was resampled on the 28th. The samples were transported with the chain of custody to Cardinal Laboratories, for analysis of Total Chlorides (SM4500Cl-B), Total Petroleum Hydrocarbons (TPH, EPA Method 8015M) and Volatile Organics (BTEX, EPA Method 8021B).

On July 26, 2023, Talon Returned to location for the purpose of taking samples in the area microblazed. Confirmation samples C-1 and C-2 were collected. The samples were transported with the chain of custody to Cardinal Laboratories, for analysis of Total Chlorides (SM4500Cl-B), Total Petroleum Hydrocarbons (TPH, EPA Method 8015M) and Volatile Organics (BTEX, EPA Method 8021B).

The soil sample results from the laboratory analytical are summarized below. Sample locations are illustrated on excavation map, Figure 2 in Appendix I and complete laboratory analytical reports are presented in Appendix V.

Table 2
Site Closure Analytical Data

Sample ID	Sample Date	Depth (BGS)	Benzene mg/kg	BTEX mg/kg	GRO mg/kg	DRO mg/kg	MRO mg/kg	Total TPH mg/kg	Chlorides mg/kg
NMOCD Table 1 Closure Criteria 19.15.29 NMAC			10 mg/kg	50 mg/kg	DRO + GRO + MRO combined = 100 mg/kg			100 mg/kg	600 mg/kg
C-1	7/26/2023	1'	ND	ND	ND	ND	ND	ND	48
C-2	7/26/2023	1'	ND	ND	ND	ND	ND	ND	64
C-3	6/23/2023	1'	ND	ND	ND	ND	ND	ND	ND
C-4	6/23/2023	1'	ND	ND	ND	ND	ND	ND	160
SW-1	6/23/2023	0-1'	ND	ND	ND	51	ND	51	1010
	6/28/2023	0-1'	ND	ND	ND	ND	ND	ND	16
SW-2	6/23/2023	0-1'	ND	ND	ND	ND	ND	ND	16
SW-3	6/23/2023	0-1'	ND	ND	ND	ND	ND	ND	ND
SW-4	6/23/2023	0-1'	ND	ND	ND	ND	ND	ND	128

NOTES:

BGS	Below ground surface
mg/kg	Milligrams per kilogram
C	Confirmation Sample
SW	Sidewall Sample
ND	Analyte Not Detected

Highlighted cells indicate exceedance of NMOCD Table 1 Closure Criteria

Remedial Action Summary

- The impacted areas on pasture were excavated to depth of 1 foot bgs. Talon field titrated soil samples for total chlorides to guide the vertical and horizontal extents of the excavation process.
- Pursuant to NMOCD guidance, confirmation soil samples were collected at 200 square foot intervals and analyzed for TPH, BTEX and Total Chlorides to insure all areas had reached NMOCD closure criteria.
- The excavated areas on pasture backfilled with new like material (sand), machine compacted, and contoured to match the surrounding location.
- Photographic documentation is provided in Appendix IV.
- Copies of the Final C-141s are presented in Appendix III.

Closure

Based upon the completed remedial actions and confirmation sampling results, on behalf of Matador Resources, we respectfully request that no further actions be required and the incident closed.

Should you have any questions or if further information is required, please do not hesitate to contact our office at 575-746-8768.

Respectfully submitted,

Talon/LPE

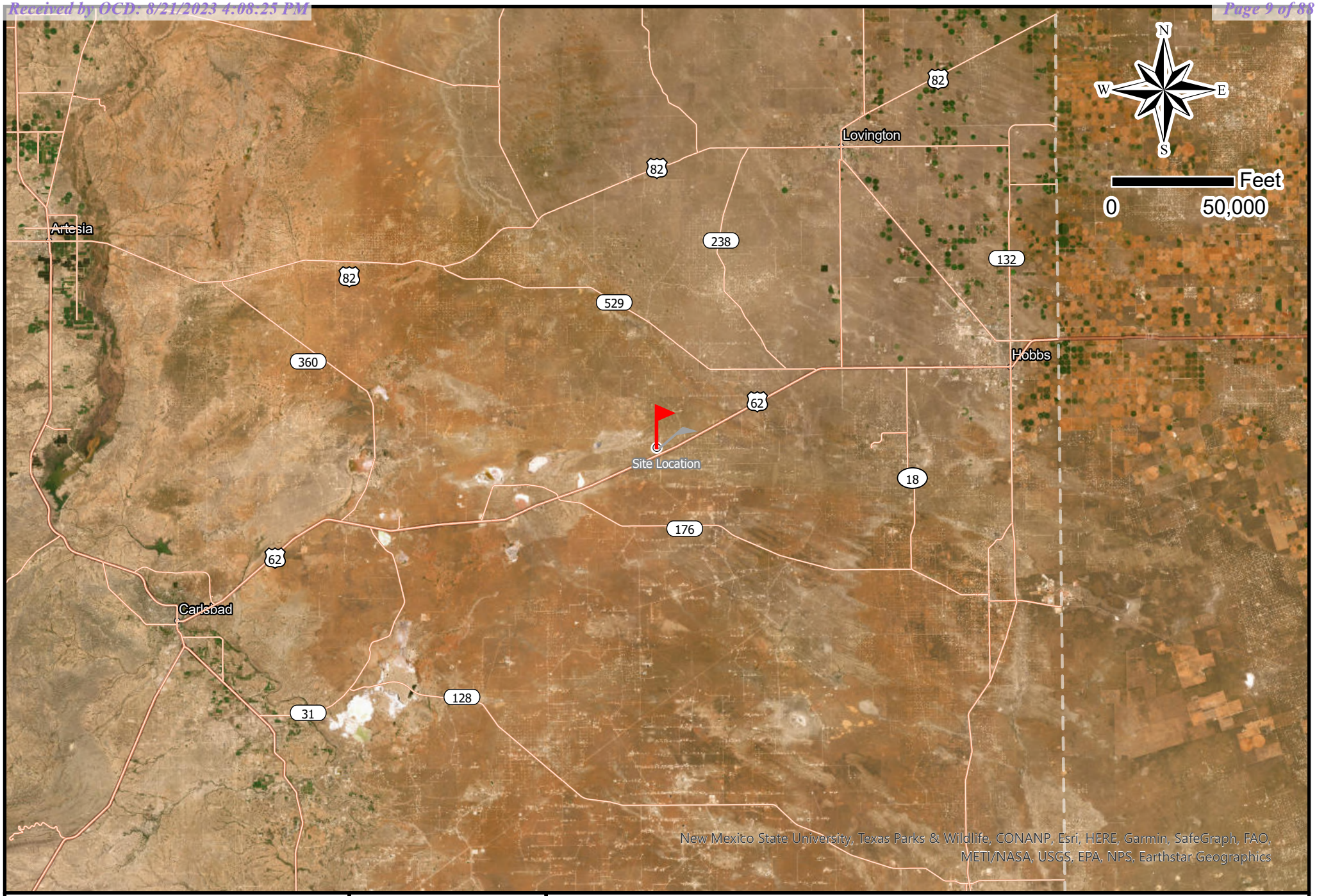
Chad Hensley
Project Manager

Attachments:

Appendix I Site Maps
Appendix II Groundwater Data, Soil Survey, FEMA Flood Map
Appendix III C-141 Forms, NMOCD Correspondence
Appendix IV Photographic Documentation
Appendix V Laboratory Analytical Reports

Appendix I

Site Maps



TALON LPE

Drafted: 7/28/2023
1 in = 50,000 ft
Drafted By: IJR

Matador Production Co.
Verna Rae CTB
Lea County, NM
Location Map

TALON LPE

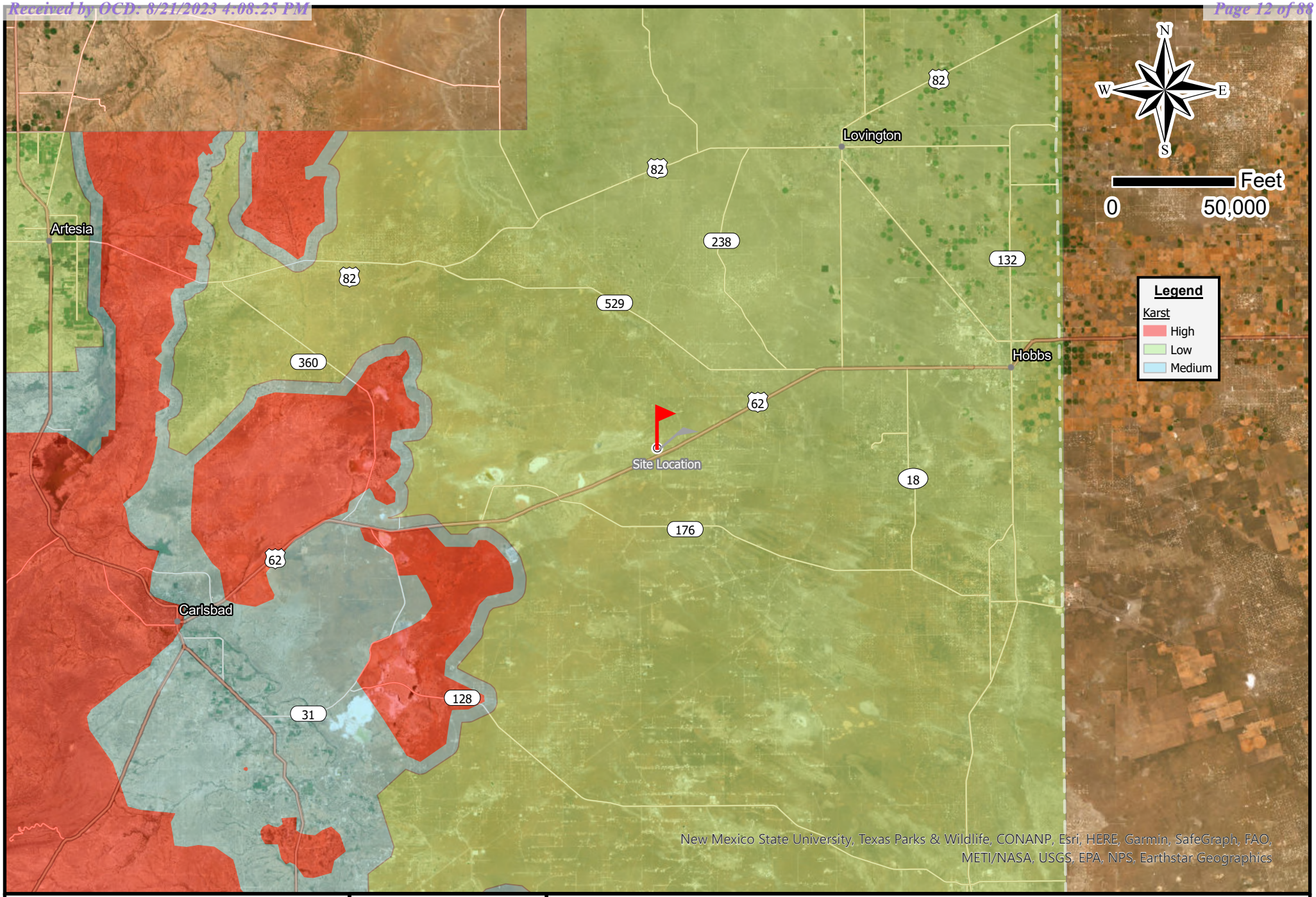
Drafted: 7/28/2023 1 in = 50 ft Drafted By: IJR	Figure 1	Matador Production Co. Verna Rae CTB Lea County, NM Assessment Map

TALON LPE

Drafted: 8/7/2023
1 in = 50 ft
Drafted By: IJR

Figure 2

Matador Production Co.
Verna Rae CTB
Lea County, NM
Excavation Map



TALON LPE

Drafted: 7/28/2023
1 in = 50,000 ft
Drafted By: IJR

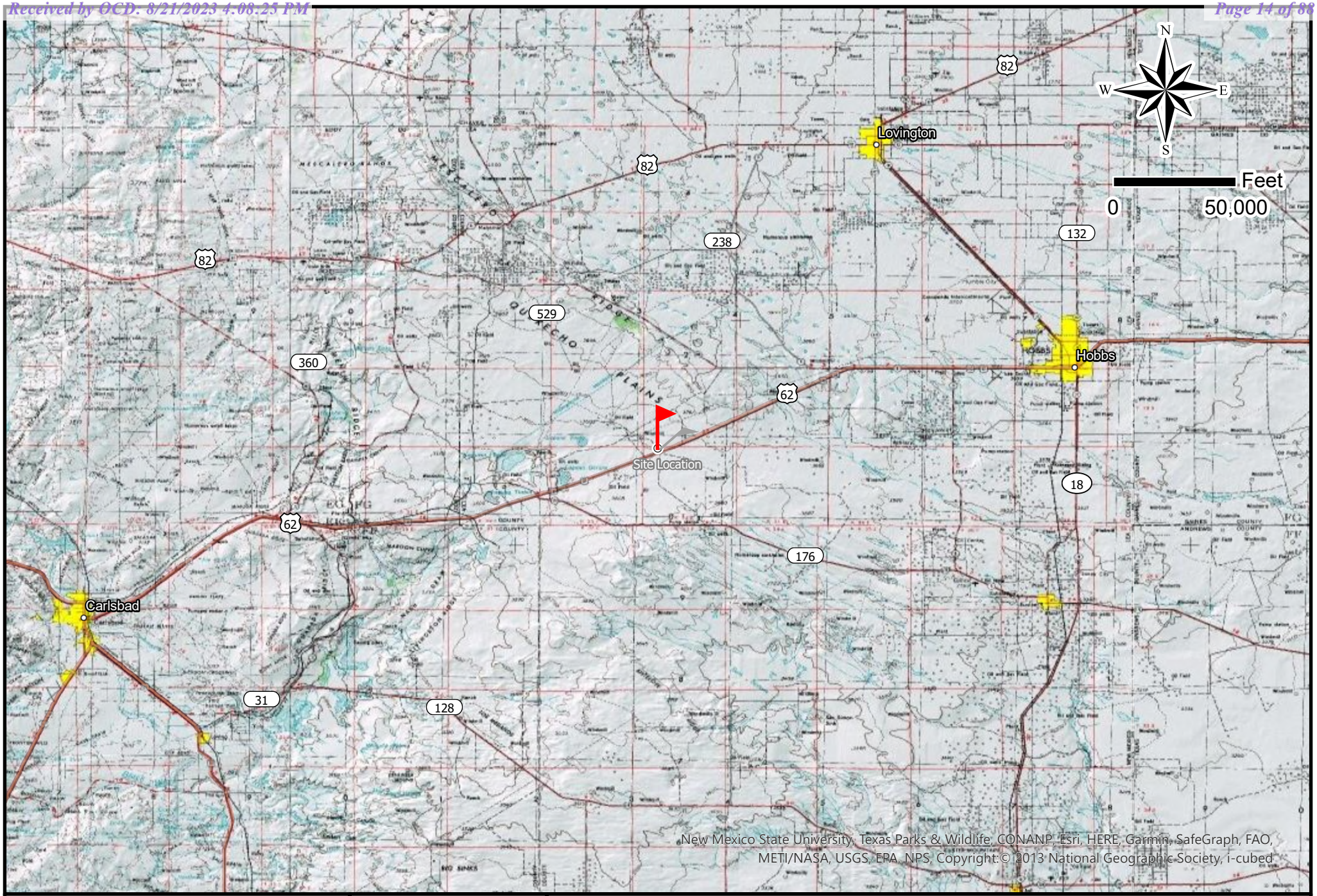
Matador Production Co.
Verna Rae CTB
Lea County, NM
Karst Map

Appendix II

Groundwater Data

Soil Survey

FEMA Flood Map



TALON LPE

Drafted: 7/28/2023
1 in = 50,000 ft
Drafted By: IJR

Matador Production Co.
Verna Rae CTB
Lea County, NM
Topographic Map

New Mexico Office of the State Engineer

Point of Diversion Summary

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

Well Tag	POD Number	Q64	Q16	Q4	Sec	Twss	Rng	X	Y
	L 07213	4	1	4	31	19S	34E	631700	3609351*

Driller License: 46 **Driller Company:** ABBOTT BROTHERS COMPANY

Driller Name:

Drill Start Date:	05/04/1974	**Drill Finish Date:**	05/05/1974	**Plug Date:**	
Log File Date:	05/15/1974	**PCW Rcv Date:**		**Source:**	Shallow
Pump Type:		**Pipe Discharge Size:**		**Estimated Yield:**	50 GPM
Casing Size:	7.00	**Depth Well:**	160 feet	**Depth Water:**	110 feet

Casing Perforations:	Top	Bottom
	110	160

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

United States Department of Agriculture

NRCS

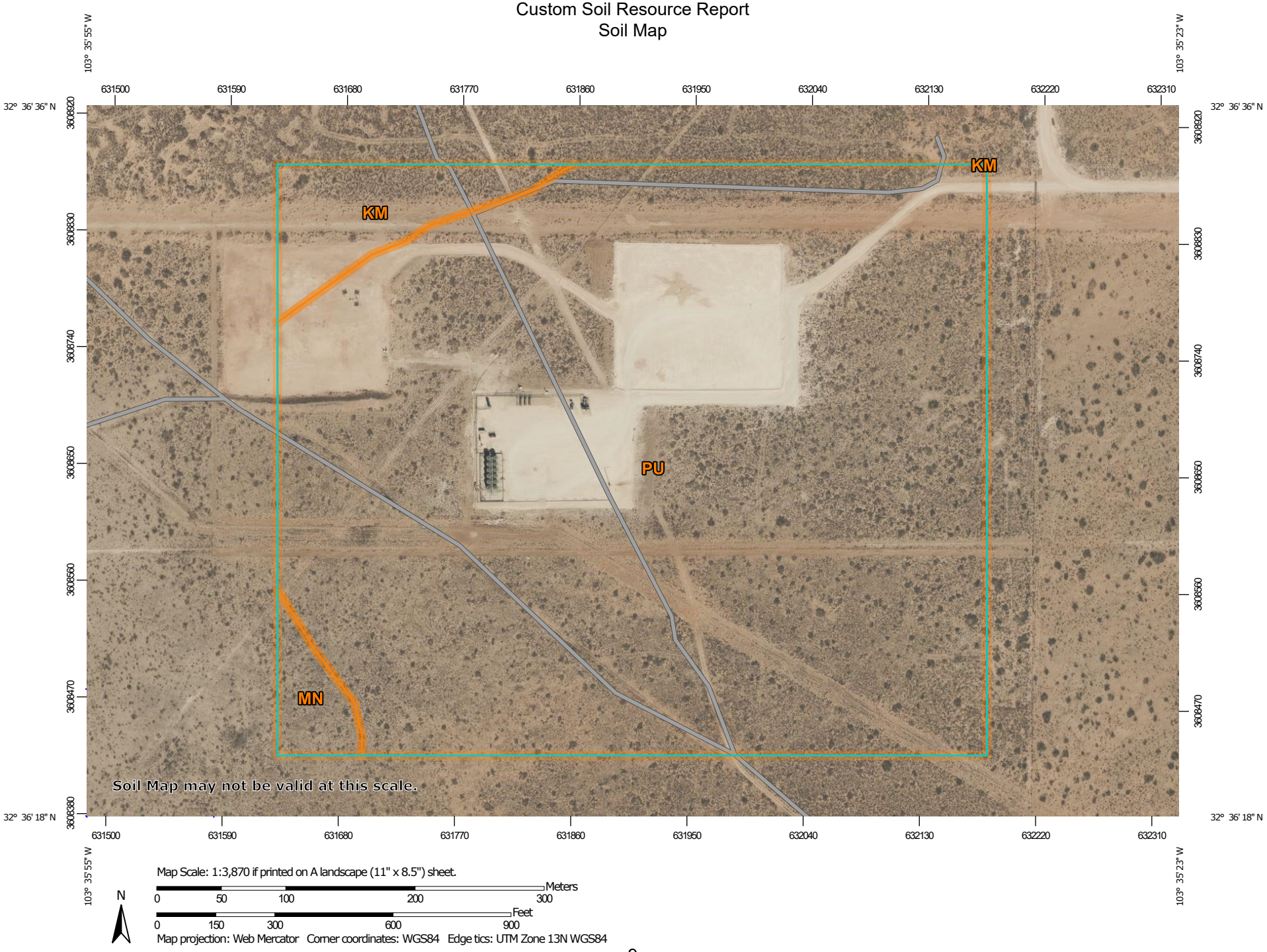
Natural Resources Conservation Service

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

Custom Soil Resource Report for Lea County, New Mexico

July 17, 2023

Custom Soil Resource Report
Soil Map



MAP LEGEND

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

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

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

Water Features
- Streams and Canals

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

Background
- Aerial Photography

MAP INFORMATION

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

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

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

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

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

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

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

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

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

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

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

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
KM	Kermit soils and Dune land, 0 to 12 percent slopes	3.1	5.1%
MN	Ratliff-Wink fine sandy loams	1.3	2.0%
PU	Pyote and Maljamar fine sands	57.7	92.9%
Totals for Area of Interest		**62.1**	**100.0%**

Map Unit Descriptions

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

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

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

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the

development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

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

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

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

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

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

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

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

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

Lea County, New Mexico

KM—Kermit soils and Dune land, 0 to 12 percent slopes

Map Unit Setting

National map unit symbol: dmpx
Elevation: 3,000 to 4,400 feet
Mean annual precipitation: 10 to 15 inches
Mean annual air temperature: 60 to 62 degrees F
Frost-free period: 190 to 205 days
Farmland classification: Not prime farmland

Map Unit Composition

Kermit and similar soils: 46 percent
Dune land: 44 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Kermit

Setting

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

Typical profile

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

Properties and qualities

Slope: 5 to 12 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Excessively drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): Very high (20.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 3 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: Low (about 3.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: A
Ecological site: R070BC022NM - Sandhills
Hydric soil rating: No

Description of Dune Land

Setting

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

Typical profile

A - 0 to 6 inches: fine sand
C - 6 to 60 inches: fine sand

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8
Hydrologic Soil Group: A
Hydric soil rating: No

Minor Components

Palomas

Percent of map unit: 3 percent
Ecological site: R070BD003NM - Loamy Sand
Hydric soil rating: No

Pyote

Percent of map unit: 3 percent
Ecological site: R070BD003NM - Loamy Sand
Hydric soil rating: No

Wink

Percent of map unit: 2 percent
Ecological site: R070BD003NM - Loamy Sand
Hydric soil rating: No

Maljamar

Percent of map unit: 2 percent
Ecological site: R070BD003NM - Loamy Sand
Hydric soil rating: No

MN—Ratliff-Wink fine sandy loams

Map Unit Setting

National map unit symbol: dmqf
Elevation: 3,000 to 3,900 feet
Mean annual precipitation: 10 to 15 inches
Mean annual air temperature: 60 to 62 degrees F
Frost-free period: 190 to 205 days

Farmland classification: Farmland of statewide importance

Map Unit Composition

Ratliff and similar soils: 45 percent
Wink and similar soils: 40 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Ratliff

Setting

Landform: Plains
Landform position (three-dimensional): Dip
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Calcareous alluvium and/or calcareous eolian deposits derived from sedimentary rock

Typical profile

A - 0 to 4 inches: fine sandy loam
Bw - 4 to 22 inches: clay loam
Bk - 22 to 60 inches: clay loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 50 percent
Gypsum, maximum content: 1 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 2.0
Available water supply, 0 to 60 inches: Moderate (about 8.1 inches)

Interpretive groups

Land capability classification (irrigated): 4e
Land capability classification (nonirrigated): 6c
Hydrologic Soil Group: B
Ecological site: R070BC007NM - Loamy
Hydric soil rating: No

Description of Wink

Setting

Landform: Plains
Landform position (three-dimensional): Dip
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Calcareous sandy alluvium and/or calcareous sandy eolian deposits derived from sedimentary rock

Typical profile

A - 0 to 12 inches: fine sandy loam
Bk - 12 to 23 inches: sandy loam
BCk - 23 to 60 inches: sandy loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): High (2.00 to 6.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 30 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: Low (about 4.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: A
Ecological site: R070BD004NM - Sandy
Hydric soil rating: No

Minor Components

Kermit

Percent of map unit: 6 percent
Ecological site: R070BC022NM - Sandhills
Hydric soil rating: No

Maljamar

Percent of map unit: 5 percent
Ecological site: R070BD003NM - Loamy Sand
Hydric soil rating: No

Palomas

Percent of map unit: 4 percent
Ecological site: R070BD003NM - Loamy Sand
Hydric soil rating: No

PU—Pyote and Maljamar fine sands

Map Unit Setting

National map unit symbol: dmqq
Elevation: 3,000 to 3,900 feet

Mean annual precipitation: 10 to 12 inches
Mean annual air temperature: 60 to 62 degrees F
Frost-free period: 190 to 205 days
Farmland classification: Not prime farmland

Map Unit Composition

Pyote and similar soils: 46 percent
Maljamar and similar soils: 44 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Pyote

Setting

Landform: Plains
Landform position (three-dimensional): Rise
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Sandy eolian deposits derived from sedimentary rock

Typical profile

A - 0 to 30 inches: fine sand
Bt - 30 to 60 inches: fine sandy loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): High (2.00 to 6.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 5 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: Low (about 5.1 inches)

Interpretive groups

Land capability classification (irrigated): 6e
Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: A
Ecological site: R070BD003NM - Loamy Sand
Hydric soil rating: No

Description of Maljamar

Setting

Landform: Plains
Landform position (three-dimensional): Rise
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Sandy eolian deposits derived from sedimentary rock

Typical profile

A - 0 to 24 inches: fine sand
Bt - 24 to 50 inches: sandy clay loam
Bkm - 50 to 60 inches: cemented material

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: 40 to 60 inches to petrocalcic
Drainage class: Well drained
Runoff class: Very low
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: 5 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: Low (about 5.6 inches)

Interpretive groups

Land capability classification (irrigated): 6e
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: B
Ecological site: R070BD003NM - Loamy Sand
Hydric soil rating: No

Minor Components

Kermit

Percent of map unit: 10 percent
Ecological site: R070BC022NM - Sandhills
Hydric soil rating: No

National Flood Hazard Layer FIRMette

FEMA

103°35'59"W 32°36'42"N

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

1:6,000

103°35'21"W 32°36'12"N

Basemap Imagery Source: USGS National Map 2023

Legend

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

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

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

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

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

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

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

N

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

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

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 7/17/2023 at 12:38 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.

Appendix III

C-141 Forms

NMOCD Correspondence

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

State of New Mexico
Energy Minerals and Natural Resources Department

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

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

Incident ID	NAPP2313060635
District RP	
Facility ID	fAPP2203274819
Application ID	

Release Notification

Responsible Party

Responsible Party	Matador Resources	OGRID	228937
Contact Name	Clinton Talley	Contact Telephone	337-319-8398
Contact email	clinton.talley@matadorresources.com	Incident # *(assigned by OCD)*	NAPP2313060635
Contact mailing address	5347 N. 26th Street 2nd Floor, Artesia, NM 88210		

Location of Release Source

Latitude 32.607422 Longitude -103.594414
(NAD 83 in decimal degrees to 5 decimal places)

Site Name	Verna Rae Fed Tank Battery	Site Type	Tank Battery
Date Release Discovered	5/10/2023	API# *(if applicable)*	

Unit Letter	Section	Township	Range	County
L	6	20S	34E	Lea

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

Nature and Volume of Release

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

☒ Crude Oil	Volume Released (bbls) 9	Volume Recovered (bbls) 7
☒ Produced Water	Volume Released (bbls) 51	Volume Recovered (bbls) 38
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☐ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release

Equipment Failure

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2313060635
District RP	
Facility ID	fAPP2203274819
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☑ Yes ☐ No	If YES, for what reason(s) does the responsible party consider this a major release?

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

NOR

Initial Response

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

- ☑ The source of the release has been stopped.
- ☑ The impacted area has been secured to protect human health and the environment.
- ☑ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.
- ☑ All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have not been undertaken, explain why:

Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name: Clinton Talley Title: EHS

Signature: Clint Talley Date: 8/21/2023

email: clinton.talley@matadorresources.com Telephone: 337-319-8398

OCD Only

Received by: _____ Date: _____

Incident ID	NAPP2313060635
District RP	
Facility ID	fAPP2203274819
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?	110 (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☑ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☑ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☑ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☑ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☑ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☑ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☑ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☑ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☑ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☑ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☑ No
Did the release impact areas **not** on an exploration, development, production, or storage site?	☐ Yes ☑ No

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

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

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

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

Form C-141
Page 4

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2313060635
District RP	
Facility ID	
Application ID	fAPP2203274819

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: Clinton Talley Title: EHS

Signature: Clint Talley Date: 08/23/2023

email: clinton.talley@matadorresources.com Telephone: 337-319-8398

OCD Only

Received by: Date:

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2313060635
District RP	
Facility ID	fAPP2203274819
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: Clinton Talley Title: EHS

Signature: Clint Talley Date: 08/23/2023

email: clinton.talley@matadorresources.com Telephone: 337-319-8398

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: Nelson Velez Date: 12/05/2023

Printed Name: Nelson Velez Title: Environmental Specialist - Adv

From: Hamlet, Robert, EMNRD
To: Chad Hensley
Cc: Bratcher, Michael, EMNRD
Subject: RE: [EXTERNAL] NAPP2313060635 VERNA RAE TANK BATTERY Sampling event
Date: Tuesday, August 8, 2023 1:40:16 PM
Attachments: image002.png
image003.png
image004.png
image005.png
image006.png

This message originated from an External Source. Please use proper judgment and caution when opening attachments, clicking links, or responding to this email.

Chad,

Thank you for the notification. In the future, please make sure 2 business days' notice is given on any sampling event. The variance is approved. Thank you

Robert Hamlet ● Environmental Specialist - Advanced
Environmental Bureau
EMNRD - Oil Conservation Division
506 W. Texas Ave.| Artesia, NM 88210
575.909.0302 | robert.hamlet@state.nm.us
http://www.emnrd.state.nm.us/OCD/

From: Chad Hensley <chensley@talonlpe.com>
Sent: Tuesday, August 8, 2023 1:32 PM
To: Hamlet, Robert, EMNRD <Robert.Hamlet@emnrd.nm.gov>
Subject: [EXTERNAL] NAPP2313060635 VERNA RAE TANK BATTERY Sampling event

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

To Rob Hamlet,

Talon on behalf of Matador is requesting a Variance for 2 days sampling event due to error on my part. Sampling was conducted on 6/23/2023. Attached is the lab results for those samples.

Chad Hensley
Environmental Project Manager
Office: 575.746.8768 x708
Direct: 575.616.4023
Cell: 575.246.0032
Fax: 575.746.8905
Emergency: 866.742.0742
Web: **www.talonlpe.com**

From: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>
Sent: Monday, August 7, 2023 2:43 PM
To: Chad Hensley <chensley@talonlpe.com>
Cc: clinton.talley@matadorresources.com
Subject: NAPP2313060635 VERNA RAE TANK BATTERY

Good afternoon Mr. Hensley,

14 day time extension request is approved. Remediation Due date is 08/22/2023.

Please keep a copy of this communication for inclusion within the appropriate report submittal.

Regards,

Nelson Velez • Environmental Specialist - Adv

Environmental Bureau | EMNRD - Oil Conservation Division

1000 Rio Brazos Road | Aztec, NM 87410

(505) 469-6146 | nelson.velez@emnrd.nm.gov

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

previous email submittal:

From: Chad Hensley <chensley@talonlpe.com>
Sent: Monday, August 7, 2023 12:51 PM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Cc: Clinton Talley <clinton.talley@matadorresources.com>
Subject: [EXTERNAL] NAPP2313060635 VERNA RAE TANK BATTERY

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

To whom it may concern,

Talon on behalf of Matador is requesting a 2 week extension (to be concluded on 8/21/23) for the Verna Rae Tank Battery release to finalize incident NAPP2313060635.

Chad Hensley
Environmental Project Manager
Office: 575.746.8768 x708
Direct: 575.616.4023
Cell: 575.246.0032
Fax: 575.746.8905
Emergency: 866.742.0742
Web: **[www.talonlpe.com]**www.talonlpe.com

At Talon/LPE, we are quality in all things, including communication. Have a question? Need a quote? Send an email to clientrelations@talonlpe.com.

Appendix IV

Photographic Documentation

Photograph No.1 Description:
Excavation

Photograph No.2 Description:
Backfill of excavation.

Photograph No.3 Description:
Micro-Blaze overspray

Photograph No.4 Description:
Micro-Blaze overspray

Appendix V

Laboratory Reports

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

May 22, 2023

CHAD HENSLEY

TALON LPE

408 W. TEXAS AVE.

ARTESIA, NM 88210

RE: VERNARAE

Enclosed are the results of analyses for samples received by the laboratory on 05/17/23 12:27.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-22-15. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

TALON LPE
CHAD HENSLEY
408 W. TEXAS AVE.
ARTESIA NM, 88210
Fax To: (575) 745-8905

Received:	05/17/2023	Sampling Date:	05/14/2023
Reported:	05/22/2023	Sampling Type:	Soil
Project Name:	VERNARAE	Sampling Condition:	Cool & Intact
Project Number:	702520.056.01	Sample Received By:	Shalyn Rodriguez
Project Location:	MATADOR - LEA COUNTY		

Sample ID: S - 1 1' (H232499-01)

BTEX 8021B mg/kg Analyzed By: JH/

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/20/2023	ND	2.24	112	2.00	1.17	
Toluene*	<0.050	0.050	05/20/2023	ND	2.29	114	2.00	1.57	
Ethylbenzene*	<0.050	0.050	05/20/2023	ND	2.18	109	2.00	1.00	
Total Xylenes*	<0.150	0.150	05/20/2023	ND	6.72	112	6.00	0.332	
Total BTEX	<0.300	0.300	05/20/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *107 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**496**	16.0	05/18/2023	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/18/2023	ND	211	106	200	1.51	
DRO >C10-C28*	<10.0	10.0	05/18/2023	ND	211	105	200	4.70	
EXT DRO >C28-C36	<10.0	10.0	05/18/2023	ND					

Surrogate: 1-Chlorooctane *83.6 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *79.0 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

TALON LPE
CHAD HENSLEY
408 W. TEXAS AVE.
ARTESIA NM, 88210
Fax To: (575) 745-8905

Received:	05/17/2023	Sampling Date:	05/14/2023
Reported:	05/22/2023	Sampling Type:	Soil
Project Name:	VERNARAE	Sampling Condition:	Cool & Intact
Project Number:	702520.056.01	Sample Received By:	Shalyn Rodriguez
Project Location:	MATADOR - LEA COUNTY		

Sample ID: S - 1 2' (H232499-02)

BTEX 8021B mg/kg Analyzed By: JH/

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/20/2023	ND	2.24	112	2.00	1.17	
Toluene*	<0.050	0.050	05/20/2023	ND	2.29	114	2.00	1.57	
Ethylbenzene*	<0.050	0.050	05/20/2023	ND	2.18	109	2.00	1.00	
Total Xylenes*	<0.150	0.150	05/20/2023	ND	6.72	112	6.00	0.332	
Total BTEX	<0.300	0.300	05/20/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *107 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**256**	16.0	05/18/2023	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/18/2023	ND	211	106	200	1.51	
DRO >C10-C28*	<10.0	10.0	05/18/2023	ND	211	105	200	4.70	
EXT DRO >C28-C36	<10.0	10.0	05/18/2023	ND					

Surrogate: 1-Chlorooctane *83.4 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *78.5 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

TALON LPE
CHAD HENSLEY
408 W. TEXAS AVE.
ARTESIA NM, 88210
Fax To: (575) 745-8905

Received:	05/17/2023	Sampling Date:	05/14/2023
Reported:	05/22/2023	Sampling Type:	Soil
Project Name:	VERNARAE	Sampling Condition:	Cool & Intact
Project Number:	702520.056.01	Sample Received By:	Shalyn Rodriguez
Project Location:	MATADOR - LEA COUNTY		

Sample ID: S - 1 3' (H232499-03)

BTEX 8021B mg/kg Analyzed By: JH/

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/20/2023	ND	2.24	112	2.00	1.17	
Toluene*	<0.050	0.050	05/20/2023	ND	2.29	114	2.00	1.57	
Ethylbenzene*	<0.050	0.050	05/20/2023	ND	2.18	109	2.00	1.00	
Total Xylenes*	<0.150	0.150	05/20/2023	ND	6.72	112	6.00	0.332	
Total BTEX	<0.300	0.300	05/20/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *108 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**64.0**	16.0	05/18/2023	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/18/2023	ND	211	106	200	1.51	
DRO >C10-C28*	<10.0	10.0	05/18/2023	ND	211	105	200	4.70	
EXT DRO >C28-C36	<10.0	10.0	05/18/2023	ND					

Surrogate: 1-Chlorooctane *105 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *103 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

TALON LPE
CHAD HENSLEY
408 W. TEXAS AVE.
ARTESIA NM, 88210
Fax To: (575) 745-8905

Received:	05/17/2023	Sampling Date:	05/14/2023
Reported:	05/22/2023	Sampling Type:	Soil
Project Name:	VERNARAE	Sampling Condition:	Cool & Intact
Project Number:	702520.056.01	Sample Received By:	Shalyn Rodriguez
Project Location:	MATADOR - LEA COUNTY		

Sample ID: S - 1 4' (H232499-04)

BTEX 8021B mg/kg Analyzed By: JH/

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/20/2023	ND	2.24	112	2.00	1.17	
Toluene*	<0.050	0.050	05/20/2023	ND	2.29	114	2.00	1.57	
Ethylbenzene*	<0.050	0.050	05/20/2023	ND	2.18	109	2.00	1.00	
Total Xylenes*	<0.150	0.150	05/20/2023	ND	6.72	112	6.00	0.332	
Total BTEX	<0.300	0.300	05/20/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *102 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**112**	16.0	05/18/2023	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/18/2023	ND	211	106	200	1.51	
DRO >C10-C28*	<10.0	10.0	05/18/2023	ND	211	105	200	4.70	
EXT DRO >C28-C36	<10.0	10.0	05/18/2023	ND					

Surrogate: 1-Chlorooctane *104 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *101 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

TALON LPE
CHAD HENSLEY
408 W. TEXAS AVE.
ARTESIA NM, 88210
Fax To: (575) 745-8905

Received:	05/17/2023	Sampling Date:	05/14/2023
Reported:	05/22/2023	Sampling Type:	Soil
Project Name:	VERNARAE	Sampling Condition:	Cool & Intact
Project Number:	702520.056.01	Sample Received By:	Shalyn Rodriguez
Project Location:	MATADOR - LEA COUNTY		

Sample ID: S - 2 1' (H232499-05)

BTEX 8021B mg/kg Analyzed By: JH/

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/20/2023	ND	2.24	112	2.00	1.17	
Toluene*	<0.050	0.050	05/20/2023	ND	2.29	114	2.00	1.57	
Ethylbenzene*	<0.050	0.050	05/20/2023	ND	2.18	109	2.00	1.00	
Total Xylenes*	<0.150	0.150	05/20/2023	ND	6.72	112	6.00	0.332	
Total BTEX	<0.300	0.300	05/20/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *105 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**80.0**	16.0	05/18/2023	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/18/2023	ND	211	106	200	1.51	
DRO >C10-C28*	<10.0	10.0	05/18/2023	ND	211	105	200	4.70	
EXT DRO >C28-C36	<10.0	10.0	05/18/2023	ND					

Surrogate: 1-Chlorooctane *82.1 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *77.5 %* *49.1-148*

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Analytical Results For:

TALON LPE
CHAD HENSLEY
408 W. TEXAS AVE.
ARTESIA NM, 88210
Fax To: (575) 745-8905

Received:	05/17/2023	Sampling Date:	05/14/2023
Reported:	05/22/2023	Sampling Type:	Soil
Project Name:	VERNARAE	Sampling Condition:	Cool & Intact
Project Number:	702520.056.01	Sample Received By:	Shalyn Rodriguez
Project Location:	MATADOR - LEA COUNTY		

Sample ID: S - 2 2' R (H232499-06)

BTEX 8021B mg/kg Analyzed By: JH/

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/20/2023	ND	2.24	112	2.00	1.17	
Toluene*	<0.050	0.050	05/20/2023	ND	2.29	114	2.00	1.57	
Ethylbenzene*	<0.050	0.050	05/20/2023	ND	2.18	109	2.00	1.00	
Total Xylenes*	<0.150	0.150	05/20/2023	ND	6.72	112	6.00	0.332	
Total BTEX	<0.300	0.300	05/20/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *108 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**16.0**	16.0	05/18/2023	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/18/2023	ND	180	90.0	200	1.20	
DRO >C10-C28*	<10.0	10.0	05/18/2023	ND	170	84.9	200	2.20	
EXT DRO >C28-C36	<10.0	10.0	05/18/2023	ND					

Surrogate: 1-Chlorooctane *88.9 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *92.6 %* *49.1-148*

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Analytical Results For:

TALON LPE
CHAD HENSLEY
408 W. TEXAS AVE.
ARTESIA NM, 88210
Fax To: (575) 745-8905

Received:	05/17/2023	Sampling Date:	05/14/2023
Reported:	05/22/2023	Sampling Type:	Soil
Project Name:	VERNARAE	Sampling Condition:	Cool & Intact
Project Number:	702520.056.01	Sample Received By:	Shalyn Rodriguez
Project Location:	MATADOR - LEA COUNTY		

Sample ID: S - 3 1' (H232499-07)

BTEX 8021B mg/kg Analyzed By: JH/

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/20/2023	ND	2.24	112	2.00	1.17	
Toluene*	<0.050	0.050	05/20/2023	ND	2.29	114	2.00	1.57	
Ethylbenzene*	<0.050	0.050	05/20/2023	ND	2.18	109	2.00	1.00	
Total Xylenes*	<0.150	0.150	05/20/2023	ND	6.72	112	6.00	0.332	
Total BTEX	<0.300	0.300	05/20/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *105 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**176**	16.0	05/18/2023	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/19/2023	ND	168	84.0	200	2.09	
DRO >C10-C28*	**102**	10.0	05/19/2023	ND	168	84.2	200	4.55	
EXT DRO >C28-C36	**17.6**	10.0	05/19/2023	ND					

Surrogate: 1-Chlorooctane *80.9 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *86.8 %* *49.1-148*

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Analytical Results For:

TALON LPE
CHAD HENSLEY
408 W. TEXAS AVE.
ARTESIA NM, 88210
Fax To: (575) 745-8905

Received:	05/17/2023	Sampling Date:	05/14/2023
Reported:	05/22/2023	Sampling Type:	Soil
Project Name:	VERNARAE	Sampling Condition:	Cool & Intact
Project Number:	702520.056.01	Sample Received By:	Shalyn Rodriguez
Project Location:	MATADOR - LEA COUNTY		

Sample ID: S - 3 2' (H232499-08)

BTEX 8021B mg/kg Analyzed By: JH/

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/20/2023	ND	2.24	112	2.00	1.17	
Toluene*	<0.050	0.050	05/20/2023	ND	2.29	114	2.00	1.57	
Ethylbenzene*	<0.050	0.050	05/20/2023	ND	2.18	109	2.00	1.00	
Total Xylenes*	<0.150	0.150	05/20/2023	ND	6.72	112	6.00	0.332	
Total BTEX	<0.300	0.300	05/20/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *105 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**48.0**	16.0	05/18/2023	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/19/2023	ND	168	84.0	200	2.09	
DRO >C10-C28*	<10.0	10.0	05/19/2023	ND	168	84.2	200	4.55	
EXT DRO >C28-C36	<10.0	10.0	05/19/2023	ND					

Surrogate: 1-Chlorooctane *81.7 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *89.2 %* *49.1-148*

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Analytical Results For:

TALON LPE
CHAD HENSLEY
408 W. TEXAS AVE.
ARTESIA NM, 88210
Fax To: (575) 745-8905

Received:	05/17/2023	Sampling Date:	05/14/2023
Reported:	05/22/2023	Sampling Type:	Soil
Project Name:	VERNARAE	Sampling Condition:	Cool & Intact
Project Number:	702520.056.01	Sample Received By:	Shalyn Rodriguez
Project Location:	MATADOR - LEA COUNTY		

Sample ID: S - 3 3' (H232499-09)

BTEX 8021B mg/kg Analyzed By: JH/

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/20/2023	ND	2.24	112	2.00	1.17	
Toluene*	<0.050	0.050	05/20/2023	ND	2.29	114	2.00	1.57	
Ethylbenzene*	<0.050	0.050	05/20/2023	ND	2.18	109	2.00	1.00	
Total Xylenes*	<0.150	0.150	05/20/2023	ND	6.72	112	6.00	0.332	
Total BTEX	<0.300	0.300	05/20/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *104 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32.0**	16.0	05/18/2023	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/19/2023	ND	168	84.0	200	2.09	
DRO >C10-C28*	<10.0	10.0	05/19/2023	ND	168	84.2	200	4.55	
EXT DRO >C28-C36	<10.0	10.0	05/19/2023	ND					

Surrogate: 1-Chlorooctane *83.5 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *91.6 %* *49.1-148*

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Analytical Results For:

TALON LPE
CHAD HENSLEY
408 W. TEXAS AVE.
ARTESIA NM, 88210
Fax To: (575) 745-8905

Received:	05/17/2023	Sampling Date:	05/14/2023
Reported:	05/22/2023	Sampling Type:	Soil
Project Name:	VERNARAE	Sampling Condition:	Cool & Intact
Project Number:	702520.056.01	Sample Received By:	Shalyn Rodriguez
Project Location:	MATADOR - LEA COUNTY		

Sample ID: S - 3 4' (H232499-10)

BTEX 8021B mg/kg Analyzed By: JH/

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/20/2023	ND	2.24	112	2.00	1.17	
Toluene*	<0.050	0.050	05/20/2023	ND	2.29	114	2.00	1.57	
Ethylbenzene*	<0.050	0.050	05/20/2023	ND	2.18	109	2.00	1.00	
Total Xylenes*	<0.150	0.150	05/20/2023	ND	6.72	112	6.00	0.332	
Total BTEX	<0.300	0.300	05/20/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *107 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**16.0**	16.0	05/18/2023	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/19/2023	ND	168	84.0	200	2.09	
DRO >C10-C28*	<10.0	10.0	05/19/2023	ND	168	84.2	200	4.55	
EXT DRO >C28-C36	<10.0	10.0	05/19/2023	ND					

Surrogate: 1-Chlorooctane *76.6 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *82.3 %* *49.1-148*

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CARDINAL Laboratories

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Analytical Results For:

TALON LPE
CHAD HENSLEY
408 W. TEXAS AVE.
ARTESIA NM, 88210
Fax To: (575) 745-8905

Received:	05/17/2023	Sampling Date:	05/14/2023
Reported:	05/22/2023	Sampling Type:	Soil
Project Name:	VERNARAE	Sampling Condition:	Cool & Intact
Project Number:	702520.056.01	Sample Received By:	Shalyn Rodriguez
Project Location:	MATADOR - LEA COUNTY		

Sample ID: S - 4 1' (H232499-11)

BTEX 8021B mg/kg Analyzed By: JH/

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/20/2023	ND	2.24	112	2.00	1.17	
Toluene*	<0.050	0.050	05/20/2023	ND	2.29	114	2.00	1.57	
Ethylbenzene*	<0.050	0.050	05/20/2023	ND	2.18	109	2.00	1.00	
Total Xylenes*	<0.150	0.150	05/20/2023	ND	6.72	112	6.00	0.332	
Total BTEX	<0.300	0.300	05/20/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *106 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**2080**	16.0	05/18/2023	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/19/2023	ND	168	84.0	200	2.09	
DRO >C10-C28*	**220**	10.0	05/19/2023	ND	168	84.2	200	4.55	
EXT DRO >C28-C36	**56.6**	10.0	05/19/2023	ND					

Surrogate: 1-Chlorooctane *82.3 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *90.8 %* *49.1-148*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

TALON LPE
CHAD HENSLEY
408 W. TEXAS AVE.
ARTESIA NM, 88210
Fax To: (575) 745-8905

Received:	05/17/2023	Sampling Date:	05/14/2023
Reported:	05/22/2023	Sampling Type:	Soil
Project Name:	VERNARAE	Sampling Condition:	Cool & Intact
Project Number:	702520.056.01	Sample Received By:	Shalyn Rodriguez
Project Location:	MATADOR - LEA COUNTY		

Sample ID: S - 4 2' (H232499-12)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/20/2023	ND	2.42	121	2.00	6.00	
Toluene*	<0.050	0.050	05/20/2023	ND	2.40	120	2.00	6.73	
Ethylbenzene*	<0.050	0.050	05/20/2023	ND	2.32	116	2.00	6.32	
Total Xylenes*	<0.150	0.150	05/20/2023	ND	7.09	118	6.00	7.44	
Total BTEX	<0.300	0.300	05/20/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *99.9 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**64.0**	16.0	05/18/2023	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/19/2023	ND	168	84.0	200	2.09	
DRO >C10-C28*	<10.0	10.0	05/19/2023	ND	168	84.2	200	4.55	
EXT DRO >C28-C36	<10.0	10.0	05/19/2023	ND					

Surrogate: 1-Chlorooctane *83.7 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *90.1 %* *49.1-148*

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Celey D. Keene, Lab Director/Quality Manager

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PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

TALON LPE
CHAD HENSLEY
408 W. TEXAS AVE.
ARTESIA NM, 88210
Fax To: (575) 745-8905

Received:	05/17/2023	Sampling Date:	05/14/2023
Reported:	05/22/2023	Sampling Type:	Soil
Project Name:	VERNARAE	Sampling Condition:	Cool & Intact
Project Number:	702520.056.01	Sample Received By:	Shalyn Rodriguez
Project Location:	MATADOR - LEA COUNTY		

Sample ID: S - 4 3' (H232499-13)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/20/2023	ND	2.42	121	2.00	6.00	
Toluene*	<0.050	0.050	05/20/2023	ND	2.40	120	2.00	6.73	
Ethylbenzene*	<0.050	0.050	05/20/2023	ND	2.32	116	2.00	6.32	
Total Xylenes*	<0.150	0.150	05/20/2023	ND	7.09	118	6.00	7.44	
Total BTEX	<0.300	0.300	05/20/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *99.9 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**80.0**	16.0	05/18/2023	ND	400	100	400	3.92	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/18/2023	ND	191	95.4	200	2.92	
DRO >C10-C28*	**10.5**	10.0	05/18/2023	ND	186	92.8	200	7.40	
EXT DRO >C28-C36	<10.0	10.0	05/18/2023	ND					

Surrogate: 1-Chlorooctane *84.3 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *85.2 %* *49.1-148*

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Analytical Results For:

TALON LPE
CHAD HENSLEY
408 W. TEXAS AVE.
ARTESIA NM, 88210
Fax To: (575) 745-8905

Received:	05/17/2023	Sampling Date:	05/14/2023
Reported:	05/22/2023	Sampling Type:	Soil
Project Name:	VERNARAE	Sampling Condition:	Cool & Intact
Project Number:	702520.056.01	Sample Received By:	Shalyn Rodriguez
Project Location:	MATADOR - LEA COUNTY		

Sample ID: S - 4 4' (H232499-14)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/20/2023	ND	2.42	121	2.00	6.00	
Toluene*	<0.050	0.050	05/20/2023	ND	2.40	120	2.00	6.73	
Ethylbenzene*	<0.050	0.050	05/20/2023	ND	2.32	116	2.00	6.32	
Total Xylenes*	<0.150	0.150	05/20/2023	ND	7.09	118	6.00	7.44	
Total BTEX	<0.300	0.300	05/20/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *102 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**80.0**	16.0	05/18/2023	ND	400	100	400	3.92	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/18/2023	ND	191	95.4	200	2.92	
DRO >C10-C28*	<10.0	10.0	05/18/2023	ND	186	92.8	200	7.40	
EXT DRO >C28-C36	<10.0	10.0	05/18/2023	ND					

Surrogate: 1-Chlorooctane *84.2 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *81.8 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

TALON LPE
CHAD HENSLEY
408 W. TEXAS AVE.
ARTESIA NM, 88210
Fax To: (575) 745-8905

Received:	05/17/2023	Sampling Date:	05/14/2023
Reported:	05/22/2023	Sampling Type:	Soil
Project Name:	VERNARAE	Sampling Condition:	Cool & Intact
Project Number:	702520.056.01	Sample Received By:	Shalyn Rodriguez
Project Location:	MATADOR - LEA COUNTY		

Sample ID: S - 5 1' (H232499-15)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/20/2023	ND	2.36	118	2.00	4.23	
Toluene*	<0.050	0.050	05/20/2023	ND	2.32	116	2.00	4.90	
Ethylbenzene*	<0.050	0.050	05/20/2023	ND	2.25	113	2.00	4.65	
Total Xylenes*	<0.150	0.150	05/20/2023	ND	6.87	114	6.00	3.07	
Total BTEX	<0.300	0.300	05/20/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *101 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**80.0**	16.0	05/18/2023	ND	400	100	400	3.92	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/18/2023	ND	191	95.4	200	2.92	
DRO >C10-C28*	**13.6**	10.0	05/18/2023	ND	186	92.8	200	7.40	
EXT DRO >C28-C36	<10.0	10.0	05/18/2023	ND					

Surrogate: 1-Chlorooctane *86.7 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *91.2 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

TALON LPE
CHAD HENSLEY
408 W. TEXAS AVE.
ARTESIA NM, 88210
Fax To: (575) 745-8905

Received:	05/17/2023	Sampling Date:	05/14/2023
Reported:	05/22/2023	Sampling Type:	Soil
Project Name:	VERNARAE	Sampling Condition:	Cool & Intact
Project Number:	702520.056.01	Sample Received By:	Shalyn Rodriguez
Project Location:	MATADOR - LEA COUNTY		

Sample ID: S - 5 2' (H232499-16)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/20/2023	ND	2.36	118	2.00	4.23	
Toluene*	<0.050	0.050	05/20/2023	ND	2.32	116	2.00	4.90	
Ethylbenzene*	<0.050	0.050	05/20/2023	ND	2.25	113	2.00	4.65	
Total Xylenes*	<0.150	0.150	05/20/2023	ND	6.87	114	6.00	3.07	
Total BTEX	<0.300	0.300	05/20/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *101 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32.0**	16.0	05/18/2023	ND	400	100	400	3.92	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/18/2023	ND	191	95.4	200	2.92	
DRO >C10-C28*	<10.0	10.0	05/18/2023	ND	186	92.8	200	7.40	
EXT DRO >C28-C36	<10.0	10.0	05/18/2023	ND					

Surrogate: 1-Chlorooctane *89.6 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *93.4 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

TALON LPE
CHAD HENSLEY
408 W. TEXAS AVE.
ARTESIA NM, 88210
Fax To: (575) 745-8905

Received:	05/17/2023	Sampling Date:	05/14/2023
Reported:	05/22/2023	Sampling Type:	Soil
Project Name:	VERNARAE	Sampling Condition:	Cool & Intact
Project Number:	702520.056.01	Sample Received By:	Shalyn Rodriguez
Project Location:	MATADOR - LEA COUNTY		

Sample ID: BG 1 (H232499-17)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/20/2023	ND	2.36	118	2.00	4.23	
Toluene*	<0.050	0.050	05/20/2023	ND	2.32	116	2.00	4.90	
Ethylbenzene*	<0.050	0.050	05/20/2023	ND	2.25	113	2.00	4.65	
Total Xylenes*	<0.150	0.150	05/20/2023	ND	6.87	114	6.00	3.07	
Total BTEX	<0.300	0.300	05/20/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *102 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32.0**	16.0	05/18/2023	ND	400	100	400	3.92	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/18/2023	ND	191	95.4	200	2.92	
DRO >C10-C28*	<10.0	10.0	05/18/2023	ND	186	92.8	200	7.40	
EXT DRO >C28-C36	<10.0	10.0	05/18/2023	ND					

Surrogate: 1-Chlorooctane *87.6 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *89.5 %* *49.1-148*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Notes and Definitions

QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
BS-3	Blank spike recovery outside of lab established statistical limits, but still within method limits. Data is not adversely affected.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

Company Name: Talon LPE	**BILL TO**
Project Manager: C. Hensley	P.O. #:
Address: 408 W. Texas Ave	Company:
City: Artesia State: NM Zip: 88210	Attn:
Phone #: 575.746.8768 Fax #:	Address:
Project #: 702520.056.01 Project Owner: Matador	City:
Project Name: VernaRae	State: Zip:
Project Location: Lea County	Phone #:
Sampler Name: N. Rose	Fax #:

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	ANALYSIS REQUEST: CL	BTEX	TPH
H232499																	
1	S-1 1'	G	C			✓					✓		05/14/2	9:18	✓	✓	✓
2	S-1 2'					✓								9:22	✓	✓	✓
3	S-1 3'					✓								9:25	✓	✓	✓
4	S-1 4'					✓								9:30	✓	✓	✓
5	S-2 1'					✓								10:10	✓	✓	✓
6	S-2 2' R					✓								10:14	✓	✓	✓
7	S-3 1'					✓								10:35	✓	✓	✓
8	S-3 2'					✓								10:38	✓	✓	✓
9	S-3 3'					✓								10:40	✓	✓	✓
10	S-3 4'					✓								10:47	✓	✓	✓

Relinquished By:	Date: 5/17/23 Time: 1227	Received By:	Phone Result: ☐ Yes ☐ No Add'l Phone #:
Relinquished By:	Date: Time:	Received By:	Fax Result: ☐ Yes ☐ No Add'l Fax #:
Delivered By: (Circle One) Sampler - UPS - Bus - Other: #113 -1.4c / -2.0c	Sample Condition: Cool ☑ Yes ☐ No / Intact ☑ Yes ☐ No	CHECKED BY: (Initials)	REMARKS: (1,2)

+ Cardinal cannot accept verbal changes. Please fax written changes to (575) 393-2326

CARDINAL Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

Company Name:	Talon LPE
Project Manager:	C. Hensley
Address:	408 W. Texas Ave
City:	Artesia
State:	NM
Zip:	88210
Phone #:	575.746.8768
Fax #:	
Project #:	702520.056.01
Project Owner:	Matador
Project Name:	VernaRae
Project Location:	Lea County
Sampler Name:	N. Rose

BILL TO

P.O. #:	
Company:	
Attn:	
Address:	
City:	
State:	Zip:
Phone #:	
Fax #:	

ANALYSIS REQUEST

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	CL	BTEX	TPH
H232499-11	S-4 1'	G	C			✓					✓		05/14/2	11:00	✓	✓	✓
12	S-4 2'					✓								11:08	✓	✓	✓
13	S-4 3'					✓								11:14	✓	✓	✓
14	S-4 4'					✓								11:17	✓	✓	✓
15	S-5 1'					✓								11:25	✓	✓	✓
16	S-5 2'					✓								11:29	✓	✓	✓
17	BG 1					✓								11:45	✓	✓	✓

Relinquished By:	Date: 5/17/23	Received By: S Rodriguez	
	Time: 1227		
Relinquished By:	Date:	Received By:	
	Time:		
Delivered By: (Circle One)	#113	Sample Condition: Cool ☑ Yes ☐ No; Intact ☑ Yes ☐ No	CHECKED BY: (Initials) SR
Sampler - UPS - Bus - Other:	-1.4/-2.0 C		

Phone Result:	☐ Yes	☐ No	Add'l Phone #:
Fax Result:	☐ Yes	☐ No	Add'l Fax #:
REMARKS:			

(2.2)

+ Cardinal cannot accept verbal changes. Please fax written changes to (575) 393-2326

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

June 28, 2023

CHAD HENSLEY

TALON LPE

408 W. TEXAS AVE.

ARTESIA, NM 88210

RE: VERNA RAE

Enclosed are the results of analyses for samples received by the laboratory on 06/23/23 13:00.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-22-15. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

TALON LPE
CHAD HENSLEY
408 W. TEXAS AVE.
ARTESIA NM, 88210
Fax To: (575) 745-8905

Received:	06/23/2023	Sampling Date:	06/21/2023
Reported:	06/28/2023	Sampling Type:	Soil
Project Name:	VERNA RAE	Sampling Condition:	Cool & Intact
Project Number:	702520.056.01	Sample Received By:	Tamara Oldaker
Project Location:	MATADOR - EDDY COUNTY		

Sample ID: SW - 1 1' (H233282-01)

BTEX 8021B mg/kg Analyzed By: JH/

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/24/2023	ND	2.28	114	2.00	4.59	
Toluene*	<0.050	0.050	06/24/2023	ND	2.15	107	2.00	0.640	
Ethylbenzene*	<0.050	0.050	06/24/2023	ND	2.25	112	2.00	3.92	
Total Xylenes*	<0.150	0.150	06/24/2023	ND	6.77	113	6.00	2.78	
Total BTEX	<0.300	0.300	06/24/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *113 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**1010**	16.0	06/26/2023	ND	416	104	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/26/2023	ND	174	87.1	200	4.58	
DRO >C10-C28*	**51.1**	10.0	06/26/2023	ND	169	84.4	200	6.08	
EXT DRO >C28-C36	<10.0	10.0	06/26/2023	ND					

Surrogate: 1-Chlorooctane *94.3 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *104 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

TALON LPE
CHAD HENSLEY
408 W. TEXAS AVE.
ARTESIA NM, 88210
Fax To: (575) 745-8905

Received:	06/23/2023	Sampling Date:	06/21/2023
Reported:	06/28/2023	Sampling Type:	Soil
Project Name:	VERNA RAE	Sampling Condition:	Cool & Intact
Project Number:	702520.056.01	Sample Received By:	Tamara Oldaker
Project Location:	MATADOR - EDDY COUNTY		

Sample ID: SW - 2 1' (H233282-02)

BTEX 8021B mg/kg Analyzed By: JH/

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/24/2023	ND	2.28	114	2.00	4.59	
Toluene*	<0.050	0.050	06/24/2023	ND	2.15	107	2.00	0.640	
Ethylbenzene*	<0.050	0.050	06/24/2023	ND	2.25	112	2.00	3.92	
Total Xylenes*	<0.150	0.150	06/24/2023	ND	6.77	113	6.00	2.78	
Total BTEX	<0.300	0.300	06/24/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *115 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**16.0**	16.0	06/26/2023	ND	416	104	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/26/2023	ND	174	87.1	200	4.58	
DRO >C10-C28*	<10.0	10.0	06/26/2023	ND	169	84.4	200	6.08	
EXT DRO >C28-C36	<10.0	10.0	06/26/2023	ND					

Surrogate: 1-Chlorooctane *99.3 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *109 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

TALON LPE
CHAD HENSLEY
408 W. TEXAS AVE.
ARTESIA NM, 88210
Fax To: (575) 745-8905

Received:	06/23/2023	Sampling Date:	06/21/2023
Reported:	06/28/2023	Sampling Type:	Soil
Project Name:	VERNA RAE	Sampling Condition:	Cool & Intact
Project Number:	702520.056.01	Sample Received By:	Tamara Oldaker
Project Location:	MATADOR - EDDY COUNTY		

Sample ID: SW - 3 1' (H233282-03)

BTEX 8021B mg/kg Analyzed By: JH/

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/24/2023	ND	2.28	114	2.00	4.59	
Toluene*	<0.050	0.050	06/24/2023	ND	2.15	107	2.00	0.640	
Ethylbenzene*	<0.050	0.050	06/24/2023	ND	2.25	112	2.00	3.92	
Total Xylenes*	<0.150	0.150	06/24/2023	ND	6.77	113	6.00	2.78	
Total BTEX	<0.300	0.300	06/24/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *114 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	06/26/2023	ND	416	104	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/26/2023	ND	174	87.1	200	4.58	
DRO >C10-C28*	<10.0	10.0	06/26/2023	ND	169	84.4	200	6.08	
EXT DRO >C28-C36	<10.0	10.0	06/26/2023	ND					

Surrogate: 1-Chlorooctane *88.4 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *94.8 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

TALON LPE
CHAD HENSLEY
408 W. TEXAS AVE.
ARTESIA NM, 88210
Fax To: (575) 745-8905

Received:	06/23/2023	Sampling Date:	06/21/2023
Reported:	06/28/2023	Sampling Type:	Soil
Project Name:	VERNA RAE	Sampling Condition:	Cool & Intact
Project Number:	702520.056.01	Sample Received By:	Tamara Oldaker
Project Location:	MATADOR - EDDY COUNTY		

Sample ID: SW - 4 1' (H233282-04)

BTEX 8021B mg/kg Analyzed By: JH/

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/24/2023	ND	2.28	114	2.00	4.59	
Toluene*	<0.050	0.050	06/24/2023	ND	2.15	107	2.00	0.640	
Ethylbenzene*	<0.050	0.050	06/24/2023	ND	2.25	112	2.00	3.92	
Total Xylenes*	<0.150	0.150	06/24/2023	ND	6.77	113	6.00	2.78	
Total BTEX	<0.300	0.300	06/24/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *114 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**128**	16.0	06/26/2023	ND	416	104	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/26/2023	ND	174	87.1	200	4.58	
DRO >C10-C28*	<10.0	10.0	06/26/2023	ND	169	84.4	200	6.08	
EXT DRO >C28-C36	<10.0	10.0	06/26/2023	ND					

Surrogate: 1-Chlorooctane *87.2 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *94.7 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

TALON LPE
CHAD HENSLEY
408 W. TEXAS AVE.
ARTESIA NM, 88210
Fax To: (575) 745-8905

Received:	06/23/2023	Sampling Date:	06/21/2023
Reported:	06/28/2023	Sampling Type:	Soil
Project Name:	VERNA RAE	Sampling Condition:	Cool & Intact
Project Number:	702520.056.01	Sample Received By:	Tamara Oldaker
Project Location:	MATADOR - EDDY COUNTY		

Sample ID: C - 3 1' (H233282-05)

BTEX 8021B mg/kg Analyzed By: JH/

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/24/2023	ND	2.28	114	2.00	4.59	
Toluene*	<0.050	0.050	06/24/2023	ND	2.15	107	2.00	0.640	
Ethylbenzene*	<0.050	0.050	06/24/2023	ND	2.25	112	2.00	3.92	
Total Xylenes*	<0.150	0.150	06/24/2023	ND	6.77	113	6.00	2.78	
Total BTEX	<0.300	0.300	06/24/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *114 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	06/26/2023	ND	416	104	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/26/2023	ND	174	87.1	200	4.58	
DRO >C10-C28*	<10.0	10.0	06/26/2023	ND	169	84.4	200	6.08	
EXT DRO >C28-C36	<10.0	10.0	06/26/2023	ND					

Surrogate: 1-Chlorooctane *84.8 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *91.4 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

TALON LPE
CHAD HENSLEY
408 W. TEXAS AVE.
ARTESIA NM, 88210
Fax To: (575) 745-8905

Received:	06/23/2023	Sampling Date:	06/21/2023
Reported:	06/28/2023	Sampling Type:	Soil
Project Name:	VERNA RAE	Sampling Condition:	Cool & Intact
Project Number:	702520.056.01	Sample Received By:	Tamara Oldaker
Project Location:	MATADOR - EDDY COUNTY		

Sample ID: C - 4 1' (H233282-06)

BTEX 8021B mg/kg Analyzed By: JH/

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/24/2023	ND	2.28	114	2.00	4.59	
Toluene*	<0.050	0.050	06/24/2023	ND	2.15	107	2.00	0.640	
Ethylbenzene*	<0.050	0.050	06/24/2023	ND	2.25	112	2.00	3.92	
Total Xylenes*	<0.150	0.150	06/24/2023	ND	6.77	113	6.00	2.78	
Total BTEX	<0.300	0.300	06/24/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *114 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**160**	16.0	06/26/2023	ND	416	104	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/26/2023	ND	174	87.1	200	4.58	
DRO >C10-C28*	<10.0	10.0	06/26/2023	ND	169	84.4	200	6.08	
EXT DRO >C28-C36	<10.0	10.0	06/26/2023	ND					

Surrogate: 1-Chlorooctane *89.5 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *95.1 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Notes and Definitions

QR-03	The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

Company Name: Talon LPE	**BILL TO**
Project Manager: C. Hensley	P.O. #:
Address: 408 W. Texas Ave	Company:
City: Artesia State: NM Zip: 88210	Attn:
Phone #: 575.746.8768 Fax #:	Address:
Project #: 702520.056.01 Project Owner: Matador	City:
Project Name: Verna Rae	State: Zip:
Project Location: Eddy County	Phone #:
Sampler Name: N. Rose	Fax #:

FOR LAB USE ONLY				MATRIX						PRESERV.			SAMPLING		ANALYSIS REQUEST		
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :	DATE	TIME	CL	BTEX	TPH
H233282																	
1	SW-1 1'	C	1			✓							6/21/23	1140	✓	✓	✓
2	SW-2 1'	C	1			✓								1146	✓	✓	✓
3	SW-3 1'	C	1			✓								1151	✓	✓	✓
4	SW-4 1'	C	1			✓								1153	✓	✓	✓
5	C-3 1'	C	1			✓								1202	✓	✓	✓
6	C-4 1'	C	1			✓								1212	✓	✓	✓

Relinquished By:	Date: 6-23-23	Received By:	Phone Result: ☐ Yes ☐ No Add'l Phone #:
	Time: 1300		Fax Result: ☐ Yes ☐ No Add'l Fax #:
Relinquished By:	Date:	Received By:	REMARKS:
	Time:		
Delivered By: (Circle One)	#113	Sample Condition: Cool ☑ Yes ☐ No, Intact ☑ Yes ☐ No	CHECKED BY: (Initials)
Sampler - UPS - Bus - Other:	0.6°C / 0.0°C		

+ Cardinal cannot accept verbal changes. Please fax written changes to (575) 393-2326

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

July 03, 2023

CHAD HENSLEY

TALON LPE

408 W. TEXAS AVE.

ARTESIA, NM 88210

RE: VERNA RAE

Enclosed are the results of analyses for samples received by the laboratory on 06/28/23 14:45.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-22-15. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

TALON LPE
CHAD HENSLEY
408 W. TEXAS AVE.
ARTESIA NM, 88210
Fax To: (575) 745-8905

Received:	06/28/2023	Sampling Date:	06/28/2023
Reported:	07/03/2023	Sampling Type:	Soil
Project Name:	VERNA RAE	Sampling Condition:	** (See Notes)
Project Number:	702520.056.01	Sample Received By:	Tamara Oldaker
Project Location:	MATADOR - LEA COUNTY		

Sample ID: SW - 1 1' (H233346-01)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/29/2023	ND	1.99	99.3	2.00	2.17	
Toluene*	<0.050	0.050	06/29/2023	ND	1.95	97.7	2.00	2.00	
Ethylbenzene*	<0.050	0.050	06/29/2023	ND	1.91	95.4	2.00	1.47	
Total Xylenes*	<0.150	0.150	06/29/2023	ND	5.80	96.6	6.00	1.52	
Total BTEX	<0.300	0.300	06/29/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *104 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**16.0**	16.0	06/29/2023	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/29/2023	ND	200	99.9	200	0.670	
DRO >C10-C28*	<10.0	10.0	06/29/2023	ND	197	98.5	200	7.16	
EXT DRO >C28-C36	<10.0	10.0	06/29/2023	ND					

Surrogate: 1-Chlorooctane *115 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *106 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name:	Talon LPE
Project Manager:	Chad Hensley
Address:	408 W. Texas Ave
City:	Artesia
State:	NM
Zip:	88210
Phone #:	575-746-8768
Fax #:	
Project #:	702520.05601
Project Owner:	Matador
Project Name:	VernaRae
Project Location:	Lea County
Sampler Name:	N. Reese

BILL TO

P.O. #:	
Company:	Matador
Attn:	
Address:	
City:	
State:	Zip:
Phone #:	
Fax #:	

ANALYSIS REQUEST

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING DATE	SAMPLING TIME	Cl	BTEX	TPH
H233346	SW-1 1'	C	1			X					X		6-28-23	14:28	X	X	X

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequental damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By:	Date: 6-28-23	Received By:	
	Time: 1445		
Relinquished By:	Date:	Received By:	
	Time:		

Verbal Result: ☐ Yes ☐ No Add'l Phone #:
All Results are emailed. Please provide Email address:

REMARKS:

Delivered By: (Circle One)	Observed Temp. °C	37.4	Sample Condition Cool Intact	CHECKED BY: (Initials)	Turnaround Time: Standard ☑ Rush ☐
Sampler - UPS - Bus - Other:	Corrected Temp. °C	37.0	☐ Yes ☑ Yes ☑ No ☐ No	TO	Thermometer ID #113 Correction Factor -0.6°C

Bacteria (only) Sample Condition: Cool ☐ Yes ☐ No Intact ☐ Yes ☐ No; Observed Temp. °C; Corrected Temp. °C

FORM-006 R 3.3 07/18/22

† Cardinal cannot accept verbal changes. Please email changes to celey.keene@cardinallabsnm.com

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

July 24, 2023

CHAD HENSLEY

TALON LPE

408 W. TEXAS AVE.

ARTESIA, NM 88210

RE: VERNA RAE

Enclosed are the results of analyses for samples received by the laboratory on 07/18/23 11:41.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-22-15. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

TALON LPE
CHAD HENSLEY
408 W. TEXAS AVE.
ARTESIA NM, 88210
Fax To: (575) 745-8905

Received:	07/18/2023	Sampling Date:	07/18/2023
Reported:	07/24/2023	Sampling Type:	Soil
Project Name:	VERNA RAE	Sampling Condition:	** (See Notes)
Project Number:	702520.056.01	Sample Received By:	Shalyn Rodriguez
Project Location:	MATADOR - LEA COUNTY		

Sample ID: C - 1 1.5' (H233718-01)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/22/2023	ND	2.12	106	2.00	1.59	
Toluene*	<0.050	0.050	07/22/2023	ND	2.08	104	2.00	1.30	
Ethylbenzene*	<0.050	0.050	07/22/2023	ND	2.01	100	2.00	1.54	
Total Xylenes*	<0.150	0.150	07/22/2023	ND	6.08	101	6.00	0.471	
Total BTEX	<0.300	0.300	07/22/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *104 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**48.0**	16.0	07/21/2023	ND	416	104	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/21/2023	ND	174	87.0	200	6.51	
DRO >C10-C28*	**740**	10.0	07/21/2023	ND	193	96.4	200	7.90	
EXT DRO >C28-C36	**203**	10.0	07/21/2023	ND					

Surrogate: 1-Chlorooctane *81.7 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *84.2 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

TALON LPE
CHAD HENSLEY
408 W. TEXAS AVE.
ARTESIA NM, 88210
Fax To: (575) 745-8905

Received:	07/18/2023	Sampling Date:	07/18/2023
Reported:	07/24/2023	Sampling Type:	Soil
Project Name:	VERNA RAE	Sampling Condition:	** (See Notes)
Project Number:	702520.056.01	Sample Received By:	Shalyn Rodriguez
Project Location:	MATADOR - LEA COUNTY		

Sample ID: C - 2 1.5' (H233718-02)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/22/2023	ND	2.12	106	2.00	1.59	
Toluene*	<0.050	0.050	07/22/2023	ND	2.08	104	2.00	1.30	
Ethylbenzene*	<0.050	0.050	07/22/2023	ND	2.01	100	2.00	1.54	
Total Xylenes*	<0.150	0.150	07/22/2023	ND	6.08	101	6.00	0.471	
Total BTEX	<0.300	0.300	07/22/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *104 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32.0**	16.0	07/21/2023	ND	416	104	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/21/2023	ND	174	87.0	200	6.51	
DRO >C10-C28*	**485**	10.0	07/21/2023	ND	193	96.4	200	7.90	
EXT DRO >C28-C36	**132**	10.0	07/21/2023	ND					

Surrogate: 1-Chlorooctane *82.9 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *85.2 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

Company Name: Talon LPE	
Project Manager: C. Hensley	
Address: 408 W. Texas Ave	
City: Artesia State: NM Zip: 88210	
Phone #: 575.746.8768 Fax #:	
Project #: 702520.056.01 Project Owner: Matador	
Project Name: VernaRae	
Project Location: Lea County	
Sampler Name: N. Rose	

BILL TO

P.O. #:	
Company:	
Attn:	
Address:	
City:	
State: Zip:	
Phone #:	
Fax #:	

ANALYSIS REQUEST

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	CL	BTEX	TPH
H233718																	
1	C-1 1.5'	C	1			✓					X		7/18/23	7:25	✓	✓	✓
2	C-2 1.5'	↓	↓			✓					X		7-18-23	7:36	✓	✓	✓

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequental damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By:	Date: 7-18-23 Time: 1141	Received By: Rodriguez	Phone Result: ☐ Yes ☐ No Add'l Phone #:
Relinquished By:	Date: Time:	Received By:	Fax Result: ☐ Yes ☐ No Add'l Fax #:
Delivered By: (Circle One) Sampler - UPS - Bus - Other: 28.4° #140	Sample Condition Cool: ☐ Yes ☐ No Intact: ☐ Yes ☐ No	CHECKED BY: (Initials) SR	REMARKS: 1, 1

† Cardinal cannot accept verbal changes. Please fax written changes to (575) 393-2326

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

August 08, 2023

CHAD HENSLEY

TALON LPE

408 W. TEXAS AVE.

ARTESIA, NM 88210

RE: VERNA RAE

Enclosed are the results of analyses for samples received by the laboratory on 07/26/23 14:05.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-22-15. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Total Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Cardinal Laboratories is accredited through the State of New Mexico Environment Department for:

Method SM 9223-B	Total Coliform and E. coli (Colilert MMO-MUG)
Method EPA 524.2	Regulated VOCs and Total Trihalomethanes (TTHM)
Method EPA 552.2	Total Haloacetic Acids (HAA-5)

Accreditation applies to public drinking water matrices for State of Colorado and New Mexico.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

TALON LPE 408 W. TEXAS AVE. ARTESIA NM, 88210	Project: VERNA RAE Project Number: 702520.056.01 Project Manager: CHAD HENSLEY Fax To: (575) 745-8905	Reported: 08-Aug-23 11:15

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
C - 1 1'	H233914-01	Soil	25-Jul-23 07:53	26-Jul-23 14:05
C - 2 1'	H233914-02	Soil	25-Jul-23 08:05	26-Jul-23 14:05

08/08/23 - Client changed the sample depths (see COC). This is the revised report and will replace the one sent on 08/02/23.

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

TALON LPE 408 W. TEXAS AVE. ARTESIA NM, 88210	Project: VERNA RAE Project Number: 702520.056.01 Project Manager: CHAD HENSLEY Fax To: (575) 745-8905	Reported: 08-Aug-23 11:15

C - 1 1'

H233914-01 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	**48.0**		16.0	mg/kg	4	3073143	AC	31-Jul-23	4500-Cl-B	
Volatile Organic Compounds by EPA Method 8021										
Benzene*	<0.050		0.050	mg/kg	50	3073103	MS	01-Aug-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3073103	MS	01-Aug-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3073103	MS	01-Aug-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3073103	MS	01-Aug-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3073103	MS	01-Aug-23	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			*106 %*	*71.5-134*		*3073103*	MS	*01-Aug-23*	*8021B*	
Petroleum Hydrocarbons by GC FID										
GRO C6-C10*	<10.0		10.0	mg/kg	1	3072813	MS	31-Jul-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3072813	MS	31-Jul-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3072813	MS	31-Jul-23	8015B	
Surrogate: 1-Chlorooctane			*106 %*	*48.2-134*		*3072813*	MS	*31-Jul-23*	*8015B*	
Surrogate: 1-Chlorooctadecane			*114 %*	*49.1-148*		*3072813*	MS	*31-Jul-23*	*8015B*	

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

TALON LPE 408 W. TEXAS AVE. ARTESIA NM, 88210	Project: VERNA RAE Project Number: 702520.056.01 Project Manager: CHAD HENSLEY Fax To: (575) 745-8905	Reported: 08-Aug-23 11:15

C - 2 1'

H233914-02 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	**64.0**		16.0	mg/kg	4	3073143	AC	31-Jul-23	4500-Cl-B	
Volatile Organic Compounds by EPA Method 8021										
Benzene*	<0.050		0.050	mg/kg	50	3073103	MS	01-Aug-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3073103	MS	01-Aug-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3073103	MS	01-Aug-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3073103	MS	01-Aug-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3073103	MS	01-Aug-23	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			*104 %*	*71.5-134*		*3073103*	MS	*01-Aug-23*	*8021B*	
Petroleum Hydrocarbons by GC FID										
GRO C6-C10*	<10.0		10.0	mg/kg	1	3072813	MS	31-Jul-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3072813	MS	31-Jul-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3072813	MS	31-Jul-23	8015B	
Surrogate: 1-Chlorooctane			*105 %*	*48.2-134*		*3072813*	MS	*31-Jul-23*	*8015B*	
Surrogate: 1-Chlorooctadecane			*109 %*	*49.1-148*		*3072813*	MS	*31-Jul-23*	*8015B*	

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

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Analytical Results For:

TALON LPE 408 W. TEXAS AVE. ARTESIA NM, 88210	Project: VERNA RAE Project Number: 702520.056.01 Project Manager: CHAD HENSLEY Fax To: (575) 745-8905	Reported: 08-Aug-23 11:15

Inorganic Compounds - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3073143 - 1:4 DI Water										
Blank (3073143-BLK1)				Prepared & Analyzed: 31-Jul-23						
Chloride	ND	16.0	mg/kg							
LCS (3073143-BS1)				Prepared & Analyzed: 31-Jul-23						
Chloride	416	16.0	mg/kg	400		104	80-120			
LCS Dup (3073143-BSD1)				Prepared & Analyzed: 31-Jul-23						
Chloride	416	16.0	mg/kg	400		104	80-120	0.00	20	

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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Analytical Results For:

TALON LPE 408 W. TEXAS AVE. ARTESIA NM, 88210	Project: VERNA RAE Project Number: 702520.056.01 Project Manager: CHAD HENSLEY Fax To: (575) 745-8905	Reported: 08-Aug-23 11:15

Volatile Organic Compounds by EPA Method 8021 - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3073103 - Volatiles										
Blank (3073103-BLK1)				Prepared: 31-Jul-23 Analyzed: 01-Aug-23						
Benzene	ND	0.050	mg/kg							
Toluene	ND	0.050	mg/kg							
Ethylbenzene	ND	0.050	mg/kg							
Total Xylenes	ND	0.150	mg/kg							
Total BTEX	ND	0.300	mg/kg							
Surrogate: 4-Bromofluorobenzene (PID)	*0.0516*		mg/kg	*0.0500*		*103*	*71.5-134*			
LCS (3073103-BS1)				Prepared: 31-Jul-23 Analyzed: 01-Aug-23						
Benzene	2.17	0.050	mg/kg	2.00		108	82.8-130			
Toluene	2.10	0.050	mg/kg	2.00		105	86-128			
Ethylbenzene	2.14	0.050	mg/kg	2.00		107	85.9-128			
m,p-Xylene	4.32	0.100	mg/kg	4.00		108	89-129			
o-Xylene	2.06	0.050	mg/kg	2.00		103	86.1-125			
Total Xylenes	6.38	0.150	mg/kg	6.00		106	88.2-128			
Surrogate: 4-Bromofluorobenzene (PID)	*0.0509*		mg/kg	*0.0500*		*102*	*71.5-134*			
LCS Dup (3073103-BSD1)				Prepared: 31-Jul-23 Analyzed: 01-Aug-23						
Benzene	2.16	0.050	mg/kg	2.00		108	82.8-130	0.116	15.8	
Toluene	2.05	0.050	mg/kg	2.00		103	86-128	2.16	15.9	
Ethylbenzene	2.12	0.050	mg/kg	2.00		106	85.9-128	0.970	16	
m,p-Xylene	4.30	0.100	mg/kg	4.00		108	89-129	0.462	16.2	
o-Xylene	2.05	0.050	mg/kg	2.00		103	86.1-125	0.391	16.7	
Total Xylenes	6.36	0.150	mg/kg	6.00		106	88.2-128	0.439	16.3	
Surrogate: 4-Bromofluorobenzene (PID)	*0.0505*		mg/kg	*0.0500*		*101*	*71.5-134*			

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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Analytical Results For:

TALON LPE 408 W. TEXAS AVE. ARTESIA NM, 88210	Project: VERNA RAE Project Number: 702520.056.01 Project Manager: CHAD HENSLEY Fax To: (575) 745-8905	Reported: 08-Aug-23 11:15

Petroleum Hydrocarbons by GC FID - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3072813 - General Prep - Organics										
Blank (3072813-BLK1)				Prepared: 28-Jul-23 Analyzed: 31-Jul-23						
GRO C6-C10	ND	10.0	mg/kg							
DRO >C10-C28	ND	10.0	mg/kg							
EXT DRO >C28-C36	ND	10.0	mg/kg							
Surrogate: 1-Chlorooctane	*47.3*		mg/kg	*50.0*		*94.6*	*48.2-134*			
Surrogate: 1-Chlorooctadecane	*53.0*		mg/kg	*50.0*		*106*	*49.1-148*			
LCS (3072813-BS1)				Prepared: 28-Jul-23 Analyzed: 31-Jul-23						
GRO C6-C10	204	10.0	mg/kg	200		102	66.4-123			
DRO >C10-C28	228	10.0	mg/kg	200		114	66.5-118			
Total TPH C6-C28	432	10.0	mg/kg	400		108	77.6-123			
Surrogate: 1-Chlorooctane	*49.5*		mg/kg	*50.0*		*99.0*	*48.2-134*			
Surrogate: 1-Chlorooctadecane	*59.9*		mg/kg	*50.0*		*120*	*49.1-148*			
LCS Dup (3072813-BSD1)				Prepared: 28-Jul-23 Analyzed: 31-Jul-23						
GRO C6-C10	203	10.0	mg/kg	200		102	66.4-123	0.505	17.7	
DRO >C10-C28	222	10.0	mg/kg	200		111	66.5-118	2.32	21	
Total TPH C6-C28	425	10.0	mg/kg	400		106	77.6-123	1.46	18.5	
Surrogate: 1-Chlorooctane	*50.7*		mg/kg	*50.0*		*101*	*48.2-134*			
Surrogate: 1-Chlorooctadecane	*60.8*		mg/kg	*50.0*		*122*	*49.1-148*			

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Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

Company Name: Talon LPE	
Project Manager: C. Hensley	
Address: 408 W. Texas Ave	
City: Artesia State: NM Zip: 88210	
Phone #: 575.746.8768 Fax #:	
Project #: 702520.056.01 Project Owner: Matador	
Project Name: Verna Rae	
Project Location: Lea County	
Sampler Name: N. Rose	

BILL TO

P.O. #:	
Company:	
Attn:	
Address:	
City:	
State: Zip:	
Phone #:	
Fax #:	

ANALYSIS REQUEST

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	CL	BTEX	TPH
H233944																	
1	C-1 ~~0-6"~~ 1' *SR 8/7/23	C	1			✓					✓		7/25/23	7:53	✓	✓	✓
2	C-2 ~~0-6"~~ 1'	C	1			✓					✓		7/25/23	8:05	✓	✓	✓

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequental damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By:	Date: 7.26.23	Received By: Brandi Bautista	Phone Result: ☐ Yes ☐ No Add'l Phone #:
	Time: 1405		Fax Result: ☐ Yes ☐ No Add'l Fax #:
Relinquished By:	Date:	Received By:	REMARKS: *customer requested depth corrections. SR 8/7/23
	Time:		
Delivered By: (Circle One) #140	Sample Condition: Cool ☑ Yes ☐ No Intact ☑ Yes ☐ No	CHECKED BY: (Initials) BB	
Sampler - UPS - Bus - Other: 2.9c			

Cardinal cannot accept verbal changes. Please fax written changes to (575) 393-2326

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 255131

CONDITIONS

Operator: MATADOR PRODUCTION COMPANY One Lincoln Centre Dallas, TX 75240	OGRID: 228937
	Action Number: 255131
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
nvelez	None	12/5/2023